

ITIL® V3

# Foundation

June 2010



**DIMENSION**  
— **DATA**   
**LEARNING SOLUTIONS**

Technology. Process. People.

# Document Control Sheet

## Record of Issues

Issue No	Issue Date	Nature of Amendment
V0.01	22AUG07	First Draft
V0.02	28AUG07	Second Draft
V0.03	10SEP07	Include Revisions from Pilot 1
V0.04	25MAR08	Updated Revisions
V0.05	02JUN08	Combine Foundation and Bridging
V0.06	21JAN09	Updated module
V2.0	01May09	Syllabus update for Foundation and Bridging
V3.0	01Jun10	Updated module

## Contact for Enquiries and Proposed Changes

### Contact Information

If you have any questions regarding this learning document please contact:

Name

Department

Phone

# Course Modules

Module 1	Introduction to ITIL® V3
Module 2	Service Management Overview
Module 3	Service Strategy Lifecycle
Module 4	Service Design Lifecycle
Module 5	Service Transition Lifecycle
Module 6	Service Operation Lifecycle
Module 7	Continuous Service Improvement Lifecycle
Module 8	Functions, Roles and Technology
Module 9	Conclusion
Module 10	Bibliography
Appendix A	ITIL® Glossary
Appendix B	Foundation Syllabus
Appendix C	Foundation Sample Exam 1
Appendix D	Foundation Sample Exam 2
Appendix E	Bridging Syllabus
Appendix F	Bridging Sample Exam 1
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Appendix H	Sample SLA
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Appendix L	Exercises
Appendix M	ITIL® Cheat Sheet

# ITIL® V3 Foundation

## Module 1:

## Introduction

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# Introduction

## Welcome

- Welcome participants to this module
- Introduce yourself, and explain your role
- Explain the location of comfort facilities, tea room etc.
- Mobile phones turned off
- Emergency procedures (where participants are not from that building)
- Catering arrangements, if provided (lunch etc)
- Timing of tea and lunch breaks (around 10.15am, 12.30pm, 3.00pm)

## Objective

The Objectives of the ITIL® V3\* Foundation Certificate in IT Service Management course are:

- To gain knowledge of the ITIL® terminology, structure and basic concepts
- To comprehend the core principles of ITIL® practices for IT Service Management
- To pass the ITIL® V3 Foundation Certificate in IT Service Management exam

The objectives of the ITIL® V2-V3 Bridging course are:

- To understand which parts of ITIL® are new in version 3
- To understand which parts of ITIL® have changed in version 3
- To Pass the ITIL® v3 Foundation Bridging exam

\* ITIL® is a Registered Trade Mark of the Office of Government Commerce in the United Kingdom and other countries.

**Course Modules** There are 9 modules in this course. They are:

Module 1	Introduction to ITIL® V3
Module 2	Service Management Overview
Module 3	Service Strategy Lifecycle
Module 4	Service Design Lifecycle
Module 5	Service Transition Lifecycle
Module 6	Service Operation Lifecycle
Module 7	Continual Service Improvement Lifecycle
Module 8	Functions, Roles and Technology
Module 9	Conclusion and Exam
Appendix A	ITIL® Glossary
Appendix B	Foundation Syllabus
Appendix C	Foundation Sample Exam 1
Appendix D	Foundation Sample Exam 2
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Appendix J	The Service Design Package
Appendix K	Requests by Lifecycle Stage
Appendix L	Exercises
Appendix M	ITIL® Cheat Sheet

# Learning Outcomes

## Service Management Overview Learning Outcomes

At the end of Module 2 – Service Management Overview, you will be able to:

- Describe the concept of Good Practice (ITILFND01 01-01)
- Define and explain the concept of a Service (ITILFND01 01-02)
- Define and explain the concept of Service Management (ITILFND01 01-03)
- Define and distinguish between Functions, Roles and Processes (ITILFND01 01-04)
- Explain the process model (ITILFND01 01-05)
- List the characteristics of processes (Measurable, Specific results, Customers, and Responds to a specific event) (ITILFND01 01-05)
- Briefly explain the Service Lifecycle (ITILFND02 02-02)
- Describe the structure, scope, components and interfaces of the ITIL® Library

## Service Strategy Lifecycle Learning Outcomes

At the end of Module 3 – Service Strategy Lifecycle, you will be able to:

- Account for the main goals and objectives of Service Strategy (ITILFND02 02-03)

### *Generic Concepts and Definitions*

- Resources Capabilities and Assets (ITILFND03 03-02/34)
- Utility and Warranty (ITILFND03 03-01)
- Service Portfolio (ITILFND03 03-03)
- Service Catalogue (Business Service Catalogue and Technical Service Catalogue) (ITILFND03 03-04)
- Business Case (ITILFND03 03-04)
- Risk (ITILFND03 03-07)

### *Key Principles and Models*

- Explain how Service Assets are the basis for Value Creation (ITILFND04 04-02)
- Describe basics of Value Creation through Services

### *Processes*

- State the objectives and basic concepts for:
  - Demand Management (ITILFND05 04-21)
    - Challenges in managing demand for services
    - Activity-based Demand Management (PBAs)
    - Business activity patterns and user profiles
  - Financial Management (ITILFND05 04-22)
    - Business case (covered in the intro to this section)

**Service Design  
Lifecycle  
Learning  
Outcomes**

At the end of Module 4 – Service Design Lifecycle, you will be able to:

- Account for the main goals and objectives of Service Design (ITILFND02 02-04)
- Briefly explain what value Service Design provides to the business (ITILFND02 02-05)

*Define*

- Service Provider (ITILFND03 03-09)
- Supplier (ITILFND03 03-10)
- Service Level Agreement (SLA) (ITILFND03 03-11)
- Operational Level Agreement (OLA) (ITILFND03 03-12)
- Contract (ITILFND03 03-13)
- Service Design Package (ITILFND03 03-14)
- Availability (ITILFND03 03-15)

*Key Principles and Models*

- Understand the importance of People, Processes, Products and Partners for Service Management (ITILFND04 04-03)
- Discuss the five major aspects of Service Design (ITILFND04 04-04)
  - Service Portfolio Design
  - Identification of Business Requirements, definition of Service requirements and design of Services
  - Technology and architectural design
  - Process design
  - Measurement design

*Processes*

- Explain the high level objectives, basic concepts, process activities and relationships for:
  - Service Level Management (SLM) (ITILFND05 05-31)
- State the objectives and basic concepts for:
  - Service Catalogue Management (ITILFND05 05-41)
  - Availability Management (ITILFND05 05-42)
  - Information Security Management (ISM) (ITILFND05 05-43)
  - Supplier Management (ITILFND05 05-44)
  - Capacity Management (ITILFND05 05-45)
  - IT Service Continuity Management (ITILFND05 05-46)

**Service  
Transition  
Lifecycle  
Learning  
Outcomes**

At the end of Module 5 – Service Transition Lifecycle, you will be able to:

- Account for the main goals and objectives of Service Transition (ITILFND02 02-06)
- Briefly explain what value Service Transition provides to the business (ITILFND02 02-07)

*Define*

- Service Knowledge Management System (SKMS) (ITILFND03 03-16)
- Configuration Item (CI) (ITILFND03 03-17)
- Configuration Management System (ITILFND03 03-18)
- Definitive Media Library (DML) (ITILFND03 03-19)
- Service Change (ITILFND03 03-20)
- Change types (Normal, Standard and Emergency) (ITILFND03 03-21)
- Release Unit (ITILFND03 03-22)
- Seven R's of Change Management (ITILFND03 03-23)
- Release Policy (ITILFND03 03-35)

*Processes*

- Explain the high level objectives, basic concepts, process activities, and relationships for:
  - Change Management (ITILFND05 05-51)
  - Service Asset and Configuration Management (SACM) (ITILFND05 05-52)
- State the objectives, basic concepts and roles for:
  - Release and Deployment Management (ITILFND05 05-61)
  - Knowledge Management (ITILFND05 05-62)

**Service  
Operation  
Lifecycle  
Learning  
Outcomes**

At the end of Module 6 – Service Operation Lifecycle, you will be able to:

- Account for the main goals and objectives of Service Operation (ITILFND02 02-08)
- Briefly explain what value Service Operation provides to the business (ITILFND02 02-09)

*Define*

- Event (ITILFND03 03-24)
- Alert (ITILFND03 03-25)
- Incident (ITILFND03 03-26)
- Impact, Urgency and Priority (ITILFND03 03-27)
- Service Request (ITILFND03 03-28)
- Problem (ITILFND03 03-29)
- Workaround (ITILFND03 03-30)
- Known Error (ITILFND03 03-31)
- Known Error Data Base (KEDB) (ITILFND03 03-32)
- The role of communication in Service Operation (ITILFND03 03-33)

*Processes*

- Explain the high level objectives, basic concepts, process activities, and relationships for:
  - Incident Management (ITILFND05 05-71)
  - Problem Management (ITILFND05 05-72)
- State the objectives and basic concepts for:
  - Event Management (ITILFND05 05-81)
  - Request Fulfilment (ITILFND05 05-82)
  - Access Management (ITILFND05 05-83)

**Continual  
Service  
Improvement  
Lifecycle  
Learning  
Outcomes**

At the end of Module 7 – Continual Service Improvement, you will be able to:

- Account for the main goals and objectives of Continual Service Improvement (ITILFND02 02-10)
- Briefly explain what value Continual Service Improvement provides to the business

*Define*

- The role of IT Governance across the Service Lifecycle (ITILFND03 03-5)

*Key Principles and Models*

- Discuss the Plan, Do, Check and Act (PDCA) Model to control and manage quality (ITILFND04 04-08)
- Explain the Continual Service Improvement Model (ITILFND04 04-09)
- Understand the role of measurement for Continual Service Improvement and explain the following key elements: (ITILFND04 04-10)
  - Business value
  - Baselines
  - Types of metrics (technology metrics, process metrics, service metrics)

**Functions,  
Roles and  
Technology  
Learning  
Outcomes**

At the end of Module 8 – Functions, Roles and Technology, you will be able to:

*Functions*

- Explain the role, objectives, organisational structures, staffing and metrics of:
  - The Service Desk function (ITILFND06 06-01)
- State the role, objectives and organisational overlap of: (ITILFND06 06-02)
  - The Technical Management function
  - The Application Management function
  - The IT Operations Management function (IT Operations Control and Facilities Management)

*Roles*

- Account for the role and the responsibilities of the
  - Process owner (ITILFND07 07-01)
  - Service owner (ITILFND07 07-01)
- Recognise the RACI model and explain its role in determining organisational structure. (ITILFND07 07-02)

*Technology*

- List some generic requirements for an integrated set of Service Management Technology
- Understand how Service Automation assists with integrating Service Management processes (ITILFND08 08-02)

**Assessment**

At the conclusion of the Foundation course, there is an exam:

- 1 hour
- 40 questions
- 26 correct to pass
- Closed book
- Exam syllabus is in the attachments
- At the end of each module, the parts of the syllabus which have been covered are listed

At the conclusion of the Foundation Bridging course, there is an exam:

- ½ hour
- 20 questions
- 13 correct to pass
- Closed book
- Exam syllabus is in the attachments
- At the end of each module, the parts of the syllabus which have been covered are listed

# ITIL® V3 Foundation

## Module 2:

# Service Management Overview

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# About ITIL®

This is the Service Management Overview Module.

## What is ITIL®

ITIL® is the IT Infrastructure Library and is defined as:

- A library – a set of 5 books make up the ITIL® library
- A framework
- Business focused
- Used by organisations worldwide
- A body of knowledge

## ITIL® Development

The growth in interest and adoption of the ITIL® process model has developed significantly since its first introduction in Europe in the early 1990's. In Australia, this interest began in the late 1990's and is continuing to grow exponentially.

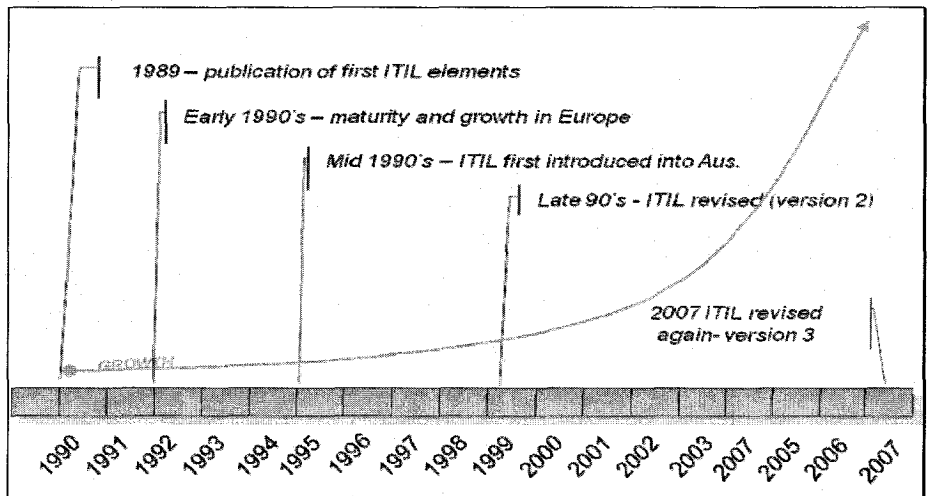


Figure 1 – ITIL® Development Timeline

# Service Management as a Practice

**Good Practice**

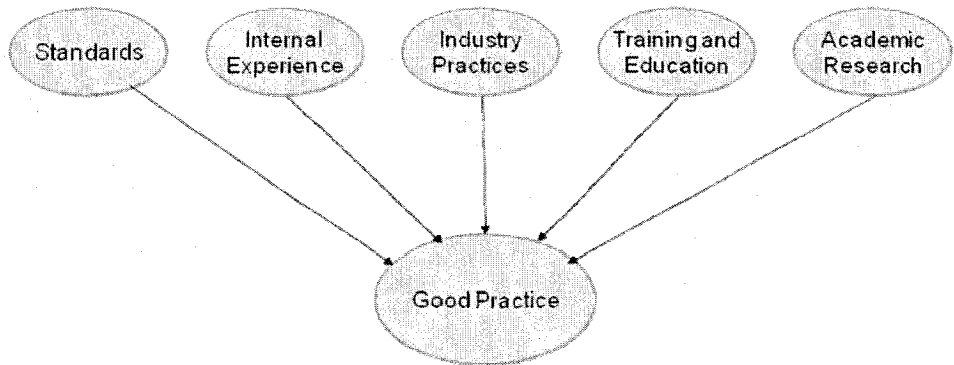
Good practice is the application of knowledge, experience, industry practices, research, training (and other sources), into a business. It is good practice to take information and guidance from all of these sources and then apply that into the management of IT in order to provide the best services to the customer.

Each organisation will apply this knowledge differently, because each organisation is different, and each industry is different.

Organisations:

- Operate in a dynamic environment
- Need to be always ready to adapt
- Trade off between maintaining stability and moving quickly
- Creates a need to benchmark, but every organisation is different
- Sources for ideas and measures include:
  - Standards
  - Internal experience
  - Industry practices
  - Training and education
  - Academic research

**Good Practice Diagram**



**Figure 2 - Good Practice**

Refer to ITIL® V3 Core Publications  
SS, SD, ST, SO, CSI 1.2.2

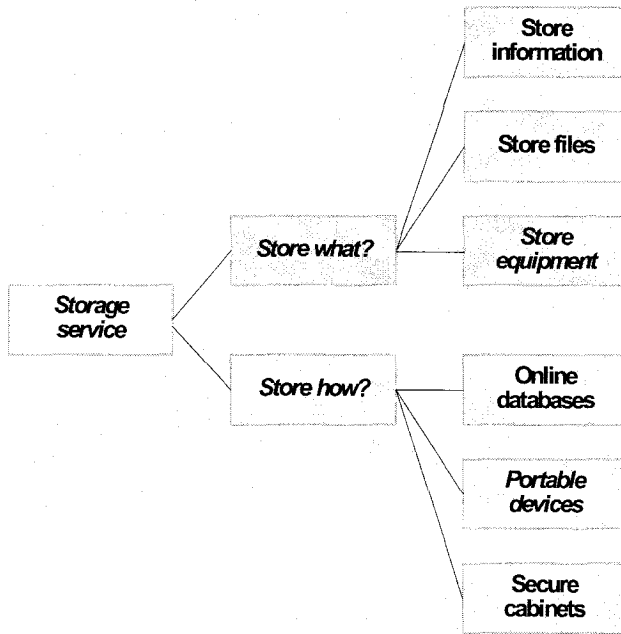


## IT Service

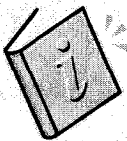
A service is a means of delivering value to customers by facilitating outcomes customers want to achieve without the ownership of specific costs and risks.

An IT service, used in support of business processes, is constructed from a combination of IT assets and externally provided “underpinning” services.

## IT Service Diagram



**Figure 3 - IT Service Diagram** © Crown copyright 2007. Reproduced under licence from OGC

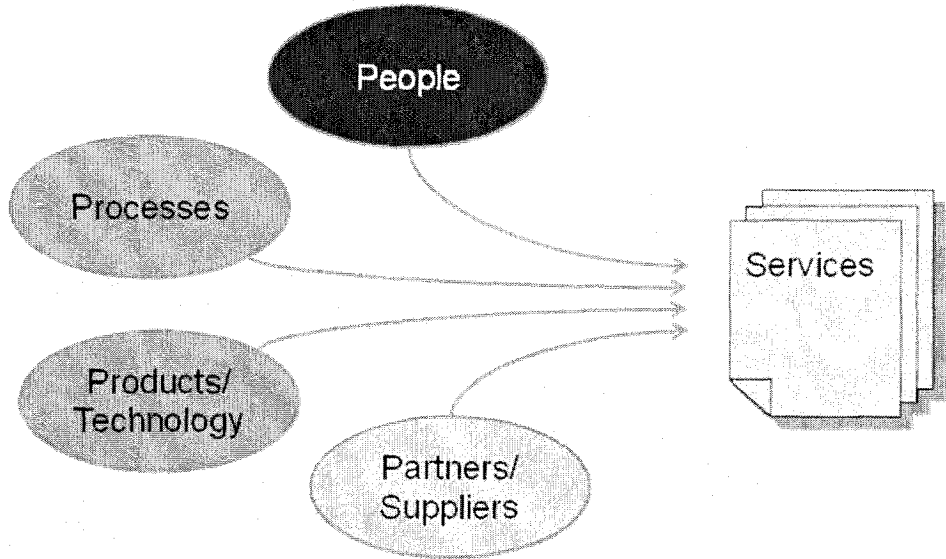


Refer to ITIL® V3 Core Publications  
SS, SD, ST, SO, CSI 2.2.1

**IT Service Management**

Service Management is a set of specialised organisational capabilities for providing value to customers in the form of services.

The act of transforming resources into services is the core of Service Management.



**Figure 4 - IT Service Management**

As well as being a set of capabilities, IT Service Management is a professional practice supported by:

- A global community (e.g. the ITSMF)
- Formal education, training, and accreditation schemes (EXIN, ISEB, APMG)
- Formal standards (ISO 20000)
- Academic research
- Industry best practices

ITSM origins are in traditional service businesses such as airlines, hotels, banks and phone companies.

Refer to ITIL® V3 Core Publications  
 SS, SD, ST, SO, CSI 2.1

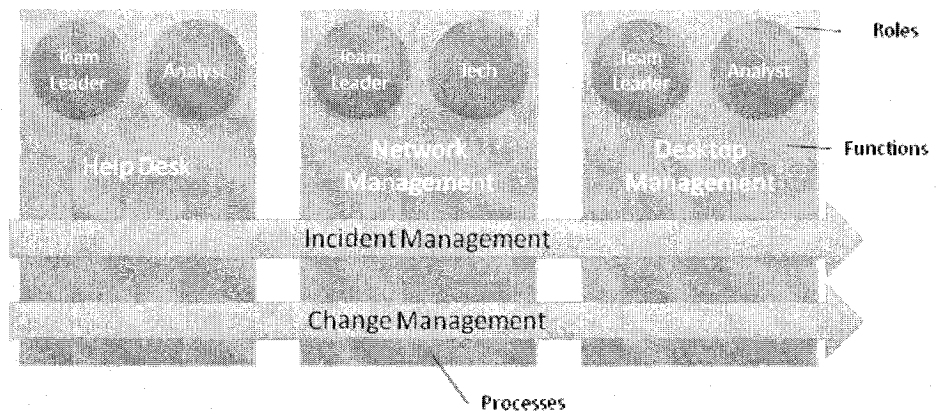


**Functions, Roles and Processes**

Functions are units of organisations (often called departments) specialised to perform certain types of work and responsible for specific outcomes. In IT, the functions include names such as Network Team, Desktop, Applications, Infrastructure, etc.

These functions usually define the roles and the associated responsibility and authority of the individuals involved in the functions.

Processes run across functions, and provide change and transformation toward a goal, and use feedback for self improvement. As an example, Change Management is a process which will require the input of a number of functions in order to be effective. The *goal* of change management is to manage change appropriately. In order to meet this goal, there will need to be input from many different *departments* or *functions* within IT. Processes provide change and transformation toward a goal, and use feedback for self improvement.



**Figure 5 – Functions, Roles and Processes**

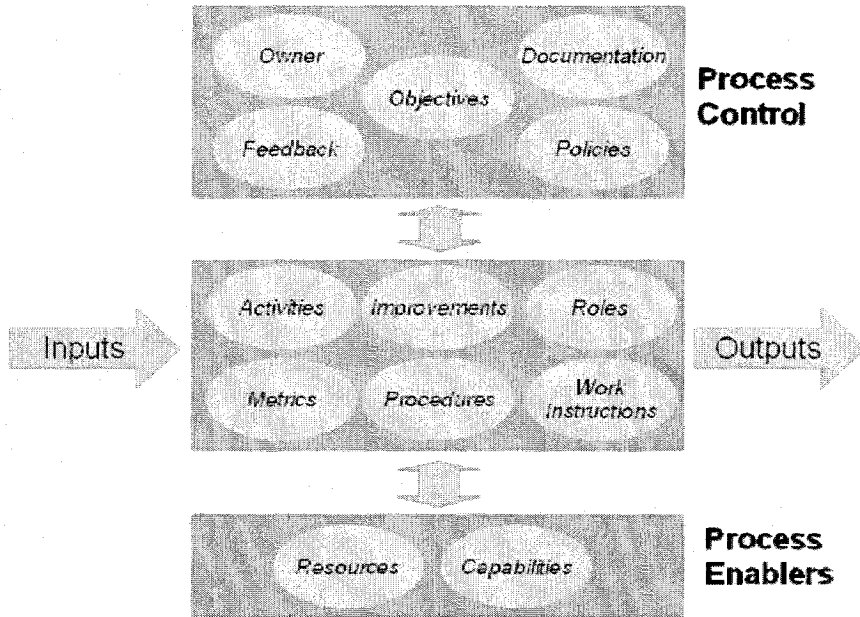


Refer to ITIL® V3 Core Publications

SS 2.3, 2.6.1, 2.6.2, SD 2.3, 3.6.4, ST 2.3, SO 2.3, 3.1, CSI 2.3

**Process Model**

A process takes one or more defined inputs and turns them into defined outputs. In order to achieve this, a process needs to have Process Control elements (an owner, a vision and measurements) and Process enablers (resources and capabilities).



**Figure 6 - Process Model**

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Refer to ITIL® V3 Core Publications

SD 3.6.4

**Process Characteristics**

A Process...

- ...is measurable - it is performance driven
- ...has specific results - there is an identifiable and countable reason for a process
- ...delivers to customers - there is a stakeholder and/or customer for every process
- ...responds to a specific event - every process has a traceable trigger



Refer to ITIL® V3 Core Publications

SS 2.6.2, SD, ST, SO, CSI 2.3.2

# ITIL® Service Lifecycle

## ITIL® Service Lifecycle

The ITIL® Service Lifecycle consists of:

- The ITIL® Core - five publications
- The ITIL® complementary guidance

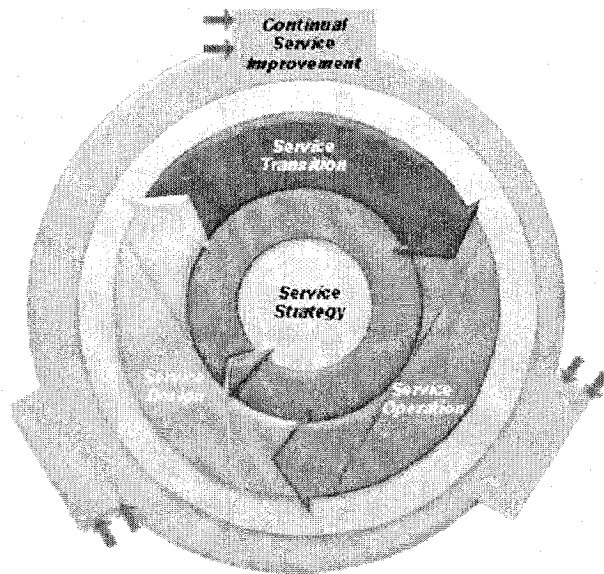
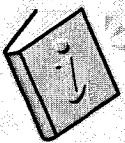


Figure 7 – ITIL® Service Lifecycle  
Diagram © Crown copyright 2007. Reproduced under licence from OGC



Refer to ITIL® V3 Core Publications

SS 1.2.3, 2.5.1, SD 1.2.3, ST 1.2.3, SO 1.2.3, CSI 1.2.3

## Service Strategy Scope

The scope of the Service Strategy lifecycle considers:

- Business processes and culture
- IT processes and culture
- Understanding customers
- Future changes in requirements
- Understanding competitors and their points of difference
- Understanding value

The Service Strategy publication provides guidance on how to design, develop and implement Service Management not only as an organisational capability but as a strategic asset.

Guidance is provided on the principles underpinning the practice of Service Management which are useful for developing Service Management policies, guidelines and processes across the ITIL® Service Lifecycle.

Service Strategy guidance is useful in the context of Service Design, Service Transition, Service Operation and Continual Service Improvement. Topics covered in Service Strategy include the development of markets, internal and external, service assets, service catalogue, and implementation of strategy through the service lifecycle.

Financial management, Service Portfolio management, organisational development and strategic risks are among other major topics.

### **Service Design Scope**

There are five individual aspects of Service Design considered in this Lifecycle:

- New or changed services
- Service Management systems and tools, especially the Service Portfolio, including the Service Catalogue
- Technology Architecture and Management Systems
- The processes required
- Measurement methods and metrics

The Service Design publication provides guidance for the design and development of services and Service Management processes. It covers design principles and methods for converting strategic objectives into portfolios of services and service assets.

The scope of Service Design is not limited to new services. It includes the changes and improvements necessary to increase or maintain value to customers over the lifecycle of services, the continuity of services, achievement of service levels, and conformance to standards and regulations.

It guides organisations on how to develop design capabilities for Service Management.

## Service Transition Scope

The scope of Service Transition includes:

- The management and coordination of the processes
- Systems and functions to package
- Build, test and deploy a release into production
- Establish the specified service

The Service Transition publication provides guidance for the development and improvement of capabilities for transitioning new and changed services into operations.

This publication provides guidance on how the requirements of Service Strategy encoded in Service Design are effectively realised in Service Operations while controlling the risks of failure and disruption. The publication combines practices in release management, programme management and risk management and places them in the practical context of Service Management.

It provides guidance on managing the complexity related to changes to services and Service Management processes, preventing undesired consequences while allowing for innovation. Guidance is provided on transferring the control of services between customers and service providers.

## Service Operation Scope

Service Operation is responsible for all ongoing activities required to support and deliver services. This includes:

- The services themselves
- The service management processes
- Technology
- People

This publication embodies practices in the management of Service Operations. It includes guidance on achieving effectiveness and efficiency in the delivery and support of services so as to ensure value for the customer and the service provider. Strategic objectives are ultimately realised through Service Operations, therefore making it a critical capability.

Guidance is provided on how to maintain stability in Service Operations, allowing for changes in design, scale, scope and service levels. Organisations are provided with detailed process guidelines, methods and tools for use in two major control perspectives: reactive and proactive.

Managers and practitioners are provided with knowledge allowing them to make better decisions in areas such as managing the availability of services, controlling demand, optimising capacity utilisation, scheduling of operations, and fixing problems. Guidance is provided on supporting operations through new models and architectures such as shared services, utility computing, web services and mobile commerce.

**Continual Service Improvement Scope**

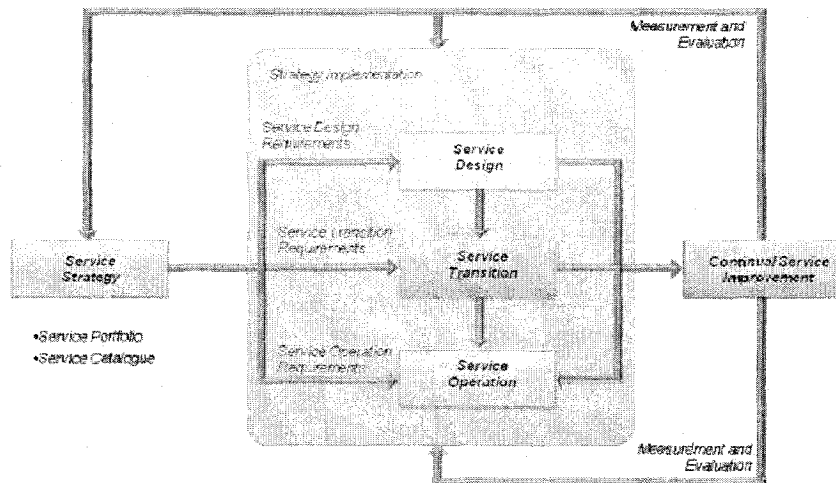
CSI addresses three main areas:

- The overall health of ITSM as a discipline
- The continual alignment of the portfolio of IT services with the current and future business needs
- The maturity of the enabling IT processes for each service in a continual service lifecycle model

The Continual Service Improvement publication provides instrumental guidance in creating and maintaining value for customers through better design, introduction and operation of services. It combines principles, practices and methods from Quality Management, Change Management and Capability Improvement. Organisations learn to realise incremental and large-scale improvements in service quality, operational efficiency and business continuity.

Guidance is provided for linking improvement efforts and outcomes with Service Strategy, Design and Transition. A closed-loop feedback system, based on the Plan-Do-Check-Act (PDCA) model specified in ISO/IEC 20000, is established and capable of receiving inputs for change from any planning perspective.

**Lifecycle Relationships**



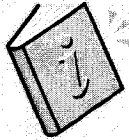
**Figure 8 - Lifecycle relationships**  
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## Lifecycle Relationships - SD, ST, SO

Service Design lifecycle start with a set of new or changed business requirements and ends with a service solution developed to meet the business need.

This solution is then passed to Service Transition to evaluate, build, test and deploy.

Once completed, it is then handed over to Service Operation to support and maintain.



Refer to ITIL® V3 Core Publications

SS, SD, ST, SO 1.2.3, 2.4.2, CSI 1.2.3, 2.4.3

## Exams

### Types of Exams

Three levels of certification:

- ITIL® Foundation Certificate in IT Service Management
- ITIL® Intermediate Certificates in IT Service Management
  - Service Management series
  - Service Capabilities series
- ITIL® Expert in IT Service Management
- ITIL® Master Qualification

# Module Summary

## Learning Outcomes

The learning outcomes covered in this module will enable you to:

- Describe the concept of Good Practice (ITILFND01 01-01)
- Define and explain the concept of a Service (ITILFND01 01-02)
- Define and explain the concept of Service Management (ITILFND01 01-03)
- Define and distinguish between Functions, Roles and Processes (ITILFND01 01-04)
- Explain the process model (ITILFND01 01-05)
- List the characteristics of processes (Measurable, Specific results, Customers, and Responds to a specific event) (ITILFND01 01-05)
- Briefly explain the Service Lifecycle (ITILFND02 02-02)
- Describe the structure, scope, components and interfaces of the ITIL® Library

# ITIL® V3 Foundation

## Module 3:

# Service Strategy Lifecycle

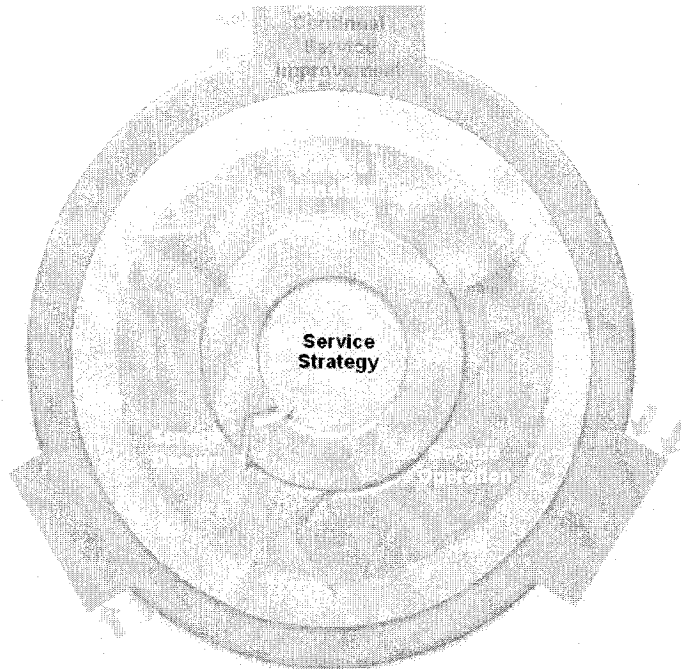
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# Service Strategy Overview

This is the Service Strategy Lifecycle Module.

## ITIL® Service Lifecycle



**Figure 1 – ITIL® Service Lifecycle  
Diagram © Crown copyright 2007. Reproduced under licence from OGC**

### Goal

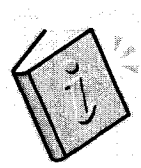
To operate and grow successfully in the long term, service providers must have the ability to think in a strategic manner.

The purpose of the guidance in the Service Strategy publication is to help organisations develop this ability.

### Objectives

To be able to answer the following types of questions:

- What services should we offer and to whom?
- How do we differentiate ourselves?
- How do we truly create value for our stakeholders?
- How should we define service quality?
- How do we efficiently allocate resources?



Refer to ITIL® V3 Core Publications

SS 1.3

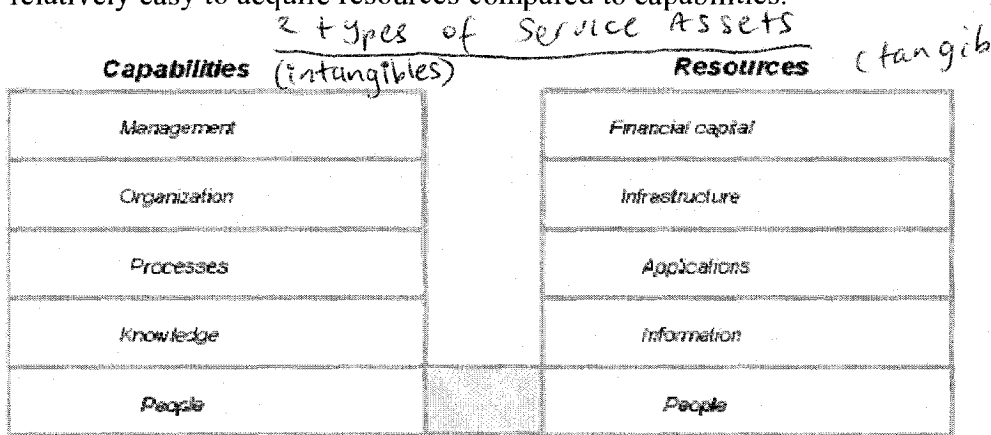
# Generic Concepts and Definitions

## Capabilities and Resources

**Capabilities and Resources** are assets used to create services and so are known as Service Assets.

These Service Assets are the basis for Value Creation.

Resources and capabilities are types of assets. Organisations use them to create value in the form of goods and services. Resources are direct inputs for production. Management, organisation, people, and knowledge are used to transform resources. Capabilities represent an organisation's ability to coordinate, control, and deploy resources to produce value. They are typically experience-driven, knowledge-intensive, information-based, and firmly embedded within an organisation's people, systems, processes and technologies. It is relatively easy to acquire resources compared to capabilities.



**Figure 2 - Capabilities and Resources**

From a competitive perspective, service providers need to develop specific capabilities to differentiate themselves from competitors.

Capabilities cannot by themselves produce value. It is an organisation's capabilities that transform the resources into value.

Resources are direct inputs to production.

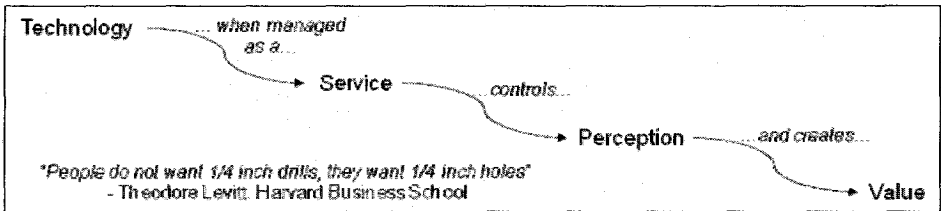
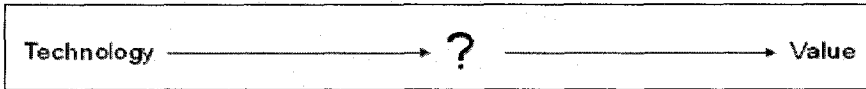


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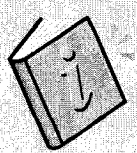
SS 3.2, 3.2.1

**Value Creation through Services**

- Value is a perception
- Managing the perception is the key to managing value
- Perception is managed by understanding IT through the eyes of the customer
- Services are technology items described and managed in ways which have meaning to the customer
- Value is created by managing services - not technology



**Figure 3 – Value Creation**



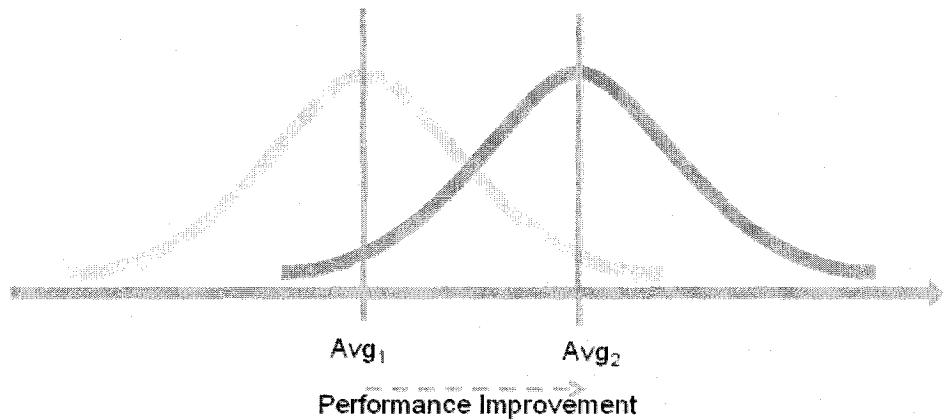
Refer to ITIL® V3 Core Publications

SS 3.1.1, 3.1.2

**Utility and Warranty**

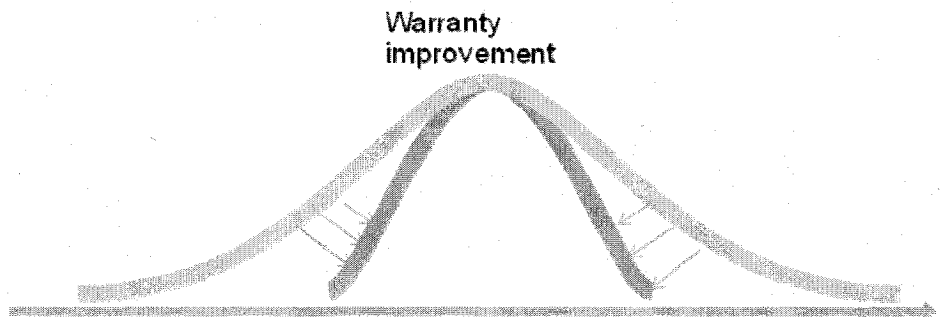
Value has two primary elements, **Utility** and **Warranty**

- **Utility** is the functionality offered by a product or service to meet a particular need. i.e. fitness for purpose
- **Utility** is a measure of performance



**Figure 4 – Value Creation – Utility**  
**Diagram © Crown copyright 2007. Reproduced under licence from OGC**

- **Warranty** is a promise that a product or service will meet its agreed requirements i.e. fitness for use
- Warranty is a measure of consistency
- If a service or product is fit for purpose (utility) and fit for use (warranty), then value has been created for the customer



**Figure 5 – Value Creation – Warranty**  
**Diagram © Crown copyright 2007. Reproduced under licence from OGC**



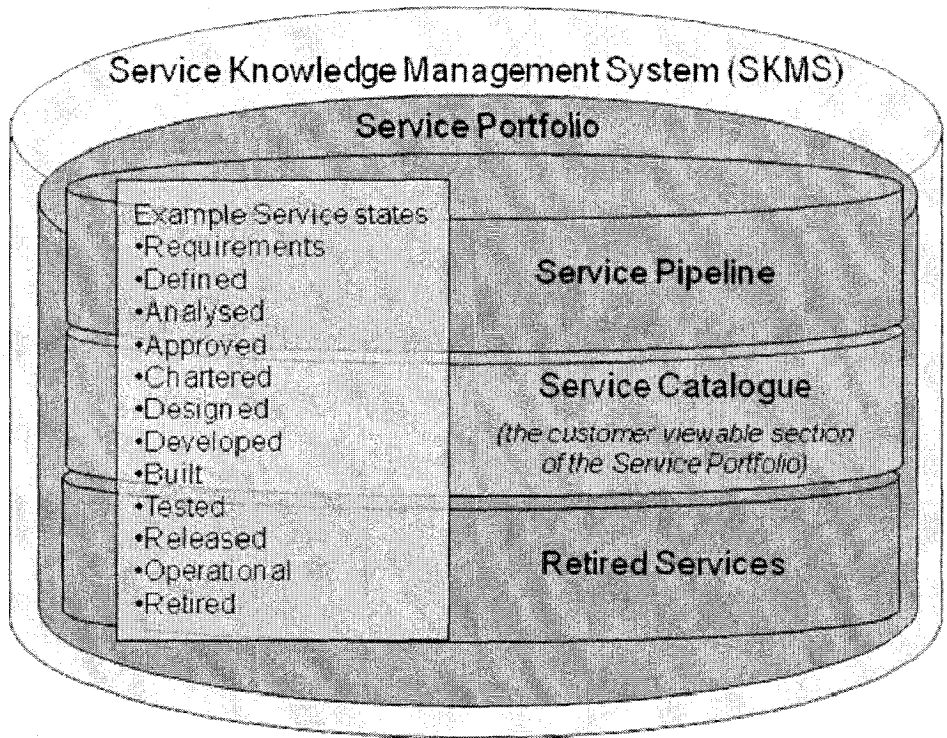
Refer to ITIL® V3 Core Publications

SS 2.2.2, 3.1.3, ST 3.1.2

**Service Portfolio, Pipeline and Catalogue**

The **Service Portfolio** is used to manage the entire life cycle of all services and includes three categories:

- **Service pipeline** (proposed or in development)
- **Service catalogue** (live or available for deployment)
- Retired services

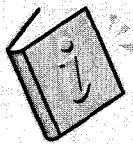


**Figure 6 –Service Portfolio/Pipeline/Catalogue**  
**Diagram © Crown copyright 2007. Reproduced under licence from OGC**

Refer to ITIL® V3 Core Publications

SS 4.2.3, SD 3.6.2

SS 4.2.3.1, SD 3.6.2, 4.1.4



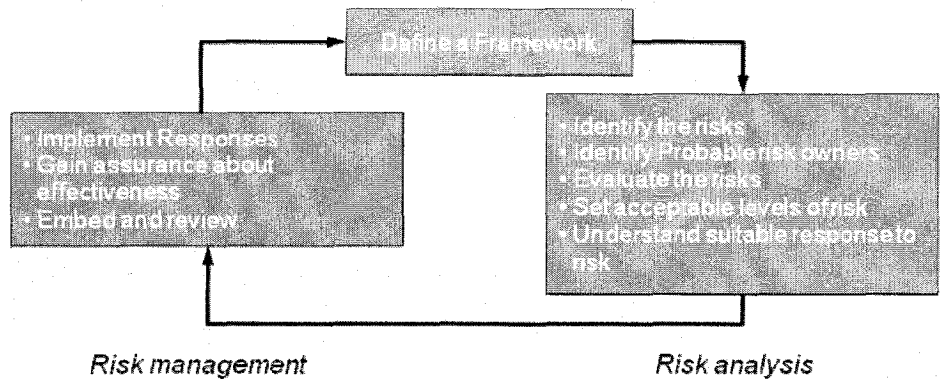
## Risks

**Risk** is defined as uncertainty of outcome - which can be positive (opportunity) or negative (threat). Managing risks requires identifying and controlling exposure to risk because of the impact on the business's ability to achieve their objectives.

There are two distinct phases in Risk Management:

- Risk Analysis
- Risk Management

## Risk Process Flow



**Figure 7 - Risk Process Flow**

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Refer to ITIL® V3 Core Publications

SS 9.5.1, CSI 5.6.3.2

# Processes

## Processes

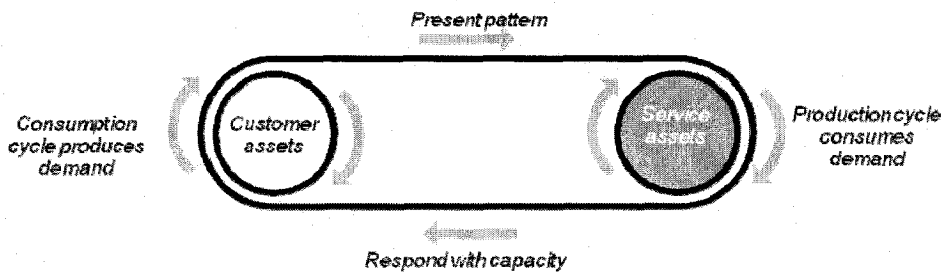
Processes

- Demand Management
- Financial Management

## Demand Management

### Objectives

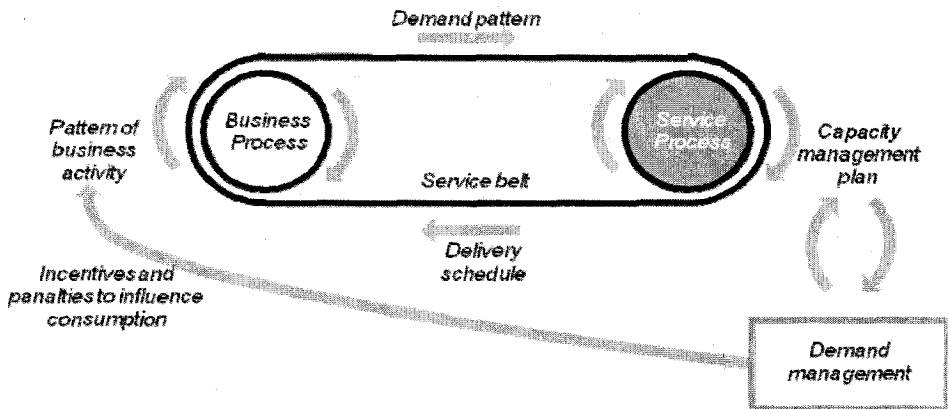
The goal is to appropriately manage the demand for services with the provision of those services



**Figure 8 - Demand Management**

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Consumption produces demand and production consumes demand in a highly synchronised pattern. Unlike products, services cannot be produced in advance and stocked ready for consumption. Demand and capacity are far more tightly linked in service systems than even the most immediate just-in-time (JIT) manufacturing.



**Figure 9 - Demand Management**

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Business Processes are the primary source of demand for services. Patterns of business activity influence the demand patterns seen by the service providers. Where there is a capacity plan in place, this increase in demand will have been foreseen, and so catered for when planning the services.

## Concepts

### Challenges

- Production happens at the same time as consumption
- Demand can be managed to some extent through techniques such as off-peak pricing and volume discounts
- Spare capacity will assist in managing demand, but customers are reluctant to pay for this unless they see the value of it.

### Patterns of Business Activity

- It is important to understand the customer's business, as this will help predict the demand on services. There will be peaks and troughs in this demand. These patterns are called Patterns of Business Activity (PBA's). These patterns will change over time. They also provide a basis for Capacity Management

### User Profiles

In addition to PBA's predicting demand at a business level, there is also differing levels of demand at a User level. These are called User Profiles, and different roles in an organisation will have different profiles of their use of the services (e.g. a CEO will have a different user requirement from a Call Centre analyst).



Refer to ITIL® V3 Core Publications

SS 5.5, 5.5.1, 5.5.2, 5.5.3

# Financial Management

**Objective** To provide information for superior decision making, operational visibility and insight in order to quantify (in financial terms) the value of IT services, the value of the assets underlying the provisioning of those services, and the qualification of operational forecasting.

**Basic Concepts** As is the case in the business, the IT Financial Management responsibilities and activities are not all undertaken solely by the IT Finance and Accounting team. There are many activities undertaken by other parts of the organisation which fit under the banner of IT Financial Management.

- **Service Valuation (pricing and value)**  
The primary goal of Service Valuation is to produce a value for services that the business perceives as fair, and fulfils the needs of the provider in terms of supporting it as an ongoing concern. A secondary objective is the improved management of demand and consumption behaviour.
- **Financial aspects of Demand modeling, Service Portfolio management, service provisioning**

Each of these other activities or processes needs information from the Financial Management process, and requires accurate and reliable data in order to fulfil their purpose effectively

- **Planning.** Generally speaking, planning can be divided into three categories
  - Operating and Capital planning (General and fixed ledgers)
  - Demand planning (need and use of IT services)
  - Regulatory and environmental planning (compliance)
- **Service Investment Analysis**  
The objective of Service Investment analysis is to derive a value indication for the total lifecycle of a service based on (1) the value received and (2) costs incurred during the lifecycle of the service.
- **Accounting**  
Accounting is concerned with understanding where the costs within the IT organisation lie and detailing them to an appropriate level in order to better manage them.
- **Compliance**

- Variable Cost dynamics (understanding all the variables that impact service cost, how sensitive they are to change, and the cost implications if they do vary)



Refer to ITIL® V3 Core Publications

SS 5.1 Intro, 5.1.2 Intro

## Business Case

A **business case** is a decision and planning tool that projects the likely consequences of a business action.

### Sample business case structure

#### A. *Introduction*

Presents the business objectives addressed by the service.

#### B. *Methods and assumptions*

Defines the boundaries of the business case, such as time period, whose costs and whose benefits.

#### C. *Business impacts*

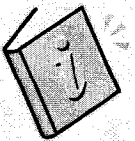
The financial and non-financial business case results.

#### D. *Risks and contingencies*

The probability that alternative results will emerge.

#### E. *Recommendations*

Specific actions recommended.



Refer to ITIL® V3 Core Publications

SS 5.2.1, CSI 4.4.1

# Module Summary

## Learning Outcomes

The learning outcomes covered in this module will enable you to:

### *Service Strategy Lifecycle*

- Account for the main goals and objectives of Service Strategy (ITILFND02 02-03)

### *Generic Concepts and Definitions*

- Resources Capabilities and Assets (ITILFND03 03-02/34)
- Explain how Service Assets are the basis for Value Creation (ITILFND04 04-02)
- Utility and Warranty (ITILFND03 03-01)
- Service Portfolio (ITILFND03 03-03)
- Service Catalogue (Business Service Catalogue and Technical Service Catalogue) (ITILFND03 03-04)
- Business Case (ITILFND03 03-04)
- Risk (ITILFND03 03-07)

### *Processes*

- State the objectives and basic concepts for:
  - Demand Management (ITILFND05 04-21)
    - Challenges in managing demand for services
    - Activity- based Demand Management (PBAs)
    - Business activity patterns and user profiles
  - Financial Management (ITILFND05 04-22)
    - Business case (covered in the intro to this section)

# ITIL® V3 Foundation

## Module 4:

# Service Design Lifecycle

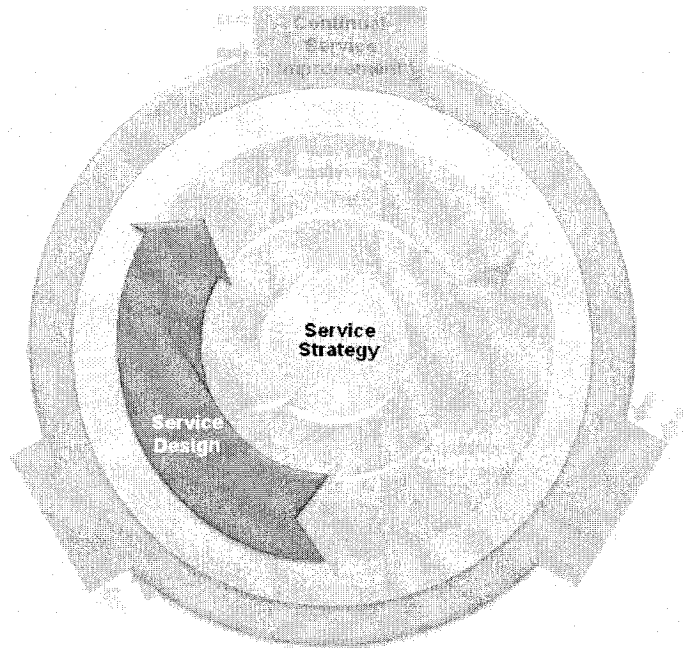
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# Service Design Overview

This is the Service Design Lifecycle Module.

**ITIL® Service  
Lifecycle**



**Figure 1 - Service Lifecycle**

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**Service Design  
Goal**

The goal of the Service Design Lifecycle is to design new or changed services for introduction into the live environment.

In order to achieve this, and to make sure that the services are appropriate, they will need to ensure that there is a holistic approach to all aspects of design, and to consider all aspects when changing or amending any of the individual elements of design.

## Service Design Objectives

The main objectives of Service Design are to:

- To design
  - Services to satisfy business objectives
  - Services that can be easily, efficiently, and appropriately developed and enhanced
  - Secure and resilient IT infrastructures and environments
  - Measurement methods and metrics for assessing design
- Identify and manage risks in services going live
- Produce and maintain documentation
- Assist in policy development
- Develop skills within IT to do all of these

Refer to ITIL® V3 Core Publications

SD 2.4.1, SD 3.1



## Value to the Business

The following benefits result from good Service Design practice:

- **Reduced Total Cost of Ownership (TCO):** cost of ownership can only be minimised if all aspects of services, processes and technology are designed properly and implemented against the design
- **Improved quality of service:** both service and operational quality will be enhanced
- **Improved consistency of service:** as services are designed within the corporate strategy, architectures and constraints
- **Easier implementation of new or changed services:** as there is integrated and full Service Design and the production of comprehensive SDPs
- **Improved service alignment:** involvement from the conception of the service, ensuring that new or changed services match business needs, with services designed to meet Service Level Requirements
- **More effective service performance:** with incorporation and recognition of Capacity, Financial Availability and IT Service Continuity Plans

- **Improved IT governance:** assist with the implementation and communication of a set of controls for effective governance of IT
- **More effective Service Management and IT processes:** processes will be designed with optimal quality and cost-effectiveness
- **Improved information and decision-making:** more comprehensive and effective measurements and metrics will enable better decision-making and continual improvement of Service Management practices in the design stage of the Service Lifecycle.



Refer to ITIL® V3 Core Publications

SD 2.4.3

# Generic Concepts and Definitions

## Service Providers

A **Service Provider** is an organisation supplying Services to one or more Internal Customers or External Customers.

Broadly speaking, there are three types of Service Providers.

1. Internal Service Providers
2. Shared Services Unit
3. External Service Providers



Refer to ITIL® V3 Core Publications

SS 3.3 Intro only, SD 4.2.4

## Service Design Package

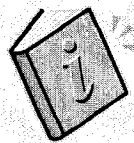
A **Service Design Package (SDP)** is a document defining all aspects of an IT Service and its requirements through each stage of its lifecycle.

A service Design Package is produced for each new IT Service, major change or IT Service Requirement.



**Figure 2 – Service Design Package Flow**

See Appendix J for a sample Service Design Package.



Refer to ITIL® V3 Core Publications

Service Provider SD 4.2.4

Service Design Package SD 3.6.1, SD Appendix A

# Key Principles and Definitions

## Five Major Aspects (1)

There are five major aspects to Service Design:

1. Identifying business requirements, defining service requirements and designing the services

When identifying business requirements and designing the solution, the following areas need to be considered:

- Review the existing IT services and infrastructure .
  - Design the service solutions to the new requirements.
  - Ensure that the contents of the Service Acceptance Criteria (SAC) are incorporated and the required achievements planned into the initial design
  - Evaluate and cost alternative designs.
  - Agree the expenditure and budgets
  - Re-evaluate and confirm the business benefits.
  - Agree the preferred solution and its planned outcomes and targets (Service Level Requirement (SLR))
  - Check the solution is in balance with all corporate and IT strategies, policies, plans and architectural documents.
  - Ensure that all of the appropriate corporate and IT governance and security controls are included with the solution
  - Complete an IT 'organisational readiness assessment' .
  - Ensure the supplier and supporting agreements necessary to maintain and deliver the service are in place
  - Ensure the assembly of a Service Design Package (SDP)
2. Designing the Service Management systems and tools, especially the Service Portfolio

The service portfolio is the most critical management system used to support all processes and describes a provider's services in terms of business value.

- Service portfolio should form part of Service Knowledge Management System (SKMS)

- The service portfolio is designed by Service Design but managed by the Service Portfolio Management Process which is a part of the Service Strategy Lifecycle
- Contains information relating to every service and its current status within the organisation. The Service Catalogue will be a subset of the Service Portfolio, as it will only contain the services which are currently live.

### 3. Technology and Architectural Design

The Technology and Architectural Design activity provides the overall strategic “blueprints” for the development and deployment of an IT infrastructure - a set of applications and data that satisfy the current and future needs of the business.

The architectural design activities should use input from the business, Service Strategy, its plans, designers and planners to develop appropriate designs, plans, architectures and policies for all areas of IT. These designs, plans, architectures and policies should cover all aspects of IT, including roles and responsibilities, services, technology, architecture and frameworks, processes and procedures, partners and suppliers and management methods.

The architectural design process must also cover all areas of technology, including the infrastructure, environment, applications and data and be closely linked to the overall business planning and design processes.

## Five Major Aspects (2)

### 4. Process Design

- Process control can be defined as “the activity of planning and regulating a process, with the objective of performing a process in an effective, efficient and consistent manner”.

### 5. Measurement Design

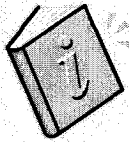
“If you can’t measure it, you can’t manage it”

In order to manage and control the design processes, they need to be monitored and measured, however care should be taken when considering what to measure and how to measure it, as measurement will impact behavior – and if the wrong information is being recorded, the wrong behavior will be encouraged.

Only metrics that encourage movement towards business objectives should be used.

Essentially there are four types of metrics:

- Process progress metrics – which measure milestones and deliverables in the capability of the process
- Process compliance metrics – which measure compliance of the process to governance requirements
- Process effectiveness metrics – which measure accuracy and correctness (“Are we doing the right things?”)
- Process efficiency metrics – which measure productivity (“Are we doing things the right way?”)



Refer to ITIL® V3 Core Publications

SD 3.6

# Processes

## Service Level Management

### Goal and Objectives

The **goal** is to ensure that an agreed level of IT Service is provided for all current IT services, and that future services are delivered to agreed achievable targets.

The **objectives** of SLM are to:

- Define, document, agree, monitor, report, review services
- Manage relationship with business and customers
- Ensure targets are developed for all services
- Monitor and improve customer satisfaction with services
- Ensure that IT and customers have matched expectations on the level of services to be delivered
- Ensure proactive measures to improve service levels are implemented when appropriate

### Scope

The scope of responsibilities mean that SLM must:

- Be a point of contact for the business
- Represent IT to the business and the business to IT
- Consider both current and future requirements and services
- Management of expectations and perceptions
- Establish and maintain SLAs for all current live services
- Produce and agree SLRs for all planned or changed services

### Basic Concepts

A **Service Level Agreement (SLA)** is a written agreement between an IT service provider and the IT customer(s), defining the key service targets and responsibilities of both parties.

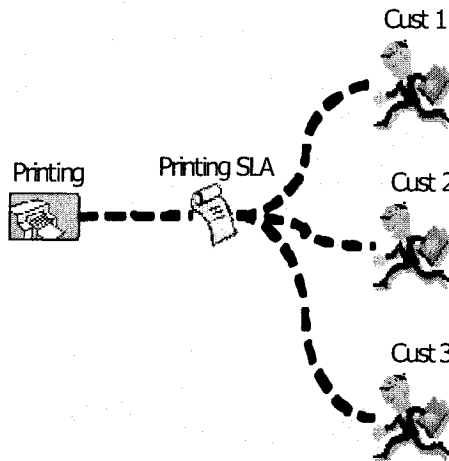
An **Operational Level Agreement (OLA)** is an agreement between an IT service provider and another part of the same organisation that assists with the provision of services.

A **contract** is defined as a legally binding agreement between two parties.

See Appendix H for a sample SLA.

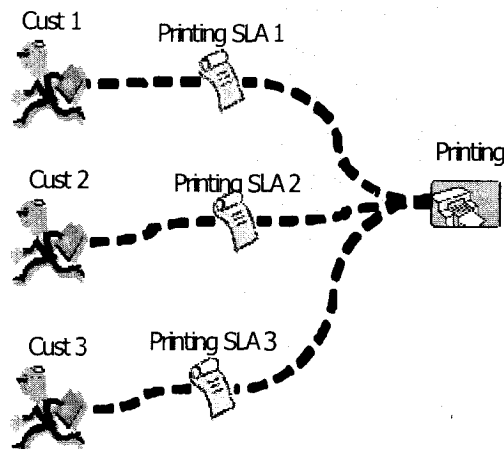
**Process Activity  
– Design SLA  
Frameworks**

- Service based agreements - All customers receive the same service level for a service (many customers, one (standard) agreement)



**Figure 3 – Service Based SLA**

- Customer based agreements - each (some) customers receive differing levels of service (many customers, many (different) agreements)



**Figure 4 – Customer Based SLA**

- Multi-level SLAs

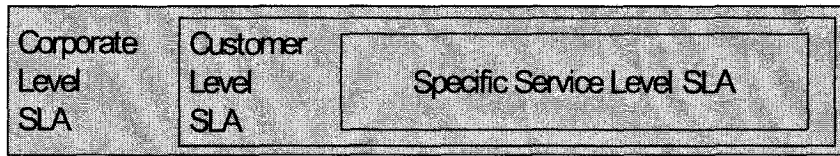


Figure 5 – Multi Level SLA

Some organisations have chosen to adopt a multi-level SLA structure. For example, a three-layer structure as follows:

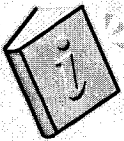
- **Corporate level:** covering all the generic SLM issues appropriate to every customer throughout the organisation. These issues are likely to be less volatile, so updates are less frequently required
- **Customer level:** covering all SLM issues relevant to the particular customer group or business unit, regardless of the service being used
- **Service level:** covering all SLM issues relevant to the specific service, in relation to a specific customer group (one for each service covered by the SLA).

### Hints and tips

A combination of either of these structures might be appropriate, providing all services and customers are covered, with no overlap or duplication.

## Process Activities

- Determine, document and agree requirements for new services and produce the **Service Level Requirements (SLR)**. The SLR is a list of requirements which the customer has of the IT Service.
- Monitor service performance against SLAs
  - Nothing should be included in the SLA unless it can be measured and monitored
  - Monitoring must match customer perceptions of the service
  - “Poor response” is often a user perception issue
- Collate, measure and improve customer satisfaction
  - Perception is important (outage does not necessarily equal dissatisfaction)
  - Methods include Periodic questionnaires, Feedback during service review meetings, telephone surveys, online etc.
- Review underpinning agreements and service scope
- Produce service reports
- A useful technique is to include a SLA Monitoring (SLAM) chart at the front of a service report to give an overview of how performance measured up against targets.
- Conduct service reviews and instigate improvements via an SIP (**Service Improvement Plan**)
- Review and revise SLA's
- Develop contacts and relationships
- Manage complaints and compliments



Refer to ITIL® V3 Core Publications

Generic Concepts and Definitions

Service Level Agreement (SLA) SD 4.2.4, 4.2.5.1

Operational Level Agreement (OLA) SD 4.2.4

Processes

SD 4.2.1, 4.2.2, 4.2.5, 4.2.5.1-9, CSI 3.5, 4.6

# Service Catalogue Management

**Objective** The **objective** of Service Catalogue Management is to ensure that a Service Catalogue is produced and maintained, containing accurate information on all operational services and those being prepared to be run operationally.

- Basic Concepts**
- A **service portfolio** containing a **service catalogue** should be put together for two reasons:
    - To provide a central , accurate set of information on all services
    - To help develop a service-focused culture
  - Once a service is “chartered”, it should be added to the service catalogue
  - The level of information contained on these services in the catalogue will vary
  - A Good starting point is to ask the customer which IT services they use and how those services map onto their business processes (see notes below)

## Service Catalogue

The Service Catalogue is key document containing valuable information on the complete set of services offered. It should preferably be stored as a set of ‘service’ CIs within a CMS, maintained under change Management.

## Sample Service Catalogue

Service Name	Service Description	Service Type	Supporting Services	Business Owner(s)	Service manager(s)	Business Impact	Business Priority	SLA	Service hours
Service 1									
Service 2									
Service 3									
Service 4									

Other column headings may include Business contacts, Escalation contacts, Service Reports, Service Reviews and Security rating (amongst others)

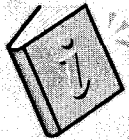
## Service Catalogue Aspects

Service Catalogue has two aspects: the Business Service Catalogue and the Technical Service Catalogue.

- **The Business Service Catalogue:** containing details of all the IT services delivered to the customer, together with relationships to the business units and the business process that rely on the IT services. This is the customer view of the Service Catalogue.
- **The Technical Service Catalogue:** containing details of all the IT services delivered to the customer, together with relationships to the supporting services, shared services, components and CIs necessary to support the provision of the service to the business. This should underpin the Business Service Catalogue and not form part of the customer view. The relationship between these two aspects is illustrated in the figure below

e.g. An Airline offers a number of services: Personal flights, business flights and cargo carrying. These are the **Business Services**. To support this, the airline has a supporting agreement with a refuelling company to refuel the planes. This is a **Technical Service**. To deliver the business services, the company needs the technical services, but the customer needs no direct knowledge of these services. There will usually be a many-to-many relationship between Business Services and Technical Services.

**Figure 6 - Service Catalogue Aspects**  
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Refer to ITIL® V3 Core Publications

SD 4.1.1, 4.1.4

# Capacity Management

## Goal and Objectives

The **goal** of Capacity Management is to ensure that cost justifiable capacity exists now and in the future.

The **objectives** of Capacity Management are to:

- Produce and maintain the capacity plan
- Provide advice and guidance on capacity related issues
- Ensure that targets are met
- Assist in resolving capacity related incidents and problems
- Assess impacts of changes on capacity plan
- Ensure proactive measures to implement good capacity management are implemented when justifiable

## Basic Concepts

Capacity Management ensures that the capacity and performance of the IT services and systems matches the evolving agreed demands of the business in the most cost-effective and timely manner. Capacity Management is essentially a balancing act:

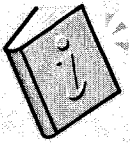
- **Balancing costs against resources needed:** the need to ensure that processing capacity that is purchased is cost-justifiable in terms of business need, and the need to make the most efficient use of those resources.
- **Balancing supply against demand:** the need to ensure that the available supply of IT processing power matches the demands made on it by the business, both now and in the future. It may also be necessary to manage or influence the demand for a particular resource.



Capacity Management has three sub-processes:

- **Business Capacity Management** which translates business needs and plans into requirements for service and IT infrastructure, ensuring that the future business requirements for IT services are quantified, designed, planned and implemented in a timely fashion.
- **Service Capacity Management** which is concerned with the management, control and prediction of the end-to-end performance and capacity of the live, operational IT services usage and workloads.

- **Component Capacity Management** which is concerned with the management, control and prediction of the performance, utilisation and capacity of individual IT technology components.
- Capacity Management is also responsible for assembling a **Capacity Plan** which contains information on the current usage of service and components, and plans for the development of IT capacity to meet the needs in the growth of both existing service and any agreed new services.



Refer to ITIL® V3 Core Publications

SD 4.3.1, 4.3.4

# Availability Management

## Goal and Objectives

The **goal** of Availability Management is to ensure that the level of service availability delivered in all services is matched to or exceeds the current and future agreed needs of the business, in a cost effective manner.

The **objectives** of Availability Management are to:

- Produce and maintain availability plan
- Provide advice and guidance on availability related issues
- Ensure that targets are met
- Assist in resolving availability related incidents and problems
- Assess impacts of changes on availability plan
- Ensure proactive measures to implement good availability management are implemented when justifiable

## Guiding Principles

**Availability** is defined as “the ability of a service, component or CI to perform its agreed function when required”

- Availability is at the core of customer satisfaction
- Improving availability can only begin after understanding how the IT services support the business

### Reliability

- A measure of how long a service, component or CI can perform its agreed function without interruption

### Maintainability

- A measure of how quickly and effectively a service, component or CI can be restored after a failure

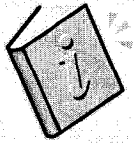
### Serviceability

- The ability of a third party supplier to meet the terms of their contract

## Key Elements

Availability Management is completed at two interconnected levels:

- **Service availability:** involves all aspects of service availability and unavailability and the impact of component availability, or the potential impact of component unavailability on service availability
- **Component availability:** involves all aspects of component availability and unavailability.



Refer to ITIL® V3 Core Publications

Generic Concepts and Definitions  
Availability SD 4.4.4

Processes  
SD 4.4.1, 4.4.4

# IT Service Continuity Management

## Goal and Objectives

The **goal** of IT Service Continuity Management (ITSCM) is to support the overall **Business Continuity Management (BCM)** process by ensuring that the required IT technical and services facilities can be resumed within required, and agreed, business timescales.

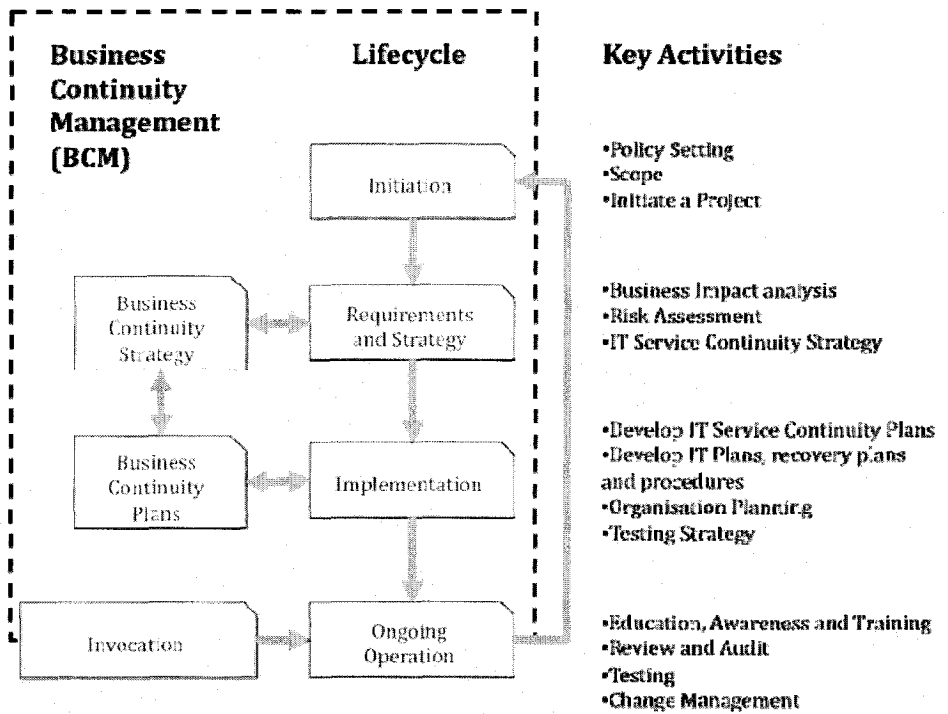
The **objectives** of ITSCM are to:

- Maintain plans
- Complete regular Business Impact Analysis (BIA)
- Conduct regular **Risk Analysis** and management
- Provide guidance to other areas
- Ensure recovery mechanisms are in place
- Assess impact of changes on continuity
- Ensure proactive availability measures are implemented where justifiable and appropriate
- Negotiate contracts with suppliers

## Basic Concepts

ITSCM is a cyclic process through the lifecycle to ensure that once service continuity and recovery plans have been developed they are kept aligned with **Business Continuity Plans (BCPs)** and business priorities.

In the diagram below, the initiation and requirements stages are principally BCM activities. ITSCM should only be involved in these stages to support the BCM activities and to understand the relationship between the business processes and the impacts caused on them by loss of IT service. As a result of these initial **BIA** and **Risk Analysis** activities, BCM should produce a Business Continuity Strategy, and the first real ITSCM task is to produce an ITSCM strategy that underpins the BCM strategy and its needs.



**Figure 7 - ITSCM Model**  
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Refer to ITIL® V3 Core Publications  
SD 4.5.1, 4.5.4

# Information Security Management

## Goal and Objectives

The **goal** of Information Security Management is to align IT security with business security and ensure that information security is effectively managed in all service and service management activities.

The **objectives** of Information Security Management are to:

- Ensure information is available and usable when required (availability)
- Ensure that information is disclosed only to those who have a right to know (confidentiality)
- Information is complete and unchanged (integrity)
- Transactions and exchanges can be trusted (authenticity and non-repudiation)

## Basic Concepts

IT Processes and practices need to align with business processes and objectives, and all other processes in the organisation need to include security considerations. In order to make this happen, the following need to be considered:

- A Security Framework

The Security Management process and framework will generally consist of:

- Security policies
- A security management system
- Security strategy
- Security organisational structure
- Security controls
- Management of security risks
- Monitoring processes
- Communications strategy
- Training and awareness plans
- An Information Security Policy

The Information Security Policy should cover all areas of security, be appropriate, meet the needs of the business and should include:

- An overall Information Security Policy
- Use and misuse of IT assets policy
- An access control policy
- A password control policy

- An e-mail policy
- An internet policy
- An anti-virus policy
- An information classification policy
- A document classification policy
- A remote access policy
- A policy with regard to supplier access of IT service, information and components
- An asset disposal policy

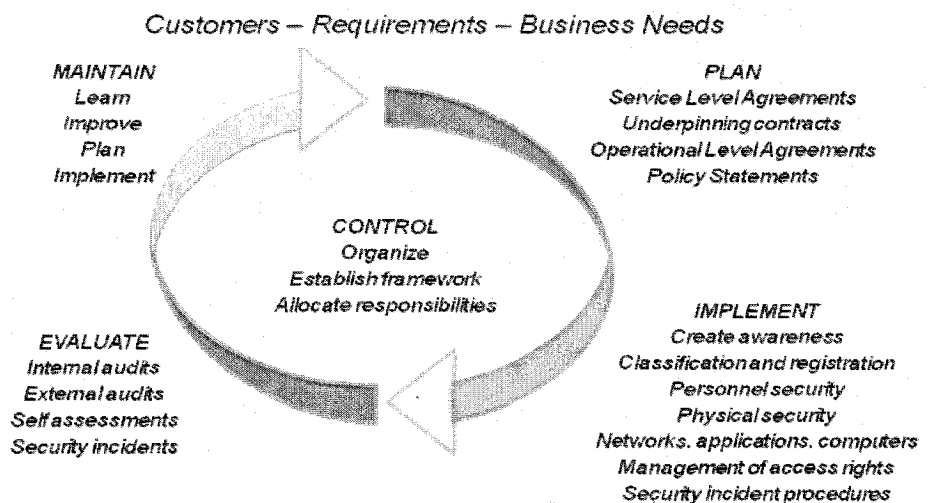
The Information Security Management System (ISMS) provides the basis for development of an appropriate security programme that supports the business.

- An Information Security Management System (ISMS)

The framework of the ISMS in turn provides a basis for the development of a cost-effective information security programme that supports the business objectives. It will involve the four P's of People, Process, Products and Partners to ensure high levels of security are in place.

The five elements within this framework are:

- Control
- Plan
- Evaluate
- Implement
- Maintain



**Figure 8 –Managing IT Security**  
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Refer to ITIL® V3 Core Publications

SD 4.6.1, 4.6.4, 4.6.4.1, 4.6.4.2, 4.6.4.3

# Supplier Management

## Goal and Objectives

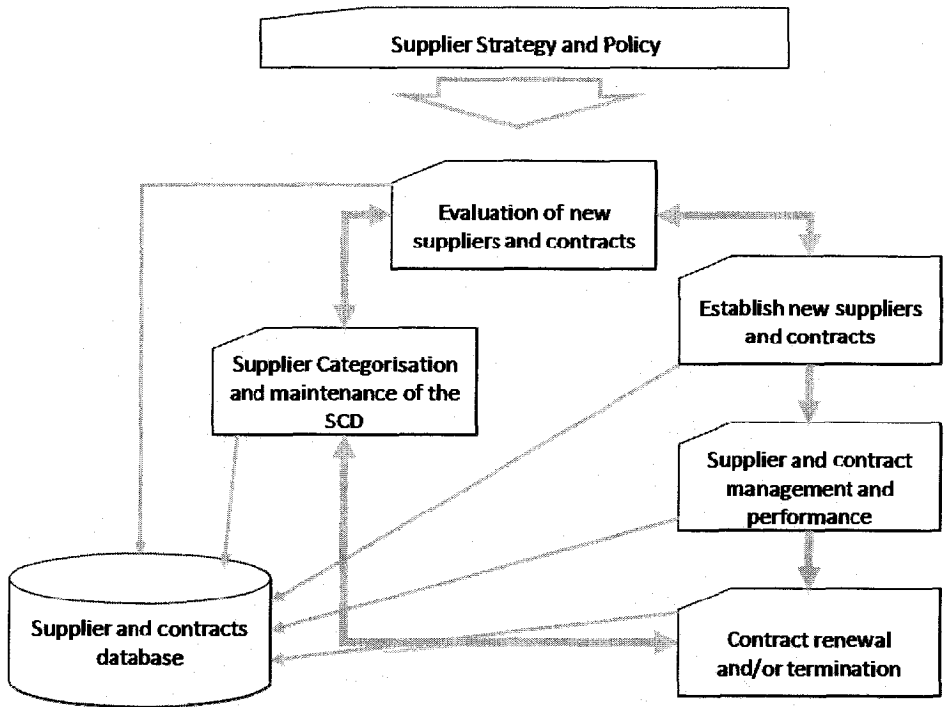
The goal of the Supplier Management process is to manage suppliers and the services they supply, to provide seamless quality of IT services to the business ensuring value for money is obtained

- The Objectives of the Supplier Management Process are to:
- Obtain value for money from suppliers and contracts
- Ensuring alignment between business needs and underpinning contracts
- Manage relationships with suppliers
- Manage supplier performance
- Negotiate, agree and manage contracts with suppliers
- Maintain a supplier policy and a supporting Supplier and Contract Database (SCD)

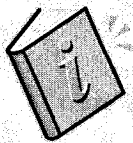
## Supplier and Contracts Database

In order to achieve consistency and effectiveness in the implementation of the policy, a supplier and contracts database should be established. This information will provide a complete set of reference information for all Supplier Management procedures and activities which are:

- Supplier categorisation and maintenance of the Supplier and Contracts Database (SCD)
- Evaluation and set-up of new suppliers and contracts
- Establishing new contracts
- Supplier and contract management and performance
- Contract renewal and termination



**Figure 9 - Supplier and Contracts Database**  
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Refer to ITIL® V3 Core Publications

Generic Concepts and Definitions  
Contract SD 4.7.5.1  
Supplier SD 4.2.4, 4.7.2

Processes  
SD 4.7.1, 4.7.4

# Module Summary

## Learning Outcomes

The learning outcomes covered in this module will enable you to:

### *Service Design Lifecycle*

- Account for the main goals and objectives of Service Design (ITILFND02 02-04)
- Briefly explain what value Service Design provides to the business (ITILFND02 02-05)

### *Generic Concepts and Definitions*

- Service Provider (ITILFND03 03-09)
- Supplier (ITILFND03 03-10)
- Service Level Agreement (SLA) (ITILFND03 03-11)
- Operational Level Agreement (OLA) (ITILFND03 03-12)
- Contract (ITILFND03 03-13)
- Service Design Package (ITILFND03 03-14)
- Availability (ITILFND03 03-15)

### *Key Principles and Models*

- Understand the importance of People, Processes, Products and Partners for Service Management (ITILFND04 04-03)
- Discuss the five major aspects of Service Design (ITILFND04 04-04)
  - Service Portfolio Design
  - Identification of Business Requirements, definition of Service requirements and design of Services
  - Technology and architectural design
  - Process design
  - Measurement design

### *Processes*

- Explain the high level objectives, basic concepts, process activities and relationships for:
  - Service Level Management (SLM) (ITILFND05 05-31)
- State the objectives and basic concepts for:
  - Service Catalogue Management (ITILFND05 05-41)
  - Availability Management (ITILFND05 05-42)
  - Information Security Management (ISM) (ITILFND05 05-43)
  - Supplier Management (ITILFND05 05-44)
  - Capacity Management (ITILFND05 05-45)
  - IT Service Continuity Management (ITILFND05 05-46)

# ITIL® V3 Foundation

## Module 5:

# Service Transition Lifecycle

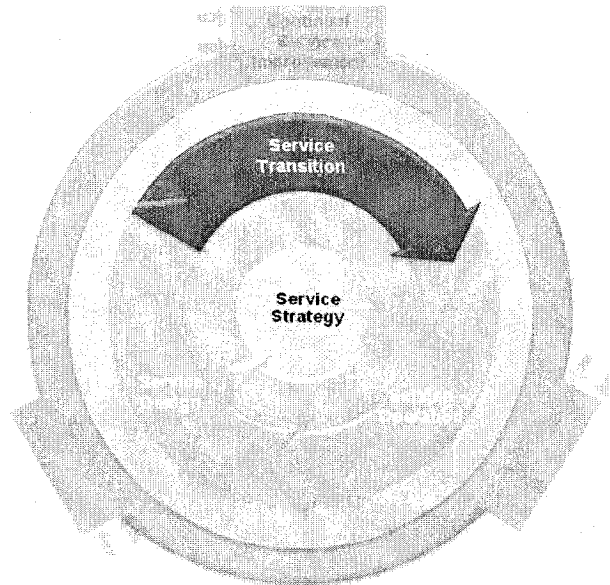
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# Service Transition Overview

This is the Service Transition Lifecycle Module.

## ITIL® Service Lifecycle



**Figure 1 - Service Lifecycle**

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### Service Transition - Goal

The goal of the Service Transition Lifecycle is to cover the following:

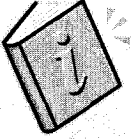
- Set customer expectations on the value to the business of new or changed services
- Enable the integration of changes into the business
- Reduce variations in performance agreed v actual of new or changed services
- Reduce known errors and minimise risks associated with transition to a new or changed service
- Ensure usability of the new or changed service.

### Service Transition - Objectives

The objectives of the Service Transition Lifecycle are :

- To plan and manage the resources to successfully establish new or changed services into production within predicted cost, quality and time estimates
- Ensure minimal unpredicted impact on production services, operations and support organisation

- Increase satisfaction with Service Transition practices
- Increase proper use of services und underlying applications and technology solutions
- Provide clear and comprehensive plans to enable change projects to align with Service Transition plans



Refer to ITIL® V3 Core Publications

ST 2.4.1, ST 2.4.3

# Generic Concepts and Definitions

## Knowledge Management

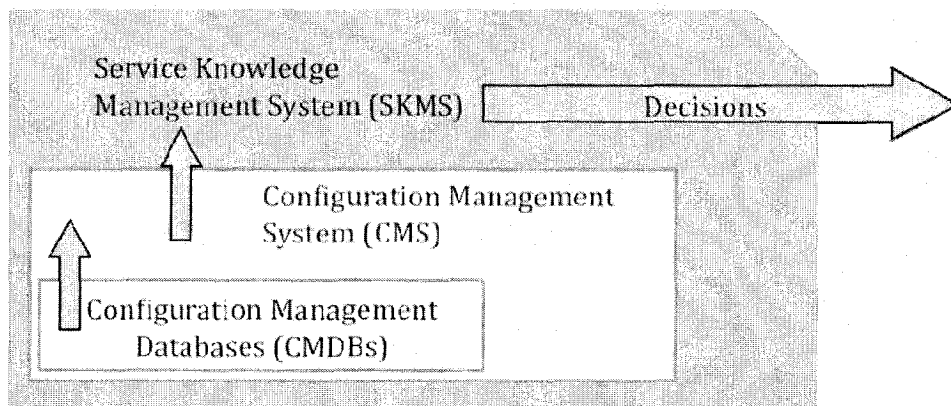
### Service Knowledge Management System

Specifically within IT Service Management, Knowledge Management will be focused within the **Service Knowledge Management System (SKMS)** concerned, as its name implies, with knowledge. Underpinning this knowledge will be a considerable quantity of data, which will be held in a central logical repository or Configuration Management System (CMS) and Configuration Management Database (CMDB). However, clearly the SKMS is a broader concept that covers a much wider base of knowledge, for example:

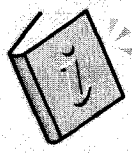
- The experience of staff
- Records of peripheral matters
- Suppliers and partners requirements, abilities and expectations
- Typical and anticipated user skill levels

The SKMS contains information on Incidents, Problems, Changes, Services, Contracts, and displays this information in ways which are most useful to the specific user.

- The Finance and admin dept would see finance information
- The Service Desk would see Incident Information
- The Supplier Manager would see the Supplier and Contracts database amongst other things



**Figure 2 – SKMS Diagram**  
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Refer to ITIL® V3 Core Publications

ST 4.7.4.2, SO 4.4.7.2

# Processes

## Change Management

### Goal and Objectives

The **goal** of Change Management is:

- To respond to the customer's changing business requirements while maximizing value and reducing incidents, disruptions and rework
- To respond to the business and IT requests for change that will align the services with the business needs

The **objective** of Change Management is:

- To ensure that changes are: Recorded; Authorised; Planned; Implemented; Reviewed; Evaluated; Prioritised; Tested and Documented...in a controlled manner

### Scope

A **service change** is “the addition, modification or removal of an authorised, planned or supported service or service component and its associated documentation”.

The scope of change management covers changes to baseline service assets and CIs.

Each organisation should define the changes that lie outside the scope of their service change process. Typically these might include:

- Changes with significantly wider impacts than service changes
- Changes at an operational level (e.g. routine servicing)

**Change Types**

Change Type	Source
Strategic changes	Service Strategy or Business Relationship Mgmt
Changes to a service	Service Design, CSI or the SLM process
Corrective changes, error resolutions	Service Operations via RFC

**Figure 3 –Change Types**

**Basic Concepts**

A Change process model is a predefined set of steps to be taken to handle a process in an agreed way.

Covering:

- The steps to be taken
- The order of these steps
- Responsibilities - who does what
- Timescales and thresholds
- Escalation procedures

Change Models may be very simple, with no requirement for approval (e.g. Password Reset) or may be very complex with many steps that require approval (e.g. major software release).

ITIL® defines three main change models:

- **Standard.** A change to a service or infrastructure that has an accepted and established procedure to provide a specific change requirement for which the approach is pre-authorised by Change Management.
- **Normal.** Unless a change falls into one of the other models, it is considered a normal change. Most organisations will have more than one type of normal change (e.g. major, minor, etc.)
- **Emergency.** A change intended to repair an error in an IT service that is negatively impacting the business to a high degree

## Change Requests

### Types of change requests

- Different types of changes may require different forms of request, e.g. A Request for Change (RFC) document, a Service Desk call or a Project Initiation Document can all be considered change requests.
- See Appendix K - Requests by Lifecycle Stage showing different types of requests by service lifecycle stage.

### Remediation Planning

- No change should be approved without having explicitly addressed the question of what to do if the change is not successful. Ideally there will be a backout plan which will restore the environment to the state it was in before the change was implemented. This, however, is not always possible. In cases where there is no way to backout a change, it is important to consider what actions should be taken if the change fails, e.g. invoking the Business Continuity plan.

## CAB – Change Advisory Board

### Change Advisory Board (CAB)

- The CAB is a body that exists to support the authorisation of changes and to assist Change Management in the assessment and prioritisation of changes
- The CAB
  - Will be composed according to the changes being considered
  - May vary considerably in make up even during one meeting
  - Should involve relevant suppliers
  - Should reflect both user and customer views
- Emergency Changes may require the ECAB (Emergency Change Advisory Board). This will generally be made up of a subset of the members of the CAB, and there will usually be a quorum of members required before an emergency change can be approved.

## CAB Meetings

### CAB meetings:

- May be conducted electronically
- Face to face is usually more efficient but may not be practical
- Circulate all RFCs in advance
- CAB members should prepare for meetings
- The CAB is only an advisory body, so management need to make decisions if consensus cannot be reached

**Emergency Changes**

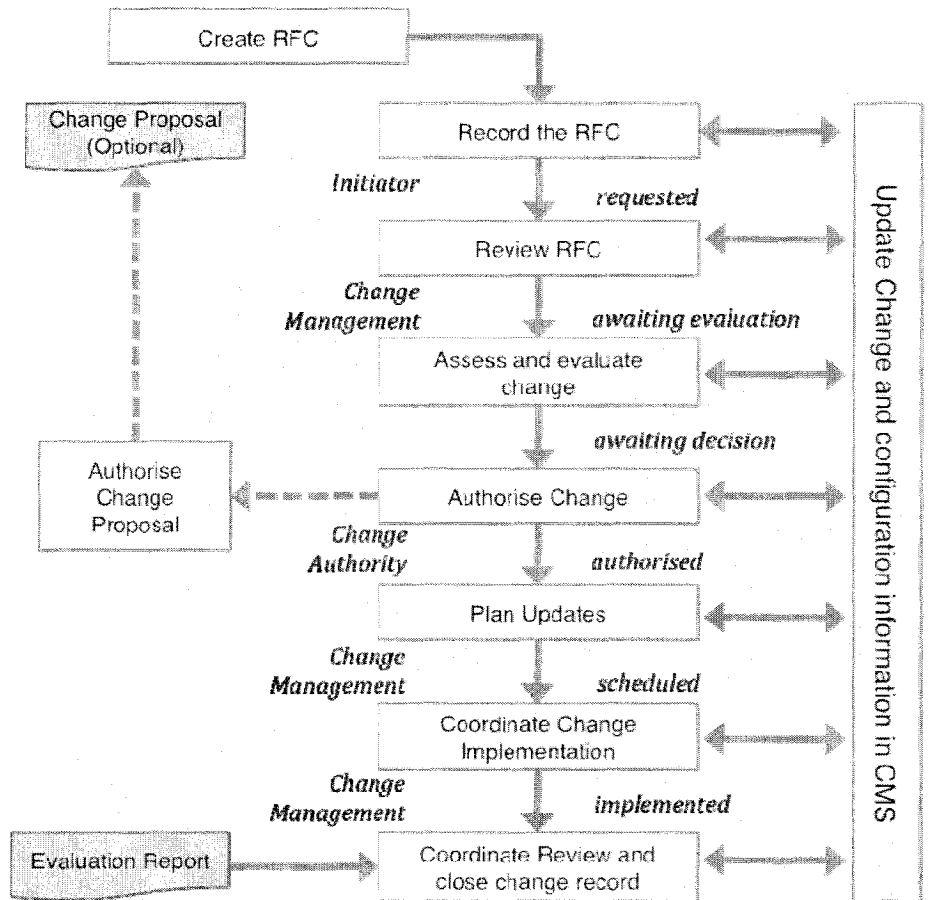
When designing the process for dealing with emergency changes, and when following this process when there is an emergency change, these points should be considered:

- **Emergency changes** Should be kept to a minimum
- The levels of authorisation for each change model need to be clearly defined.
- As much testing as is possible should be carried out
- Service Desk and other stakeholders should be given as much warning as possible
- Documentation may be temporary during implementation but should be updated retrospectively

**Process Activities**

The Activities in the Change Management process are:

- Create and record requests for change
- Review requests for change
- Assess and evaluate the change
- Authorise the change
- Coordinate change implementation
- Review and close change record



**Figure 4 - Change Management Process**  
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**Requests for Change and their Review**

- Create and record requests
  - Request is raised by the initiator
  - Some information is update during the life of the change
  - Requests for Change (RFC)s may be submitted on paper, online, email, etc
- Review the Request for Change
  - Briefly consider: Is it totally impractical? A repeat of an earlier RFC? An incomplete submission?
- Establish the appropriate level of change authority
- Establish relevant areas of interest (i.e. who should be involved in the CAB)
- Assess and evaluate the business justification, impact, cost, benefits and risk of changes
- Request independent evaluation of a change

## Seven Rs of Change Management

A helpful framework to use when assessing the impacts of changes is the **Seven R's of Change Management**. These are:

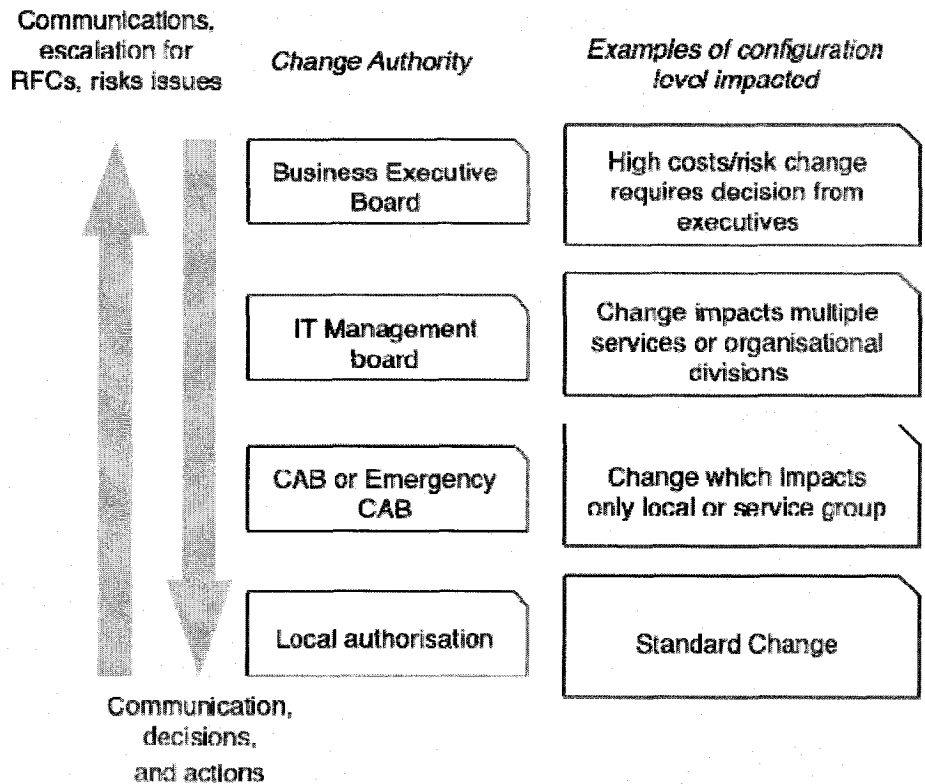
1. Who **RAISED** the change?
2. What is the **REASON** for the change?
3. What is the **RETURN** required from the change?
4. What are the **RISKS** involved in the change?
5. What **RESOURCES** are required to deliver the change?
6. Who is **RESPONSIBLE** for the build, test and implementation of the change?
7. What is the **RELATIONSHIP** between this change and other changes?

When conducting the impact and resource assessment for RFCs referred to them, Change Management, CAB, ECAB or any others (nominated by Change Management or CAB members) who are involved in this process should consider relevant items, including:

- The impact that the change will make on the customer's business operation
- The effect on the infrastructure and customer service, as defined in the service requirements baselines, service model, SLA, and on the capacity and performance, reliability and resilience, contingency plans, and security
- The impact on other services that run on the same infrastructure (or on projects)
- The impact on non-IT infrastructures within the organisation – for example, security, office services, transport, customer help desks
- The effect of not implementing the change the IT, business and other resources required to implement the change, covering the likely costs, the number and availability of people required, the elapsed time, and any new infrastructure elements required
- The current change schedule and projected service outage
- Additional ongoing resources required if the change is implemented

**Authorising the Change**

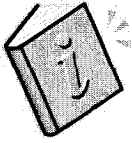
- Each change authority approves
- Approval method determined by organisational culture
- Authority may be delegated depending on:
  - Anticipated business risk
  - Financial implications
  - Scope of change



**Figure 5 - Authorising Change Flow**  
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**Coordinate and Close**

- Coordinating change implementation
  - Ensuring changes are implemented as scheduled
  - Change Management has oversight
- Review and close change record
  - Post implementation Review (PIR)
  - Did the change have the desired effects; meet its objectives; have any shortcomings; use the expected resources; go ahead on time; need remediation, and if so, did it work?
  - Different reviews for service changes vs. infrastructure changes



## Refer to ITIL® V3 Core Publications

### Generic Concepts and Definitions

Service Change - ST 4.2.2

Types of Change Request – ST 4.2.4.3, Table 4.3

Change types (Normal, Standard and Emergency) - ST 4.2.6.1, 4.2.4.4, 4.2.4.5, 4.2.6.9

Remediation Planning – ST 4.2.5

Change Advisory Board/Emergency Change Advisory Board – ST 4.2.6.8

Seven R's of Change Management - ST 4.2.6.4

### Processes

ST 4.2, 6.3.2.4

# Service Asset & Configuration

## Goal and Objectives

The **goal** of Service Asset and Configuration Management is:

- To define and control the components of services and infrastructure and maintain accurate configuration information on the state of the services and infrastructure

The **objectives** of Service Asset and Configuration Management are:

- To support the customer's control requirements
- To make configuration information available to other service management processes
- Minimize the number of compliance and quality issues
- Optimize the service assets, configurations, capabilities and resources

## Basic Concepts

### Configuration Items (CIs)

An asset, service component or other item that is, or will be, under the control of SACM. They may vary widely in complexity, size and type.

### Configuration Management System (CMS)

The CMS will hold details of all of the components of the IT Infrastructure as well as the relationships between these components. It will act as a valuable source for problem diagnosis and for evaluating the impact of problems (e.g. if this disk is down, what data is on that disk; which services use that data; which users use those services?). As it will also hold details of previous activities, it can also be used as a valuable source of historical data to help identify trends or potential weaknesses – a key part of proactive Problem Management.

The CMS maintains the relationships between all service components and any related incidents, problems, known errors, change and release documentation and may also contain corporate data about employees, suppliers, locations and business units, customers and users.

At the data level, the CMS may take data from several physical CMDBs, which together constitute a federated CMDB. Other data sources will also plug into the CMS such as the definitive media libraries. The CMS will provide access to data in asset inventories wherever possible rather than duplicating data.

The **Definitive Media Library** is a secure library in which the definitive authorised versions of all media CIs are stored and protected:

- It contains master copies of all controlled software (purchased and developed) including licence information
- May be one or more libraries or file storage areas
- Will also include master copies of controlled documentation

## Configuration Baseline

### Definitive Spares

An area for the secure storage of configured components and assemblies maintained at the same level as those in the live environment

### Configuration Baseline

The configuration of a service, product or infrastructure that has been formally reviewed and agreed on and thereafter serves as the basis for further activities. It can be changed only through formal change procedures. Commonly called a standard operating environment (SOE).

## Configuration Model

SACM delivers a model of the services, assets and infrastructure by recording the relationship between the CIs. This enables other processes to access valuable information. This model is the single source for any information on the IT infrastructure, so there should be only ONE model.

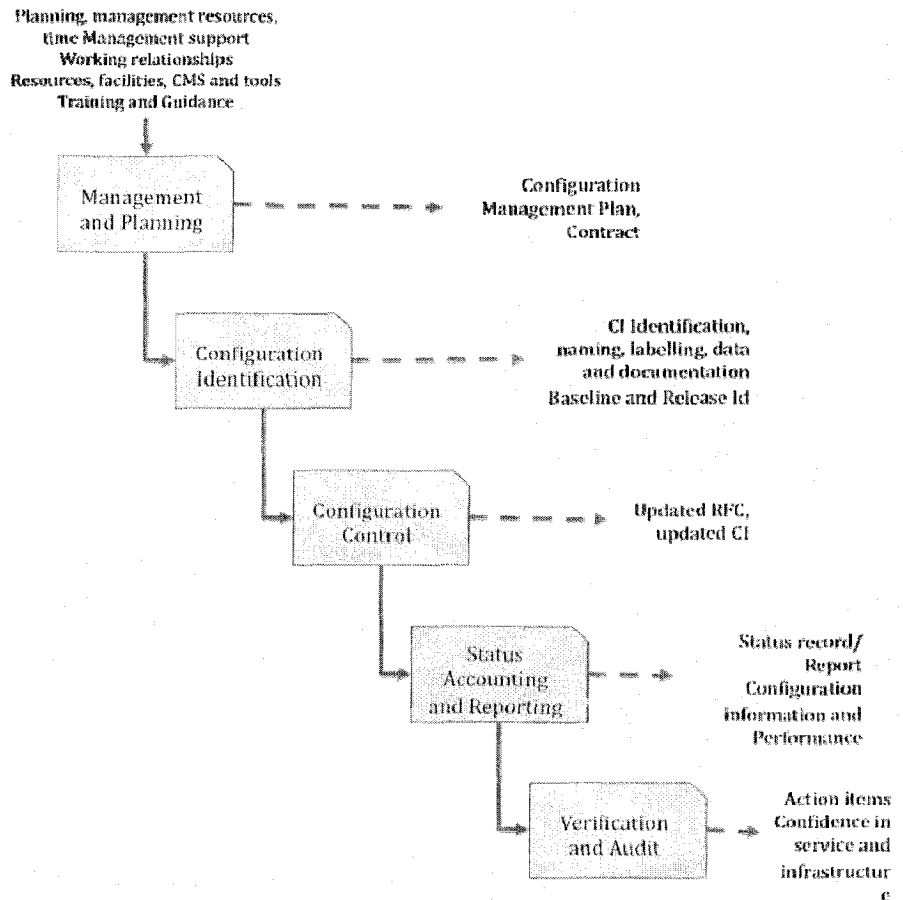
*"When there is one clock in the house, you know the time... once you have two clocks, you are no longer certain" – Danish Proverb.*

### Figure 6 - Configuration Quote

## Activities

The activities in the Service Asset and Configuration Management Process are:

- Management and Planning
- Identification
- Control
- Status Accounting and Reporting
- Verification and Audit



**Figure 7 – Activities**

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### Management and Planning

The Management team and SACM should jointly decide what level of SACM is required for the selected project or services. This involves gathering all the relevant data on the organization and using it to establish an appropriate process.

### Configuration Identification

Once the relevant level of SACM has been determined, this needs to be translated into detail including:

- Defining the classes of assets, how they will be grouped, classified and defined
- Establishing an appropriate naming and labeling convention
- Define the attributes and relationships which need to be recorded for the CIs
- Identify the owner of each CI
- Populating the database

## Configuration Control

Once the database and its contents have been determined, control needs to be maintained over the information. No CI should be added, modified, replaced or removed without an appropriate controlling documentation or procedure being followed.

## Status Accounting and Reporting

This activity is concerned with ensuring that all configuration data and documentation is recorded as each CI progresses through its lifecycle

## Verification and Audit

- It is important to ensure that the information contained in the database accurately reflects the live environment. The verification and audit activity is responsible for this.

Refer to ITIL® V3 Core Publications

Generic Concepts and Definitions

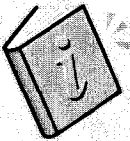
Configuration Item (CI) - ST 4.3.4.2

Configuration Management System - ST 4.3.4.3, SO 4.4.7.1

Definitive Media Library (DML) - ST 4.3.4.3

Processes

ST 4.3.1, 4.3.4, 4.3.5



# Release & Deployment Management

## Goal and Objectives

The **goal** of the Release and Deployment process is:

To deploy resources into production and establish effective use of the service in order to deliver value to the customer and be able to hand over to service operations.

The **objectives** are to ensure that:

- Release and Deployment management aims to build, test and deliver the capability to provide the services specified by service design and that will accomplish the stakeholders' requirements and deliver the intended objective
- There are clear and comprehensive plans
- Release packages are built, installed, tested and deployed efficiently, successfully and on schedule
- New or changed services can deliver what is promised
- There is minimal unpredicted outages due to releases
- There is satisfaction with the process

## Basic Concepts

A **Release Unit** is the portion of a service or IT infrastructure that is normally released together according to the organisation's release policy.

The general aim is to decide the most appropriate release unit level for each service asset or component.

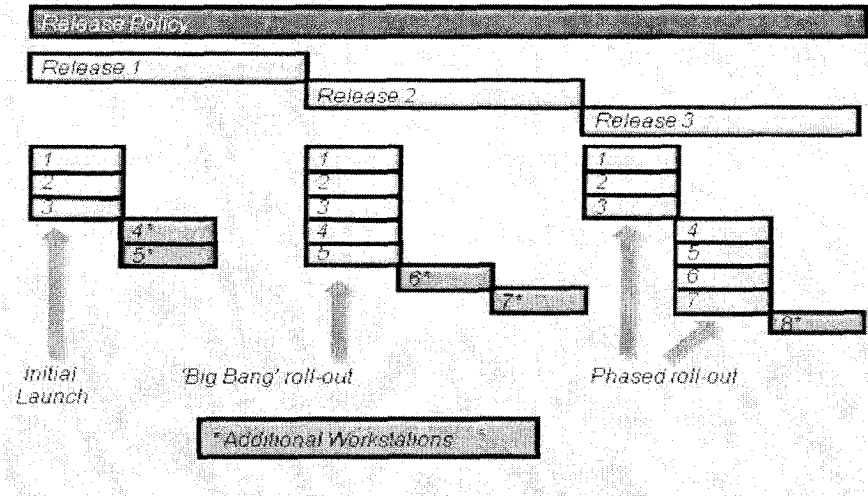
A **Release Policy** should be defined for the services. This would include:

- Naming conventions
- Roles and responsibilities
- Frequency of releases
- The approach for grouping changes, and accepting changes into a release
- Any automation considerations

## Release Design Options

**Release design options** and considerations are:

- Big bang release vs. phased release
- Push or Pull installation
- Automation vs. manual intervention required



**Figure 8 - Release Design Options**  
Diagram © Crown copyright 2007. Reproduced under licence from OGC

**Designing release and release packages**

- A release package may be a single unit or a structured set of release units
- The deployment of any significant new or changed service will likely contain sub deployments.

**Testing**

- Testing is a part of the Release Management process

Refer to ITIL® V3 Core Publications

Generic Concepts and Definitions  
Release Policy – ST 4.1.4.2  
Release Unit - ST 4.4.4.1

Processes  
ST 4.4.1, 4.4.4



# Knowledge Management

## Goal and Objectives

The **goal** of Knowledge Management is to enable organisations to improve the quality of management decision by ensuring that reliable and secure information is available throughout the service lifecycle:

The **objectives** include:

- Enable the service provider to be more efficient and improve quality of service, increase satisfaction and reduce the cost of service
- Ensuring staff have a clear understanding of the value that the services provide to the customers, the benefits of those services, and how they are realised.
- Ensuring that , at a given time and location, service provider staff have adequate information on:
  - Who is currently using their services
  - The current states of consumption
  - Service delivery constraints
  - Difficulties faced by the customer in fully realizing the benefits expected from the service.

## Context vs. Understanding

### Data vs. Information vs. Knowledge vs. Wisdom (DIKW)

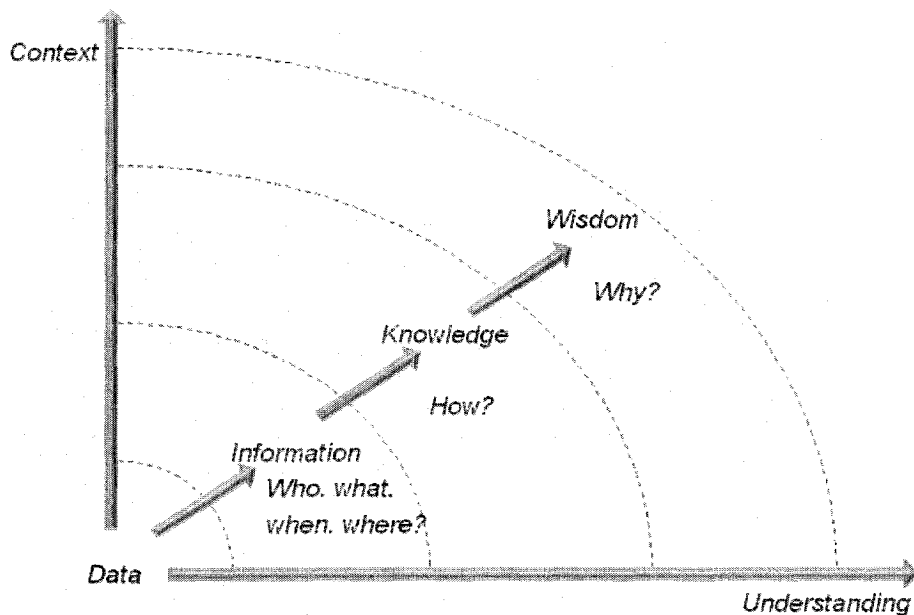
The use of these terms is set out below.

**Data** is a set of discrete facts about events. Most organisations capture significant amounts of data in highly structured databases such as Service Management and Configuration Management tools/systems and databases.

**Information** comes from providing context to data. Information is typically stored in semi-structured content such as documents, e-mail, and multimedia.

**Knowledge** is composed of the tacit experiences, ideas, insights, values and judgements of individuals. People gain knowledge both from their own and from their peers' expertise, as well as from the analysis of information (and data). Through the synthesis of these elements, new knowledge is created.

**Wisdom** gives the ultimate discernment of the material and having the application and contextual awareness to provide a strong common sense judgment.



**Figure 9 - Context vs. Understanding**  
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Example		Implication
Data	7	None – this is only a data point
Information	7° Celsius	7 degrees C means that you are measuring temperature
Knowledge	7° C outside	It's cold - you need a coat. You have applied the information
Wisdom	7° C outside in July	It's cold because it's winter, and it will happen again next year

**Table 1 - Application of the Model**

Refer to ITIL® V3 Core Publications

ST 4.7 Intro, 4.7.1, 4.7.4



# Module Summary

## Learning Outcomes

The learning outcomes covered in this module will enable you to:

### *The Service Lifecycle*

- Account for the main goals and objectives of Service Transition (ITILFND02 02-06)
- Briefly explain what value Service Transition provides to the business (ITILFND02 02-07)

### *Generic Concepts and Definitions*

- Service Knowledge Management System (SKMS) (ITILFND03 03-16)
- Configuration Item (CI) (ITILFND03 03-17)
- Configuration Management System (ITILFND03 03-18)
- Definitive Media Library (DML) (ITILFND03 03-19)
- Service Change (ITILFND03 03-20)
- Change types (Normal, Standard and Emergency) (ITILFND03 03-21)
- Release Unit (ITILFND03 03-22)
- Seven R's of Change Management (ITILFND03 03-23)
- Release Policy (ITILFND03 03-35)

### *Processes*

- Explain the high level objectives, basic concepts, process activities and relationships for:
  - Change Management (ITILFND05 05-51)
  - Service Asset and Configuration Management (ITILFND05 05-52)
- State the objectives, basic concepts and roles for:
  - Release and Deployment Management (ITILFND05 05-61)
  - Knowledge Management (ITILFND05 05-62)

# ITIL® V3 Foundation

## Module 6:

# Service Operation Lifecycle

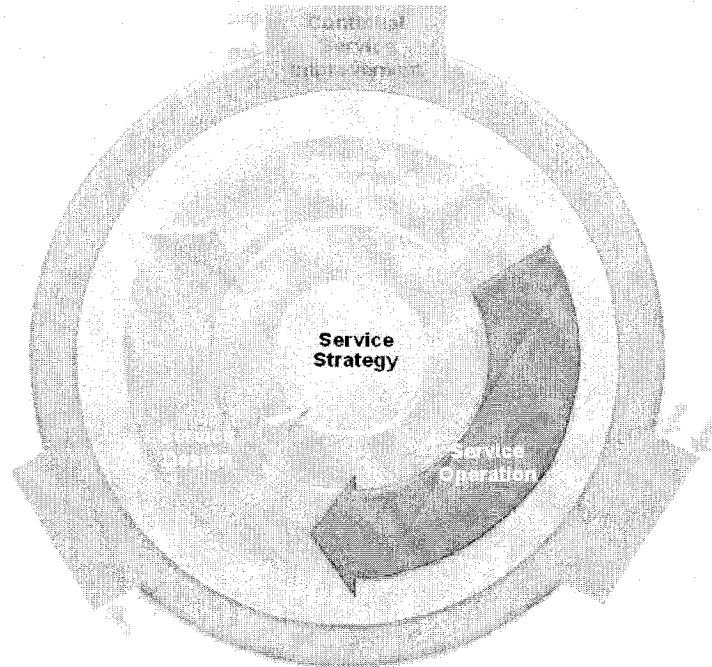
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# Service Operation Overview

This is the Service Operation Lifecycle Module.

## ITIL® Service Lifecycle



**Figure 1 – ITIL® Service Lifecycle**  
**Diagram © Crown copyright 2007. Reproduced under licence from OGC**

## Value to the Business

Each stage in the ITIL® Service Lifecycle provides value to business.

For example, service value is modelled in **Service Strategy**; the cost of the service is designed, predicted and validated in **Service Design** and **Service Transition**; and measures for optimisation are identified in **Continual Service Improvement**.

The operation of service is where these plans, designs and optimisations are executed and measured. From a customer viewpoint, **Service Operation** is where actual value is seen.



Refer to ITIL® V3 Core Publications

SO 2.4.3 1<sup>st</sup> para

**Goal and Scope**

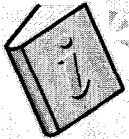
The **goal** of Service Operation is to coordinate and carry out the activities and processes required to deliver and manage services at agreed levels to business users and customers. Service operation is also responsible for the ongoing management of the technology that is used to deliver and support services.

**Scope**

- The services themselves.
- Service Management processes.
- Technology.
- People.

Refer to ITIL® V3 Core Publications

SO 2.4.1



# Key Principles and Models

- Communication**
- **Communication** between departments and teams within the Service operation lifecycle is imperative
  - Communication must have an intended purpose, and should not happen without an intended audience
  - Typical communication would include:
    - Routine operational communication
    - Communication between shifts
    - Performance reporting
    - Communication in projects
    - Communication about changes, exceptions and emergencies
    - Training



Refer to ITIL® V3 Core Publications

SO 3.6

# Processes

## Resources and Capabilities

### Major Processes

- Incident Management
- Problem Management

### Other Processes

- Event Management
- Request fulfillment
- Access Management

# Incident Management

## Goal and Scope

### Goal

*As defined by SLA*

To restore normal service operation as quickly as possible and minimise the adverse impact on business operations, thus ensuring that the best possible levels of service quality and availability are maintained

### Scope

Incident management covers any incident or event which disrupts or could disrupt a service. This includes events which are communicated directly by users as well as system generated event.

## Basic Concepts

An **incident** is an unplanned interruption to an IT service or reduction in the quality of an IT service. Failure of a CI that has not yet impacted service is also an incident.

### Timescales

- Timescales must be agreed upon for each stage in the incident management process, based on the overall targets in the SLAs
- Service management tools can be used to automate the management and monitoring of these timescales



Refer to ITIL® V3 Core Publications

SO 4.2

## Incident Models and Major Incidents

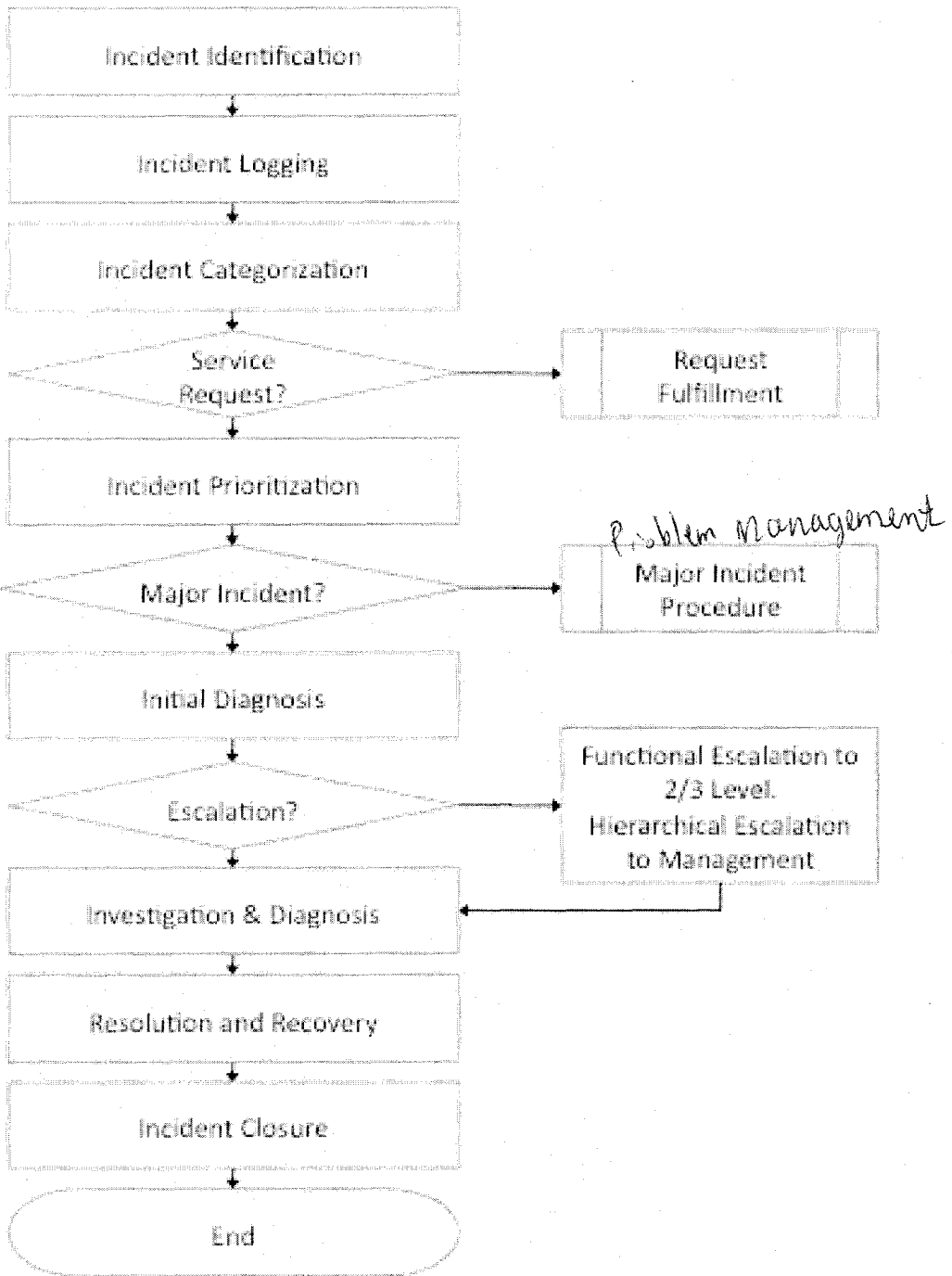
Many incidents are not new – they involve dealing with something that has happened before and may well happen again. For this reason, many organisations will find it helpful to pre-define ‘standard’ Incident Models – and apply them to appropriate incidents when they occur.

- An incident model is a way of pre-defining the steps that should be taken to handle a process (in this case a process for dealing with a particular type of incident) in an agreed way.

### Major incidents

- A separate procedure with shorter timescales and greater urgency must be used for major incidents - which requires a definition of what constitutes a major incident.
- It is important to note that there is a very clear distinction between a major incident and a problem. Major incidents will always be managed as part of the incident management process, as they are incidents. Problem Management deals with problems separately. An incident never *becomes* a problem – it may be linked to a problem, but it will never *become* a problem.

**Process Activities**



**Figure 2 - Incident Identification and Logging Flow Diagram © Crown copyright 2007. Reproduced under licence from OGC**

**Incident Identification**

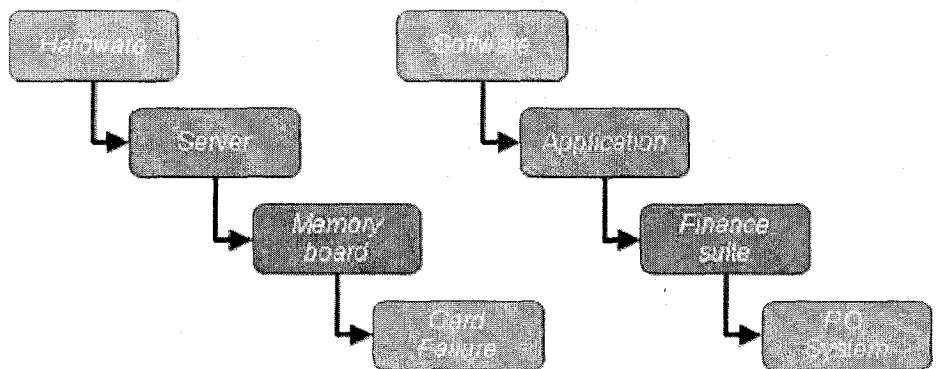
- Work cannot begin on resolving an incident until the incident has been identified. As far as possible, all key components should be monitored so that incidents can be identified quickly - ideally before the customer identifies them.

- Incident logging**
- All incidents must be fully logged and time stamped. Even the “while you’re here” incidents
  - Logging needs to be consistent and accurate
  - The information recorded may include:
    - Unique reference number
    - Incident categorisation (often broken down into between two and four levels of sub-categories)
    - Incident urgency, impact and priority
    - Date/time recorded; name and department of person reporting the incident; how the incident was reported; call back method
    - Description of symptoms
    - Incident status (active, waiting, closed, etc.)
    - Related CI
    - Support group/person to which the incident is allocated
    - Related problem/Known Error
    - Activities undertaken to resolve the incident
    - Resolution date and time
    - Closure category
    - Closure date and time

**Incident Categorisation**

In order to understand the incidents, it is important that all incidents are categorised accurately and effectively. A drop down box with 20 options is almost useless as the correct selection of Category will be difficult. Similarly a drop down box with two options will also provide very little valuable information. Make sure the categories are relevant and meaningful.

**Incident Categorisation Flow**



**Figure 3 - Incident Categorisation Flow**

**Incident Prioritisation**

- **Priority** is defined as “a category used to identify the relative importance of an incident, problem or change”. Priority is based on impact and urgency
- **Impact** is defined as “a measure of the effect of an incident, problem or change on business processes”
- **Urgency** is defined as “a measure of how long it will be until an incident, problem or change has a significant impact on the business”
- Other factors such as safety; the number of services affected; financial impact and reputation may also need to be considered



Refer to ITIL® V3 Core Publications

SO 4.2.5.4, 4.4.5.4

**Priority Matrix**

	High	3	2	1
Impact	Med	4	3	2
	Low	5	4	3
		Low	Med	High

Priority code	Description	Target resolution time
1	Critical	1 hour
2	High	2 hours
3	Medium	24 hours
4	Low	48 hours
5	Planned	Agreed

**Figure 4 - Priority Matrix**  
Diagram © Crown copyright 2007. Reproduced under licence from OGC

**Diagnosis and Escalation**

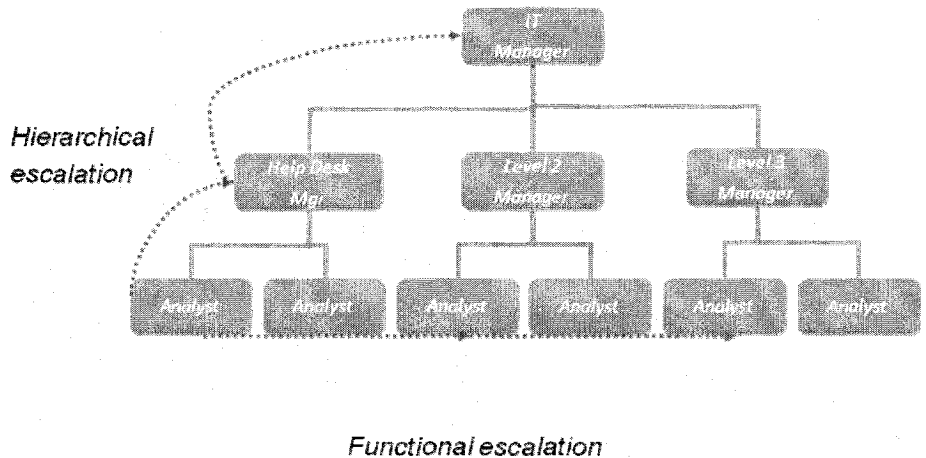
**Initial Diagnosis**

It is at this stage that diagnostic scripts and known error information can be most valuable in allowing earlier and accurate diagnosis.

If possible, the Service Desk Analyst will resolve the incident while the user is still on the telephone – and close the incident if the resolution is successful.

- Discover the exact symptoms
- Service Desk may be able to resolve the incident immediately. If not, it may need to be escalated

## Incident Escalation



**Figure 5 - Incident Escalation**

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**Hierarchic Escalation** – Informing or involving more senior levels of management to assist in an escalation

**Functional escalation** – transferring an incident, problem or change to a technical team with a higher level of expertise to assist in an escalation.

### Investigation and Diagnosis

Each of the support groups involved with the incident handling will investigate and diagnose what has gone wrong – and all such activities should be fully documented in the incident record so that a complete historical record of all activities is maintained at all times.

- Establishing what exactly the user requires
- Understanding the chronological order of events
- Confirm full impact of the incident
- Identifying any events which could have triggered the incident
- Knowledge searches

### Resolution and Recovery

- Making sure that all activities have been undertaken to resolve the fault
- Test that the service has been restored

**Incident Closure** The service desk should check that the incident is fully resolved and that the users are satisfied and willing to agree the incident can be closed. The Service Desk should also verify the following:

- Closure Category
- User satisfaction survey
- Incident documentation
- Determining whether the incident may recur
- Formal closure
- Determining rules for re-opening incidents



Refer to ITIL® V3 Core Publications

SO 4.2, Fig 4.2

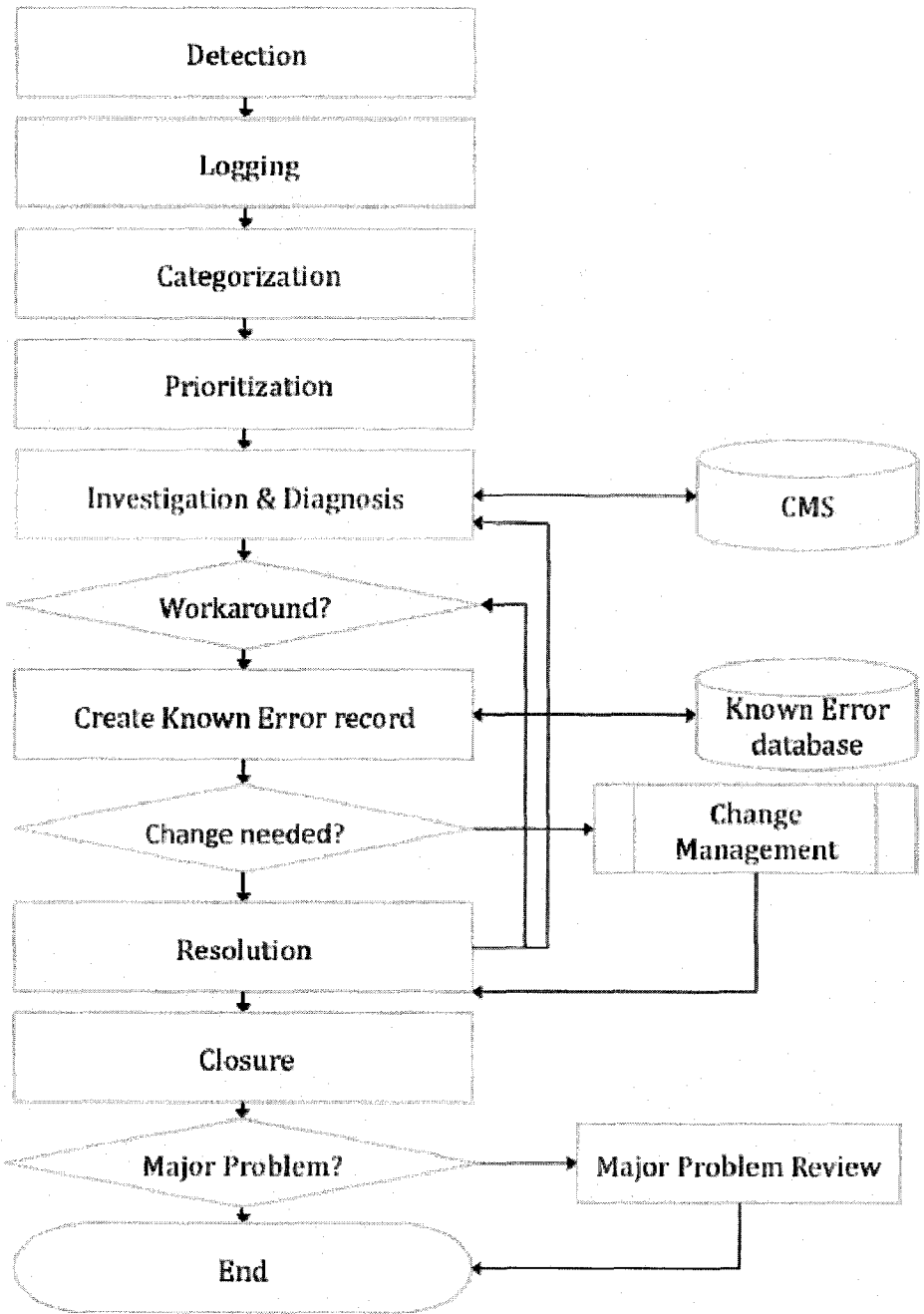
# Problem Management

**Objective** The primary objectives of problem management are to prevent problems and resulting incidents from happening; to eliminate recurring incidents; and to minimise the impact of incidents that cannot be prevented

- Basic Concepts**
- A **Workaround** is a way to reduce or eliminate the impact of an incident or problem for which a full resolution is not yet available.
  - A **Problem** is defined as the unknown cause of one or more incidents.
  - A **Known Error** is a problem that has a documented root cause ~~and a workaround~~.
    - Known Errors are created and managed throughout their lifecycle by problem management
  - The **Known Error Database (KEDB)** is a database containing all known error records.
    - This database is created by problem management and used by incident and problem management

**Problem Models** Some incidents may recur because of dormant or underlying problems. The creation of a problem model for handling such problems may be helpful if they continue to occur. The concept of a problem model is similar to that of an incident model, as described in Incident Management.

- Activities** Problem Management consists of two major processes:
- Reactive Problem Management which is generally executed as part of the Service Operation Lifecycle
  - Proactive Problem Management which is initiated in Service Operation, but generally driven as part of the Continual Service Improvement lifecycle



**Figure 6 –Problem Activity Process Flow**  
**Diagram © Crown copyright 2007. Reproduced under licence from OGC**

## Problem Detection

There are a number of ways in which problems will be detected including:

- Suspicion by the Service Desk
- Analysis by a technical support group
- Automated detection by monitoring tools
- Notification from a supplier
- Analysis by Proactive Problem Management

## Problem Logging, Categorisation and Prioritisation

All relevant details of the problem need to be recorded including date and time stamping. A cross reference needs to be made to any relevant incidents and any relevant details copied across.

Problems must also be categorized and prioritized. Generally this will be done using the same principles as for incident Management.

For prioritisation, Problem Management will also need to take into account:

- Can the system be recovered or does it need to be replaced?
- How much will it cost?
- How many people with what skills will be needed to fix the problem?
- How long will it take to fix the problem?
- How extensive is the problem?

## Problem Investigation and Diagnosis

An investigation should be conducted to try to diagnose the root cause of the problem – the speed and nature of this investigation will vary depending on the impact, severity and urgency of the problem. There are a number of useful techniques which may be employed when solving problems which include methods such as Kepner and Tregoe, Pareto Analysis and Chronological Analysis.

The CMS will be used to determine the severity of the impact and the KEDB may also be accessed to determine if there are any related incidents or problems (problem matching)

If a workaround is found, the problem record <sup>could</sup> ~~should~~ remain open, and the details of the workaround recorded within the Problem record.

**Raising a  
Known Error  
Record**

As soon as the diagnosis is complete, and particularly where a workaround has been found (even though it may not yet be a permanent resolution), a Known Error Record must be raised and placed in the Known Error Database – so that if further incidents or problems arise, they can be identified and the service restored more quickly.

However, in some cases it may be advantageous to raise a Known Error Record even earlier in the overall process – just for information purposes, for example – even though the diagnosis may not be complete or a workaround found, so it is inadvisable to set a concrete procedural point exactly when a Known Error Record must be raised. It should be done as soon as it becomes useful to do so!

**Problem  
Resolution and  
Closure**

Ideally as soon as a solution has been found, it should be applied to resolve the problem through the established Change Management process (except in the case of emergencies. In this case, the resolution may be handled through the Emergency Change process.

Once the change has been successfully implemented and reviewed, the problem should be formally closed – as should any related incidents that are still open.

**Major Problem  
Review**

After every major problem (as determined by the organization's priority system), while memories are still fresh a review should be conducted to learn any lessons for the future. Specifically, the review should examine:

- Those things that were done correctly
- Those things that were done wrong
- What could be done better in the future
- How to prevent recurrence
- Whether there has been any third-party responsibility and whether follow-up actions are needed.



Refer to ITIL® V3 Core Publications

Generic Concepts and Definitions

Problem - SO 4.4, Fig 4.4

Workaround - SO 4.4.5.6

Known Error - SO 4.4.5.7

Known Error Data Base (KEDB) - SO 4.4.7.2

Processes

SO 4.4

# Event Management

**Objective** The objective of Event Management is to create the ability to detect events, make sense of them and determine the appropriate control action.

It provides the basis for other processes including Incident Management, Service Level Management (for reporting and monitoring) and Problem Management.

- Basic Concepts**
- An **Event** is defined as a change of state that has significance for the management of a CI or an IT Service.
  - An **Alert** is a warning that a threshold has been reached, something has changed or a failure has occurred.

**Types of Events** Types of Events include events that:

- Signify normal operation
  - E.g. A user logging on; an email reaching its recipient
- Signify an exception
  - E.g. A scan showing unauthorised software; log on attempt with an incorrect password; payment authorisation site unavailable
- Signify unusual, but not exceptional operation
  - Indicates a situation requires closer monitoring
  - Often the result of a combination of unusual workloads

It is important to define what constitutes normal versus unusual versus an exception. The purpose of event management is to act as a filter for all the events which are recorded in the event management system. They will be many events but not all will be incidents. Event management needs to ensure that all events are recorded; the appropriate notifications take place and any events which are identified as incidents are passed on to the incident management process.

Refer to ITIL® V3 Core Publications

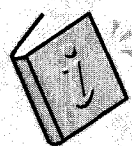
Generic Concepts and Definitions

Event - SO 4.1

Alert - SO 4.1, SO Glossary

Processes

SO 4.1.1, 4.1.4



# Request Fulfilment

## Objective

Request fulfillment is the processes of dealing with service requests from the users. The objectives of the request fulfillment process include:

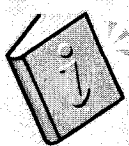
- To provide a channel for users to request and receive standard services for which a predefined approval and qualification process exists
- To provide information to users and customers about the availability of services and the procedure for obtaining them
- To source and deliver the components of requested standard services (e.g. licenses and software media)
- To assist with general information, complaints or comments

## Basic Concepts

The term 'Service Request' is used as a generic description for many varying types of demands that are placed upon the IT Department by the users. Many of these are actually small changes – low risk, frequently occurring, low cost, etc. (e.g. a request to change a password, a request to install an additional software application onto a particular workstation, a request to relocate some items of desktop equipment) or maybe just a question requesting information – but their scale and frequent, low-risk nature means that they are better handled by a separate process, rather than being allowed to congest and obstruct the normal Incident and Change Management processes.

A **service request** is defined as a request from a user for information, or advice; or for a standard change or for access to an IT Service

- Many will occur regularly so will have a predefined process flow known as a "Request model". This model outlines actions to be taken, contacts, timeframes
- Will usually be resolved by implementing a Standard change
- The service desk owns the service requests and their management



Refer to ITIL® V3 Core Publications

Generic Concepts and Definitions  
Service Request - SO 4.3

Processes  
SO 4.3.1, 4.3.4

# Access Management

## Objective

Access Management provides the right for users to be able to use a service or group of services. It is therefore the execution of policies and actions defined in Security and Availability Management.

## Basic Concepts

- Access management is the process that enables users to use the services that are documented in the service catalogue. It comprises the following basic concepts
- **Access** refers to the level and extent of a service's functionality or data that a user is entitled to use
- **Identity** refers to the information about them that distinguishes them as an individual and which verifies their status within the organisation
- **Rights** (also called privileges) refer to the actual settings whereby a user is provided access to a service or group of services
- **Services or Service groups**. It may be possible to group services together and grant access in that way
- **Directory services** refers to a specific type of tool that is used to manage access and rights

Refer to ITIL® V3 Core Publications

SO 4.5 Intro, 4.5.1, 4.5.4



# Module Summary

## Learning Outcomes

The learning outcomes covered in this module will enable you to:

### *The Service Lifecycle*

- Account for the main goals and objectives of Service Operation (ITILFND02 02-08)
- Briefly explain what value Service Operation provides to the business (ITILFND02 02-09)

### *Generic Concepts and Definitions Event*

- Event (ITILFND03 03-24)
- Alert (ITILFND03 03-25)
- Incident (ITILFND03 03-26)
- Impact, Urgency and Priority (ITILFND03 03-27)
- Service Request (ITILFND03 03-28)
- Problem (ITILFND03 03-29)
- Workaround (ITILFND03 03-30)
- Known Error (ITILFND03 03-31)
- Known Error Data Base (KEDB) (ITILFND03 03-32)
- The role of communication in Service Operation (ITILFND03 03-33)

### *Processes*

- Explain the high level objectives, basic concepts, process activities, and relationships for:
  - Incident Management (ITILFND05 05-71)
  - Problem Management (ITILFND05 05-72)
- State the objectives and basic concepts for:
  - Event Management (ITILFND05 05-81)
  - Request Fulfilment (ITILFND05 05-82)
  - Access Management (ITILFND05 05-83)

# ITIL® V3 Foundation

## Module 7:

# Continual Service Improvement (CSI) Lifecycle

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# Continual Service Improvement Overview

This is the Continual Service Improvement Lifecycle Module.

## ITIL® Service Lifecycle

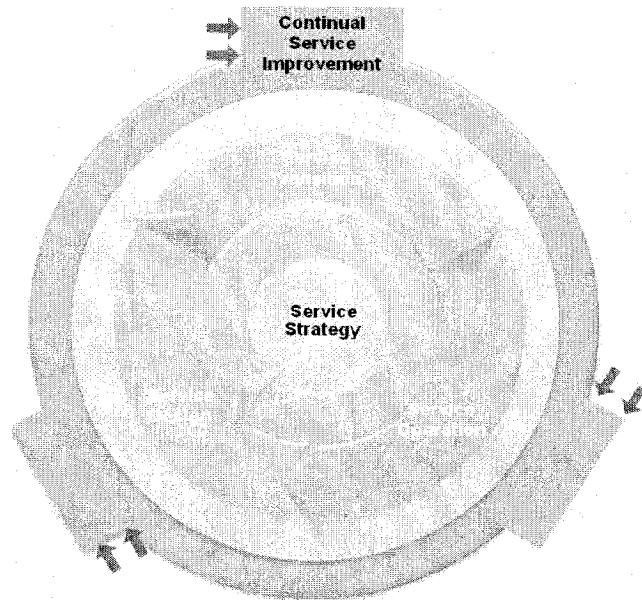


Figure 1 - ITIL® Service Lifecycle

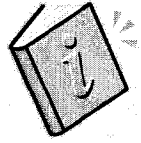
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## Goal and Objectives

The primary purpose of CSI is to continually align and re-align IT services to the changing business needs by identifying and implementing improvements to IT services that support business processes.

The **objectives** of the CSI Lifecycle are to:

- Review, analyse and make recommendations on improvement opportunities in each lifecycle phase
- Review and analyse Service Level Achievement results
- Identify and implement improvement activities
- Improve cost effectiveness
- Ensure applicable quality management methods are used to support continual improvement



Refer to ITIL® V3 Core Publications

CSI 2.4.1, 2.4.2

# Key Principles and Models

## The Deming Cycle

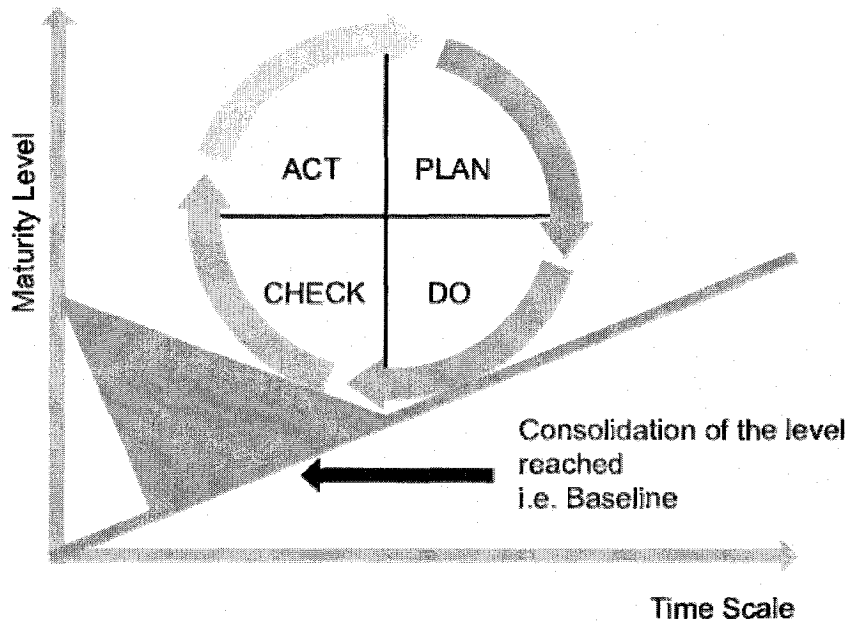


Figure 2 - Deming Cycle

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W. Edwards Deming is best known for his work in the development of a quality management philosophy (illustrated in the diagram above). The approach was to be continually striving for better and better quality. He developed what has become known as the four-step Deming Cycle. The Steps being Plan, Do, Check and Act – the documentation of the improvements and the consolidation of these is what maintains the standard.

**Planning for improvement initiatives (Plan)** – At this stage goals and measures for success are established, a gap analysis is performed, action steps to close the gap are defined, and measures to ensure the gap was closed are established and implemented.

**Implementation of improvement initiative (Do)** – This includes development and implementation of a project to close the identified gaps, implementation of the improvement to service management processes, and establishing the smooth operation of the process.

**Monitor, measure and review services and service management processes (Check)** – During this stage the implemented improvements are compared to the measures of success established in the Plan phase. The comparison determines if a gap still exists between the improvement objectives and the operational process state. Gaps don't necessarily require closure. A gap may be considered tolerable if the

actual performance is within allowable limits of performance. At the Check stage, the expected output is recommendations for improvement. For example, recommendations to update or modify the Service Catalogue, measurements to be tracked in SLAs, Operating Level Agreements (OLAs) and Underpinning Contracts (UCs) could also come out of this stage.

**Continual service and service management process improvement (Act)** – This stage requires implementing the actual service and service management process improvements. A decision to keep the status quo, close the gap or add necessary resources needs to be made to determine if further work is required to close remaining gaps and to allocate resources necessary to support another round of improvement. Project decisions at this stage are the input for the next round of the Plan-Do-Check-Act cycle, closing the loop as input to the next Plan stage.

Refer to ITIL® V3 Core Publications

CSI 3.6, 5.5.1



## KPIs

Improvement is not possible without measurement. Accurate and effective measurement forms the basis for Continual Service Improvement. This includes:

- Baselines
- Measurement models
- Understanding the reasons for measurement
- Understanding the need for governance

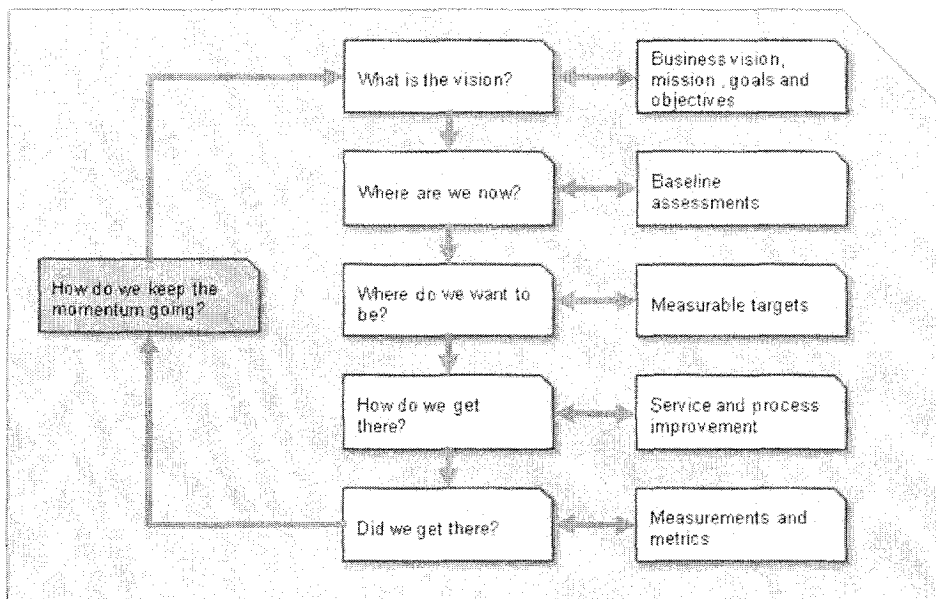
Without definite KPI's (Key Performance Indicators) it is very difficult to manage improvement.

## CSI Model

The CSI model is a model for constant improvement, and can be summarised in the following six steps

- Embrace the vision by understanding the high level business objectives
- Assess the current situation
- Understand and agree on the priorities for improvements

- Detail the plan to achieve higher quality service provision
- Verify that measurements and metrics are in place
- Ensure that the momentum for quality improvement is maintained



**Figure 3 - CSI Model**

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Refer to ITIL® V3 Core Publications

CSI 2.4.4, 4.1.2

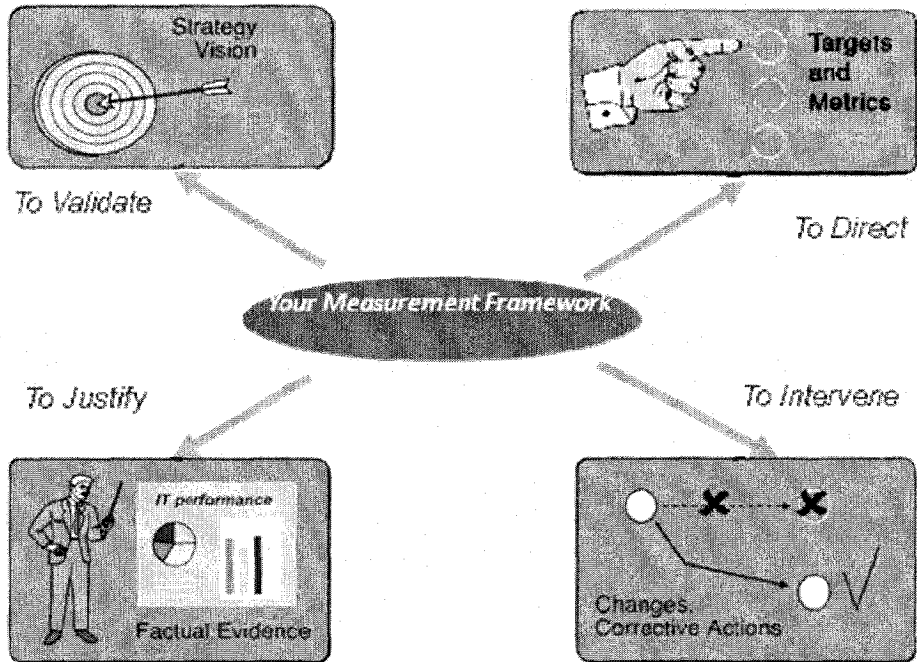
**Business Value of Measurement**

There are four reasons to monitor and measure:

- To **validate** – monitoring and measuring to validate previous decisions. E.g. “Deciding to change tyres on our car was the right thing to do, because we now get better fuel efficiency”
- To **direct** – monitoring and measuring to set direction for activities in order to meet set targets. It is the most prevalent reason for monitoring and measuring. E.g. “If we want to drive from Alice Springs to Darwin, we need to be at Tennant Creek in 6 ½ hours, and at Katherine in 14 ½ hours”
- To **justify** – monitoring and measuring to justify, with factual evidence or proof, that a course of action is required. E.g. “You need

to drive faster. If we want to get to Darwin by tonight, we should have arrived in Katherine by now”

- To **intervene** – monitoring and measuring to identify a point of intervention including subsequent changes and corrective actions. E.g. “If we’re not in Katherine by 3:00 pm, we’ll need to book a motel for the night”



**Figure 4 - Measurement Framework**  
Diagram © Crown copyright 2007. Reproduced under licence from OGC

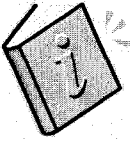
Refer to ITIL® V3 Core Publications

CSI 3.7.2



**Measurement Baselines**

An important beginning point for highlighting improvement is to establish baselines as markers or starting points for later comparison. Baselines are also used to establish an initial data point to determine if a service or process needs to be improved. As a result, it is important that baselines are documented, recognised and accepted throughout the organisation. Baselines must be established at each level: strategic goals and objectives, tactical process maturity, and operational metrics and KPIs.



Refer to ITIL® V3 Core Publications

CSI 3.7.1

**Types of Metrics** In order to appropriately and accurately support the activities in the CSI lifecycle, metrics are needed. There are three different types of metrics which can be recorded:

- **Technology Metrics** - component and application based metrics (performance, availability, etc.)
- **Process Metrics** - CSF's, KPI's and activity metrics for the service management processes. They help determine the overall health of the process.
- **Service Metrics** – These metrics are the results of end to end services. Component metrics are used to compute the service metrics.



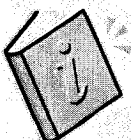
Refer to ITIL® V3 Core Publications

CSI 4.1.2

## IT Governance

**IT Governance** has been on the agenda for many years within IT, but has come to the fore since the early 2000's as a result of (amongst other things) high level corporate fraud. IT organisations are now required to be much more answerable for the money which they spend, and for the benefits which they bring to the organisation.

IT must be run as an organisation which prides itself on its **transparency**. The diagram below illustrates the link between three types of governance which are often discussed – Enterprise governance, Corporate governance and IT governance.



Refer to ITIL® V3 Core Publications

CSI 3.10

# Module Summary

## Learning Outcomes

The learning outcomes covered in this module will enable you to:

### *The Service Lifecycle*

- Account for the main goals and objectives of Continual Service Improvement (ITILFND02 02-10)
- Briefly explain what value Continual Service Improvement provides to the business

### *Generic Concepts and Definitions*

- The role of IT Governance across the Service Lifecycle (ITILFND03 03-5)

### *Key Principles and Models*

- Discuss the Plan, Do, Check and Act (PDCA) Model to control and manage quality (ITILFND04 04-08)
- Explain the Continual Service Improvement Model (ITILFND04 04-09)
- Understand the role of measurement for Continual Service Improvement and explain the following key elements: (ITILFND04 04-10)
  - Business value
  - Baselines
  - Types of metrics (technology metrics, process metrics, service metrics)

# ITIL® V3 Foundation

## Module 8:

# Functions, Roles and Technology

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# Functions Overview

This is the Functions, Roles and Technology Module.

## Functions

### Major Functions

- Service Desk

### Other Functions

- Technical Management
- Application Management
- IT Operations Management (IT Ops control and Facilities Management)

# Major Functions - Service Desk

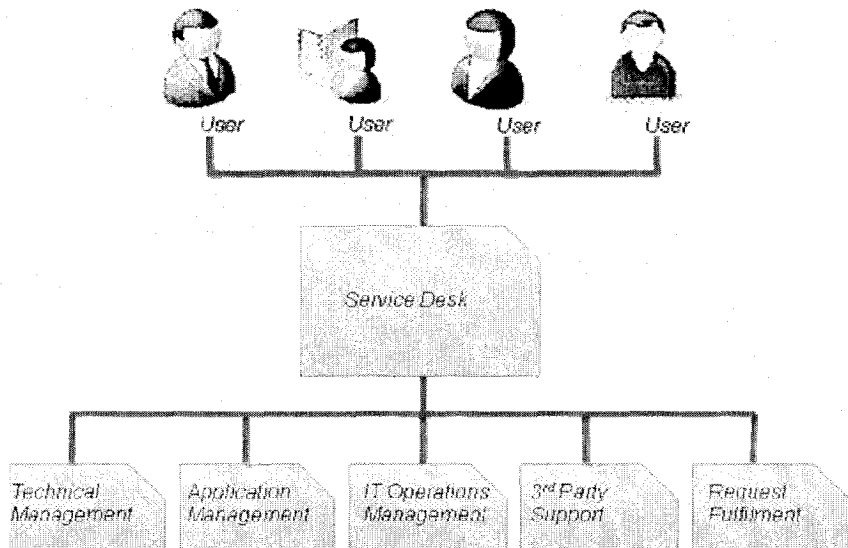
## Role and Objective

The service desk is the primary point of contact for users when there is a service disruption, for service requests or even for some categories of Request for Change.

Their primary aim is to restore the “normal service” to users as quickly as possible.

## Structures

### Local Service Desk



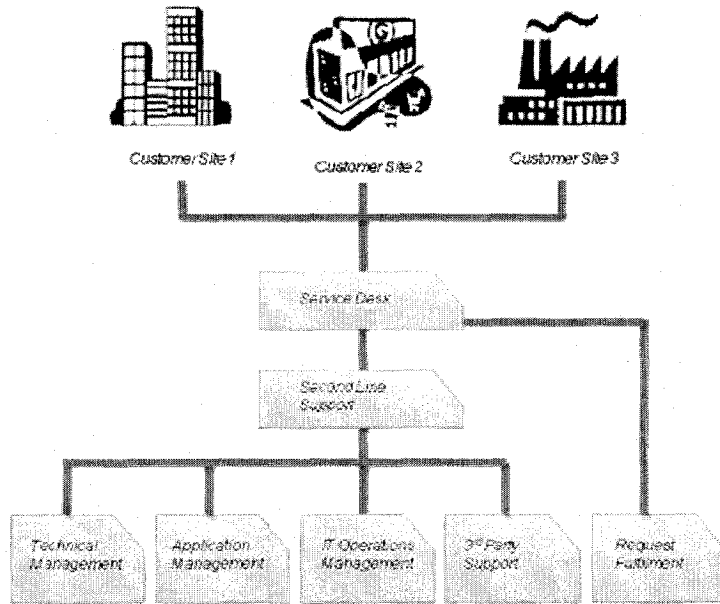
**Figure 1 - Local Service Desk Structure**

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The local service desk is located within or physically close to the user community it serves.

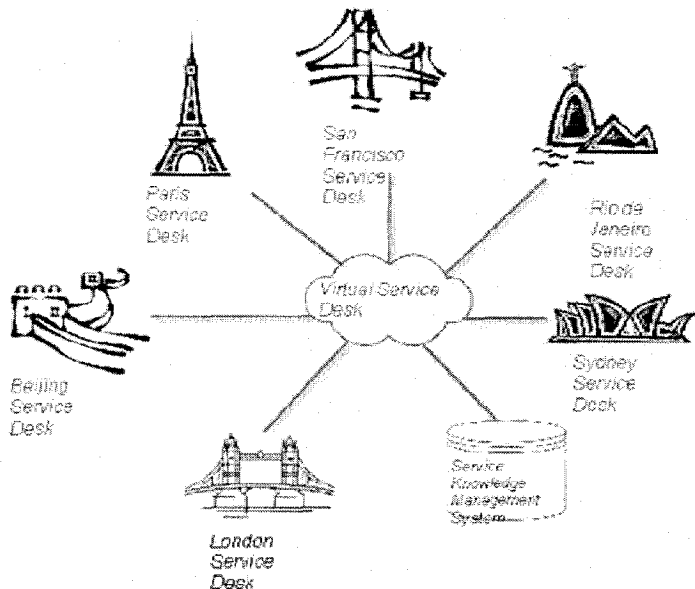
**Centralised Service Desk**

A central service desk is a service desk in a single geographic location which supports users who are located in different geographic locations.



**Figure 2 - Centralised Service Desk Structure**  
Diagram © Crown copyright 2007. Reproduced under licence from OGC

**Virtual Service Desk**



**Figure 3 - Virtual Service Desk Structure**  
Diagram © Crown copyright 2007. Reproduced under licence from OGC

A virtual service desk has no single geographic location and supports users in many locations. It will usually have a single phone number, and all data will be stored in a single central database.

## Considerations

- Considerations when planning and establishing a Service Desk.
- Follow the sun. This may be a possibility, but benefits can generally only be realised when there are large call volumes and it fits in with the business strategy
- Specialised Service Desks may be required if the customers use specific technologies
- A physical environment that is conducive to providing excellent service
- Creating and encouraging the single point of contact culture

## Staffing

### Staffing Levels

When considering staffing levels required there is no “one size fits all” ratio of staff to users. There are many considerations to take into account including the following:

- Customer service expectations
- Business requirements
- Size, age, design and complexity of It infrastructure
- Number and location of customers
- Incident and Service Request types
- Period of support required
- Training
- Technologies used

### Skill Levels and Training

An organisation must decide on the level and range of skills it requires of its service desks staff – and then ensure that these skills are available at the appropriate times. The decision on the required skills level will often be driven by target resolution times (agreed with the business and captured in service level targets), the complexity of the systems supported and what the business is prepared to pay.

- Dependant on the organisation such as:
  - Call logging or “highly technical”

- Required resolution times
- Scope of supported products
- Off the shelf products or custom products
- Skill levels must be maintained via training
- Induction training (may require “shadowing”)
- Maintain knowledge levels
- Professional development

**Staff Retention**

Loss of staff from the service desk can be highly disruptive to business operations, and so efforts should be made to recognise the value the service desk adds to IT operations.

- Is Service Desk a stepping stone into IT or to other roles?
- Service Desk may also lead into other managerial roles

**Super Users**

Any organisations find it helpful to appoint “super users” to act as IT points of reference within the user community. These are generally individuals who know their area of the business, but also have an IT “bent”. If this is the case, it should be recognised that they require IT training and need to be considered when making decisions which will affect the way the users use the IT services.

- Contacts within the business who have IT knowledge
- They are part of the Incident Management process - so must log calls
- They may also be involved in:
  - Staff training
  - Minor incident support
  - New releases or rollouts

# Metrics

- Metrics**
- Must be chosen carefully and taken in context
    - Call resolution may be very high, but at the expense of call length for example
    - New releases will generate calls, so monitoring call volumes alone do not tell the whole story
  - Call/ technical metrics
    - E.g. first line resolution rate, average resolution time, cost per call, etc.
  - Customer Satisfaction metrics - see notes for some options



Refer to ITIL® V3 Core Publications

SO 6.2

# Other Functions

## Technical and Application Management

### Roles

Technical Management and Application Management each have a dual role:

- They are custodians of knowledge and expertise:
  - Tech Management is the custodian of technical knowledge and expertise related to managing the IT infrastructure
  - Applications Management is the custodian of technical knowledge and expertise related to managing applications

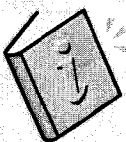
They also provide the actual resources to support the ITSM Life cycle which entails

- maintaining the balance between the skill level, utilization and cost of the resources
- providing guidance to IT operations about how best to carry out the on-going operational management of technology/ applications

### Objectives

The objectives of technical and application management are to help plan, implement and maintain a stable technical infrastructure to support the organisation's business processes through:

- Well designed and highly resilient, cost-effective technical topology/applications
- The use of adequate technical skills to maintain the technical infrastructure/applications in optimum condition
- Swift use of technical skills to speedily diagnose and resolve any technical failures that do occur



Refer to ITIL® V3 Core Publications

SO 6.1, 6.3 Intro, 6.3.1, 6.3.2, 6.5 Intro, 6.5.1, 6.5.2

# IT Operations Management

## Role

The role of Operations Management is to execute the on-going activities and procedures required to manage and maintain the IT infrastructure so those to deliver and support IT services at agreed levels. This includes:

- Operations Control
  - Console management
  - Job scheduling
  - Backup and restore
  - Print and Output management
  - Maintenance activities
- Facilities Management

IT Operations Management has a dual role

- They are responsible for executing the activities and performance standards defined in the other life cycles
- They are part of the process of adding value to the different lines of business and supporting the value network

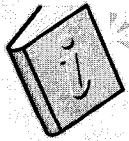
IT Operations Management must have:

- An understanding of how technology provides services
- Understanding of the business impact of those services
- Documented procedures and manuals
- Appropriate metrics for different levels of management
- A cost strategy and a value strategy

## Objectives

The objectives of IT Operations Management include:

- Maintenance of the status quo to achieve day to day stability
- Regular scrutiny and improvements to achieve improved service at reduced costs, while maintaining stability
- Swift application of operational skills to diagnose and resolve any IT operations failures that occur

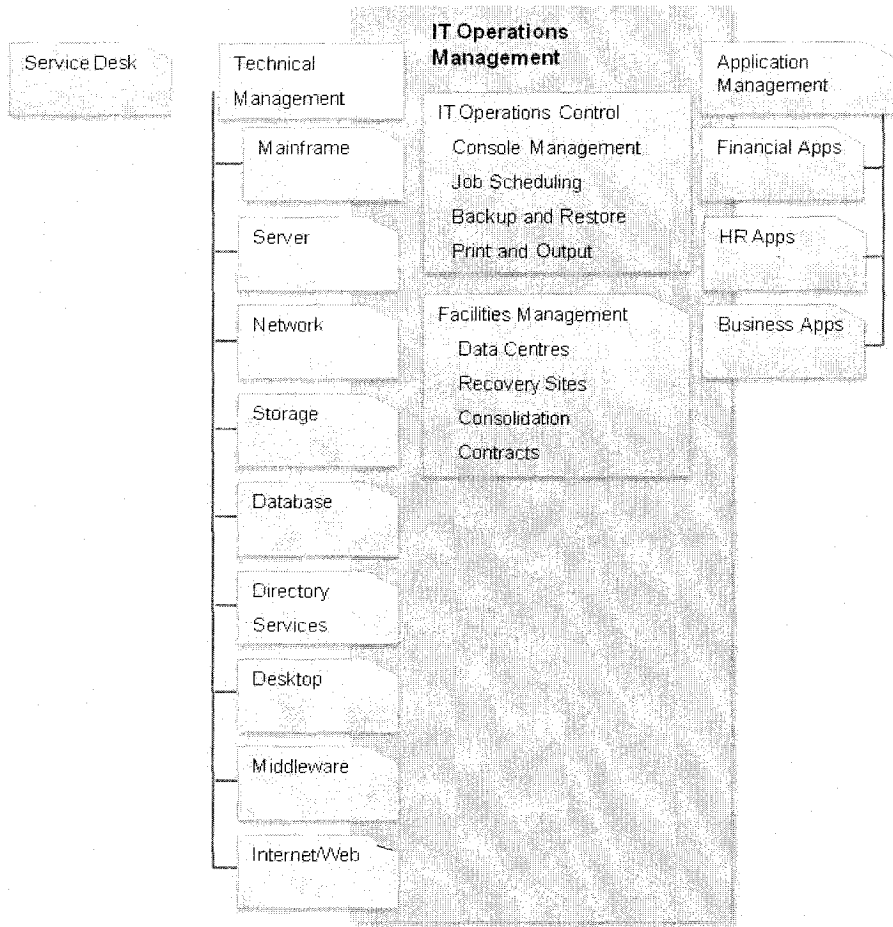


Refer to ITIL® V3 Core Publications

SO 6.4 Intro, 6.4.1, 6.4.2

# Organisational Overlap

## Map



**Figure 4 - Organisational Overlap Map**  
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This diagram shows various operation functions which may be required to maintain the business as “usual state” of an IT operational environment. These are skill sets or areas of expertise rather than department or functional names. In other words Technical and Application Management can be organised into any combination and any number of departments, the groups shown above are examples.

# Roles

## Process Owner

### Role and Responsibility

The Process Owner is responsible for

- Defining the process strategy
- Assisting with process design
- Up to date and available process documentation
- Defining policies and standards
- Auditing for compliance
- Reviewing the process and recommending changes
- Communication of any changes
- Providing process resources to support activities required through the whole Service Management Lifecycle
- Create KPIs



Refer to ITIL® V3 Core Publications

SD 6.4 Intro, 6.4.1, ST 6.1.1, CSI 3.3, 6.1.5

## Service Owner

### Role and Responsibility

The Service Owner is responsible for:

- Being the customer contact for any service related enquiries
- Ensuring services meet agreed levels
- Identifying opportunities for improvements
- Liaison with relevant process owners
- Gathering data for service monitoring
- Accountability for the delivery of the service

Refer to ITIL® V3 Core Publications

ST 6.2.1, CSI 3.3, 6.1 Intro, 6.1.4



# RACI Model

## RACI Matrix Role

Roles must be clearly defined for successful Service Management. A RACI matrix can be used as a guide.

- Responsible – the person or people responsible for getting the job done
- Accountable – only one person can be accountable for each task
- Consulted – the people who are consulted and whose opinions are sought
- Informed – the people who are kept up to date on progress

## Example of RACI Matrix

	Director Service Management	Service Level Manager	Problem Manager	Security Manager	Procurement Manager
Activity 1	AR	C	I	I	C
Activity 2	A	R	C	C	C
Activity 3	I	A	R	I	C
Activity 4	I	A	R	I	
Activity 5	I	I	A	C	I

Figure 5 - Example of RACI Matrix

## Functional Roles Analysis

- Many As: Are duties segregated properly? Should someone else be accountable for some of these activities? Is this causing a bottleneck in some areas that will delay decisions?
- Many Rs: Is this too much for one function?
- No empty spaces: Does this role need to be involved in so many tasks?  
Does the type or degree of participation fit this role's qualifications?

**Activity  
Analysis**

- More than one A: Only one role can be accountable
- No As: At least one A must be assigned to each activity
- More than one R: Too many roles responsible often mean that no one takes responsibility. Responsibility may be shared, but only if roles are clear
- No Rs: At least one person must be responsible
- Many Cs: Is there a requirement to consult with so many roles? What are the benefits and can the extra time be justified?
- No Cs and Is: Are the communication channels open to enable people and departments to talk to each other and keep each other up to date?



Refer to ITIL® V3 Core Publications

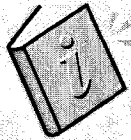
SD 6, CSI 6.2

# Technology and Architecture

## Generic Requirements

When considering an integrated ITSM toolset, a list of generic requirements would include:

- Self-Help
- Workflow or Process engine
- Integrated CMS
- Discovery/ Deployment/ Licensing Technology
- Remote Control
- Diagnostic Utilities
- Reporting
- Dashboards
- Integration with Business Service Management



Refer to ITIL® V3 Core Publications

SD 7.1, ST 7, SO 7.1

## Service Automation

Areas where Service Management can benefit from Automation include;

- Design and modeling
- Service catalog (tracking demand for services)
- Pattern recognition and analysis
- Classification, prioritisation and routing
- Detection and monitoring
- Optimisation



Refer to ITIL® V3 Core Publications

SS 8.1

# Module Summary

## Learning Outcomes

The learning outcomes covered in this module will enable you to:

### *Functions*

- Explain the role, objectives, organisational structures, staffing and metrics of:
  - The Service Desk function (ITILFND06 06-01)
- State the role, objectives and organisational overlap of: (ITILFND06 06-02)
  - The Technical Management function
  - The Application Management function
  - The IT Operations Management function (IT Operations Control and Facilities Management)

### *Roles*

- Account for the role and the responsibilities of the
  - Process owner (ITILFND07 07-01)
  - Service owner (ITILFND07 07-01)
- Recognise the RACI model and explain its role in determining organisational structure (ITILFND07 07-02)

### *Technology*

- List some generic requirements for an integrated set of Service Management Technology
- Understand how Service Automation assists with integrating Service Management processes (ITILFND08 08-02)

# ITIL® V3 Foundation

## Module 9:

## Conclusion

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# Conclusion

This is the Conclusion Module.

## What is ITIL®?

ITIL® is defined as:

- A library
- A framework
- Business focused
- Used by organisations worldwide
- A body of knowledge

## What was the Objective?

The Objectives of the Foundation course are:

- To gain knowledge of the ITIL® terminology, structure and basic concepts
- To comprehend the core principles of ITIL® practices for IT Service Management
- To pass the ITIL® Foundation Certificate in IT Service Management!

The objectives of the Foundation Bridging course are:

- To understand which parts of ITIL® are new in version 3
- To understand which parts of ITIL® have changed in version 3
- To pass the ITIL® v3 Foundation Bridging exam

**What were the Course Modules?**

- Module 1: Introduction
- Module 2: Service Management Overview
- Module 3: Service Strategy Lifecycle
- Module 4: Service Design Lifecycle
- Module 5: Service Transition Lifecycle
- Module 6: Service Operation Lifecycle
- Module 7: Continual Service Improvement Lifecycle
- Module 8: Functions, Roles and Technology
- Module 9: Conclusion and Exam

**Assessment**

At the conclusion of the Foundation course, there is an exam:

- 1 hour
- 40 questions
- 26 correct to pass
- Closed book
- Exam syllabus is in the attachments
- At the end of each module, the parts of the syllabus which have been covered are listed

At the conclusion of the Foundation Bridging course, there is an exam:

- ½ hour
- 20 questions
- 13 correct to pass
- Closed book
- Exam syllabus is in the attachments
- At the end of each module, the parts of the syllabus which have been covered are listed

## Where to next?

(ITILFND09 09-01)

- ITIL® Foundation Certificate in IT Service Management
- ITIL® Intermediate Certificates in IT Service Management
  - Service Management series
  - Service Capabilities series
- ITIL® Expert in IT Service Management
  - Practitioner Certifications – 5 days with a 2 hour exam
  - Manager's Certification – 12 days with two 3 hour exams+
- ITIL® Master Qualification
  - Candidates submit a Proposal describing the real life situation they intend to address and the elements of ITIL® they will apply to this situation
  - Candidates prepare and submit a Work Package for assessment
  - Candidates attend an interview to support the Work Package assessment.

## Results

- If your exam is online, results are immediate
- Certificates can take up to 6 weeks – they will arrive in the post
- If required, you are able to resit just the exam (not the whole course)
- Websites for further information
  - [www.itsmf.org.au](http://www.itsmf.org.au)
  - [www.ITIL®.co.uk](http://www.ITIL®.co.uk)

# ITIL® V3 Foundation

## Bibliography

# Bibliography

- Cannon, D. & Wheeldon, D., 2007, *Service Operation*, The OGC, U.K.
- Lloyd, V. & Rudd, C., 2007, *Service Design*, The OGC, U.K.
- Iqbal, M. & Nieves, M., 2007, *Service Strategy*, The OGC, U.K.
- Lacy, S. & MacFarlane, I., 2007, *Service Transition*, The OGC, U.K.
- Case, G. & Spalding, G., 2007, *Continual Service Improvement*, The OGC, U.K.

# ITIL<sup>®</sup> V3 Foundation

## Appendix A: ITIL<sup>®</sup> Glossary



# Glossary of Terms, Definitions and Acronyms

V3, 30 May 2007

## Acknowledgements

We would like to express our gratitude and acknowledge the contribution of Stuart Rance and Ashley Hanna of Hewlett-Packard in the production of this glossary.

## Note for readers

This glossary may be freely downloaded.

See <http://www.get-best-practice.co.uk/glossaries.aspx> for details of licence terms

## ITIL® Glossary of Terms, Definitions and Acronyms

Term	Definition
Acceptance	<p>Formal agreement that an IT Service, Process, Plan, or other Deliverable is complete, accurate, Reliable and meets its specified Requirements. Acceptance is usually preceded by Evaluation or Testing and is often required before proceeding to the next stage of a Project or Process.</p> <p>See Service Acceptance Criteria.</p>
Access Management	<p><b>(Service Operation)</b> The Process responsible for allowing Users to make use of IT Services, data, or other Assets. Access Management helps to protect the Confidentiality, Integrity and Availability of Assets by ensuring that only authorized Users are able to access or modify the Assets. Access Management is sometimes referred to as Rights Management or Identity Management.</p>
Account Manager	<p><b>(Service Strategy)</b> A Role that is very similar to Business Relationship Manager, but includes more commercial aspects. Most commonly used when dealing with External Customers.</p>
Accounting	<p><b>(Service Strategy)</b> The Process responsible for identifying actual Costs of delivering IT Services, comparing these with budgeted costs, and managing variance from the Budget.</p>
Accredited	<p>Officially authorised to carry out a Role. For example an Accredited body may be authorised to provide training or to conduct Audits.</p>
Active Monitoring	<p><b>(Service Operation)</b> Monitoring of a Configuration Item or an IT Service that uses automated regular checks to discover the current status.</p> <p>See Passive Monitoring.</p>
Activity	<p>A set of actions designed to achieve a particular result. Activities are usually defined as part of Processes or Plans, and are documented in Procedures.</p>
Agreed Service Time	<p><b>(Service Design)</b> A synonym for Service Hours, commonly used in formal calculations of Availability. See Downtime.</p>
Agreement	<p>A Document that describes a formal understanding between two or more parties. An Agreement is not legally binding, unless it forms part of a Contract.</p> <p>See Service Level Agreement, Operational Level Agreement.</p>
Alert	<p><b>(Service Operation)</b> A warning that a threshold has been reached, something has changed, or a Failure has occurred. Alerts are often created and managed by System Management tools and are managed by the Event Management Process.</p>

ITIL® V3 Glossary v3.1.24, 11 May 2007  
Analytical Modelling to Assessment

Term	Definition
Analytical Modelling	<b>(Service Strategy) (Service Design) (Continual Service Improvement)</b> A technique that uses mathematical Models to predict the behaviour of a Configuration Item or IT Service. Analytical Models are commonly used in Capacity Management and Availability Management. See Modelling.
Application	Software that provides Functions that are required by an IT Service. Each Application may be part of more than one IT Service. An Application runs on one or more Servers or Clients. See Application Management, Application Portfolio.
Application Management	<b>(Service Design) (Service Operation)</b> The Function responsible for managing Applications throughout their Lifecycle.
Application Portfolio	<b>(Service Design)</b> A database or structured Document used to manage Applications throughout their Lifecycle. The Application Portfolio contains key Attributes of all Applications. The Application Portfolio is sometimes implemented as part of the Service Portfolio, or as part of the Configuration Management System.
Application Service Provider (ASP)	<b>(Service Design)</b> An External Service Provider that provides IT Services using Applications running at the Service Provider's premises. Users access the Applications by network connections to the Service Provider.
Application Sizing	<b>(Service Design)</b> The Activity responsible for understanding the Resource Requirements needed to support a new Application, or a major Change to an existing Application. Application Sizing helps to ensure that the IT Service can meet its agreed Service Level Targets for Capacity and Performance.
Architecture	<b>(Service Design)</b> The structure of a System or IT Service, including the Relationships of Components to each other and to the environment they are in. Architecture also includes the Standards and Guidelines which guide the design and evolution of the System.
Assembly	<b>(Service Transition)</b> A Configuration Item that is made up from a number of other CIs. For example a Server CI may contain CIs for CPUs, Disks, Memory etc.; an IT Service CI may contain many Hardware, Software and other CIs. See Component CI, Build.
Assessment	Inspection and analysis to check whether a Standard or set of Guidelines is being followed, that Records are accurate, or that Efficiency and Effectiveness targets are being met. See Audit.

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 Asset to Availability Management Information System (AMIS)

Term	Definition
Asset	<b>(Service Strategy)</b> Any Resource or Capability. Assets of a Service Provider include anything that could contribute to the delivery of a Service. Assets can be one of the following types: Management, Organisation, Process, Knowledge, People, Information, Applications, Infrastructure, and Financial Capital.
Asset Management	<b>(Service Transition)</b> Asset Management is the Process responsible for tracking and reporting the value and ownership of financial Assets throughout their Lifecycle. Asset Management is part of an overall Service Asset and Configuration Management Process. See Asset Register.
Asset Register	<b>(Service Transition)</b> A list of Assets, which includes their ownership and value. The Asset Register is maintained by Asset Management.
Attribute	<b>(Service Transition)</b> A piece of information about a Configuration Item. Examples are name, location, Version number, and Cost. Attributes of CIs are recorded in the Configuration Management Database (CMDB). See Relationship.
Audit	Formal inspection and verification to check whether a Standard or set of Guidelines is being followed, that Records are accurate, or that Efficiency and Effectiveness targets are being met. An Audit may be carried out by internal or external groups. See Certification, Assessment.
Authority Matrix	Synonym for RACI.
Automatic Call Distribution (ACD)	<b>(Service Operation)</b> Use of Information Technology to direct an incoming telephone call to the most appropriate person in the shortest possible time. ACD is sometimes called Automated Call Distribution.
Availability	<b>(Service Design)</b> Ability of a Configuration Item or IT Service to perform its agreed Function when required. Availability is determined by Reliability, Maintainability, Serviceability, Performance, and Security. Availability is usually calculated as a percentage. This calculation is often based on Agreed Service Time and Downtime. It is Best Practice to calculate Availability using measurements of the Business output of the IT Service.
Availability Management	<b>(Service Design)</b> The Process responsible for defining, analysing, Planning, measuring and improving all aspects of the Availability of IT Services. Availability Management is responsible for ensuring that all IT Infrastructure, Processes, Tools, Roles etc are appropriate for the agreed Service Level Targets for Availability.
Availability Management Information System (AMIS)	<b>(Service Design)</b> A virtual repository of all Availability Management data, usually stored in multiple physical locations. See Service Knowledge Management System.

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Availability Plan to Brainstorming

Term	Definition
Availability Plan	<b>(Service Design)</b> A Plan to ensure that existing and future Availability Requirements for IT Services can be provided Cost Effectively.
Back-out	Synonym for Remediation.
Backup	<b>(Service Design) (Service Operation)</b> Copying data to protect against loss of Integrity or Availability of the original.
Balanced Scorecard	<b>(Continual Service Improvement)</b> A management tool developed by Drs. Robert Kaplan (Harvard Business School) and David Norton. A Balanced Scorecard enables a Strategy to be broken down into Key Performance Indicators. Performance against the KPIs is used to demonstrate how well the Strategy is being achieved. A Balanced Scorecard has 4 major areas, each of which has a small number of KPIs. The same 4 areas are considered at different levels of detail throughout the Organisation.
Baseline	<b>(Continual Service Improvement)</b> A Benchmark used as a reference point. For example: <ul style="list-style-type: none"> <li>• An ITSM Baseline can be used as a starting point to measure the effect of a Service Improvement Plan</li> <li>• A Performance Baseline can be used to measure changes in Performance over the lifetime of an IT Service</li> <li>• A Configuration Management Baseline can be used to enable the IT Infrastructure to be restored to a known Configuration if a Change or Release fails</li> </ul>
Benchmark	<b>(Continual Service Improvement)</b> The recorded state of something at a specific point in time. A Benchmark can be created for a Configuration, a Process, or any other set of data. For example, a benchmark can be used in: <ul style="list-style-type: none"> <li>• Continual Service Improvement, to establish the current state for managing improvements.</li> <li>• Capacity Management, to document Performance characteristics during normal operations.</li> <li>• See Benchmarking, Baseline.</li> </ul>
Benchmarking	<b>(Continual Service Improvement)</b> Comparing a Benchmark with a Baseline or with Best Practice. The term Benchmarking is also used to mean creating a series of Benchmarks over time, and comparing the results to measure progress or improvement.
Best Practice	Proven Activities or Processes that have been successfully used by multiple Organisations. ITIL is an example of Best Practice.
Brainstorming	<b>(Service Design)</b> A technique that helps a team to generate ideas. Ideas are not reviewed during the Brainstorming session, but at a later stage. Brainstorming is often used by Problem Management to identify possible causes.

Term	Definition
British Standards Institution (BSI)	The UK National Standards body, responsible for creating and maintaining British Standards. See <a href="http://www.bsi-global.com">http://www.bsi-global.com</a> for more information. See ISO.
Budget	A list of all the money an Organisation or Business Unit plans to receive, and plans to pay out, over a specified period of time. See Budgeting, Planning.
Budgeting	The Activity of predicting and controlling the spending of money. Consists of a periodic negotiation cycle to set future Budgets (usually annual) and the day-to-day monitoring and adjusting of current Budgets.
Build	<b>(Service Transition)</b> The Activity of assembling a number of Configuration Items to create part of an IT Service. The term Build is also used to refer to a Release that is authorised for distribution. For example Server Build or laptop Build. See Configuration Baseline.
Build Environment	<b>(Service Transition)</b> A controlled Environment where Applications, IT Services and other Builds are assembled prior to being moved into a Test or Live Environment.
Business	<b>(Service Strategy)</b> An overall corporate entity or Organisation formed of a number of Business Units. In the context of ITSM, the term Business includes public sector and not-for-profit organisations, as well as companies. An IT Service Provider provides IT Services to a Customer within a Business. The IT Service Provider may be part of the same Business as their Customer (Internal Service Provider), or part of another Business (External Service Provider).
Business Capacity Management (BCM)	<b>(Service Design)</b> In the context of ITSM, Business Capacity Management is the Activity responsible for understanding future Business Requirements for use in the Capacity Plan. See Service Capacity Management.
Business Case	<b>(Service Strategy)</b> Justification for a significant item of expenditure. Includes information about Costs, benefits, options, issues, Risks, and possible problems. See Cost Benefit Analysis.
Business Continuity Management (BCM)	<b>(Service Design)</b> The Business Process responsible for managing Risks that could seriously impact the Business. BCM safeguards the interests of key stakeholders, reputation, brand and value creating activities. The BCM Process involves reducing Risks to an acceptable level and planning for the recovery of Business Processes should a disruption to the Business occur. BCM sets the Objectives, Scope and Requirements for IT Service Continuity Management.

## Business Continuity Plan (BCP) to Business Relationship Manager (BRM)

Term	Definition
Business Continuity Plan (BCP)	<b>(Service Design)</b> A Plan defining the steps required to Restore Business Processes following a disruption. The Plan will also identify the triggers for Invocation, people to be involved, communications etc. IT Service Continuity Plans form a significant part of Business Continuity Plans.
Business Customer	<b>(Service Strategy)</b> A recipient of a product or a Service from the Business. For example if the Business is a car manufacturer then the Business Customer is someone who buys a car.
Business Impact Analysis (BIA)	<b>(Service Strategy)</b> BIA is the Activity in Business Continuity Management that identifies Vital Business Functions and their dependencies. These dependencies may include Suppliers, people, other Business Processes, IT Services etc. BIA defines the recovery requirements for IT Services. These requirements include Recovery Time Objectives, Recovery Point Objectives and minimum Service Level Targets for each IT Service.
Business Objective	<b>(Service Strategy)</b> The Objective of a Business Process, or of the Business as a whole. Business Objectives support the Business Vision, provide guidance for the IT Strategy, and are often supported by IT Services.
Business Operations	<b>(Service Strategy)</b> The day-to-day execution, monitoring and management of Business Processes.
Business Perspective	<b>(Continual Service Improvement)</b> An understanding of the Service Provider and IT Services from the point of view of the Business, and an understanding of the Business from the point of view of the Service Provider.
Business Process	A Process that is owned and carried out by the Business. A Business Process contributes to the delivery of a product or Service to a Business Customer. For example, a retailer may have a purchasing Process which helps to deliver Services to their Business Customers. Many Business Processes rely on IT Services.
Business Relationship Management	<b>(Service Strategy)</b> The Process or Function responsible for maintaining a Relationship with the Business. BRM usually includes: <ul style="list-style-type: none"> <li>• Managing personal Relationships with Business managers</li> <li>• Providing input to Service Portfolio Management</li> <li>• Ensuring that the IT Service Provider is satisfying the Business needs of the Customers</li> </ul> This Process has strong links with Service Level Management.
Business Relationship Manager (BRM)	<b>(Service Strategy)</b> A Role responsible for maintaining the Relationship with one or more Customers. This Role is often combined with the Service Level Manager Role. See Account Manager.

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 Business Service to Capability Maturity Model (CMM)

Term	Definition
Business Service	<p>An IT Service that directly supports a Business Process, as opposed to an Infrastructure Service which is used internally by the IT Service Provider and is not usually visible to the Business.</p> <p>The term Business Service is also used to mean a Service that is delivered to Business Customers by Business Units. For example delivery of financial services to Customers of a bank, or goods to the Customers of a retail store. Successful delivery of Business Services often depends on one or more IT Services.</p>
Business Service Management (BSM)	<p><b>(Service Strategy) (Service Design)</b> An approach to the management of IT Services that considers the Business Processes supported and the Business value provided.</p> <p>This term also means the management of Business Services delivered to Business Customers.</p>
Business Unit	<p><b>(Service Strategy)</b> A segment of the Business which has its own Plans, Metrics, income and Costs. Each Business Unit owns Assets and uses these to create value for Customers in the form of goods and Services.</p>
Call	<p><b>(Service Operation)</b> A telephone call to the Service Desk from a User. A Call could result in an Incident or a Service Request being logged.</p>
Call Centre	<p><b>(Service Operation)</b> An Organisation or Business Unit which handles large numbers of incoming and outgoing telephone calls.</p> <p>See Service Desk.</p>
Call Type	<p><b>(Service Operation)</b> A Category that is used to distinguish incoming requests to a Service Desk. Common Call Types are Incident, Service Request and Complaint.</p>
Capability	<p><b>(Service Strategy)</b> The ability of an Organisation, person, Process, Application, Configuration Item or IT Service to carry out an Activity. Capabilities are intangible Assets of an Organisation.</p> <p>See Resource.</p>
Capability Maturity Model (CMM)	<p><b>(Continual Service Improvement)</b> The Capability Maturity Model for Software (also known as the CMM and SW-CMM) is a model used to identify Best Practices to help increase Process Maturity. CMM was developed at the Software Engineering Institute (SEI) of Carnegie Mellon University. In 2000, the SW-CMM was upgraded to CMMI® (Capability Maturity Model Integration). The SEI no longer maintains the SW-CMM model, its associated appraisal methods, or training materials.</p>

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 Capability Maturity Model Integration (CMMI) to Capitalization

Term	Definition
Capability Maturity Model Integration (CMMI)	<p><b>(Continual Service Improvement)</b> Capability Maturity Model® Integration (CMMI) is a process improvement approach developed by the Software Engineering Institute (SEI) of Carnegie Mellon University. CMMI provides organizations with the essential elements of effective processes. It can be used to guide process improvement across a project, a division, or an entire organization. CMMI helps integrate traditionally separate organizational functions, set process improvement goals and priorities, provide guidance for quality processes, and provide a point of reference for appraising current processes. See <a href="http://www.sei.cmu.edu/cmmi/">http://www.sei.cmu.edu/cmmi/</a> for more information. See CMM, Continuous Improvement, Maturity.</p>
Capacity	<p><b>(Service Design)</b> The maximum Throughput that a Configuration Item or IT Service can deliver whilst meeting agreed Service Level Targets. For some types of CI, Capacity may be the size or volume, for example a disk drive.</p>
Capacity Management	<p><b>(Service Design)</b> The Process responsible for ensuring that the Capacity of IT Services and the IT Infrastructure is able to deliver agreed Service Level Targets in a Cost Effective and timely manner. Capacity Management considers all Resources required to deliver the IT Service, and plans for short, medium and long term Business Requirements.</p>
Capacity Management Information System (CMIS)	<p><b>(Service Design)</b> A virtual repository of all Capacity Management data, usually stored in multiple physical locations. See Service Knowledge Management System.</p>
Capacity Plan	<p><b>(Service Design)</b> A Capacity Plan is used to manage the Resources required to deliver IT Services. The Plan contains scenarios for different predictions of Business demand, and costed options to deliver the agreed Service Level Targets.</p>
Capacity Planning	<p><b>(Service Design)</b> The Activity within Capacity Management responsible for creating a Capacity Plan.</p>
Capital Expenditure (CAPEX)	<p><b>(Service Strategy)</b> The Cost of purchasing something that will become a financial Asset, for example computer equipment and buildings. The value of the Asset is Depreciated over multiple accounting periods.</p>
Capital Item	<p><b>(Service Strategy)</b> An Asset that is of interest to Financial Management because it is above an agreed financial value.</p>
Capitalization	<p><b>(Service Strategy)</b> Identifying major Cost as capital, even though no Asset is purchased. This is done to spread the impact of the Cost over multiple accounting periods. The most common example of this is software development, or purchase of a software license.</p>

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 Category to Change Request

Term	Definition
Category	A named group of things that have something in common. Categories are used to group similar things together. For example Cost Types are used to group similar types of Cost. Incident Categories are used to group similar types of Incident, CI Types are used to group similar types of Configuration Item.
Certification	Issuing a certificate to confirm Compliance to a Standard. Certification includes a formal Audit by an independent and Accredited body. The term Certification is also used to mean awarding a certificate to verify that a person has achieved a qualification.
Change	<b>(Service Transition)</b> The addition, modification or removal of anything that could have an effect on IT Services. The Scope should include all IT Services, Configuration Items, Processes, Documentation etc.
Change Advisory Board (CAB)	<b>(Service Transition)</b> A group of people that advises the Change Manager in the Assessment, prioritisation and scheduling of Changes. This board is usually made up of representatives from all areas within the IT Service Provider, the Business, and Third Parties such as Suppliers.
Change Case	<b>(Service Operation)</b> A technique used to predict the impact of proposed Changes. Change Cases use specific scenarios to clarify the scope of proposed Changes and to help with Cost Benefit Analysis. See Use Case.
Change History	<b>(Service Transition)</b> Information about all changes made to a Configuration Item during its life. Change History consists of all those Change Records that apply to the CI.
Change Management	<b>(Service Transition)</b> The Process responsible for controlling the Lifecycle of all Changes. The primary objective of Change Management is to enable beneficial Changes to be made, with minimum disruption to IT Services.
Change Model	<b>(Service Transition)</b> A repeatable way of dealing with a particular Category of Change. A Change Model defines specific pre-defined steps that will be followed for a Change of this Category. Change Models may be very simple, with no requirement for approval (e.g. Password Reset) or may be very complex with many steps that require approval (e.g. major software Release). See Standard Change, Change Advisory Board.
Change Record	<b>(Service Transition)</b> A Record containing the details of a Change. Each Change Record documents the Lifecycle of a single Change. A Change Record is created for every Request for Change that is received, even those that are subsequently rejected. Change Records should reference the Configuration Items that are affected by the Change. Change Records are stored in the Configuration Management System.
Change Request	Synonym for Request for Change.

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Change Schedule to Code of Practice

Term	Definition
Change Schedule	<b>(Service Transition)</b> A Document that lists all approved Changes and their planned implementation dates. A Change Schedule is sometimes called a Forward Schedule of Change, even though it also contains information about Changes that have already been implemented.
Change Window	<b>(Service Transition)</b> A regular, agreed time when Changes or Releases may be implemented with minimal impact on Services. Change Windows are usually documented in SLAs.
Charging	<b>(Service Strategy)</b> Requiring payment for IT Services. Charging for IT Services is optional, and many Organisations choose to treat their IT Service Provider as a Cost Centre.
Chronological Analysis	<b>(Service Operation)</b> A technique used to help identify possible causes of Problems. All available data about the Problem is collected and sorted by date and time to provide a detailed timeline. This can make it possible to identify which Events may have been triggered by others.
CI Type	<b>(Service Transition)</b> A Category that is used to Classify CIs. The CI Type identifies the required Attributes and Relationships for a Configuration Record. Common CI Types include: hardware, Document, User etc.
Classification	The act of assigning a Category to something. Classification is used to ensure consistent management and reporting. CIs, Incidents, Problems, Changes etc. are usually classified.
Client	A generic term that means a Customer, the Business or a Business Customer. For example Client Manager may be used as a synonym for Account Manager. The term client is also used to mean: <ul style="list-style-type: none"> <li>• A computer that is used directly by a User, for example a PC, Handheld Computer, or Workstation.</li> <li>• The part of a Client-Server Application that the User directly interfaces with. For example an email Client.</li> </ul>
Closed	<b>(Service Operation)</b> The final Status in the Lifecycle of an Incident, Problem, Change etc. When the Status is Closed, no further action is taken.
Closure	<b>(Service Operation)</b> The act of changing the Status of an Incident, Problem, Change etc. to Closed.
COBIT	<b>(Continual Service Improvement)</b> Control Objectives for Information and related Technology (COBIT) provides guidance and Best Practice for the management of IT Processes. COBIT is published by the IT Governance Institute. See <a href="http://www.isaca.org/">http://www.isaca.org/</a> for more information.
Code of Practice	A Guideline published by a public body or a Standards Organisation, such as ISO or BSI. Many Standards consist of a Code of Practice and a Specification. The Code of Practice describes recommended Best Practice.

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Cold Standby to Configuration Baseline

Term	Definition
Cold Standby	Synonym for Gradual Recovery.
Commercial off the Shelf (COTS)	<b>(Service Design)</b> Application software or Middleware that can be purchased from a Third Party.
Compliance	Ensuring that a Standard or set of Guidelines is followed, or that proper, consistent accounting or other practices are being employed.
Component	A general term that is used to mean one part of something more complex. For example, a computer System may be a component of an IT Service, an Application may be a Component of a Release Unit. Components that need to be managed should be Configuration Items.
Component Capacity Management (CCM)	<b>(Service Design) (Continual Service Improvement)</b> The Process responsible for understanding the Capacity, Utilisation, and Performance of Configuration Items. Data is collected, recorded and analysed for use in the Capacity Plan. See Service Capacity Management.
Component CI	<b>(Service Transition)</b> A Configuration Item that is part of an Assembly. For example, a CPU or Memory CI may be part of a Server CI.
Component Failure Impact Analysis (CFIA)	<b>(Service Design)</b> A technique that helps to identify the impact of CI failure on IT Services. A matrix is created with IT Services on one edge and CIs on the other. This enables the identification of critical CIs (that could cause the failure of multiple IT Services) and of fragile IT Services (that have multiple Single Points of Failure).
Computer Telephony Integration (CTI)	<b>(Service Operation)</b> CTI is a general term covering any kind of integration between computers and telephone Systems. It is most commonly used to refer to Systems where an Application displays detailed screens relating to incoming or outgoing telephone calls. See Automatic Call Distribution, Interactive Voice Response.
Concurrency	A measure of the number of Users engaged in the same Operation at the same time.
Confidentiality	<b>(Service Design)</b> A security principle that requires that data should only be accessed by authorised people.
Configuration	<b>(Service Transition)</b> A generic term, used to describe a group of Configuration Items that work together to deliver an IT Service, or a recognizable part of an IT Service. Configuration is also used to describe the parameter settings for one or more CIs.
Configuration Baseline	<b>(Service Transition)</b> A Baseline of a Configuration that has been formally agreed and is managed through the Change Management process. A Configuration Baseline is used as a basis for future Builds, Releases and Changes.

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 Configuration Control to Configuration Structure

Term	Definition
Configuration Control	<b>(Service Transition)</b> The Activity responsible for ensuring that adding, modifying or removing a CI is properly managed, for example by submitting a Request for Change or Service Request.
Configuration Identification	<b>(Service Transition)</b> The Activity responsible for collecting information about Configuration Items and their Relationships, and loading this information into the CMDB. Configuration Identification is also responsible for labelling the CIs themselves, so that the corresponding Configuration Records can be found.
Configuration Item (CI)	<b>(Service Transition)</b> Any Component that needs to be managed in order to deliver an IT Service. Information about each CI is recorded in a Configuration Record within the Configuration Management System and is maintained throughout its Lifecycle by Configuration Management. CIs are under the control of Change Management. CIs typically include IT Services, hardware, software, buildings, people, and formal documentation such as Process documentation and SLAs.
Configuration Management	<b>(Service Transition)</b> The Process responsible for maintaining information about Configuration Items required to deliver an IT Service, including their Relationships. This information is managed throughout the Lifecycle of the CI. Configuration Management is part of an overall Service Asset and Configuration Management Process.
Configuration Management Database (CMDB)	<b>(Service Transition)</b> A database used to store Configuration Records throughout their Lifecycle. The Configuration Management System maintains one or more CMDBs, and each CMDB stores Attributes of CIs, and Relationships with other CIs.
Configuration Management System (CMS)	<b>(Service Transition)</b> A set of tools and databases that are used to manage an IT Service Provider's Configuration data. The CMS also includes information about Incidents, Problems, Known Errors, Changes and Releases; and may contain data about employees, Suppliers, locations, Business Units, Customers and Users. The CMS includes tools for collecting, storing, managing, updating, and presenting data about all Configuration Items and their Relationships. The CMS is maintained by Configuration Management and is used by all IT Service Management Processes. See Configuration Management Database, Service Knowledge Management System.
Configuration Record	<b>(Service Transition)</b> A Record containing the details of a Configuration Item. Each Configuration Record documents the Lifecycle of a single CI. Configuration Records are stored in a Configuration Management Database.
Configuration Structure	<b>(Service Transition)</b> The hierarchy and other Relationships between all the Configuration Items that comprise a Configuration.

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 Continual Service Improvement (CSI) to Control Processes

Term	Definition
Continual Service Improvement (CSI)	<p><b>(Continual Service Improvement)</b> A stage in the Lifecycle of an IT Service and the title of one of the Core ITIL publications. Continual Service Improvement is responsible for managing improvements to IT Service Management Processes and IT Services. The Performance of the IT Service Provider is continually measured and improvements are made to Processes, IT Services and IT Infrastructure in order to increase Efficiency, Effectiveness, and Cost Effectiveness. See Plan-Do-Check-Act.</p>
Continuous Availability	<p><b>(Service Design)</b> An approach or design to achieve 100% Availability. A Continuously Available IT Service has no planned or unplanned Downtime.</p>
Continuous Operation	<p><b>(Service Design)</b> An approach or design to eliminate planned Downtime of an IT Service. Note that individual Configuration Items may be down even though the IT Service is Available.</p>
Contract	<p>A legally binding Agreement between two or more parties.</p>
Contract Portfolio	<p><b>(Service Strategy)</b> A database or structured Document used to manage Service Contracts or Agreements between an IT Service Provider and their Customers. Each IT Service delivered to a Customer should have a Contract or other Agreement which is listed in the Contract Portfolio. See Service Portfolio, Service Catalogue.</p>
Control	<p>A means of managing a Risk, ensuring that a Business Objective is achieved, or ensuring that a Process is followed. Example Controls include Policies, Procedures, Roles, RAID, door-locks etc. A control is sometimes called a Countermeasure or safeguard. Control also means to manage the utilization or behaviour of a Configuration Item, System or IT Service.</p>
Control Objectives for Information and related Technology (COBIT)	<p>See COBIT.</p>
Control perspective	<p><b>(Service Strategy)</b> An approach to the management of IT Services, Processes, Functions, Assets etc. There can be several different Control Perspectives on the same IT Service, Process etc., allowing different individuals or teams to focus on what is important and relevant to their specific Role. Example Control Perspectives include Reactive and Proactive management within IT Operations, or a Lifecycle view for an Application Project team.</p>
Control Processes	<p>The ISO/IEC 20000 Process group that includes Change Management and Configuration Management.</p>

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Core Service to Cost Unit

Term	Definition
Core Service	<b>(Service Strategy)</b> An IT Service that delivers basic Outcomes desired by one or more Customers. See Supporting Service, Core Service Package.
Core Service Package (CSP)	<b>(Service Strategy)</b> A detailed description of a Core Service that may be shared by two or more Service Level Packages. See Service Package.
Cost	The amount of money spent on a specific Activity, IT Service, or Business Unit. Costs consist of real cost (money), notional cost such as people's time, and Depreciation.
Cost Benefit Analysis	An Activity that analyses and compares the Costs and the benefits involved in one or more alternative courses of action. See Business Case, Net Present Value, Internal Rate of Return, Return on Investment, Value on Investment.
Cost Centre	<b>(Service Strategy)</b> A Business Unit or Project to which Costs are assigned. A Cost Centre does not charge for Services provided. An IT Service Provider can be run as a Cost Centre or a Profit Centre.
Cost Effectiveness	A measure of the balance between the Effectiveness and Cost of a Service, Process or activity, A Cost Effective Process is one which achieves its Objectives at minimum Cost. See KPI, Return on Investment, Value for Money.
Cost Element	<b>(Service Strategy)</b> The middle level of category to which Costs are assigned in Budgeting and Accounting. The highest level category is Cost Type. For example a Cost Type of "people" could have cost elements of payroll, staff benefits, expenses, training, overtime etc. Cost Elements can be further broken down to give Cost Units. For example the Cost Element "expenses" could include Cost Units of Hotels, Transport, Meals etc.
Cost Management	<b>(Service Strategy)</b> A general term that is used to refer to Budgeting and Accounting, sometimes used as a synonym for Financial Management
Cost Type	<b>(Service Strategy)</b> The highest level of category to which Costs are assigned in Budgeting and Accounting. For example hardware, software, people, accommodation, external and Transfer. See Cost Element, Cost Type.
Cost Unit	<b>(Service Strategy)</b> The lowest level of category to which Costs are assigned, Cost Units are usually things that can be easily counted (e.g. staff numbers, software licences) or things easily measured (e.g. CPU usage, Electricity consumed). Cost Units are included within Cost Elements. For example a Cost Element of "expenses" could include Cost Units of Hotels, Transport, Meals etc. See Cost Type.

Term	Definition
Countermeasure	Can be used to refer to any type of Control. The term Countermeasure is most often used when referring to measures that increase Resilience, Fault Tolerance or Reliability of an IT Service.
Course Corrections	Changes made to a Plan or Activity that has already started, to ensure that it will meet its Objectives. Course corrections are made as a result of Monitoring progress.
CRAMM	A methodology and tool for analysing and managing Risks. CRAMM was developed by the UK Government, but is now privately owned. Further information is available from <a href="http://www.cramm.com/">http://www.cramm.com/</a>
Crisis Management	The Process responsible for managing the wider implications of Business Continuity. A Crisis Management team is responsible for Strategic issues such as managing media relations and shareholder confidence, and decides when to invoke Business Continuity Plans.
Critical Success Factor (CSF)	Something that must happen if a Process, Project, Plan, or IT Service is to succeed. KPIs are used to measure the achievement of each CSF. For example a CSF of "protect IT Services when making Changes" could be measured by KPIs such as "percentage reduction of unsuccessful Changes", "percentage reduction in Changes causing Incidents" etc.
Culture	A set of values that is shared by a group of people, including expectations about how people should behave, ideas, beliefs, and practices. See Vision.
Customer	Someone who buys goods or Services. The Customer of an IT Service Provider is the person or group who defines and agrees the Service Level Targets. The term Customers is also sometimes informally used to mean Users, for example "this is a Customer focussed Organisation".
Customer Portfolio	<b>(Service Strategy)</b> A database or structured Document used to record all Customers of the IT Service Provider. The Customer Portfolio is the Business Relationship Manager's view of the Customers who receive Services from the IT Service Provider. See Contract Portfolio, Service Portfolio.
Dashboard	<b>(Service Operation)</b> A graphical representation of overall IT Service Performance and Availability. Dashboard images may be updated in real-time, and can also be included in management reports and web pages. Dashboards can be used to support Service Level Management, Event Management or Incident Diagnosis.
Data-to-Information-to-Knowledge-to-Wisdom (DIKW)	A way of understanding the relationships between data, information, knowledge, and wisdom. DIKW shows how each of these builds on the others.

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 Definitive Media Library (DML) to Development Environment

Term	Definition
Definitive Media Library (DML)	<b>(Service Transition)</b> One or more locations in which the definitive and approved versions of all software Configuration Items are securely stored. The DML may also contain associated CIs such as licenses and documentation. The DML is a single logical storage area even if there are multiple locations. All software in the DML is under the control of Change and Release Management and is recorded in the Configuration Management System. Only software from the DML is acceptable for use in a Release.
Deliverable	Something that must be provided to meet a commitment in a Service Level Agreement or a Contract. Deliverable is also used in a more informal way to mean a planned output of any Process.
Demand Management	Activities that understand and influence Customer demand for Services and the provision of Capacity to meet these demands. At a Strategic level Demand Management can involve analysis of Patterns of Business Activity and User Profiles. At a Tactical level it can involve use of Differential Charging to encourage Customers to use IT Services at less busy times. See Capacity Management.
Deming Cycle	Synonym for Plan Do Check Act.
Dependency	The direct or indirect reliance of one Process or Activity upon another.
Deployment	<b>(Service Transition)</b> The Activity responsible for movement of new or changed hardware, software, documentation, Process, etc to the Live Environment. Deployment is part of the Release and Deployment Management Process. See Rollout.
Depreciation	<b>(Service Strategy)</b> A measure of the reduction in value of an Asset over its life. This is based on wearing out, consumption or other reduction in the useful economic value.
Design	<b>(Service Design)</b> An Activity or Process that identifies Requirements and then defines a solution that is able to meet these Requirements. See Service Design.
Detection	<b>(Service Operation)</b> A stage in the Incident Lifecycle. Detection results in the Incident becoming known to the Service Provider. Detection can be automatic, or can be the result of a User logging an Incident.
Development	<b>(Service Design)</b> The Process responsible for creating or modifying an IT Service or Application. Also used to mean the Role or group that carries out Development work.
Development Environment	<b>(Service Design)</b> An Environment used to create or modify IT Services or Applications. Development Environments are not typically subjected to the same degree of control as Test Environments or Live Environments. See Development.

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 Diagnosis to Economies of scale

Term	Definition
Diagnosis	<b>(Service Operation)</b> A stage in the Incident and Problem Lifecycles. The purpose of Diagnosis is to identify a Workaround for an Incident or the Root Cause of a Problem.
Diagnostic Script	<b>(Service Operation)</b> A structured set of questions used by Service Desk staff to ensure they ask the correct questions, and to help them Classify, Resolve and assign Incidents. Diagnostic Scripts may also be made available to Users to help them diagnose and resolve their own Incidents.
Differential Charging	A technique used to support Demand Management by charging different amounts for the same IT Service Function at different times.
Direct Cost	<b>(Service Strategy)</b> A cost of providing an IT Service which can be allocated in full to a specific Customer, Cost Centre, Project etc. For example cost of providing non-shared servers or software licenses. See Indirect Cost.
Directory Service	<b>(Service Operation)</b> An Application that manages information about IT Infrastructure available on a network, and corresponding User access Rights.
Do Nothing	<b>(Service Design)</b> A Recovery Option. The Service Provider formally agrees with the Customer that Recovery of this IT Service will not be performed.
Document	Information in readable form. A Document may be paper or electronic. For example a Policy statement, Service Level Agreement, Incident Record, diagram of computer room layout. See Record.
Downtime	<b>(Service Design) (Service Operation)</b> The time when a Configuration Item or IT Service is not Available during its Agreed Service Time. The Availability of an IT Service is often calculated from Agreed Service Time and Downtime.
Driver	Something that influences Strategy, Objectives or Requirements. For example new legislation or the actions of competitors.
Early Life Support	<b>(Service Transition)</b> Support provided for a new or Changed IT Service for a period of time after it is Released. During Early Life Support the IT Service Provider may review the KPIs, Service Levels and Monitoring Thresholds, and provide additional Resources for Incident and Problem Management.
Economies of scale	<b>(Service Strategy)</b> The reduction in average Cost that is possible from increasing the usage of an IT Service or Asset. See Economies of Scope.

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Economies of scope to Escalation

Term	Definition
Economies of scope	<b>(Service Strategy)</b> The reduction in Cost that is allocated to an IT Service by using an existing Asset for an additional purpose. For example delivering a new IT Service from existing IT Infrastructure. See Economies of Scale.
Effectiveness	<b>(Continual Service Improvement)</b> A measure of whether the Objectives of a Process, Service or Activity have been achieved. An Effective Process or Activity is one that achieves its agreed Objectives. See KPI.
Efficiency	<b>(Continual Service Improvement)</b> A measure of whether the right amount of resources have been used to deliver a Process, Service or Activity. An Efficient Process achieves its Objectives with the minimum amount of time, money, people or other resources. See KPI.
Emergency Change	<b>(Service Transition)</b> A Change that must be introduced as soon as possible. For example to resolve a Major Incident or implement a Security patch. The Change Management Process will normally have a specific Procedure for handling Emergency Changes. See Emergency Change Advisory Board (ECAB).
Emergency Change Advisory Board (ECAB)	<b>(Service Transition)</b> A sub-set of the Change Advisory Board who make decisions about high impact Emergency Changes. Membership of the ECAB may be decided at the time a meeting is called, and depends on the nature of the Emergency Change.
Environment	<b>(Service Transition)</b> A subset of the IT Infrastructure that is used for a particular purpose. For Example: Live Environment, Test Environment, Build Environment. It is possible for multiple Environments to share a Configuration Item, for example Test and Live Environments may use different partitions on a single mainframe computer. Also used in the term Physical Environment to mean the accommodation, air conditioning, power system etc. Environment is also used as a generic term to mean the external conditions that influence or affect something.
Error	<b>(Service Operation)</b> A design flaw or malfunction that causes a Failure of one or more Configuration Items or IT Services. A mistake made by a person or a faulty Process that impacts a CI or IT Service is also an Error.
Escalation	<b>(Service Operation)</b> An Activity that obtains additional Resources when these are needed to meet Service Level Targets or Customer expectations. Escalation may be needed within any IT Service Management Process, but is most commonly associated with Incident Management, Problem Management and the management of Customer complaints. There are two types of Escalation, Functional Escalation and Hierarchic Escalation.

eSourcing Capability Model for Client Organizations (eSCM-CL) to External Customer

Term	Definition
eSourcing Capability Model for Client Organizations (eSCM-CL)	<b>(Service Strategy)</b> A framework to help Organisations guide their analysis and decisions on Service Sourcing Models and Strategies. eSCM-CL was developed by Carnegie Mellon University. See eSCM-SP.
eSourcing Capability Model for Service Providers (eSCM-SP)	<b>(Service Strategy)</b> A framework to help IT Service Providers develop their IT Service Management Capabilities from a Service Sourcing perspective. eSCM-SP was developed by Carnegie Mellon University. See eSCM-CL.
Estimation	The use of experience to provide an approximate value for a Metric or Cost. Estimation is also used in Capacity and Availability Management as the cheapest and least accurate Modelling method.
Evaluation	<b>(Service Transition)</b> The Process responsible for assessing a new or Changed IT Service to ensure that Risks have been managed and to help determine whether to proceed with the Change. Evaluation is also used to mean comparing an actual Outcome with the intended Outcome, or comparing one alternative with another.
Event	<b>(Service Operation)</b> A change of state which has significance for the management of a Configuration Item or IT Service. The term Event is also used to mean an Alert or notification created by any IT Service, Configuration Item or Monitoring tool. Events typically require IT Operations personnel to take actions, and often lead to Incidents being logged.
Event Management	<b>(Service Operation)</b> The Process responsible for managing Events throughout their Lifecycle. Event Management is one of the main Activities of IT Operations.
Exception Report	A Document containing details of one or more KPIs or other important targets that have exceeded defined Thresholds. Examples include SLA targets being missed or about to be missed, and a Performance Metric indicating a potential Capacity problem.
Expanded Incident Lifecycle	<b>(Availability Management)</b> Detailed stages in the Lifecycle of an Incident. The stages are Detection, Diagnosis, Repair, Recovery, Restoration. The Expanded Incident Lifecycle is used to help understand all contributions to the Impact of Incidents and to Plan how these could be controlled or reduced.
External Customer	A Customer who works for a different Business to the IT Service Provider. See External Service Provider, Internal Customer.

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 External Metric to Financial Management

Term	Definition
External Metric	A Metric that is used to measure the delivery of IT Service to a Customer. External Metrics are usually defined in SLAs and reported to Customers. See Internal Metric.
External Service Provider	<b>(Service Strategy)</b> An IT Service Provider which is part of a different Organisation to their Customer. An IT Service Provider may have both Internal Customers and External Customers. See Type III Service Provider.
External Sourcing	Synonym for Outsourcing.
Facilities Management	<b>(Service Operation)</b> The Function responsible for managing the physical Environment where the IT Infrastructure is located. Facilities Management includes all aspects of managing the physical Environment, for example power and cooling, building Access Management, and environmental Monitoring.
Failure	<b>(Service Operation)</b> Loss of ability to Operate to Specification, or to deliver the required output. The term Failure may be used when referring to IT Services, Processes, Activities, Configuration Items etc. A Failure often causes an Incident.
Failure Modes and Effects Analysis (FMEA)	An approach to assessing the potential Impact of Failures. FMEA involves analysing what would happen after Failure of each Configuration Item, all the way up to the effect on the Business. FMEA is often used in Information Security Management and in IT Service Continuity Planning.
Fast Recovery	<b>(Service Design)</b> A Recovery Option which is also known as Hot Standby. Provision is made to Recover the IT Service in a short period of time, typically less than 24 hours. Fast Recovery typically uses a dedicated Fixed Facility with computer Systems, and software configured ready to run the IT Services. Immediate Recovery may take up to 24 hours if there is a need to Restore data from Backups.
Fault	Synonym for Error.
Fault Tolerance	<b>(Service Design)</b> The ability of an IT Service or Configuration Item to continue to Operate correctly after Failure of a Component part. See Resilience, Countermeasure.
Fault Tree Analysis (FTA)	<b>(Service Design) (Continual Service Improvement)</b> A technique that can be used to determine the chain of Events that leads to a Problem. Fault Tree Analysis represents a chain of Events using Boolean notation in a diagram.
Financial Management	<b>(Service Strategy)</b> The Function and Processes responsible for managing an IT Service Provider's Budgeting, Accounting and Charging Requirements.

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 First-line Support to Governance

Term	Definition
First-line Support	<b>(Service Operation)</b> The first level in a hierarchy of Support Groups involved in the resolution of Incidents. Each level contains more specialist skills, or has more time or other Resources. See Escalation.
Fishbone Diagram	Synonym for Ishikawa Diagram.
Fit for Purpose	An informal term used to describe a Process, Configuration Item, IT Service etc. that is capable of meeting its Objectives or Service Levels. Being Fit for Purpose requires suitable Design, implementation, Control and maintenance.
Fixed Cost	<b>(Service Strategy)</b> A Cost that does not vary with IT Service usage. For example the cost of Server hardware. See Variable Cost.
Fixed Facility	<b>(Service Design)</b> A permanent building, available for use when needed by an IT Service Continuity Plan. See Recovery Option, Portable Facility.
Follow the Sun	<b>(Service Operation)</b> A methodology for using Service Desks and Support Groups around the world to provide seamless 24 * 7 Service. Calls, Incidents, Problems and Service Requests are passed between groups in different time zones.
Fulfilment	Performing Activities to meet a need or Requirement. For example by providing a new IT Service, or meeting a Service Request.
Function	A team or group of people and the tools they use to carry out one or more Processes or Activities. For example the Service Desk. The term Function also has two other meanings <ul style="list-style-type: none"> <li>• An intended purpose of a Configuration Item, Person, Team, Process, or IT Service. For example one Function of an Email Service may be to store and forward outgoing mails, one Function of a Business Process may be to dispatch goods to Customers.</li> <li>• To perform the intended purpose correctly, "The computer is Functioning"</li> </ul>
Functional Escalation	<b>(Service Operation)</b> Transferring an Incident, Problem or Change to a technical team with a higher level of expertise to assist in an Escalation.
Gap Analysis	<b>(Continual Service Improvement)</b> An Activity which compares two sets of data and identifies the differences. Gap Analysis is commonly used to compare a set of Requirements with actual delivery. See Benchmarking.
Governance	Ensuring that Policies and Strategy are actually implemented, and that required Processes are correctly followed. Governance includes defining Roles and responsibilities, measuring and reporting, and taking actions to resolve any issues identified.

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 Gradual Recovery to Incident Management

Term	Definition
Gradual Recovery	<b>(Service Design)</b> A Recovery Option which is also known as Cold Standby. Provision is made to Recover the IT Service in a period of time greater than 72 hours. Gradual Recovery typically uses a Portable or Fixed Facility that has environmental support and network cabling, but no computer Systems. The hardware and software are installed as part of the IT Service Continuity Plan.
Guideline	A Document describing Best Practice, that recommends what should be done. Compliance to a guideline is not normally enforced. See Standard.
Help Desk	<b>(Service Operation)</b> A point of contact for Users to log Incidents. A Help Desk is usually more technically focussed than a Service Desk and does not provide a Single Point of Contact for all interaction. The term Help Desk is often used as a synonym for Service Desk.
Hierarchic Escalation	<b>(Service Operation)</b> Informing or involving more senior levels of management to assist in an Escalation.
High Availability	<b>(Service Design)</b> An approach or Design that minimises or hides the effects of Configuration Item Failure on the Users of an IT Service. High Availability solutions are Designed to achieve an agreed level of Availability and make use of techniques such as Fault Tolerance, Resilience and fast Recovery to reduce the number of Incidents, and the Impact of Incidents.
Hot Standby	Synonym for Fast Recovery or Immediate Recovery.
Identity	<b>(Service Operation)</b> A unique name that is used to identify a User, person or Role. The Identity is used to grant Rights to that User, person, or Role. Example identities might be the username SmithJ or the Role "Change manager".
Immediate Recovery	<b>(Service Design)</b> A Recovery Option which is also known as Hot Standby. Provision is made to Recover the IT Service with no loss of Service. Immediate Recovery typically uses mirroring, load balancing and split site technologies.
Impact	<b>(Service Operation) (Service Transition)</b> A measure of the effect of an Incident, Problem or Change on Business Processes. Impact is often based on how Service Levels will be affected. Impact and Urgency are used to assign Priority.
Incident	<b>(Service Operation)</b> An unplanned interruption to an IT Service or a reduction in the Quality of an IT Service. Failure of a Configuration Item that has not yet impacted Service is also an Incident. For example Failure of one disk from a mirror set.
Incident Management	<b>(Service Operation)</b> The Process responsible for managing the Lifecycle of all Incidents. The primary Objective of Incident Management is to return the IT Service to Users as quickly as possible.

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Incident Record to Interactive Voice Response (IVR)

Term	Definition
Incident Record	<b>(Service Operation)</b> A Record containing the details of an Incident. Each Incident record documents the Lifecycle of a single Incident.
Indirect Cost	<b>(Service Strategy)</b> A Cost of providing an IT Service which cannot be allocated in full to a specific Customer. For example Cost of providing shared Servers or software licenses. Also known as Overhead. See Direct Cost.
Information Security Management (ISM)	<b>(Service Design)</b> The Process that ensures the Confidentiality, Integrity and Availability of an Organisation's Assets, information, data and IT Services. Information Security Management usually forms part of an Organisational approach to Security Management which has a wider scope than the IT Service Provider, and includes handling of paper, building access, phone calls etc., for the entire Organisation.
Information Security Management System (ISMS)	<b>(Service Design)</b> The framework of Policy, Processes, Standards, Guidelines and tools that ensures an Organisation can achieve its Information Security Management Objectives.
Information Security Policy	<b>(Service Design)</b> The Policy that governs the Organisation's approach to Information Security Management.
Information Technology (IT)	The use of technology for the storage, communication or processing of information. The technology typically includes computers, telecommunications, Applications and other software. The information may include Business data, voice, images, video, etc. Information Technology is often used to support Business Processes through IT Services.
Infrastructure Service	An IT Service that is not directly used by the Business, but is required by the IT Service Provider so they can provide other IT Services. For example Directory Services, naming services, or communication services.
Insourcing	Synonym for Internal Sourcing.
Integrity	<b>(Service Design)</b> A security principle that ensures data and Configuration Items are only modified by authorised personnel and Activities. Integrity considers all possible causes of modification, including software and hardware Failure, environmental Events, and human intervention.
Interactive Voice Response (IVR)	<b>(Service Operation)</b> A form of Automatic Call Distribution that accepts User input, such as key presses and spoken commands, to identify the correct destination for incoming Calls.

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Intermediate Recovery to Ishikawa Diagram

Term	Definition
Intermediate Recovery	<b>(Service Design)</b> A Recovery Option which is also known as Warm Standby. Provision is made to Recover the IT Service in a period of time between 24 and 72 hours. Intermediate Recovery typically uses a shared Portable or Fixed Facility that has computer Systems and network Components. The hardware and software will need to be configured, and data will need to be restored, as part of the IT Service Continuity Plan.
Internal Customer	A Customer who works for the same Business as the IT Service Provider. See Internal Service Provider, External Customer.
Internal Metric	A Metric that is used within the IT Service Provider to Monitor the Efficiency, Effectiveness or Cost Effectiveness of the IT Service Provider's internal Processes. Internal Metrics are not normally reported to the Customer of the IT Service. See External Metric.
Internal Rate of Return (IRR)	<b>(Service Strategy)</b> A technique used to help make decisions about Capital Expenditure. IRR calculates a figure that allows two or more alternative investments to be compared. A larger IRR indicates a better investment. See Net Present Value, Return on Investment.
Internal Service Provider	<b>(Service Strategy)</b> An IT Service Provider which is part of the same Organisation as their Customer. An IT Service Provider may have both Internal Customers and External Customers. See Type I Service Provider, Type II Service Provider, Insource.
Internal Sourcing	<b>(Service Strategy)</b> Using an Internal Service Provider to manage IT Services. See Service Sourcing, Type I Service Provider, Type II Service Provider.
International Organization for Standardization (ISO)	The International Organization for Standardization (ISO) is the world's largest developer of Standards. ISO is a non-governmental organization which is a network of the national standards institutes of 156 countries. Further information about ISO is available from <a href="http://www.iso.org/">http://www.iso.org/</a>
International Standards Organisation	See International Organization for Standardization (ISO)
Internet Service Provider (ISP)	An External Service Provider that provides access to the Internet. Most ISPs also provide other IT Services such as web hosting.
Invocation	<b>(Service Design)</b> Initiation of the steps defined in a plan. For example initiating the IT Service Continuity Plan for one or more IT Services.
Ishikawa Diagram	<b>(Service Operation) (Continual Service Improvement)</b> A technique that helps a team to identify all the possible causes of a Problem. Originally devised by Kaoru Ishikawa, the output of this technique is a diagram that looks like a fishbone.

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ISO 9000 to IT Service

Term	Definition
ISO 9000	A generic term that refers to a number of international Standards and Guidelines for Quality Management Systems. See <a href="http://www.iso.org/">http://www.iso.org/</a> for more information. See ISO.
ISO 9001	An international Standard for Quality Management Systems. See ISO 9000, Standard.
ISO/IEC 17799	<b>(Continual Service Improvement)</b> ISO Code of Practice for Information Security Management. See Standard.
ISO/IEC 20000	ISO Specification and Code of Practice for IT Service Management. ISO/IEC 20000 is aligned with ITIL Best Practice.
ISO/IEC 27001	<b>(Service Design) (Continual Service Improvement)</b> ISO Specification for Information Security Management. The corresponding Code of Practice is ISO/IEC 17799. See Standard.
IT Directorate	<b>(Continual Service Improvement)</b> Senior Management within a Service Provider, charged with developing and delivering IT services. Most commonly used in UK Government departments.
IT Infrastructure	All of the hardware, software, networks, facilities etc. that are required to Develop, Test, deliver, Monitor, Control or support IT Services. The term IT Infrastructure includes all of the Information Technology but not the associated people, Processes and documentation.
IT Operations	<b>(Service Operation)</b> Activities carried out by IT Operations Control, including Console Management, Job Scheduling, Backup and Restore, and Print and Output Management. IT Operations is also used as a synonym for Service Operation.
IT Operations Control	<b>(Service Operation)</b> The Function responsible for Monitoring and Control of the IT Services and IT Infrastructure. See Operations Bridge.
IT Operations Management	<b>(Service Operation)</b> The Function within an IT Service Provider which performs the daily Activities needed to manage IT Services and the supporting IT Infrastructure. IT Operations Management includes IT Operations Control and Facilities Management.
IT Service	A Service provided to one or more Customers by an IT Service Provider. An IT Service is based on the use of Information Technology and supports the Customer's Business Processes. An IT Service is made up from a combination of people, Processes and technology and should be defined in a Service Level Agreement.

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IT Service Continuity Management (ITSCM) to Job Scheduling

Term	Definition
IT Service Continuity Management (ITSCM)	<b>(Service Design)</b> The Process responsible for managing Risks that could seriously impact IT Services. ITSCM ensures that the IT Service Provider can always provide minimum agreed Service Levels, by reducing the Risk to an acceptable level and Planning for the Recovery of IT Services. ITSCM should be designed to support Business Continuity Management.
IT Service Continuity Plan	<b>(Service Design)</b> A Plan defining the steps required to Recover one or more IT Services. The Plan will also identify the triggers for Invocation, people to be involved, communications etc. The IT Service Continuity Plan should be part of a Business Continuity Plan.
IT Service Management (ITSM)	The implementation and management of Quality IT Services that meet the needs of the Business. IT Service Management is performed by IT Service Providers through an appropriate mix of people, Process and Information Technology. See Service Management.
IT Service Management Forum (itSMF)	The IT Service Management Forum is an independent Organisation dedicated to promoting a professional approach to IT Service Management. The itSMF is a not-for-profit membership Organisation with representation in many countries around the world (itSMF Chapters). The itSMF and its membership contribute to the development of ITIL and associated IT Service Management Standards. See <a href="http://www.itsmf.com/">http://www.itsmf.com/</a> for more information.
IT Service Provider	<b>(Service Strategy)</b> A Service Provider that provides IT Services to Internal Customers or External Customers.
IT Steering Group (ISG)	A formal group that is responsible for ensuring that Business and IT Service Provider Strategies and Plans are closely aligned. An IT Steering Group includes senior representatives from the Business and the IT Service Provider.
ITIL	A set of Best Practice guidance for IT Service Management. ITIL is owned by the OGC and consists of a series of publications giving guidance on the provision of Quality IT Services, and on the Processes and facilities needed to support them. See <a href="http://www.itil.co.uk/">http://www.itil.co.uk/</a> for more information.
Job Description	A Document which defines the Roles, responsibilities, skills and knowledge required by a particular person. One Job Description can include multiple Roles, for example the Roles of Configuration Manager and Change Manager may be carried out by one person.
Job Scheduling	<b>(Service Operation)</b> Planning and managing the execution of software tasks that are required as part of an IT Service. Job Scheduling is carried out by IT Operations Management, and is often automated using software tools that run batch or online tasks at specific times of the day, week, month or year.

Term	Definition
Kano Model	<b>(Service Strategy)</b> A Model developed by Noriaki Kano that is used to help understand Customer preferences. The Kano Model considers Attributes of an IT Service grouped into areas such as Basic Factors, Excitement Factors, Performance Factors etc.
Kepner & Tregoe Analysis	<b>(Service Operation) (Continual Service Improvement)</b> A structured approach to Problem solving. The Problem is analysed in terms of what, where, when and extent. Possible causes are identified. The most probable cause is tested. The true cause is verified.
Key Performance Indicator (KPI)	<b>(Continual Service Improvement)</b> A Metric that is used to help manage a Process, IT Service or Activity. Many Metrics may be measured, but only the most important of these are defined as KPIs and used to actively manage and report on the Process, IT Service or Activity. KPIs should be selected to ensure that Efficiency, Effectiveness, and Cost Effectiveness are all managed. See Critical Success Factor.
Knowledge Base	<b>(Service Transition)</b> A logical database containing the data used by the Service Knowledge Management System.
Knowledge Management	<b>(Service Transition)</b> The Process responsible for gathering, analysing, storing and sharing knowledge and information within an Organisation. The primary purpose of Knowledge Management is to improve Efficiency by reducing the need to rediscover knowledge. See Data-to-Information-to-Knowledge-to-Wisdom, Service Knowledge Management System.
Known Error	<b>(Service Operation)</b> A Problem that has a documented Root Cause and a Workaround. Known Errors are created and managed throughout their Lifecycle by Problem Management. Known Errors may also be identified by Development or Suppliers.
Known Error Database (KEDB)	<b>(Service Operation)</b> A database containing all Known Error Records. This database is created by Problem Management and used by Incident and Problem Management. The Known Error Database is part of the Service Knowledge Management System.
Known Error Record	<b>(Service Operation)</b> A Record containing the details of a Known Error. Each Known Error Record documents the Lifecycle of a Known Error, including the Status, Root Cause and Workaround. In some implementations a Known Error is documented using additional fields in a Problem Record.

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 Lifecycle to Management System

Term	Definition
Lifecycle	<p>The various stages in the life of an IT Service, Configuration Item, Incident, Problem, Change etc. The Lifecycle defines the Categories for Status and the Status transitions that are permitted. For example:</p> <ul style="list-style-type: none"> <li>• The Lifecycle of an Application includes Requirements, Design, Build, Deploy, Operate, Optimise.</li> <li>• The Expanded Incident Lifecycle includes Detect, Respond, Diagnose, Repair, Recover, Restore.</li> <li>• The lifecycle of a Server may include: Ordered, Received, In Test, Live, Disposed etc.</li> </ul>
Line of Service (LOS)	<p><b>(Service Strategy)</b> A Core Service or Supporting Service that has multiple Service Level Packages. A line of Service is managed by a Product Manager and each Service Level Package is designed to support a particular market segment.</p>
Live	<p><b>(Service Transition)</b> Refers to an IT Service or Configuration Item that is being used to deliver Service to a Customer.</p>
Live Environment	<p><b>(Service Transition)</b> A controlled Environment containing Live Configuration Items used to deliver IT Services to Customers.</p>
Maintainability	<p><b>(Service Design)</b> A measure of how quickly and Effectively a Configuration Item or IT Service can be restored to normal working after a Failure. Maintainability is often measured and reported as MTRS. Maintainability is also used in the context of Software or IT Service Development to mean ability to be Changed or Repaired easily.</p>
Major Incident	<p><b>(Service Operation)</b> The highest Category of Impact for an Incident. A Major Incident results in significant disruption to the Business.</p>
Managed Services	<p><b>(Service Strategy)</b> A perspective on IT Services which emphasizes the fact that they are managed. The term Managed Services is also used as a synonym for Outsourced IT Services.</p>
Management Information	<p>Information that is used to support decision making by managers. Management Information is often generated automatically by tools supporting the various IT Service Management Processes. Management Information often includes the values of KPIs such as "Percentage of Changes leading to Incidents", or "first time fix rate".</p>
Management of Risk (MoR)	<p>The OGC methodology for managing Risks. MoR includes all the Activities required to identify and Control the exposure to Risk which may have an impact on the achievement of an Organisation's Business Objectives.      See <a href="http://www.m-o-r.org/">http://www.m-o-r.org/</a> for more details.</p>
Management System	<p>The framework of Policy, Processes and Functions that ensures an Organisation can achieve its Objectives.</p>

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Manual Workaround to Middleware

Term	Definition
Manual Workaround	A Workaround that requires manual intervention. Manual Workaround is also used as the name of a Recovery Option in which The Business Process Operates without the use of IT Services. This is a temporary measure and is usually combined with another Recovery Option.
Marginal Cost	<b>(Service Strategy)</b> The Cost of continuing to provide the IT Service. Marginal Cost does not include investment already made, for example the cost of developing new software and delivering training.
Market Space	<b>(Service Strategy)</b> All opportunities that an IT Service Provider could exploit to meet business needs of Customers. The Market Space identifies the possible IT Services that an IT Service Provider may wish to consider delivering.
Maturity	<b>(Continual Service Improvement)</b> A measure of the Reliability, Efficiency and Effectiveness of a Process, Function, Organisation etc. The most mature Processes and Functions are formally aligned to Business Objectives and Strategy, and are supported by a framework for continual improvement.
Maturity Level	A named level in a Maturity model such as the Carnegie Mellon Capability Maturity Model Integration.
Mean Time Between Failures (MTBF)	<b>(Service Design)</b> A Metric for measuring and reporting Reliability. MTBF is the average time that a Configuration Item or IT Service can perform its agreed Function without interruption. This is measured from when the CI or IT Service starts working, until it next fails.
Mean Time Between Service Incidents (MTBSI)	<b>(Service Design)</b> A Metric used for measuring and reporting Reliability. MTBSI is the mean time from when a System or IT Service fails, until it next fails. MTBSI is equal to MTBF + MTRS.
Mean Time To Repair (MTTR)	The average time taken to repair a Configuration Item or IT Service after a Failure. MTTR is measured from when the CI or IT Service fails until it is Repaired. MTTR does not include the time required to Recover or Restore. MTTR is sometimes incorrectly used to mean Mean Time to Restore Service.
Mean Time to Restore Service (MTRS)	The average time taken to Restore a Configuration Item or IT Service after a Failure. MTRS is measured from when the CI or IT Service fails until it is fully Restored and delivering its normal functionality. See Maintainability, Mean Time to Repair.
Metric	<b>(Continual Service Improvement)</b> Something that is measured and reported to help manage a Process, IT Service or Activity. See KPI.
Middleware	<b>(Service Design)</b> Software that connects two or more software Components or Applications. Middleware is usually purchased from a Supplier, rather than developed within the IT Service Provider. See Off the Shelf.

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Mission Statement to Office of Government Commerce (OGC)

Term	Definition
Mission Statement	The Mission Statement of an Organisation is a short but complete description of the overall purpose and intentions of that Organisation. It states what is to be achieved, but not how this should be done.
Model	A representation of a System, Process, IT Service, Configuration Item etc. that is used to help understand or predict future behaviour.
Modelling	A technique that is used to predict the future behaviour of a System, Process, IT Service, Configuration Item etc. Modelling is commonly used in Financial Management, Capacity Management and Availability Management.
Monitor Control Loop	<b>(Service Operation)</b> Monitoring the output of a Task, Process, IT Service or Configuration Item; comparing this output to a predefined norm; and taking appropriate action based on this comparison.
Monitoring	<b>(Service Operation)</b> Repeated observation of a Configuration Item, IT Service or Process to detect Events and to ensure that the current status is known.
Near-Shore	<b>(Service Strategy)</b> Provision of Services from a country near the country where the Customer is based. This can be the provision of an IT Service, or of supporting Functions such as Service Desk. See On-shore, Off-shore.
Net Present Value (NPV)	<b>(Service Strategy)</b> A technique used to help make decisions about Capital Expenditure. NPV compares cash inflows to cash outflows. Positive NPV indicates that an investment is worthwhile. See Internal Rate of Return, Return on Investment.
Notional Charging	<b>(Service Strategy)</b> An approach to Charging for IT Services. Charges to Customers are calculated and Customers are informed of the charge, but no money is actually transferred. Notional Charging is sometimes introduced to ensure that Customers are aware of the Costs they incur, or as a stage during the introduction of real Charging.
Objective	The defined purpose or aim of a Process, an Activity or an Organisation as a whole. Objectives are usually expressed as measurable targets. The term Objective is also informally used to mean a Requirement. See Outcome.
Off the Shelf	Synonym for Commercial Off the Shelf.
Office of Government Commerce (OGC)	OGC owns the ITIL brand (copyright and trademark). OGC is a UK Government department that supports the delivery of the government's procurement agenda through its work in collaborative procurement and in raising levels of procurement skills and capability with departments. It also provides support for complex public sector projects.

Term	Definition
Office of Public Sector Information (OPSI)	OPSI license the Crown Copyright material used in the ITIL publications. They are a UK Government department who provide online access to UK legislation, license the re-use of Crown copyright material, manage the Information Fair Trader Scheme, maintain the Government's Information Asset Register and provide advice and guidance on official publishing and Crown copyright.
Off-shore	<b>(Service Strategy)</b> Provision of Services from a location outside the country where the Customer is based, often in a different continent. This can be the provision of an IT Service, or of supporting Functions such as Service Desk. See On-shore, Near-shore.
On-shore	<b>(Service Strategy)</b> Provision of Services from a location within the country where the Customer is based. See Off-shore, Near-shore.
Operate	To perform as expected. A Process or Configuration Item is said to Operate if it is delivering the Required outputs. Operate also means to perform one or more Operations. For example, to Operate a computer is to do the day-to-day Operations needed for it to perform as expected.
Operation	<b>(Service Operation)</b> Day-to-day management of an IT Service, System, or other Configuration Item. Operation is also used to mean any pre-defined Activity or Transaction. For example loading a magnetic tape, accepting money at a point of sale, or reading data from a disk drive.
Operational	The lowest of three levels of Planning and delivery (Strategic, Tactical, Operational). Operational Activities include the day-to-day or short term Planning or delivery of a Business Process or IT Service Management Process. The term Operational is also a synonym for Live.
Operational Cost	Cost resulting from running the IT Services. Often repeating payments. For example staff costs, hardware maintenance and electricity (also known as "current expenditure" or "revenue expenditure"). See Capital Expenditure.
Operational Expenditure (OPEX)	Synonym for Operational Cost.
Operational Level Agreement (OLA)	<b>(Service Design) (Continual Service Improvement)</b> An Agreement between an IT Service Provider and another part of the same Organisation. An OLA supports the IT Service Provider's delivery of IT Services to Customers. The OLA defines the goods or Services to be provided and the responsibilities of both parties. For example there could be an OLA <ul style="list-style-type: none"> <li>• between the IT Service Provider and a procurement department to obtain hardware in agreed times</li> <li>• between the Service Desk and a Support Group to provide Incident Resolution in agreed times.</li> </ul> See Service Level Agreement.

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 Operations Bridge to Pareto Principle

Term	Definition
Operations Bridge	<b>(Service Operation)</b> A physical location where IT Services and IT Infrastructure are monitored and managed.
Operations Control	Synonym for IT Operations Control.
Operations Management	Synonym for IT Operations Management.
Opportunity Cost	<b>(Service Strategy)</b> A Cost that is used in deciding between investment choices. Opportunity Cost represents the revenue that would have been generated by using the Resources in a different way. For example the Opportunity Cost of purchasing a new Server may include not carrying out a Service Improvement activity that the money could have been spent on. Opportunity cost analysis is used as part of a decision making processes, but is not treated as an actual Cost in any financial statement.
Optimise	Review, Plan and request Changes, in order to obtain the maximum Efficiency and Effectiveness from a Process, Configuration Item, Application etc.
Organisation	A company, legal entity or other institution. Examples of Organisations that are not companies include International Standards Organisation or ITSMF. The term Organisation is sometimes used to refer to any entity which has People, Resources and Budgets. For example a Project or Business Unit.
Outcome	The result of carrying out an Activity; following a Process; delivering an IT Service etc. The term Outcome is used to refer to intended results, as well as to actual results. See Objective.
Outsourcing	<b>(Service Strategy)</b> Using an External Service Provider to manage IT Services. See Service Sourcing, Type III Service Provider.
Overhead	Synonym for Indirect cost
Pain Value Analysis	<b>(Service Operation)</b> A technique used to help identify the Business Impact of one or more Problems. A formula is used to calculate Pain Value based on the number of Users affected, the duration of the Downtime, the Impact on each User, and the cost to the Business (if known).
Pareto Principle	<b>(Service Operation)</b> A technique used to prioritise Activities. The Pareto Principle says that 80% of the value of any Activity is created with 20% of the effort. Pareto Analysis is also used in Problem Management to prioritise possible Problem causes for investigation.

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Partnership to Plan-Do-Check-Act

Term	Definition
Partnership	A relationship between two Organisations which involves working closely together for common goals or mutual benefit. The IT Service Provider should have a Partnership with the Business, and with Third Parties who are critical to the delivery of IT Services. See Value Network.
Passive Monitoring	<b>(Service Operation)</b> Monitoring of a Configuration Item, an IT Service or a Process that relies on an Alert or notification to discover the current status. See Active Monitoring.
Pattern of Business Activity (PBA)	<b>(Service Strategy)</b> A Workload profile of one or more Business Activities. Patterns of Business Activity are used to help the IT Service Provider understand and plan for different levels of Business Activity. See User Profile.
Percentage utilisation	<b>(Service Design)</b> The amount of time that a Component is busy over a given period of time. For example, if a CPU is busy for 1800 seconds in a one hour period, its utilisation is 50%
Performance	A measure of what is achieved or delivered by a System, person, team, Process, or IT Service.
Performance Anatomy	<b>(Service Strategy)</b> An approach to Organisational Culture that integrates, and actively manages, leadership and strategy, people development, technology enablement, performance management and innovation.
Performance Management	<b>(Continual Service Improvement)</b> The Process responsible for day-to-day Capacity Management Activities. These include Monitoring, Threshold detection, Performance analysis and Tuning, and implementing Changes related to Performance and Capacity.
Pilot	<b>(Service Transition)</b> A limited Deployment of an IT Service, a Release or a Process to the Live Environment. A Pilot is used to reduce Risk and to gain User feedback and Acceptance. See Test, Evaluation.
Plan	A detailed proposal which describes the Activities and Resources needed to achieve an Objective. For example a Plan to implement a new IT Service or Process. ISO/IEC 20000 requires a Plan for the management of each IT Service Management Process.
Plan-Do-Check-Act	<b>(Continual Service Improvement)</b> A four stage cycle for Process management, attributed to Edward Deming. Plan-Do-Check-Act is also called the Deming Cycle. PLAN: Design or revise Processes that support the IT Services. DO: Implement the Plan and manage the Processes. CHECK: Measure the Processes and IT Services, compare with Objectives and produce reports ACT: Plan and implement Changes to improve the Processes.

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 Planned Downtime to Proactive Monitoring

Term	Definition
Planned Downtime	<b>(Service Design)</b> Agreed time when an IT Service will not be available. Planned Downtime is often used for maintenance, upgrades and testing. See Change Window, Downtime.
Planning	An Activity responsible for creating one or more Plans. For example, Capacity Planning.
PMBOK	A Project management Standard maintained and published by the Project Management Institute. PMBOK stands for Project Management Body of Knowledge. See <a href="http://www.pmi.org/">http://www.pmi.org/</a> for more information. See PRINCE2.
Policy	Formally documented management expectations and intentions. Policies are used to direct decisions, and to ensure consistent and appropriate development and implementation of Processes, Standards, Roles, Activities, IT Infrastructure etc.
Portable Facility	<b>(Service Design)</b> A prefabricated building, or a large vehicle, provided by a Third Party and moved to a site when needed by an IT Service Continuity Plan. See Recovery Option, Fixed Facility.
Post Implementation Review (PIR)	A Review that takes place after a Change or a Project has been implemented. A PIR determines if the Change or Project was successful, and identifies opportunities for improvement.
Practice	A way of working, or a way in which work must be done. Practices can include Activities, Processes, Functions, Standards and Guidelines. See Best Practice.
Prerequisite for Success (PFS)	An Activity that needs to be completed, or a condition that needs to be met, to enable successful implementation of a Plan or Process. A PFS is often an output from one Process that is a required input to another Process.
Pricing	<b>(Service Strategy)</b> The Activity for establishing how much Customers will be Charged.
PRINCE2	The standard UK government methodology for Project management. See <a href="http://www.ogc.gov.uk/prince2/">http://www.ogc.gov.uk/prince2/</a> for more information. See PMBOK.
Priority	<b>(Service Transition) (Service Operation)</b> A Category used to identify the relative importance of an Incident, Problem or Change. Priority is based on Impact and Urgency, and is used to identify required times for actions to be taken. For example the SLA may state that Priority2 Incidents must be resolved within 12 hours.
Proactive Monitoring	<b>(Service Operation)</b> Monitoring that looks for patterns of Events to predict possible future Failures. See Reactive Monitoring.

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Proactive Problem Management to Production Environment

Term	Definition
Proactive Problem Management	<b>(Service Operation)</b> Part of the Problem Management Process. The Objective of Proactive Problem Management is to identify Problems that might otherwise be missed. Proactive Problem Management analyses Incident Records, and uses data collected by other IT Service Management Processes to identify trends or significant Problems.
Problem	<b>(Service Operation)</b> A cause of one or more Incidents. The cause is not usually known at the time a Problem Record is created, and the Problem Management Process is responsible for further investigation.
Problem Management	<b>(Service Operation)</b> The Process responsible for managing the Lifecycle of all Problems. The primary Objectives of Problem Management are to prevent Incidents from happening, and to minimise the Impact of Incidents that cannot be prevented.
Problem Record	<b>(Service Operation)</b> A Record containing the details of a Problem. Each Problem Record documents the Lifecycle of a single Problem.
Procedure	A Document containing steps that specify how to achieve an Activity. Procedures are defined as part of Processes. See Work Instruction.
Process	A structured set of Activities designed to accomplish a specific Objective. A Process takes one or more defined inputs and turns them into defined outputs. A Process may include any of the Roles, responsibilities, tools and management Controls required to reliably deliver the outputs. A Process may define Policies, Standards, Guidelines, Activities, and Work Instructions if they are needed.
Process Control	The Activity of planning and regulating a Process, with the Objective of performing the Process in an Effective, Efficient, and consistent manner.
Process Manager	A Role responsible for Operational management of a Process. The Process Manager's responsibilities include Planning and co-ordination of all Activities required to carry out, monitor and report on the Process. There may be several Process Managers for one Process, for example regional Change Managers or IT Service Continuity Managers for each data centre. The Process Manager Role is often assigned to the person who carries out the Process Owner Role, but the two Roles may be separate in larger Organisations.
Process Owner	A Role responsible for ensuring that a Process is Fit for Purpose. The Process Owner's responsibilities include sponsorship, Design, Change Management and continual improvement of the Process and its Metrics. This Role is often assigned to the same person who carries out the Process Manager Role, but the two Roles may be separate in larger Organisations.
Production Environment	Synonym for Live Environment.

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Profit Centre to Quick Win

Term	Definition
Profit Centre	<b>(Service Strategy)</b> A Business Unit which charges for Services provided. A Profit Centre can be created with the objective of making a profit, recovering Costs, or running at a loss. An IT Service Provider can be run as a Cost Centre or a Profit Centre.
pro-forma	A template, or example Document containing example data that will be replaced with the real values when these are available.
Programme	A number of Projects and Activities that are planned and managed together to achieve an overall set of related Objectives and other Outcomes.
Project	A temporary Organisation, with people and other Assets required to achieve an Objective or other Outcome. Each Project has a Lifecycle that typically includes initiation, Planning, execution, Closure etc. Projects are usually managed using a formal methodology such as PRINCE2.
Projected Service Outage (PSO)	<b>(Service Transition)</b> A Document that identifies the effect of planned Changes, maintenance Activities and Test Plans on agreed Service Levels.
Projects IN Controlled Environments (PRINCE2)	See PRINCE2
Qualification	<b>(Service Transition)</b> An Activity that ensures that IT Infrastructure is appropriate, and correctly configured, to support an Application or IT Service. See Validation.
Quality	The ability of a product, Service, or Process to provide the intended value. For example, a hardware Component can be considered to be of high Quality if it performs as expected and delivers the required Reliability. Process Quality also requires an ability to monitor Effectiveness and Efficiency, and to improve them if necessary. See Quality Management System.
Quality Assurance (QA)	<b>(Service Transition)</b> The Process responsible for ensuring that the Quality of a product, Service or Process will provide its intended Value.
Quality Management System (QMS)	<b>(Continual Service Improvement)</b> The set of Processes responsible for ensuring that all work carried out by an Organisation is of a suitable Quality to reliably meet Business Objectives or Service Levels. See ISO 9000.
Quick Win	<b>(Continual Service Improvement)</b> An improvement Activity which is expected to provide a Return on Investment in a short period of time with relatively small Cost and effort. See Pareto Principle.

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 RACI to Redundancy

Term	Definition
RACI	<b>(Service Design) (Continual Service Improvement)</b> A Model used to help define Roles and Responsibilities. RACI stands for Responsible, Accountable, Consulted and Informed. See Stakeholder.
Reactive Monitoring	<b>(Service Operation)</b> Monitoring that takes action in response to an Event. For example submitting a batch job when the previous job completes, or logging an Incident when an Error occurs. See Proactive Monitoring.
Reciprocal Arrangement	<b>(Service Design)</b> A Recovery Option. An agreement between two Organisations to share resources in an emergency. For example, Computer Room space or use of a mainframe.
Record	A Document containing the results or other output from a Process or Activity. Records are evidence of the fact that an Activity took place and may be paper or electronic. For example, an Audit report, an Incident Record, or the minutes of a meeting.
Recovery	<b>(Service Design) (Service Operation)</b> Returning a Configuration Item or an IT Service to a working state. Recovery of an IT Service often includes recovering data to a known consistent state. After Recovery, further steps may be needed before the IT Service can be made available to the Users (Restoration).
Recovery Option	<b>(Service Design)</b> A Strategy for responding to an interruption to Service. Commonly used Strategies are Do Nothing, Manual Workaround, Reciprocal Arrangement, Gradual Recovery, Intermediate Recovery, Fast Recovery, Immediate Recovery. Recovery Options may make use of dedicated facilities, or Third Party facilities shared by multiple Businesses.
Recovery Point Objective (RPO)	<b>(Service Operation)</b> The maximum amount of data that may be lost when Service is Restored after an interruption. Recovery Point Objective is expressed as a length of time before the Failure. For example a Recovery Point Objective of one day may be supported by daily Backups, and up to 24 hours of data may be lost. Recovery Point Objectives for each IT Service should be negotiated, agreed and documented, and used as Requirements for Service Design and IT Service Continuity Plans.
Recovery Time Objective (RTO)	<b>(Service Operation)</b> The maximum time allowed for recovery of an IT Service following an interruption. The Service Level to be provided may be less than normal Service Level Targets. Recovery Time Objectives for each IT Service should be negotiated, agreed and documented. See Business Impact Analysis.
Redundancy	Synonym for Fault Tolerance. The term Redundant also has a generic meaning of obsolete, or no longer needed.

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 Relationship to Release Window

Term	Definition
Relationship	A connection or interaction between two people or things. In Business Relationship Management it is the interaction between the IT Service Provider and the Business. In Configuration Management it is a link between two Configuration Items that identifies a dependency or connection between them. For example Applications may be linked to the Servers they run on, IT Services have many links to all the CIs that contribute to them.
Relationship Processes	The ISO/IEC 20000 Process group that includes Business Relationship Management and Supplier Management.
Release	<b>(Service Transition)</b> A collection of hardware, software, documentation, Processes or other Components required to implement one or more approved Changes to IT Services. The contents of each Release are managed, Tested, and Deployed as a single entity.
Release and Deployment Management	<b>(Service Transition)</b> The Process responsible for both Release Management and Deployment.
Release Identification	<b>(Service Transition)</b> A naming convention used to uniquely identify a Release. The Release Identification typically includes a reference to the Configuration Item and a version number. For example Microsoft Office 2003 SR2.
Release Management	<b>(Service Transition)</b> The Process responsible for Planning, scheduling and controlling the movement of Releases to Test and Live Environments. The primary Objective of Release Management is to ensure that the integrity of the Live Environment is protected and that the correct Components are released. Release Management is part of the Release and Deployment Management Process.
Release Process	The name used by ISO/IEC 20000 for the Process group that includes Release Management. This group does not include any other Processes. Release Process is also used as a synonym for Release Management Process.
Release Record	<b>(Service Transition)</b> A Record in the CMDB that defines the content of a Release. A Release Record has Relationships with all Configuration Items that are affected by the Release.
Release Unit	<b>(Service Transition)</b> Components of an IT Service that are normally Released together. A Release Unit typically includes sufficient Components to perform a useful Function. For example one Release Unit could be a Desktop PC, including Hardware, Software, Licenses, Documentation etc. A different Release Unit may be the complete Payroll Application, including IT Operations Procedures and User training.
Release Window	Synonym for Change Window.

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Reliability to Responsiveness

Term	Definition
Reliability	<b>(Service Design) (Continual Service Improvement)</b> A measure of how long a Configuration Item or IT Service can perform its agreed Function without interruption. Usually measured as MTBF or MTBSI. The term Reliability can also be used to state how likely it is that a Process, Function etc. will deliver its required outputs. See Availability.
Remediation	<b>(Service Transition)</b> Recovery to a known state after a failed Change or Release.
Repair	<b>(Service Operation)</b> The replacement or correction of a failed Configuration Item.
Request for Change (RFC)	<b>(Service Transition)</b> A formal proposal for a Change to be made. An RFC includes details of the proposed Change, and may be recorded on paper or electronically. The term RFC is often misused to mean a Change Record, or the Change itself.
Request Fulfilment	<b>(Service Operation)</b> The Process responsible for managing the Lifecycle of all Service Requests.
Requirement	<b>(Service Design)</b> A formal statement of what is needed. For example a Service Level Requirement, a Project Requirement or the required Deliverables for a Process. See Statement of Requirements.
Resilience	<b>(Service Design)</b> The ability of a Configuration Item or IT Service to resist Failure or to Recover quickly following a Failure. For example, an armoured cable will resist failure when put under stress. See Fault Tolerance.
Resolution	<b>(Service Operation)</b> Action taken to repair the Root Cause of an Incident or Problem, or to implement a Workaround. In ISO/IEC 20000, Resolution Processes is the Process group that includes Incident and Problem Management.
Resolution Processes	The ISO/IEC 20000 Process group that includes Incident Management and Problem Management.
Resource	<b>(Service Strategy)</b> A generic term that includes IT Infrastructure, people, money or anything else that might help to deliver an IT Service. Resources are considered to be Assets of an Organisation. See Capability, Service Asset.
Response Time	A measure of the time taken to complete an Operation or Transaction. Used in Capacity Management as a measure of IT Infrastructure Performance, and in Incident Management as a measure of the time taken to answer the phone, or to start Diagnosis.
Responsiveness	A measurement of the time taken to respond to something. This could be Response Time of a Transaction, or the speed with which an IT Service Provider responds to an Incident or Request for Change etc.

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Restoration of Service to Role

Term	Definition
Restoration of Service	See Restore.
Restore	<b>(Service Operation)</b> Taking action to return an IT Service to the Users after Repair and Recovery from an Incident. This is the primary Objective of Incident Management.
Retire	<b>(Service Transition)</b> Permanent removal of an IT Service, or other Configuration Item, from the Live Environment. Retired is a stage in the Lifecycle of many Configuration Items.
Return on Investment (ROI)	<b>(Service Strategy) (Continual Service Improvement)</b> A measurement of the expected benefit of an investment. In the simplest sense it is the net profit of an investment divided by the net worth of the assets invested. See Net Present Value, Value on Investment.
Return to Normal	<b>(Service Design)</b> The phase of an IT Service Continuity Plan during which full normal operations are resumed. For example, if an alternate data centre has been in use, then this phase will bring the primary data centre back into operation, and restore the ability to invoke IT Service Continuity Plans again.
Review	An evaluation of a Change, Problem, Process, Project etc. Reviews are typically carried out at predefined points in the Lifecycle, and especially after Closure. The purpose of a Review is to ensure that all Deliverables have been provided, and to identify opportunities for improvement. See Post Implementation Review.
Rights	<b>(Service Operation)</b> Entitlements, or permissions, granted to a User or Role. For example the Right to modify particular data, or to authorize a Change.
Risk	A possible Event that could cause harm or loss, or affect the ability to achieve Objectives. A Risk is measured by the probability of a Threat, the Vulnerability of the Asset to that Threat, and the Impact it would have if it occurred.
Risk Assessment	The initial steps of Risk Management. Analysing the value of Assets to the business, identifying Threats to those Assets, and evaluating how Vulnerable each Asset is to those Threats. Risk Assessment can be quantitative (based on numerical data) or qualitative.
Risk Management	The Process responsible for identifying, assessing and controlling Risks. See Risk Assessment.
Role	A set of responsibilities, Activities and authorities granted to a person or team. A Role is defined in a Process. One person or team may have multiple Roles, for example the Roles of Configuration Manager and Change Manager may be carried out by a single person.

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 Rollout to Service Acceptance Criteria (SAC)

Term	Definition
Rollout	<b>(Service Transition)</b> Synonym for Deployment. Most often used to refer to complex or phased Deployments or Deployments to multiple locations.
Root Cause	<b>(Service Operation)</b> The underlying or original cause of an Incident or Problem.
Root Cause Analysis (RCA)	<b>(Service Operation)</b> An Activity that identifies the Root Cause of an Incident or Problem. RCA typically concentrates on IT Infrastructure failures. See Service Failure Analysis.
Running Costs	Synonym for Operational Costs
Scalability	The ability of an IT Service, Process, Configuration Item etc. to perform its agreed Function when the Workload or Scope changes.
Scope	The boundary, or extent, to which a Process, Procedure, Certification, Contract etc. applies. For example the Scope of Change Management may include all Live IT Services and related Configuration Items, the Scope of an ISO/IEC 20000 Certificate may include all IT Services delivered out of a named data centre.
Second-line Support	<b>(Service Operation)</b> The second level in a hierarchy of Support Groups involved in the resolution of Incidents and investigation of Problems. Each level contains more specialist skills, or has more time or other Resources.
Security	See Information Security Management
Security Management	Synonym for Information Security Management
Security Policy	Synonym for Information Security Policy
Separation of Concerns (SoC)	<b>(Service Strategy)</b> An approach to Designing a solution or IT Service that divides the problem into pieces that can be solved independently. This approach separates "what" is to be done from "how" it is to be done.
Server	<b>(Service Operation)</b> A computer that is connected to a network and provides software Functions that are used by other computers.
Service	A means of delivering value to Customers by facilitating Outcomes Customers want to achieve without the ownership of specific Costs and Risks.
Service Acceptance Criteria (SAC)	<b>(Service Transition)</b> A set of criteria used to ensure that an IT Service meets its functionality and Quality Requirements and that the IT Service Provider is ready to Operate the new IT Service when it has been Deployed. See Acceptance.

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 Service Analytics to Service Design Package

Term	Definition
Service Analytics	<b>(Service Strategy)</b> A technique used in the Assessment of the Business Impact of Incidents. Service Analytics Models the dependencies between Configuration Items, and the dependencies of IT Services on Configuration Items.
Service Asset	Any Capability or Resource of a Service Provider. See Asset.
Service Asset and Configuration Management (SACM)	<b>(Service Transition)</b> The Process responsible for both Configuration Management and Asset Management.
Service Capacity Management (SCM)	<b>(Service Design) (Continual Service Improvement)</b> The Activity responsible for understanding the Performance and Capacity of IT Services. The Resources used by each IT Service and the pattern of usage over time are collected, recorded, and analysed for use in the Capacity Plan. See Business Capacity Management, Component Capacity Management.
Service Catalogue	<b>(Service Design)</b> A database or structured Document with information about all Live IT Services, including those available for Deployment. The Service Catalogue is the only part of the Service Portfolio published to Customers, and is used to support the sale and delivery of IT Services. The Service Catalogue includes information about deliverables, prices, contact points, ordering and request Processes. See Contract Portfolio.
Service Continuity Management	Synonym for IT Service Continuity Management.
Service Contract	<b>(Service Strategy)</b> A Contract to deliver one or more IT Services. The term Service Contract is also used to mean any Agreement to deliver IT Services, whether this is a legal Contract or an SLA. See Contract Portfolio.
Service Culture	A Customer oriented Culture. The major Objectives of a Service Culture are Customer satisfaction and helping the Customer to achieve their Business Objectives.
Service Design	<b>(Service Design)</b> A stage in the Lifecycle of an IT Service. Service Design includes a number of Processes and Functions and is the title of one of the Core ITIL publications. See Design.
Service Design Package	<b>(Service Design)</b> Document(s) defining all aspects of an IT Service and its Requirements through each stage of its Lifecycle. A Service Design Package is produced for each new IT Service, major Change, or IT Service Retirement.

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 Service Desk to Service Level Package (SLP)

Term	Definition
Service Desk	<b>(Service Operation)</b> The Single Point of Contact between the Service Provider and the Users. A typical Service Desk manages Incidents and Service Requests, and also handles communication with the Users.
Service Failure Analysis (SFA)	<b>(Service Design)</b> An Activity that identifies underlying causes of one or more IT Service interruptions. SFA identifies opportunities to improve the IT Service Provider's Processes and tools, and not just the IT Infrastructure. SFA is a time constrained, project-like activity, rather than an ongoing process of analysis. See Root Cause Analysis.
Service Hours	<b>(Service Design) (Continual Service Improvement)</b> An agreed time period when a particular IT Service should be Available. For example, "Monday-Friday 08:00 to 17:00 except public holidays". Service Hours should be defined in a Service Level Agreement.
Service Improvement Plan (SIP)	<b>(Continual Service Improvement)</b> A formal Plan to implement improvements to a Process or IT Service.
Service Knowledge Management System (SKMS)	<b>(Service Transition)</b> A set of tools and databases that are used to manage knowledge and information. The SKMS includes the Configuration Management System, as well as other tools and databases. The SKMS stores, manages, updates, and presents all information that an IT Service Provider needs to manage the full Lifecycle of IT Services.
Service Level	Measured and reported achievement against one or more Service Level Targets. The term Service Level is sometimes used informally to mean Service Level Target.
Service Level Agreement (SLA)	<b>(Service Design) (Continual Service Improvement)</b> An Agreement between an IT Service Provider and a Customer. The SLA describes the IT Service, documents Service Level Targets, and specifies the responsibilities of the IT Service Provider and the Customer. A single SLA may cover multiple IT Services or multiple Customers. See Operational Level Agreement.
Service Level Management (SLM)	<b>(Service Design) (Continual Service Improvement)</b> The Process responsible for negotiating Service Level Agreements, and ensuring that these are met. SLM is responsible for ensuring that all IT Service Management Processes, Operational Level Agreements, and Underpinning Contracts, are appropriate for the agreed Service Level Targets. SLM monitors and reports on Service Levels, and holds regular Customer reviews.
Service Level Package (SLP)	<b>(Service Strategy)</b> A defined level of Utility and Warranty for a particular Service Package. Each SLP is designed to meet the needs of a particular Pattern of Business Activity. See Line of Service.

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Service Level Requirement (SLR) to Service Pipeline

Term	Definition
Service Level Requirement (SLR)	<b>(Service Design) (Continual Service Improvement)</b> A Customer Requirement for an aspect of an IT Service. SLRs are based on Business Objectives and are used to negotiate agreed Service Level Targets.
Service Level Target	<b>(Service Design) (Continual Service Improvement)</b> A commitment that is documented in a Service Level Agreement. Service Level Targets are based on Service Level Requirements, and are needed to ensure that the IT Service design is Fit for Purpose. Service Level Targets should be SMART, and are usually based on KPIs.
Service Maintenance Objective	<b>(Service Operation)</b> The expected time that a Configuration Item will be unavailable due to planned maintenance Activity.
Service Management	Service Management is a set of specialized organizational capabilities for providing value to customers in the form of services.
Service Management Lifecycle	An approach to IT Service Management that emphasizes the importance of coordination and Control across the various Functions, Processes, and Systems necessary to manage the full Lifecycle of IT Services. The Service Management Lifecycle approach considers the Strategy, Design, Transition, Operation and Continuous Improvement of IT Services.
Service Manager	A manager who is responsible for managing the end-to-end Lifecycle of one or more IT Services. The term Service Manager is also used to mean any manager within the IT Service Provider. Most commonly used to refer to a Business Relationship Manager, a Process Manager, an Account Manager or a senior manager with responsibility for IT Services overall.
Service Operation	<b>(Service Operation)</b> A stage in the Lifecycle of an IT Service. Service Operation includes a number of Processes and Functions and is the title of one of the Core ITIL publications. See Operation.
Service Owner	<b>(Continual Service Improvement)</b> A Role which is accountable for the delivery of a specific IT Service.
Service Package	<b>(Service Strategy)</b> A detailed description of an IT Service that is available to be delivered to Customers. A Service Package includes a Service Level Package and one or more Core Services and Supporting Services.
Service Pipeline	<b>(Service Strategy)</b> A database or structured Document listing all IT Services that are under consideration or Development, but are not yet available to Customers. The Service Pipeline provides a Business view of possible future IT Services and is part of the Service Portfolio which is not normally published to Customers.

ITIL® V3 Glossary v3.1.24, 11 May 2007  
Service Portfolio to Service Sourcing

Term	Definition
Service Portfolio	<p><b>(Service Strategy)</b> The complete set of Services that are managed by a Service Provider. The Service Portfolio is used to manage the entire Lifecycle of all Services, and includes three Categories: Service Pipeline (proposed or in Development); Service Catalogue (Live or available for Deployment); and Retired Services. See Service Portfolio Management, Contract Portfolio.</p>
Service Portfolio Management (SPM)	<p><b>(Service Strategy)</b> The Process responsible for managing the Service Portfolio. Service Portfolio Management considers Services in terms of the Business value that they provide.</p>
Service Potential	<p><b>(Service Strategy)</b> The total possible value of the overall Capabilities and Resources of the IT Service Provider.</p>
Service Provider	<p><b>(Service Strategy)</b> An Organisation supplying Services to one or more internal Customers or External Customers. Service Provider is often used as an abbreviation for IT Service Provider. See Type I Service Provider, Type II Service Provider, Type III Service Provider.</p>
Service Provider Interface (SPI)	<p><b>(Service Strategy)</b> An interface between the IT Service Provider and a User, Customer, Business Process, or a Supplier. Analysis of Service Provider Interfaces helps to coordinate end-to-end management of IT Services.</p>
Service Provisioning Optimization (SPO)	<p><b>(Service Strategy)</b> Analysing the finances and constraints of an IT Service to decide if alternative approaches to Service delivery might reduce Costs or improve Quality.</p>
Service Reporting	<p><b>(Continual Service Improvement)</b> The Process responsible for producing and delivering reports of achievement and trends against Service Levels. Service Reporting should agree the format, content and frequency of reports with Customers.</p>
Service Request	<p><b>(Service Operation)</b> A request from a User for information, or advice, or for a Standard Change or for Access to an IT Service. For example to reset a password, or to provide standard IT Services for a new User. Service Requests are usually handled by a Service Desk, and do not require an RFC to be submitted. See Request Fulfilment.</p>
Service Sourcing	<p><b>(Service Strategy)</b> The Strategy and approach for deciding whether to provide a Service internally or to Outsource it to an External Service Provider. Service Sourcing also means the execution of this Strategy. Service Sourcing includes:</p> <ul style="list-style-type: none"> <li>• Internal Sourcing - Internal or Shared Services using Type I or Type II Service Providers.</li> <li>• Traditional Sourcing - Full Service Outsourcing using a Type III Service Provider.</li> <li>• Multivendor Sourcing - Prime, Consortium or Selective Outsourcing using Type III Service Providers.</li> </ul>

ITIL® V3 Glossary v3.1.24, 11 May 2007  
 Service Strategy to Simulation modelling

Term	Definition
Service Strategy	<b>(Service Strategy)</b> The title of one of the Core ITIL publications. Service Strategy establishes an overall Strategy for IT Services and for IT Service Management.
Service Transition	<b>(Service Transition)</b> A stage in the Lifecycle of an IT Service. Service Transition includes a number of Processes and Functions and is the title of one of the Core ITIL publications. See Transition.
Service Utility	<b>(Service Strategy)</b> The Functionality of an IT Service from the Customer's perspective. The Business value of an IT Service is created by the combination of Service Utility (what the Service does) and Service Warranty (how well it does it). See Utility.
Service Validation and Testing	<b>(Service Transition)</b> The Process responsible for Validation and Testing of a new or Changed IT Service. Service Validation and Testing ensures that the IT Service matches its Design Specification and will meet the needs of the Business.
Service Valuation	<b>(Service Strategy)</b> A measurement of the total Cost of delivering an IT Service, and the total value to the Business of that IT Service. Service Valuation is used to help the Business and the IT Service Provider agree on the value of the IT Service.
Service Warranty	<b>(Service Strategy)</b> Assurance that an IT Service will meet agreed Requirements. This may be a formal Agreement such as a Service Level Agreement or Contract, or may be a marketing message or brand image. The Business value of an IT Service is created by the combination of Service Utility (what the Service does) and Service Warranty (how well it does it). See Warranty.
Serviceability	<b>(Service Design) (Continual Service Improvement)</b> The ability of a Third Party Supplier to meet the terms of their Contract. This Contract will include agreed levels of Reliability, Maintainability or Availability for a Configuration Item.
Shift	<b>(Service Operation)</b> A group or team of people who carry out a specific Role for a fixed period of time. For example there could be four shifts of IT Operations Control personnel to support an IT Service that is used 24 hours a day.
Simulation modelling	<b>(Service Design) (Continual Service Improvement)</b> A technique that creates a detailed Model to predict the behaviour of a Configuration Item or IT Service. Simulation Models can be very accurate but are expensive and time consuming to create. A Simulation Model is often created by using the actual Configuration Items that are being modelled, with artificial Workloads or Transactions. They are used in Capacity Management when accurate results are important. A simulation model is sometimes called a Performance Benchmark.

ITIL® V3 Glossary v3.1.24, 11 May 2007  
 Single Point of Contact to Standard

Term	Definition
Single Point of Contact	<b>(Service Operation)</b> Providing a single consistent way to communicate with an Organisation or Business Unit. For example, a Single Point of Contact for an IT Service Provider is usually called a Service Desk.
Single Point of Failure (SPOF)	<b>(Service Design)</b> Any Configuration Item that can cause an Incident when it fails, and for which a Countermeasure has not been implemented. A SPOF may be a person, or a step in a Process or Activity, as well as a Component of the IT Infrastructure. See Failure.
SLAM Chart	<b>(Continual Service Improvement)</b> A Service Level Agreement Monitoring Chart is used to help monitor and report achievements against Service Level Targets. A SLAM Chart is typically colour coded to show whether each agreed Service Level Target has been met, missed, or nearly missed during each of the previous 12 months.
SMART	<b>(Service Design) (Continual Service Improvement)</b> An acronym for helping to remember that targets in Service Level Agreements and Project Plans should be Specific, Measurable, Achievable, Relevant and Timely.
Snapshot	<b>(Service Transition)</b> The current state of a Configuration as captured by a discovery tool. Also used as a synonym for Benchmark. See Baseline.
Source	See Service Sourcing.
Specification	A formal definition of Requirements. A Specification may be used to define technical or Operational Requirements, and may be internal or external. Many public Standards consist of a Code of Practice and a Specification. The Specification defines the Standard against which an Organisation can be Audited.
Stakeholder	All people who have an interest in an Organisation, Project, IT Service etc. Stakeholders may be interested in the Activities, targets, Resources, or Deliverables. Stakeholders may include Customers, Partners, employees, shareholders, owners, etc. See RACI.
Standard	A mandatory Requirement. Examples include ISO/IEC 20000 (an international Standard), an internal security Standard for Unix configuration, or a government Standard for how financial Records should be maintained. The term Standard is also used to refer to a Code of Practice or Specification published by a Standards Organisation such as ISO or BSI. See Guideline.

ITIL® V3 Glossary v3.1.24, 11 May 2007  
Standard Change to Supplier

Term	Definition
Standard Change	<p><b>(Service Transition)</b> A pre-approved Change that is low Risk, relatively common and follows a Procedure or Work Instruction. For example password reset or provision of standard equipment to a new employee. RFCs are not required to implement a Standard Change, and they are logged and tracked using a different mechanism, such as a Service Request.</p> <p>See Change Model.</p>
Standard Operating Procedures (SOP)	<p><b>(Service Operation)</b> Procedures used by IT Operations Management.</p>
Standby	<p><b>(Service Design)</b> Used to refer to Resources that are not required to deliver the Live IT Services, but are available to support IT Service Continuity Plans. For example a Standby data centre may be maintained to support Hot Standby, Warm Standby or Cold Standby arrangements.</p>
Statement of requirements (SOR)	<p><b>(Service Design)</b> A Document containing all Requirements for a product purchase, or a new or changed IT Service.</p> <p>See Terms of Reference.</p>
Status	<p>The name of a required field in many types of Record. It shows the current stage in the Lifecycle of the associated Configuration Item, Incident, Problem etc.</p>
Status Accounting	<p><b>(Service Transition)</b> The Activity responsible for recording and reporting the Lifecycle of each Configuration Item.</p>
Storage Management	<p><b>(Service Operation)</b> The Process responsible for managing the storage and maintenance of data throughout its Lifecycle.</p>
Strategic	<p><b>(Service Strategy)</b> The highest of three levels of Planning and delivery (Strategic, Tactical, Operational). Strategic Activities include Objective setting and long term Planning to achieve the overall Vision.</p>
Strategy	<p><b>(Service Strategy)</b> A Strategic Plan designed to achieve defined Objectives.</p>
Super User	<p><b>(Service Operation)</b> A User who helps other Users, and assists in communication with the Service Desk or other parts of the IT Service Provider. Super Users typically provide support for minor Incidents and training.</p>
Supplier	<p><b>(Service Strategy) (Service Design)</b> A Third Party responsible for supplying goods or Services that are required to deliver IT services. Examples of suppliers include commodity hardware and software vendors, network and telecom providers, and Outsourcing Organisations.</p> <p>See Underpinning Contract, Supply Chain.</p>

ITIL® V3 Glossary v3.1.24, 11 May 2007  
 Supplier and Contract Database (SCD) to Tactical

Term	Definition
Supplier and Contract Database (SCD)	<b>(Service Design)</b> A database or structured Document used to manage Supplier Contracts throughout their Lifecycle. The SCD contains key Attributes of all Contracts with Suppliers, and should be part of the Service Knowledge Management System.
Supplier Management	<b>(Service Design)</b> The Process responsible for ensuring that all Contracts with Suppliers support the needs of the Business, and that all Suppliers meet their contractual commitments.
Supply Chain	<b>(Service Strategy)</b> The Activities in a Value Chain carried out by Suppliers. A Supply Chain typically involves multiple Suppliers, each adding value to the product or Service. See Value Network.
Support Group	<b>(Service Operation)</b> A group of people with technical skills. Support Groups provide the Technical Support needed by all of the IT Service Management Processes. See Technical Management.
Support Hours	<b>(Service Design) (Service Operation)</b> The times or hours when support is available to the Users. Typically this is the hours when the Service Desk is available. Support Hours should be defined in a Service Level Agreement, and may be different from Service Hours. For example, Service Hours may be 24 hours a day, but the Support Hours may be 07:00 to 19:00.
Supporting Service	<b>(Service Strategy)</b> A Service that enables or enhances a Core Service. For example a Directory Service or a Backup Service. See Service Package.
SWOT Analysis	<b>(Continual Service Improvement)</b> A technique that reviews and analyses the internal strengths and weaknesses of an Organisation and the external opportunities and threats which it faces SWOT stands for Strengths, Weaknesses, Opportunities and Threats.
System	A number of related things that work together to achieve an overall Objective. For example: <ul style="list-style-type: none"> <li>• A computer System including hardware, software and Applications.</li> <li>• A management System, including multiple Processes that are planned and managed together. For example a Quality Management System.</li> <li>• A Database Management System or Operating System that includes many software modules that are designed to perform a set of related Functions.</li> </ul>
System Management	The part of IT Service Management that focuses on the management of IT Infrastructure rather than Process.
Tactical	The middle of three levels of Planning and delivery (Strategic, Tactical, Operational). Tactical Activities include the medium term Plans required to achieve specific Objectives, typically over a period of weeks to months.

Term	Definition
Tag	<b>(Service Strategy)</b> A short code used to identify a Category. For example tags EC1, EC2, EC3 etc. might be used to identify different Customer outcomes when analysing and comparing Strategies. The term Tag is also used to refer to the Activity of assigning Tags to things.
Technical Management	<b>(Service Operation)</b> The Function responsible for providing technical skills in support of IT Services and management of the IT Infrastructure. Technical Management defines the Roles of Support Groups, as well as the tools, Processes and Procedures required.
Technical Observation (TO)	<b>(Continual Service Improvement)</b> A technique used in Service Improvement, Problem investigation and Availability Management. Technical support staff meet to monitor the behaviour and Performance of an IT Service and make recommendations for improvement.
Technical Service	Synonym for Infrastructure Service.
Technical Support	Synonym for Technical Management.
Tension Metrics	<b>(Continual Service Improvement)</b> A set of related Metrics, in which improvements to one Metric have a negative effect on another. Tension Metrics are designed to ensure that an appropriate balance is achieved.
Terms of Reference (TOR)	<b>(Service Design)</b> A Document specifying the Requirements, Scope, Deliverables, Resources and schedule for a Project or Activity.
Test	<b>(Service Transition)</b> An Activity that verifies that a Configuration Item, IT Service, Process, etc. meets its Specification or agreed Requirements. See Service Validation and Testing, Acceptance.
Test Environment	<b>(Service Transition)</b> A controlled Environment used to Test Configuration Items, Builds, IT Services, Processes etc.
Third Party	A person, group, or Business who is not part of the Service Level Agreement for an IT Service, but is required to ensure successful delivery of that IT Service. For example a software Supplier, a hardware maintenance company, or a facilities department. Requirements for Third Parties are typically specified in Underpinning Contracts or Operational Level Agreements.
Third-line Support	<b>(Service Operation)</b> The third level in a hierarchy of Support Groups involved in the resolution of Incidents and investigation of Problems. Each level contains more specialist skills, or has more time or other Resources.
Threat	Anything that might exploit a Vulnerability. Any potential cause of an Incident can be considered to be a Threat. For example a fire is a Threat that could exploit the Vulnerability of flammable floor coverings. This term is commonly used in Information Security Management and IT Service Continuity Management, but also applies to other areas such as Problem and Availability Management.

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Threshold to Tuning

Term	Definition
Threshold	The value of a Metric which should cause an Alert to be generated, or management action to be taken. For example "Priority1 Incident not solved within 4 hours", "more than 5 soft disk errors in an hour", or "more than 10 failed changes in a month".
Throughput	<b>(Service Design)</b> A measure of the number of Transactions, or other Operations, performed in a fixed time. For example 5000 emails sent per hour, or 200 disk I/Os per second.
Total Cost of Ownership (TCO)	<b>(Service Strategy)</b> A methodology used to help make investment decisions. TCO assesses the full Lifecycle Cost of owning a Configuration Item, not just the initial Cost or purchase price. See Total Cost of Utilization.
Total Cost of Utilization (TCU)	<b>(Service Strategy)</b> A methodology used to help make investment and Service Sourcing decisions. TCU assesses the full Lifecycle Cost to the Customer of using an IT Service. See Total Cost of Ownership.
Total Quality Management (TQM)	<b>(Continual Service Improvement)</b> A methodology for managing continual Improvement by using a Quality Management System. TQM establishes a Culture involving all people in the Organisation in a Process of continual monitoring and improvement.
Transaction	A discrete Function performed by an IT Service. For example transferring money from one bank account to another. A single Transaction may involve numerous additions, deletions and modifications of data. Either all of these complete successfully or none of them is carried out.
Transition	<b>(Service Transition)</b> A change in state, corresponding to a movement of an IT Service or other Configuration Item from one Lifecycle status to the next.
Transition Planning and Support	<b>(Service Transition)</b> The Process responsible for Planning all Service Transition Processes and co-ordinating the resources that they require. These Service Transition Processes are Change Management, Service Asset and Configuration Management, Release and Deployment Management, Service Validation and Testing, Evaluation, and Knowledge Management.
Trend Analysis	<b>(Continual Service Improvement)</b> Analysis of data to identify time related patterns. Trend Analysis is used in Problem Management to identify common Failures or fragile Configuration Items, and in Capacity Management as a Modelling tool to predict future behaviour. It is also used as a management tool for identifying deficiencies in IT Service Management Processes.
Tuning	The Activity responsible for Planning Changes to make the most efficient use of Resources. Tuning is part of Performance Management, which also includes Performance Monitoring and implementation of the required Changes.

Term	Definition
Type I Service Provider	<b>(Service Strategy)</b> An Internal Service Provider that is embedded within a Business Unit. There may be several Type I Service Providers within an Organisation.
Type II Service Provider	<b>(Service Strategy)</b> An Internal Service Provider that provides shared IT Services to more than one Business Unit.
Type III Service Provider	<b>(Service Strategy)</b> A Service Provider that provides IT Services to External Customers.
Underpinning Contract (UC)	<b>(Service Design)</b> A Contract between an IT Service Provider and a Third Party. The Third Party provides goods or Services that support delivery of an IT Service to a Customer. The Underpinning Contract defines targets and responsibilities that are required to meet agreed Service Level Targets in an SLA.
Unit Cost	<b>(Service Strategy)</b> The Cost to the IT Service Provider of providing a single Component of an IT Service. For example the Cost of a single desktop PC, or of a single Transaction.
Urgency	<b>(Service Transition) (Service Design)</b> A measure of how long it will be until an Incident, Problem or Change has a significant Impact on the Business. For example a high Impact Incident may have low Urgency, if the Impact will not affect the Business until the end of the financial year. Impact and Urgency are used to assign Priority.
Usability	<b>(Service Design)</b> The ease with which an Application, product, or IT Service can be used. Usability Requirements are often included in a Statement of Requirements.
Use Case	<b>(Service Design)</b> A technique used to define required functionality and Objectives, and to Design Tests. Use Cases define realistic scenarios that describe interactions between Users and an IT Service or other System. See Change Case.
User	A person who uses the IT Service on a day-to-day basis. Users are distinct from Customers, as some Customers do not use the IT Service directly.
User Profile (UP)	<b>(Service Strategy)</b> A pattern of User demand for IT Services. Each User Profile includes one or more Patterns of Business Activity.
Utility	<b>(Service Strategy)</b> Functionality offered by a Product or Service to meet a particular need. Utility is often summarised as "what it does". See Service Utility.

ITIL® V3 Glossary v3.1.24, 11 May 2007  
Validation to Verification and Audit

Term	Definition
Validation	<p><b>(Service Transition)</b> An Activity that ensures a new or changed IT Service, Process, Plan, or other Deliverable meets the needs of the Business. Validation ensures that Business Requirements are met even though these may have changed since the original Design. See Verification, Acceptance, Qualification, Service Validation and Testing.</p>
Value Chain	<p><b>(Service Strategy)</b> A sequence of Processes that creates a product or Service that is of value to a Customer. Each step of the sequence builds on the previous steps and contributes to the overall product or Service. See Value Network.</p>
Value for Money	<p>An informal measure of Cost Effectiveness. Value for Money is often based on a comparison with the Cost of alternatives. See Cost Benefit Analysis.</p>
Value Network	<p><b>(Service Strategy)</b> A complex set of Relationships between two or more groups or organisations. Value is generated through exchange of knowledge, information, goods or Services. See Value Chain, Partnership.</p>
Value on Investment (VOI)	<p><b>(Continual Service Improvement)</b> A measurement of the expected benefit of an investment. VOI considers both financial and intangible benefits. See Return on Investment.</p>
Variable Cost	<p><b>(Service Strategy)</b> A Cost that depends on how much the IT Service is used, how many products are produced, the number and type of Users, or something else that cannot be fixed in advance. See Variable Cost Dynamics.</p>
Variable Cost Dynamics	<p><b>(Service Strategy)</b> A technique used to understand how overall Costs are impacted by the many complex variable elements that contribute to the provision of IT Services.</p>
Variance	<p>The difference between a planned value and the actual measured value. Commonly used in Financial Management, Capacity Management and Service Level Management, but could apply in any area where Plans are in place.</p>
Verification	<p><b>(Service Transition)</b> An Activity that ensures a new or changed IT Service, Process, Plan, or other Deliverable is complete, accurate, Reliable and matches its Design Specification. See Validation, Acceptance, Service Validation and Testing.</p>
Verification and Audit	<p><b>(Service Transition)</b> The Activities responsible for ensuring that information in the CMDB is accurate and that all Configuration Items have been identified and recorded in the CMDB. Verification includes routine checks that are part of other Processes. For example, verifying the serial number of a desktop PC when a User logs an Incident. Audit is a periodic, formal check.</p>

ITIL® V3 Glossary v3.1.24, 11 May 2007  
Version to Workload

Term	Definition
Version	<b>(Service Transition)</b> A Version is used to identify a specific Baseline of a Configuration Item. Versions typically use a naming convention that enables the sequence or date of each Baseline to be identified. For example Payroll Application Version 3 contains updated functionality from Version 2.
Vision	A description of what the Organisation intends to become in the future. A Vision is created by senior management and is used to help influence Culture and Strategic Planning.
Vital Business Function (VBF)	<b>(Service Design)</b> A Function of a Business Process which is critical to the success of the Business. Vital Business Functions are an important consideration of Business Continuity Management, IT Service Continuity Management and Availability Management.
Vulnerability	A weakness that could be exploited by a Threat. For example an open firewall port, a password that is never changed, or a flammable carpet. A missing Control is also considered to be a Vulnerability.
Warm Standby	Synonym for Intermediate Recovery.
Warranty	<b>(Service Strategy)</b> A promise or guarantee that a product or Service will meet its agreed Requirements. See Service Validation and Testing, Service Warranty.
Work in Progress (WIP)	A Status that means Activities have started but are not yet complete. It is commonly used as a Status for Incidents, Problems, Changes etc.
Work Instruction	A Document containing detailed instructions that specify exactly what steps to follow to carry out an Activity. A Work Instruction contains much more detail than a Procedure and is only created if very detailed instructions are needed.
Workaround	<b>(Service Operation)</b> Reducing or eliminating the Impact of an Incident or Problem for which a full Resolution is not yet available. For example by restarting a failed Configuration Item. Workarounds for Problems are documented in Known Error Records. Workarounds for Incidents that do not have associated Problem Records are documented in the Incident Record.
Workload	The Resources required to deliver an identifiable part of an IT Service. Workloads may be Categorised by Users, groups of Users, or Functions within the IT Service. This is used to assist in analysing and managing the Capacity, Performance and Utilisation of Configuration Items and IT Services. The term Workload is sometimes used as a synonym for Throughput.

ITIL® Glossary v01, 1 May 2006: Acronyms  
ACD to ISG

Acronym	Term
ACD	Automatic Call Distribution
AM	Availability Management
AMIS	Availability Management Information System
ASP	Application Service Provider
BCM	Business Capacity Management
BCM	Business Continuity Management
BCP	Business Continuity Plan
BIA	Business Impact Analysis
BRM	Business Relationship Manager
BSI	British Standards Institution
BSM	Business Service Management
CAB	Change Advisory Board
CAB/EC	Change Advisory Board / Emergency Committee
CAPEX	Capital Expenditure
CCM	Component Capacity Management
CFIA	Component Failure Impact Analysis
CI	Configuration Item
CMDB	Configuration Management Database
CMIS	Capacity Management Information System
CMM	Capability Maturity Model
CMMI	Capability Maturity Model Integration
CMS	Configuration Management System
COTS	Commercial off the Shelf
CSF	Critical Success Factor
CSI	Continual Service Improvement
CSIP	Continual Service Improvement Programme
CSP	Core Service Package
CTI	Computer Telephony Integration
DIKW	Data-to-Information-to-Knowledge-to-Wisdom
eSCM-CL	eSourcing Capability Model for Client Organizations
eSCM-SP	eSourcing Capability Model for Service Providers
FMEA	Failure Modes and Effects Analysis
FTA	Fault Tree Analysis
IRR	Internal Rate of Return
ISG	IT Steering Group

ITIL® Glossary v01, 1 May 2006: Acronyms  
ISM to SACM

Acronym	Term
ISM	Information Security Management
ISMS	Information Security Management System
ISO	International Organization for Standardization
ISP	Internet Service Provider
IT	Information Technology
ITSCM	IT Service Continuity Management
ITSM	IT Service Management
itSMF	IT Service Management Forum
IVR	Interactive Voice Response
KEDB	Known Error Database
KPI	Key Performance Indicator
LOS	Line of Service
MoR	Management of Risk
MTBF	Mean Time Between Failures
MTBSI	Mean Time Between Service Incidents
MTRS	Mean Time to Restore Service
MTTR	Mean Time to Repair
NPV	Net Present Value
OGC	Office of Government Commerce
OLA	Operational Level Agreement
OPEX	Operational Expenditure
OPSI	Office of Public Sector Information
PBA	Pattern of Business Activity
PFS	Prerequisite for Success
PIR	Post Implementation Review
PSA	Projected Service Availability
QA	Quality Assurance
QMS	Quality Management System
RCA	Root Cause Analysis
RFC	Request for Change
ROI	Return on Investment
RPO	Recovery Point Objective
RTO	Recovery Time Objective
SAC	Service Acceptance Criteria
SACM	Service Asset and Configuration Management

ITIL® Glossary v01, 1 May 2006: Acronyms  
SCD to WIP

Acronym	Term
SCD	Supplier and Contract Database
SCM	Service Capacity Management
SFA	Service Failure Analysis
SIP	Service Improvement Plan
SKMS	Service Knowledge Management System
SLA	Service Level Agreement
SLM	Service Level Management
SLP	Service Level Package
SLR	Service Level Requirement
SMO	Service Maintenance Objective
SoC	Separation of Concerns
SOP	Standard Operating Procedures
SOR	Statement of requirements
SPI	Service Provider Interface
SPM	Service Portfolio Management
SPO	Service Provisioning Optimization
SPOF	Single Point of Failure
TCO	Total Cost of Ownership
TCU	Total Cost of Utilization
TO	Technical Observation
TOR	Terms of Reference
TQM	Total Quality Management
UC	Underpinning Contract
UP	User Profile
VBF	Vital Business Function
VOI	Value on Investment
WIP	Work in Progress

#### Acknowledgements

We would like to express our gratitude and acknowledge the contribution of Stuart Rance and Ashley Hanna of Hewlett-Packard in the production of this glossary.

# ITIL<sup>®</sup> V3 Foundation

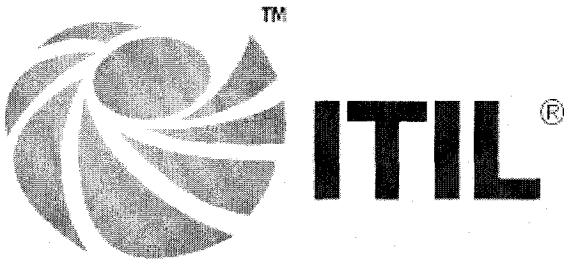
## Appendix B: Foundation Syllabus

## Document Control Information

<b>Document Details</b>	
<b>Document Name</b>	ITIL V3 Foundation Certificate Syllabus_v4.2
Purpose of Document	To outline the syllabus for the ITIL v3 Foundation Certificate in IT Service Management
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4.0	19 December 2008	New document
4.1	19 January 2008	Added book reference 4.3.5 to learning unit 05-52
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<b>Distribution List</b>	
Name	Title/Company
4.0	All ITIL Examination Institutes
4.1	All ITIL Examination Institutes
4.2	All ITIL Examination Institutes



**Professional Qualifications for**

**ITIL® PRACTICES FOR SERVICE MANAGEMENT**

***The ITIL Foundation Certificate  
in IT Service Management***  
**SYLLABUS**



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ITIL V3 Foundation Certificate Syllabus\_v4.2

# THE ITIL FOUNDATION CERTIFICATE IN IT SERVICE MANAGEMENT

The purpose of the ITIL Foundation certificate in IT Service Management is to certify that the candidate has gained knowledge of the ITIL terminology, structure and basic concepts and has comprehended the core principles of ITIL practices for Service Management.

The ITIL Foundation certificate in IT Service Management is *not* intended to enable the holders of the certificate to *apply* the ITIL practices for Service Management without further guidance.

## Target Group

The target group of the ITIL Foundation certificate in IT Service Management is drawn from:

- Individuals who require a basic understanding of the ITIL framework and how it may be used to enhance the quality of IT service management within an organization.
- IT professionals that are working within an organization that has adopted and adapted ITIL who need to be informed about and thereafter contribute to an ongoing service improvement programme.

This may include but is not limited to, IT professionals, business managers and business process owners.

## Learning Objectives

Candidates can expect to gain knowledge and understanding in the following upon successful completion of the education and examination components related to this certification.

- Service Management as a practice (Comprehension)
- Service Lifecycle (Comprehension)
- Key Principles and Models (Comprehension)
- Generic Concepts (Awareness)
- Selected Processes (Awareness)
- Selected Roles (Awareness)
- Selected Functions (Awareness)
- Technology and Architecture (Awareness)
- ITIL Qualification scheme (Awareness)

## Foundation Syllabus

The syllabus will guide the design, development and use of training materials as well as training aimed at raising individual's understanding of, and competence in, IT Service Management as described in the ITIL Service Strategy, ITIL Service Design, ITIL Service Transition, ITIL Service Operation, ITIL Continual Service Improvement, ITIL Introduction and ITIL Glossary publications. The syllabus has been designed with ease of reference, extensibility and ease of maintenance in mind.

Candidates for the ITIL Foundation certificate in IT Service Management have to complete all units and successfully pass the corresponding examination to achieve certification.

Training providers are free to structure and organize their training in the way they find most appropriate, provided the units below are sufficiently covered. It is strongly recommended that training providers do not structure their courses by simply following the order of the training units as described in this document. It has been designed to be flexible so that training providers can add value as appropriate. The recommended number of study hours is 18 hours plus the final exam.

The units cover the topics listed. The terms emphasized in *italics* are defined in the ITIL Glossary.

Unit	Content
ITILFND01	<p><b>Service Management as a practice</b></p> <p>The purpose of this unit is to help the candidate to define <i>Service</i> and to comprehend and explain the concept of <i>Service Management as a practice</i>.</p> <p>Specifically, candidates must be able to:</p> <ul style="list-style-type: none"> <li>01-1. Describe the concept of <i>Good Practice</i> (SS 1.2.2)</li> <li>01-2. Define and explain the concept of a <i>Service</i> (SS 2.2.1)</li> <li>01-3. Define and explain the concept of <i>Service Management</i> (SS 2.1)</li> <li>01-4. Define <i>Functions</i> and <i>Processes</i> (SS 2.3, 2.6.1, SD 2.3, SD 3.6.4, ST 2.3, SO 2.3, 3.1, CSI 2.3)</li> <li>01-5. Explain the <i>process</i> model and the characteristics of <i>processes</i> (SD 2.3.2, 3.6.4)</li> </ul> <p><b><i>The recommended study period for this unit is minimum 45 minutes</i></b></p>
ITILFND02	<p><b>The Service Lifecycle</b></p> <p>The purpose of this unit is to help the candidate to understand the value of the <i>Service Lifecycle</i>, how the <i>processes</i> integrate with each other, throughout the <i>Lifecycle</i> and explain the <i>objectives</i> and business value for each phase in the <i>Lifecycle</i></p> <p>Specifically, candidates must be able to:</p> <ul style="list-style-type: none"> <li>02-2. Describe the structure, <i>scope</i>, <i>components</i> and interfaces of the <i>Service Lifecycle</i> (SS 1.2.3 All)</li> <li>02-3. Account for the main goals and <i>objectives</i> of <i>Service Strategy</i> (SS 1.3)</li> <li>02-4. Account for the main goals and <i>objectives</i> of <i>Service Design</i> (SD 2.4.1, SD 3.1)</li> <li>02-5. Briefly explain what value <i>Service Design</i> provides to the business (SD 2.4.3)</li> <li>02-6. Account for the main goals and objectives of <i>Service Transition</i> (ST 2.4.1)</li> <li>02-7. Briefly explain what value <i>Service Transition</i> provides to the business (ST 2.4.3)</li> <li>02-8. Account for the main goals and objectives of <i>Service Operations</i> (SO 2.4.1)</li> <li>02-9. Briefly explain what value <i>Service Operation</i> provides to the <i>business</i> (SO 2.4.3 1<sup>st</sup> para, SO 1.2.3.4)</li> </ul>

Unit	Content
	<p>02-10. Account for the main goals and <i>objectives</i> of <i>Continual Service Improvement</i> (CSI 2.4.1, 2.4.2)</p> <p><b><i>It is recommended that this training is covered within other units.</i></b></p> <p><b><i>The recommended study period for this unit is minimum 1.0 hours.</i></b></p>
ITILFND03	<p><b>Generic concepts and definitions</b></p> <p>The purpose of this unit is to help the candidate to define some of the key terminology and explain the key concepts of <i>Service Management</i>.</p> <p>Specifically, candidates must be able to define and explain the following key concepts:</p> <ul style="list-style-type: none"> <li>03-1. <i>Utility and Warranty</i> (SS 2.2.2 )</li> <li>03-2. <i>Resources, Capabilities and Assets</i> (SS 3.2.1)</li> <li>03-3. <i>Service Portfolio</i> (SS 4.2.3, SD 3.6.2 – to end of 1st bullet list)</li> <li>03-4. <i>Service Catalogue</i> (<i>Business Service Catalogue</i> and <i>Technical Service Catalogue</i>) (SS 4.2.3.1, SD 4.1.4)</li> <li>03-5. The role of <i>IT Governance</i> across the <i>Service Lifecycle</i> (CSI 3.10 All)</li> <li>03-6. <i>Business Case</i> (SS 5.2.1 Intro, CSI 4.4.1)</li> <li>03-7. <i>Risk</i> (SS 9.5.1, CSI 5.6.3)</li> <li>03-9. <i>Service Provider</i> (the candidate is not expected to know the detail of each of the three types of <i>Service Providers</i>) (SS 3.3 Intro only, not 3.3.1, 3.3.2, 3.3.3)</li> <li>03-10. <i>Supplier</i> (SD 4.2.4, 4.7.2)</li> <li>03-11. <i>Service Level Agreement</i> (SLA) (SD 4.2.4, 4.2.5.1)</li> <li>03-12. <i>Operational Level Agreement</i> (OLA) (SD 4.2.4)</li> <li>03-13. <i>Contract</i> (SD 4.7.5.1)</li> <li>03-14. <i>Service Design Package</i> (SD Appendix A)</li> <li>03-15. <i>Availability</i> (SD 4.4.4)</li> <li>03-16. <i>Service Knowledge Management System</i> (SKMS) (ST 4.7.4.2)</li> <li>03-17. <i>Configuration Item</i> (CI) (ST 4.3.4.2)</li> <li>03-18. <i>Configuration Management System</i> (ST 4.3.4.3)</li> <li>03-19. <i>Definitive Media Library</i> (DML) (ST 4.3.4.3)</li> <li>03-20. <i>Service Change</i> (ST 4.2.2)</li> <li>03-21. <i>Change types</i> (Normal, <i>Standard</i> and <i>Emergency</i>) (ST 4.2.6.1, 4.2.4.5, 4.2.6.9)</li> <li>03-22. <i>Release Unit</i> (ST 4.4.4.1)</li> <li>03-23. Concept of Seven R's of <i>Change Management</i> (ST 4.2.6.4); no requirement to learn list</li> <li>03-24. <i>Event</i> (SO 4.1 1<sup>st</sup> para)</li> <li>03-25. <i>Alert</i> (SO Glossary)</li> <li>03-26. <i>Incident</i> (SO 4.2)</li> <li>03-27. <i>Impact, Urgency and Priority</i> (SO 4.2.5.4, 4.4.5.4)</li> <li>03-28. <i>Service Request</i> (SO 4.3)</li> <li>03-29. <i>Problem</i> (SO 4.4)</li> <li>03-30. <i>Workaround</i> (SO 4.4.5.6)</li> <li>03-31. <i>Known Error</i> (SO 4.4.5.7)</li> <li>03-32. <i>Known Error Data Base</i> (KEDB) (SO 4.4.7.2)</li> <li>03-33. The role of communication in <i>Service Operation</i> (SO 3.6)</li> <li>03-34. <i>Service Assets</i> (SS 3.2)</li> <li>03-35. Release policy (ST 4.1.4.2)</li> </ul> <p><b><i>It is recommended that this unit is covered as part of the training in the other</i></b></p>

Unit	Content
	<p><b>units.</b></p> <p><b>The recommended study period for this unit is minimum 1.0 hours.</b></p>
ITILFND04	<p><b>Key Principles and Models</b></p> <p>The purpose of this unit is to help the candidate to comprehend and account for the key principles and <i>models</i> of <i>Service Management</i> and to balance some of the opposing forces within <i>Service Management</i>.</p> <p>Specifically, candidates must be able to:</p> <p><b>Service Strategy</b></p> <p>04-2. Describe basics of <i>Value Creation through Services</i> (SS 3.1.1, 3.1.2)</p> <p><b>Service Design</b></p> <p>04-3. Understand the importance of People, <i>Processes</i>, Products and Partners for <i>Service Management</i> (SD 2.4.2)</p> <p>04-4. Understand the five major aspects of <i>Service Design</i> (SD 2.4.2):</p> <ul style="list-style-type: none"> <li>• <i>Service Portfolio Design</i></li> <li>• Identification of <i>Business Requirements</i>, definition of <i>Service Requirements</i> and <i>design of Services</i></li> <li>• Technology and architectural <i>design</i></li> <li>• <i>Process design</i></li> <li>• <i>Measurement design</i></li> </ul> <p><b>Continual Service Improvement</b></p> <p>04-8. Explain the <i>Plan, Do, Check and Act (PDCA) Model</i> to control and manage <i>quality</i> (CSI 3.6, 5.5.1, Fig 5.6)</p> <p>04-9. Explain the <i>Continual Service Improvement Model</i> (CSI 2.4.4, Fig 2.3)</p> <p>04-10. Understand the role of measurement for <i>Continual Service Improvement</i> and explain the following key elements:</p> <ul style="list-style-type: none"> <li>• The role of KPIs in the Improvement Process (CSI 4.1.2)</li> <li>• <i>Baselines</i> (CSI 3.7.1)</li> <li>• Types of <i>metrics</i> (<i>technology metrics</i>, <i>process metrics</i>, <i>service metrics</i>) (CSI 4.1.2)</li> </ul> <p><b>The recommended study period for this unit is minimum 1.5 hours.</b></p>
ITILFND05	<p><b>Processes</b></p> <p>The purpose of this unit is to help the candidate understand how the <i>Service Management processes</i> contribute to the <i>Service Lifecycle</i>, to explain the high level <i>objectives</i>, <i>scope</i>, basic concepts, <i>activities</i> and challenges for five of the core <i>processes</i>, and to state the <i>objectives</i> and some of the basic concepts for thirteen of the remaining <i>processes</i> including how they relate to each other.</p> <p>The list of activities to be included from each process is the minimum required and</p>

Unit	Content
	<p>should not be taken as an exhaustive list.</p> <p>Specifically, candidates must be able to:</p> <p><b>Service Strategy</b></p> <p><b>State the objectives and basic concepts for:</b></p> <p>05-21. <i>Demand Management</i> (SS 5.5)</p> <p>The following list must be covered:</p> <ul style="list-style-type: none"> <li>• Challenges in managing demand for Services (SS 5.5.1)</li> <li>• Activity-based Demand Management (Patterns of business activity (PBAs) (SS 5.5.2)</li> <li>• Business activity patterns and user profiles (SS 5.5.3)</li> </ul> <p>05-22. <i>Financial Management</i> (SS 5.1 Intro, 5.1.2 Intro)</p> <ul style="list-style-type: none"> <li>• Business case</li> </ul> <p><b>Service Design</b></p> <p><b>Explain the high level objectives, basic concepts, process activities and relationships for:</b></p> <p>05-31. <i>Service Level Management (SLM)</i> (SD 4.2.1, 4.2.2, 4.2.5, 4.2.5.1 - 9, CSI 3.5 )</p> <p>The following list must be covered:</p> <ul style="list-style-type: none"> <li>• Service-based SLA</li> <li>• Multi-level SLAs</li> <li>• Service level requirements (SLRs)</li> <li>• SLAM chart</li> <li>• Service review</li> <li>• Service improvement plan (SIP)</li> </ul> <p><b>State the objectives and basic concepts for:</b></p> <p>05-41. <i>Service Catalogue Management</i> (SD 4.1 Intro, 4.1.1, 4.1.4)</p> <p>05-42. <i>Availability Management</i> (SD 4.4.1, 4.4.4)</p> <ul style="list-style-type: none"> <li>• Service availability</li> <li>• Component availability</li> <li>• Reliability</li> <li>• Maintainability</li> <li>• Serviceability</li> </ul> <p>05-43. <i>Information Security Management (ISM)</i> (SD 4.6 Intro, 4.6.1, 4.6.4 )</p> <ul style="list-style-type: none"> <li>• Security framework (SD 4.6.4.1)</li> <li>• Information security policy (SD 4.6.4.2)</li> </ul>

Unit	Content
	<ul style="list-style-type: none"> <li>• Information security management system (ISMS) (SD 4.6.4.3)</li> </ul> <p>05-44. <i>Supplier Management</i> (SD 4.7 Intro, 4.7.1)</p> <ul style="list-style-type: none"> <li>• Supplier Contract Database (SCD) (SD 4.7.4)</li> </ul> <p>05-45. <i>Capacity Management</i> (SD 4.3.1, 4.3.4)</p> <ul style="list-style-type: none"> <li>• Capacity plan</li> <li>• Business capacity management</li> <li>• Service capacity management</li> <li>• Component capacity management</li> </ul> <p>05-46. <i>IT Service Continuity Management</i> (SD 4.5.1, 4.5.4)</p> <ul style="list-style-type: none"> <li>• Business Continuity Plans</li> <li>• Business Continuity Management</li> <li>• Business Impact Analysis</li> <li>• Risk Analysis</li> </ul> <p><b>Service Transition</b></p> <p><b>Explain the high level <i>objectives</i>, basic concepts, process <i>activities</i> and relationships for:</b></p> <p>05-51. <i>Change Management</i> (ST 4.2)</p> <ul style="list-style-type: none"> <li>• Types of change request (ST 4.2.4.3, Table 4.3)</li> <li>• Change process models and workflows (ST 4.2.4.4)</li> <li>• Standard change (ST 4.2.4.5)</li> <li>• Remediation Planning (ST 4.2.5)</li> <li>• Change Advisory Board / Emergency Change Advisory Board (ST 4.2.6.8)</li> </ul> <p>05-52. <i>Service Asset and Configuration Management (SACM)</i> (ST 4.3.1, 4.3.4, 4.3.5) to include:</p> <ul style="list-style-type: none"> <li>• The Configuration Model</li> <li>• Configuration items</li> <li>• Configuration Management System (CMS)</li> <li>• Definitive Media Library</li> <li>• Configuration baseline</li> </ul> <p><b>State the <i>objectives</i> and basic concepts for:</b></p> <p>05-61. <i>Release and Deployment Management</i> (ST 4.4.1, 4.4.4)</p> <p>05-62. <i>Knowledge Management</i> (ST 4.7 Intro, 4.7.1, 4.7.4)</p> <ul style="list-style-type: none"> <li>• DIKW &amp; SKMS</li> </ul>

Unit	Content
	<p><b>Service Operation</b></p> <p><b>Explain the high level objectives, basic concepts, process activities and relationships for:</b></p> <p>05-71. <i>Incident Management</i> (SO 4.2, Fig 4.2)</p> <p>05-72. <i>Problem Management</i> (SO 4.4, Fig 4.4), not PM techniques</p> <p><b>State the objectives and basic concepts for:</b></p> <p>05-81. <i>Event Management</i> (SO 4.1 Intro, 4.1.1, 4.1.4)</p> <p>05-82. <i>Request Fulfilments</i> (SO 4.3 Intro, 4.3.1, 4.3.4)</p> <p>05-83. <i>Access Management</i> (SO 4.5 Intro, 4.5.1, 4.5.4)</p> <p><b>The recommended study period for this unit is minimum 10.0 hours.</b></p>
ITILFND06	<p><b>Functions</b></p> <p>The purpose of this unit is to help the candidate to explain the <i>role, objectives</i> and <i>organizational</i> structures of the <i>Service Desk function</i>, and to state the <i>role, objectives</i> and overlap of three other <i>functions</i>.</p> <p>Specifically, candidates must be able to:</p> <p>06-1. Explain the <i>role, objectives</i> and <i>organizational</i> structures for</p> <ul style="list-style-type: none"> <li>• The <i>Service Desk function</i> (SO 6.2)</li> </ul> <p>06-2. State the <i>role, objectives</i> and <i>organizational</i> overlap of:</p> <ul style="list-style-type: none"> <li>• The <i>Technical Management function</i> (SO 6.1, 6.3 Intro, 6.3.1, 6.3.2)</li> <li>• The <i>Application Management function</i> (SO 6.5 Intro, 6.5.1, 6.5.2)</li> <li>• The <i>IT Operations Management function (IT Operations Control and Facilities Management)</i> (SO 6.4 Intro, 6.4.1, 6.4.2)</li> </ul> <p><b>The recommended study period for this unit is minimum 1.0 hours.</b></p>
ITILFND07	<p><b>Roles</b></p> <p>The purpose of this unit is to help the candidate to account for and to be aware of the responsibilities of some of the key <i>roles</i> in <i>Service Management</i>.</p> <p>Specifically, candidates must be able to:</p> <p>07-1. Account for the <i>role</i> and the responsibilities of the</p> <ul style="list-style-type: none"> <li>• <i>Process owner</i> (SD 6.4 Intro, 6.4.1)</li> </ul>

Unit	Content
	<ul style="list-style-type: none"> <li>• <i>Service owner</i> (CSI 6.1 Intro, 6.1.4)</li> </ul> <p>07-2. Recognize the <i>RACI</i> model and explain its role in determining <i>organizational</i> structure. (SD 6 Intro, CSI 6.2 – not RASI-VS or RASCI)</p> <p><b><i>The recommended study period for this unit is minimum 30 minutes.</i></b></p>
ITILFND08	<p><b>Technology and Architecture</b></p> <p>The purpose of this unit is to help the candidate to</p> <ul style="list-style-type: none"> <li>08-2. Understand how <i>Service Automation</i> assists with integrating <i>Service Management</i> processes (SS 8.1)</li> </ul> <p><b><i>It is recommended that this unit is covered as part of the training in the other units.</i></b></p>
ITILFND09	<p><b>ITIL Qualification scheme</b></p> <p>The purpose of this unit is to help the candidate to</p> <ul style="list-style-type: none"> <li>09-1. Explain the <i>ITIL Qualification</i> scheme, distinguish between the purposes of the two intermediate streams, mention the included certificates, ITIL Expert and ITIL Master, and understand the different options for further training.</li> </ul> <p><b><i>The recommended study period for this unit is minimum 15 minutes.</i></b></p>
ITILFND10	<p><b>Mock exam</b></p> <p>The purpose of this unit is to help the candidate to pass the ITIL Foundation exam.</p> <p>Specifically, candidates must:</p> <ul style="list-style-type: none"> <li>10-1. Sit minimum one ITIL Foundation mock exam.</li> </ul> <p><b><i>The recommended study period for this unit is minimum 2.0 hours inclusive of revision.</i></b></p>

## Format of the Examination

This syllabus has an accompanying examination at which the candidate must achieve a pass score to gain the ITIL Foundation Certificate in IT Service Management.

Type	Multiple choice, 40 questions. The questions are selected from the full ITIL Foundation in IT Service Management examination question bank.
Duration	Maximum 60 minutes. Candidates sitting the examination in a language other than their native language have a maximum of 75 minutes and are allowed the use of a dictionary.
Prerequisite	Accredited ITIL Foundation training is strongly recommended, but is not a prerequisite.
Supervised	Yes
Open Book	No
Pass Score	65% (26 out of 40)
Distinction Score	None
Delivery	Online or Paper Based. Examination agent facility with a proof of education providers.

# ITIL<sup>®</sup> V3 Foundation

## Appendix C: Foundation Sample Exam 1

## Document Control Information

Document Details	
<b>Document Name</b>	ITILv3FoundationSampleA_v3.0
Purpose of Document	To help candidates prepare for the ITIL® v.3 Foundation Examination based on the Foundation syllabus version 4
Document Version Number	3.0
Document Status	Live
Document Owner	Chief Examiner
Prepared By	ITIL® v.3 Examination Panel
Date of First Draft	19 January 2009
Date Approved	19 January 2009
Approved By	Chief Examiner
<b>Next Scheduled Review Date</b>	

Version History		
Version Number	Date Approved	Change/Reasons for Change/Comments
3.0	19 January 2009	New Document

Distribution List		
Version	Name	Title/Company
3.0	All ITIL® EIs and ATOs	



## ***The ITIL® v.3 Foundation Examination***

*ITIL® v. 3 Foundation Examination:  
Sample Paper A, version 3.0*

Multiple Choice

### ***Instructions***

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1. All 40 questions should be attempted.
2. There are no trick questions.
3. All answers are to be marked on the original examination paper.
4. Please use a pen to mark your answers with either a ✓ or x .
5. You have 1 hour to complete this paper.
6. You must get 26 or more correct to pass.

**Candidate Number:** .....

- 1 The scope of the Change Management process includes changes to services and other Configuration Items (CIs) across the whole Service Lifecycle.  
What types of changes are NOT usually included within the scope of Change Management?
- a) Changes to a mainframe computer
  - b) Changes to Business Operations
  - c) Changes to a Service Level Agreement
  - d) The retirement of a service
- 2 Which of the following is NOT an objective of Service Operation?
- a) Thorough testing to ensure that services are designed to meet business needs
  - b) To deliver and manage IT services
  - c) To manage the technology used to deliver services
  - d) To monitor the performance of technology and processes
- 3 Operations Control refers to?
- a) The managers of the Technical and Applications Management functions
  - b) Overseeing the execution and monitoring of operational activities and events
  - c) The tools used to monitor and display the status of the IT Infrastructure and Applications
  - d) The situation where the Service Desk is required to monitor the status of the infrastructure when Operators are not available
- 4 Which process is responsible for recording relationships between service components?
- a) Service Level Management
  - b) Service Portfolio Management
  - c) Service Asset and Configuration Management
  - d) Incident Management

- 5 What is the RACI model used for?
- a) Documenting the roles and relationships of stakeholders in a process or activity
  - b) Defining requirements for a new service or process
  - c) Analyzing the business impact of an Incident
  - d) Creating a Balanced Scorecard showing the overall status of service management
- 6 Which of the following is the BEST description of an Operational Level Agreement (OLA)?
- a) An agreement between an IT Service Provider and another part of the same organisation that assists in the provision of services
  - b) A written agreement between the IT Service Provider and the IT Customer(s) defining key targets and responsibilities of both parties
  - c) An agreement between two Service Providers about the levels of Service required by the customer
  - d) An agreement between a 3rd party Service Desk and the IT customer about fix and response times
- 7 The MAIN goal of Availability Management is?
- a) To monitor and report availability of services and components
  - b) To ensure that all targets in Service Level Agreements (SLAs) are met
  - c) To guarantee availability levels for services and components
  - d) To ensure that service availability matches or exceeds the agreed needs of the business
- 8 Which of the following statements are CORRECT?
- 1. Service Transition provides guidance on moving new and changed services into production
  - 2. Service Transition provides guidance on testing
  - 3. Service Transition provides guidance on the transfer of services to or from an external service provider
- a) 1 and 2 only
  - b) 1 only
  - c) All of the above
  - d) 1 and 3 only

- 9 Learning and Improvement is the PRIMARY concern of which of the following phases of the Service Lifecycle?
- a) Service Strategy, Service Design, Service Transition, Service Operation, and Continual Service Improvement
  - b) Service Strategy, Service Transition, and Service Operation
  - c) Service Operation and Continual Service Improvement
  - d) Continual Service Improvement
- 10 Which of the following is an activity of the Service Asset and Configuration Management process?
- a) Account for all the financial assets of the organisation
  - b) Specify the relevant attributes of each Configuration Item (CI)
  - c) Build service models to justify ITIL implementations
  - d) Implement ITIL across the organisation
- 11 Which of the following basic concepts are included in Access Management?
- 1. Verifying the identity of users requesting access to services
  - 2. Setting the rights or privileges of systems to allow access to authorized users
  - 3. Defining security policies for system access
  - 4. Monitoring the availability of systems that users should have access to
- a) 2 and 4 only
  - b) 1 and 3 only
  - c) 2 and 3 only
  - d) 1 and 2 only
- 12 Which of the following would be stored in the Definitive Media Library (DML)?
- 1. Copies of purchased software
  - 2. Copies of internally developed software
  - 3. Relevant license documentation
  - 4. The Change Schedule
- a) All of the above
  - b) 1 and 2 only
  - c) 2, 3 and 4 only
  - d) 1, 2 and 3 only

- 13 Which process reviews Operational Level Agreements (OLAs) on a regular basis?
- a) Supplier Management
  - b) Service Level Management
  - c) Service Portfolio Management
  - d) Demand Management
- 14 A Process Owner is responsible for which of the following?
- a) Purchasing tools to support the process
  - b) Ensuring that targets specified in a Service Level Agreement (SLA) are met
  - c) Carrying out activities defined in the process
  - d) Ensuring that the process is performed as documented
- 15 Which of the following are aims of the Release and Deployment Management process?
- 1. To ensure there are clear release and deployment plans
  - 2. To ensure that Customers are satisfied with the Service Transition practices and outputs
  - 3. To ensure there is minimal unpredicted impact on production services, operations and support
  - 4. To provide cost justifiable IT capacity that is matched to the needs of the business
- a) 1, 2 and 3 only
  - b) All of the above
  - c) 1 and 3 only
  - d) 1, 3 and 4 only
- 16 Functions are BEST described as?
- a) A body of knowledge
  - b) Closed loop systems
  - c) Self-Contained units of organizations
  - d) Projects focusing on transformation

- 17 Defining the functional requirements for a new service is part of:
- a) Service Operation: Application Management
  - b) Service Strategy: Service Portfolio Management
  - c) Service Design: Design the technology architecture
  - d) Service Design: Design the service solutions
- 18 The Information Security Policy should be available to which groups of people?
- a) Senior Business Managers and all IT staff
  - b) Senior Business Managers, IT Executives and the Security Manager
  - c) All Customers, Users and IT staff
  - d) Information Security Management staff only
- 19 The Service Design Package should detail all aspects of the service and its requirements through subsequent stages of its lifecycle.  
Which of the following are valid elements?
- 1. Agreed and documented Business Requirements
  - 2. A service definition for operations
  - 3. Requirements for new or changed processes
  - 4. Metrics to measure the service
- a) 1 only
  - b) 2 and 3 only
  - c) 1, 2 and 4 only
  - d) All of the above
- 20 Which of the following are examples of tools that might support the Service Transition phase of the Lifecycle?
- 1. A tool to store definitive versions of software
  - 2. A workflow tool for managing changes
  - 3. An automated software distribution tool
  - 4. Testing and validation tools
- a) 1, 3 and 4 only
  - b) 1, 2 and 3 only
  - c) All of the above
  - d) 2, 3 and 4 only

21 Which of the following statements are CORRECT?

1. Problem Management ensures that all resolutions or workarounds that require a change to a Configuration Item (CI) are submitted through Change Management

2. Problem Management provides management information about the cost of resolving and preventing problems to Financial Management

- a) 1 only
- b) 2 only
- c) Both of the above
- d) Neither of the above

22 What is the purpose of the Request Fulfilment Process?

- a) Dealing with Service Requests from the users
- b) Making sure all requests within an IT organisation are fulfilled
- c) Ensuring fulfilment of Change Requests
- d) Making sure the Service Level Agreement (SLA) is met

23 Which statement about Value Creation through services is CORRECT?

- a) The customer's perception of the service is an important factor in Value Creation
- b) The value of a service can only ever be measured in financial terms
- c) Delivering customer outcomes is unimportant in the value of a service
- d) Service provider preferences drive the value perception of a service

24 The four stages of the Deming Cycle are?

- a) Plan, Measure, Monitor, Report
- b) Plan, Check, Re-Act, Implement
- c) Plan, Do, Act, Audit
- d) Plan, Do, Check, Act

- 25 Which of the following statements is CORRECT for all IT services?
- a) They deliver resources and capabilities to customers
  - b) They deliver costs and risks to customers
  - c) They deliver business solutions to customers
  - d) They deliver value to customers
- 26 Which of the following activities is Service Level Management (SLM) responsible for?
- a) Designing the Configuration Management system from a business perspective
  - b) Creating technology metrics to align with customer needs
  - c) Discuss service achievements with customers
  - d) Training Service Desk staff how to deal with customer complaints about service
- 27 Which of the following BEST describes the purpose of Event Management?
- a) The ability to detect events, make sense of them and determine the appropriate control action
  - b) The ability to implement monitoring tools
  - c) The ability to monitor and control the activities of technical staff
  - d) The ability to report on the successful delivery of services by checking the uptime of infrastructure devices
- 28 Which of the following should a Service Catalogue contain?
- a) The version information of all software
  - b) The organizational structure of the company
  - c) Asset information
  - d) Details of all operational services

- 29 "Warranty of a service" means?
- a) The service is fit for purpose
  - b) There will be no failures in applications and infrastructure associated with the service
  - c) All service-related problems are fixed free of charge for a certain period of time
  - d) Customers are assured of certain levels of availability, capacity, continuity and security
- 30 A technician uses a pre-defined technique to restore service as the Incident has been seen before.  
This is an example of which of the following?
- a) A Workaround
  - b) A Standard Change
  - c) A Service Capability
  - d) An Alert
- 31 Which of the following is a benefit of using an incident Model?
- a) It will make problems easier to identify and diagnose
  - b) It means known incident types never recur
  - c) It provides pre-defined steps for handling particular types of incidents
  - d) It ensures all incidents are easy to solve
- 32 Which of the following is the CORRECT sequence of activities for handling an Incident?
- a) Identification, Logging, Categorisation, Prioritisation, Initial Diagnosis, Functional Escalation, Investigation and Diagnosis, Resolution and Recovery, Closure
  - b) Identification, Prioritisation, Logging, Categorisation, Initial Diagnosis, Functional Escalation, Investigation and Diagnosis, Resolution and Recovery, Closure
  - c) Identification, Logging, Initial Diagnosis, Categorisation, Prioritisation, Functional Escalation, Investigation and Diagnosis, Resolution and Recovery, Closure
  - d) Identification, Investigation, Logging, Categorisation, Functional Escalation, Prioritisation, Initial Diagnosis, Resolution and Recovery, Closure

- 33 Which of the following is an objective of Continual Service Improvement?
1. To improve process efficiency and effectiveness
  2. To improve services
  3. To improve all phases of the Service Lifecycle except Service Strategy
  4. To improve standards such as ISO/IEC 20000
- a) 1 and 2 only
  - b) 2 only
  - c) 1, 2 and 3 only
  - d) All of the above
- 34 Which of the following is a MAJOR activity of Demand Management?
- a) Increasing customer value
  - b) Understanding patterns of business activity
  - c) Increasing the value of IT
  - d) Aligning the business with IT cost
- 35 Which of the following is NOT defined as a main metric type by Continual Service Improvement (CSI)?
- a) Process Metrics
  - b) Service Metrics
  - c) Personnel Metrics
  - d) Technology Metrics
- 36 Which statement about the relationship between the Configuration Management System (CMS) and the Service Knowledge Management System (SKMS) is CORRECT?
- a) The SKMS is part of the CMS
  - b) The CMS forms part of the SKMS
  - c) The CMS and SKMS are the same thing
  - d) There is no relationship between the CMS and the SKMS

- 37 What is the role of the Emergency Change Advisory Board (ECAB)?
- a) To assist the Change Manager in ensuring that no urgent Changes are made during particularly volatile business periods
  - b) To assist the Change Manager by implementing Emergency Changes
  - c) To assist the Change Manager in evaluating Emergency Changes and to decide whether the Change should be approved
  - d) To assist the Change Manager in speeding up the Emergency Change Process so that no unacceptable delays occur
- 38 Which of the following statements about the Service Desk are CORRECT?
- 1. The Service Desk is a function that provides a means of communication between IT and its users for all operational issues
  - 2. The Service Desk is always the owner of the Incident Management process
- a) 2 only
  - b) 1 only
  - c) Both of the above
  - d) Neither of the above
- 39 Which of the following describes the Four Ps of Service Design?
- a) A process for the design of effective services
  - b) The Planning, Perspective, Position and People aspects of Service Design
  - c) Questions that should be asked when reviewing design specifications
  - d) The People, Partner, Product and Process elements to be considered in the design of services
- 40 Which of the following represents the BEST course of action to take when a problem workaround is found?
- a) The problem record is closed
  - b) The problem record remains open and details of the workaround are documented within it
  - c) The problem record remains open and details of the workaround are documented on all related incident records
  - d) The problem record remains open and details of the workaround are documented in a Request for Change(RFC)

## ANSWER SHEET

**Answer Key for Exam Paper: ITILv3FoundationSampleA\_v3.0**

Q	A	Syllabus Ref		Q	A	Syllabus Ref	
1	B	05-51		21	C	05-72	
2	A	02-08		22	A	05-82	
3	B	06-02		23	A	04-02	
4	C	05-52		24	D	04-08	
5	A	07-02		25	D	01-02	
6	A	03-12		26	C	05-31	
7	D	05-42		27	A	05-81	
8	C	02-06		28	D	05-41	
9	D	02-02		29	D	03-01	
10	B	05-52		30	A	03-30	
11	D	05-83		31	C	05-71	
12	D	03-19		32	A	05-71	
13	B	05-31		33	A	02-10	
14	D	07-01		34	B	05-21	
15	A	05-61		35	C	04-10	
16	C	01-04		36	B	03-16	
17	D	04-04		37	C	05-51	
18	C	05-43		38	B	06-01	
19	D	03-14		39	D	04-03	
20	C	08-02		40	B	05-72	

# ITIL® V3 Foundation

## Appendix D: Foundation Sample Exam 2

## Document Control Information

Document Details	
Document Name	ITILv3FoundationSampleB_v3.0
Purpose of Document	To help candidates prepare for the ITIL® v.3 Foundation Examination based on the Foundation syllabus version 4
Document Version Number	3.0
Document Status	Live
Document Owner	Chief Examiner
Prepared By	ITIL® v.3 Examination Panel
Date of First Draft	19 January 2009
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Version History		
Version Number	Date Approved	Change/Reasons for Change/Comments
3.0	19 January 2009	New Document

Distribution List		
Version	Name	Title/Company
3.0	All ITIL® Els and ATOs	



## ***The ITIL® v.3 Foundation Examination***

*ITIL® v. 3 Foundation Examination:  
Sample Paper B, version 3.0*

Multiple Choice

### ***Instructions***

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1. All 40 questions should be attempted.
2. There are no trick questions.
3. All answers are to be marked on the original examination paper.
4. Please use a pen to mark your answers with either a ✓ or x .
5. You have 1 hour to complete this paper.
6. You must get 26 or more correct to pass.

**Candidate Number:** .....

- 1 Input from which processes could be considered by Service Level Management when negotiating Service Level Agreements (SLA)?
  - a) All other ITIL processes
  - b) Capacity and Availability Management only
  - c) Incident and Problem Management only
  - d) Change and Release and Deployment Management only
  
- 2 Which of the following statements about a standard change is INCORRECT?
  - a) A standard change is one for which the approach is pre-authorized by Change Management
  - b) Each standard change is granted by the nominated authority for that change
  - c) Standard changes are usually low risk and well understood
  - d) Standard changes are only raised using the Request Fulfilment process
  
- 3 Which of these statements about Service Desk staff is CORRECT?
  - a) The Service Desk should try to have a high level of staff turnover as the training requirements are low and this helps to minimize salaries
  - b) Service Desk staff should be discouraged from applying for other roles as it is more cost effective to keep them in the role where they have been trained
  - c) The Service Desk can often be used as a stepping stone for staff to move into other more technical or supervisory roles
  - d) Technical skills are more important to the Service Desk than business or interpersonal skills because they enable incidents to be resolved.
  
- 4 Which of the following statements is CORRECT about patterns of demand generated by the customer's business?
  - a) They are driven by patterns of business activity
  - b) It is impossible to predict how they behave
  - c) It is impossible to influence demand patterns
  - d) They are driven by the delivery schedule generated by Capacity Management

- 5 Facilities Management refers to?
- a) The Management of IT services that are viewed as "utilities", such as printers or network access
  - b) Advice and guidance to IT Operations on methodology and tools for managing IT Services
  - c) The Management of the physical IT environment such as a Data Center
  - d) The procurement and maintenance of tools that are used by IT Operations staff to maintain the infrastructure

6 The three sub-processes of Capacity Management are:

- a) Business Capacity Management, Service Capacity Management and Component Capacity Management
- b) Supplier Capacity Management, Service Capacity Management and Component Capacity Management
- c) Supplier Capacity Management, Service Capacity Management and Technology Capacity Management
- d) Business Capacity Management, Technology Capacity Management and Component Capacity Management

7 Which statement about the Known Error Database (KEDB) is totally correct?

- a) The KEDB is the same database as the Service Knowledge Management System
- b) The KEDB should be used during incident diagnosis phase to try to speed up the resolution process
- c) Care should be taken to avoid duplication of records in the KEDB. This can be done by giving as many technicians as possible access to create new records
- d) Access to the KEDB should be limited to the Service Desk

8 Which statements about Key Performance Indicators (KPIs) and Metrics are CORRECT?

- 1. Service metrics measure the end-to-end service
- 2. KPIs should relate to a Critical Success Factor
- 3. Continual Service Improvement (CSI) uses process metrics to identify improvement opportunities
- 4. KPIs can be both qualitative and quantitative

- a) 1 only
- b) 2 and 3 only
- c) 1, 2 and 4 only
- d) All of the Above

- 9 What is described by the following statement? "Maintains relationships between all service components and any related incidents, problems, known errors, change and release documentation"
- a) The Capacity Plan
  - b) The Definitive Media Library
  - c) The Configuration Management System
  - d) A Service Level Agreement
- 10 Which of the following statements about a Definitive Media Library (DML) are CORRECT?
- 1. The DML includes a physical store
  - 2. The DML holds definitive hardware spares
  - 3. The DML includes master copies of controlled documentation
- a) All of the above
  - b) 1 and 2 only
  - c) 2 and 3 only
  - d) 1 and 3 only
- 11 Which of the following statements are correct?
- 1. Problem Management can support the Service Desk by providing Known Errors to speed up incident resolution
  - 2. Problem Management provides information to Service Level Management about the impact of changes
- a) 1 only
  - b) 2 only
  - c) Both of the Above
  - d) Neither of the Above
- 12 Incident Management provides value to the business by?
- a) Helping to control infrastructure cost of adding new technology
  - b) Enabling users to resolve Problems
  - c) Helping to align people and process for the delivery of service
  - d) Contributing to the reduction of impact of service outages

- 13 Which of the following questions is NOT answered by information in the Service Portfolio?
- a) How should our resources and capabilities be allocated?
  - b) What opportunities are there in the market?
  - c) Why should a customer buy these services?
  - d) What are the pricing or chargeback models?
- 14 Which word is missing from the following sentence?  
"A logical configuration model records the relationships between Assets, the Infrastructure and \_\_\_\_\_"
- a) Services
  - b) The network
  - c) Processes
  - d) Service levels
- 15 Which of the following statements about processes is CORRECT?
- 1. All processes must have an owner
  - 2. A process takes one or more inputs and turns them into defined outputs
- a) 1 only
  - b) 2 only
  - c) Both of the above
  - d) Neither of the above
- 16 Which of the following statements is CORRECT for ALL processes?
- a) They define activities, roles, responsibilities, functions and metrics
  - b) They create value for stakeholders
  - c) They are carried out by a Service Provider in support of a Customer
  - d) They are units of organizations responsible for specific outcomes

- 17 The following options are considered within which process?
1. Big Bang vs. Phased
  2. Push and Pull
  3. Automated vs. Manual
- a) Incident Management
  - b) Release and Deployment Management
  - c) Service Asset and Configuration Management
  - d) Service Catalogue Management
- 18 Which of the following BEST describes a Workaround?
- a) A technician uses a pre-defined technique to restore service as this Incident has been seen before
  - b) A technician tries several approaches to solve an Incident. One of them works, although they do not know why
  - c) After reporting the Incident to the Service Desk, the user works on alternative tasks while the problem is identified and resolved
  - d) A device works intermittently, allowing the user to continue working at degraded levels of performance while the technician diagnoses the incident
- 19 Which of the following areas would technology help to support
1. Self Help
  2. Reporting
  3. Release and Deployment
  4. Process design
- a) 1, 2 and 3 only
  - b) 1, 3 and 4 only
  - c) 2, 3 and 4 only
  - d) All of the above
- 20 The four stages of the Deming Cycle are?
- a) Plan, Measure, Monitor, Report
  - b) Plan, Check, Re-Act, Implement
  - c) Plan, Do, Act, Audit
  - d) Plan, Do, Check, Act

- 21 Which of these processes includes a need to carry out Risk Assessment and Management?
1. IT Service Continuity Management
  2. Information Security Management
  3. Service Level Management
- a) All of the above
  - b) 1 and 3 only
  - c) 2 and 3 only
  - d) 1 and 2 only
- 22 What is the best definition of an Incident Model?
- a) The template used to define the incident logging form used to report incidents
  - b) A type of incident involving a standard (or model) type of Configuration Item (CI)
  - c) A set of pre-defined steps to be followed when dealing with a known type of incident
  - d) An incident that is easy to solve
- 23 The RACI model ensures which combination of the following roles is allocated for processes?
- a) Responsible, Accountable, Consulted, Informed
  - b) Responsible, Achievable, Consulted, Informed
  - c) Realistic, Accountable, Consulted, Informed
  - d) Responsible, Accountable, Corrected, Informed
- 24 Where within the Service Lifecycle would it be decided what services we should be offering and to whom they will be offered?
- a) Continual Service Improvement
  - b) Service Operation
  - c) Service Design
  - d) Service Strategy

- 25 Which of the following statements is CORRECT?
1. Continual Service Improvement (CSI) provides guidance on how to improve process efficiency and effectiveness
  2. CSI provides guidance on how to improve services
  3. CSI provides guidance on the improvement of all phases of the Service Lifecycle
  4. CSI provides guidance on the measurement of processes and services
- a) 1 and 2 only
- b) 2 only
- c) 1, 2 and 3 only
- d) All of the above
- 26 Which of the following is a valid type of Service Level Agreement (SLA)?
- a) Priority-based SLA
- b) Technology-based SLA
- c) Location-based SLA
- d) Customer-based SLA
- 27 The BEST definition of an event is?
- a) An occurrence where a performance threshold has been exceeded and an agreed service level has already been impacted
- b) An occurrence that is significant for the management of the IT Infrastructure or delivery of services
- c) A known system defect that generates multiple incident reports
- d) A planned meeting of customers and IT staff to announce a new service or improvement programme
- 28 Which Service Lifecycle phase is responsible for ensuring that existing measurement methods can provide the required metrics for new or changed services?
- a) Service Design
- b) Service Operation
- c) Continual Service Improvement
- d) Service Delivery

- 29 An Incident occurs when:
1. A user is unable to access a service during service hours
  2. An authorized IT staff member is unable to access a service during service hours
  3. A network segment fails and the user is not aware of any disruption to service
  4. A user contacts the Service Desk about slow performance of an application
- Which of the above statements is CORRECT?

- a) All of the above
- b) 1 and 4 only
- c) 2 and 3 only
- d) None of the above

- 30 Which of the following statements about a Change process model is CORRECT?

- a) A Change process model should not be used for emergency changes
- b) A Change process model should be constructed when a significant change is required
- c) A Change process model predefines steps that should be taken to handle a Change in an agreed way
- d) Escalation procedures are outside the scope of a Change process model

- 31 Which is the first activity of the Continual Service Improvement (CSI) model?

- a) Understand the business objectives
- b) Carry out a baseline assessment to understand the current situation
- c) Agree on priorities for improvement
- d) Create and verify a plan

- 32 Which are the missing Service Operation processes from the following?

1. Incident Management
2. Problem Management
3. Access Management
4. ?
5. ?

- a) Event Management and Request Fulfilment
- b) Event Management and Service Desk
- c) Facilities Management and Event Management
- d) Change Management and Service Level Management

- 33 Which phase of the Service Lifecycle provides a framework for evaluating service capability and risk profile before a service is deployed?
- a) Service Strategy
  - b) Service Design
  - c) Service Transition
  - d) Service Operation
- 34 Which activities would you expect a service owner to undertake?
- 1. Representing a specific service across the organization
  - 2. Updating the CMDB after a change
  - 3. Helping to identify service improvements
  - 4. Representing a specific service in CAB meetings
- a) 1, 2 and 4 only
  - b) All of the above
  - c) 1 and 4 only
  - d) 1, 3 and 4 only
- 35 The MAIN goal of Availability Management is?
- a) To monitor and report availability of services and components
  - b) To ensure that all targets in Service Level Agreements (SLAs) are met
  - c) To guarantee availability levels for services and components
  - d) To ensure that service availability matches or exceeds the agreed needs of the business
- 36 Which of the following is the CORRECT description of the Four Ps of Service Design?
- a) A four step process for the design of effective service management
  - b) A definition of the people and products required for successful design
  - c) A set of questions that should be asked when reviewing design specifications
  - d) The four major areas that need to be considered in the design of effective service management

- 37 In which core publication can you find detailed descriptions of Demand Management and Financial Management?
- a) Service Operation
  - b) Service Strategy
  - c) Service Transition
  - d) Continual Service Improvement
- 38 Which of the following statements about Supplier Management is INCORRECT?
- a) Supplier Management negotiates Operational Level Agreements (OLAs) with internal groups to support the delivery of services
  - b) Supplier Management ensures that suppliers meet business expectations
  - c) Supplier Management maintains information in a Supplier and Contract Database
  - d) Supplier Management negotiates external agreements to support the delivery of services
- 39 Which of the following is NOT one of the ITIL core publications?
- a) Service Optimisation
  - b) Service Transition
  - c) Service Design
  - d) Service Strategy
- 40 Which of the following is MOST LIKELY to be covered by a Service Request through the Request Fulfilment process?
- a) A user calls the Service Desk to order a toner cartridge
  - b) A user calls the Service Desk because they would like to change the functionality of an application
  - c) A Manager asks for a change to an existing global security profile
  - d) A user logs onto an external web site to download a copy of a new version of software

## ANSWER SHEET

**Answer Key for Exam Paper: ITILv3FoundationSampleB\_v3.0**

Q	A	Syllabus Ref		Q	A	Syllabus Ref	
1	A	05-31		21	D	05-46	
2	D	05-51		22	C	05-71	
3	C	06-01		23	A	07-02	
4	A	05-21		24	D	02-03	
5	C	06-02		25	D	02-10	
6	A	05-45		26	D	05-31	
7	B	05-72		27	B	03-24	
8	D	61		28	A	04-04	
9	C	03-18		29	A	03-26	
10	D	05-52		30	C	05-51	
11	A	05-72		31	A	04-09	
12	D	05-71		32	A	05-81	
13	B	03-03		33	C	02-06	
14	A	05-52		34	D	07-01	
15	C	01-05		35	D	05-42	
16	B	01-04		36	D	04-03	
17	B	05-61		37	B	05-22	
18	A	03-30		38	A	05-44	
19	D	08-02		39	A	02-02	
20	D	04-08		40	A	03-28	

# ITIL® V3 Foundation

## Appendix E: Bridging Syllabus

## Document Control Information

Document Details	
Document Name	ITIL_v3_Foundation_Bridge_Certificate_Syllabus_v4.1
Purpose of Document	Detailed syllabus for the Bridge Course updating candidates who hold Foundation certificates from earlier versions of ITIL to a level of knowledge and understanding in line with the ITIL v3 Foundation Certificate in IT Service Management.
Document Version Number	4.1
Document Status	Live
Document Owner	Chief Examiner
Prepared By	Chief Examiner
Date of First Draft	30 October 2008
Date Approved	27 February 2009
Approved By	Qualifications Board
Next Scheduled Review Date	

Version History		
Version Number	Date Approved	Change/Reasons for Change/Comments
4.0	19 December 2008	New document
4.1	27 February 2009	Learning topic 02-1 renamed into 02-2; topics 03-4 and 03-21 removed from Unit 03; topic 03-23 moved from Unit 3 to Unit 10

Distribution List	
Name	Title/Company
4.0	All ITIL Examination Institutes
4.1	All ITIL Examination Institutes



**Professional Qualifications for**

**ITIL® PRACTICES FOR SERVICE MANAGEMENT**

***The ITIL® V3 Foundation Bridge Certificate  
in IT Service Management  
SYLLABUS***



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ITIL\_v3\_Foundation\_Bridge\_Certificate\_Syllabus\_v4.1

# THE ITIL FOUNDATION BRIDGE CERTIFICATE IN IT SERVICE MANAGEMENT

The ITIL Foundation V3 Bridge Course is provided to give candidates a fast track route to an ITIL version 3 Foundation certificate level of knowledge. This course is only intended for existing holders of ITIL Foundation Certificates from earlier ITIL versions.

The ITIL Foundation V3 Bridge course highlights the new topics in ITIL version 3 and the main differences from earlier ITIL versions.

## Target Group

The target group of the ITIL V3 Foundation Bridge course is existing holders of ITIL Foundation Certificate from earlier ITIL versions who want knowledge and understanding of the new content of ITIL version 3.

## Learning Objectives

Candidates can expect to gain knowledge and understanding in the following upon successful completion of the components related to this certification.

- Service Management as a practice (Awareness)
- Service Lifecycle (Awareness)
- Key Principles and Models (Awareness)
- Generic Concepts (Awareness)
- Selected Processes (Awareness)
- Selected Roles (Awareness)
- Selected Functions (Awareness)
- Technology and Architecture (Awareness)
- ITIL Qualification scheme (Awareness)

## Foundation Bridge Syllabus

The syllabus will guide the design, development and use of training materials as well as training aimed at raising understanding of, and competence in, IT Service Management as described in the ITIL Service Strategy, ITIL Service Design, ITIL Service Transition, ITIL Service Operation, ITIL Continual Service Improvement, ITIL Introduction and ITIL Glossary publications. The syllabus has been designed with ease of reference, extensibility and ease of maintenance in mind.

The Bridge syllabus is based on the ITIL version 3 Foundation Syllabus. The scope of the V3 Foundation course is wider and less detailed compared to Foundation on earlier ITIL versions. The main focus of the Bridge course will be the new content. It will also provide an overview of the main differences on topics known from earlier ITIL versions.

Training providers are free to structure and organize their training in the way they find most appropriate, provided the units below are sufficiently covered. It is strongly recommended that training providers do not structure their courses by simply following the order of the training units as described in this document. It has been designed to be flexible so that training providers can add value as appropriate. The recommended number of study hours is 9.5 hours plus the final exam.

Note that the numbering is not in order, since it reflects the numbering of the ITIL version 3 Foundation Syllabus. The terms emphasized in *italics* are defined in the ITIL Glossary.

Unit	Content
ITILFND00	<p><b>Introduction</b></p> <p>The purpose of this unit is to help the candidate understand the background for ITIL version 3 and why ITIL needed to change.</p> <p>Specifically, candidates must be able to:</p> <ul style="list-style-type: none"> <li>00-1. Explain the background for the new ITIL version and how the project got input from different stakeholder groups and nationalities</li> <li>00-2. Understand why ITIL needed to change</li> </ul> <p><b><i>The recommended study period for this unit is minimum 15 minutes. This unit will not be subject to exam questions.</i></b></p>
ITILFND01	<p><b>Service Management as a practice</b></p> <p>The purpose of this unit is to help the candidate to define <i>Service</i> and to comprehend and explain the concept of <i>Service Management</i> as a <i>practice</i>.</p> <p>Specifically, candidates must be able to:</p> <ul style="list-style-type: none"> <li>01-1. Describe the concept of Good <i>Practice</i> (SS 1.2.2)</li> <li>01-2. Define and explain the concept of a <i>Service</i> (SS 2.2.1)</li> <li>01-3. Define and explain the concept of <i>Service Management</i> (SS 2.1)</li> <li>01-4. Define <i>Functions</i> and <i>Processes</i> (SS 2.3, 2.6.1, SD 2.3, SD 3.6.4, ST 2.3, SO 2.3, 3.1, CSI 2.3)</li> <li>01-5. Explain the <i>process</i> model and the characteristics of <i>processes</i> (SD 2.3.2, 3.6.4)</li> </ul> <p><b><i>The recommended study period for this unit is minimum 45 minutes.</i></b></p>

Unit	Content
ITILFND02	<p><b>The Service Lifecycle</b></p> <p>The purpose of this unit is to help the candidate to understand the value of the <i>Service Lifecycle</i>, how the <i>processes</i> integrate with each other, throughout the <i>Lifecycle</i> and explain the <i>objectives</i> and business value for each phase in the <i>Lifecycle</i></p> <p>Specifically, candidates must be able to:</p> <ul style="list-style-type: none"> <li>02-2. Describe the structure, <i>scope</i>, <i>components</i> and interfaces of the Service Lifecycle (SS 1.2.3 All)</li> <li>02-3. Account for the main goals and <i>objectives</i> of <i>Service Strategy</i> (SS 1.3)</li> <li>02-4. Account for the main goals and <i>objectives</i> of <i>Service Design</i> (SD 2.4.1, SD 3.1)</li> <li>02-5. Briefly explain what value <i>Service Design</i> provides to the business (SD 2.4.3)</li> <li>02-6. Account for the main goals and objectives of <i>Service Transition</i> (ST 2.4.1)</li> <li>02-7. Briefly explain what value <i>Service Transition</i> provides to the business (ST 2.4.3)</li> <li>02-8. Account for the main goals and objectives of <i>Service Operations</i> (SO 2.4.1)</li> <li>02-9. Briefly explain what value <i>Service Operation</i> provides to the <i>business</i> (SO 2.4.3 1<sup>st</sup> para, SO 1.2.3.4 )</li> <li>02-10. Account for the main goals and <i>objectives</i> of <i>Continual Service Improvement</i> (CSI 2.4.1, 2.4.2)</li> </ul> <p><b><i>It is recommended that this training is covered within other units</i></b></p> <p><b><i>The recommended study period for this unit is minimum 1.0 hours.</i></b></p>
ITILFND03	<p><b>Generic concepts and definitions</b></p> <p>The purpose of this unit is to help the candidate to define some of the key terminology and explain the key concepts of <i>Service Management</i>.</p> <p>Specifically, candidates must be able to define and explain the following key concepts:</p> <ul style="list-style-type: none"> <li>03-1. <i>Utility and Warranty</i> (SS 2.2.2 )</li> <li>03-2. <i>Resources, Capabilities and Assets</i> (SS 3.2.1)</li> <li>03-3. <i>Service Portfolio</i> (SS 4.2.3, SD 3.6.2 – to end of 1st bullet list)</li> <li>03-5. The role of <i>IT Governance</i> across the <i>Service Lifecycle</i> (CSI 3.10 All)</li> <li>03-14. <i>Service Design Package</i> (SD Appendix A)</li> <li>03-16. <i>Service Knowledge Management System (SKMS)</i> (ST 4.7.4.2)</li> <li>03-18. <i>Configuration Management System</i> (ST 4.3.4.3 )</li> <li>03-19. <i>Definitive Media Library (DML)</i> (ST 4.3.4.3)</li> <li>03-20. <i>Service Change</i> (ST 4.2.2)</li> <li>03-24. <i>Event</i> (SO 4.1 1<sup>st</sup> para)</li> <li>03-25. <i>Alert</i> (SO glossary)</li> </ul> <p><b><i>It is recommended that this unit is covered as part of the training in the other units.</i></b></p> <p><b><i>The recommended study period for this unit is minimum 30 minutes.</i></b></p>
ITILFND04	<p><b>Key Principles and Models</b></p> <p>The purpose of this unit is to help the candidate comprehend and account for the key principles and <i>models</i> of <i>Service Management</i> and balance some of the opposing</p>

Unit	Content
	<p>forces within <i>Service Management</i>.</p> <p>Specifically, candidates must be able to:</p> <p><b>Service Strategy</b></p> <p>04-2. Describe basics of <i>Value Creation</i> through <i>Services</i> (SS 3.1.1, 3.1.2)</p> <p><b>Service Design</b></p> <p>04-4. Understand the five major aspects of <i>Service Design</i> (SD 2.4.2)</p> <ul style="list-style-type: none"> <li>• <i>Service Portfolio</i> Design</li> <li>• Identification of <i>Business Requirements</i>, definition of <i>Service Requirements</i> and <i>design of Services</i></li> <li>• <i>Technology</i> and <i>architectural design</i></li> <li>• <i>Process design</i></li> <li>• <i>Measurement design</i></li> </ul> <p><b>Continual Service Improvement</b></p> <p>04-8. Explain the <i>Plan, Do, Check and Act (PDCA) Model</i> to control and manage <i>quality</i> (CSI 3.6, 5.5.1, Fig 5.6)</p> <p>04-9. Explain the <i>Continual Service Improvement Model</i> (CSI 2.4.4, Fig 2.3)</p> <p>04-10. Understand the role of measurement for <i>Continual Service Improvement</i> and explain the following key elements:</p> <ul style="list-style-type: none"> <li>• The role of KPIs in the Improvement Process (CSI 4.1.2)</li> <li>• <i>Baselines</i> (CSI 3.7.1)</li> <li>• Types of <i>metrics</i> (<i>technology metrics</i>, <i>process metrics</i>, <i>service metrics</i>) (CSI 4.1.2)</li> </ul> <p><b>The recommended study period for this unit is minimum 1.5 hours.</b></p>
ITILFND05	<p><b>Processes</b></p> <p>The purpose of this unit is to help the candidate understand how the <i>Service Management processes</i> contribute to the <i>Service Lifecycle</i>, to explain the <i>objectives</i> and some of the basic concepts where there are changes from earlier versions of ITIL.</p> <p>The list of activities to be included from each process is the minimum required and should not be taken as an exhaustive list.</p> <p>Specifically, candidates must be able to:</p> <p><b>Service Strategy</b></p> <p><b>State the objectives and basic concepts for:</b></p> <p>05-21. <i>Demand Management</i> (SS 5.5)</p> <p>The following list must be covered:</p> <ul style="list-style-type: none"> <li>• Challenges in managing demand for <i>Services</i> (SS 5.5.1)</li> <li>• Activity based <i>Demand Management</i> (<i>Patterns of Business Activity PBAs</i>) (SS 5.5.2)</li> <li>• <i>Business activity patterns</i> and <i>user profiles</i> (SS 5.5.3)</li> </ul>

Unit	Content
	<p>05-22. <i>Financial Management</i> (SS 5.1 Intro, 5.1.2 Intro)</p> <ul style="list-style-type: none"> <li>• Business case</li> </ul> <p><b>Service Design</b></p> <p><b>State the objectives and basic concepts for:</b></p> <p>05-41. <i>Service Catalogue Management</i> (SD 4.1 Intro, 4.1.1, 4.1.4)</p> <p>05-43. <i>Information Security Management (ISM)</i> (SD 4.6 Intro, 4.6.1, 4.6.4 )</p> <ul style="list-style-type: none"> <li>• Security Framework (SD 4.6.4.1)</li> <li>• Information Security Policy (SD 4.6.4.2)</li> <li>• Information Security management System (ISMS) (SD 4.6.4.3)</li> </ul> <p>05-44 <i>Supplier Management</i> (SD 4.7 Intro, 4.7.1)</p> <ul style="list-style-type: none"> <li>• Supplier Contract Database (SD 4.7.4)</li> </ul> <p><b>Service Transition</b></p> <p><b>State the objectives and basic concepts for:</b></p> <p>05-62. <i>Knowledge Management</i> (ST 4.7 Intro, 4.7.1, 4.7.4)</p> <ul style="list-style-type: none"> <li>• DIKW &amp; SKMS</li> </ul> <p><b>Service Operation</b></p> <p><b>State the objectives and basic concepts for:</b></p> <p>05-81. <i>Event Management</i> (SO 4.1 Intro, 4.1.1, 4.1.4 )</p> <p>05-82. <i>Request Fulfilment</i> (SO 4.3 Intro, 4.3.1, 4.3.4 )</p> <p>05-83. <i>Access Management</i> (SO 4.5 Intro, 4.5.1, 4.5.4 )</p> <p><b>The recommended number of study hours for this unit is minimum 3.0 hours.</b></p>
ITILFND06	<p><b>Functions</b></p> <p>The purpose of this unit is to help the candidate explain the <i>role, objectives, organizational</i> structures and overlap of the three <i>functions</i>.</p> <p>Specifically, candidates must be able to:</p> <p>06-2. State the <i>role, objectives</i> and <i>organizational</i> overlap of:</p> <ul style="list-style-type: none"> <li>• The <i>Technical Management function</i> (SO 6.1, 6.3 Intro, 6.3.1, 6.3.2)</li> <li>• The <i>Application Management function</i> (SO 6.5 Intro, 6.5.1, 6.5.2)</li> <li>• The <i>IT Operations Management function (IT Operations Control and Facilities Management)</i> (SO 6.4 Intro, 6.4.1, 6.4.2)</li> </ul> <p><b>The recommended study period for this unit is minimum 15 minutes.</b></p>
ITILFND07	<p><b>Roles</b></p>

Unit	Content
	<p>The purpose of this unit is to help the candidate account for and be aware of the responsibilities of some of the key <i>roles</i> in <i>Service Management</i>.</p> <p>Specifically, candidates must be able to:</p> <p>07-1. Account for the <i>role</i> and the responsibilities of the</p> <ul style="list-style-type: none"> <li>• <i>Process owner</i> (SD 6.4 Intro, 6.4.1)</li> <li>• <i>Service owner</i> (CSI 6.1.Intro, 6.1.4)</li> </ul> <p>07-2. Recognize the <i>RACI</i> model and explain its role in determining <i>organizational</i> structure. (SD 6 Intro, CSI 6.2 – not RACI-VS or RASCI)</p> <p><b><i>The recommended study period for this unit is minimum 30 minutes.</i></b></p>
ITILFND09	<p><b>ITIL Qualification scheme</b></p> <p>The purpose of this unit is to help the candidate</p> <p>09-1. Explain the ITIL <i>Qualification</i> scheme, distinguish between the purposes of the two intermediate streams, mention the included certificates, ITIL Expert and ITIL Master, and understand the different options for further training.</p> <p><b><i>The recommended study period for this unit is minimum 15 minutes.</i></b></p>
ITILFND10	<p>The following learning unit highlights the main differences related to expected knowledge from earlier ITIL versions. The main differences shall be explained in the ITIL V3 Foundation Bridge Course, not the full content. These main differences will probably be covered as part of the training in the other units, but add a study period of at least 30 minutes.</p> <p><b>Some key differences from earlier ITIL versions:</b></p> <p>Based on earlier ITIL versions, candidates should be able to explain the main differences in the following topics:</p> <p><b>Service Strategy</b></p> <p>03-4. <i>Service Catalogue (Business Service Catalogue and Technical Service Catalogue)</i> (SS 4.2.3.1, SD 4.1.4)</p> <p>03-9. <i>Service Provider</i> (SS 3.3 Intro) (The 3 main types of service providers are NOT required in detail)</p> <p><b>Service Transition</b></p> <p>03-21. <i>Change types (Normal, Standard and Emergency)</i> (ST 4.2.6.1, 4.2.4.5, 4.2.6.9)</p> <p>03-23. Concept of Seven R's of <i>Change Management</i> (ST 4.2.6.4); no requirement to learn list</p> <p>05-51B. <i>Change Management</i> (ST 4.2)</p> <ul style="list-style-type: none"> <li>• Types of change request (ST 4.2.4.3, Table 4.3)</li> <li>• Change process models and workflows (ST 4.2.4.4)</li> <li>• Standard change (ST 4.2.4.5)</li> <li>• Remediation Planning (ST 4.2.5)</li> <li>• Change Advisory Board / Emergency Change Advisory Board (ST</li> </ul>

Unit	Content
	<p style="text-align: center;">4.2.6.8)</p> <p>05-52B. State the <i>objectives</i> and basic concepts for:</p> <ul style="list-style-type: none"> <li>• <i>Service Asset and Configuration Management (SACM)</i> (ST 4.3 Intro, 4.3.1, 4.3.4) (Understand the information structure and new terminology related to CMDB, DML, KEDB CMS and SKMS related to the concept of “data-information-knowledge-wisdom”)</li> </ul> <p>05-61. State the <i>objectives</i> and basic concepts for:</p> <ul style="list-style-type: none"> <li>• Release and Deployment Management (ST 4.4 Intro, 4.4.1, 4.4.4, 4.4.4.1, 4.4.4.2 )</li> </ul> <p><b><i>Service Operation</i></b></p> <p>05-72B. State the <i>objectives</i> and basic concepts for:</p> <ul style="list-style-type: none"> <li>• Problem Management (SO 4.4 ) not PM Techniques</li> </ul> <p><b><i>It is recommended that this unit is covered as part of the training in the other units.</i></b></p> <p><b><i>The recommended study period for this unit is minimum 30 minutes.</i></b></p>
ITILFND11	<p><b>Mock exam</b></p> <p>The purpose of this unit is to help the candidate to pass the ITIL Foundation Bridge exam.</p> <p>Specifically, candidates must:</p> <p style="padding-left: 40px;">11-1. Sit minimum one ITIL Foundation Bridge mock exam.</p> <p><b><i>The recommended study period for this unit is a minimum 1.0 hour inclusive of revision.</i></b></p>

## Format of the Examination

This syllabus has an accompanying examination at which the candidate must achieve a pass score to gain the ITIL V3 Foundation Bridge Certificate in IT Service Management.

Type	Multiple choice, 20 questions. The questions are selected from the full ITIL Foundation in IT Service Management examination question bank.
Duration	Maximum 30 minutes. Candidates sitting the examination in a language other than their native language have a maximum of 40 minutes and are allowed the use of a dictionary.
Prerequisite	Foundation Certificate from earlier ITIL versions and completion of an accredited Course from an ITIL Accredited Training Provider.
Supervised	Yes
Open Book	No
Pass Score	65 % (13 out of 20)
Distinction Score	None
Delivery	Online or paper based through an Accredited Training Organization / Provider.

# **ITIL® V3 Foundation**

## **Appendix F: Bridging Sample Exam 1**

## Document Control Information

Document Details	
Document Name	ITILv3FoundationBRIDGESampleA_v3.1
Purpose of Document	To help candidates prepare for the ITIL® v.3 Foundation Bridge Examination based on the Foundation Bridge syllabus version 4
Document Version Number	3.1
Document Status	Live
Document Owner	Chief Examiner
Prepared By	ITIL® v.3 Examination Panel
Date of First Draft	19 January 2009
Date Approved	24 March 2009
Approved By	Chief Examiner
Next Scheduled Review Date	

Version History		
Version Number	Date Approved	Change/Reasons for Change/Comments
3.0	19 January 2009	New Document
3.1	24 March 2009	Questions 2 and 6 replaced

Distribution List		
Version	Name	Title/Company
3.0	All ITIL® Els and ATOs	
3.1	All ITIL® Els and ATOs	



## ***The ITIL® v.3. Foundation Bridge Examination***

*ITIL® v. 3 Foundation Bridge Examination:  
Sample Paper A, version 3.1*

Multiple Choice

### ***Instructions***

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1. All 20 questions should be attempted.
2. There are no trick questions.
3. All answers are to be marked on the original examination paper.
4. Please use a pen to mark your answers with either a ✓ or x .
5. You have 30 minutes to complete this paper.
6. You must get 13 or more correct to pass.

***Candidate Number:*** .....

- 1 Operations Control refers to?
- a) The managers of the Technical and Applications Management functions
  - b) Overseeing the execution and monitoring of operational activities and events
  - c) The tools used to monitor and display the status of the IT Infrastructure and Applications
  - d) The situation where the Service Desk is required to monitor the status of the infrastructure when Operators are not available
- 2 Which of the following statements are correct?
- 1. Problem Management can support the Service Desk by providing Known Errors to speed up incident resolution
  - 2. Problem Management provides information to Service Level Management about the impact of changes
- a) 1 only
  - b) 2 only
  - c) Both of the Above
  - d) Neither of the Above
- 3 Functions are BEST described as?
- a) A body of knowledge
  - b) Closed loop systems
  - c) Self-Contained units of organizations
  - d) Projects focusing on transformation
- 4 Which of the following is NOT defined as a main metric type by Continual Service Improvement (CSI)?
- a) Process Metrics
  - b) Service Metrics
  - c) Personnel Metrics
  - d) Technology Metrics

- 5 The Service Design Package should detail all aspects of the service and its requirements through subsequent stages of its lifecycle.  
Which of the following are valid elements?
1. Agreed and documented Business Requirements
  2. A service definition for operations
  3. Requirements for new or changed processes
  4. Metrics to measure the service
- a) 1 only
- b) 2 and 3 only
- c) 1, 2 and 4 only
- d) All of the above
- 6 Which of the following statements about a standard change is INCORRECT?
- a) A standard change is one for which the approach is pre-authorized by Change Management
  - b) Each standard change is granted by the nominated authority for that change
  - c) Standard changes are usually low risk and well understood
  - d) Standard changes are only raised using the Request Fulfilment process
- 7 In which core publication can you find detailed descriptions of Demand Management and Financial Management?
- a) Service Operation
  - b) Service Strategy
  - c) Service Transition
  - d) Continual Service Improvement
- 8 Which of the following should a Service Catalogue contain?
- a) The version information of all software
  - b) The organizational structure of the company
  - c) Asset information
  - d) Details of all operational services

- 9 Which of the following statements is CORRECT for all IT services?
- a) They deliver resources and capabilities to customers
  - b) They deliver costs and risks to customers
  - c) They deliver business solutions to customers
  - d) They deliver value to customers
- 10 Which of the following statements are CORRECT?
- 1. Service Transition provides guidance on moving new and changed services into production
  - 2. Service Transition provides guidance on testing
  - 3. Service Transition provides guidance on the transfer of services to or from an external service provider
- a) 1 and 2 only
  - b) 1 only
  - c) All of the above
  - d) 1 and 3 only
- 11 Which statement about the relationship between the Configuration Management System (CMS) and the Service Knowledge Management System (SKMS) is CORRECT?
- a) The SKMS is part of the CMS
  - b) The CMS forms part of the SKMS
  - c) The CMS and SKMS are the same thing
  - d) There is no relationship between the CMS and the SKMS
- 12 Which of the following statements about Supplier Management is INCORRECT?
- a) Supplier Management negotiates Operational Level Agreements (OLAs) with internal groups to support the delivery of services
  - b) Supplier Management ensures that suppliers meet business expectations
  - c) Supplier Management maintains information in a Supplier and Contract Database
  - d) Supplier Management negotiates external agreements to support the delivery of services

- 13 Which of the following is NOT an objective of Service Operation?
- a) Thorough testing to ensure that services are designed to meet business needs
  - b) To deliver and manage IT services
  - c) To manage the technology used to deliver services
  - d) To monitor the performance of technology and processes
- 14 Which of the following BEST describes the purpose of Event Management?
- a) The ability to detect events, make sense of them and determine the appropriate control action
  - b) The ability to implement monitoring tools
  - c) The ability to monitor and control the activities of technical staff
  - d) The ability to report on the successful delivery of services by checking the uptime of infrastructure devices
- 15 A Process Owner is responsible for which of the following?
- a) Purchasing tools to support the process
  - b) Ensuring that targets specified in a Service Level Agreement (SLA) are met
  - c) Carrying out activities defined in the process
  - d) Ensuring that the process is performed as documented
- 16 Which statement about Value Creation through services is CORRECT?
- a) The customer's perception of the service is an important factor in Value Creation
  - b) The value of a service can only ever be measured in financial terms
  - c) Delivering customer outcomes is unimportant in the value of a service
  - d) Service provider preferences drive the value perception of a service

- 17 Which of the following is an objective of Continual Service Improvement?
1. To improve process efficiency and effectiveness
  2. To improve services
  3. To improve all phases of the Service Lifecycle except Service Strategy
  4. To improve standards such as ISO/IEC 20000
- a) 1 and 2 only
  - b) 2 only
  - c) 1, 2 and 3 only
  - d) All of the above
- 18 Which of the following is a MAJOR activity of Demand Management?
- a) Increasing customer value
  - b) Understanding patterns of business activity
  - c) Increasing the value of IT
  - d) Aligning the business with IT cost
- 19 The Information Security Policy should be available to which groups of people?
- a) Senior Business Managers and all IT staff
  - b) Senior Business Managers, IT Executives and the Security Manager
  - c) All Customers, Users and IT staff
  - d) Information Security Management staff only
- 20 Defining the functional requirements for a new service is part of:
- a) Service Operation: Application Management
  - b) Service Strategy: Service Portfolio Management
  - c) Service Design: Design the technology architecture
  - d) Service Design: Design the service solutions

**Answer Key for Exam Paper: ITILv3FoundationBRIDGESampleA\_v3.1**

<b>Q</b>	<b>A</b>	<b>Syllabus Ref</b>
1	B	06-02
2	A	05-72B
3	C	01-04
4	C	04-10
5	D	03-14
6	D	05-51B
7	B	05-22
8	D	05-41
9	D	01-02
10	C	02-06
11	B	03-16
12	A	05-44
13	A	02-08
14	A	05-81
15	D	07-01
16	A	04-02
17	A	02-10
18	B	05-21
19	C	05-43
20	D	04-04

# **ITIL® V3 Foundation**

## **Appendix G: Bridging Sample Exam 2**

## Document Control Information

Document Details	
Document Name	ITILv3FoundationBRIDGESampleB_v3.1
Purpose of Document	To help candidates prepare for the ITIL® v.3 Foundation Bridge Examination based on the Foundation Bridge syllabus version 4
Document Version Number	3.1
Document Status	Live
Document Owner	Chief Examiner
Prepared By	ITIL® v.3 Examination Panel
Date of First Draft	19 January 2009
Date Approved	24 March 2009
Approved By	Chief Examiner
Next Scheduled Review Date	

Version History		
Version Number	Date Approved	Change/Reasons for Change/Comments
3.0	19 January 2009	New Document
3.1	24 March 2009	Question 1 replaced

Distribution List		
Version	Name	Title/Company
3.0	All ITIL® Els and ATOs	
3.1	All ITIL® Els and ATOs	



## **The ITIL<sup>®</sup> v.3. Foundation Bridge Examination**

*ITIL<sup>®</sup> v. 3 Foundation Bridge Examination:  
Sample Paper B, version 3.1*

Multiple Choice

### **Instructions**

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1. All 20 questions should be attempted.
2. There are no trick questions.
3. All answers are to be marked on the original examination paper.
4. Please use a pen to mark your answers with either a ✓ or x .
5. You have 30 minutes to complete this paper.
6. You must get 13 or more correct to pass.

**Candidate Number:** .....

- 1 Which process is responsible for recording relationships between service components?
  - a) Service Level Management
  - b) Service Portfolio Management
  - c) Service Asset and Configuration Management
  - d) Incident Management
  
- 2 Where within the Service Lifecycle would it be decided what services we should be offering and to whom they will be offered?
  - a) Continual Service Improvement
  - b) Service Operation
  - c) Service Design
  - d) Service Strategy
  
- 3 "Warranty of a service" means?
  - a) The service is fit for purpose
  - b) There will be no failures in applications and infrastructure associated with the service
  - c) All service-related problems are fixed free of charge for a certain period of time
  - d) Customers are assured of certain levels of availability, capacity, continuity and security
  
- 4 What is described by the following statement? "Maintains relationships between all service components and any related incidents, problems, known errors, change and release documentation"
  - a) The Capacity Plan
  - b) The Definitive Media Library
  - c) The Configuration Management System
  - d) A Service Level Agreement

- 5 Which are the missing Service Operation processes from the following?
1. Incident Management
  2. Problem Management
  3. Access Management
  4. ?
  5. ?
- a) Event Management and Request Fulfilment
- b) Event Management and Service Desk
- c) Facilities Management and Event Management
- d) Change Management and Service Level Management
- 6 The BEST definition of an event is?
- a) An occurrence where a performance threshold has been exceeded and an agreed service level has already been impacted
- b) An occurrence that is significant for the management of the IT Infrastructure or delivery of services
- c) A known system defect that generates multiple incident reports
- d) A planned meeting of customers and IT staff to announce a new service or improvement programme
- 7 Which Service Lifecycle phase is responsible for ensuring that existing measurement methods can provide the required metrics for new or changed services?
- a) Service Design
- b) Service Operation
- c) Continual Service Improvement
- d) Service Delivery
- 8 Which of the following statements is CORRECT for ALL processes?
- a) They define activities, roles, responsibilities, functions and metrics
- b) They create value for stakeholders
- c) They are carried out by a Service Provider in support of a Customer
- d) They are units of organizations responsible for specific outcomes

- 9 Which of the following statements is CORRECT?
1. Continual Service Improvement (CSI) provides guidance on how to improve process efficiency and effectiveness
  2. CSI provides guidance on how to improve services
  3. CSI provides guidance on the improvement of all phases of the Service Lifecycle
  4. CSI provides guidance on the measurement of processes and services
- a) 1 and 2 only
- b) 2 only
- c) 1, 2 and 3 only
- d) All of the above
- 10 Which of the following statements about a Change process model is CORRECT?
- a) A Change process model should not be used for emergency changes
- b) A Change process model should be constructed when a significant change is required
- c) A Change process model predefines steps that should be taken to handle a Change in an agreed way
- d) Escalation procedures are outside the scope of a Change process model
- 11 Which of the following statements is CORRECT about patterns of demand generated by the customer's business?
- a) They are driven by patterns of business activity
- b) It is impossible to predict how they behave
- c) It is impossible to influence demand patterns
- d) They are driven by the delivery schedule generated by Capacity Management

- 12 Which statements about Key Performance Indicators (KPIs) and Metrics are CORRECT?
1. Service metrics measure the end-to-end service
  2. KPIs should relate to a Critical Success Factor
  3. Continual Service Improvement (CSI) uses process metrics to identify improvement opportunities
  4. KPIs can be both qualitative and quantitative
- a) 1 only
- b) 2 and 3 only
- c) 1, 2 and 4 only
- d) All of the Above
- 13 Which is the first activity of the Continual Service Improvement (CSI) model?
- a) Understand the business objectives
  - b) Carry out a baseline assessment to understand the current situation
  - c) Agree on priorities for improvement
  - d) Create and verify a plan
- 14 Which phase of the Service Lifecycle provides a framework for evaluating service capability and risk profile before a service is deployed?
- a) Service Strategy
  - b) Service Design
  - c) Service Transition
  - d) Service Operation
- 15 Which of the following statements about processes is CORRECT?
1. All processes must have an owner
  2. A process takes one or more inputs and turns them into defined outputs
- a) 1 only
- b) 2 only
- c) Both of the above
- d) Neither of the above

- 16 Which of the following sentences BEST describes a Standard Change?
- a) A Change to the service provider's established policies and guidelines
  - b) A Change that correctly follows the required Change process
  - c) A pre-authorized Change that has an accepted and established procedure
  - d) A Change that is made as the result of an audit
- 17 Facilities Management refers to?
- a) The Management of IT services that are viewed as "utilities", such as printers or network access
  - b) Advice and guidance to IT Operations on methodology and tools for managing IT Services
  - c) The Management of the physical IT environment such as a Data Center
  - d) The procurement and maintenance of tools that are used by IT Operations staff to maintain the infrastructure
- 18 The RACI model ensures which combination of the following roles is allocated for processes?
- a) Responsible, Accountable, Consulted, Informed
  - b) Responsible, Achievable, Consulted, Informed
  - c) Realistic, Accountable, Consulted, Informed
  - d) Responsible, Accountable, Corrected, Informed
- 19 Which of the following statements about Supplier Management is INCORRECT?
- a) Supplier Management negotiates Operational Level Agreements (OLAs) with internal groups to support the delivery of services
  - b) Supplier Management ensures that suppliers meet business expectations
  - c) Supplier Management maintains information in a Supplier and Contract Database
  - d) Supplier Management negotiates external agreements to support the delivery of services

20 Which statement about the Known Error Database (KEDB) is totally correct?

- a) The KEDB is the same database as the Service Knowledge Management System
- b) The KEDB should be used during incident diagnosis phase to try to speed up the resolution process
- c) Care should be taken to avoid duplication of records in the KEDB. This can be done by giving as many technicians as possible access to create new records
- d) Access to the KEDB should be limited to the Service Desk

## ANSWER SHEET

**Answer Key for Exam Paper: ITILv3FoundationBRIDGESampleB\_v3.1**

Q	A	Syllabus Ref
1	C	05-52B
2	D	02-03
3	D	03-01
4	C	03-18
5	A	05-81
6	B	03-24
7	A	04-04
8	B	01-04
9	D	02-10
10	C	05-51B
11	A	05-21
12	D	04-10
13	A	04-09
14	C	02-06
15	C	01-05
16	C	03-21
17	C	06-02
18	A	07-02
19	A	05-44
20	B	05-72B

# ITIL® V3 Foundation

## Appendix H: Sample SLA

# Sample SLA

It is not recommended that every SLA or OLA should necessarily contain all of the sections listed within the following sample documents. It is suggested that these areas are considered when preparing document templates, but that they are only incorporated into the actual documents themselves where they are appropriate and relevant. So the following outlines should only be considered as guidelines or checklists.

## SERVICE LEVEL AGREEMENT (SLA – SAMPLE)

This agreement is made between.....and

.....

The agreement covers the provision and support of the ABC services which..... (brief service description).

This agreement remains valid for 12 months from the (date) until (date). The agreement will be reviewed annually. Minor changes may be recorded on the form at the end of the agreement, providing they are mutually endorsed by the two parties and managed through the Change Management process.

Signatories:

Name.....Position.....Date.....

Name.....Position.....Date.....

### Service description:

The ABC Service consists of.... (a fuller description to include key business functions, deliverables and all relevant information to describe the service and its scale, impact and priority for the business).

### Scope of the agreement:

What is covered within the agreement and what is excluded?

### Service hours:

A description of the hours that the customers can expect the service to be available (e.g. 7 x 24 x 365, 08:00 to 18:00 – Monday to Friday).

Special conditions for exceptions (e.g. weekends, public holidays) and procedures for requesting service extensions (who to contact – normally the Service Desk – and what notice periods are required).

This could include a service calendar or reference to a service calendar.

Details of any pre-agreed maintenance or housekeeping slots, if these impact on service hours, together with details of how any other potential outages must be negotiated and agreed – by whom and notice periods etc.

Procedures for requesting permanent changes to service hours.

### Service availability:

The target availability levels that the IT service provider will seek to deliver within the agreed service hours. Availability targets within agreed service hours, normally expressed as percentages (e.g. 99.5%), measurement periods, method and calculations must be stipulated. This figure may be expressed for the overall service, underpinning services and critical components or all three.

However, it is difficult to relate such simplistic percentage availability figures to service quality, or to customer business activities. It is therefore often better to try to measure service unavailability in terms of the customer's inability to conduct its business activities. For example, 'sales are immediately affected by a failure of IT to provide an adequate POS support service'. This strong link

between the IT service and the customer's business processes is a sign of maturity in both the SLM and the Availability Management processes.

Agreed details of how and at what point this will be measured and reported, and over what agreed period should also be documented.

### **Reliability:**

The maximum number of service breaks that can be tolerated within an agreed period (may be defined either as number of breaks e.g. four per annum, or as a Mean Time Between Failures (MTBF) or Mean Time Between Systems Incidents (MTBSI)).

Definition of what constitutes a 'break' and how these will be monitored and recorded.

### **Customer support:**

Details of how to contact the Service Desk, the hours it will be available, the hours support is available and what to do outside these hours to obtain assistance (e.g. on-call support, third-party assistance etc.) must be documented. The SLA may also include reference to internet/Intranet Self Help and/or Incident logging. Metrics and measurements should be included such as telephone call answer targets (number of rings, missed calls etc.)

Targets for Incident response times (how long will it be before someone starts to assist the customer – may include travelling time etc.)

A definition is needed of 'response' – Is it a telephone call back to the customer or a site visit? – as appropriate.

Arrangements for requesting support extensions, including required notice periods (e.g. request must be made to the Service Desk

by 12 noon for an evening extension, by 12 noon on Thursday for a week-end extension)

Note. Both Incident response and resolution times will be based on whatever Incident impact/priority codes are used – details of the classification of Incidents should also be included here.

Note. In some cases, it may be appropriate to reference out to third-party contacts and contracts and OLAs – but not as a way of diverting responsibility.

### **Contact points and escalation:**

Details of the contacts within each of the parties involved in the agreement and the escalation processes and contact points. This should also include the definition of a complaint and procedure for managing complaints.

### **Service performance:**

Details of the expected responsiveness of the IT service (e.g. target workstation response times for average, or maximum workstation response times, sometimes expressed as a percentile – e.g. 95% within two seconds), details of expected service throughput on which targets are based, and any thresholds that would invalidate the targets).

This should include indication of likely traffic volumes, throughput activity, constraints and dependencies (e.g. the number of transactions to be processed, number of concurrent users, and amount of data to be transmitted over the network). This is important so that performance issues that have been caused by excessive throughput outside the terms of the agreement may be identified.

### **Batch turnaround times:**

If appropriate, details of any batch turnaround times, completion times and key deliverables, including times for delivery of input and the time and place for delivery of output where appropriate.

### **Functionality (if appropriate):**

Details of the minimal functionality to be provided and the number of errors of particular types that

can be tolerated before the SLA is breached. Should include severity levels and the reporting period.

### **Change Management:**

Brief mention of and/or reference out to the organization's Change Management procedures that must be followed – just to reinforce compliance. Also targets for approving, handling and implementing RFCs, usually based on the category or urgency/priority of the change, should also be included and details of any known changes that will impact on the agreement, if any.

### **Service Continuity:**

Brief mention of and/or reference out to the organization's Service Continuity Plans, together with details of how the SLA might be affected or reference to a separate Continuity SLA, containing details of any diminished or amended service targets should a disaster situation occur. Details of any specific responsibilities on both sides (e.g. data backup, off-site storage). Also details of the of plans and coverage of any security issues, particularly any customer responsibilities (e.g. coordination of business activities, business documentation, backup of freestanding PCs, password changes).

### **Security:**

Brief mention of and/or reference out to the organization's Security Policy (covering issues such as password controls, security violations, unauthorized software, viruses etc.). Details of any specific responsibilities on both sides (e.g. Virus Protection, Firewalls).

### **Printing:**

Details of any special conditions relating to printing or printers (e.g. print distribution details, notification of large centralized print runs, or handling of any special high-value stationery).

### **Responsibilities:**

Details of the responsibilities of the various parties involved within the service and their agreed responsibilities, including the service provider, the customer and the users.

### **Charging (if applicable):**

Details of any charging formulas used, charging periods, or reference out to charging policy documents, together with invoicing procedures and payment conditions etc. must be included. This should also include details of any financial penalties or bonuses that will be paid if service targets do not meet expectations. What will the penalties/bonuses be and how will they be calculated, agreed and collected/paid (more appropriate for third-party situations). If the SLA covers an outsourcing relationship, charges should be detailed in an Appendix as they are often covered by commercial in-confidence provisions.

It should be noted that penalty clauses can create their own difficulties. They can prove a barrier to partnerships if unfairly invoked on a technicality and can also make service provider staff unwilling to admit to mistakes for fear of penalties being imposed. This can, unless used properly, be a barrier to developing effective relationships and problem solving.

### **Service reporting and reviewing:**

The content, frequency, content, timing and distribution of service reports, and the frequency of associated service review meetings. Also details of how and when SLAs and the associated service targets will be reviewed and possibly revised, including who will be involved and in what capacity.

### **Glossary:**

Explanation of any unavoidable abbreviations or terminology used, to assist customer understanding.

### **Amendment sheet:**

To include a record of any agreed amendments, with details of amendments, dates and signatories. It should also contain details of a complete change history of the document and its revisions. It should be noted that the SLA contents given above are examples only. They should not be regarded as exhaustive or mandatory, but they provide a good starting point.

# ITIL® V3 Foundation

## Appendix J: The Service Design Package

# The Service Design Package

A 'Service Design Package' or SDP should be produced during the design stage, for each new service, major change to a service or removal of a service or changes to the 'Service Design Package' itself. This pack is then passed from Service Design to Service Transition and details all aspects of the service and its requirements through all of the subsequent stages of its lifecycle. The SDP should contain:

## Contents of the Service Design Package

Category	Sub-category	Description of what is in the SDP
Requirements	Business requirements	The initial agreed and documented business requirements
	Service applicability	This defines how and where the service would be used. This could reference business, customer and user requirements for internal services
	Service contacts	The business contacts, customer contacts and stakeholders in the service
Service Design	Service functional requirements	The changed functionality of the new or changed service, including its planned outcomes and deliverables, in a formally agreed Statement of Requirements (SoR)
	Service Level Requirements	The SLR, revised or new SLA, including service and quality targets
	Service and operational management requirements	Management requirements to manage the new or changed service and its components, including all supporting services and agreements, control, operation, monitoring, measuring and reporting
	Service Design and topology	<p>The design, transition and subsequent implementation and operation of the service solution and its supporting components, including:</p> <ul style="list-style-type: none"> <li>-The service definition and model, for transition and operation</li> <li>-All service components and infrastructure (including H/W, S/W, networks, environments, data, applications, technology, tools, documentation), including version numbers and relationships, preferably within the CMS</li> <li>-All user, business, service, component, transition, support and operational documentation</li> <li>-Processes, procedures, measurements, metrics and reports</li> <li>-Supporting products, services, agreements and suppliers</li> </ul>
Organizational Readiness Assessment	Organizational Readiness Assessment	'Organizational Readiness Assessment' report and plan, including: business benefit, financial assessment, technical assessment, resource assessment and organizational assessment, together with details of all new skills, competences, capabilities required of the service provider organization, its suppliers, supporting services and contracts
Service Lifecycle Plan	Service Programme	An overall programme or plan covering all stages of the lifecycle of the service, including the timescales and phasing, for the transition,

operation and subsequent improvement of the new service including:

- Management, coordination and integration with any other projects, or new or changed activities, services or processes
- Management of risks and issues
- Scope, objectives and components of the service
- Skills, competences, roles and responsibilities
- Processes required
- Interfaces and dependencies with other services
- Management of teams, resources, tools, technology, budgets, facilities required
- Management of suppliers and contracts
- Progress reports, reviews and revision of the programme and plans
- Communication plans and training plans
- Timescales, deliverables, targets and quality targets for each stage

Service  
Transition Plan

Overall transition strategy, objectives, policy, risk assessment and plans including:

-Build policy, plans and requirements, including service and component build plans, specifications, control and environments, technology, tools, processes, methods and mechanisms, including all platforms

-Testing policy, plans and requirements, including test environments, technology, tools, processes, methods and mechanisms

-Testing must include:

Functional testing

Component testing, including all suppliers, contracts and externally provided supporting products and services

User acceptance and usability testing

System compatibility and integration testing

Service and component performance and capacity testing

Resilience and continuity testing

Failure, alarm and event categorization, processing and testing

Service and component, security and integrity testing

Logistics, release and distribution testing

Management testing, including control, monitoring, measuring and reporting, together with backup, recovery and all batch scheduling

and processing

-Deployment policy, release policy, plans and requirements, including logistics, deployment, roll-out, staging, deployment environments, cultural change, organisational change, technology, tools, processes, approach, methods and mechanisms, including all platforms, knowledge, skill and competence transfer and development, supplier and contract transition, data migration and conversion

Service  
Operational  
Acceptance Plan

Overall operational strategy, objectives, policy, risk assessment and plans including:

-Interface and dependency management and planning

-Events, reports, service issues, including all changes, releases, resolved incidents, problems and known errors, included within the service and any errors, issues or non-conformances within the new service

-Final service acceptance

Service  
Acceptance  
Criteria

Development and use of Service Acceptance Criteria (SAC) for progression through each stage of the Service Lifecycle, including:

-All environments

-Guarantee and pilot criteria and periods

# ITIL® V3 Foundation

## Appendix K: Requests by Lifecycle Stage

**Example of types of request by service lifecycle stage**

Type of change with examples	Documented work procedures	Service Strategy	Service Design	Service Transition	Service Operation	Continual Service Improvement
<b>Request for Change to Service Portfolios</b> <ul style="list-style-type: none"> <li>- New portfolio line item</li> <li>- To predicted scope, Business Case, baseline</li> <li>- Service pipeline</li> </ul>	Service Change Management	✓				
<b>Request for Change to Service or service definition</b> <ul style="list-style-type: none"> <li>- To existing or planned service attributes</li> <li>- Project change that impacts Service Design, e.g. forecasted warranties</li> <li>- Service improvement</li> </ul>	Service Change Management	✓	✓	✓	✓	✓
<b>Project change proposal</b> <ul style="list-style-type: none"> <li>- Business change</li> <li>- No impact on service or design baseline</li> </ul>	Project Change Management procedure		✓	✓		✓
<b>User access request</b>	User access procedure				✓	
<b>Operational activity</b> <ul style="list-style-type: none"> <li>- Tuning (within specification/constraints)</li> <li>- Re-boot hardware on failure if no impact on other services</li> <li>- Planned maintenance</li> </ul>	Local procedure (often pre-authorised)				✓	

# ITIL® V3 Foundation

## Appendix L: Exercises

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## Background to Case Study

### **Merricks Environmental Management**

You are working in Merricks Environmental Management Pty Ltd, a start up environmental engineering organization. They decontaminate former industrial sites so that the sites can be redeveloped. Merricks are currently cleaning up a site which used to be a storage site for a major petrochemical company. It is prime land, and developers intend to build an apartment complex on the site once it has been fully decontaminated. There are twenty full time employees working on the site (with additional subcontractors as required).

As expected, the preparation of the site involves a lot of heavy machinery, with bulldozers, graders, trucks, and excavators in constant use. In addition to the machinery operators is a team of engineers and chemists who are continuously measuring and monitoring levels of potentially dangerous chemicals in the soil. The results of this monitoring is entered into the company's database. The site office has two networked PCs.

Although the project involves a lot of earthmoving equipment, there is also a heavy reliance on IT as a result of the legal requirement to report on the monitoring results. This is especially sensitive as the site is located next to a major river. Understandably, there is a never ending need to be 100% up to date on current events and news to ensure that Merricks are always prepared in the case of any potentially bad media coverage.

Recently, there was an incident which could have been very damaging to the company which involved a report on morning radio of contaminants leaking into the local river as a result of poor practices. Ultimately this turned out to be untrue. The potential for damage to the company's reputation was managed well largely because the results of all recent test and monitoring were available immediately.

Daily reporting is performed on all activities and monitoring levels. This information is used for the reporting and information management mentioned above. IT is also used for project management and general email communication.

In support of the 20 on site staff, there are another 15 people located in the head office who are monitoring and managing the project and activities, making sales, performing admin, providing management, providing IT and managing finance. There are two people working in IT, supporting about 35 staff in total.

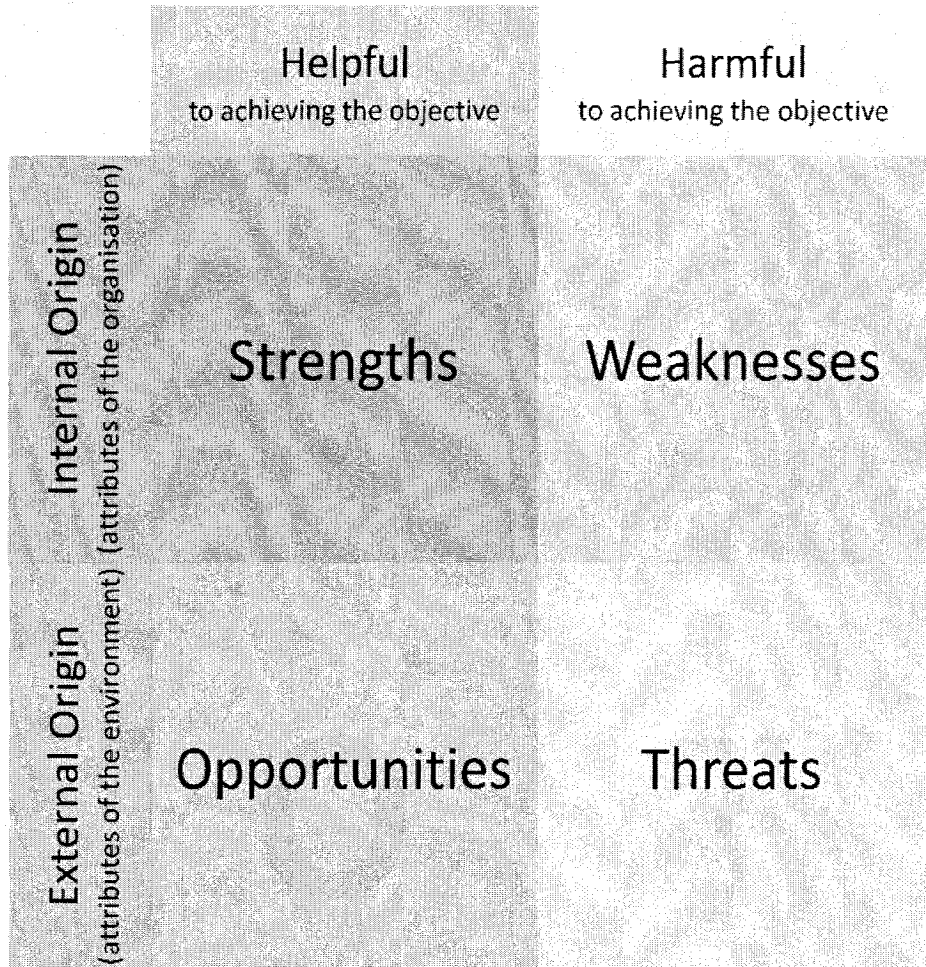
The IT systems have been added to as the company has grown, with hardware and software being purchased as required from a number of local vendors. The Finance Manager has been Managing IT when he could, and has been happy for the IT staff to fix things as they went wrong, as a result, there is a lot of quite old hardware which is still in use. Although there are applications which could make the organization

run more smoothly (better project management software, monitoring equipment, email, etc), they have not been considered until now. Because the company is growing, there are now requirements to report in certain formats to the relevant authorities and this is not possible without a complete change in Merricks' approach to IT.

# Service Strategy – SWOT Analysis

## Background

A SWOT Analysis is a tool used to help organisations understand themselves and their environment. SWOT stands for Strengths, Weaknesses, Opportunities and Threats. A SWOT analysis breaks down the challenges facing an organisation into two dimensions – Helpful/Harmful and External/ Internal, and these can be best understood using the following diagram.



## Exercise

Based on the information contained in the case study, perform a SWOT analysis on Merricks.

# Service Design

## Background

It has now been two years since Merricks first began investigating how IT can benefit their business. The outcomes of those initial discussions were a series of suggestions to be considered and a number of business cases were tabled. Many of these (including the management of email, project management software, and a number of other basic improvements) gave management an enormous amount of flexibility in their options and helped to prepared IT for the growth which the business has seen in the intervening two years.

Merricks now have 250 employees and are managing 15 sites. Ten of these are located in the one city, not far from each other. The other 5 are located in the country – each about 600 kms apart. They are all for the one mining company who need to decontaminate their old refining plants before selling them off as parklands.

One of the suggestions which have been made to Merricks management is to consider the use of a system called RCMS (Remote Contaminant Monitoring System). RCMS is a monitoring system which measures levels of contaminants in the soil without requiring on site specialists. This would involve a series of probes (about 30 per site) being driven into the ground. Each probe contains a series of sensors and a transmitter. All of the monitoring information gathered by each probe is wirelessly transmitted to a central monitoring hub. Each of the 5 sites will require one central hub.

The hubs notify head office:

1. On a regular, daily basis to report all monitoring results from the previous day
2. In the case of an exception. For example if any of the measurements have exceeded tolerances. This reporting is ad hoc.

## Requirements

After listening to your presentation of the business case, and investigating other options, management have decided that this is a system which would be worth investing in and they would like to develop an agreement with RCMS.

As a minimum, an SLA should include:

- A simple description of the service and the deliverables
- The agreed service hours
- Incident response times and resolution times and response time for changes
- Service availability, security and continuity (i.e. disaster) targets
- Customer and provider responsibilities
- Critical business periods and exceptions

## Exercise

Create a Service Level Agreement to cover this service. You only need to provide bullet points covering what would go under each heading. For the headings, use the list above.

In a real situation, you would have a client to provide you with expectations (e.g. the required opening hours of the Service Desk). In the absence of this client, feel free to be creative with any information not contained in this exercise. I.e. make it up.

# Service Transition

## Background

The RCMS service has been running successfully for the past 12 months on the five sites, however there have been legislative changes which have an impact on your monitoring. These changes relate to research which has been undertaken and they have discovered the following:

1. The chemical carstine has been found to be much more dangerous than previously thought, and the acceptable levels of this chemical in the soil have been adjusted down from 10 grams per cubic metre to 1 gram per cubic metre.
2. A chemical grampinism which was formerly considered non toxic has been found to be highly poisonous, and now needs to be monitored.

As a result of these two findings, all of the sensors (150 in all) need to be reconfigured. In addition, it seems timely to replace the batteries in the sensors and perform routine maintenance on them while this work is being undertaken.

## Exercise

### Option 1

Describe the steps required from beginning to end (initial request to successful post implementation review) and identify two things:

1. Who will be responsible for each step
2. What needs to be done at each step

### Option 2

1. Determine whether this is one change, or more than one change, and list your reasons for this.
2. Determine whether this is one release, or more than one release, and list your reasons for this.
3. Complete the 7 R's for the change (or one of the changes if you decide there are more than one)
4. Fill out a Request for Change form for the change (or one of the changes if you decide there is more than one). This will include defining what fields you think should be on the form, and then completing the information which will be required for this particular change.

# Service Operation

## Background

You have been given the task of designing the forms for the Service Desk tool which RCMS will be using. In order to do this, you need to decide what information needs to be collected for Incidents, Problems and Known Errors.

## Exercise

List the fields which you will have on each of the three screens:

- The screen for recording Incidents
- The screen for recording Problems
- The screen for recording Known Errors

# Continual Service Improvement

## Background

There are four reasons to measure, these are:

1. To validate
2. To direct
3. To justify
4. To intervene

## Exercise

Using Merricks as an example, create one imaginary scenario to illustrate each of these 4 reasons to measure. E.g. In the case of point 2 “Measurement for direction” – you need to describe a situation when measurement for direction was required.

Explain what brought it about; what was done; and how measurement for direction was relevant.

# ITIL® V3 Foundation

## Appendix M: ITIL® Cheat Sheet

	STRATEGY	DESIGN	TRANSITION	OPERATION	CONTINUOUS IMPROVEMENT
Goal	To help organisations operate and grow over the long term by developing strategic thinking.	Holistic approach to the design of new and changed services.	Integrate services into the business with reduced variations, KE & risks while setting expectations & ensuring usability.	Coordinate & perform activities to deliver & manage services at agreed levels, along with underlying tech.	Continually align IT services with changing business needs by implementing service improvements.
Objectives	To be able to answer the following: <ul style="list-style-type: none"> <li>What services should we offer and to whom?</li> <li>How to differentiate ourselves?</li> <li>How to create value for our stakeholders?</li> <li>How to define service quality?</li> <li>How to efficiently allocate resources?</li> </ul>	<ul style="list-style-type: none"> <li>To design: <ul style="list-style-type: none"> <li>Services to satisfy biz objectives</li> <li>Services that can be easily and efficiently developed &amp; enhanced</li> <li>Secure, resilient IT infrastructure</li> <li>Metrics for assessing design</li> </ul> </li> <li>Find/manage risks in svcs going in</li> <li>Produce &amp; maintain documentation</li> <li>Assist in policy development</li> <li>Develop skills within IT to do all this</li> </ul>	<ul style="list-style-type: none"> <li>To plan &amp; manage resources to go live with new or changed svc within cost, quality &amp; time predictions</li> <li>Ensure min. unpredicted impact on live services, ops and support org</li> <li>Increase ST practices satisfaction</li> <li>Increase proper use of services, underlying apps and tech solutions</li> <li>Provide complete plans to enable chg projects to align with ST plans</li> </ul>	<ul style="list-style-type: none"> <li>Event &amp; Alert</li> <li>Incident</li> <li>Impact, Urgency &amp; Priority</li> <li>Service Request</li> <li>Problem &amp; Known Error</li> <li>Known Error Data Base</li> <li>Workaround</li> <li>Communication</li> </ul>	<ul style="list-style-type: none"> <li>To review, analyse &amp; make recommendations on improvement opportunities in each lifecycle</li> <li>Review &amp; analyse Service Level Achievements</li> <li>Identify &amp; implement improvements</li> <li>Improve cost effectiveness</li> <li>Ensure applicable QM used to support continual improvement</li> </ul>
Processes	<ul style="list-style-type: none"> <li>Demand Management</li> <li>Financial Mgt</li> </ul>	<ul style="list-style-type: none"> <li>Service Level Management</li> <li>Service Catalogue Management</li> <li>Availability Management</li> <li>Information Security Management</li> <li>Supplier Management</li> <li>Capacity Management</li> <li>IT Service Continuity Management</li> </ul>	<ul style="list-style-type: none"> <li>Change Management</li> <li>Service Asset and Configuration Management</li> <li>Release and Deployment Management</li> <li>Knowledge Management</li> </ul>	<ul style="list-style-type: none"> <li>Incident Management</li> <li>Problem Management</li> <li>Event Management</li> <li>Request Fulfillment</li> <li>Access Management</li> </ul>	
Key Principles & Models	<ul style="list-style-type: none"> <li>Value Creation through Services</li> <li>Good Practice</li> <li>Service &amp; Service Management</li> <li>Functions, Roles and Processes</li> <li>Process model &amp; characteristics (Measurable, Specific results, Customers, triggered)</li> <li>Service Lifecycle</li> </ul>	<ul style="list-style-type: none"> <li>Importance of People, Processes, Products and Partners in SM</li> <li>Five major aspects of SD: <ol style="list-style-type: none"> <li>Service Portfolio Design</li> <li>Definition of Biz &amp; Service Reqs, and design of Services</li> <li>Tech &amp; arch design</li> <li>Process design</li> <li>Measurement design</li> </ol> </li> </ul>			<ul style="list-style-type: none"> <li>Deming Plan, Do, Check and Act</li> <li>CSI Model: vision (obj), where r we (baseline), where next (targets), next steps (proc imp), there yet? (metrics), keeping momentum</li> <li>Role of measurement in CSI and: <ul style="list-style-type: none"> <li>Business value</li> <li>Baselines</li> <li>Metric Types (technical, process, service)</li> </ul> </li> </ul>
Business Value		<p><i>Cost of svc are designed &amp; predicted</i></p> <ul style="list-style-type: none"> <li>Reduced TCO</li> <li>Improved quality, consistency, performance &amp; svc alignment</li> <li>Easier implementation of new or changed services:</li> <li>More effective IT governance, Service Mgt &amp; IT processes</li> <li>Improved information &amp; decision-making</li> </ul>	<p><i>The cost of services are validated</i></p> <p><i>Improvements to</i></p> <ul style="list-style-type: none"> <li>Time to market ('edge')</li> <li>Transition management e.g. mergers</li> <li>Success rate of changes</li> <li>Predictions of service levels</li> <li>Confidence in compliance with business reqs during change</li> <li>Plan/budget variations</li> <li>Productivity of staff from planning and service use</li> <li>Understanding of risk</li> </ul>	<p><i>Actual value is realized for the customer through the execution of plans, designs and optimisations</i></p> <p><b>Functions</b></p> <ul style="list-style-type: none"> <li>Service Desk, Technical and Application Management, IT Operations Management including IT Operations Control and Facilities Management)</li> <li>Roles of Process and Service owners, RACI</li> <li>Requirements for integrated Service Management Technology</li> <li>How does Service Automation assist with integrating Service Mgt processes</li> </ul>	

Overview	Good Practice	Industry wide practices based on public frameworks, standards, as well as proprietary knowledge of organisations and individuals.
	Service	Means of delivering value to customers by facilitating outcomes without owning costs & risks. In support of a business process, an IT service comprises IT assets & external underpinning services.
	Service Mgt	Set of specialised organisational capabilities for providing value to customers in the form of services; ITIL® Service Mgt is about planning the effective & efficient utilisation of people, process, partner, and product.
	Function	Units of organisations specialised to perform certain types of work and responsible for specific outcomes.
	Role	Roles define responsibility and authority.
	Process	Provide change and transformation toward a goal, and use feedback for self improvement.
	Process model	Process control (vision, owner, measurements); defined inputs, outputs and activities; enablers (resources, capabilities).
	Characteristics	Measurable, Specific results, Customers, and Responds to a specific event.
	Service Lifecycle	Strategy, Design, Transition, Operation and Continuous Improvement.
Strategy	Structure of ITIL®	5 core books describing a service lifecycle plus complementary guidance (eg ), components = principles, concepts, models, processes, definitions.
	Capability	Ability of Organisation, person, Process, Configuration Item or IT Service to carry out an Activity. An intangible Service Asset.
	Resource	IT Infrastructure, people, money or anything else that helps deliver an IT Service. Also a Service Asset.
	Value Creation	When a service fit for purpose (utility) and fit for us (warranty) it creates value, which is a customer perception to be managed. Customers seek fulfilment of their business outcomes.
	Utility	Functionality offered by a Service to meet particular need. Also "what the customer gets". Performance enhancement or constraint relaxation. Fit for purpose.
	Warranty	A promise that a Service will meet agreed Requirements for availability, capacity, security and dependability. Also "how the customer gets it". Fit for use.
	Risk	Uncertainty of outcome - which can be positive (opportunity) or negative (threat).
	Business Case	Decision & planning tool that projects likely consequences of business action, and justification for significant expenditure with Costs, benefits, options, issues, Risks, & possible problems.
	Service Portfolio	Set of Services managed by Provider. Used to manage entire Lifecycle of all Services incl. Service Pipeline (proposed/dev), Service Catalogue (live) (Bus SC & Tech SC), and Retired Services.
Design	Service Provider	Organisation supplying Services to one or more Internal Customers or External Customers. Internal Svc Provider (Type 1), Shared Services Unit (Type 2), Ext Service Provider (Type 3).
	SLA	Written agreement between IT service provider and IT customer(s); defining key service targets and responsibilities of both parties.
	OLA	Agreement between IT service provider and another part of the same organisation that assists with the provision of services.
	Contract	A legally binding Agreement between two or more parties.
	SLP	Service Level Package is a defined level of Utility and Warranty for a particular Service Package. Each SLP is designed to meet the needs of a particular Pattern of Business Activity.
	SDP	Service Design Package are documents defining all aspects of an IT Svc and its Reqs through each lifecycle stage. SDP is produced for each new IT Svc, major Chg, or IT Svc Retirement.
	Availability	Ability of a CI or IT Svc to perform agreed Function when required. Determined by Reliability, Maintainability, Serviceability, Perf & Security. Usually calculated as % based on AST & DT.
Transition	SKMS	Service Knowledge Management System combines CMDB, CMS, Service Portfolio, KEDB and staff experience, user skill levels, supplier abilities.
	Config Item	An asset, service component or other item that is, or will be, under the control of SACM. They may vary widely in complexity, size and type.
	CMS/DML	Configuration Management System/ Definitive Media Library is a secure library where definitive authorised versions of all media CIs are stored and protected.
	Service Change	The addition, modification or removal of authorized or supported services or their components including associated documentation.
	Release Unit	Portion of a service or IT infrastructure that is normally released together according to the organisation's release policy.
Operation	Seven Rs of Chg	Who Raised; Reason; required Return; Risks; Resources; Who is Responsible for build, test, implement; Relationship to other changes.
	Event/Alert	Change of state that is significant for the mgt of CI or IT Service (normal, exception, unusual)/ Warning that threshold has been reached, something has changed, or Failure has occurred.
	Trigger	Mechanism used to initiate a response to an Event.
	Incident/Major	An unplanned interruption to an IT service or reduction in the quality of an IT service. Failure of a CI that has not yet impacted service is also an incident/ Major has high impact on business.
	Impact/ Urgency	The effect of incident or change on business processes eg number of users impacted/ How long until an incident or change has significant impact on business, required speed of resolution.
	Priority	A category used to identify the relative importance of an incident, problem or change. Priority is based on impact and urgency.
	Service Request	A request from a user for information, or advice; or for a standard change or for access to an IT Service including self-service eg download site or FAQ.
	Problem	Unknown cause of one or more incidents, created by anyone but owned by Problem Mgt. Separate record to incident, started either for major Incident (P1/P2) or multiple related Incidents.
	Known Error/DB	Problem that has a documented root cause AND a workaround; KEs in live services stored in KEDB, and updated by bug list from new releases by Rel & Dep Mgt e.g. known issues list.
Governance	Workaround	A way to reduce or eliminate the impact of an incident or problem for which a full resolution is not yet available; sourced anywhere but tested for quality by problem mgt.
	Communication	Must have an intended purpose and audience, imperative between departments and teams within the Service Operation Lifecycle, and important in all stages of the lifecycle.
	IT Governance	Leadership, organizational structures and processes that ensure IT sustains and extends the organisation's strategies and objectives.
Governance	RACI	Documents the roles and responsibilities of stakeholders in a process or activity; only one person can be accountable for an activity.

Process	Description
Access Mgt	Provides rights for users to use a service, while preventing non-authorized user access. Also known as Rights or Identity Mgt. Verifies user identity & that they have legitimate requirement.
Availability Mgt	Ensures that the level of service availability delivered in all services is matched to, or exceeds, the current and future agreed needs of the business, in a cost-effective manner.
Capacity Mgt	Ensures that cost-justifiable IT capacity in all areas of IT always exists and is matched to the current and future agreed needs of the business, in a timely manner.
Change Mgt	To respond to the customer's changing business requirements while maximizing value and reducing incidents, disruptions and rework
Demand Mgt	To understand the patterns of user demand on the services, to understand what influences these patterns, and to manage the production of services to meet this demand.
Event Mgt	The ability to detect events, make sense of them and determine the appropriate control action.
Financial Mgt	To provide the business and IT with the quantification in financial terms, of the value of IT services, the value of the assets underpinning those services, and the qualification of operational forecasting
Info Security Mgt	To align IT security with business security and ensure that information security is effectively managed in all service and service management activities
Incident Mgt	To restore normal service operation as quickly as possible and minimise the adverse impact on business operations, thus ensuring that the best possible levels of service quality and availability are maintained
Knowledge Mgt	To enable organisations to improve the quality of management decision by ensuring that reliable and secure information is available throughout the service lifecycle
Problem Mgt	The primary objectives of problem management are to prevent problems and resulting incidents from happening, to eliminate recurring incidents and to minimize the impact of incidents that cannot be prevented
Rel & Dep Mgt	To deploy resources into production and establish effective use of the service in order to deliver value to the customer and be able to hand over to service operations
Request Fulfilment	Handles frequently occurring changes where risk and cost are low.
SAC Mgt	To define and control the components of services and infrastructure and maintain accurate configuration information on the state of the services and infrastructure
Supplier Mgt	Ensures suppliers to meet business reqs; maintains the SCD; is involved in all lifecycle stages.
Svc Catalogue Mgt	Ensures a Svc Cat is produced and maintained, and contains accurate data on the status, interfaces, and dependencies of all live services and those being prepared to run operationally.
Svc Level Mgt	Negotiates, agrees and documents appropriate IT svc targets with business reps, and then monitors and reports on the service provider's ability to deliver the agreed level of service.
ITSCM	To support the overall Business Continuity Management process by ensuring that the required IT technical and services facilities can be resumed within required, and agreed, business timescales.

Function	Description
Application Mgt	Assisting app design; Deciding on buy or build; Guiding IT Ops on how to manage an app.
Technical Mgt	Assisting IT infrastructure design; Deciding on buy or build; Guiding IT Ops on how to manage technical infrastructure.
Service Desk	Local, Centralised, Virtual, Follow the Sun; not Call Centre (bulk calls eg telesales) or IT Help Desk (process volume of Incidents only).

Extra Definition	Description
SAC	Service Acceptance Criteria – ensures an IT Service design meets its functionality and quality reqs, and that the IT Service Provider is ready to Operate the new IT Svc once Deployed.
Standard Change	A pre-authorized change that has an accepted and established procedure.
CAB/ECAB	Change Advisory Board/Emergency Change Advisory Board.
Measure reasons	Validate (prove way forward); Justify (prove way taken); Direct (set the course); Intervene (alter course).

Generic Role	Description
Process Manager	Responsible for Operational management of a Process including Planning and co-ordination of all Activities required to carry out, monitor and report on the Process. Can be more than one.
Process Owner	Responsible for ensuring that Process is Fit for Purpose including sponsorship, Design, Change Management and continual improvement of Process and Metrics. Can also be Process Mgr.
Service Owner	Accountable for delivery of an IT Service incl. being contact for related enquiries, ensuring agreed levels met, identifying improvements, process owner liaison, & gathering monitoring data.

SERVICE Desk first line support  
2nd level

Service Level Manager looks after SLA's ~~but~~  
SLA means IT and customer officially agreed on  
a level of service

~~of~~ service Level Management SLM

- Requirements SLR

- Improvement Plan SIP → operational view

- Catalog = list of all services ~~offered~~ that are available + retired <sup>now</sup> ones

- Portfolio =  $\frac{\text{catalog} + \text{future planned services}}{\text{pipeline}}$  that exist → strategic view

- Owner = person who is ultimately responsible for a service (or system)

- Level manager - looks after SLAs

# IT Service Lifecycle

## 18 Processes

- Financial Management
- Demand Management
- Service Level Management
- Service Catalog Mgt

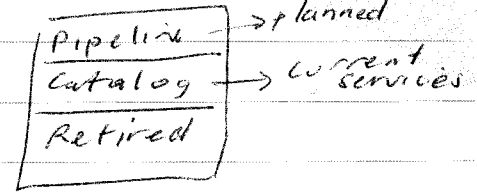
### 1. Service Strategy

- Define
- Analyse
- Approve
- Charter
- Business Case
- Allocate a Budget
- Communicate

### 2. Service Design

- Capacity
  - Availability
  - Security
  - Service Continuity
  - Supplier Mgt
  - Change Mgt
  - Release & Deployment
  - Service Assets Configuration
  - Knowledge
  - Incident Problem
  - Event
  - Request Fulfilment
  - Access
- People
  - Process
  - Products (tools)
  - Partner (suppliers)

Portfolio =



Service Design Package

### 3. Service Transition (from an idea to reality)

- Build
- Test
- Deploy
- handover to customer (rolled out) operational

### 4. Service Operation

- Day to day support + maintenance
- Now at last can get a return on our investment
- What is the True Value of this app?

### 5. Continual Service Improvement

Unit of the organisation = Function  
= a department (a group of people doing one job)

Objective of Incident

Restore Normal Service Operation As Quickly as possible

Incident Model = Script for helpdesk to ask a list of questions

Incident Matching = A fix for an old case may work this time

Incident Mgt Process Owner = overall process of Incident Mgt

Incident Manager = hands on for actual incidents

Incident - something unplanned - disruption  
poor performance outside of SLA  
component failure - even if it affects nobody

Utility - What the service does - what it looks like - how to use it  
"Fit for purpose"

warranty - a promise that the service will deliver in availability, capacity,  
continuity, security  
↓  
Part of SLA ↓ "Fit for use" \* how fast to get it back online

Risk Analysis

Risk Management

Demand Management

- Disk, - Network, Airconditioning, ~~to~~ Daytime -

Pattern of Business Activity

User Profiles execs vs call centre operator for example

Differentiated offerings - making it cheaper at low usage

Peak pricing

## Appendix C

1. (b) c      16. c ✓
2. a ✓      23 a
3. abc      25 d
4. c ✓      29 d ✓
5. ?      34 b ✓
6. a ✓      39 d ✓
7. d ✓
8. a (c)
9. d ✓

## IT Service Provider

- Internal Service Provider
- Shared Services Unit
- External Service Provider

SLA are internal, non-legal, in business language (between IT & customer)  
contracts are legal, external, in legalese (between external IT providers ?)

Service Design Package → entire phase of design & everything else of a service

1. Identify Requirements
2. Design system
3. Design Technology & architecture
4. Process Design
5. Measurement Design
  - Progress      How far have we gone?
  - Compliance      Did we make the SLA?
  - Effectiveness      Did we do it right?
  - Efficiency      Did we do it quickly?

## Service Level Management

Underpinning contract - A contract that ensures part of SLA can be met  
Example - contract with Telstra to ensure a certain response time.

operational level agreement (OLA) - agreement with an internal group to supply a service to IT, and can also underpin a SLA

## Service Targets

Service Review Meetings to keep SLAs up to date

Service based - everyone agrees on a certain level of service

Customer / - each wants their own - - -

Corporate Level SLA → Customer Level SLA → specific Service Level SLA

SLAM = ~~SLA~~ SLA monitoring chart

## Capacity Manager

- Disks
- Network
- Servers
- Aircon
- Licences
- Look at new technologies

# Availability Management

$$\text{AVAIL \%} = \frac{\text{agreed service hours} - \text{downtime}}{\text{agreed service hours}} \times 100$$

Downtime can occur outside agreed service hours with no penalty

1. prevent disruption to service
2. minimise impact of disruptions
3. Redundancy - remove single point of failure
4. Resilience - robustness
5. Reliability - (component) - time to failure & (service) time between incidents
6. Maintainability - Fix it fast
7. Serviceability - How fast can supplier fix it

Business Impact Analysis - those who will be affected the most by an incident - done by Business - not IT.

Business Continuity Management - done by CEO etc - bunch of what if this or that broke or was destroyed, how the business can continue.

Risk Analysis - fire, flood, market conditions etc

IT Service Continuity Management - Plan for  
Preventative  
Reductive  
Recovery

Security Management

Security must write security policies and publicise them

Supplier Mgt

Manage all aspects of supplier's

Keep details in a "Supplier and Contracts Database"

CHANGE MANAGEMENT

Normal (Production, Non production)

Appendix C.

RFC

6. a ✓

Log into Infra → Calendar → Change Schedule

7. d ✓

Category

13. b. ✓

Priority

18. c ✓

Evaluate = review, check etc

19. d ✓

Resource, Risk, Impact

26. b X c

Build

28. d ✓

Test

Eval → CAB

Implement

Eval = Post implementation review

Report (on time, rollback?, customer satisfied) → K.P.I.

Standard change

Log in Infra

Build

Test

Implement

Emergency change

Requested by Techie who is working on the incident

Log in Infra

Eval - make sure ok to go Emergency CAB

Build

Test - minimal

Implement

[www.DDLS.com.au](http://www.DDLS.com.au)

Eval - (report)

## Seven R's of Change Management

who RAISED it

The REASON for it

What is the RETURN

RISKS

What RESOURCES are needed

RESPONSIBLE for build test implement

RELATIONSHIP to other changes?

## Asset Management

SACM = Service Asset & Configuration Mgt

Finance job to track assets

I.T. must tell Finance about I.T. assets

Laptops

PC Servers, Printers, Software

## Configuration Item (C.I.)

- One per server

- Software

- SLA

- staff (person)

- user group

Each of these has attributes = things about each C.I.

Attributes can link between C.I.s and are called relationships

Configuration baseline = S.O.E.

- Model = How the assets, services and infrastructure are related.

CMDB Config Mgt DB → no longer used

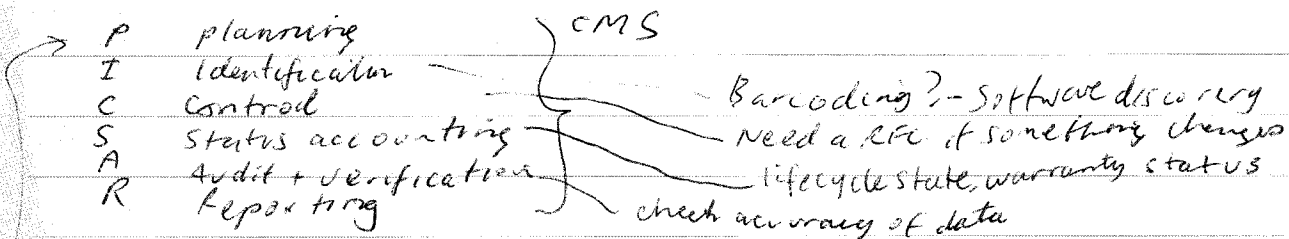
Now is a Config Mgt System

where Techie, Desktop, etc have separate areas, but there are relationships between them.

DML Definitive Media Library

where all software originals are kept

Definitive Spares - preconfigured PC's ready to send out



need to determine VIA business case if we should have a CMS

How detailed? Schedule? Make a project.

RELEASE = bunch of changes/modifications

Release Unit - what happens with one system

Release Package - if a number of Release Units are needed in a single release e.g. 2 systems that rely on each other both need a change.

- 1. ~~a~~ b. ✓
- 4. c ✓
- 8. c ✓
- 10. b ✓
- 12. d ✓
- 15. ~~b~~ a
- 20. ~~b~~ c
- 36. ~~a~~ b
- 37. c ✓

Functions:

Service Desk Function

Technical Mgt ✓

~~Software~~

Applications Mgt ✓

IT Operations Mgt

Operations Control

- Facilities Mgt
  - UPS
  - Generator
  - Aircon
  - Security

Request Fulfilment refers to a Service Request

Incident

→ Problem

causes one or more incidents  
(unknown cause)

once it is found, it becomes a KNOWN ERROR

→ goes in Known Error DB

Workaround unofficial way to get customer going although underlying ~~case~~ cause is still there

When a fix arrives, raise a RFC

Event Management

- change of state of a device
- normal → log
- unusual → investigate
- significant → incident

Event

Alert

warning or failure

Option → correlation engine

- |    |                |   |   |
|----|----------------|---|---|
| 2  | a              | ✓ | RACI                                      |
| 11 | d              | ✓ | Responsible - does the job                |
| 17 | <del>e</del> d | ✓ | Accountable                               |
| 21 | <del>a</del> c |   | Consulted -                               |
| 22 | a              | ✓ | Informed - people who are kept up to date |
| 27 | a              | ✓ |   |
| 30 | a              | ✓ |   |
| 31 | c              | ✓ |   |
| 32 | a              | ✓ |   |
| 40 | b              | ✓ |   |

CSI model

What is the vision

Where are we now

Where do we want to be

How to get there

Did we get there

plan  
↓  
Do  
↓  
check  
↓  
Act

4 reasons for  
monitoring and  
measuring  
validate

Metrics

Technology

Process

Service

IT governance

Rules under which

IT operates