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SERIES M: TMN AND NETWORK MAINTENANCE: INTERNATIONAL TRANSMISSION SYSTEMS, TELEPHONE CIRCUITS, TELEGRAPHY, FACSIMILE AND LEASED CIRCUITS

Telecommunications management network

Enhanced Telecom Operations Map (eTOM)

Supplement 3: eTOM to M.3400 mapping

ITU-T Recommendation M.3050 – Supplement 3

ITU-T M-SERIES RECOMMENDATIONS

TMN AND NETWORK MAINTENANCE: INTERNATIONAL TRANSMISSION SYSTEMS, TELEPHONE CIRCUITS, TELEGRAPHY, FACSIMILE AND LEASED CIRCUITS

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ITU-T Recommendation M.3050

Enhanced Telecom Operations Map (eTOM)

Supplement 3

eTOM to M.3400 mapping

Summary

ITU-T Recs M.3050.x series contain a reference framework for categorizing the business activities that a service provider will use. The Enhanced Telecom Operations Map® (or eTOM for short), which has been developed by the TeleManagement Forum, describes the enterprise processes required by a service provider and analyses them to different levels of detail according to their significance and priority for the business. This business process approach has built on the concepts of Management Services and Functions in order to develop a framework for categorizing all the business activities.

This Supplement provides an insight on how the functional view provided by the Management Functions described in TMN Recommendation M.3400 can be mapped to the process view provided by the eTOM Business Process Framework.

Source

Supplement 3 to ITU-T Recommendation M.3050 was agreed on 7 May 2004 by ITU-T Study Group 4 (2001-2004).

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FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

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Introduction

In this Supplement, concepts will be elaborated of mapping the Management Service/Function approach of ITU-T Recs M.3200 [3]/M.3400 [1], on one hand, and the Enhanced Telecom Operations Map® – eTOM documented in ITU-T Rec. M.3050 [4], on the other hand. An example will be given of how the respective functional and process view can be mapped. This mapping needs to be seen as preliminary analysis, which will be extended in next versions of this Supplement. Clause 6, Outlook to future work, identifies some of the possible future extensions.

ITU-T Recommendation M.3050

Enhanced Telecom Operations Map (eTOM)

Supplement 3

eTOM to M.3400 mapping

1 Scope

The Enhanced Telecom Operations Map (eTOM) [4] has been developed by the TeleManagement Forum as a reference framework for categorizing all the business activities that an Information and Communications service provider will use. It should be noted that the TM Forum retains the ownership of the eTOM and copyright of the underlying IPR. The ITU-T will own the copyright on the M.3050.x series ITU-T Recommendations themselves.

This Supplement is a part of a series of ITU-T texts dealing with eTOM, and which have the following structure:

– M.3050.0: eTOM – Introduction.

– M.3050.1: eTOM – The business process framework. (TMF GB921 v4.0.)

– M.3050.2: eTOM – Process decompositions and descriptions. (TMF GB921 v4.0 Addendum D.)

– M.3050.3: eTOM – Representative process flow. (TMF GB921 v4.0 Addendum F.)

– M.3050.4: eTOM – B2B integration: Using B2B inter-enterprise integration with the eTOM. (TMF GB921 v4.0 Addendum B.)

– M.3050 Supplement 1: eTOM – ITIL application note. (TMF GB921 v4.0 Addendum L.)

– M.3050 Supplement 2: eTOM – Public B2B Business Operations Map (BOM). (GB921 Addendum C.)

– M.3050 Supplement 3: eTOM to M.3400 mapping.

Additional parts will be published as material becomes available.

This series of ITU-T Recs M.3050.x build on the Management Services approach described in ITU-T Recs M.3010 and M.3200 by developing a Business Process Framework.

This Supplement provides an insight on how the functional view provided by the Management Functions described in TMN Recommendation M.3400 [1] can be mapped to the process view provided by the eTOM Business Process Framework.

The eTOM provides the framework for standardizing and categorizing business activities to help setting the direction for management solutions. It also provides the business-oriented view of service provider requirements that the management services and functions will need to support.

The mapping of eTOM processes to M.3400 management functions in both directions is documented in this Supplement, in order to facilitate the application of both these processes and functions within the development and integration of Business and Operations Support Systems.

2 References

[1] ITU-T Recommendation M.3400 (2000), *TMN management functions*.

[2] ITU-T Recommendation M.3010 (2000), *Principles for a telecommunications management network*.

[3] ITU-T Recommendation M.3200 (1997), *TMN management services and telecommunications managed areas: overview*.

[4] ITU-T Recommendation M.3050.0 (2004), *Enhanced Telecom Operations Map (eTOM) – Introduction*.

[5] ITU-T Recommendation M.3050.1 (2004), *Enhanced Telecom Operations Map (eTOM) – The business process framework.*

[6] ITU-T Recommendation M.3050.2 (2004), *Enhanced Telecom Operations Map (eTOM) – Process decompositions and descriptions*.

[7] ITU-T Recommendation M.3050.3 (2004), *Enhanced Telecom Operations Map (eTOM) – Representative process flows*.

3 Terms and abbreviations

3.1 Definitions

See ITU-T Rec. M.3050.1 [5].

3.2 Abbreviations

The following abbreviations are additional to those defined in ITU-T Rec. M.3050.1:

NGN Next Generation Network

OSI Open Systems Interconnection

TM Forum TeleManagement Forum (see also TMF)

4 Linking eTOM to the TMN model

Within the telecommunications industry different Management Models have evolved over time. The OSI Functional model – the Service Management Function Areas – introduced the functional areas known as FCAPS: Fault Management, Configuration Management, Accounting Management, Performance Management and Security Management.

The ITU-T TMN introduced the concept of the Logical Layered Architecture with the Element Management Layer, Network Management Layer, Service Management Layer and Business Management Layer. This is one of the concepts that have been developed by ITU, to assist in the functional decomposition of the management requirements into manageable subsets and to encourage the reuse of solutions, as is described in ITU-T Rec. M.3050.0 [4].

As investment decisions in the telecommunications industry were more and more driven by Business rather than Technology drivers, the TeleManagement Forum developed the Enhanced Telecom Operations Map® (eTOM) as a reference framework for classifying all business activities, which will be performed by an Information and Communications service provider. Process elements – components of overall business processes – can be positioned within a model to show organizational, functional and

other relationships, and can be combined within process flows that trace activity paths through the business. The eTOM concepts are described in ITU-T Rec. M.3050.1 [5].

This clause links the ITU-TMN model and the eTOM Business Process Framework, business drivers and the benefits we can get from linking those two models.

It should be noted that in the context of the eTOM Business Process Framework, Process Elements are the building blocks or components, which are used to 'assemble' end-to-end business processes. The term Process refers to a systematic, sequenced set of functional activities that deliver a specified result, and does not refer to Process Flow, which is the sequencing of Process Elements (see [5]).

4.1 The TMN model

The telecommunications industry has embraced the Telecommunications Management Network (TMN) model as a way to think logically about how the business of a service provider is managed. As mentioned before, the TMN model introduced the concept of Logical Layered Architecture. It consists of four layers, usually arranged in a triangle or pyramid, with business management at the apex, service management the second layer, network management the third layer, and element management at the bottom. The idea is that management decisions at each layer are different but interrelated. For example, detailed information is needed to keep a switch operating (at the element management layer), but only a subset of that information is needed to keep the network operating (e.g., is the switch operating at full capacity). Working from the top down, each layer imposes requirements on the layer below. Working from the bottom up, each layer provides a capability to the layer above.

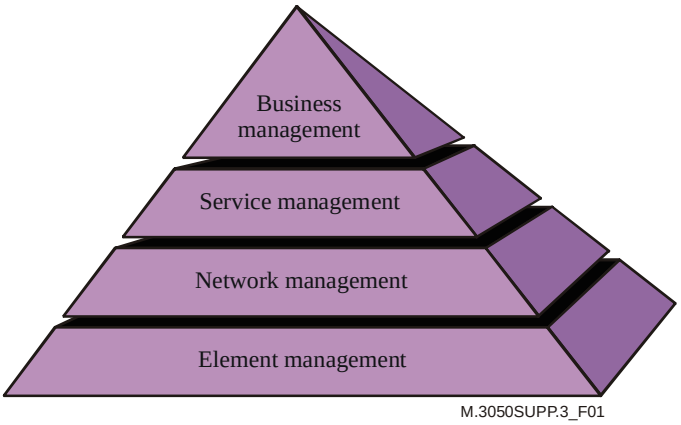


Figure 1 – Basic TMN logical layering architecture model

Some of the concepts defined by the TMN are very relevant for the context of this Supplement. ITU-T Rec. M.3200 [3] describes Telecommunications Managed Areas and TMN Management Services, in order to support the wide variety of management activities for telecommunications networks and services. The Telecommunications Managed Areas relate to the grouping of telecommunications resources being managed and the Management Services relate to the set of processes needed to achieve business objectives (Management Goals). It has been accepted that flexibility is required in the definition of TMN Management Services to enable additional requirements to be accommodated as they are identified [3].

The management services are comprised of management functions, where Management Functions are grouped together and referred to as a Management Function Set. ITU-T Rec. M.3400 [1] states that "A TMN Management Function is a cooperative interaction between application processes in managing

and managed systems for the management of telecommunications resources, and is the smallest functional part of a TMN Management Service as perceived by the TMN users". The library of general Management Function Sets and their Management Functions members can be found in ITU-T Rec. M.3400 [1] categorized according to their FCAPS application.

In describing the requirements for an interface, the functions identified may reference those defined in ITU-T Rec. M.3400 [1] or specialize one or more of them to suit a specific managed area, or new functions may be identified as appropriate.

The TMN model is simple, although its implementation is complex. The sheer number of standards now available that address the various interfaces between management systems makes it difficult to see and appreciate the big picture. These ITU-T standards are mainly concentrated in the element management and network management layers. Although they have been developed from the bottom up, ITU-T started with the management requirements which have been drawn from the network which is bottom up. This makes it difficult to apply the standards as part of a business case, and likewise it is difficult to have a customer centric focus.

4.2 The Enhanced Telecom Operations Map Business Process Framework

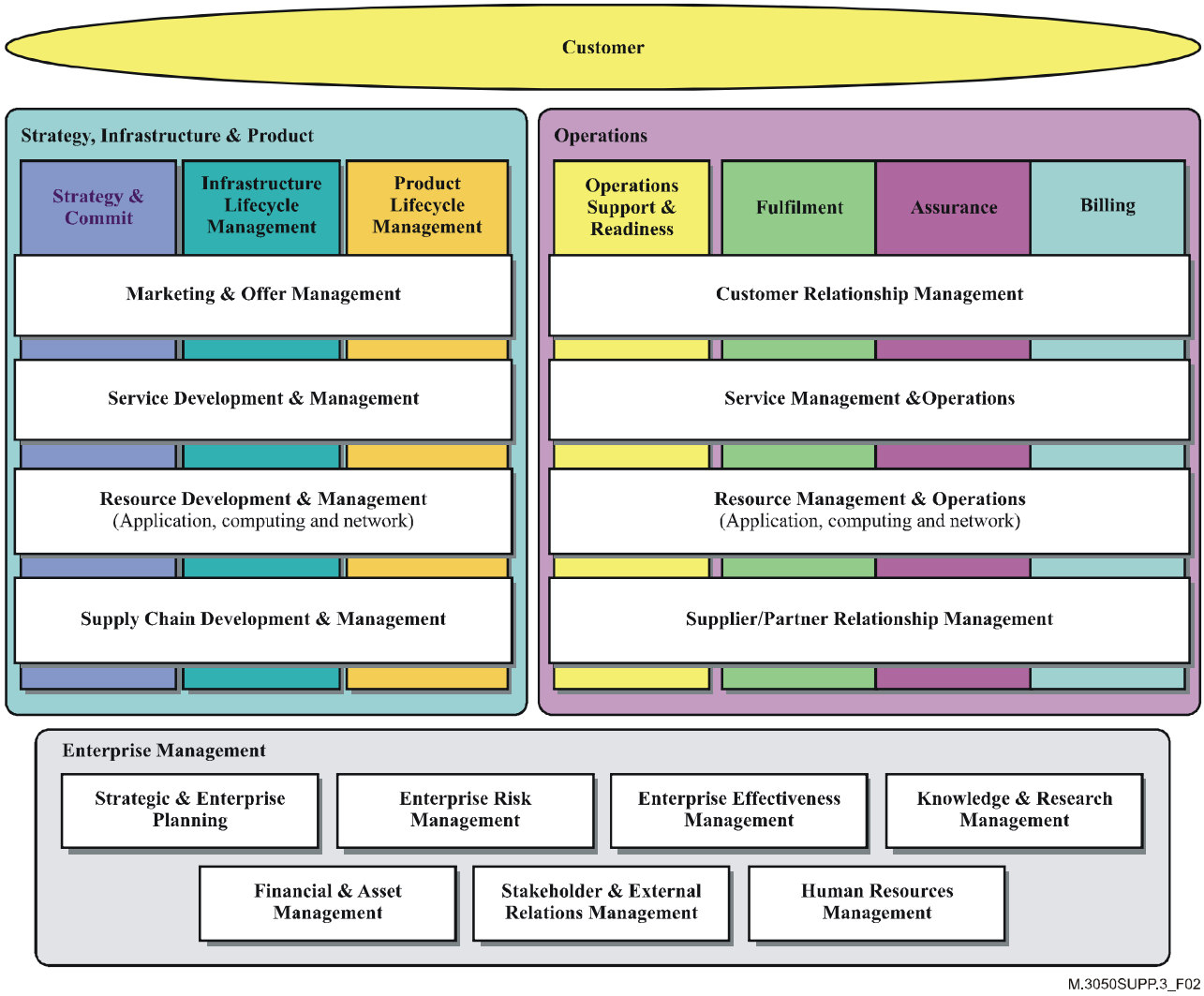


Figure 2 – eTOM Business Process Framework – Level 0 processes

The eTOM is a business process framework, i.e., a reference framework or model for categorizing all the business activities – process elements – that a service provider will use. The aim is to be able to combine these process elements in many different ways, to implement end-to-end business processes (e.g., Fulfilment, Assurance, Billing) which deliver value for the customer and the service provider.

The eTOM defines common terms, which makes it easier for service providers to negotiate with customers, third party suppliers, and other service providers. Furthermore eTOM enables:

- Focused work to define detailed business requirements, information agreements, business application contracts and shared data model specifications (exchanges between applications or systems) and to review these outputs for consistency;
- Relating business needs to available or required standards;
- A common process view for equipment suppliers, applications builders and integrators to build management systems by combining third party and in-house developments.

4.3 Business drivers for process/function mappings

The communications services industry is rapidly changing with new rules, new competitors, new customers, and unprecedented demands. Service providers worldwide all face similar challenges, risks, and struggles to remain profitable in the face of more competition; pressures on market share, prices and margins. As the service providers face these challenges, also their suppliers must find innovative ways to deliver value. Let's consider two cases to illustrate some of today's business drivers.

With an increasing pressure to optimize Operational Expenses, service providers are evaluating multiple outsourcing arrangements. One of these possibilities is to purchase not only equipment from suppliers, but also the managed services for those resources. The development of appropriate value chain processes to support the ordering, provision and maintenance of network infrastructure would lead to automated B2B processes, that, in turn, would lower equipment costs from a maintenance and technical support point of view for both the service providers and their equipment and services suppliers as has happened in other industries, e.g., automotive. This raises a need for developing and specifying interfaces used in procurements and maintenance between service providers and their suppliers.

A second kind of driver relates to the advent of Next Generation Network and Services. While the volumes of traditional telecommunication services are still growing, the margins are decreasing. Service providers with a strong market share in traditional telecommunication services realize they need to increase their focus on Next Generation services such as, for example, Triple Play: High Speed Internet Access, Voice and Video Streaming. Introduction of the required technology and resources in their network imposes a huge integration tax.

Traditionally, service providers have spent a lot of effort in various infrastructures and interfaces. But since these new kinds of service models introduce a Service Control and Application Layer on top of the Network Layer, service providers need to focus on Service and Business Logic in order to be able to differentiate and be successful in the future. Therefore, there is a need for a consistent abstraction, which is hiding complexity and multiplicity of technologies and domains in the network layer.

4.4 Objectives of mapping eTOM to M.3400

To address the needs for both current and the emerging Next Generation Network (NGN) technologies as indicated before, there is a need to provide more detailed process decompositions than currently available in the eTOM Business Process Framework. ITU-T Rec. M.3400 [1] provides a more detailed, but functional view on the Element and Network Management Layers. Linking the M.3400 functional

view to the eTOM process view will provide the required detail to design in a standardized way the processes to be operated between service provider OSSs and the network element vendor specific OSSs. It will also assist in building the required level of abstraction between the Resources, on one hand, and the Business and Service Logic, on the other hand.

The objectives of mapping eTOM to M.3400 are to:

- Facilitate the linkage from process view to functional view;
- Provide a framework for level of granularity and abstraction for the interface definitions;
- Get a better handle on what should be implemented in systems in terms of:
  - Reusable software components;
  - Boundaries of what to implement;
- Understand what are the interfaces between processes at the indicated levels;
- Identify the needs for standardization.

The eTOM Business Process Framework is a hierarchical framework, a taxonomy of process elements. The hierarchy helps an enterprise to organize the process analysis. The levels in the hierarchy provide an increasing level of detail. There comes a point where it no longer makes sense to further decompose: further details are filled in by the process flows. At this level, the M.3400 [1] management functions meld with the processes. This means that the functional view provided by ITU-T Rec. M.3400 [1] corresponds to the lowest level of process elements.

The mapping of M.3400 to eTOM is expected to help with validating and completing the eTOM process analysis work in the relevant process areas.

Since functions are what vendors are going to deliver, and processes model how service providers are going to sequence those functions, the mapping should also provide a means to match the service providers requirements with the vendors capabilities.

5 Linking functions to processes

5.1 About processes, functions and data

The relationship between processes and functions is illustrated in Figure 3.

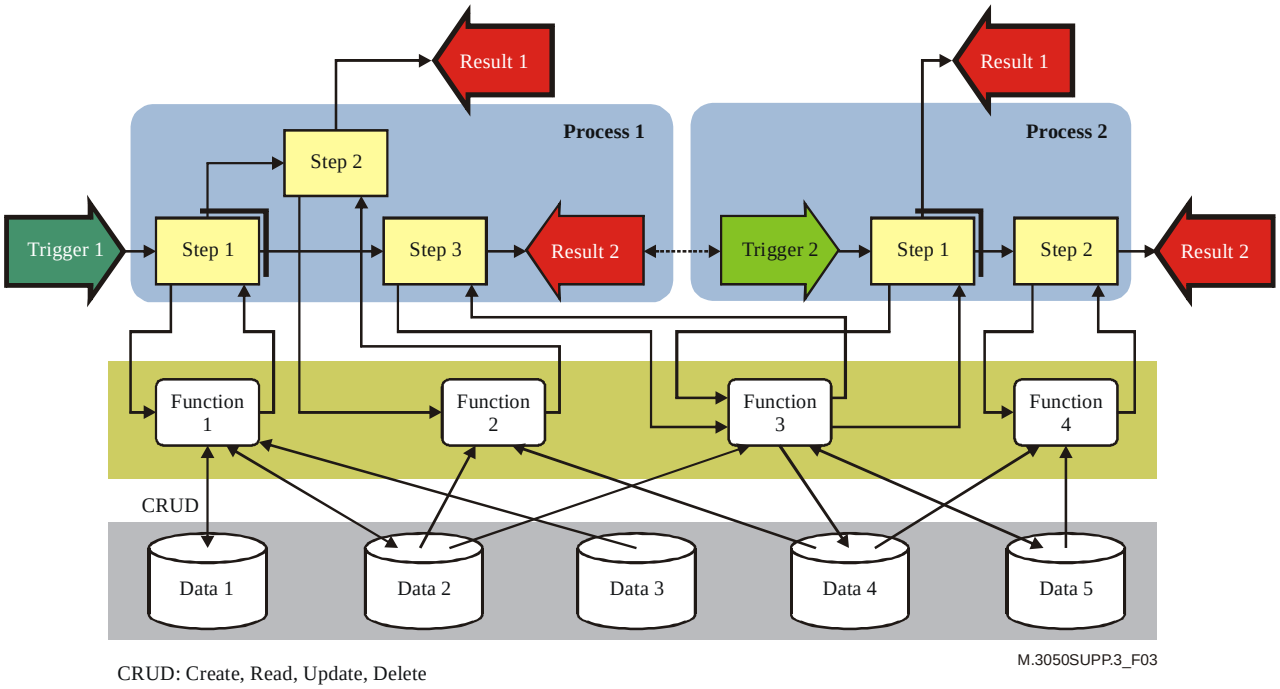


Figure 3 – Relationship between processes, functions and data

Processes can be used to describe the flow of activities to solve a particular business problem, or part of it. At early analysis stages for processes, the means of availability and how the data flows are not significant. Whether or not data is handed over or accessed in a central database is not addressed. However, processes are concerned with the triggers that set them into action.

As previously noted, ITU-T Rec. M.3400 defines TMN Management Functions. In the context of Figure 3, a function can be considered as a unit of processing (either initiated by humans or through an automated action) with specific, well-defined inputs and outputs. This aligns well with the view of TMN Management Functions in ITU-T Rec. M.3400 as cooperative interactions between application processes in managing and managed systems. For functions in particular, the data is essential because the function is described as a unit of processing together with its associated data inputs and outputs. As used in this framework, functions tend to be dedicated to a single purpose and highly granular. In the current version of this mapping Supplement, we did not yet take the data aspects into account.

A process will typically make use of activities in a number of functions. Multiple processes may employ a given function. Thus, there is in principle a many-to-many mapping between process and function.

Based on ITU-T Rec. M.3400 [1], functions with related or complementary capabilities are grouped into Function Set Groups, which then provide operational support to individual processes. It is envisioned that agreement is possible on the high-level processes and the standardized Function Set Groups, without constraining the way in which these are mapped through the intermediate work strings and sub-processes. This maintains the flexibility of application and implementation of this work in individual organizations, and provides harmonization of the underlying functional support and the broad process structure in which these are used.

A function can be considered as a mechanistic reaction to specific inputs, and is thus relatively straightforward to automate. Whereas a process is a reaction to one or more triggers with the

application of business rules, and can therefore be more complex to automate. By structuring processes, functions and data (see Figure 3), their relationships can become clearer.

This function-oriented perspective for understanding the content of processes supports the "top-down" analysis of processes, by identifying likely target functional capabilities which the processes will employ in carrying out their role.

5.2 Mapping processes levels to function set groups

As a first step, the need to understand the relationship of Level 2 processes with Function Set Groups is useful. The diagram below (Figure 4) helps to position them, but does not describe the Function Set Groups or Function Sets in detail (see Reference [1] for more detail).

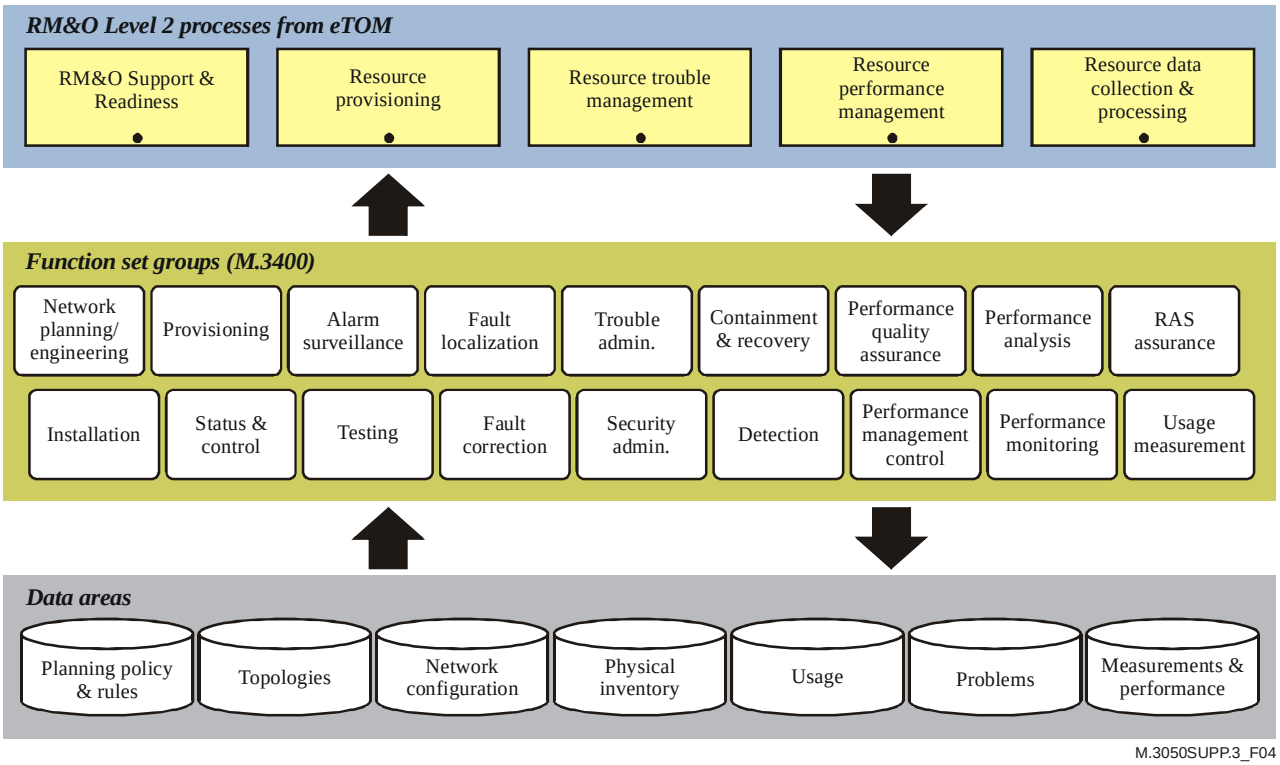


Figure 4 – Processes, function set groups and data areas

As a next step we can be looking at how the Level 2 and Level 3 processes relate with Function Set Groups and Function Sets as shown in Figure 5.

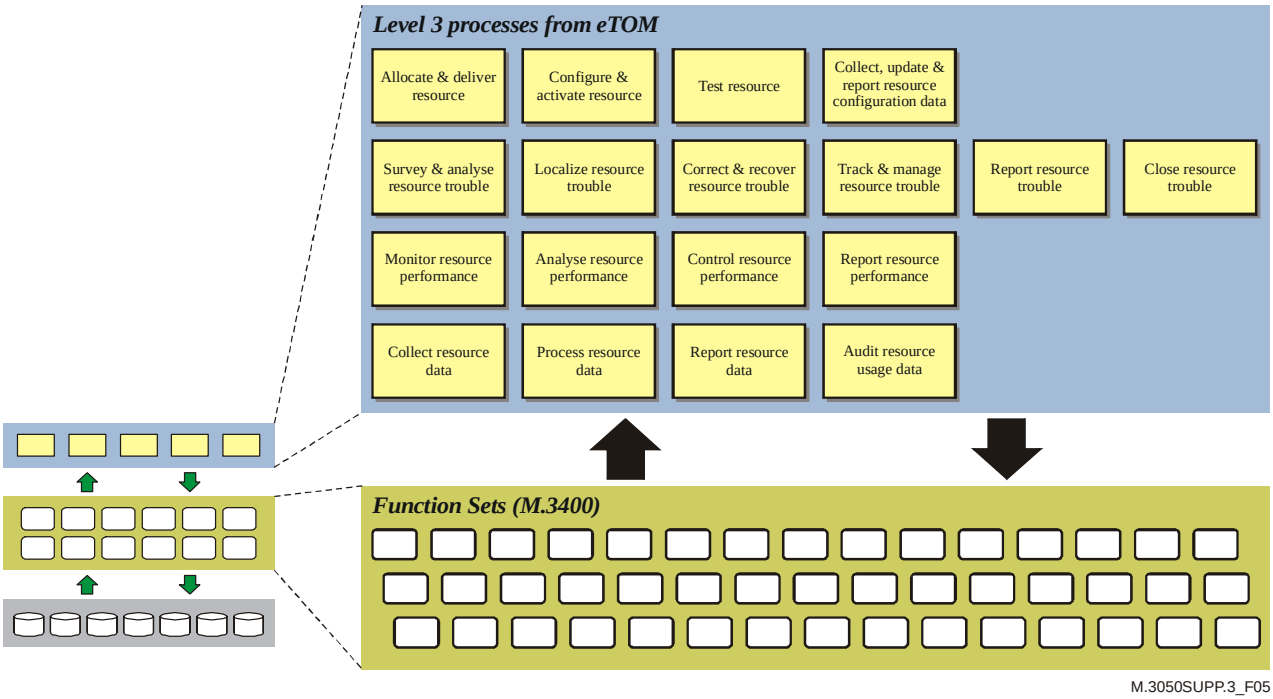


Figure 5 – Relationship between processes and functions

Each process or sub-process will be composed of all or part of the different Function Set Groups or Function Sets, perhaps as a linked workflow, to achieve its objectives. Figure 6 shows examples of these linked workflows, and how these might be used.

This would encourage the SID mapping exercise as it will provide an insight from an application's point of view.

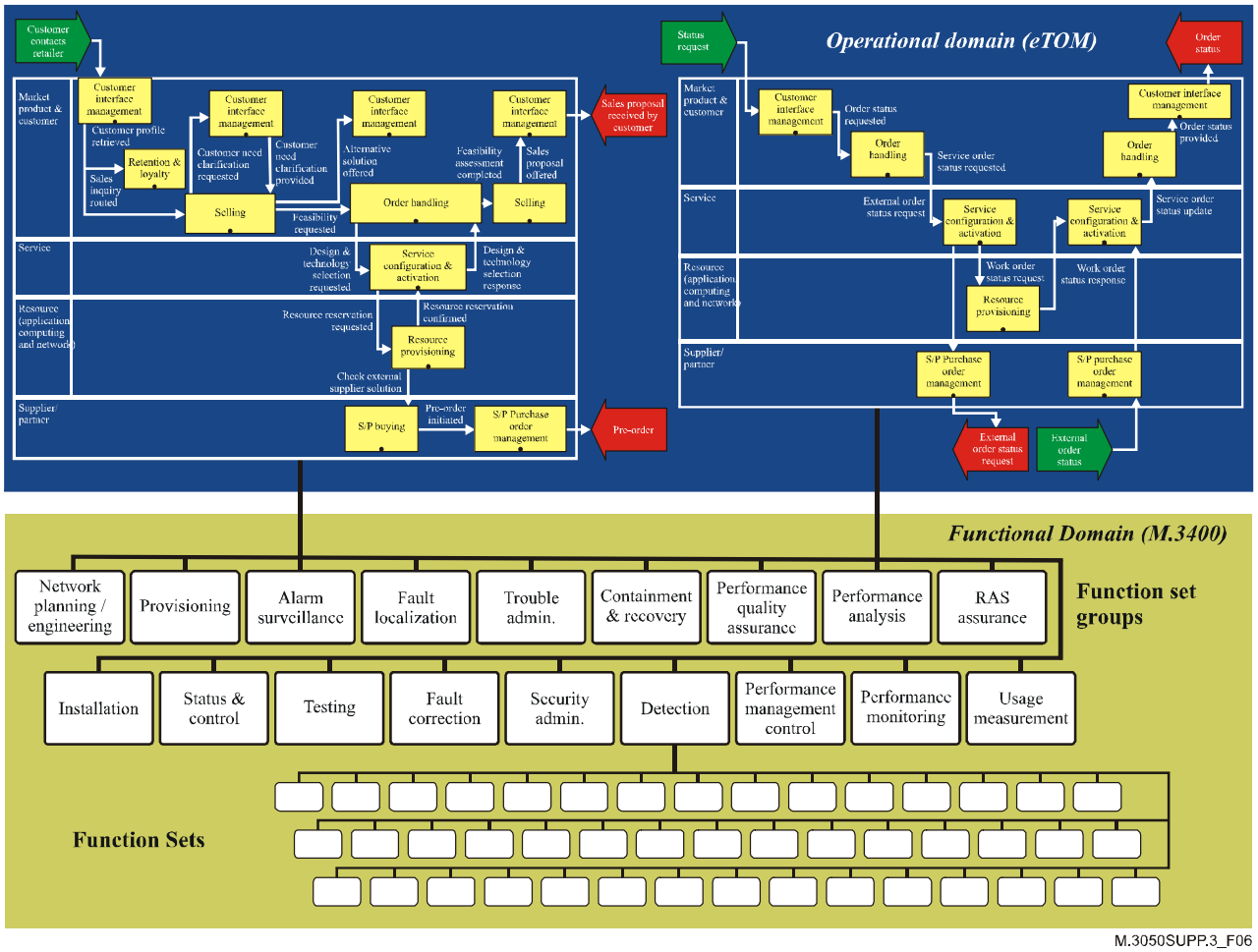


Figure 6 – Linking process flows with function set groups

Appendix I shows how eTOM Level 2 processes relate to M.3400 Function Set Groups. Currently this appendix is just focusing on Resource Management & Operations. Figures for other process areas will be developed in future work.

Appendices II and III will show a detailed mapping of Level 2 processes from and to M.3400 Function Set Groups and Function Sets.

It should be noted that the approach in Appendix I – abstract mapping figure – on one hand, and Appendices II and III – detailed mapping table – on the other hand, are quite different. The mapping tables attempt to clarify the detailed and precise relationship between M.3400 functions and eTOM processes as far as possible, since the approach of eTOM and M.3400 are significantly different.

The mapping tables show the complicated relationship between the two domains. If we were to represent this in a figure, that would become too complicated and hence not readable.

Therefore the approach was taken to provide figures, which are not correct in terms of precise and detailed mapping, but rather show the main linkage between eTOM and FCAPS, currently in the RM&O process area.

6 Outlook to future work

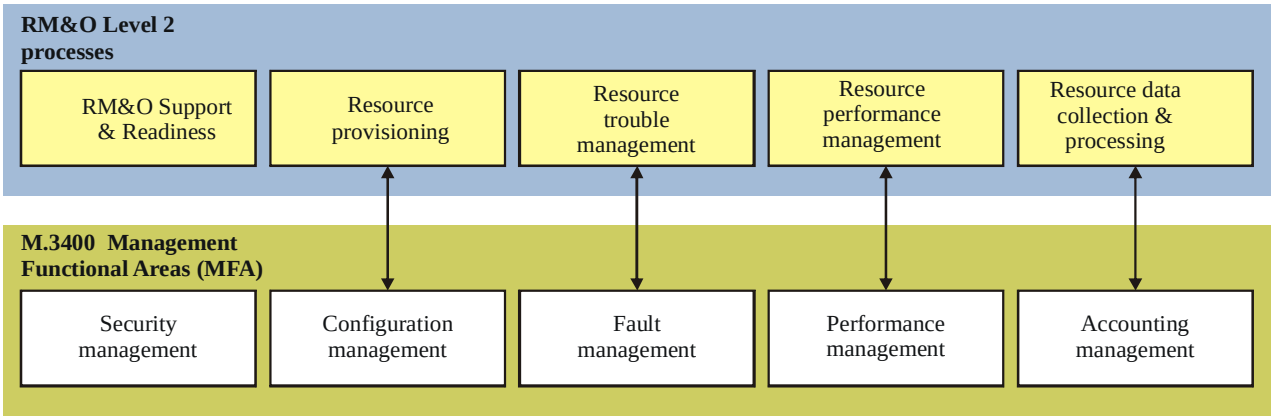
Possible future work items may include:

- elaborating of the abstract mapping figures from Appendix I;
- validating of the detailed mappings from Appendices II and III;
- complementing the current mapping with the data aspects.

Appendix I

eTOM Level 2 processes mapped to M.3400 function set groups

An overview of the main linkages between eTOM Level 2 Processes and M.3400 Function Set Groups is presented here. A detailed mapping of the eTOM process to the Function Set Groups and Function Sets is provided in Appendix II. As mentioned before, linking the Data Areas is for future work.



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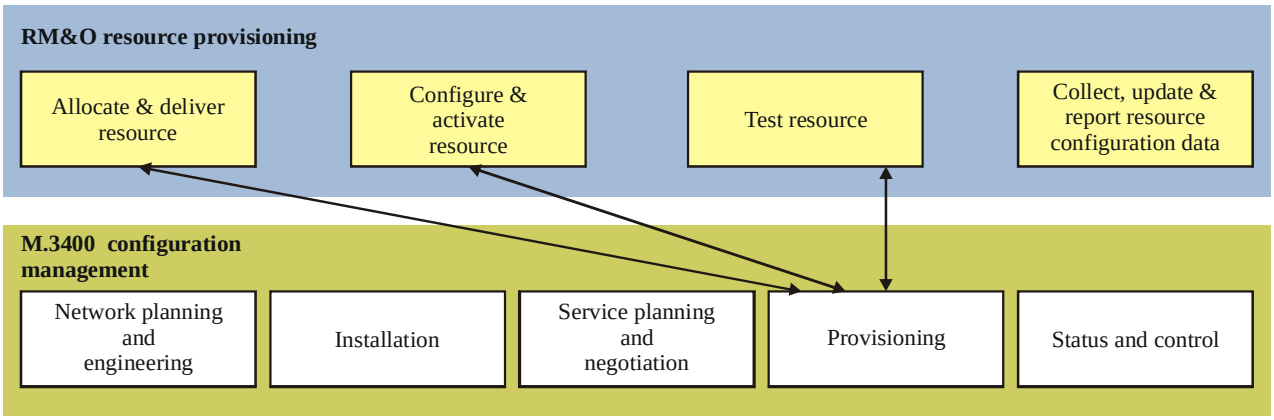

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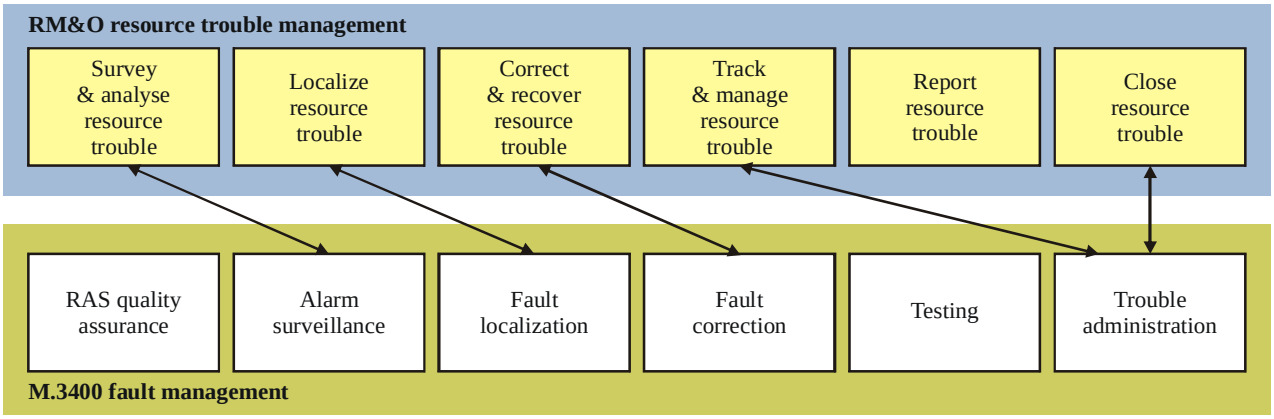

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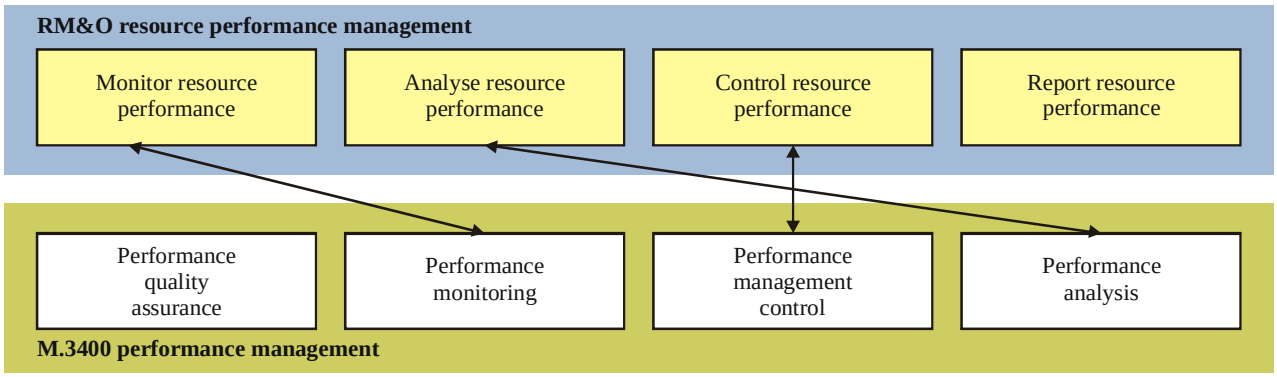

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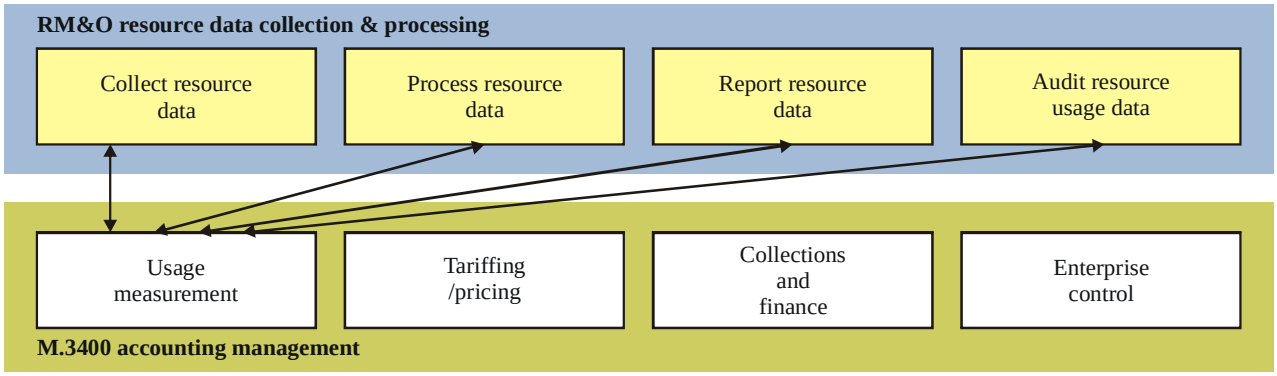

M.3050SUPP.3_FI.5

Appendix II

eTOM-to-M.3400 mapping table

This appendix should be considered "informative". It provides an example of mapping eTOM processes (ITU-T Rec. M.3050.2 [6]) and the Function Set Groups as well as their underlying component Function Sets (ITU-T Rec. M.3400 [1]).

eTOM Process ID	Process.Name	M.3400ID	Function.Name
1.A	Assurance		
		5	Performance Management
		6	Fault Management
1.A.1.6	Problem Handling		
		6.4	Fault Correction
		6.6	Trouble administration
1.A.1.6.1	Isolate Problem & Initiate Resolution		
		6.6.2	Trouble reporting function set
1.A.1.6.2	Report Problem		
		6.6.2	Trouble reporting function set
		6.6.3	Trouble report status change notification function set
		6.6.5	Trouble ticket creation notification function set
		6.6.6	Trouble ticket administration function set
1.A.1.6.3	Track and Manage Problem		
		6.4.2	Arrangement of repair with customer function set
		6.6.2	Trouble reporting function set
		6.6.4	Trouble information query function set
		6.6.6	Trouble ticket administration function set
1.A.1.6.4	Close Problem		
		6.6.6	Trouble ticket administration function set
1.A.2.3	Service Problem Management		
		7.5	Status and control
1.A.2.3.1	Evaluate & Qualify Problem		
		7.5.2	Priority service restoration function set
1.A.2.3.2	Diagnose Problem		
		7.5.2	Priority service restoration function set
1.A.2.3.3	Plan & Assign Resolution		
		7.5.2	Priority service restoration function set
1.A.2.3.4	Track & Manage Resolution		

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		7.5.2	Priority service restoration function set
1.A.2.4	Service Quality Management		
		5.1	Performance Quality Assurance
1.A.2.4.2	Analyse Service Quality		
		5.1.3	Subscriber service quality criteria function set
1.A.3.3	Resource Trouble Management		
		5.1	Performance Quality Assurance
		5.1.1	QoS performance goal setting function set
		5.1.2	Network performance goal setting function set
		5.4.1	Recommendations for performance improvement function set
		5.4.3	Traffic forecasting function set
		6.1	RAS Quality Assurance
		6.1.1	Network RAS goal setting function set
		6.2	Alarm surveillance
		6.3	Fault localization
		6.5	Testing
		6.6	Trouble administration
		7.1	Network Planning and Engineering
		7.1.1	Product line budget function set
		7.1.10	Routing design function set
		7.1.11	NE(s) design function set
		7.1.2	Supplier and technology policy function set
		7.1.3	Area boundary definition function set
		7.1.5	Management of planning and engineering process function set
		7.1.7	Network infrastructure design function set
		7.1.8	Access infrastructure design function set
		7.1.9	Facility infrastructure design function set
		7.2	Installation
		7.2.1	Procurement function set
		8.4	Enterprise Control
		8.4.1	Budgeting function set
1.A.3.3.1	Survey & Analyse Resource Trouble		
		6.1.5	Network outage reporting function set
		6.2.10	Failure event detection and reporting function set
		6.2.2	Network fault event analysis, including correlation and

eTOM Process ID	Process.Name	M.3400ID	Function.Name
			filtering function set
		6.2.6	Alarm event criteria function set
		6.2.7	Alarm indication management function set
		6.2.9	Alarm correlation and filtering function set
		6.3.3	Network fault localization function set
		6.3.4	NE(s) fault localization function set
		6.3.5	Running of diagnostic function set
		6.5.2	Service test function set
		6.5.3	Circuit selection, test correlation and fault location function set
		6.5.4	Selection of test suite function set
		6.5.5	Test access network control and recovery function set
1.A.3.3.2	Localize Resource Trouble		
		6.1.5	Network outage reporting function set
		6.2.10	Failure event detection and reporting function set
		6.2.2	Network fault event analysis, including correlation and filtering function set
		6.2.9	Alarm correlation and filtering function set
		6.3.3	Network fault localization function set
		6.3.4	NE(s) fault localization function set
		6.3.5	Running of diagnostic function set
1.A.3.3.3	Correct & Recover Resource Trouble		
		6.4.2	Arrangement of repair with customer function set
		6.4.4	NE(s) fault correction function set
		6.4.5	Automatic restoration function set
1.A.3.3.4	Track & Manage Resource Trouble		
		6.1.4	Service outage reporting function set
		6.1.5	Network outage reporting function set
		6.1.6	NE(s) outage reporting function set
		6.2.3	Alarm status modification function set
		6.2.8	Log control function set
		6.4.2	Arrangement of repair with customer function set
		6.4.3	Scheduling and dispatch administration of repair forces function set
		6.6.6	Trouble ticket administration function set
		6.6.7	Management of trouble by service customer function set (new function set)
1.A.3.3.5	Report Resource Trouble		

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		6.1.3	RAS assessment function set
		6.1.4	Service outage reporting function set
		6.1.5	Network outage reporting function set
		6.2.2	Network fault event analysis, including correlation and filtering function set
		6.2.4	Alarm reporting function set
		6.2.5	Alarm summary function set
		6.2.6	Alarm event criteria function set
		6.3.3	Network fault localization function set
		6.3.4	NE(s) fault localization function set
		6.3.5	Running of diagnostic function set
		6.4.4	NE(s) fault correction function set
		6.4.5	Automatic restoration function set
		6.5.2	Service test function set
		6.5.3	Circuit selection, test correlation and fault location function set
		6.5.4	Selection of test suite function set
		6.5.5	Test access network control and recovery function set
		6.5.9	Results and status reporting function set
		6.6.6	Trouble ticket administration function set
		6.6.7	Management of trouble by service customer function set (new function set)
1.A.3.4	Resource Performance Management		
		5.2	Performance Monitoring
		5.4	Performance Analysis
		8	Accounting Management
		9	Security Management
1.A.3.4.1	Monitor Resource Performance		
		5.2.10	Detection, counting, storage and reporting function set
		5.2.6	Traffic performance monitoring function set
		5.2.9	Performance monitoring data accumulation function set
		5.4.10	NE(s) traffic exception analysis function set
		5.4.11	NE(s) traffic capacity analysis function set
		7.4.20	Assignable inventory management function set
1.A.3.4.2	Analyse Resource Performance		
		5.1.6	NE(s) performance assessment function set

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		5.1.7	Data integrity check function set
		5.2.10	Detection, counting, storage and reporting function set
		5.2.2	Network performance monitoring event correlation and filtering function set
		5.2.3	Data aggregation and trending function set
		5.2.5	Traffic status function set
		5.2.6	Traffic performance monitoring function set
		5.2.7	NE(s) threshold crossing alert processing function set
		5.2.8	NE(s) trend analysis function set
		5.2.9	Performance monitoring data accumulation function set
		5.4.10	NE(s) traffic exception analysis function set
		5.4.11	NE(s) traffic capacity analysis function set
		5.4.6	Traffic exception analysis function set
		5.4.7	Traffic capacity analysis function set
		5.4.8	Network performance characterization function set
		7.4.20	Assignable inventory management function set
1.A.3.4.3	Control Resource Performance		
		7.4.20	Assignable inventory management function set
1.A.3.4.4	Report Resource Performance		
		5.2.10	Detection, counting, storage and reporting function set
		5.2.2	Network performance monitoring event correlation and filtering function set
		5.2.3	Data aggregation and trending function set
		5.2.4	Circuit-specific data collection function set
		5.2.5	Traffic status function set
		5.2.6	Traffic performance monitoring function set
		5.2.7	NE(s) threshold crossing alert processing function set
		5.2.8	NE(s) trend analysis function set
		5.2.9	Performance monitoring data accumulation function set
		5.4.6	Traffic exception analysis function set
		5.4.7	Traffic capacity analysis function set
		5.4.8	Network performance characterization function set
		5.4.9	NE(s) performance characterization function set
		7.4.20	Assignable inventory management function set
1.A.4.4.2	Restore S/P Service Performance		

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		6.1	RAS Quality Assurance
		6.2	Alarm surveillance
		6.3	Fault localization
		6.5	Testing
		6.6	Trouble administration
1.AB.3.5	Resource Data Collection & Processing		
		5.2	Performance Monitoring
		5.4	Performance Analysis
		6.1	RAS Quality Assurance
		6.1.1	Network RAS goal setting function set
		6.2	Alarm surveillance
		6.4	Fault Correction
		6.5	Testing
		7.1	Network Planning and Engineering
		7.1.7	Network infrastructure design function set
		7.1.8	Access infrastructure design function set
		7.1.9	Facility infrastructure design function set
		7.2	Installation
		7.2.2	Management of installation function set
		7.2.3	Contracting function set
		7.2.6	Network installation administration function set
		7.4	Provisioning
		7.4.1	Provisioning policy function set
		8.4	Enterprise Control
		8.4.9	Investments function set
1.AB.3.5.1	Collect Resource Data		
		5.2.10	Detection, counting, storage and reporting function set
		5.2.6	Traffic performance monitoring function set
		5.2.9	Performance monitoring data accumulation function set
		6.6.2	Trouble reporting function set
		8.1.14	Usage accumulation function set
		8.3.15	In-call service request function set
		9.2.2	Support element protection function set
1.AB.3.5.2	Process Resource Data		
		5.2.10	Detection, counting, storage and reporting function set
		5.2.2	Network performance monitoring event correlation

eTOM Process ID	Process.Name	M.3400ID	Function.Name
			and filtering function set
		5.2.3	Data aggregation and trending function set
		5.2.4	Circuit-specific data collection function set
		5.2.5	Traffic status function set
		5.2.6	Traffic performance monitoring function set
		5.2.7	NE(s) threshold crossing alert processing function set
		5.2.8	NE(s) trend analysis function set
		5.2.9	Performance monitoring data accumulation function set
		5.4.6	Traffic exception analysis function set
		5.4.7	Traffic capacity analysis function set
		5.4.8	Network performance characterization function set
		5.4.9	NE(s) performance characterization function set
		6.2.10	Failure event detection and reporting function set
		6.2.2	Network fault event analysis, including correlation and filtering function set
		6.2.5	Alarm summary function set
		6.2.6	Alarm event criteria function set
		6.2.9	Alarm correlation and filtering function set
		6.4.5	Automatic restoration function set
		6.6.2	Trouble reporting function set
		8.1.11	Network usage correlation function set
		8.1.16	Administration of usage data collection function set
		8.1.4	Service usage correlation function set
		8.1.5	Service usage validation function set
		8.1.7	Usage surveillance function set
		8.1.8	Usage error correction function set
		8.3.15	In-call service request function set
		9.2.2	Support element protection function set
		9.2.5	Customer usage pattern analysis function set
1.AB.3.5.3	Report Resource Data		
		5.2.10	Detection, counting, storage and reporting function set
		5.2.2	Network performance monitoring event correlation and filtering function set
		5.2.3	Data aggregation and trending function set
		5.2.4	Circuit-specific data collection function set
		5.2.5	Traffic status function set

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		5.2.6	Traffic performance monitoring function set
		5.2.7	NE(s) threshold crossing alert processing function set
		5.2.8	NE(s) trend analysis function set
		5.2.9	Performance monitoring data accumulation function set
		5.4.6	Traffic exception analysis function set
		5.4.7	Traffic capacity analysis function set
		5.4.8	Network performance characterization function set
		5.4.9	NE(s) performance characterization function set
		6.1.3	RAS assessment function set
		6.2.10	Failure event detection and reporting function set
		6.2.2	Network fault event analysis, including correlation and filtering function set
		6.2.5	Alarm summary function set
		6.2.6	Alarm event criteria function set
		6.2.9	Alarm correlation and filtering function set
		6.4.4	NE(s) fault correction function set
		6.4.5	Automatic restoration function set
		6.6.2	Trouble reporting function set
		8.1.12	Usage short-term storage function set
		8.1.13	Usage long-term storage function set
		8.1.2	Management of the usage measurement process function set
		8.1.3	Usage aggregation function set
		8.1.4	Service usage correlation function set
		8.1.6	Usage distribution function set
		8.2.3	Costing function set
		8.3.15	In-call service request function set
		9.2.2	Support element protection function set
1.AB.3.5.4	Audit Resource Usage Data		
		8.1.1	Planning of the usage measurement process function set
		8.1.2	Management of the usage measurement process function set
		8.1.7	Usage surveillance function set
		8.1.9	Usage testing function set
		9.2.2	Support element protection function set

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		9.2.5	Customer usage pattern analysis function set
		9.2.9	Software intrusion audit function set
1.B	Billing		
		5	Performance Management
		6	Fault Management
		8	Accounting Management
1.B.1.8	Billing & Collections Management		
		8.2	Tariffing/pricing
		8.3	Collections and Finance
1.B.1.8.1	Manage Customer Bill Inquiries		
		8.3.16	Storage of invoice function set
		8.3.18	Inquiry response function set
1.B.1.8.2	Apply Pricing, Discounting & Rebate		
		8.2.8	Totalling usage charges function set
1.B.1.8.3	Create & Deliver Bill		
		8.2.8	Totalling usage charges function set
		8.3.12	Invoice assembly function set
		8.3.13	Sending invoice function set
1.B.1.8.4	Manage Customer Billing		
		8.3.1	Planning of the billing process function set
		8.3.2	Management of the billing process function set
1.B.1.8.5	Manage Collection		
		8.3.14	Customer tax administration function set
		8.3.16	Storage of invoice function set
		8.3.17	Receipt of payment function set
		8.3.19	Collections function set
		8.3.21	Customer profile administration function set
		8.3.5	Accounts receivable function set
1.B.2.5	Service & Specific Instance Rating		
		8.1	Usage Measurement
		8.2	Tariffing/pricing
		8.3	Collections and Finance
		9.4	Security Administration
1.B.2.5.1	Mediate Usage Records		
		8.1.10	Measurement rules identification function set
		8.1.15	Usage validation function set

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		8.1.5	Service usage validation function set
		8.3.15	In-call service request function set
1.B.2.5.2	Rate Usage Records		
		8.1.10	Measurement rules identification function set
		8.2.7	Rating usage function set
		8.3.15	In-call service request function set
1.B.2.5.3	Analyse Usage Records		
		8.1.3	Usage aggregation function set
		8.3.15	In-call service request function set
		9.4.12	Customer audit trail function set
1.B.4.5.1	Manage Account		
		8.3.6	Accounts payable function set
1.B.4.5.2	Receive & Assess Invoice		
		8.3.6	Accounts payable function set
1.B.4.5.3	Negotiate & Approve Invoice		
		8.3.6	Accounts payable function set
1.B.4.5.4	Issue Settlement Notice & Payment		
		8.3.6	Accounts payable function set
1.E.1	Strategic & Enterprise Planning		
		7	Configuration Management
		8	Accounting Management
1.E.1.1	Strategic Business Planning		
		8.4	Enterprise Control
		8.4.1	Budgeting function set
		8.4.5	Cost reduction function set
		8.4.9	Investments function set
1.E.1.2	Business Development		
		8.4	Enterprise Control
		8.4.9	Investments function set
1.E.1.3	Enterprise Architecture Management		
		7.1	Network Planning and Engineering
		7.1.5	Management of planning and engineering process function set
1.E.2	Enterprise Risk Management		
		5	Performance Management
		8	Accounting Management
		9	Security Management

eTOM Process ID	Process.Name	M.3400ID	Function.Name
1.E.2.1	Business Continuity Management		
		5.3	Performance Management Control
		5.3.1	Network traffic management policy function set
		9.3	Containment and Recovery
		9.3.1	Protected storage of business data function set
		9.3.12	Protected storage of network configuration data function set
		9.3.16	Protected storage of NE(s) configuration data function set
		9.3.8	Protected storage of customer data function set
		9.4	Security Administration
		9.4.2	Disaster recovery planning function set
1.E.2.2	Security Management		
		9.1	Prevention
		9.1.2	Physical access security function set
		9.1.3	Guarding function set
		9.1.4	Personnel risk analysis function set
		9.2	Detection
		9.2.10	Support element security alarm reporting function set
		9.2.3	Customer security alarm function set
		9.2.8	Network security alarm function set
		9.2.9	Software intrusion audit function set
		9.3	Containment and Recovery
		9.3.11	Administration of network revocation list function set
		9.3.15	Administration of NE(s) revocation list function set
		9.3.3	Theft of service action function set
		9.3.5	Apprehending function set
		9.3.7	Administration of customer revocation list function set
		9.4	Security Administration
		9.4.1	Security policy function set
		9.4.10	Administration of external encryption and keys function set
		9.4.11	Administration of external security protocols function set
		9.4.12	Customer audit trail function set
		9.4.13	Customer security alarm management function set
		9.4.15	Administration of internal authentication

eTOM Process ID	Process.Name	M.3400ID	Function.Name
			function set
		9.4.16	Administration of internal access control function set
		9.4.17	Administration of internal certification function set
		9.4.18	Administration of internal encryption and keys function set
		9.4.19	Network audit trail management function set
		9.4.20	Network security alarm management function set
		9.4.21	NE(s) audit trail management function set
		9.4.22	NE(s) security alarm management function set
		9.4.23	Administration of keys for NEs function set
		9.4.24	Administration of keys by an NE function set
		9.4.3	Manage guards function set
		9.4.4	Audit trail analysis function set
		9.4.5	Security alarm analysis function set
		9.4.6	Assessment of corporate data integrity function set
		9.4.7	Administration of external authentication function set
		9.4.8	Administration of external access control function set
		9.4.9	Administration of external certification function set
1.E.2.3	Fraud Management		
		9.2	Detection
		9.2.1	Investigation of changes in revenue patterns function set
		9.2.4	Customer (external user) profiling function set
		9.2.5	Customer usage pattern analysis function set
		9.2.6	Investigation of theft of service function set
1.E.2.4	Audit Management		
		5.3	Performance Management Control
		5.3.6	Audit report function set
		8.4	Enterprise Control
		8.4.2	Auditing function set
		9.4	Security Administration
		9.4.12	Customer audit trail function set
		9.4.14	Testing of audit trail mechanism function set
		9.4.19	Network audit trail management function set
		9.4.21	NE(s) audit trail management function set
		9.4.4	Audit trail analysis function set
1.E.2.5	Insurance Management		

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		8.4	Enterprise Control
		8.4.8	Insurance analysis function set
1.E.3	Enterprise Effectiveness Management		
		7	Configuration Management
		8	Accounting Management
1.E.3.1	Process Management & Support		
		8.2	Tariffing/pricing
		8.2.3	Costing function set
		8.4	Enterprise Control
		8.4.5	Cost reduction function set
1.E.3.5	Facilities Management & Support		
		7.2	Installation
		7.2.4	Real estate management function set
1.E.5	Financial & Asset Management		
		8	Accounting Management
1.E.5.1	Financial Management		
		8.2	Tariffing/pricing
		8.2.3	Costing function set
		8.3	Collections and Finance
		8.3.10	Taxation function set
		8.3.3	General accounting operations function set
		8.3.4	General ledger function set
		8.3.5	Accounts receivable function set
		8.3.6	Accounts payable function set
		8.4	Enterprise Control
		8.4.1	Budgeting function set
		8.4.11	Tracking of liabilities function set
		8.4.3	Cash management function set
		8.4.5	Cost reduction function set
		8.4.6	Profitability analysis function set
		8.4.9	Investments function set
1.E.5.2	Asset Management		
		8.4	Enterprise Control
		8.4.10	Assets management function set
1.E.6	Stakeholder & External Relations Management		
		7	Configuration Management

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		8	Accounting Management
		9	Security Management
1.E.6.1	Corporate Communications & Image Management		
		7.3	Service Planning and Negotiation
		7.3.5	External relations (legal, stockholders, regulators, public relations) function set
1.E.6.2	Community Relations Management		
		7.3	Service Planning and Negotiation
		7.3.5	External relations (legal, stockholders, regulators, public relations) function set
1.E.6.3	Shareholder Relations Management		
		7.3	Service Planning and Negotiation
		7.3.5	External relations (legal, stockholders, regulators, public relations) function set
		8.4	Enterprise Control
		8.4.7	Financial reporting function set
1.E.6.4	Regulatory Management		
		7.3	Service Planning and Negotiation
		7.3.5	External relations (legal, stockholders, regulators, public relations) function set
		8.2	Tariffing/pricing
		8.2.2	Tariff and price administration function set
		8.4	Enterprise Control
		8.4.7	Financial reporting function set
1.E.6.5	Legal Management		
		7.3	Service Planning and Negotiation
		7.3.5	External relations (legal, stockholders, regulators, public relations) function set
		9.1	Prevention
		9.1.1	Legal review function set
		9.3	Containment and Recovery
		9.3.3	Theft of service action function set
		9.3.4	Legal action function set
1.E.6.6	Board & Shares/Securities Management		
		7.3	Service Planning and Negotiation
		7.3.5	External relations (legal, stockholders, regulators, public relations) function set
		8.4	Enterprise Control

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		8.4.4	Raising equity function set
1.E.7	Human Resources Management		
		8	Accounting Management
1.E.7.1	HR Policies & Practices		
		8.3	Collections and Finance
		8.3.11	Human resources function set
		8.3.8	Benefits administration function set
		8.3.9	Pension administration function set
1.E.7.2	Organization Development		
		8.3	Collections and Finance
		8.3.11	Human resources function set
1.E.7.3	Workforce Strategy		
		8.3	Collections and Finance
		8.3.11	Human resources function set
1.E.7.4	Workforce Development		
		8.3	Collections and Finance
		8.3.11	Human resources function set
1.E.7.5	Employee & Labor Relations Management		
		8.3	Collections and Finance
		8.3.7	Payroll function set
1.F	Fulfilment		
		5	Performance Management
		7	Configuration Management
1.F.1.4	Selling		
		7.3	Service Planning and Negotiation
1.F.1.4.1	Manage Prospect		
		7.3.7	Customer need identification function set
1.F.1.5	Order Handling		
		9.1	Prevention
1.F.1.5.2	Authorize Credit		
		9.1.5	Security screening function set
1.F.2.2	Service Configuration & Activation		
		6.5	Testing
		7.2	Installation
		7.3	Service Planning and Negotiation
		7.4	Provisioning

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1.F.2.2.1	Design Solution		
		7.2.5	Arrangement of installation with customer function set
		7.3.10	Solution proposal function set
		7.3.8	Customer service planning function set
1.F.2.2.2	Allocate Specific Resources to Services		
		7.2.5	Arrangement of installation with customer function set
		7.4.4	Directory address determination function set
		7.4.6	Request for service function set
1.F.2.2.3	Track & Manage Work Orders		
		7.2.5	Arrangement of installation with customer function set
		7.4.7	Service status administration function set
1.F.2.2.4	Implement & Configure Service		
		7.2.5	Arrangement of installation with customer function set
		7.4.6	Request for service function set
		9.3.6	Service intrusion recovery function set
1.F.2.2.5	Test Service End-to-End		
		6.5.2	Service test function set
		7.2.5	Arrangement of installation with customer function set
1.F.3.2	Resource Provisioning		
		5.1	Performance Quality Assurance
		5.4	Performance Analysis
		6.5	Testing
		7.4	Provisioning
1.F.3.2.1	Allocate & Deliver Resource		
		7.4.1	Provisioning policy function set
		7.4.10	Access circuit design function set
		7.4.11	Leased circuit design function set
		7.4.12	Facility design function set
		7.4.13	Manage pending network changes function set
		7.4.17	NE(s) configuration function set
		7.4.19	NE(s) database management function set
		7.4.21	NE(s) resource selection and assignment function set
		7.4.22	NE(s) path design function set
		7.4.26	Manage pending changes in NE(s) function set
		7.4.3	Access route determination function set
		7.4.5	Leased circuit route determination function set

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		7.4.8	Network resource selection and assignment function set
		7.4.9	Interexchange circuit design function set
1.F.3.2.2	Configure & Activate Resource		
		6.5.10	Test access path management function set
		6.5.11	Test access function set
		7.4.13	Manage pending network changes function set
		7.4.14	Network connection management function set
		7.4.19	NE(s) database management function set
		7.4.23	Loading program for service feature(s) function set
		7.4.8	Network resource selection and assignment function set
		7.5.3	Message handling systems network status function set
		7.5.4	Leased circuit network status function set
		7.5.5	Transport network status function set
		7.5.6	NE(s) status and control function set
		9.3.10	Network intrusion recovery function set
		9.3.13	Severing internal connections function set
		9.3.14	NE(s) intrusion recovery function set
		9.3.2	Exception report action function set
		9.3.9	Severing external connections function set
1.F.3.2.3	Test Resource		
		6.5.10	Test access path management function set
		6.5.11	Test access function set
		6.5.2	Service test function set
		6.5.3	Circuit selection, test correlation and fault location function set
		6.5.4	Selection of test suite function set
		6.5.5	Test access network control and recovery function set
		6.5.6	Test access configuration function set
		6.5.7	Test circuit configuration function set
		6.5.8	NE(s) test control function set
1.F.3.2.4	Collect, Update & Report Resource Configuration Data		
		6.4.4	NE(s) fault correction function set
		6.4.5	Automatic restoration function set
		7.2.9	Installation completion reporting function set
		7.4.29	Self-inventory function set

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		7.4.8	Network resource selection and assignment function set
		7.5.3	Message handling systems network status function set
		7.5.4	Leased circuit network status function set
		7.5.5	Transport network status function set
		7.5.6	NE(s) status and control function set
		7.5.7	Access to state information in NEs function set
		7.5.8	Notification of state changes by NEs function set
		9.3.2	Exception report action function set
		9.3.3	Theft of service action function set
		9.4.19	Network audit trail management function set
		9.4.21	NE(s) audit trail management function set
1.F.4.2	S/P Settlements & Billing Management		
		8.3	Collections and Finance
1.F.4.2.1	Select Supplier/Partner		
		7.2.7	Material management function set
1.F.4.2.2	Determine S/P Pre-Requisition Feasibility		
		7.2.7	Material management function set
1.F.4.2.3	Place S/P Requisition		
		7.2.7	Material management function set
1.F.4.2.4	Receive & Accept S/P Product		
		7.2.7	Material management function set
1.FAB.1.2	Customer Interface Management		
		6.4	Fault Correction
		7.3	Service Planning and Negotiation
		8.3	Collections and Finance
1.FAB.1.2.1	Manage Contact		
		6.4.2	Arrangement of repair with customer function set
		7.3.6	Customer identification function set
		8.3.16	Storage of invoice function set
		8.3.17	Receipt of payment function set
		8.3.18	Inquiry response function set
		8.3.20	Customer account administration function set
1.FAB.1.2.2	Manage Request (Including Self Service)		
		6.4.2	Arrangement of repair with customer function set
		8.3.16	Storage of invoice function set
		8.3.17	Receipt of payment function set

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		8.3.18	Inquiry response function set
		8.3.20	Customer account administration function set
1.FAB.1.9.2	Build Customer Insight		
		8.3.20	Customer account administration function set
1.FAB.1.9.3	Analyse and Manage Customer Risk		
		9.2.6	Investigation of theft of service function set
1.FAB.4.6	S/P Interface Management		
		5.1	Performance Quality Assurance
		5.2	Performance Monitoring
		5.3	Performance Management Control
		5.4	Performance Analysis
		6.1	RAS Quality Assurance
		6.2	Alarm surveillance
		6.3	Fault localization
		6.4	Fault Correction
		6.5	Testing
		6.6	Trouble administration
		7.1	Network Planning and Engineering
		7.2	Installation
		7.4	Provisioning
		7.5	Status and control
		9.2	Detection
		9.4	Security Administration
1.I.1.2	Product & Offer Portfolio Planning		
		7.3	Service Planning and Negotiation
		8.2	Tariffing/pricing
		8.2.5	Feature pricing function set
		8.4.9	Investments function set
1.I.1.3	Product & Offer Capability Delivery		
		8.2.5	Feature pricing function set
1.I.1.4	Marketing Capability Delivery		
		7.3	Service Planning and Negotiation
		7.3.3	Marketing function set
1.I.2.2	Service Capability Delivery		
		6.1	RAS Quality Assurance
		6.1.2	Service availability goal setting function set

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		7.2	Installation
		7.2.2	Management of installation function set
		7.2.6	Network installation administration function set
		7.3	Service Planning and Negotiation
		7.3.10	Solution proposal function set
		7.3.8	Customer service planning function set
		8.4	Enterprise Control
		8.4.9	Investments function set
1.I.3.2	Requisition Management		
		7.2	Installation
1.I.4.2	Supply Chain Capability Delivery		
		7.2	Installation
		7.2.1	Procurement function set
		7.2.3	Contracting function set
1.O	Operation Support & Readiness		
		5	Performance Management
1.O.1.1	CRM Support & Readiness		
		7.3	Service Planning and Negotiation
		8.1	Usage Measurement
		8.2	Tariffing/pricing
		8.3	Collections and Finance
1.O.1.1.1	Support Customer Interface Management		
		7.3.4	Management of sales process function set
		8.2.6	Provision of access to tariff/price information function set
1.O.1.1.4	Support Billing & Collections		
		8.1.1	Planning of the usage measurement process function set
		8.2.1	Pricing strategy function set
		8.2.2	Tariff and price administration function set
		8.2.5	Feature pricing function set
		8.3.1	Planning of the billing process function set
		8.3.2	Management of the billing process function set
1.O.1.1.5	Support Retention & Loyalty		
		8.2.6	Provision of access to tariff/price information function set
1.O.1.1.6	Support Marketing Fulfilment		

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		7.3.4	Management of sales process function set
1.O.1.1.7	Support Selling		
		7.3.4	Management of sales process function set
1.O.1.1.9	Manage Campaign		
		7.3.4	Management of sales process function set
1.O.2.1	SM&O Support & Readiness		
		5.1	Performance Quality Assurance
		5.4	Performance Analysis
		6.1	RAS Quality Assurance
		7.3	Service Planning and Negotiation
		7.5	Status and control
1.O.2.1.1	Manage Service Inventory		
		7.3.2	Service feature definition function set
		7.3.9	Customer service feature definition function set
		7.4.28	Access to service features in NEs function set
		8.3.21	Customer profile administration function set
1.O.2.1.4	Enable Service Quality Management		
		5.1.4	QoS performance assessment function set
		5.4.4	Customer service performance summary (excludes traffic) function set
		5.4.5	Customer traffic performance summary function set
		7.5.1	Priority service policy function set
1.O.3.1	Resource Data Collection & Processing		
		8.3	Collections and Finance
		9.2	Detection
1.O.3.1.1	Enable Resource Provisioning		
		7.1.3	Area boundary definition function set
		7.2.10	Software administration function set
		7.2.11	NE installation administration function set
		7.4.1	Provisioning policy function set
		7.4.18	NE(s) administration function set
1.O.3.1.2	Enable Resource Performance Management		
		5.1.4	QoS performance assessment function set
		5.1.5	Network performance assessment function set
		5.2.1	Performance monitoring policy function set
		5.3.4	Performance administration function set

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		5.4.2	Exception threshold policy function set
		9.2.7	Internal traffic and activity pattern analysis function set
1.O.3.1.3	Support Resource Trouble Management		
		6.2.1	Alarm policy function set
		6.3.1	Fault localization policy function set
		6.4.1	Management of repair process function set
		6.5.1	Test point policy function set
		6.6.1	Trouble report policy function set
1.O.3.1.4	Enable Resource Data Collection & Processing		
		5.3.1	Network traffic management policy function set
		5.3.2	Traffic control function set
		5.3.3	Traffic administration function set
		5.3.5	Execution of traffic control function set
		5.3.6	Audit report function set
		5.4.5	Customer traffic performance summary function set
		8.1.17	Usage generation function set
		9.2.10	Support element security alarm reporting function set
		9.2.7	Internal traffic and activity pattern analysis function set
		9.2.8	Network security alarm function set
		9.4.13	Customer security alarm management function set
		9.4.20	Network security alarm management function set
		9.4.22	NE(s) security alarm management function set
		9.4.5	Security alarm analysis function set
1.O.3.1.5	Manage Resource Inventory		
		6.3.2	Verification of parameters and connectivity function set
		6.5.5	Test access network control and recovery function set
		7.1.4	Infrastructure planning function set
		7.2.10	Software administration function set
		7.2.11	NE installation administration function set
		7.4.15	Circuit inventory notification function set
		7.4.16	Circuit inventory query function set
		7.4.19	NE(s) database management function set
		7.4.2	Material management policy function set
		7.4.20	Assignable inventory management function set

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		7.4.24	NE(s) inventory notification function set
		7.4.25	NE(s) inventory query function set
		7.4.27	Access to parameters and cross-connects in NEs function set
		7.4.28	Access to service features in NEs function set
		7.5.3	Message handling systems network status function set
		7.5.4	Leased circuit network status function set
		7.5.5	Transport network status function set
		7.5.6	NE(s) status and control function set
		7.5.7	Access to state information in NEs function set
		7.5.8	Notification of state changes by NEs function set
1.O.3.1.6	Manage Workforce		
		6.4.1	Management of repair process function set
		7.2.8	Scheduling and dispatch administration of installation force function set
1.O.4.1	S/PRM Operations Support & Readiness		
		8.2	Tariffing/pricing
1.O.4.1.4	Support S/P Settlements & Billing Management		
		8.2.4	Settlements policy function set
1.OFAB.1	Customer Relationship Management		
		5.1	Performance Quality Assurance
		6	Fault Management
		7	Configuration Management
		8	Accounting Management
		9	Security Management
1.OFAB.2	Service Management & Operation		
		5	Performance Management
		6	Fault Management
		7	Configuration Management
		8	Accounting Management
		9	Security Management
1.OFAB.3	Resource Management & Operations		
		5	Performance Management
		5.1	Performance Quality Assurance
		5.1.1	QoS performance goal setting function set
		5.4	Performance Analysis
		5.4.1	Recommendations for performance improvement

eTOM Process ID	Process.Name	M.3400ID	Function.Name
			function set
		6	Fault Management
		7	Configuration Management
		7.1	Network Planning and Engineering
		7.1.1	Product line budget function set
		7.2	Installation
		7.2.2	Management of installation function set
		7.2.3	Contracting function set
		7.2.6	Network installation administration function set
		8.4	Enterprise Control
		8.4.9	Investments function set
1.OFAB.4	Supplier/Partner Relationship Management		
		5	Performance Management
		6	Fault Management
		7	Configuration Management
		8	Accounting Management
1.P	Product Lifecycle Management		
		5	Performance Management
1.P.1.6	Sales Development		
		7.3	Service Planning and Negotiation
		7.3.3	Marketing function set
		7.3.4	Management of sales process function set
1.P.2.3	Service Development & Retirement		
		5.1	Performance Quality Assurance
		5.1.1	QoS performance goal setting function set
		5.4	Performance Analysis
		5.4.1	Recommendations for performance improvement function set
		7.1	Network Planning and Engineering
		7.1.1	Product line budget function set
		8.4	Enterprise Control
		8.4.9	Investments function set
1.P.3.3	Resource Development & Retirement		
		8	Accounting Management
1.P.4.3	Supply Chain Development & Change Management		
		7.1	Network Planning and Engineering
		7.1.2	Supplier and technology policy function set

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		7.2	Installation
		7.2.1	Procurement function set
		7.2.3	Contracting function set
1.S.1.1	Market Strategy & Policy		
		7.3	Service Planning and Negotiation
		7.3.1	Service planning function set
		7.3.3	Marketing function set
		8.4	Enterprise Control
		8.4.1	Budgeting function set
1.S.2.1	Service Strategy & Planning		
		5.1	Performance Quality Assurance
		5.1.1	QoS performance goal setting function set
		5.4	Performance Analysis
		5.4.1	Recommendations for performance improvement function set
		6.1	RAS Quality Assurance
		6.1.2	Service availability goal setting function set
		7.1	Network Planning and Engineering
		7.1.1	Product line budget function set
		7.1.6	Demand forecasting function set
		7.3	Service Planning and Negotiation
		7.3.1	Service planning function set
		7.3.10	Solution proposal function set
		7.3.2	Service feature definition function set
		7.3.8	Customer service planning function set
		8.4	Enterprise Control
		8.4.1	Budgeting function set
1.S.3.1	Resource Strategy & Planning		
		6.4	Fault Correction
		6.5	Testing
		7.2	Installation
		7.4	Provisioning
		7.5	Status and control
		9.3	Containment and Recovery
		9.4	Security Administration
1.S.4.1	Supply Chain Strategy & Planning		
		7.1	Network Planning and Engineering

eTOM Process ID	Process.Name	M.3400ID	Function.Name
		7.1.2	Supplier and technology policy function set
		8.4	Enterprise Control
		8.4.1	Budgeting function set
1.SIP.1	Marketing & Offer Management		
		7	Configuration Management
		8	Accounting Management
1.SIP.2	Service Development & Management		
		5	Performance Management
		6	Fault Management
		7	Configuration Management
		8	Accounting Management
1.SIP.3	Resource Development & Management		
		6	Fault Management
		7	Configuration Management
		8.1	Usage Measurement
		8.2	Tariffing/pricing
		8.3	Collections and Finance
		9.2	Detection
1.SIP.4	Supply Chain Development & Management		
		7	Configuration Management
		8	Accounting Management

Appendix III

M.3400-to-eTOM mapping table

This appendix should be considered "informative". It provides an example of mapping the Function Set Groups as well as their underlying component Function Sets (ITU-T Rec. M.3400 [1]), to eTOM processes (ITU-T Rec. M.3050.2 [6]).

M.3400ID	Function.Name	eTOM Process ID	Process.Name
5	Performance Management		
		1.A	Assurance
		1.B	Billing
		1.E.2	Enterprise Risk Management

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.F	Fulfilment
		1.O	Operation Support & Readiness
		1.OFAB.2	Service Management & Operation
		1.OFAB.3	Resource Management & Operations
		1.OFAB.4	Supplier/Partner Relationship Management
		1.P	Product Lifecycle Management
		1.SIP.2	Service Development & Management
5.1	Performance Quality Assurance		
		1.A.2.4	Service Quality Management
		1.A.3.3	Resource Trouble Management
		1.F.3.2	Resource Provisioning
		1.FAB.4.6	S/P Interface Management
		1.O.2.1	SM&O Support & Readiness
		1.OFAB.1	Customer Relationship Management
		1.OFAB.3	Resource Management & Operations
		1.P.2.3	Service Development & Retirement
		1.S.2.1	Service Strategy & Planning
5.1.1	QoS performance goal setting function set		
		1.A.3.3	Resource Trouble Management
		1.OFAB.3	Resource Management & Operations
		1.P.2.3	Service Development & Retirement
		1.S.2.1	Service Strategy & Planning
5.1.2	Network performance goal setting function set		
		1.A.3.3	Resource Trouble Management
5.1.3	Subscriber service quality criteria function set		
		1.A.2.4.2	Analyse Service Quality
5.1.4	QoS performance assessment function set		
		1.O.2.1.4	Enable Service Quality Management
		1.O.3.1.2	Enable Resource Performance Management
5.1.5	Network performance assessment function set		
		1.O.3.1.2	Enable Resource Performance Management
5.1.6	NE(s) performance assessment function set		
		1.A.3.4.2	Analyse Resource Performance
5.1.7	Data integrity check function set		
		1.A.3.4.2	Analyse Resource Performance

M.3400ID	Function.Name	eTOM Process ID	Process.Name
5.2	Performance Monitoring		
		1.A.3.4	Resource Performance Management
		1.AB.3.5	Resource Data Collection & Processing
		1.FAB.4.6	S/P Interface Management
5.2.1	Performance monitoring policy function set		
		1.O.3.1.2	Enable Resource Performance Management
5.2.10	Detection, counting, storage and reporting function set		
		1.A.3.4.1	Monitor Resource Performance
		1.A.3.4.2	Analyse Resource Performance
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.1	Collect Resource Data
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.2.2	Network performance monitoring event correlation and filtering function set		
		1.A.3.4.2	Analyse Resource Performance
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.2.3	Data aggregation and trending function set		
		1.A.3.4.2	Analyse Resource Performance
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.2.4	Circuit-specific data collection function set		
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.2.5	Traffic status function set		
		1.A.3.4.2	Analyse Resource Performance
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.2.6	Traffic performance monitoring function set		
		1.A.3.4.1	Monitor Resource Performance
		1.A.3.4.2	Analyse Resource Performance

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.1	Collect Resource Data
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.2.7	NE(s) threshold crossing alert processing function set		
		1.A.3.4.2	Analyse Resource Performance
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.2.8	NE(s) trend analysis function set		
		1.A.3.4.2	Analyse Resource Performance
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.2.9	Performance monitoring data accumulation function set		
		1.A.3.4.1	Monitor Resource Performance
		1.A.3.4.2	Analyse Resource Performance
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.1	Collect Resource Data
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.3	Performance Management Control		
		1.E.2.1	Business Continuity Management
		1.E.2.4	Audit Management
		1.FAB.4.6	S/P Interface Management
5.3.1	Network traffic management policy function set		
		1.E.2.1	Business Continuity Management
		1.O.3.1.4	Enable Resource Data Collection & Processing
5.3.2	Traffic control function set		
		1.O.3.1.4	Enable Resource Data Collection & Processing
5.3.3	Traffic administration function set		
		1.O.3.1.4	Enable Resource Data Collection & Processing
5.3.4	Performance administration function set		
		1.O.3.1.2	Enable Resource Performance Management
5.3.5	Execution of traffic control function set		

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.O.3.1.4	Enable Resource Data Collection & Processing
5.3.6	Audit report function set		
		1.E.2.4	Audit Management
		1.O.3.1.4	Enable Resource Data Collection & Processing
5.4	Performance Analysis		
		1.A.3.4	Resource Performance Management
		1.AB.3.5	Resource Data Collection & Processing
		1.F.3.2	Resource Provisioning
		1.FAB.4.6	S/P Interface Management
		1.O.2.1	SM&O Support & Readiness
		1.OFAB.3	Resource Management & Operations
		1.P.2.3	Service Development & Retirement
		1.S.2.1	Service Strategy & Planning
5.4.1	Recommendations for performance improvement function set		
		1.A.3.3	Resource Trouble Management
		1.OFAB.3	Resource Management & Operations
		1.P.2.3	Service Development & Retirement
		1.S.2.1	Service Strategy & Planning
5.4.10	NE(s) traffic exception analysis function set		
		1.A.3.4.1	Monitor Resource Performance
		1.A.3.4.2	Analyse Resource Performance
5.4.11	NE(s) traffic capacity analysis function set		
		1.A.3.4.1	Monitor Resource Performance
		1.A.3.4.2	Analyse Resource Performance
5.4.2	Exception threshold policy function set		
		1.O.3.1.2	Enable Resource Performance Management
5.4.3	Traffic forecasting function set		
		1.A.3.3	Resource Trouble Management
5.4.4	Customer service performance summary (excludes traffic) function set		
		1.O.2.1.4	Enable Service Quality Management
5.4.5	Customer traffic performance summary function set		
		1.O.2.1.4	Enable Service Quality Management
		1.O.3.1.4	Enable Resource Data Collection & Processing
5.4.6	Traffic exception analysis function set		
		1.A.3.4.2	Analyse Resource Performance

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.4.7	Traffic capacity analysis function set		
		1.A.3.4.2	Analyse Resource Performance
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.4.8	Network performance characterization function set		
		1.A.3.4.2	Analyse Resource Performance
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
5.4.9	NE(s) performance characterization function set		
		1.A.3.4.4	Report Resource Performance
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
6	Fault Management		
		1.A	Assurance
		1.B	Billing
		1.OFAB.1	Customer Relationship Management
		1.OFAB.2	Service Management & Operation
		1.OFAB.3	Resource Management & Operations
		1.OFAB.4	Supplier/Partner Relationship Management
		1.SIP.2	Service Development & Management
		1.SIP.3	Resource Development & Management
6.1	RAS Quality Assurance		
		1.A.3.3	Resource Trouble Management
		1.A.4.4.2	Restore S/P Service Performance
		1.AB.3.5	Resource Data Collection & Processing
		1.FAB.4.6	S/P Interface Management
		1.I.2.2	Service Capability Delivery
		1.O.2.1	SM&O Support & Readiness
		1.S.2.1	Service Strategy & Planning
6.1.1	Network RAS goal setting function set		

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.A.3.3	Resource Trouble Management
		1.AB.3.5	Resource Data Collection & Processing
6.1.2	Service availability goal setting function set		
		1.I.2.2	Service Capability Delivery
		1.S.2.1	Service Strategy & Planning
6.1.3	RAS assessment function set		
		1.A.3.3.5	Report Resource Trouble
		1.AB.3.5.3	Report Resource Data
6.1.4	Service outage reporting function set		
		1.A.3.3.4	Track & Manage Resource Trouble
		1.A.3.3.5	Report Resource Trouble
6.1.5	Network outage reporting function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.2	Localize Resource Trouble
		1.A.3.3.4	Track & Manage Resource Trouble
		1.A.3.3.5	Report Resource Trouble
6.1.6	NE(s) outage reporting function set		
		1.A.3.3.4	Track & Manage Resource Trouble
6.2	Alarm surveillance		
		1.A.3.3	Resource Trouble Management
		1.A.4.4.2	Restore S/P Service Performance
		1.AB.3.5	Resource Data Collection & Processing
		1.FAB.4.6	S/P Interface Management
6.2.1	Alarm policy function set		
		1.O.3.1.3	Support Resource Trouble Management
6.2.10	Failure event detection and reporting function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.2	Localize Resource Trouble
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
6.2.2	Network fault event analysis, including correlation and filtering function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.2	Localize Resource Trouble
		1.A.3.3.5	Report Resource Trouble
		1.AB.3.5.2	Process Resource Data

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.AB.3.5.3	Report Resource Data
6.2.3	Alarm status modification function set		
		1.A.3.3.4	Track & Manage Resource Trouble
6.2.4	Alarm reporting function set		
		1.A.3.3.5	Report Resource Trouble
6.2.5	Alarm summary function set		
		1.A.3.3.5	Report Resource Trouble
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
6.2.6	Alarm event criteria function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.5	Report Resource Trouble
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
6.2.7	Alarm indication management function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
6.2.8	Log control function set		
		1.A.3.3.4	Track & Manage Resource Trouble
6.2.9	Alarm correlation and filtering function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.2	Localize Resource Trouble
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
6.3	Fault localization		
		1.A.3.3	Resource Trouble Management
		1.A.4.4.2	Restore S/P Service Performance
		1.FAB.4.6	S/P Interface Management
6.3.1	Fault localization policy function set		
		1.O.3.1.3	Support Resource Trouble Management
6.3.2	Verification of parameters and connectivity function set		
		1.O.3.1.5	Manage Resource Inventory
6.3.3	Network fault localization function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.2	Localize Resource Trouble
		1.A.3.3.5	Report Resource Trouble

M.3400ID	Function.Name	eTOM Process ID	Process.Name
6.3.4	NE(s) fault localization function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.2	Localize Resource Trouble
		1.A.3.3.5	Report Resource Trouble
6.3.5	Running of diagnostic function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.2	Localize Resource Trouble
		1.A.3.3.5	Report Resource Trouble
6.4	Fault Correction		
		1.A.1.6	Problem Handling
		1.AB.3.5	Resource Data Collection & Processing
		1.FAB.1.2	Customer Interface Management
		1.FAB.4.6	S/P Interface Management
		1.S.3.1	Resource Strategy & Planning
6.4.1	Management of repair process function set		
		1.O.3.1.3	Support Resource Trouble Management
		1.O.3.1.6	Manage Workforce
6.4.2	Arrangement of repair with customer function set		
		1.A.1.6.3	Track and Manage Problem
		1.A.3.3.3	Correct & Recover Resource Trouble
		1.A.3.3.4	Track & Manage Resource Trouble
		1.FAB.1.2.1	Manage Contact
		1.FAB.1.2.2	Manage Request (Including Self Service)
6.4.3	Scheduling and dispatch administration of repair forces function set		
		1.A.3.3.4	Track & Manage Resource Trouble
6.4.4	NE(s) fault correction function set		
		1.A.3.3.3	Correct & Recover Resource Trouble
		1.A.3.3.5	Report Resource Trouble
		1.AB.3.5.3	Report Resource Data
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
6.4.5	Automatic restoration function set		
		1.A.3.3.3	Correct & Recover Resource Trouble
		1.A.3.3.5	Report Resource Trouble
		1.AB.3.5.2	Process Resource Data

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.AB.3.5.3	Report Resource Data
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
6.5	Testing		
		1.A.3.3	Resource Trouble Management
		1.A.4.4.2	Restore S/P Service Performance
		1.AB.3.5	Resource Data Collection & Processing
		1.F.2.2	Service Configuration & Activation
		1.F.3.2	Resource Provisioning
		1.FAB.4.6	S/P Interface Management
		1.S.3.1	Resource Strategy & Planning
6.5.1	Test point policy function set		
		1.O.3.1.3	Support Resource Trouble Management
6.5.10	Test access path management function set		
		1.F.3.2.2	Configure & Activate Resource
		1.F.3.2.3	Test Resource
6.5.11	Test access function set		
		1.F.3.2.2	Configure & Activate Resource
		1.F.3.2.3	Test Resource
6.5.2	Service test function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.5	Report Resource Trouble
		1.F.2.2.5	Test Service End-to-End
		1.F.3.2.3	Test Resource
6.5.3	Circuit selection, test correlation and fault location function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.5	Report Resource Trouble
		1.F.3.2.3	Test Resource
6.5.4	Selection of test suite function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.5	Report Resource Trouble
		1.F.3.2.3	Test Resource
6.5.5	Test access network control and recovery function set		
		1.A.3.3.1	Survey & Analyse Resource Trouble
		1.A.3.3.5	Report Resource Trouble

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.F.3.2.3	Test Resource
		1.O.3.1.5	Manage Resource Inventory
6.5.6	Test access configuration function set		
		1.F.3.2.3	Test Resource
6.5.7	Test circuit configuration function set		
		1.F.3.2.3	Test Resource
6.5.8	NE(s) test control function set		
		1.F.3.2.3	Test Resource
6.5.9	Results and status reporting function set		
		1.A.3.3.5	Report Resource Trouble
6.6	Trouble administration		
		1.A.1.6	Problem Handling
		1.A.3.3	Resource Trouble Management
		1.A.4.4.2	Restore S/P Service Performance
		1.FAB.4.6	S/P Interface Management
6.6.1	Trouble report policy function set		
		1.O.3.1.3	Support Resource Trouble Management
6.6.2	Trouble reporting function set		
		1.A.1.6.1	Isolate Problem & Initiate Resolution
		1.A.1.6.2	Report Problem
		1.A.1.6.3	Track and Manage Problem
		1.AB.3.5.1	Collect Resource Data
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
6.6.3	Trouble report status change notification function set		
		1.A.1.6.2	Report Problem
6.6.4	Trouble information query function set		
		1.A.1.6.3	Track and Manage Problem
6.6.5	Trouble ticket creation notification function set		
		1.A.1.6.2	Report Problem
6.6.6	Trouble ticket administration function set		
		1.A.1.6.2	Report Problem
		1.A.1.6.3	Track and Manage Problem
		1.A.1.6.4	Close Problem
		1.A.3.3.4	Track & Manage Resource Trouble

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.A.3.3.5	Report Resource Trouble
6.6.7	Management of trouble by service customer function set (new function set)		
		1.A.3.3.4	Track & Manage Resource Trouble
		1.A.3.3.5	Report Resource Trouble
7	Configuration Management		
		1.E.1	Strategic & Enterprise Planning
		1.E.3	Enterprise Effectiveness Management
		1.E.6	Stakeholder & External Relations Management
		1.F	Fulfilment
		1.OFAB.1	Customer Relationship Management
		1.OFAB.2	Service Management & Operation
		1.OFAB.3	Resource Management & Operations
		1.OFAB.4	Supplier/Partner Relationship Management
		1.SIP.1	Marketing & Offer Management
		1.SIP.2	Service Development & Management
		1.SIP.3	Resource Development & Management
		1.SIP.4	Supply Chain Development & Management
7.1	Network Planning and Engineering		
		1.A.3.3	Resource Trouble Management
		1.AB.3.5	Resource Data Collection & Processing
		1.E.1.3	Enterprise Architecture Management
		1.FAB.4.6	S/P Interface Management
		1.OFAB.3	Resource Management & Operations
		1.P.2.3	Service Development & Retirement
		1.P.4.3	Supply Chain Development & Change Management
		1.S.2.1	Service Strategy & Planning
		1.S.4.1	Supply Chain Strategy & Planning
7.1.1	Product line budget function set		
		1.A.3.3	Resource Trouble Management
		1.OFAB.3	Resource Management & Operations
		1.P.2.3	Service Development & Retirement
		1.S.2.1	Service Strategy & Planning
7.1.10	Routing design function set		
		1.A.3.3	Resource Trouble Management

M.3400ID	Function.Name	eTOM Process ID	Process.Name
7.1.11	NE(s) design function set		
		1.A.3.3	Resource Trouble Management
7.1.2	Supplier and technology policy function set		
		1.A.3.3	Resource Trouble Management
		1.P.4.3	Supply Chain Development & Change Management
		1.S.4.1	Supply Chain Strategy & Planning
7.1.3	Area boundary definition function set		
		1.A.3.3	Resource Trouble Management
		1.O.3.1.1	Enable Resource Provisioning
7.1.4	Infrastructure planning function set		
		1.O.3.1.5	Manage Resource Inventory
7.1.5	Management of planning and engineering process function set		
		1.A.3.3	Resource Trouble Management
		1.E.1.3	Enterprise Architecture Management
7.1.6	Demand forecasting function set		
		1.S.2.1	Service Strategy & Planning
7.1.7	Network infrastructure design function set		
		1.A.3.3	Resource Trouble Management
		1.AB.3.5	Resource Data Collection & Processing
7.1.8	Access infrastructure design function set		
		1.A.3.3	Resource Trouble Management
		1.AB.3.5	Resource Data Collection & Processing
7.1.9	Facility infrastructure design function set		
		1.A.3.3	Resource Trouble Management
		1.AB.3.5	Resource Data Collection & Processing
7.2	Installation		
		1.A.3.3	Resource Trouble Management
		1.AB.3.5	Resource Data Collection & Processing
		1.E.3.5	Facilities Management & Support
		1.F.2.2	Service Configuration & Activation
		1.FAB.4.6	S/P Interface Management
		1.I.2.2	Service Capability Delivery
		1.I.3.2	Requisition Management
		1.I.4.2	Supply Chain Capability Delivery

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.OFAB.3	Resource Management & Operations
		1.P.4.3	Supply Chain Development & Change Management
		1.S.3.1	Resource Strategy & Planning
7.2.1	Procurement function set		
		1.A.3.3	Resource Trouble Management
		1.I.4.2	Supply Chain Capability Delivery
		1.P.4.3	Supply Chain Development & Change Management
7.2.10	Software administration function set		
		1.O.3.1.1	Enable Resource Provisioning
		1.O.3.1.5	Manage Resource Inventory
7.2.11	NE installation administration function set		
		1.O.3.1.1	Enable Resource Provisioning
		1.O.3.1.5	Manage Resource Inventory
7.2.2	Management of installation function set		
		1.AB.3.5	Resource Data Collection & Processing
		1.I.2.2	Service Capability Delivery
		1.OFAB.3	Resource Management & Operations
7.2.3	Contracting function set		
		1.AB.3.5	Resource Data Collection & Processing
		1.I.4.2	Supply Chain Capability Delivery
		1.OFAB.3	Resource Management & Operations
		1.P.4.3	Supply Chain Development & Change Management
7.2.4	Real estate management function set		
		1.E.3.5	Facilities Management & Support
7.2.5	Arrangement of installation with customer function set		
		1.F.2.2.1	Design Solution
		1.F.2.2.2	Allocate Specific Resources to Services
		1.F.2.2.3	Track & Manage Work Orders
		1.F.2.2.4	Implement & Configure Service
		1.F.2.2.5	Test Service End-to-End
7.2.6	Network installation administration function set		
		1.AB.3.5	Resource Data Collection & Processing
		1.I.2.2	Service Capability Delivery

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.OFAB.3	Resource Management & Operations
7.2.7	Material management function set		
		1.F.4.2.1	Select Supplier/Partner
		1.F.4.2.2	Determine S/P Pre-Requisition Feasibility
		1.F.4.2.3	Place S/P Requisition
		1.F.4.2.4	Receive & Accept S/P Product
7.2.8	Scheduling and dispatch administration of installation force function set		
		1.O.3.1.6	Manage Workforce
7.2.9	Installation completion reporting function set		
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
7.3	Service Planning and Negotiation		
		1.E.6.1	Corporate Communications & Image Management
		1.E.6.2	Community Relations Management
		1.E.6.3	Shareholder Relations Management
		1.E.6.4	Regulatory Management
		1.E.6.5	Legal Management
		1.E.6.6	Board & Shares/Securities Management
		1.F.1.4	Selling
		1.F.2.2	Service Configuration & Activation
		1.FAB.1.2	Customer Interface Management
		1.I.1.2	Product & Offer Portfolio Planning
		1.I.1.4	Marketing Capability Delivery
		1.I.2.2	Service Capability Delivery
		1.O.1.1	CRM Support & Readiness
		1.O.2.1	SM&O Support & Readiness
		1.P.1.6	Sales Development
		1.S.1.1	Market Strategy & Policy
		1.S.2.1	Service Strategy & Planning
7.3.1	Service planning function set		
		1.S.1.1	Market Strategy & Policy
		1.S.2.1	Service Strategy & Planning
7.3.10	Solution proposal function set		
		1.F.2.2.1	Design Solution
		1.I.2.2	Service Capability Delivery

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.S.2.1	Service Strategy & Planning
7.3.2	Service feature definition function set		
		1.O.2.1.1	Manage Service Inventory
		1.S.2.1	Service Strategy & Planning
7.3.3	Marketing function set		
		1.I.1.4	Marketing Capability Delivery
		1.P.1.6	Sales Development
		1.S.1.1	Market Strategy & Policy
7.3.4	Management of sales process function set		
		1.O.1.1.1	Support Customer Interface Management
		1.O.1.1.6	Support Marketing Fulfilment
		1.O.1.1.7	Support Selling
		1.O.1.1.9	Manage Campaign
		1.P.1.6	Sales Development
7.3.5	External relations (legal, stockholders, regulators, public relations) function set		
		1.E.6.1	Corporate Communications & Image Management
		1.E.6.2	Community Relations Management
		1.E.6.3	Shareholder Relations Management
		1.E.6.4	Regulatory Management
		1.E.6.5	Legal Management
		1.E.6.6	Board & Shares/Securities Management
7.3.6	Customer identification function set		
		1.FAB.1.2.1	Manage Contact
7.3.7	Customer need identification function set		
		1.F.1.4.1	Manage Prospect
7.3.8	Customer service planning function set		
		1.F.2.2.1	Design Solution
		1.I.2.2	Service Capability Delivery
		1.S.2.1	Service Strategy & Planning
7.3.9	Customer service feature definition function set		
		1.O.2.1.1	Manage Service Inventory
7.4	Provisioning		
		1.AB.3.5	Resource Data Collection & Processing
		1.F.2.2	Service Configuration & Activation

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.F.3.2	Resource Provisioning
		1.FAB.4.6	S/P Interface Management
		1.S.3.1	Resource Strategy & Planning
7.4.1	Provisioning policy function set		
		1.AB.3.5	Resource Data Collection & Processing
		1.F.3.2.1	Allocate & Deliver Resource
		1.O.3.1.1	Enable Resource Provisioning
7.4.10	Access circuit design function set		
		1.F.3.2.1	Allocate & Deliver Resource
7.4.11	Leased circuit design function set		
		1.F.3.2.1	Allocate & Deliver Resource
7.4.12	Facility design function set		
		1.F.3.2.1	Allocate & Deliver Resource
7.4.13	Manage pending network changes function set		
		1.F.3.2.1	Allocate & Deliver Resource
		1.F.3.2.2	Configure & Activate Resource
7.4.14	Network connection management function set		
		1.F.3.2.2	Configure & Activate Resource
7.4.15	Circuit inventory notification function set		
		1.O.3.1.5	Manage Resource Inventory
7.4.16	Circuit inventory query function set		
		1.O.3.1.5	Manage Resource Inventory
7.4.17	NE(s) configuration function set		
		1.F.3.2.1	Allocate & Deliver Resource
7.4.18	NE(s) administration function set		
		1.O.3.1.1	Enable Resource Provisioning
7.4.19	NE(s) database management function set		
		1.F.3.2.1	Allocate & Deliver Resource
		1.F.3.2.2	Configure & Activate Resource
		1.O.3.1.5	Manage Resource Inventory
7.4.2	Material management policy function set		
		1.O.3.1.5	Manage Resource Inventory
7.4.20	Assignable inventory management function set		
		1.A.3.4.1	Monitor Resource Performance
		1.A.3.4.2	Analyse Resource Performance

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.A.3.4.3	Control Resource Performance
		1.A.3.4.4	Report Resource Performance
		1.O.3.1.5	Manage Resource Inventory
7.4.21	NE(s) resource selection and assignment function set		
		1.F.3.2.1	Allocate & Deliver Resource
7.4.22	NE(s) path design function set		
		1.F.3.2.1	Allocate & Deliver Resource
7.4.23	Loading program for service feature(s) function set		
		1.F.3.2.2	Configure & Activate Resource
7.4.24	NE(s) inventory notification function set		
		1.O.3.1.5	Manage Resource Inventory
7.4.25	NE(s) inventory query function set		
		1.O.3.1.5	Manage Resource Inventory
7.4.26	Manage pending changes in NE(s) function set		
		1.F.3.2.1	Allocate & Deliver Resource
7.4.27	Access to parameters and cross-connects in NEs function set		
		1.O.3.1.5	Manage Resource Inventory
7.4.28	Access to service features in NEs function set		
		1.O.2.1.1	Manage Service Inventory
		1.O.3.1.5	Manage Resource Inventory
7.4.29	Self-inventory function set		
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
7.4.3	Access route determination function set		
		1.F.3.2.1	Allocate & Deliver Resource
7.4.4	Directory address determination function set		
		1.F.2.2.2	Allocate Specific Resources to Services
7.4.5	Leased circuit route determination function set		
		1.F.3.2.1	Allocate & Deliver Resource
7.4.6	Request for service function set		
		1.F.2.2.2	Allocate Specific Resources to Services
		1.F.2.2.4	Implement & Configure Service
7.4.7	Service status administration function set		
		1.F.2.2.3	Track & Manage Work Orders

M.3400ID	Function.Name	eTOM Process ID	Process.Name
7.4.8	Network resource selection and assignment function set		
		1.F.3.2.1	Allocate & Deliver Resource
		1.F.3.2.2	Configure & Activate Resource
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
7.4.9	Interexchange circuit design function set		
		1.F.3.2.1	Allocate & Deliver Resource
7.5	Status and control		
		1.A.2.3	Service Problem Management
		1.FAB.4.6	S/P Interface Management
		1.O.2.1	SM&O Support & Readiness
		1.S.3.1	Resource Strategy & Planning
7.5.1	Priority service policy function set		
		1.O.2.1.4	Enable Service Quality Management
7.5.2	Priority service restoration function set		
		1.A.2.3.1	Evaluate & Qualify Problem
		1.A.2.3.2	Diagnose Problem
		1.A.2.3.3	Plan & Assign Resolution
		1.A.2.3.4	Track & Manage Resolution
7.5.3	Message handling systems network status function set		
		1.F.3.2.2	Configure & Activate Resource
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
		1.O.3.1.5	Manage Resource Inventory
7.5.4	Leased circuit network status function set		
		1.F.3.2.2	Configure & Activate Resource
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
		1.O.3.1.5	Manage Resource Inventory
7.5.5	Transport network status function set		
		1.F.3.2.2	Configure & Activate Resource
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
		1.O.3.1.5	Manage Resource Inventory
7.5.6	NE(s) status and control function set		
		1.F.3.2.2	Configure & Activate Resource

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
		1.O.3.1.5	Manage Resource Inventory
7.5.7	Access to state information in NEs function set		
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
		1.O.3.1.5	Manage Resource Inventory
7.5.8	Notification of state changes by NEs function set		
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
		1.O.3.1.5	Manage Resource Inventory
8	Accounting Management		
		1.A.3.4	Resource Performance Management
		1.B	Billing
		1.E.1	Strategic & Enterprise Planning
		1.E.2	Enterprise Risk Management
		1.E.3	Enterprise Effectiveness Management
		1.E.5	Financial & Asset Management
		1.E.6	Stakeholder & External Relations Management
		1.E.7	Human Resources Management
		1.OFAB.1	Customer Relationship Management
		1.OFAB.2	Service Management & Operation
		1.OFAB.4	Supplier/Partner Relationship Management
		1.P.3.3	Resource Development & Retirement
		1.SIP.1	Marketing & Offer Management
		1.SIP.2	Service Development & Management
		1.SIP.4	Supply Chain Development & Management
8.1	Usage Measurement		
		1.B.2.5	Service & Specific Instance Rating
		1.O.1.1	CRM Support & Readiness
		1.SIP.3	Resource Development & Management
8.1.1	Planning of the usage measurement process function set		
		1.AB.3.5.4	Audit Resource Usage Data
		1.O.1.1.4	Support Billing & Collections
8.1.10	Measurement rules identification function set		
		1.B.2.5.1	Mediate Usage Records

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.B.2.5.2	Rate Usage Records
8.1.11	Network usage correlation function set		
		1.AB.3.5.2	Process Resource Data
8.1.12	Usage short-term storage function set		
		1.AB.3.5.3	Report Resource Data
8.1.13	Usage long-term storage function set		
		1.AB.3.5.3	Report Resource Data
8.1.14	Usage accumulation function set		
		1.AB.3.5.1	Collect Resource Data
8.1.15	Usage validation function set		
		1.B.2.5.1	Mediate Usage Records
8.1.16	Administration of usage data collection function set		
		1.AB.3.5.2	Process Resource Data
8.1.17	Usage generation function set		
		1.O.3.1.4	Enable Resource Data Collection & Processing
8.1.2	Management of the usage measurement process function set		
		1.AB.3.5.3	Report Resource Data
		1.AB.3.5.4	Audit Resource Usage Data
8.1.3	Usage aggregation function set		
		1.AB.3.5.3	Report Resource Data
		1.B.2.5.3	Analyse Usage Records
8.1.4	Service usage correlation function set		
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
8.1.5	Service usage validation function set		
		1.AB.3.5.2	Process Resource Data
		1.B.2.5.1	Mediate Usage Records
8.1.6	Usage distribution function set		
		1.AB.3.5.3	Report Resource Data
8.1.7	Usage surveillance function set		
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.4	Audit Resource Usage Data
8.1.8	Usage error correction function set		
		1.AB.3.5.2	Process Resource Data
8.1.9	Usage testing function set		

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.AB.3.5.4	Audit Resource Usage Data
8.2	Tariffing/pricing		
		1.B.1.8	Billing & Collections Management
		1.B.2.5	Service & Specific Instance Rating
		1.E.3.1	Process Management & Support
		1.E.5.1	Financial Management
		1.E.6.4	Regulatory Management
		1.I.1.2	Product & Offer Portfolio Planning
		1.O.1.1	CRM Support & Readiness
		1.O.4.1	S/PRM Operations Support & Readiness
		1.SIP.3	Resource Development & Management
8.2.1	Pricing strategy function set		
		1.O.1.1.4	Support Billing & Collections
8.2.2	Tariff and price administration function set		
		1.E.6.4	Regulatory Management
		1.O.1.1.4	Support Billing & Collections
8.2.3	Costing function set		
		1.AB.3.5.3	Report Resource Data
		1.E.3.1	Process Management & Support
		1.E.5.1	Financial Management
8.2.4	Settlements policy function set		
		1.O.4.1.4	Support S/P Settlements & Billing Management
8.2.5	Feature pricing function set		
		1.I.1.2	Product & Offer Portfolio Planning
		1.I.1.3	Product & Offer Capability Delivery
		1.O.1.1.4	Support Billing & Collections
8.2.6	Provision of access to tariff/price information function set		
		1.O.1.1.1	Support Customer Interface Management
		1.O.1.1.5	Support Retention & Loyalty
8.2.7	Rating usage function set		
		1.B.2.5.2	Rate Usage Records
8.2.8	Totalling usage charges function set		
		1.B.1.8.2	Apply Pricing, Discounting & Rebate
		1.B.1.8.3	Create & Deliver Bill

M.3400ID	Function.Name	eTOM Process ID	Process.Name
8.3	Collections and Finance		
		1.B.1.8	Billing & Collections Management
		1.B.2.5	Service & Specific Instance Rating
		1.E.5.1	Financial Management
		1.E.7.1	HR Policies & Practices
		1.E.7.2	Organization Development
		1.E.7.3	Workforce Strategy
		1.E.7.4	Workforce Development
		1.E.7.5	Employee & Labor Relations Management
		1.F.4.2	S/P Settlements & Billing Management
		1.FAB.1.2	Customer Interface Management
		1.O.1.1	CRM Support & Readiness
		1.O.3.1	Resource Data Collection & Processing
		1.SIP.3	Resource Development & Management
8.3.1	Planning of the billing process function set		
		1.B.1.8.4	Manage Customer Billing
		1.O.1.1.4	Support Billing & Collections
8.3.10	Taxation function set		
		1.E.5.1	Financial Management
8.3.11	Human resources function set		
		1.E.7.1	HR Policies & Practices
		1.E.7.2	Organization Development
		1.E.7.3	Workforce Strategy
		1.E.7.4	Workforce Development
8.3.12	Invoice assembly function set		
		1.B.1.8.3	Create & Deliver Bill
8.3.13	Sending invoice function set		
		1.B.1.8.3	Create & Deliver Bill
8.3.14	Customer tax administration function set		
		1.B.1.8.5	Manage Collection
8.3.15	In-call service request function set		
		1.AB.3.5.1	Collect Resource Data
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
		1.B.2.5.1	Mediate Usage Records

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.B.2.5.2	Rate Usage Records
		1.B.2.5.3	Analyse Usage Records
8.3.16	Storage of invoice function set		
		1.B.1.8.1	Manage Customer Bill Inquiries
		1.B.1.8.5	Manage Collection
		1.FAB.1.2.1	Manage Contact
		1.FAB.1.2.2	Manage Request (Including Self Service)
8.3.17	Receipt of payment function set		
		1.B.1.8.5	Manage Collection
		1.FAB.1.2.1	Manage Contact
		1.FAB.1.2.2	Manage Request (Including Self Service)
8.3.18	Inquiry response function set		
		1.B.1.8.1	Manage Customer Bill Inquiries
		1.FAB.1.2.1	Manage Contact
		1.FAB.1.2.2	Manage Request (Including Self Service)
8.3.19	Collections function set		
		1.B.1.8.5	Manage Collection
8.3.2	Management of the billing process function set		
		1.B.1.8.4	Manage Customer Billing
		1.O.1.1.4	Support Billing & Collections
8.3.20	Customer account administration function set		
		1.FAB.1.2.1	Manage Contact
		1.FAB.1.2.2	Manage Request (Including Self Service)
		1.FAB.1.9.2	Build Customer Insight
8.3.21	Customer profile administration function set		
		1.B.1.8.5	Manage Collection
		1.O.2.1.1	Manage Service Inventory
8.3.3	General accounting operations function set		
		1.E.5.1	Financial Management
8.3.4	General ledger function set		
		1.E.5.1	Financial Management
8.3.5	Accounts receivable function set		
		1.B.1.8.5	Manage Collection
		1.E.5.1	Financial Management
8.3.6	Accounts payable function set		

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.B.4.5.1	Manage Account
		1.B.4.5.2	Receive & Assess Invoice
		1.B.4.5.3	Negotiate & Approve Invoice
		1.B.4.5.4	Issue Settlement Notice & Payment
		1.E.5.1	Financial Management
8.3.7	Payroll function set		
		1.E.7.5	Employee & Labor Relations Management
8.3.8	Benefits administration function set		
		1.E.7.1	HR Policies & Practices
8.3.9	Pension administration function set		
		1.E.7.1	HR Policies & Practices
8.4	Enterprise Control		
		1.A.3.3	Resource Trouble Management
		1.AB.3.5	Resource Data Collection & Processing
		1.E.1.1	Strategic Business Planning
		1.E.1.2	Business Development
		1.E.2.4	Audit Management
		1.E.2.5	Insurance Management
		1.E.3.1	Process Management & Support
		1.E.5.1	Financial Management
		1.E.5.2	Asset Management
		1.E.6.3	Shareholder Relations Management
		1.E.6.4	Regulatory Management
		1.E.6.6	Board & Shares/Securities Management
		1.I.2.2	Service Capability Delivery
		1.OFAB.3	Resource Management & Operations
		1.P.2.3	Service Development & Retirement
		1.S.1.1	Market Strategy & Policy
		1.S.2.1	Service Strategy & Planning
		1.S.4.1	Supply Chain Strategy & Planning
8.4.1	Budgeting function set		
		1.A.3.3	Resource Trouble Management
		1.E.1.1	Strategic Business Planning
		1.E.5.1	Financial Management
		1.S.1.1	Market Strategy & Policy

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.S.2.1	Service Strategy & Planning
		1.S.4.1	Supply Chain Strategy & Planning
8.4.10	Assets management function set		
		1.E.5.2	Asset Management
8.4.11	Tracking of liabilities function set		
		1.E.5.1	Financial Management
8.4.2	Auditing function set		
		1.E.2.4	Audit Management
8.4.3	Cash management function set		
		1.E.5.1	Financial Management
8.4.4	Raising equity function set		
		1.E.6.6	Board & Shares/Securities Management
8.4.5	Cost reduction function set		
		1.E.1.1	Strategic Business Planning
		1.E.3.1	Process Management & Support
		1.E.5.1	Financial Management
8.4.6	Profitability analysis function set		
		1.E.5.1	Financial Management
8.4.7	Financial reporting function set		
		1.E.6.3	Shareholder Relations Management
		1.E.6.4	Regulatory Management
8.4.8	Insurance analysis function set		
		1.E.2.5	Insurance Management
8.4.9	Investments function set		
		1.AB.3.5	Resource Data Collection & Processing
		1.E.1.1	Strategic Business Planning
		1.E.1.2	Business Development
		1.E.5.1	Financial Management
		1.I.1.2	Product & Offer Portfolio Planning
		1.I.2.2	Service Capability Delivery
		1.OFAB.3	Resource Management & Operations
		1.P.2.3	Service Development & Retirement
9	Security Management		
		1.A.3.4	Resource Performance Management
		1.E.2	Enterprise Risk Management

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.E.6	Stakeholder & External Relations Management
		1.OFAB.1	Customer Relationship Management
		1.OFAB.2	Service Management & Operation
9.1	Prevention		
		1.E.2.2	Security Management
		1.E.6.5	Legal Management
		1.F.1.5	Order Handling
9.1.1	Legal review function set		
		1.E.6.5	Legal Management
9.1.2	Physical access security function set		
		1.E.2.2	Security Management
9.1.3	Guarding function set		
		1.E.2.2	Security Management
9.1.4	Personnel risk analysis function set		
		1.E.2.2	Security Management
9.1.5	Security screening function set		
		1.F.1.5.2	Authorize Credit
9.2	Detection		
		1.E.2.2	Security Management
		1.E.2.3	Fraud Management
		1.FAB.4.6	S/P Interface Management
		1.O.3.1	Resource Data Collection & Processing
		1.SIP.3	Resource Development & Management
9.2.1	Investigation of changes in revenue patterns function set		
		1.E.2.3	Fraud Management
9.2.10	Support element security alarm reporting function set		
		1.E.2.2	Security Management
		1.O.3.1.4	Enable Resource Data Collection & Processing
9.2.2	Support element protection function set		
		1.AB.3.5.1	Collect Resource Data
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.3	Report Resource Data
		1.AB.3.5.4	Audit Resource Usage Data
9.2.3	Customer security alarm function set		
		1.E.2.2	Security Management

M.3400ID	Function.Name	eTOM Process ID	Process.Name
9.2.4	Customer (external user) profiling function set		
		1.E.2.3	Fraud Management
9.2.5	Customer usage pattern analysis function set		
		1.AB.3.5.2	Process Resource Data
		1.AB.3.5.4	Audit Resource Usage Data
		1.E.2.3	Fraud Management
9.2.6	Investigation of theft of service function set		
		1.E.2.3	Fraud Management
		1.FAB.1.9.3	Analyse and Manage Customer Risk
9.2.7	Internal traffic and activity pattern analysis function set		
		1.O.3.1.2	Enable Resource Performance Management
		1.O.3.1.4	Enable Resource Data Collection & Processing
9.2.8	Network security alarm function set		
		1.E.2.2	Security Management
		1.O.3.1.4	Enable Resource Data Collection & Processing
9.2.9	Software intrusion audit function set		
		1.AB.3.5.4	Audit Resource Usage Data
		1.E.2.2	Security Management
9.3	Containment and Recovery		
		1.E.2.1	Business Continuity Management
		1.E.2.2	Security Management
		1.E.6.5	Legal Management
		1.S.3.1	Resource Strategy & Planning
9.3.1	Protected storage of business data function set		
		1.E.2.1	Business Continuity Management
9.3.10	Network intrusion recovery function set		
		1.F.3.2.2	Configure & Activate Resource
9.3.11	Administration of network revocation list function set		
		1.E.2.2	Security Management
9.3.12	Protected storage of network configuration data function set		
		1.E.2.1	Business Continuity Management
9.3.13	Severing internal connections function set		
		1.F.3.2.2	Configure & Activate Resource
9.3.14	NE(s) intrusion recovery function set		
		1.F.3.2.2	Configure & Activate Resource

M.3400ID	Function.Name	eTOM Process ID	Process.Name
9.3.15	Administration of NE(s) revocation list function set		
		1.E.2.2	Security Management
9.3.16	Protected storage of NE(s) configuration data function set		
		1.E.2.1	Business Continuity Management
9.3.2	Exception report action function set		
		1.F.3.2.2	Configure & Activate Resource
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
9.3.3	Theft of service action function set		
		1.E.2.2	Security Management
		1.E.6.5	Legal Management
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
9.3.4	Legal action function set		
		1.E.6.5	Legal Management
9.3.5	Apprehending function set		
		1.E.2.2	Security Management
9.3.6	Service intrusion recovery function set		
		1.F.2.2.4	Implement & Configure Service
9.3.7	Administration of customer revocation list function set		
		1.E.2.2	Security Management
9.3.8	Protected storage of customer data function set		
		1.E.2.1	Business Continuity Management
9.3.9	Severing external connections function set		
		1.F.3.2.2	Configure & Activate Resource
9.4	Security Administration		
		1.B.2.5	Service & Specific Instance Rating
		1.E.2.1	Business Continuity Management
		1.E.2.2	Security Management
		1.E.2.4	Audit Management
		1.FAB.4.6	S/P Interface Management
		1.S.3.1	Resource Strategy & Planning
9.4.1	Security policy function set		
		1.E.2.2	Security Management
9.4.10	Administration of external encryption and keys function set		

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.E.2.2	Security Management
9.4.11	Administration of external security protocols function set		
		1.E.2.2	Security Management
9.4.12	Customer audit trail function set		
		1.B.2.5.3	Analyse Usage Records
		1.E.2.2	Security Management
		1.E.2.4	Audit Management
9.4.13	Customer security alarm management function set		
		1.E.2.2	Security Management
		1.O.3.1.4	Enable Resource Data Collection & Processing
9.4.14	Testing of audit trail mechanism function set		
		1.E.2.4	Audit Management
9.4.15	Administration of internal authentication function set		
		1.E.2.2	Security Management
9.4.16	Administration of internal access control function set		
		1.E.2.2	Security Management
9.4.17	Administration of internal certification function set		
		1.E.2.2	Security Management
9.4.18	Administration of internal encryption and keys function set		
		1.E.2.2	Security Management
9.4.19	Network audit trail management function set		
		1.E.2.2	Security Management
		1.E.2.4	Audit Management
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
9.4.2	Disaster recovery planning function set		
		1.E.2.1	Business Continuity Management
9.4.20	Network security alarm management function set		
		1.E.2.2	Security Management
		1.O.3.1.4	Enable Resource Data Collection & Processing
9.4.21	NE(s) audit trail management function set		
		1.E.2.2	Security Management
		1.E.2.4	Audit Management
		1.F.3.2.4	Collect, Update & Report Resource Configuration Data
9.4.22	NE(s) security alarm management function set		

M.3400ID	Function.Name	eTOM Process ID	Process.Name
		1.E.2.2	Security Management
		1.O.3.1.4	Enable Resource Data Collection & Processing
9.4.23	Administration of keys for NEs function set		
		1.E.2.2	Security Management
9.4.24	Administration of keys by an NE function set		
		1.E.2.2	Security Management
9.4.3	Manage guards function set		
		1.E.2.2	Security Management
9.4.4	Audit trail analysis function set		
		1.E.2.2	Security Management
		1.E.2.4	Audit Management
9.4.5	Security alarm analysis function set		
		1.E.2.2	Security Management
		1.O.3.1.4	Enable Resource Data Collection & Processing
9.4.6	Assessment of corporate data integrity function set		
		1.E.2.2	Security Management
9.4.7	Administration of external authentication function set		
		1.E.2.2	Security Management
9.4.8	Administration of external access control function set		
		1.E.2.2	Security Management
9.4.9	Administration of external certification function set		
		1.E.2.2	Security Management

BIBLIOGRAPHY

[GB908] Network Management Detailed Operations Map, TMF, GB908, Evaluation Version 1.0.

[GB910] Telecom Operations Map, TMF, GB910, Evaluation Version 2.1.

[GB921] Enhanced Telecom Operations Map® (eTOM), TMF, GB921, Approved Version 4.0.

[GB921D] Enhanced Telecom Operations Map® (eTOM) Addendum D, TMF, GB921D, Approved Version 4.0.

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