

International Telecommunication Union

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

M.3348

(01/2011)

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INCLUDING TMN AND NETWORK MAINTENANCE

Telecommunications management network

Requirements of the NMS-EMS management interface for NGN service platforms

Recommendation ITU-T M.3348



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Recommendation ITU-T M.3348

Requirements of the NMS-EMS management interface for NGN service platforms

Summary

Recommendation ITU-T M.3348 describes the requirements of the NMS-EMS management interface for NGN service platforms. The requirements are provided using the TMN interface specification methodology described in Recommendation ITU-T M.3020.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T M.3348	2011-01-13	2

Keywords

EMS, interface, NGN, NMS, requirements, service platform.

FOREWORD

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Introduction

The ITU-T M.370x series of Recommendations defines the management functions applicable in the network management system-element management system (NMS-EMS) interface which includes object management, state management, notification management, performance management and fault management. These common management functions are network independent.

While in NGN environment or in a mixed environment of NGN and non-NGN technologies, there are many kinds of service platforms to provide various services. The management and administration interface for controlling the service platform is proprietary to each vendor currently. The service platform consists of IT resources (including hardware and software aspects), service support applications and services. IETF has created detailed specifications related to the management of IT resources. Moreover, regarding service platforms, the management and administration to services and the service support applications are more significant. The specification of the service support applications and services is seldom covered in the current Recommendations so, it is necessary to specify the NMS-EMS management interface for the NGN service platforms.

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Recommendation ITU-T M.3348

Requirements of the NMS-EMS management interface for NGN service platforms

1 Scope

This Recommendation defines the requirements for managing service platforms used to introduce new service types (e.g., multimedia service) in NGN. The management functions include monitoring and controlling service support applications and services supported by service platforms. The purpose of this Recommendation is to provide a standardized interface to manage these services and service support applications. It is out of the scope of this Recommendation to manage the resources based on which the services are provided. Management of service instances is out of the scope of this Recommendation.

2 References

The following ITU-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision; users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published. The reference to a document within this Recommendation does not give it, as a stand-alone document, the status of a Recommendation.

- [ITU-T M.3010] Recommendation ITU-T M.3010 (2000), *Principles for a telecommunications management network*.
- [ITU-T M.3020] Recommendation ITU-T M.3020 (2010), *Management interface specification methodology*.
- [ITU-T M.3050.1] Recommendation ITU-T M.3050.1 (2007), *Enhanced Telecom Operations Map (eTOM) – The business process framework*.
- [ITU-T M.3060] Recommendation ITU-T M.3060/Y.2401 (2006), *Principles for the Management of Next Generation Networks*.
- [ITU-T M.3703] Recommendation ITU-T M.3703 (2010), *Common management services – Alarm management – Protocol neutral requirements and analysis*.
- [ITU-T M.3704] Recommendation ITU-T M.3704 (2010), *Common management service – Performance management – Protocol neutral requirements and analysis*.
- [ITU-T Y.110] Recommendation ITU-T Y.110 (1998), *Global Information Infrastructure principles and framework architecture*.
- [ITU-T Y.2001] Recommendation ITU-T Y.2001 (2004), *General overview of NGN*.
- [ITU-T Y.2011] Recommendation ITU-T Y.2011 (2004), *General principles and general reference model for next generation networks*.

3 Definitions

3.1 Terms defined elsewhere

This Recommendation uses the following terms defined elsewhere:

3.1.1 application: [ITU-T Y.110].

3.1.2 interface: [ITU-T M.3010].

3.1.3 next generation network (NGN): [ITU-T Y.2001].

3.1.4 NGN service stratum: [ITU-T Y.2011].

3.1.5 operations system (OS): [ITU-T M.3010].

3.1.6 Q interface: [ITU-T M.3010].

3.1.7 service: [ITU-T M.3050.1].

3.1.8 service element management function (SEMF): [ITU-T M.3060].

3.1.9 service network management function (SNMF): [ITU-T M.3060].

3.2 Terms defined in this Recommendation

This Recommendation defines the following terms:

3.2.1 service delivery platform (SDP): A complete environment or system architecture designed to enable rapid, cost efficient service creation, deployment, execution, orchestration and management.

3.2.2 service execution environment: The software and hardware which support the execution of the service. The basic environment information of a service includes memory size, disk size, JDK (Java development kit) path, database URI (uniform resource identifier), process priority, etc.

3.2.3 service exposure: An interface provided by the service platform or SDP (service delivery platform), through which the user (can be a system or an end user) can use the function of the service. The basic service exposure information includes service URI (service hostname, service port and service path), service access policies (permitted access user, permitted access time, etc.), etc.

3.2.4 service platform: The collection of software and hardware on the server side, which is constructed by the service provider and used to deliver one or more specific services to end users.

3.2.5 service support application: The software which provides the function of the service using the resource of the service platform.

4 Abbreviations

This Recommendation uses the following abbreviations:

EMS	Element Management System
FM	Fault Management
ID	Identifier
IT	Information Technology
JDK	Java Development Kit
NGN	Next Generation Network
NMS	Network Management System