INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

M.3100

Corrigendum 2

(01/2001)

SERIES M: TMN AND NETWORK MAINTENANCE: INTERNATIONAL TRANSMISSION SYSTEMS, TELEPHONE CIRCUITS, TELEGRAPHY, FACSIMILE AND LEASED CIRCUITS

Telecommunications management network

Generic network information model

Corrigendum 2

CAUTION !

PREPUBLISHED RECOMMENDATION

This prepublication is an unedited version of a recently approved Recommendation. It will be replaced by the published version after editing. Therefore, there will be differences between this prepublication and the published version.

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.

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/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.

© ITU 2001

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from ITU.

CONTENTS

Page

1 Introduction 6

2 Resolved defects 6

RECOMMENDATION M.3100

GENERIC NETWORK INFORMATION MODEL

CORRIGENDUM 2

(Geneva, 200x)

1 Introduction

This technical corrigendum corrects a number of defects to Recommendation M.3100 that have previously been documented and resolved in the M.3100 Implementors' Guide. This technical corrigendum replaces the Implementors' Guide as the authoritative source. However, the Implementors' Guide will be available on the ITU-T server until this corrigendum has been published.

Additional defects and resolutions will again be recorded in the Implementors' Guide and finally be published in an additional technical corrigendum or a revision of Recommendation M.3100.

1.1 Definitions

There are no new definitions added by this corrigendum.

2 Resolved defects

This technical corrigendum corrects the following defects reported against Recommendation M.3100 (1995):

Defect number	Issue	Correction No.
DR-M3100-30	Clarification on non-alarmed behaviour	1
DR-M3100-31	Duplication of registration OID	2
DR-M3100-32	The abstractLink usageCost attribute	3
DR-M3100-33	NetworkCTPSource behaviour	4
DR-M3100-34	Node	5
DR-M3100-35	SignalIdentification (signalId) in abstractLinkEnd	16
DR-M3100-36	Missing clientLinkEndPointerPackage in networkTTPSink.	6, 7
DR-M3100-37	Behaviour reference in networkCTPPackage	8, 9
DR-M3100-38	Conditional componentPointerPackage of subNetworkConnection	10, 11
DR-M3100-39	Entity Relationships diagram for network level fragment (amendment 1)	12
DR-M3100-40	The behaviour definition of the signal identification	13

Defect number	Issue	Correction No.
DR-M3100-41	accessGroup-layerNetworkDomain name binding semantics	14
DR-M3100-42	Topology objects creation behaviour with respect to signal identification	15, 16, 17, 18

1) New section I.12 "Behaviour of non-alarmed severity conditions"

Add the following new section I.12 with clarification of non-alarmed severity conditions:

"When the alarm severity code of a condition is critical, major, minor, or warning, alarm notifications are generated for that condition with a perceived severity equal to the severity code.

When the alarm severity code of a condition is non-alarmed, no alarm notifications are generated for that condition. The probableCause of the condition is still placed in the currentProblemList (if the currentProblemList attribute is present) with an alarmStatus of activePending."

2) Subclause 2.2.13 " Network Trail Termination Point Sink "

In subclause 2.2.13/M.3100 Am.1, replace

"REGISTERED AS {m3100ObjectClass 52};"

with

"REGISTERED AS {m3100ObjectClass 56};"

3) Subclause 2.3.x "Usage Cost Package"

In subclause 2.2.13/M.3100 Am.1, replace existing usageCostPackage with

```
usageCostPackage    PACKAGE
   ATTRIBUTES
      usageCost  GET-REPLACE;
REGISTERED AS {m3100Package 91};
```

4) Subclause 2.3.x "Network CTP Source"

In subclause 2.3.x/M.3100 Am.1, the paragraph:

"The Connectivity Pointer attribute points to the managed object representing the Connection which relates this instance to the instance representing the Network Connection Termination Point, Source or Bi-directional, that sends information (traffic) to this network termination point, or is null."

with the following

"The Connectivity Pointer attribute points to the managed object representing the Connection which relates this instance to the instance representing the Network Connection Termination Point, Sink or Bi-directional, that receives information (traffic) from this network termination point, or is null."

5) Node related definitions

Remove the node object class, nodeId attribute, and the associated name bindings from M.3100 Am.1.

6) New section 2.2.x "Network Trail Termination Point Sink R1"

Add the following new subclass networkTTPSinkR1 managed object class definition in a new subclause 2.2.x/M.3100 Am.1 following section 2.x "Network Trail Termination Point Sink":

```
networkTTPSinkR1 MANAGED OBJECT CLASS
   DERIVED FROM networkTTPSink;
   CONDITIONAL PACKAGES
      clientCTPListPackage PRESENT IF
         "management of the client networkCTPs of this managed object is supported
         <G.853.1,RELATIONSHIP:networkTTPAdaptsNetworkCTP>";;
REGISTERED AS {m3100ObjectClass 67};
```

7) New section 2.2.x "Network Trail Termination Point Bidirectional R1"

Add the following new subclass networkTTPBidirectionalR1 managed object class definition in a new subclause 2.2.x/M.3100 Am.1 following section 2.x "Network Trail Termination Point Bidirectional":

```
networkTTPBidirectionalR1 MANAGED OBJECT CLASS
   DERIVED FROM
 networkTTPBidirectional,
      networkTTPSinkR1;
REGISTERED AS {m3100ObjectClass 68};
```

8) Section 2.2.x "Network Connection Termination Point Sink"

In section 2.2.x/M.3100 Am.1, Network Connection Termination Point Sink, replace

```
networkCTPPackage      PRESENT IF
   "pointers to instances of network termination points at higher or lower levels of sub-network partitioning
   are supported by this managed object class
   <G.853.1,RELATIONSHIP:subnetworkTPPoolIsMadeOfSubnetworkTP>",
```

with

```
networkCTPPackage      PRESENT IF
   "pointers to instances of network termination points at higher or lower levels of sub-network partitioning
   are supported by this managed object class   <G.853.1,RELATIONSHIP:
   subnetworTPIsRelatedToExtremity>",
```

9) Section 2.2.x "Network Connection Termination Point Source"

In section 2.2.x/M.3100 Am.1, Network Connection Termination Point Source, replace

```
networkCTPPackage      PRESENT IF
   "pointers to instances of network termination points at higher or lower levels of sub-network partitioning
   are supported by this managed object class
   <see G.853.1,RELATIONSHIP:subnetworkTPPoolIsMadeOfSubnetworkTP>",
```

with

networkCTPPackage PRESENT IF

"pointers to instances of network termination points at higher or lower levels of sub-network partitioning are supported by this managed object class
<see G.853.1,RELATIONSHIP: subnetworTPIsRelatedToExtremity>",

10) Section 2.2.x "Sub-Network Connection"

In section 2.2.x/M.3100 Am.1, Sub-Network Connection, replace

"The componentListPackage is supported where the Sub-network Connection is made up of a number of component Sub-network Connections, and Connections, within the same layer."

with

"The componentPackage 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.";;

11) Section 2.2.x "Sub-Network Connection"

In section 2.2.x/M.3100 Am.1, Sub-Network Connection, replace

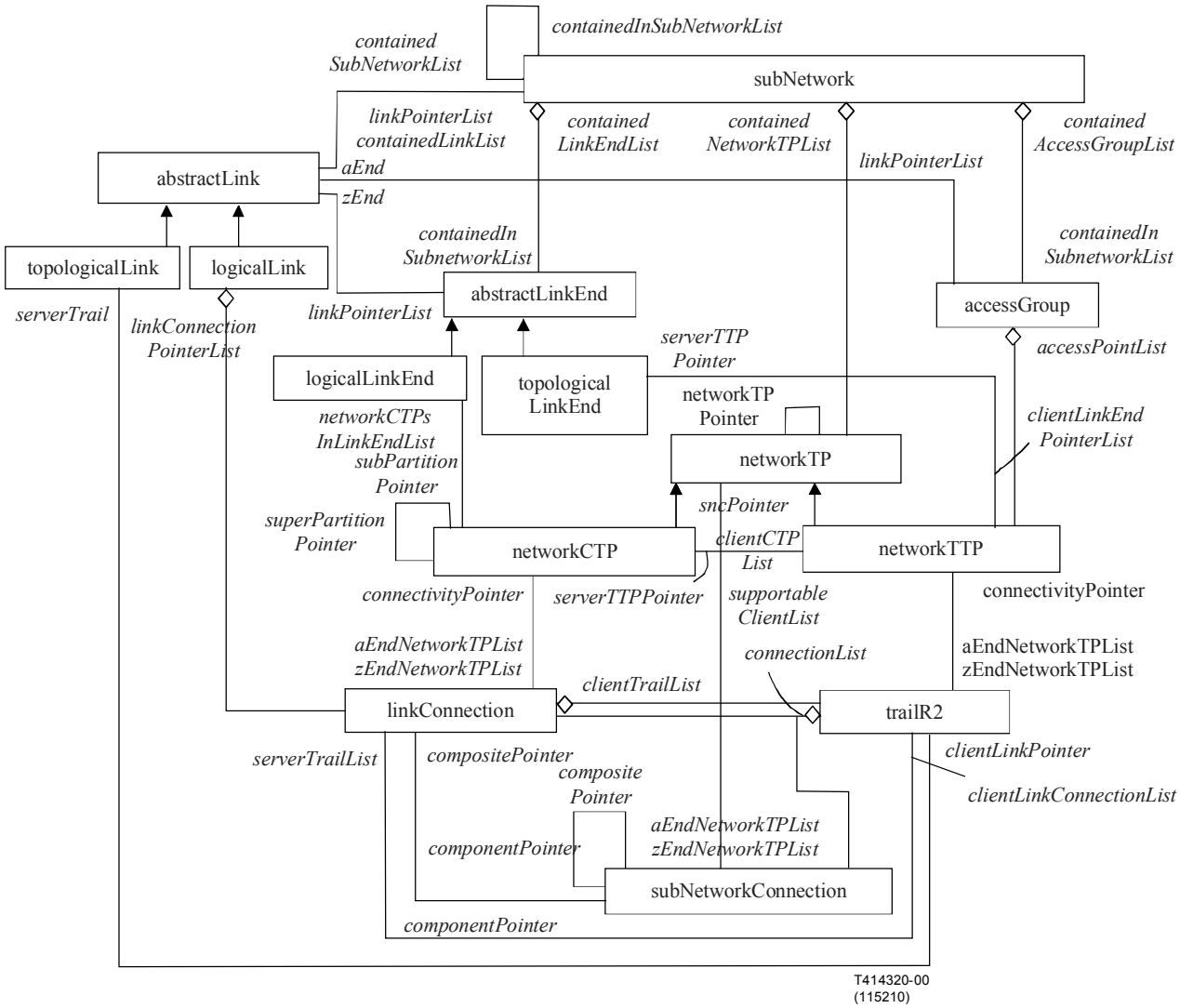
componentPointerPackage PRESENT IF "the Sub-network Connection is made up of a number of component Sub-network Connections, and Connections, within the same layer (partitioned sub-networks)
<G.853.1,RELATIONSHIP:subnetworkConnectionisMadeOfTransportEntities>",

with

componentPointerPackage PRESENT IF "the Sub-network Connection is made up of a number of component Sub-network Connections, and Link Connections, within the same layer (partitioned sub-networks)
<G.853.1,RELATIONSHIP:subnetworkConnectionisMadeOfTransportEntities>",

12) Section 2.1 "Overview of the model"

In section 2.1//*M.3100 Am.1* add the following revised E/R Diagram



13) Section 2.2.x "Signal Identification"

In section 2.2.x/M.3100 Am.1, Signal Identification, replace the following behaviour

"This attribute defines the characteristic information of the layer (in the G.805 sense) to which the entity under consideration belongs. It is used to determine whether sub-network connection/connectivity is possible. The signal Id may be a simple rate and format or may be a bundle of entities with the same characteristic information which form an aggregate signal.";;

with

"This attribute defines the characteristic information of the layer (in the G.805 sense) to which the entity under consideration belongs. It is used to determine whether sub-network connection/connectivity is possible. The signal Id may be a simple rate and format, a bundle of entities with the same characteristic information which form an aggregate signal, or a complex type containing groupings of different bundles. The complex type may be applicable to certain multi-media applications involving multiple parallel connections between endpoint locations";;

14) Section 2.2.x "Access Group"

In section 2.2.x/M.3100 Am.1, Access group, replace the following DELETE statement

```
"DELETE
    ONLY-IF-NO-CONTAINED-OBJECTS
        networkTTPsExisting
        failureToRemoveAccessGroup;"
```

with the following

```
"DELETE
    DELETES-CONTAINED-OBJECTS
        networkTTPsExisting
        failureToRemoveAccessGroup;"
```

15) New section 2.2.x "Layer Network Domain R1"

Add the following new subclass layerNetworkDomainR1 managed object class definition in a new subclause 2.2.x/M.3100 Am.1 following section 2.x "Layer Network Domain":

```
layerNetworkDomainR1 MANAGED OBJECT CLASS
  DERIVED FROM layerNetworkDomain;
  CHARACTERIZED BY
    layerNetworkDomainPkgR1 PACKAGE
 BEHAVIOUR
            layerNetworkDomainBehaviourR1 BEHAVIOUR
        DEFINED AS
"The signalId can be set upon creation of an instance of the layerNetworkDomainR1 to support the following
typical operations:
1) set the signalId value upon creation of the layer network domain
2) set the signalId attribute of a subnetwork (or abstract link, etc.) based on the value of the layer network
domain instance referenced in the create request. ";;
 ATTRIBUTES
    signalId    GET SET-BY-CREATE;;;
REGISTERED AS {m3100ObjectClass 69};
```

16) New section 2.2.x "Abstract Link End R1"

Add the following new subclass abstractLinkEndR1 managed object class definition in a new subclause 2.2.x/M.3100 Am.1 following section 2.x "Abstract Link End":

```
abstractLinkEndR1 MANAGED OBJECT CLASS
  DERIVED FROM abstractLinkEnd;
  CHARACTERIZED BY
```

```
        abstractLinkEndPkgR1 PACKAGE
    ATTRIBUTES
        signalId    GET;;;
REGISTERED AS {m3100ObjectClass 70};
```

17) New section 2.2.x "Logical Link End R1"

Add the following new subclass logicalLinkEndR1 managed object class definition in a new subclause 2.2.x/M.3100 Am.1 following section 2.x "Logical Link End":

```
logicalLinkEndR1 MANAGED OBJECT CLASS
    DERIVED FROM logicalLinkEnd;
    CHARACTERIZED BY
        logicalLinkEndPkgR1 PACKAGE
    ATTRIBUTES
        signalId    GET;;;
REGISTERED AS {m3100ObjectClass 71};
```

18) New section 2.2.x "Topological Link End R1"

Add the following new subclass topologicalLinkEndR1 managed object class definition in a new subclause 2.2.x/M.3100 Am.1 following section 2.x "Topological Link End":

```
topologicalLinkEndR1 MANAGED OBJECT CLASS
    DERIVED FROM topologicalLinkEnd;
    CHARACTERIZED BY
        topologicalLinkEndPkgR1 PACKAGE
    ATTRIBUTES
        signalId    GET;;;
REGISTERED AS {m3100ObjectClass 72};
```