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ITU-T

TELECOMMUNICATION
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OF ITU

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SERIES M: TELECOMMUNICATION MANAGEMENT,
INCLUDING TMN AND NETWORK MAINTENANCE

Telecommunications management network

**Security for the management plane: Profile
proforma**

ITU-T Recommendation M.3016.4



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TELECOMMUNICATION MANAGEMENT, INCLUDING TMN AND NETWORK MAINTENANCE

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ITU-T Recommendation M.3016.4

Security for the management plane: Profile proforma

Summary

This Recommendation defines the Conformance Profile proforma for organizations using ITU-T Recs M.3016.1-M.3016.3 for specifying the telecommunications management plane requirements. By completing the proforma in this Recommendation, different profiles are specified.

Source

ITU-T Recommendation M.3016.4 was approved on 13 April 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

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

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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ITU-T Recommendation M.3016.4

Security for the management plane: Profile proforma

1 Scope

ITU-T Recs M.3016.1-M.3016.3 specify a set of requirements, services, and mechanisms for the appropriate security of the management functions necessary to support the telecommunications infrastructure. Because different administrations and organizations require varying levels of security support, ITU-T Recs M.3016.1-M.3016.3 do not specify whether a requirement/service/mechanism is mandatory or optional.

This Recommendation specifies the Proforma for the security requirements, mechanisms and services in ITU-T Recs M.3016.1-M.3016.3. The Proforma, when completed by different organizations, results in a profile for the security requirements, services and mechanisms. These profiles may be used by implementations to specify conformance.

The proforma defined in ITU-T Rec. M.3016.4 is provided to assist organizations, administrations and other national/international organizations, specify the mandatory and optional support of the requirements as well as value ranges, values, etc. to help implement their security policies.

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 Recommendation M.3016.0 (2005), *Security for the management plane: Overview*.
- ITU-T Recommendation M.3016.1 (2005), *Security for the management plane: Security requirements*.
- ITU-T Recommendation M.3016.2 (2005), *Security for the management plane: Security services*.
- ITU-T Recommendation M.3016.3 (2005), *Security for the management plane: Security mechanisms*.

3 Definitions

There are no new definitions in this Recommendation.

4 Abbreviations and acronyms

This Recommendation uses the following abbreviations:

PP Profile Proforma

5 Conventions

In ITU-T Recs M.3016.1-M.3016.3, a descriptor is used to identify the different requirements, services and mechanisms. The descriptor consists of one of the following three-letter labels followed by a number:

- REQ for requirement;
- SER for service;
- MEC for mechanism.

6 Basis of profile proforma for security requirements

6.1 Overview

ITU-T Recs M.3016.1-M.3016.3 specify a set of requirements, services and mechanisms for the appropriate security of the management functions necessary to support the telecommunications infrastructure. Because different administrations and organizations require varying levels of security support, ITU-T Recs M.3016.1-M.3016.3 do not specify whether a requirement/mechanism/service is mandatory or optional.

The proforma defined in this Recommendation is to assist administrations and other national/international organizations to specify the mandatory and optional support of the requirements, as well as value ranges, values, etc.

The proforma is specified using the numbered requirements from ITU-T Recs M.3016.1-M.3016.3.

6.2 Guidelines and instructions for proforma specification

The proforma is specified using tabular representation. For each Recommendation, one table is provided and should be completed for the profile. Each table has the following columns:

- a) The requirement number from the Recommendation;
- b) Status;
- c) The value range or value;
- d) Comments or notes.

The tables in this Recommendation have the first column completed. Organizations using the profiles should complete the tables as follows.

For each requirement in the status column indicate:

- m Mantory;
- o Optional;
- c Conditional;
- x Prohibited ("x" stands for "excluded");
- Not applicable or out of scope.

If status is "c", the comment column should define the condition that must be true for supporting the requirement.

The value range or value column specifies applicable range or specific values. For example, a requirement for the length of the key is placed in that column.

The comment column is used to include information relevant for the implementing the requirement according to that profile.

7 Proforma

7.1 M.3016.1 security requirements

Table 1/M.3016.4 contains the requirements from ITU-T Rec. M.3016.1 and the user should complete the other columns according to the guidelines provided above.

Table 1/M.3016.4 – Proforma for requirements in ITU-T Rec. M.3016.1

Security requirements	Status	Value range/Values	Comments
REQ 1			
REQ 2			
REQ 3			
REQ 4			
REQ 5			
REQ 6			
REQ 7			
REQ 8			
REQ 9			
REQ 10			
REQ 11			
REQ 12			
REQ 13			
REQ 14			
REQ 15			
REQ 16			
REQ 17			
REQ 18			
REQ 19			
REQ 20			
REQ 21			
REQ 22			
REQ 23			
REQ 24			
REQ 25			
REQ 26			
REQ 27			
REQ 28			
REQ 29			
REQ 30			
REQ 31			
REQ 32			
REQ 33			
REQ 34			

Table 1/M.3016.4 – Proforma for requirements in ITU-T Rec. M.3016.1

Security requirements	Status	Value range/Values	Comments
REQ 35			
REQ 36			
REQ 37			
REQ 38			
REQ 39			
REQ 40			
REQ 41			
REQ 42			
REQ 43			
REQ 44			
REQ 45			
REQ 46			
REQ 47			
REQ 48			
REQ 49			
REQ 50			
REQ 51			
REQ 52			
REQ 53			
REQ 54			
REQ 55			
REQ 56			
REQ 57			
REQ 58			
REQ 59			
REQ 60			

7.2 M.3016.2 security services

Table 2/M.3016.4 contains the requirements from ITU-T Rec. M.3016.2 and the user should complete the other columns according to the guidelines provided above.

Table 2/M.3016.4 – Proforma for Requirements in M.3016.2

Security requirements	Status	Value range/Values	Comments
SER 1			
SER 2			
SER 3			
SER 4			
SER 5			
SER 6			
SER 7			
SER 8			
SER 9			
SER 10			

7.3 M.3016.3 security mechanisms

Table 3/M.3016.4 contains the requirements from ITU-T Rec. M.3016.2 and the user should complete the other columns according to the guidelines provided above.

Table 3/M.3016.4 – Proforma for requirements in M.3016.3

Security requirements	Status	Value range/Values	Comments
MEC 1			
MEC 2			
MEC 3			
MEC 4			
MEC 5			
MEC 6			
MEC 7			
MEC 8			
MEC 9			
MEC 10			
MEC 11			
MEC 12			
MEC 13			
MEC 14			
MEC 15			
MEC 16			
MEC 17			
MEC 18			
MEC 19			
MEC 20			
MEC 21			
MEC 22			
MEC 23			
MEC 24			
MEC 25			
MEC 26			
MEC 27			
MEC 28			
MEC 29			
MEC 30			
MEC 31			
MEC 32			
MEC 33			
MEC 34			
MEC 35			
MEC 36			

Table 3/M.3016.4 – Proforma for requirements in M.3016.3

Security requirements	Status	Value range/Values	Comments
MEC 37			
MEC 38			
MEC 39			
MEC 40			
MEC 41			
MEC 42			

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Series A	Organization of the work of ITU-T
Series D	General tariff principles
Series E	Overall network operation, telephone service, service operation and human factors
Series F	Non-telephone telecommunication services
Series G	Transmission systems and media, digital systems and networks
Series H	Audiovisual and multimedia systems
Series I	Integrated services digital network
Series J	Cable networks and transmission of television, sound programme and other multimedia signals
Series K	Protection against interference
Series L	Construction, installation and protection of cables and other elements of outside plant
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Series R	Telegraph transmission
Series S	Telegraph services terminal equipment
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Series U	Telegraph switching
Series V	Data communication over the telephone network
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Series Y	Global information infrastructure, Internet protocol aspects and next-generation networks
Series Z	Languages and general software aspects for telecommunication systems