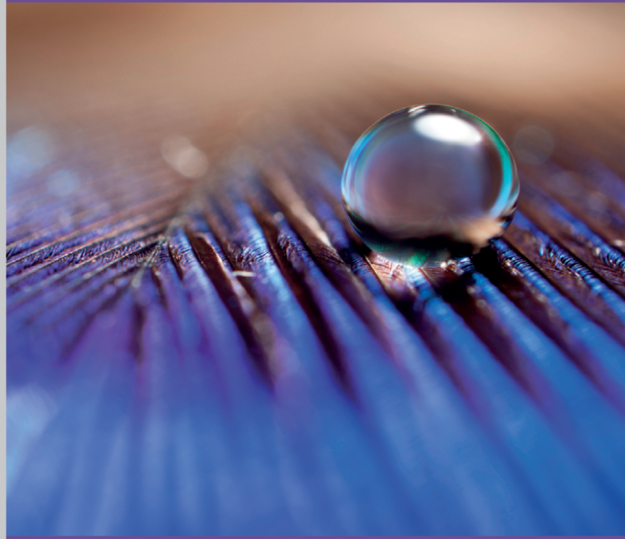
BEST PRACTICE

ITIL® Pocket Guide

2011 EDITION



ITIL® LICENSED PRODUCT

Van Haren
PUBLISHING

ITIL® 2011 Edition - A Pocket Guide

Other publications by Van Haren Publishing

Van Haren Publishing (VHP) specializes in titles on Best Practices, methods and standards within four domains:

- IT and IT Management
- Architecture (Enterprise and IT)
- Business Management and
- Project Management

Van Haren Publishing offers a wide collection of whitepapers, templates, free e-books, trainer materials etc. in the **Van Haren Publishing Knowledge Base**: www.vanharen.net for more details.

Van Haren Publishing is also publishing on behalf of leading organizations and companies: ASLBiSL Foundation, CA, Centre Henri Tudor, Gaming Works, IACCM, IAOP, IPMA-NL, ITSqc, NAF, Ngi, PMI-NL, PON, The Open Group, The SOX Institute.

Topics are (per domain):

IT and IT Management

ABC of ICT
ASL®
CATS CM®
CMMI®
COBIT®
e-CF
ISO 20000
ISO 27001/27002
ISPL
IT Service CMM
ITIL®
MOF
MSF
SABSA

Architecture (Enterprise and IT)

ArchiMate®
GEA®
Novius Architectuur Methode
TOGAF®

Business Management

BABOK® Guide
BiSL®
EFQM
eSCM
IACCM
ISA-95
ISO 9000/9001
Novius B&IP
OPBOK
SAP
SixSigma
SOX
SqEME®

Project, Program and Risk Management

A4-Projectmanagement
DSDM/Atern
ICB / NCB
ISO 21500
MINCE®
M_o_R®
MSP™
P3O®
PMBOK® Guide
PRINCE2®

For the latest information on VHP publications, visit our website: www.vanharen.net.

ITIL®
LICENSED PRODUCT

ITIL® 2011 Edition - A Pocket Guide

Van Haren
PUBLISHING

Colophon

Title:	ITIL® 2011 Edition - A Pocket Guide
Author:	Jan van Bon
Publisher:	Van Haren Publishing, Zaltbommel, www.vanharen.net
Design & layout:	CO2 Premedia bv, Amersfoort – NL
ISBN Hard copy:	978 90 8753 676 3
ISBN eBook:	978 90 8753 925 2
ISBN ePUB:	978 90 8753 978 8
Edition:	First edition, first impression, December 2011 First edition, second impression, March 2012 First edition, third impression, September 2012 First edition, fourth impression, April 2013 First edition, fifth impression, December 2014

© 2011 Van Haren Publishing
All rights reserved. No part of this publication may be reproduced in any form by print, photo print, microfilm or any other means without written permission by the publisher.
Although this publication has been composed with much care, neither author, nor editor, nor publisher can accept any liability for damage caused by possible errors and/or incompleteness in this publication.

© Crown copyright 2011. Reproduced under license from AXELOS: cover diagram and diagrams 2.1, 3.1, 3.2, 4.1, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 7.3

TRADEMARK NOTICES
ITIL®, M_o_R®, and PRINCE2® are a registered trade mark of AXELOS Limited.
The ITIL Swirl logo™ is a trade mark of AXELOS Limited.
PRINCE2® is a registered trade mark of AXELOS.
COBIT® is a registered trademark of the Information Systems Audit and Control Association (ISACA)/IT Governance Institute (ITGI).
PMBOK® Guide is a registered trademark of the Project Management Institute (PMI).

Foreword

This concise summary offers a practical introduction to the content of the five ITIL core books. It is based on ITIL 2011 Edition, and explains the structure of the service lifecycle, and the processes and functions of each stage. It also provides support for all the existing users of previous ITIL editions that are looking for a bridge to the new edition.

The 2011 update resolved errors and inconsistencies, and improved clarity, consistency, correctness, and completeness. The Service Strategy book was revised in order to explain the concepts in a clear, concise, and accessible way.

This pocket guide provides the reader with a quick reference to the basic concepts of ITIL. Readers can use the Van Haren Publishing publication “IT service management based on ITIL” or the ITIL core volumes (Service Strategy, Service Design, Service Transition, Service Operation and Continual Service Improvement) for more detailed understanding and guidance.

This pocket guide was produced in the same way as other Van Haren Publishing publications: a broad team of expert editors, expert authors and expert reviewers contributed to a comprehensive text, and a great deal of effort was spent on the development and review of the manuscript.

I’m convinced that this pocket guide will provide an excellent reference tool for practitioners, students and others who want a concise summary of the key ITIL concepts.

Jan van Bon

Acknowledgements

Following the official publication of ITIL, this pocket guide was developed as a concise summary of the ITIL core books, by the authors of the publication “Foundations of ITIL”. The text is an update of the ITIL V3 Pocket Guide, that was produced by the editors and reviewers of the ITIL Foundation publication. All members of IPESC, itSMF International’s Publication Committee, were invited to participate in the original review, and thirteen itSMF chapters actively participated.

The integrated Review Team was composed of the following:

- Rob van der Burg, Microsoft, Netherlands
- Judith Cremers, Getronics PinkRoccade Educational Services, Netherlands
- Dani Danyluk, Burntsand, itSMF Canada
- John Deland, Sierra Systems, itSMF Canada
- Robert Falkowitz, Concentric Circle Consulting, itSMF Switzerland
- Karen Ferris, itSMF Australia
- Peter van Gijn, Logica, Netherlands
- Kevin Holland, NHS, UK
- Ton van der Hoogen, Tot Z Diensten BV, Netherlands
- Matiss Horodishtiano, Amdocs, itSMF Israel
- Wim Hoving, BHVB, Netherlands
- Brian Johnson, CA, USA
- Steve Mann, Opsys-sm2, itSMF Belgium
- Reiko Morita, Ability InterBusiness Solutions, Inc., Japan
- Ingrid Ouwerkerk, Getronics PinkRoccade Educational Services, Netherlands
- Ton Sleutjes, Capgemini Academy, Netherlands

- Maxime Sottini, iCONS – Innovative Consulting S.r.l., itSMF Italy

The 2011 update of the ITIL pocket guide was reviewed by a smaller section of this Review Team, since it only involved a limited update:
- Rob van der Burg, Microsoft, Netherlands
- John Deland, Sierra Systems, itSMF Canada
- Peter van Gijn, Logica, Netherlands
- Kevin Holland, NHS, UK
- Steve Mann, Opsys-sm2, itSMF Belgium
- Reiko Morita, Ability InterBusiness Solutions, Inc., Japan

All reviewers spent their valuable hours on a detailed review of the text, answering the core question "Is the content a correct reflection of the core content of ITIL, given the limited size of a pocket guide?". Providing several hundreds of valuable improvement issues, they contributed significantly to the quality of this pocket guide, and we thank them for that.

Due to the expert services of the Review Team and the professional support by the editors team, the resulting pocket guide is an excellent entry into the core ITIL books. We are very satisfied with the result, which will be of great value for people wanting to get a first high-level grasp of what ITIL is really all about.

Contents

1 Introduction 13

1.1 What is ITIL? 13

1.2 Why is ITIL successful? 14

1.3 ITIL exams 14

1.4 Structure of this pocket guide 16

1.5 How to use this pocket guide 16

2 Introduction to the service lifecycle 17

2.1 Definition of service management 17

2.2 Internal and external customers 18

2.3 Internal and external services 18

2.4 Overview of the service lifecycle 18

2.5 Functions and processes 20

2.6 Organizational structure 21

2.7 ITIL lifecycle clustering 24

2.8 The process model and the characteristics of processes 27

2.9 Key concepts 28

3 Lifecycle stage: service strategy 39

3.1 Introduction 39

3.2 Basic concepts 39

3.3 Processes and other activities 41

3.4 Strategy management for IT services 42

3.5 Service portfolio management 43

3.6 Financial management for IT services 47

3.7 Demand management 56

3.8 Business relationship management 59

3.9 Governance 61

3.10 Organization 62

3.11 Methods, techniques and tools 63
3.12 Implementation and operation 64

4 Lifecycle stage: service design 69
4.1 Introduction 69
4.2 Basic concepts 69
4.3 Processes and other activities 72
4.4 Design coordination 74
4.5 Service catalogue management 76
4.6 Service level management 78
4.7 Availability management 82
4.8 Capacity management 86
4.9 IT service continuity management 88
4.10 Information security management 91
4.11 Supplier management 94
4.12 Service design technology-related activities 98
4.13 Organization 102
4.14 Methods, techniques and tools 102
4.15 Implementation and operation 102

5 Lifecycle stage: service transition 105
5.1 Introduction 105
5.2 Basic concepts 105
5.3 Processes and other activities 106
5.4 Transition planning and support 108
5.5 Change management 110
5.6 Service asset and configuration management 114
5.7 Release and deployment management 118
5.8 Service validation and testing 121
5.9 Change evaluation 124
5.10 Knowledge management 126
5.11 Organization 128

5.12 Methods, techniques and tools 129
5.13 Implementation and operation 130

6 Lifecycle stage: service operation 133
6.1 Introduction 133
6.2 Basic concepts 133
6.3 Processes and other activities 135
6.4 Event management 136
6.5 Incident management 140
6.6 Request fulfillment 143
6.7 Problem management 147
6.8 Access management 151
6.9 Common service operation activities 154
6.10 Organization 161
6.11 Methods, techniques and tools 166
6.12 Implementation and operation 167

7 Lifecycle stage: continual service improvement 169
7.1 Introduction 169
7.2 Basic concepts 169
7.3 Processes and other activities 173
7.4 Seven-step improvement process 174
7.5 Organization 178
7.6 Methods, techniques and tools 179
7.7 Implementation and operation 182

Acronyms 185

References 189

1 Introduction

This pocket guide provides the reader with an overview of the basic concepts of ITIL (ITIL 2011 Edition). Readers can use the publication “IT service management based on ITIL 2011 Edition” or the ITIL core volumes (Service Strategy, Service Design, Service Transition, Service Operation and Continual Service Improvement) for more detailed understanding and guidance.

1.1 What is ITIL?

The Information Technology Infrastructure Library™ (ITIL) offers a systematic approach to the delivery of quality IT services. ITIL was developed in the 1980s and 1990s by CCTA (Central Computer and Telecommunications Agency, now the Office of Government Commerce, OGC), under contract to the UK Government. Since then, ITIL has provided not only a best practice based framework, but also an approach and philosophy shared by the people who work with it in practice. ITIL has now been updated three times, the first time in 2000-2002 (V2), the second time in 2007 (V3), and now in 2011. From 2011 onward, new editions will be named by the year of their release (“ITIL 2011”).

Several organizations are involved in the maintenance of the best practice documentation in ITIL:

- *AXELOS - Capita has 51% of the shares; OGC has 49% of the shares.* – Owner of ITIL, promoter of best practices in numerous areas including IT service management. AXELOS contracted the management of ITIL rights, the certification of ITIL exams and accreditation of training organizations to the APM Group (APMG), a commercial organization.

- *itSMF (IT Service Management Forum)* – A global, independent, internationally recognized not-for-profit organization dedicated to support the development of IT service management, e.g. through publications in the ITSM Library series. It consists of a growing number of national chapters (40+), with itSMF International as the controlling body.
- *Examination institutes* – To support the world-wide delivery of the ITIL exams, AXELOS has accredited a number of exam bodies: BCS-ISEB, CERT-IT, CSME, DANSK IT, DF Certifiering AB, EXIN, Loyalist Certification Services, PEOPLECERT Group, and TÜV SÜD Akademie. See www.itil-officialsite.com for recent information.

1.2 Why is ITIL successful?

ITIL combines a number of characteristics that makes it a valuable and effective instrument, aiming at that one goal that really counts: delivering value to the business. It is vendor-neutral, making sure it is applicable to any IT organization, whatever products are used. It is non-prescriptive, making sure it can be adopted and adapted in organizations in any line of business, be it public or private, internal or external, small or large. And finally, it is best practice: it represents the lessons of the best performing organizations in the IT service business today.

1.3 ITIL exams

In 2007 the accreditor (APM Group) launched a new qualification scheme for ITIL, based on ITIL V3. The ITIL V2 certification ceased in mid 2011. Candidates who hold existing ITIL V3 certification will not need to become re-certified with the ITIL 2011 update. The accreditor has no plans to introduce any bridging examinations for the update, as the core ITIL process areas and principles have not changed significantly.

ITIL V2 had qualifications on three levels:
- *Foundation Certificate* in IT Service Management
- *Practitioner's Certificate* in IT Service Management
- *Manager's Certificate* in IT Service Management

The ITIL V2 exams proved to be a great success. Up to 2000, some 60,000 certificates had been issued. In the following years the numbers rocketed, and by 2006 they had broken the 500,000 mark.

For ITIL V3 a new system of qualifications was set up. This also applies to the ITIL 2011 edition. There are four qualification levels:
- Foundation Level
- Intermediate Level (Lifecycle Stream & Capability Stream)
- ITIL Expert Level
- ITIL Master Qualification

Each of the service lifecycle stages requires appropriate skills and experience of people involved, so they can work effectively and efficiently throughout the lifecycle. Core skills, attributes and competencies include business awareness, a basic understanding of what IT can contribute to the business, customer service skills, and the ability to work with best practice and policies. The Skills Framework for the Information Age (SFIA) is often used as a common reference model for IT organizations. SFIA defines a standardized skills structure for tasks and core competencies.

For more information about the ITIL qualification scheme, see http://www.itil-officialsite.com/qualifications. More information on SFIA can be found at www.sfia.org.uk

1.4 Structure of this pocket guide

Chapter 2 introduces the service lifecycle, in the context of IT service management principles. It discusses the functions and processes that are referred to in each of the lifecycle stages. It provides general information on principles of processes, teams, roles, functions, positions, tools, and other elements of interest. It also shows how the processes, the common activities, and the functions are clustered in the 5 ITIL core books.

In Chapters 3 to 7, each of the stages in the service lifecycle is discussed in detail, following a standardized structure: service strategy, service design, service transition, service operation and continual service improvement. For each process and function, the following information is provided:
- introduction
- basic concepts
- activities

1.5 How to use this pocket guide

Readers who are primarily interested in getting a quick understanding of the service lifecycle can focus on the introduction chapters of the pocket guide, and pick whatever they need on specific functions and processes from the other chapters.

2 Introduction to the service lifecycle

2.1 Definition of service management

ITIL is presented as “*best practice”*. Best practice is an approach or method that has been proven in practice. Best practices can be a solid backing for organizations that want to improve their IT services.

The ITIL service lifecycle is based on ITIL’s core concept of “service management” and the related concepts “service” and “value”. These core terms in service management are explained as follows:

- *Service management* – A set of specialized organizational capabilities for providing value to customers in the form of services.
- *Service* – A means of delivering value to customers by facilitating outcomes the customers want to achieve without the ownership of specific costs or risks. Outcomes are possible from the performance of tasks and they are limited by a number of constraints. Services enhance performance and reduce the pressure of constraints. This increases the chances of the desired outcomes being realized.
- *Value* – Value is the core of the service concept. From the customer’s perspective, value consists of two core components: utility and warranty. Utility is what the customer receives, and warranty is how it is provided. The concepts “utility” and “warranty” are described in the Section on service strategy.

2.2 Internal and external customers

Internal customers are people or departments who are part of the same organization as the service provider. These customers may be business units, departments, teams, or any other type of organizational unit.

External customers are people who are not employed by the organization, or organizations that are separate legal entities. The agreements between a service provider and external customers are legally binding contracts. External customers pay with 'real money' (or goods).

Both internal and external customers must be provided with the agreed level of service, with the same levels of customer service.

2.3 Internal and external services

There also are internal and external services. Internal services are delivered to customers in the same organization. External services are delivered to external customers.

2.4 Overview of the service lifecycle

ITIL approaches service management from the lifecycle aspect of a service. The service lifecycle is an organizational model that provides insight into:

- the way service management is structured
- the way the various lifecycle components are linked to each other
- the impact that changes in one component will have on other components and on the entire lifecycle system.

Thus, ITIL focuses on the service lifecycle, and the way service management components are linked. Processes and functions are also discussed in the lifecycle stages.

The service lifecycle consists of five stages. Each volume of the new core ITIL volumes describes one of these stages. The related processes are described in detail in the stage where they have the strongest association.

The five stages (domains of the core books) are:

1. *Service strategy* – the stage that defines the requirements for a service provider to be able to support the business requirements. It describes the strategy of delivering and managing services to the customer, in the perspective of added value to the customer's business.
2. *Service design* – the stage where services are designed, and planned for introduction into the service delivery environment. It includes several practices, making sure that services are designed with the business objectives in mind.
3. *Service transition* – following up on service strategy and service design stages of the lifecycle, the activities in this stage ensure that service releases are deployed successfully into supported environments, and that new, modified or retired services meet the expectations of the business, while controlling the risks of failure and subsequent disruption.
4. *Service operation* – this is the stage where the service provider coordinates and carries out the activities and processes required to deliver and manage services at agreed levels to business users and customers.
5. *Continual service improvement* – the fifth stage describes best practice for achieving incremental and large-scale improvements in service quality, operational efficiency and business continuity, and for ensuring that the service portfolio continues to be aligned to business needs.

Service strategy is the axis of the service lifecycle (Figure 2.1) that drives all other stages; it is the stage of policymaking and setting objectives. The service design, service transition and service operation stages are guided by this strategy; their continual theme is adjustment and change. The continual service improvement stage stands for learning and improving, and embraces all other lifecycle stages. This stage initiates improvement programs and projects, and prioritizes them based on the strategic objectives of the organization.

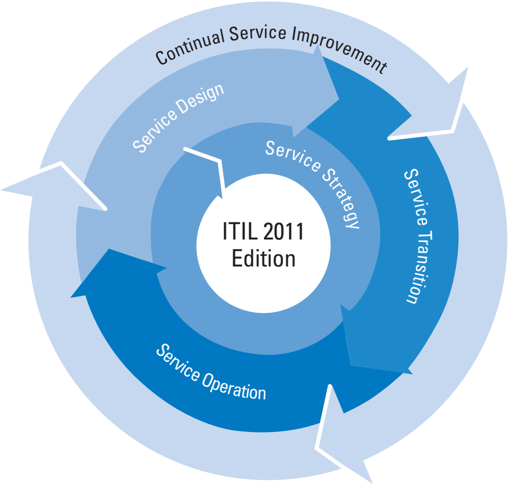

Continual Service Improvement
Service Design
Service Strategy
Service Transition
Service Operation
ITIL 2011 Edition

Figure 2.1 The service lifecycle
Source: AXELOS

2.5 Functions and processes

Each of the lifecycles describes a number of processes and a number of functions. Processes and functions are defined as follows:

- *Process* – A structured set of activities designed to accomplish a defined objective. Processes have inputs and outputs, result in a goal-oriented change, and utilize feedback for

self-enhancing and self-corrective actions. Processes are measurable, provide results to customers or stakeholders, are continual and iterative and are always originating from a certain event. Processes can run through several organizational units. An example of a process is change management.
- *Function* – A team or group of people and the tools they use to carry out one or more processes or activities, specialized in fulfilling a specified type of work, and responsible for specific end results. Functions have their own practices and their own knowledge body. Functions can make use of various processes. An example of a function is a service desk. (Note: "function" can also mean "functionality", "functioning", or "job".)

Processes are often described using procedures and work instructions:
- A *procedure* is a specified way to carry out an activity or a process. A procedure describes the "how", and can also describe "who" executes the activities. A procedure may include stages from different processes. Procedures will vary depending on the organization.
- A set of *work instructions* defines how one or more activities in a procedure should be executed in detail, using technology or other resources.

2.6 Organizational structure

When setting up an organization, positions and roles are also used, in addition to the various groups (teams, departments, divisions):
- *Roles* are sets of responsibilities, activities and authorities granted to a person or team. One person or team may have

multiple roles; for example, the roles of configuration manager and change manager may be carried out by one person.

- *Job positions* are traditionally recognized as tasks and responsibilities that are assigned to a specific person. A person in a particular position has a clearly defined package of tasks and responsibilities which may include various roles. Positions can also be more broadly defined as a logical concept that refers to the people and automated measures that carry out a clearly defined process, an activity or a combination of processes or activities. Individuals and roles have an N:N relationship (many-to-many).

We can study each process separately to optimize its quality:

- The *process owner* is responsible for the process results.
- The *process manager* is responsible for the realization and structure of the process, and reports to the process owner.
- The *process practitioners* are responsible for defined activities, and these activities are reported to the process manager.

The management of the organization can provide control on the basis of data from each process. In most cases, the relevant performance indicators and standards will already be agreed upon, and the process manager can take day-to-day control of the process. The process owner will assess the results based on performance indicators and check whether the results meet the agreed standard. Without clear indicators, it would be difficult for a process owner to determine whether the process is under control, and if planned improvements are being implemented.

When setting up a service or a process, it is imperative that all roles are clearly defined and that it is clear who does what. For this purpose, a responsibility model like RACI can be used.

RACI provides an 'authority matrix' to define the roles and responsibilities in relation to processes and activities.
RACI is an acronym for the four main roles:

- *Responsible* – The person or people responsible for correct execution – for getting the job done.
- *Accountable* – The person who has ownership of quality and the end result. Only one person can be accountable for each task.
- *Consulted* – The people who are consulted and whose opinions are sought. They have involvement through input of knowledge and information.
- *Informed* – The people who are kept up to date on progress. They receive information about process execution and quality.

People, process, products and partners (the four Ps) provide the main "machinery" of any organization, but they only work well if the machine is oiled: *communication* is an essential element in any organization. If the people do not know about the processes or use the wrong instructions or tools, the outputs may not be as anticipated. Formal structures on communication include:

- *Reporting* – Internal and external reporting, aimed at management or customers, project progress reports, alerts.
- *Meetings* – Formal project meetings, regular meetings with specific targets.
- *Online facilities* – Email systems, chat rooms, pagers, groupware, document sharing systems, messenger facilities, teleconferencing and virtual meeting facilities.
- *Notice boards* – Near the coffee maker, at the entrance of the building, in the company restaurant.