



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

**M.3100-series  
Implementers'  
Guide**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

(24 November 2009)

SERIES M: Telecommunication management, including  
TMN and network maintenance

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

Defects and resolutions, version 14

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## **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 World 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 2 on 24 November 2009.

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## **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 2, 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 SG2 meetings as well as meeting of ITU-T WP2/2. 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.

<b>Recommendation</b>	<b>Defect group leader</b>	
Rec. M.3100 Generic Network Information Model (including amendments)	Knut Johannessen Telenor NORWAY	Tel. +47 90 10 18 10 Email: <a href="mailto:knut.johannessen@telenor.com">knut.johannessen@telenor.com</a>
Rec. M.3120 CORBA Generic Network And Network Element Level Information Model (including amendments)	Kam Lam Alcatel-Lucent United States	Tel: +1 908 582 0672 Fax: +1 908 582 1124 Email: <a href="mailto:hklam@alcatel-lucent.com">hklam@alcatel-lucent.com</a>
Rec. M.3160 Generic, protocol-neutral management information mode	Knut Johannessen Telenor NORWAY	Tel. +47 90 10 18 10 Email: <a href="mailto:knut.johannessen@telenor.com">knut.johannessen@telenor.com</a>

### **1.4 History log**

<b>Item</b>	<b>Location</b>	<b>Reason</b>
13.0	Geneva, September 2005	Updated to reflect publication of revised M.3100.
14.0	Geneva, November 2009	Added first defect to M.3160 Updated text to reflect merger of SG4 and SG2. All defects that have been corrected in re-publications after 2005 has been removed. The details for revision prior to version 13 is removed.

## **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 SG2 Secretariat and copied to the ITU-T WP2/2 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 WP2/2 and ITU-T SG2.

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 (04/05)**

None.

### **3.2 Changes to Rec M.3101 (1995)**

None

### **3.3 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 {  
                                preProvisionedSLCPtr ObjectInstance }
```

with

```
ListOfSLCsUsed ::= SEQUENCE OF ObjectInstance
```

### 3.4 Changes to Rec M.3120 (10/2001)

None

### 3.5 Changes to Rec M.3160 (11/08)

C1 DR-M3160-1 (\*)

Definition of operationalState of the termination point in M.3160 is corrected such that when it is able to perform its normal function (i.e., detecting failures) it should not change its operationalState from enabled to disabled. Specifically, the following modification applies:

#### *7.3.95 Trail Termination Point Sink*

*- The operational state reflects the perceived ability to process (including detecting failures) the incoming ~~receive a valid~~ signal. If the termination point ~~detects that a signal received has failed or it is unable to process the incoming signal~~, then the operational state will have the value disabled.*

Similar changes should be done to update the other termination points as necessary. For the arc-related objects (e.g. trail, subnetwork connection), the following definition for the operationalState is added:

*- The operational state of the <xxx> reflects its perceived ability to carry valid signal. If the signal is detected (i.e., by the associated termination point) as failed, then the operational state of the <xxx> shall have the value disabled.*

## TMN Defect Report Register

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*

<i>Status</i>	<i>Severity</i>	<i>Defect Number</i>	<i>Source</i>	<i>Guide Entry</i>	<i>Other reference</i>	<i>Subject Matter</i>

*ITU-T Recommendation M.3101 (1995)*

<i>Status</i>	<i>Severity</i>	<i>Defect Number</i>	<i>Source</i>	<i>Guide Entry</i>	<i>Other reference</i>	<i>Subject Matter</i>

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

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

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

<i>Status</i>	<i>Severity</i>	<i>Defect Number</i>	<i>Source</i>	<i>Guide Entry</i>	<i>Other reference</i>	<i>Subject Matter</i>

*ITU-T Recommendation M.3160 (11/08)*

<i>Status</i>	<i>Severity</i>	<i>Defect Number</i>	<i>Source</i>	<i>Guide Entry</i>	<i>Other reference</i>	<i>Subject Matter</i>
C	M	DR-M3160-1	SG 15	C1	TD5 (2/2) 2009	Incorrect use/behaviour of Operational State in termination point



## TMN Defect Report Form

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