International Telecommunication Union

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

M.3010

Amendment 2

(11/2005)

SERIES M: TELECOMMUNICATION MANAGEMENT, INCLUDING TMN AND NETWORK MAINTENANCE

Telecommunications management network

Principles for a telecommunications management network

Amendment 2: Additions and corrections

ITU-T Recommendation M.3010 (2000) – Amendment 2

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ITU-T Recommendation M.3010

Principles for a telecommunications management network

Amendment 2

Additions and corrections

Summary

This amendment contains additions and changes to the 2000 version of ITU-T Rec. M.3010 as amended by Amendment 1 (2003).

Source

Amendment 2 to ITU-T Recommendation M.3010 (2000) was approved on 13 November 2005 by ITU-T Study Group 4 (2005-2008) under the ITU-T Recommendation A.8 procedure.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

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.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure e.g. interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

INTELLECTUAL PROPERTY RIGHTS

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As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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Additions and corrections

1) Additions

1.1) Clause 2 (References)

Add the following new references:

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

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

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

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

[30] ITU-T Recommendation M.3050.4 (2004), *Enhanced Telecom Operations Map (eTOM) – B2B integration: Using B2B inter-enterprise integration with the eTOM*.

[31] ITU-T Recommendation M.3050 Supplement 1 (2004), *Enhanced Telecom Operations Map (eTOM) – ITIL application note*.

[32] ITU-T Recommendation M.3050 Supplement 2 (2004), *Enhanced Telecom Operations Map (eTOM) – Public B2B Business Operations Map (BOM)*.

[33] ITU-T Recommendation M.3050 Supplement 3 (2004), *Enhanced Telecom Operations Map (eTOM) – eTOM to M.3400 mapping*.

1.2) Clause 3 (Definitions)

Add the following new definitions:

3.37 **business process**: The means by which one or more activities are accomplished in operating business practices.

3.38 **customer operations process**: See ITU-T Rec. M.3050.1.

3.39 **enterprise**: See ITU-T Rec. M.3050.1.

3.40 **G interface**: An interface applied at g reference points.

3.41 **process**: See ITU-T Rec. M.3050.1.

3.42 **service provider**: See ITU-T Rec. M.3050.1.

1.3) Clause 4 (Abbreviations)

Add the following new abbreviations:

MFS Management Function Set

TSP Telecommunication Service Provider

2) Changes

2.1) Clause 3 (Definitions)

Replace the definition of "function block" with the following:

3.6 function block: The smallest deployable unit of management functionality.

Replace the definition of "interface" with the following:

3.8 interface: An architectural concept that enables interoperable interconnection at reference points between physical blocks by realizing the reference points.

Replace the definition of "management function" with the following:

3.14 management function: The smallest part of a business process (or management service) as perceived by the user of the process (or service).

Replace the definition of "management function set" with the following:

3.15 management function set (MFS): A grouping of management functions that contextually belong together.

Replace the definition of "operations system" with the following:

3.21 operations system (OS): An architectural concept representing the physical realization of one or more OSFs, and exposing interfaces to other OSs or to managed resources.

Replace the definition of "operations systems function" with the following:

3.22 operations systems function (OSF): A function block that processes information related to telecommunications management for the purpose of monitoring/coordinating and/or controlling telecommunication functions including management functions.

Replace the definition of "reference point" with the following:

3.28 reference point: An architectural concept which delineates and exposes an external view of management functionality of a function block; it defines all or part of that function block's service boundary.

2.2) Clause 5.1 (General)

Replace the entire clause with the following:

This Recommendation presents the general architectural requirements for a Telecommunications Management Network (TMN) to support business processes ([26]-[33]) and the management requirements of Public Telecommunication Operators (PTOs) and Telecommunications Service Providers (TSPs) to plan, provision, install, maintain, operate and administer telecommunication networks and services.[1] Customer operations processes may also include customer activity.

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[1] Some considerations for design, planning, installation and operating a TMN and examples of use are presented in ITU-T Rec. M.3013 [8].

Within the context of the TMN, management functionality refers to a set of management capabilities, or management functions, to allow for the exchange and processing of management information to assist PTOs and TSPs in conducting their business efficiently.

A TMN provides management functions for telecommunication networks and services, and offers communications between itself and managed telecommunication networks or services and other TMNs. In this context, a telecommunication network is assumed to consist of both digital and analogue telecommunications equipment and associated support equipment. A telecommunication service in this context consists of a range of capabilities provided to customers.

The basic concept behind a TMN is to provide an organized architecture to achieve the interconnection between various types of Operations Systems (OSs) and/or telecommunications equipment for the exchange of management information using an agreed architecture with standardized interfaces including protocols and messages. In defining the concept, it is recognized that many PTOs and TSPs have a large infrastructure of OSs, networks and telecommunications equipment already in place, and which must be accommodated within the architecture.

Provision is also made to users for access to, and display of, management information contained within the TMN, and for customer-initiated business processes.

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