INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

M.3100 Implementers' Guide

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

(30 September 2005)

SERIES M: Telecommunication management, including TMN and network maintenance

Implementers' Guide for ITU-T Rec. M.3100 Series

Defects and resolutions, version 13

ABSTRACT

This document is a compilation of reported defects in the ITU-T M.3100 series of Recommendations. It is intended to be an additional authoritative source of information for implementers to be read in conjunction with the Recommendations themselves. Further, the Guide includes defect resolutions, that will be corrected in the next editions of the relevant Recommendations.

Preface

The purpose of this Guide is to help the implementers of the ITU-T Recommendations on TMN principles and architecture, management services and generic information models. This Guide is not part of those Recommendations, but may be used in their ongoing maintenance.

The first version of the guide was produced following the Sydney 1995 expert groups meeting.

Items marked with an asterisk (*) were added to the Guide or modified for this Version.

Every change to the Recommendations are identified with bullets having reference numbers of the form Yx where Y is a letter which corresponds to one of the ITU-T Recommendations and x is a number which identifies the particular change in the context of that Recommendation.

At the end of each bullet a defect report number (DR) is included if appropriate. This defect report number is used in Appendix A, which is a register of defect reports raised and their current status. Note that a single bullet may relate to more than one defect report, or a single defect report may result in more than one bullet being generated.

Wide distribution of this document is expected and encouraged. The latest version of this Guide will be available on the Word Wide Web server of the ITU (http://www.itu.ch) below the ITU-T SG 4 entry.

This Guide is published in the spirit of international communication and co-operation. However the authors assume no responsibility for the accuracy of the information it contains or for the consequences arising from its use.

Summary

This document is an Implementers' Guide for ITU-T Recommendation of M.3100 Series.

Source

This document was agreed by ITU-T Study Group 4 on 30 September 2005.

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Table of Contents

1   Introduction

1.1   Background

This Guide concerns the ITU-T M.3100 series of Recommendations on Telecommunications Management Network (TMN).

This Guide is informal in nature and the Guide is not an ITU-T Recommendation. The information it contains will serve as an information source for the ITU-T SG 4, who is responsible for maintaining the M.3100 series of TMN Recommendations, and other users both within and outside of the ITU-T. The changes are expected to be included into future versions of the Recommendations.

1.2   Scope of the Guide

This guide resolves defects in (only) the following categories:

> - editorial errors;
>
> - technical errors, such as omissions or inconsistencies;
>
> - ambiguities.

In addition the Guide may include explanatory text found necessary as a result of interpretation difficulties apparent from the defect reports.

Note: This Guide will not address proposed additions, deletions or modifications to the Recommendations that are not strictly related to implementation difficulties in the above categories.

Initially, the Guide is limited to defects concerning information models and implementation conformance statements proformas.

1.3   Contacts and Distribution of the Guide

This Guide will be made available at ITU-T SG4 meetings as well as meeting of ITU-T WP3/4. In addition copies of this Guide, can in general, also be made available from one's national representative for ITU-T. Copies may also be obtained from other agencies.

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Defect group leaders

This list includes the names of leaders for Recommendations. Not all of the Recommendations may have defects raised against them and leaders are not identified for all Recommendations. However, whenever a defect is raised, a defect group leader will be identified for the relevant Recommendation.

Recommendation	Defect group leader	
Rec. M.3100 Generic Network Information Model (including amendments)	Knut Johannessen Telenor Nordic N-1331 FORNEBU NORWAY	Tel. +47 90 10 18 10 Fax. +47 940 53 977 Email: knut-hakon.johannessen@telenor.com
Rec. M.3120 CORBA Generic Network And Network Element Level Information Model (including amendments)	Kam Lam Lucent Technologies United States	Tel: +1 732 615-4118 Fax: +1 732 615-4610 E-mail: hklam@lucent.com

1.4   History log

Item	Location	Reason
1.0	Geneva, January 1996	First version of the Guide
2.0	Tokyo, April 1996	Second version of the Guide
3.0	Edimburgh, July 1996	Third version of the Guide
4.0	Geneva, December 1996	Correction of editorial errors (e.g. missing semicolons) Addition of new defect resolutions including modifications to existing entries.
4.0a	Oslo, January 1997	Correction of editorial errors (e.g. syntax errors)
4.0b	Oslo, May 1997	Correction of editorial errors (e.g. syntax errors)

Item	Location	Reason
4.1	Beijing, June 1997	Correction of editorial errors (e.g. missing semicolons)
		Addition of new defect resolutions including modifications to existing entries.
5.0	Geneva, October 1997	SG approval
		Note - All approved corrections to Rec. M.3100 is published in a technical corrigendum.
6.0	Geneva, June 1998	All resolved defects are documented in M.3100 Technical Corrigendum 1. The resolutions are removed from the implementers guide (this document).
7.0	Geneva, February 2000	Addition of user guidelines, correction to registration etc.
8.0	Torrance, August 2000	Additional defects discovered as part of work on CORBA/IDL (M.3120) as well as defects moved from the M.3100 status document
9.0	Geneva, January 2001	No additional defect reports
10.0	Pleasanton, May 2001	Incorrect ArcAlarmDetailSet syntax in Amendment 3
		Defect report on M.3120 on missing string identifiers for conditional packages.
11.0	Geneva, July 2001	Incorrect reference to TC-3 replaced with TC-2 for defect resolutions DR-M3100-31 to DR-M3100-42.
		Combined into a single table for all M.3100 defects (including amendments).
12.0	Geneva, February 2003	Updated with defect reports and resolutions from SG17.
13.0	Geneva, September 2005	Updated to reflect publication of revised M.3100.

2 Defect Report and Resolution Procedures

2.1 Submission of defects

Any implementer of the TMN Recommendations is invited to submit TMN defect report using the form in Appendix B of the Guide. The defect should be submitted to the ITU-T SG4 Secretariat and copied to the ITU-T WP3/4 Chairman. Each form should cover a single defect. It is important that the form is completed accurately, especially the sections which relate to the base material against which the defect report is being raised.

2.2 Resolution of Defects

A TMN defect resolution group is established for each of the Recommendations. In some cases a group covers more than one Recommendation. Following agreement on a resolution, within the defect resolution group, the proposed resolution may require approval of ITU-T WP3/4 and ITU-T SG4.

This Guide will contain resolutions as they are agreed by the defect resolution group. The status of each will be reflected in Appendix A of the Guide and any modifications required to the resolutions themselves prior to final approval, will be reflected in Section 3 of the Guide.

Please note that individual responses can not be given to an individual submitting defect reports, and that the procedure is not intended as a consulting service.

2.3   Defect report register

New defect reports will be included in the report of the relevant Question or Working Party.

3   Implementation Guidance

Remember that this Guide is intended to be an authoritative source of information for implementers of the TMN Recommendations, however it is not itself an ITU-T Recommendation.

Items marked with an asterisk (*) were added to the Guide or modified for this version of the Guide.

Bullets have reference numbers of the form Yx where Y is a letter which corresponds to one of the ITU-T Recommendations, and x is a number which identified the bullet in the context of that Recommendation.

At the end of each bullet title a defect report number (DR) is included if appropriate. This defect report number is used in Annex A, which is a register of defect reports raised and their current status. Note that a single bullet may relate to more than one defect report, or a single defect report may result in more than one bullet being generated. Text contained in this clause shall only be considered final when the associated changes are part of a revised Recommendation.

3.1   Changes to Rec M.3100 (1995)

All changes due to defect reports are incorporated into revised M.3100 (04/05).

3.2   Changes to Rec M.3100 (04/05)

None.

3.3   Changes to Rec M.3101 (1995)

None

3.4   Changes to Rec M.3108.2 (02/2000)

B1   DR-M3108.2-1 (*)

In section 7.10, in the ASN.1 module M3108Part2ASN1Module:

Replace

ListOfSLCsUsed ::= SEQUENCE OF   {

prePprovisionedSLCPtr ObjectInstance   }

with

ListOfSLCsUsed ::= SEQUENCE OF ObjectInstance

3.5   Changes to Rec M.3120 (2001)

Defect reports DR-M3120-1, DR-M3120-2 and DR-M3120-3 are resolved by the publication of M.3120 (10/2001).

<div align="center">**TMN Defect Report Register**</div>

The defects reported to date are listed below. The status of each is indicated according to the classification outlined below:

O   Open

- The defect has been submitted, a solution may have been proposed, but the Defect Resolution Group has not yet come to an agreement.

A/U   Agreed/Unanimous

- Proposed solution agreed by everyone in the Defect Resolution Group

- Pending approval by affected Study Group

A/C   Agreed/Consensus

- Consensus solution agreed by the Defect Resolution Group and documented in this version of the Implementers' Guide.

- Pending approval by affected Study Group

A   Agreed

- Proposed solution agreed by the Defect Resolution Group

- Pending approval by affected Study Group

Note: This status value is no longer to be used and has been replaced with the A/U and A/C status values.

C   Complete

- Defect resolution approval by full Study Group

- Final resolution reflected in this version of Implementor's Guide

P   Published

- Change included in published version

R   Rejected

- As a defect (may be misinterpretation, request for extension or have already been corrected in subsequent version of text)

W   Withdrawn

- Defect report withdrawn by source.

The severity of each is indicated according to the classification outlined below:

m   Minor

The following defects are classified as minor:

-      Pure syntax errors in GDMO templates (e.g. missing semicolons)

-      Obvious misalignment in names of attributes in the GDMO and ASN.1

-      Missing ASN.1 productions where the text is clear as to the syntax, semantics and data type

-      Clarifications of ambiguities in the text if supported by the formal definitions

-      Typographical errors.

M   Major

-      All other defects are classified as major.

ITU-T Recommendation M.3100 (1995) - including amendments

Status	Severity	Defect Number	Source	Guide Entry	Other reference	Subject Matter
R	M	DR-M3100-1	Deutsche Telecom	None	SYD-46, M.3100/§3.5.5	Missing ToTermination in Multi-point Cross-Connection. In the case of a multi-point cross-connection, the to-termination points are not identified directly by the Multi-point Cross-Connection object instance, but by the Cross-Connection object instances that are contained by the Multi-point Cross-Connection instance.
P	M	DR-M3100-2	Deutsche Telecom	TC[1] 1	SYD-46, M.3100/Fig I.6	Information flow in Figure I.6 should be from left to right and the sink and source labels should be corrected
P	M	DR-M3100-3	Australia	TC 1	SYD WD-M7(R1) TD-6 (4/4)	Modify the subordinateCircuitPackSoftwareLoad attribute behaviour to add clarification
P	M	DR-M3100-4	Australia	TC 1	SYD WD-M7 TD-6 (4/4)	Add DELETE to (new version of) autocreated circuitPack name binding.
P	m	DR-M3100-5	Australia	TC 1	SYD WD-M7	Additional user guidelines on use of supportedByObjectList
P	m	DR-M3100-6	Japan	TC 1	Geneve WD-M11/12	Multiple use of *package* label in OID assignments
P	M	DR-M3100-7	Bellcore	TC 1	TOK-42	Addition of Error Parameter to (some) name bindings
P	M	DR-M3100-8	Bellcore	TC 1	TOK-41	Missing resource type attribute in equipmentR1 object class
P	M	DR-M3100-9	Bellcore	TC 1	Tokyo WD-MM	Missing ProblemCause value

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[1] Defect resolutions are published in M.3100 Technical Corrigendum 1 (TC-1).

ITU-T Recommendation M.3100 (1995) - including amendments

Status	Severity	Defect Number	Source	Guide Entry	Other reference	Subject Matter
P	M	DR-M3100-10	ETSI	TC 1	TOK -58	Missing probable cause values (derived from work on GSM) NOTE: The applicable generic or otherwise useful set of new probable cause values has been added to M.3100. Too generic (e.g. equipmentFailure) and too specific (or implementation oriented) probable cause values are not considered useful and are not included.
P	M	DR-M3100-11	Nokia	TC 1	EDI-11	Missing probable cause values for real time clock
P	m	DR-M3100-12	Nokia	TC 1	EDI-51	Duplicated behaviour definition in name binding.
W	M	DR-M3100-13	Nokia	TC 1	EDI-52	Use of crossConnectionPackage
P	m	DR-M3100-14	Nokia	TC 1	EDI-53	Typographical and editorial errors.
P	M	DR-M3100-15	Nokia	TC 1	EDI-54	Revised crossConnection
O	M	DR-M3100-16	Fujitsu		EDI-29	Identification of physical connectivity in circuitPack NOTE: Also addressed by DR-M3100-20
P	M	DR-M3100-17	Q.15/4	TC 1	WD-x	Missing namebinding from managedElementComplex
P	m	DR-M3100-18	Italy (ETSI)	TC 1	D-012	Possible values of equipmentHolderType
P	M	DR-M3100-19	Italy (ETSI)	TC 1	D-012	Need of possibleCircuitPackList attribute

Status	Severity	Defect Number	Source	Guide Entry	Other reference	Subject Matter
O	M	DR-M3100-20	Italy (ETSI)		D-012	Modelling of cables, connectors and backplane NOTE: Modelling of cables and connectors are also addressed by DR-M3100-16
P	M	DR-M3100-21	Q.15/4	TC 1	WD-x	Missing name bindings from managedElement (and subclasses) to managed objects named from system in X.700 series
P	M	DR-M3100-22	Nokia	TC 1	D-022	Assignment of probable cause values related to radio relay management NOTE: A subset of the proposed values has been included in version 4.0 of the implementors' guide.
P	M	DR-M3100-23	USA	TC 1	D-008	Enhancement of the generalErrorParameter with addition of new cause codes.
P	m	DR-M3100-24	WP 4/4	TC 1	TD-71	Several editors errors are identified. NOTE: Some issues have been addressed in previous defect reports.
P	m	DR-M3100-25	ETSI	TC 1	WD-5	Definition of object identifier of e0-e4 levels.
P	M	DR-M3100-26	Lucent	TC 1	Beijing-30	The defect report proposes clarification of delete behaviour of circuitPack as follows: "Circuit packs are deleted only by the manager. It is not automatically deleted when removed".
P	M	DR-M3100-27	ETSI	TC 1	Beijing-24	Modification to behaviour of equipmentHolder-equipmentHolder name binding to allow an equipmentHolder to contain both equipmentHolder and circuitPack objects.
P	M	DR-M3100-28	USA	TC 1	Beijing-45	Addition of missing notifications to fabricR1and gtp managed object class. NOTE: No object identifier values has been assigned in this document as further changes to these object classes is expected before publication of the next version of M.3100.

ITU-T Recommendation M.3100 (1995) - including amendments

Status	Severity	Defect Number	Source	Guide Entry	Other reference	Subject Matter
P	m	DR-M3100-29	China	TC 1	TD-38 (4/4)	Missing name binding of managedElementComplex to network.
C	m	DR-M3100-30	USA	TC 2	D.185 (GEN)	Clarification on non-alarmed behaviour
C	M	DR-M3100-31	Rapporteur	TC² 2		Duplication of registration OID.
C	M	DR-M3100-32	Joint experts group on CORBA/IDL	TC 2	WD 15 (Torrance)	The abstractLink (M.3100 Amd-1) object has the usageCost attribute that is get only. It was suggested to change this to GET-REPLACE.
C	m	DR-M3100-33	Joint experts group on CORBA/IDL	TC 2	WD 15 (Torrance)	In the networkCTPSource object, the last paragraph of the behaviour should be "… the Network Connection Termination Point **Sink** or Bi-directional, that **receives** information **from**…"
C	m	DR-M3100-34	Joint experts group on CORBA/IDL	TC 2	WD 15 (Torrance)	The node was not intended to be included in M.3100 Amendment 1 (was taken out of input draft document) and should be removed.
C	m	DR-M3100-35	Joint experts group on CORBA/IDL	TC 2	TD 42/4,§4.5.1	In spite that linkEnd of G.853.1(CIV) has signalIdentification, abstractLinkEnd of M.3100 does not have signalId.
C	m	DR-M3100-36	Joint experts group on CORBA/IDL	TC 2	TD 42/4,§4.5.2	clientLinkEndPointerPackage is defined in networkTTPSource. However, it is missing in networkTTPSink.

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² Defect resolutions are published in M.3100 Technical Corrigendum 2 (TC-2).

ITU-T Recommendation M.3100 (1995) - including amendments

Status	Severity	Defect Number	Source	Guide Entry	Other reference	Subject Matter
C	m	DR-M3100-37	Joint experts group on CORBA/IDL	TC 2	TD 42/4,§4.5.3	According to present M.3100 Amd1, networkCTPPackage is defined based on subnetworkTPPoolIsMadeOfSubnetworkTP of G.853.1(CIV). However, as this package is addressing partitioning, subnetworTPIsRelatedToExtremity may be the corresponding relationship definition.
C	m	DR-M3100-38	Joint experts group on CORBA/IDL	TC 2	TD 42/4,§4.5.4	In the componentPointerPackage of subNetworkConnection the last paragraph of the behavior clause should be "The componentListPointerPackage is supported where the Sub-network Connection is made up of a number of component Sub-network Connections, and Link Connections, within the same layer".
C	m	DR-M3100-39	Joint experts group on CORBA/IDL	TC 2	TD 42/4,§4.5.5	Figure x.3/M.3100 (Entity Relationships) should be updated to be aligned with the text.
C	m	DR-M3100-40	Joint experts group on CORBA/IDL	TC 2	TD 42/4,§4.5.6	The behaviour definition of the signal identification attribute in M.3100 Am. 1 is inconsistent with the syntax definition for SignalId.
C	m	DR-M3100-41	Joint experts group on CORBA/IDL	TC 2	TD 42/4,§4.5.7	In the name binding accessGroup-layerNetworkDomain, correct the wording in the DELETE statement to be consistent with the behaviour statement.
C	m	DR-M3100-42	Joint experts group on CORBA/IDL	TC 2	TD 42/4,§5.2.3	Topology Objects Creation Behaviour with Respect to Signal Identification
C	M	DR-M3100-43	Experts group	A1		Incorrect ASN.1 syntax `ArcAlarmDetailSet`
C	M	DR-M3100-44	SG 17	A2	TD46-GEN 2003	Missing IMPORTs

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ITU-T Recommendation M.3100 (1995) - including amendments

Status	Severity	Defect Number	Source	Guide Entry	Other reference	Subject Matter
C	M	DR-M3100-45	SG 17	A3	TD46-GEN 2003	Incorrect module reference (arc value)
C	M	DR-M3100-46	SG 17	A4	TD46-GEN 2003	Incorrect module reference (arc value)

ITU-T Recommendation M.3101 (1995)

Status	Severity	Defect Number	Source	Guide Entry	Other reference	Subject Matter

ITU-T Recommendation M.3108.2 (02/2000)

Status	Severity	Defect Number	Source	Guide Entry	Other reference	Subject Matter
C	M	DR-M3100-47	SG 17	B1	TD46-GEN 2003	Incorrect ASN.1

ITU-T Recommendation M.3120 (10/01)

Status	Severity	Defect Number	Source	Guide Entry	Other reference	Subject Matter

TMN Defect Report Form

	DEFECT REPORT FORM	
1.	Defect Report Number	*Recommendation code/numeric* *Note: Only the recommendation is identified by the defect report submitter*
2.	Source	*country, member etc* *Note: Filled out by the defect report submitter*
3.	Addressed to	*Defect editors group reference* *Note: Filled out by the defect report submitter*
4.	a) ITU-T TSB b) ITU-T WP	*administrative body reference* *Note: Not filled out by the defect report submitter*
5.	Date circulated by administrative body	*date* *Note: Filled out by the TSB or WP*
6.	Deadline for response from editor	*date* *Note: Determined by the Defect Resolution Group*
7.	Defect Report Concerning	*Recommendation number and publication date* *Note: Filled out by the defect report submitter*
8.	Qualifier	*e.g. error, omission, clarification required* *Note: Filled out by the defect report submitter*
9.	Reference in document	*clause number* *Note: Filled out by the defect report submitter*
10.	Nature of defect	*complete, concise explanation of the perceived problem* *Note: Filled out by the defect report submitter*
11.	Solution proposed by source	*optional*
12.	Editors response	*any material proposed for processing as an erratum to, an amendment to or a commentary on the final Recommendation text. This will be included in Chapter 3 of a later version of this document.*

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