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Digital terminal equipments – Operations, administration  
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**Synchronous Digital Hierarchy (SDH) –  
Unidirectional performance monitoring for the  
network element view**

ITU-T Recommendation G.774.6

(Formerly CCITT Recommendation)

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## ITU-T Recommendation G.774.6

### Synchronous Digital Hierarchy (SDH) – Unidirectional performance monitoring for the network element view

#### Summary

This Recommendation provides an information model for the performance monitoring of Synchronous Digital Hierarchy (SDH) network. This model describes the managed object classes and their properties for the performance monitoring function of unidirectional paths and sections, as defined in ITU-T G.784 and as related to SDH network elements. These objects are useful to describe information exchanged across interfaces defined in ITU-T M.3010 Telecommunications Management Network (TMN) architecture for the management of the performance monitoring function.

History	
Issue	Notes
2001	First revision incorporated the changes documented in the Implementors Guide. The <b>rsCurrentData</b> , <b>rsCurrentDataTR</b> , <b>rsHistoryData</b> , <b>msAdaptationCurrentData</b> , and <b>msAdaptationHistoryData</b> were moved from ITU-T G.774.1 to this Recommendation for unidirectional performance monitoring.
4/1997	Initial version of the Recommendation.

#### Source

ITU-T Recommendation G.774.6 was revised by ITU-T Study Group 15 (2001-2004) and approved under the WTSA Resolution 1 procedure on 9 February 2001.

## FOREWORD

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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.

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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 G.774.6**

### **Synchronous Digital Hierarchy (SDH) – Unidirectional performance monitoring for the network element view**

#### **1 Scope**

SDH Performance Monitoring Functions are used to monitor specified performance events of specified Termination Points managed objects and to report these performance data, as well as Quality Of Service Alarms to its managing system according to a given schedule.

ITU-T M.2120 defines maintenance of transport network, ITU-T G.784 defines the management of SDH-based network element. This Recommendation defines the object model based on ITU-T Q.822 according to the requirements described in ITU-T G.784 and ITU-T M.2120 with respect to unidirectional performance monitoring. This model uses generic mechanisms defined in ITU-T Q.822. The information model for bidirectional performance monitoring is covered by ITU-T G.774.1. This Recommendation reuses functionality of ITU-T G.774.1 wherever possible.

#### **Structure of this Recommendation**

Clause 5.1 provides an overview of the unidirectional SDH performance monitoring information model. Clauses 6 to 15 describe the information model using the notation mechanisms defined in ITU-T X.722, Guidelines for the definition of managed objects. Clause 15 contains the syntax definitions of the information carried in the protocol using Abstract Syntax Notation One (ASN.1) defined in ITU-T X.680-X.683. Naming and inheritance are illustrated in Appendix I.

#### **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: all 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.

- ITU-T G.707/Y.1322 (2000), *Network node interface for the synchronous digital hierarchy SDH*.
- ITU-T G.773 (1993), *Protocol suites for Q-interfaces for management of transmission systems*.
- ITU-T G.774 (2001), *Synchronous digital hierarchy (SDH) – Management information model for the network element view*.
- ITU-T G.783 (2000), *Characteristics of synchronous digital hierarchy (SDH) equipment functional blocks*.
- ITU-T G.784 (1999), *Synchronous digital hierarchy (SDH) management*.
- ITU-T G.803 (2000), *Architecture of transport networks based on the synchronous digital hierarchy (SDH)*.
- ITU-T G.831 (2000), *Management capabilities of transport networks based on the synchronous digital hierarchy (SDH)*.

- ITU-T G.958 (1994), *Digital line systems based on the synchronous digital hierarchy for use on optical fibre cables.*
- ITU-T M.60 (1993), *Maintenance terminology and definitions.*
- ITU-T M.2120 (2000), *PDH path, section and transmission system and SDH path and multiplex section fault detection and localization procedures.*
- ITU-T M.3010 (2000), *Principles for a telecommunication management network.*
- ITU-T M.3013 (2000), *Considerations for a telecommunications management network.*
- ITU-T M.3100 (1995), *Generic network information model.*
- ITU-T Q.811 (1997), *Lower layer protocol profiles for the Q3 and X interfaces.*
- ITU-T Q.812 (1997), *Upper layer protocol profiles for the Q3 and X interfaces.*
- ITU-T Q.822 (1994), *Stage 1, Stage 2 and Stage 3 description for the Q3-interface – Performance management.*
- ITU-T X.680 to X.683 (1997), *Information technology – Abstract Syntax Notation One (ASN.1).*
- ITU-T X.701 (1997), *Information technology – Open Systems Interconnection – Systems management overview.*
- ITU-T X.710 (1997), *Information technology – Open Systems Interconnection – Common management information service.*
- ITU-T X.711 (1997), *Information technology – Open Systems Interconnection – Common management information protocol: Specification.*
- ITU-T X.720 (1992), *Information technology – Open Systems Interconnection – Structure of Management Information: Management information model, plus Amd.1 (1995) and Cor.1 (1994).*
- ITU-T X.721 (1992), *Information technology – Open Systems Interconnection – Structure of management information: Definition of management information, plus Cor.1 (1994), Cor.2 (1996), Cor.3 (1998), and Cor.4 (2000).*
- ITU-T X.722 (1992), *Information technology – Open Systems Interconnection – Structure of management information: Guidelines for the definition of managed objects, plus Amd.1 (1995), Amd.2 (1997) and Cor.1 (1996).*
- ITU-T X.730 (1992), *Information technology – Open Systems Interconnection – Systems Management: Object management function, plus Amd.1 (1995) and Amd.1/Cor.1 (1996).*
- ITU-T X.731 (1992), *Information technology – Open Systems Interconnection – Systems Management: State management function, plus Amd.1 (1995), Cor.1 (1995) and Amd.1/Cor.1 (1996).*
- ITU-T X.733 (1992), *Information technology – Open Systems Interconnection – Systems Management: Alarm reporting function, plus Cor.1 (1994), Amd.1 (1995), Amd.1/Cor.1 (1996) and Cor.2 (1999).*
- ITU-T X.734 (1992), *Information technology – Open Systems Interconnection – Systems Management: Event report management function, plus Cor.1 (1994), Amd.1 (1995), Amd.1/Cor.1 (1996) and Cor.2 (1999).*
- ITU-T X.735 (1992), *Information technology – Open Systems Interconnection – Systems Management: Log control function, plus Amd.1 (1995) and Amd.1/Cor.1 (1996).*

- ITU-T X.739 (1993), *Information technology – Open Systems Interconnection – Systems Management: Metric objects and attributes.*
- ANSI T1.231-1997, *Digital Hierarchy – Layer 1 in-Service Digital Transmission Performance Monitoring.*

### 3 Terms and Definitions

This Recommendation uses the terms and definitions defined in ITU-T G.774, ITU-T G.784 and ITU-T M.3100.

### 4 Abbreviations

This Recommendation uses the following abbreviations:

AIS	Alarm Indication Signal
BBE	Background Block Error
CSES	Consecutive Severely Errored Second
CTP	Connection Termination Point
EBER	Excessive Bit Error Ratio
ES	Errored Second
FEBBE	Far-End Background Block Error
FEEB	Far-End Errored Block
FEES	Far-End Errored Second
FESES	Far-End Severely Errored Second
ISO	International Organization for Standardization
ITU	International Telecommunication Union
LOF	Loss Of Frame
LOS	Loss Of Signal
MS	Multiplex Section
NCSES	Number of Consecutive Severely Errored Seconds
NE	Network Element
OS	Operations System
OSI	Open Systems Interconnection
Pkg	Package
QoS	Quality of Service
RDN	Relative Distinguished Name
RS	Regenerator Section
SDH	Synchronous Digital Hierarchy
SES	Severely Errored Second
SPI	Synchronous Physical Interface
STM-N	Synchronous Transport Module N

TMN	Telecommunications Management Network
TP	Termination Point
TR	Threshold Reset
TTP	Trail Termination Point
UAS	Unavailable Second

## 5 Performance management model

### 5.1 Overview

This clause provides Managed Objects required to support management of unidirectional performance monitoring in SDH Network Elements.

This model defines subclasses of the generic **currentData** and **historyData** object classes from ITU-T Q.822 for each kind of monitoring point. For each type of monitoring point, two subclasses of **currentData** are defined. One is defined for either a 15-minute count or 1-day count period, and provides implicit clearing of threshold crossing alarms at the end of each granularity period. The other subclass is only relevant to 15-minute counting and performs explicit clearing of threshold alarms (Threshold Reset) at the end of a clear 15-minute period (refer to 2.3.4.2/M.2120).

History information could either be collected as part of **historyData** instances or one of its subclasses or as an **eventRecord** or one of its subclasses contained in a log. Utilization of a log is not mandatory in this Recommendation.

The threshold reset (TR) mechanism used in this Recommendation corresponds to the reset threshold report (RTR) of ITU-T G.784.

### 5.2 Requirements

The unidirectional SDH Performance Monitoring functions shall provide for:

- the ability for a managing system to request the collection of the various Performance events relating to a given monitored entity for a given collection period;
- the ability for a managing system to suspend/resume the performance data collection for a given monitored entity (or set of entities);
- the ability for a managing system to instruct the NE to reset the performance monitoring counters for a given monitored entity (or set of entities);
- the scheduling of performance collection activity within specified time periods, for a given monitored entity (or set of entities);
- the ability for a managing system to request the performance monitoring counters for a given monitored entity (or set of entities);
- the ability for a managed system to send event reports to a managing system to notify the results of the performance data collection, at the end of the collection period;
- the ability for a managing system to instruct the NE to maintain Performance historical data for a specified duration, under specified conditions;
- the ability for a managing system to instruct the NE to remove specific Performance historical data;
- the ability for a managing system to instruct the NE to establish thresholding criteria for a given monitored entity (or set of entities);
- the ability for a managed system to send Quality Of Service Alarms upon threshold violation of a performance counter of a monitored entity.

In order to fulfil the needs for maintenance-based collection and error performance-based collection, the following register sets are required for performance management evaluation:

Starting and ending of a unidirectional unavailability period has to be reported by the instance of the managed object class that hold the 24-hour counts (near end or far end).

### **Maintenance-based collection for regenerator sections**

The detailed definitions for the required parameters are included in ITU-T G.784. While the optional requirements are defined in either ITU-T G.784 or ANSI Standard T1.231.

These requirements are covered by this Recommendation.

Required Register sets are:

- 17 (16+1) 15-minute near-end registers for BBE, ES, and SES;
- 2 (1+1) 24-hour near-end registers unidirectional for BBE, ES, and SES.

Optional Register sets are:

- 17 (16+1) 15-minute near-end registers for ESA, ESB, OFS (SEFS) and UAS;
- 2 (1+1) 24-hour near-end registers unidirectional for ESA, ESB, OFS (SEFS) and UAS.

### **Maintenance-based collection for paths and multiplex sections**

The detailed definitions for the required parameters are included in ITU-T G.784, while the optional requirements are defined in either ITU-T G.784 or ANSI Standard T1.231.

These requirements are covered by this Recommendation.

Required Register sets are:

- 17 (16+1) 15-minute near-end registers for BBE, ES, and SES;
- 17 (16+1) 15-minute far-end registers for BBE, ES, and SES;
- 2 (1+1) 24-hour near-end registers unidirectional for BBE, ES, and SES;
- 2 (1+1) 24-hour far-end registers unidirectional for BBE, ES, and SES.

Optional Register sets are:

- 17 (16+1) 15-minute near-end registers for ESA, ESB, FC and UAS;
- 17 (16+1) 15-minute far-end registers for ESA, ESB, FC and UAS;
- 2 (1+1) 24-hour near-end registers unidirectional for ESA, ESB, FC and UAS;
- 2 (1+1) 24-hour far-end registers unidirectional for ESA, ESB, FC and UAS.

### **Error performance-based collection for paths only**

These requirements are covered by ITU-T G.774.1.

Register sets needed:

- 2 (1+1) 24-hour near-end registers for BBE, ES and SES but bidirectional (ITU-T G.826) behaviour;
- 2 (1+1) 24-hour far-end registers for BBE, ES and SES but bidirectional (ITU-T G.826) behaviour;
- 2 (1+1) 24-hour bidirectional registers for UAS.

### 5.3 Model overview

ITU-T G.774.1 does not cover unidirectional unavailability of paths and multiplex sections, because the performance counters of the several **currentData** and **historyData** Managed Object Classes behave in the G.826 (the bidirectional) way. Therefore, it is necessary to have Managed Object Classes for the unidirectional performance monitoring feature to extend the G.774.1 information model.

The unidirectional requirements are reflected in the Managed Object Classes defined in this Recommendation.

In order to avoid redundant information duplication and unuseful implementation effort the CSES events are managed only in the **sdhCurrentData** subclass instances that have a 15-minute granularity period.

#### List of the managed object classes to fulfil the requirements for unidirectional performance monitoring

**sdhCurrentDataUnidirectional**

**msCurrentDataNearEnd, msCurrentDataNearEndTR**

**pathTerminationCurrentDataNearEnd, pathTerminationCurrentDataNearEndTR**

**msCurrentDataFarEnd, msCurrentDataFarEndTR**

**pathTerminationCurrentDataFarEnd, pathTerminationCurrentDataFarEndTR**

**msHistoryDataNearEnd**

**pathTerminationHistoryDataNearEnd**

**msHistoryDataFarEnd**

**pathTerminationHistoryDataFarEnd**

### 5.4 Other modelling considerations

Since there is no far-end signalling in the regenerator section, the **rsCurrentData**, **rsCurrentDataTR** and **rsHistoryData** Managed Object Classes of ITU-T G.774.1 with the **uASCurrentDataPackage** and the **uASHistoryDataPackage** shall be used for near-end monitoring.

No additional Managed Object Classes are needed to fulfil the requirement of monitoring 2 (1+1) 24-hour-registers for bidirectional performance data of paths. The ITU-T G.774.1 **pathTerminationCurrentData** with the **uASCurrentDataPackage** plus the **farEndCurrentDataPackage** and the **pathTerminationHistoryData** Managed Object Classes with the **uASHistoryDataPackage** plus the **farEndHistoryDataPackage** can be used.

New **nameBindings** and new attributes (far-end unavailable seconds (**fEUAS**), near-end unavailable seconds (**nEUAS**)) are added wherever necessary.

All the UAS counters are optional and therefore put in conditional packages.

## 6 Managed object classes definitions

NOTE – The following managed object classes have been moved to this Recommendation from the previous version of ITU-T G.774.1 for supporting unidirectional performance monitoring.

## 6.1 SDH current data unidirectional

```
sdhCurrentDataUnidirectional MANAGED OBJECT CLASS
DERIVED FROM "Recommendation Q.822": currentData;
CHARACTERIZED BY
    "Recommendation Q.822": zeroSuppressionPkg,
    "Recommendation Q.822": thresholdPkg,
sdhCurrentDataUnidirectionalPackage PACKAGE
BEHAVIOUR sdhCurrentDataUnidirectionalBehaviour;
ATTRIBUTES
    "Recommendation M.3100": currentProblemList GET;;;
CONDITIONAL PACKAGES
    "Recommendation G.774.01": historyPackage PRESENT IF
    "an instance does not support flexible assignment of the history length",
    "Recommendation G.774.01": unavailableTimeAlarmPackage PRESENT IF
    "starting and ending of unavailable period has to be reported and the
    granularity period is 24 hours";
REGISTERED AS {g774-6MObjectClass 1};
```

```
sdhCurrentDataUnidirectionalBehaviour BEHAVIOUR
DEFINED AS
```

"The **sdhCurrentDataUnidirectional** class is used to define generic characteristic for unidirectional SDH performance monitoring from which subclasses are defined in order to hold performance event counts for a specific monitoring point. Subclasses of this class are used in order to support performance monitoring of SDH trails at various layers as described in Recommendation G.805. The performance monitoring events ES, SES and BBE which are monitored by some of the subclasses of this subclass are defined in 4.1.1/G.826. The **granularityPeriod** attribute can only be assigned a value at creation time.

This class can only contain one reference to an instance of the **thresholdData** object class in the **thresholdDataInstance** attribute.

If a threshold is reached or crossed then the **currentProblemList** attribute shall indicate it with the probable cause Threshold crossed. Subclass of this class is used to monitor the near-end or far-end performance data of the trail.

The unavailability conditions are kept separate for near-end and far-end monitoring. This means that only near-end conditions apply only to near-end unavailability and vice versa only far-end conditions apply only to far-end unavailability.

For threshold reset subclasses of this object class the following rules apply:

- No more than one QOS alarm shall be generated until there has been a 15-minute rectangular fixed window with less error count than the low error count threshold and no unavailable period exists.
- To provision the high and low threshold value, the **counterThresholdAttributList** attribute of the **Q.822-ThresholdDataInstance** is used.

In this attribute all the thresholds (high and low) for each necessary counter are stored in a list. This means for example, that the high threshold for ES and the low threshold for ES are individually stored in the same list. It is up to the network element to recognize which is the high and which is the low one.

If the **unavailableTimeAlarmPackage** is present and if an unavailable period starts, then a communication alarm shall be sent with a probable cause of Unavailable and the presence of this unavailable condition is indicated by the **currentProblemList** attribute. If an unavailable period is ending, then a communication alarm shall be sent with a probable cause of Unavailable and a

severity of Cleared. An available condition is indicated by the absence of the unavailable condition in the current problem list. The unavailable condition has no effect on the **operationalState**. Each subclass of this class shall define the performance attributes required to hold the mandatory or optional performance events. These performance event counts are inhibited during unavailable time of its own direction (at the near end or at the far end). Attributes which are defined in a subclass of this class shall be included in history information using the **historyData**, or one of its subclasses, unless it is explicitly specified in the subclass of this class that a particular attribute be not included. Each subclass of this class shall indicate which subclass of the history data is used for history retention. The following conditional packages are not used in this class: **filterSuppressionPkg**, **observedManagedObjectPkg**.

Concerning the subclasses of this class the following rule applies:

If a subclass of this class has a granularity period of 15 minutes, it should be either an instance with the threshold reset functionality or an instance without this functionality instantiated (per termination point), but not both.";

## 6.2 Regenerator section current data

```
rsCurrentData  MANAGED OBJECT CLASS
DERIVED FROM "Recommendation G.774.01":sdhCurrentData;
CHARACTERIZED BY
rsCurrentDataPackage  PACKAGE
    BEHAVIOUR rsCurrentDataBehaviour;
ATTRIBUTES
    "Recommendation X.739": granularityPeriod REQUIRED VALUES
    SDHPMASN1.SDHGranularityPeriod,
    "Recommendation G.774.01":bbe REPLACE-WITH-DEFAULT GET,
    "Recommendation G.774.01":eS REPLACE-WITH-DEFAULT GET,
    "Recommendation G.774.01":ses REPLACE-WITH-DEFAULT GET;;;
CONDITIONAL PACKAGES
oFSCurrentDataPackage PRESENT IF
    "an instance supports it",
"Recommendation G.774.01":cSESCurrentDataPackage PRESENT IF
    "an instance supports it",
"Recommendation G.774.01":uASCURRENTDataPackage PRESENT IF
    "an instance supports it";
REGISTERED AS {g774-01MobjectClass 2};
```

```
rsCurrentDataBehaviour BEHAVIOUR
DEFINED AS
```

\*Instances of the **rsCurrentData** managed object Class are used to hold the current register counts for a regenerator section during a collection period. This managed object class uses the **rsHistoryData** managed object class for history retention.

A QOS alarm shall be sent as soon as a threshold is reached or crossed. At the end of the granularity period the QOS alarm is implicitly cleared, providing there are no other outstanding threshold crossing QOS alarms, "Threshold crossing" removed from the **currentProblemList** (i.e. No Notification is Sent) and a new QOS alarm shall be sent if the threshold is reached or crossed again during the next granularity period. Only one threshold value per performance counter will be supported. \*;

## 6.3 Regenerator section current data threshold reset

```
rsCurrentDataTR  MANAGED OBJECT CLASS
DERIVED FROM "Recommendation G.774.01":sdhCurrentData;
CHARACTERIZED BY
"Recommendation G.774.01":thresholdResetPackage,
rsCurrentDataTRPackage  PACKAGE
    BEHAVIOUR rsCurrentDataTRBehaviour;
```



#### ATTRIBUTES

"Recommendation X.739": granularityPeriod PERMITTED VALUES  
SDHPMASN1.SDHPVGranularityPeriod,  
"Recommendation G.774.01": bBE REPLACE-WITH-DEFAULT GET,  
"Recommendation G.774.01": eS REPLACE-WITH-DEFAULT GET,  
"Recommendation G.774.01": sES REPLACE-WITH-DEFAULT GET;;;

#### CONDITIONAL PACKAGES

oFSCurrentDataPackage PRESENT IF  
"an instance supports it",  
"Recommendation G.774.01": cSESCurrentDataPackage PRESENT IF  
"an instance supports it",  
"Recommendation G.774.01": uASCcurrentDataPackage PRESENT IF  
"an instance supports it";  
REGISTERED AS {g774-01MObjectClass 3};

#### rsCurrentDataTRBehaviour BEHAVIOUR

##### DEFINED AS

"Instances of the **rsCurrentDataTR** managed object Class are used to hold the current register counts for a regenerator section during a collection period. This managed object class uses the **rsHistoryData** managed object class for history retention";

## 6.4 Multiplex section current data near-end

#### msCurrentDataNearEnd MANAGED OBJECT CLASS

DERIVED FROM **sdhCurrentDataUnidirectional**;  
CHARACTERIZED BY

#### msCurrentDataNearEndPackage PACKAGE

BEHAVIOUR **msCurrentDataNearEndBehaviour**;  
ATTRIBUTES

"Recommendation X.739": granularityPeriod REQUIRED VALUES  
SDHPMUNIASN1.SDHGranularityPeriod,  
"Recommendation G.774.01": bBE REPLACE-WITH-DEFAULT GET,  
"Recommendation G.774.01": eS REPLACE-WITH-DEFAULT GET,  
"Recommendation G.774.01": sES REPLACE-WITH-DEFAULT GET;;;

#### CONDITIONAL PACKAGES

nearEndUASCcurrentDataPackage PRESENT IF  
"an instance supports it",  
"Recommendation G.774.01": cSESCurrentDataPackage PRESENT IF  
"the granularity period is 15 minutes and an instance supports it",  
failureCountsNearEndPackage PRESENT IF  
"an instance supports it",  
eSANearEndPackage PRESENT IF  
"an instance supports it",  
eSBNearEndPackage PRESENT IF  
"an instance supports it";  
REGISTERED AS {g774-6MObjectClass 2} ;

#### msCurrentDataNearEndBehaviour BEHAVIOUR

##### DEFINED AS

"Instances of the **msCurrentDataNearEnd** managed object Class are used to hold the current near-end register counts for a multiplex section trail termination point during a collection period.

This managed object class uses the **msHistoryDataNearEnd** managed object class for history retention.

A QOS alarm shall be sent as soon as a threshold is reached or crossed. At the end of the granularity period, the QOS alarm is implicitly cleared and, providing there are no other outstanding threshold crossing QOS alarms, threshold crossing is removed from the **currentProblemList** (i.e. No Notification is Sent) and a new QOS alarm shall be sent if the threshold is reached or crossed again during the next granularity period. Only one threshold value per performance counter will be supported.";

## 6.5 Multiplex section current data near-end threshold reset

```
msCurrentDataNearEndTR  MANAGED OBJECT CLASS
DERIVED FROM sdhCurrentDataUnidirectional;
CHARACTERIZED BY
"Recommendation G.774.01": thresholdResetPackage,
msCurrentDataNearEndTRPackage PACKAGE
  BEHAVIOUR
  msCurrentDataNearEndTRBehaviour;
  ATTRIBUTES
  "Recommendation X.739": granularityPeriod PERMITTED VALUES
    SDHPMUNIASN1.SDHPVGranularityPeriod,
  "Recommendation G.774.01": bBE REPLACE-WITH-DEFAULT GET,
  "Recommendation G.774.01": eS REPLACE-WITH-DEFAULT GET,
  "Recommendation G.774.01": sES REPLACE-WITH-DEFAULT GET;;;
CONDITIONAL PACKAGES
  nearEndUASCurrentDataPackage PRESENT IF
  "an instance supports it",
  "Recommendation G.774.01": cSESCurrentDataPackage PRESENT IF
  "the granularity period is 15 minutes and an instance supports it" ;
REGISTERED AS {g774-6MObjectClass 3} ;
```

```
msCurrentDataNearEndTRBehaviour BEHAVIOUR
DEFINED AS
```

"Instances of the `msCurrentDataNearEndTR` managed object Class are used to hold the current near-end register counts for a multiplex section trail termination point during a collection period.

Only the 15 minutes granularity period must be supported.

This managed object class uses the `msHistoryDataNearEnd` managed object class for history retention. " ;

## 6.6 Path termination current data near-end

```
pathTerminationCurrentDataNearEnd  MANAGED OBJECT CLASS
DERIVED FROM  sdhCurrentDataUnidirectional;
CHARACTERIZED BY
pathTerminationCurrentDataNearEndPackage PACKAGE
  BEHAVIOUR pathTerminationCurrentDataNearEndBehaviour;
  ATTRIBUTES
  "Recommendation X.739": granularityPeriod REQUIRED VALUES
    SDHPMUNIASN1.SDHGranularityPeriod,
  "Recommendation G.774.01": bBE REPLACE-WITH-DEFAULT GET,
  "Recommendation G.774.01": eS REPLACE-WITH-DEFAULT GET,
  "Recommendation G.774.01": sES REPLACE-WITH-DEFAULT GET;;;
CONDITIONAL PACKAGES
  nearEndUASCurrentDataPackage PRESENT IF
  "an instance supports it",
  "Recommendation G.774.01": cSESCurrentDataPackage PRESENT IF
  "the granularity period is 15 minutes and an instance supports it",
  failureCountsNearEndPackage PRESENT IF
  "an instance supports it",
  eSANearEndPackage PRESENT IF
  "an instance supports it",
  eSBNearEndPackage PRESENT IF
  "an instance supports it";
REGISTERED AS {g774-6MObjectClass 4} ;
```

```
pathTerminationCurrentDataNearEndBehaviour BEHAVIOUR
DEFINED AS
```

"Instances of the `pathTerminationCurrentDataNearEnd` managed object Class are used

to hold the current near end register counts for a Higher Order Path or Lower Order Path during a collection period.

This managed object class uses the **pathTerminationHistoryDataNearEnd** managed object class for history retention.

A QOS alarm shall be sent as soon as a threshold is reached or crossed. At the end of the granularity period, the QOS alarm is implicitly cleared and, providing there are no other outstanding threshold crossing QOS alarms, threshold crossing is removed from the **currentProblemList** (i.e. No Notification is Sent) and a new QOS alarm shall be sent if the threshold is reached or crossed again during the next granularity period. Only one threshold value per performance counter will be supported.";

## 6.7 Path termination current data near-end threshold reset

```
pathTerminationCurrentDataNearEndTR  MANAGED OBJECT CLASS
DERIVED FROM      sdhCurrentDataUnidirectional;
CHARACTERIZED BY
"Recommendation G.774.01": thresholdResetPackage,
pathTerminationCurrentDataNearEndTRPackage PACKAGE
  BEHAVIOUR pathTerminationCurrentDataNearEndTRBehaviour;
  ATTRIBUTES
    "Recommendation X.739": granularityPeriod PERMITTED VALUES
      SDHPMUNIASN1.SDHPVGranularityPeriod,
    "Recommendation G.774.01": bBE  REPLACE-WITH-DEFAULT GET,
    "Recommendation G.774.01": eS  REPLACE-WITH-DEFAULT GET,
    "Recommendation G.774.01": sES  REPLACE-WITH-DEFAULT GET;;;
CONDITIONAL PACKAGES
  nearEndUASCurrentDataPackage PRESENT IF
    "an instance supports it",
  "Recommendation G.774.01": cSESCurrentDataPackage PRESENT IF
    "the granularity period is 15 minutes and an instance supports it";
REGISTERED AS {g774-6MObjectClass 5} ;
```

```
pathTerminationCurrentDataNearEndTRBehaviour BEHAVIOUR
DEFINED AS
"Instances of the pathTerminationCurrentDataNearEndTR managed object Class are
used to hold the current near-end register counts for a Higher Order Path or
Lower Order Path during a collection period.
```

Only the 15 minutes granularity period must be supported.

This managed object class uses the **pathTerminationHistoryDataNearEnd** managed object class for history retention.";

## 6.8 Multiplex section adaptation current data

```
msAdaptationCurrentData  MANAGED OBJECT CLASS
DERIVED FROM "Recommendation G.774.01":sdhCurrentData;
CHARACTERIZED BY
msAdaptationCurrentDataPackage PACKAGE
  BEHAVIOUR msAdaptationCurrentDataBehaviour;
  ATTRIBUTES
    pJCHigh  GET,
    pJCLow   GET;;;
REGISTERED AS {g774-01MObjectClass 11};
```

**msAdaptationCurrentDataBehaviour** BEHAVIOUR

DEFINED AS

"Instances of this class are used to hold the pointer justification event (PJE) counts. Positive and negative PJE's are counted separately one selectable outgoing AU within an STM-N signal after the AU has been resynchronized to the local clock.";

## 6.9 Multiplex section current data far-end

**msCurrentDataFarEnd** MANAGED OBJECT CLASS

DERIVED FROM **sdhCurrentDataUnidirectional**;

CHARACTERIZED BY

**msCurrentDataFarEndPackage** PACKAGE

BEHAVIOUR **msCurrentDataFarEndBehaviour**;

ATTRIBUTES

"Recommendation X.739": granularityPeriod REQUIRED VALUES

SDHPMUNIASN1.SDHGranularityPeriod,

"Recommendation G.774.01": FEBBE REPLACE-WITH-DEFAULT GET,

"Recommendation G.774.01": FEES REPLACE-WITH-DEFAULT GET,

"Recommendation G.774.01": FESES REPLACE-WITH-DEFAULT GET;;;

CONDITIONAL PACKAGES

**farEndUASCurrentDataPackage** PRESENT IF

"an instance supports it",

"Recommendation G.774.01": **farEndCSESCurrentDataPackage** PRESENT IF

"the granularity period is 15 minutes and an instance supports it",

**failureCountsFarEndPackage** PRESENT IF

"an instance supports it",

**eSAFarEndPackage** PRESENT IF

"an instance supports it",

**eSBFarEndPackage** PRESENT IF

"an instance supports it";

REGISTERED AS {g774-6MObjectClass 6} ;

**msCurrentDataFarEndBehaviour** BEHAVIOUR

DEFINED AS

"Instances of the **msCurrentDataFarEnd** managed object Class are used to hold the current far-end register counts for a multiplex section trail termination point during a collection period.

This managed object class uses the **msHistoryDataFarEnd** managed object class for history retention.

A QOS alarm shall be sent as soon as a threshold is reached or crossed. At the end of the granularity period, the QOS alarm is implicitly cleared and, providing there are no other outstanding threshold crossing QOS alarms, threshold crossing is removed from the **currentProblemList** (i.e. No Notification is Sent) and a new QOS alarm shall be sent if the threshold is reached or crossed again during the next granularity period. Only one threshold value per performance counter will be supported.";

## 6.10 Multiplex section current data far-end threshold reset

**msCurrentDataFarEndTR** MANAGED OBJECT CLASS

DERIVED FROM **sdhCurrentDataUnidirectional**;

CHARACTERIZED BY

"Recommendation G.774.01": thresholdResetPackage,

**msCurrentDataFarEndTRPackage** PACKAGE

BEHAVIOUR

**msCurrentDataFarEndTRBehaviour**;

ATTRIBUTES

"Recommendation X.739": granularityPeriod PERMITTED VALUES

SDHPMUNIASN1.SDHPVGranularityPeriod,

"Recommendation G.774.01": FEBBE REPLACE-WITH-DEFAULT GET,

```

"Recommendation G.774.01": FEES REPLACE-WITH-DEFAULT GET,
"Recommendation G.774.01": FESES REPLACE-WITH-DEFAULT GET;;;
CONDITIONAL PACKAGES
farEndUASCurrentDataPackage PRESENT IF
"an instance supports it",
"Recommendation G.774.01": farEndCSESCurrentDataPackage PRESENT IF
"the granularity period is 15 minutes and an instance supports it";
REGISTERED AS {g774-6MObjectClass 7} ;

```

```

msCurrentDataFarEndTRBehaviour BEHAVIOUR
DEFINED AS

```

"Instances of the **msCurrentDataFarEnd** managed object Class are used to hold the current far-end register counts for a multiplex section trail termination point during a collection period.

Only the 15 minutes granularity period must be supported.

This managed object class uses the **msHistoryDataFarEnd** managed object class for history retention." ;

## 6.11 Path termination current data far-end

```

pathTerminationCurrentDataFarEnd MANAGED OBJECT CLASS
DERIVED FROM sdhCurrentDataUnidirectional;
CHARACTERIZED BY
pathTerminationCurrentDataFarEndPackage PACKAGE
BEHAVIOUR pathTerminationCurrentDataFarEndBehaviour;
ATTRIBUTES
"Recommendation X.739": granularityPeriod REQUIRED VALUES
SDHPMUNIASN1.SDHGranularityPeriod,
"Recommendation G.774.01": FEBBE REPLACE-WITH-DEFAULT GET,
"Recommendation G.774.01": FEES REPLACE-WITH-DEFAULT GET,
"Recommendation G.774.01": FESES REPLACE-WITH-DEFAULT GET;;;
CONDITIONAL PACKAGES
farEndUASCurrentDataPackage PRESENT IF
"an instance supports it",
"Recommendation G.774.01": farEndCSESCurrentDataPackage PRESENT IF
"the granularity period is 15 minutes and an instance supports it",
failureCountsFarEndPackage PRESENT IF
"an instance supports it",
eSAFarEndPackage PRESENT IF
"an instance supports it",
eSBFarEndPackage PRESENT IF
"an instance supports it";
REGISTERED AS {g774-6MObjectClass 8} ;

```

```

pathTerminationCurrentDataFarEndBehaviour BEHAVIOUR
DEFINED AS

```

"Instances of the **pathTerminationCurrentDataFarEnd** managed object Class are used to hold the current far end register counts for a Higher Order Path or Lower Order Path during a collection period.

This managed object class uses the **pathTerminationHistoryDataFarEnd** managed object class for history retention.

A QOS alarm shall be sent as soon as a threshold is reached or crossed. At the end of the granularity period, the QOS alarm is implicitly cleared and, providing there are no other outstanding threshold crossing QOS alarms, threshold crossing is removed from the **currentProblemList** (i.e. No Notification is Sent) and a new QOS alarm shall be sent if the threshold is reached or crossed again during the next granularity period. Only one threshold value per performance counter will be supported." ;

## 6.12 Path termination current data far-end threshold reset

```
pathTerminationCurrentDataFarEndTR  MANAGED OBJECT CLASS
DERIVED FROM  sdhCurrentDataUnidirectional;
CHARACTERIZED BY
"Recommendation G.774.01": thresholdResetPackage,
pathTerminationCurrentDataFarEndTRPackage PACKAGE
  BEHAVIOUR pathTerminationCurrentDataFarEndTRBehaviour;
ATTRIBUTES
"Recommendation X.739": granularityPeriod PERMITTED VALUES
  SDHPMUNIASN1.SDHPVGranularityPeriod,
"Recommendation G.774.01": FEBBE REPLACE-WITH-DEFAULT GET,
"Recommendation G.774.01": FEES REPLACE-WITH-DEFAULT GET,
"Recommendation G.774.01": FESES REPLACE-WITH-DEFAULT GET;;;
CONDITIONAL PACKAGES
  farEndUASCurrentDataPackage PRESENT IF
    "an instance supports it",
    "Recommendation G.774.01": farEndCSESCurrentDataPackage PRESENT IF
      "the granularity period is 15 minutes and an instance supports it";
REGISTERED AS {g774-6MObjectClass 9} ;
```

```
pathTerminationCurrentDataFarEndTRBehaviour BEHAVIOUR
DEFINED AS
"Instances of the pathTerminationCurrentDataFarEndTR managed object Class are
used to hold the current far-end register counts for a Higher Order Path or Lower
Order Path during a collection period.
```

Only the 15 minutes granularity period must be supported.

This managed object class uses the **pathTerminationHistoryDataFarEnd** managed object class for history retention."

## 6.13 Regenerator section history data

```
rsHistoryData  MANAGED OBJECT CLASS
DERIVED FROM  "Recommendation Q.822 ": historyData;
CHARACTERIZED BY
rsHistoryDataPackage PACKAGE
  BEHAVIOUR rsHistoryDataBehaviour;
ATTRIBUTES
"Recommendation G.774.01":bBE GET,
"Recommendation G.774.01":eS GET,
"Recommendation G.774.01":sES GET ;;;
CONDITIONAL PACKAGES
oFShistoryDataPackage PRESENT IF
  "the containing rsCurrentData or rsCurrentDataTR instance contains the
  oFSCurrentDataPackage",
  "Recommendation G.774.01":uASHistoryDataPackage PRESENT IF
    "the containing rsCurrentData contains the uASCurrentDataPackage";
REGISTERED AS {g774-01MObjectClass 12};
```

```
rsHistoryDataBehaviour  BEHAVIOUR
DEFINED AS
"Instances of this class are used to store the observed events of an
rsCurrentData or rsCurrentDataTR object at the end of an observation interval. An
instance of this managed object is contained by an rsCurrentData or
rsCurrentDataTR managed object instance."
```

## 6.14 Multiplex section history data near-end

```
msHistoryDataNearEnd    MANAGED OBJECT CLASS
DERIVED FROM "Recommendation Q.822":historyData;
CHARACTERIZED BY
msHistoryDataNearEndPackage PACKAGE
    BEHAVIOUR
        msHistoryDataNearEndBehaviour;
    ATTRIBUTES
        "Recommendation G.774.01": bBE GET,
        "Recommendation G.774.01": eS GET,
        "Recommendation G.774.01": sES GET;;;
CONDITIONAL PACKAGES
    nearEndUASHistoryDataPackage PRESENT IF
        "the containing msCurrentDataNearEnd contains the
        nearEndUASCurrentDataPackage",
    failureCountsNearEndHistoryDataPackage PRESENT IF
        "the containing msCurrentDataNearEnd contains the
        failureCountsNearEndPackage",
    eSANearEndHistoryDataPackage PRESENT IF
        "the containing msCurrentDataNearEnd contains the eSANearEndPackage",
    eSBNearEndHistoryDataPackage PRESENT IF
        "the containing msCurrentDataNearEnd contains the eSBNearEndPackage";
REGISTERED AS {g774-6MObjectClass 10} ;
```

```
msHistoryDataNearEndBehaviour BEHAVIOUR
DEFINED AS
"Instances of this class are used to store the observed events of an
msCurrentDataNearEnd or msCurrentDataNearEndTR object at the end of an
observation interval. An instance of this managed object is contained by an
msCurrentDataNearEnd or msCurrentDataNearEndTR managed object instance";
```

## 6.15 Multiplex section adaptation history data

```
msAdaptationHistoryData    MANAGED OBJECT CLASS
DERIVED FROM "Recommendation Q.822": historyData;
CHARACTERIZED BY
msAdaptationHistoryDataPackage PACKAGE
    BEHAVIOUR msAdaptationHistoryDataBehaviour;
    ATTRIBUTES
        pJCHigh  GET,
        pJCLow   GET;;;
REGISTERED AS {g774-01MObjectClass 18};
msAdaptationHistoryDataBehaviour BEHAVIOUR
DEFINED AS
"Instances of this class are used to store the observed events of an
msAdaptationCurrentData object at the end of an observation interval. An instance
of this managed object is contained by an msAdaptationCurrentData managed object
instance.";
```

## 6.16 Path termination history data near-end

```
pathTerminationHistoryDataNearEnd    MANAGED OBJECT CLASS
DERIVED FROM "Recommendation Q.822":historyData;
CHARACTERIZED BY
pathTerminationHistoryDataNearEndPackage PACKAGE
    BEHAVIOUR pathTerminationHistoryDataNearEndBehaviour;
    ATTRIBUTES
        "Recommendation G.774.01": bBE GET,
        "Recommendation G.774.01": eS GET,
        "Recommendation G.774.01": sES GET;;;
```

#### CONDITIONAL PACKAGES

```
nearEndUASHistoryDataPackage PRESENT IF
"the containing pathTerminationCurrentDataNearEnd contains the
nearEndUASCurrentDataPackage",
failureCountsNearEndHistoryDataPackage PRESENT IF
"the containing pathTerminationCurrentDataNearEnd contains the
failureCountsNearEndPackage",
eSANearEndHistoryDataPackage PRESENT IF
"the containing pathTerminationCurrentDataNearEnd contains the
eSANearEndPackage",
eSBNearEndHistoryDataPackage PRESENT IF
"the containing pathTerminationCurrentDataNearEnd contains the
eSBNearEndPackage";
```

```
REGISTERED AS {g774-6MObjectClass 11} ;
```

```
pathTerminationHistoryDataNearEndBehaviour BEHAVIOUR
```

```
DEFINED AS
```

```
"Instances of this class are used to store the observed events of a
pathTerminationCurrentDataNearEnd or pathTerminationCurrentDataNearEndTR object
at the end of an observation interval. An instance of this managed object is
contained by a pathTerminationCurrentDataNearEnd or
pathTerminationCurrentDataNearEndTR managed object instance";
```

### 6.17 Multiplex section history data far-end

```
msHistoryDataFarEnd MANAGED OBJECT CLASS
```

```
DERIVED FROM "Recommendation Q.822":historyData;
```

```
CHARACTERIZED BY
```

```
msHistoryDataFarEndPackage PACKAGE
```

```
BEHAVIOUR
```

```
msHistoryDataFarEndBehaviour;
```

```
ATTRIBUTES
```

```
"Recommendation G.774.01": FEBBE GET,
```

```
"Recommendation G.774.01": FEES GET,
```

```
"Recommendation G.774.01": FESES GET;;;
```

#### CONDITIONAL PACKAGES

```
farEndUASHistoryDataPackage PRESENT IF
"the containing msCurrentDataFarEnd contains the
farEndUASCurrentDataPackage",
```

```
failureCountsFarEndHistoryDataPackage PRESENT IF
"the containing msCurrentDataFarEnd contains the
failureCountsFarEndPackage",
```

```
eSAFarEndHistoryDataPackage PRESENT IF
"the containing msCurrentDataFarEnd contains the eSAFarEndPackage",
```

```
eSBFarEndHistoryDataPackage PRESENT IF
"the containing msCurrentDataFarEnd contains the eSBFarEndPackage";
```

```
REGISTERED AS {g774-6MObjectClass 12} ;
```

```
msHistoryDataFarEndBehaviour BEHAVIOUR
```

```
DEFINED AS
```

```
"Instances of this class are used to store the observed events of an
msCurrentDataFarEnd or msCurrentDataFarEndTR object at the end of an observation
interval. An instance of this managed object is contained by an
msCurrentDataFarEnd or msCurrentDataFarEndTR managed object instance";
```

### 6.18 Path termination history data far-end

```
pathTerminationHistoryDataFarEnd MANAGED OBJECT CLASS
```

```
DERIVED FROM "Recommendation Q.822":historyData;
```

```
CHARACTERIZED BY
```

```
pathTerminationHistoryDataFarEndPackage PACKAGE
```

```
BEHAVIOUR pathTerminationHistoryDataFarEndBehaviour;
```

```
ATTRIBUTES
```



```

"Recommendation G.774.01": FEBBE GET,
"Recommendation G.774.01": FEES GET,
"Recommendation G.774.01": FESES GET;;;
CONDITIONAL PACKAGES
farEndUASHistoryDataPackage PRESENT IF
"the containing pathTerminationCurrentDataFarEnd contains the
farEndUASCurrentDataPackage",
failureCountsFarEndHistoryDataPackage PRESENT IF
"the containing pathTerminationCurrentDataFarEnd contains the
failureCountsFarEndPackage",
eSAFarEndHistoryDataPackage PRESENT IF
"the containing pathTerminationCurrentDataFarEnd contains the
eSAFarEndPackage",
eSBFarEndHistoryDataPackage PRESENT IF
"the containing pathTerminationCurrentDataFarEnd contains the
eSBFarEndPackage";
REGISTERED AS {g774-6MObjectClass 13} ;

```

```

pathTerminationHistoryDataFarEndBehaviour BEHAVIOUR
DEFINED AS
"Instances of this class are used to store the observed events of a
pathTerminationCurrentDataFarEnd or pathTerminationCurrentDataFarEndTR object at
the end of an observation interval. An instance of this managed object is
contained by a pathTerminationCurrentDataFarEnd or
pathTerminationCurrentDataFarEndTR managed object instance";

```

## 7 Package definitions

### 7.1 Near-end unavailable second current data package

```

nearEndUASCurrentDataPackage PACKAGE
BEHAVIOUR
    nearEndUASCurrentDataPackageBehaviour;
ATTRIBUTES
    nEUAS REPLACE-WITH-DEFAULT GET;
REGISTERED AS {g774-6Package 1};

```

```

nearEndUASCurrentDataPackageBehaviour BEHAVIOUR
DEFINED AS
"This package is used to store the counter of one-second intervals pertaining to
an Unavailable Time at the near end.";

```

### 7.2 Far-end unavailable second current data package

```

farEndUASCurrentDataPackage PACKAGE
BEHAVIOUR
    farEndUASCurrentDataPackageBehaviour;
ATTRIBUTES
    fEUAS REPLACE-WITH-DEFAULT GET;
REGISTERED AS {g774-6Package 2};

```

```

farEndUASCurrentDataPackageBehaviour BEHAVIOUR
DEFINED AS
"This package is used to store the counter of one-second intervals pertaining to
an Unavailable Time at the far end.";

```

### 7.3 Near-end unavailable second history data package

```
nearEndUASHistoryDataPackage PACKAGE
    BEHAVIOUR
        nearEndUASHistoryDataPackageBehaviour;
    ATTRIBUTES
        nEUAS GET;
REGISTERED AS {g774-6Package 3};
```

```
nearEndUASHistoryDataPackageBehaviour BEHAVIOUR
DEFINED AS
```

"This package is used to store the corresponding current data counter of one second intervals pertaining to an Unavailable Time at the near end at the end of the granularity period.";

### 7.4 Far-end unavailable second history data package

```
farEndUASHistoryDataPackage PACKAGE
    BEHAVIOUR
        farEndUASHistoryDataPackageBehaviour;
    ATTRIBUTES
        fEUAS GET;
REGISTERED AS {g774-6Package 4};
```

```
farEndUASHistoryDataPackageBehaviour BEHAVIOUR
DEFINED AS
```

"This package is used to store the corresponding current data counter of one-second intervals pertaining to an Unavailable Time at the far end at the end of the granularity period.";

### 7.5 Failure counts near-end package

```
failureCountsNearEndPackage PACKAGE
    BEHAVIOUR
        failureCountsNearEndPackageBehaviour;
    ATTRIBUTES
        fCNearEnd REPLACE-WITH-DEFAULT GET;
REGISTERED AS {g774-6Package 5};
```

```
failureCountsNearEndPackageBehaviour BEHAVIOUR
DEFINED AS
```

"This package is used to store the corresponding failure counts at the near end.";

### 7.6 Errored seconds type A near-end package

```
eSANearEndPackage PACKAGE
    BEHAVIOUR
        eSANearEndPackageBehaviour;
    ATTRIBUTES
        eSANearEnd REPLACE-WITH-DEFAULT GET;
REGISTERED AS {g774-6Package 6};
```

```
eSANearEndPackageBehaviour BEHAVIOUR
DEFINED AS
```

"This package is used to store the errored seconds of type A at the near end.";

## 7.7 Errored seconds type B near-end package

```
eSBNearEndPackage PACKAGE
  BEHAVIOUR
    eSBNearEndPackageBehaviour;
  ATTRIBUTES
    eSBNearEnd REPLACE-WITH-DEFAULT GET;
REGISTERED AS {g774-6Package 7};
```

```
eSBNearEndPackageBehaviour BEHAVIOUR
DEFINED AS
"This package is used to store the errored seconds of type B at the near end.";
```

## 7.8 Failure counts far-end package

```
failureCountsFarEndPackage PACKAGE
  BEHAVIOUR
    failureCountsFarEndPackageBehaviour;
  ATTRIBUTES
    fCFarEnd REPLACE-WITH-DEFAULT GET;
REGISTERED AS {g774-6Package 8};
```

```
failureCountsFarEndPackageBehaviour BEHAVIOUR
DEFINED AS
"This package is used to store the corresponding failure counts at the far end.";
```

## 7.9 Errored seconds type A far-end package

```
eSAFarEndPackage PACKAGE
  BEHAVIOUR
    eSAFarEndPackageBehaviour;
  ATTRIBUTES
    eSAFarEnd REPLACE-WITH-DEFAULT GET;
REGISTERED AS {g774-6Package 9};
```

```
eSAFarEndPackageBehaviour BEHAVIOUR
DEFINED AS
"This package is used to store the errored seconds of type A at the far end.";
```

## 7.10 Errored seconds type B far-end package

```
eSBFarEndPackage PACKAGE
  BEHAVIOUR
    eSBFarEndPackageBehaviour;
  ATTRIBUTES
    eSBFarEnd REPLACE-WITH-DEFAULT GET;
REGISTERED AS {g774-6Package 10};
```

```
eSBFarEndPackageBehaviour BEHAVIOUR
DEFINED AS
"This package is used to store the errored seconds of type B at the far end.";
```

## 7.11 Failure counts near-end history data package

```
failureCountsNearEndHistoryDataPackage PACKAGE
  BEHAVIOUR
    failureCountsNearEndHistoryDataPackageBehaviour;
  ATTRIBUTES
    fCNearEnd GET;
REGISTERED AS {g774-6Package 11};
```

**failureCountsNearEndHistoryDataPackageBehaviour** BEHAVIOUR  
DEFINED AS

"This package is used to store the corresponding failure counts at the near end at the end of the granularity period.";

## 7.12 Errored seconds type A near-end history data package

**eSANearEndHistoryDataPackage** PACKAGE  
BEHAVIOUR  
    **eSANearEndHistoryDataPackageBehaviour**;  
ATTRIBUTES  
    **eSANearEnd** GET;  
REGISTERED AS {g774-6Package 12};

**eSANearEndHistoryDataPackageBehaviour** BEHAVIOUR  
DEFINED AS  
"This package is used to store the corresponding errored seconds of type A at the near end at the end of the granularity period.";

## 7.13 Errored seconds type B near-end history data package

**eSBNearEndHistoryDataPackage** PACKAGE  
BEHAVIOUR  
    **eSBNearEndHistoryDataPackageBehaviour**;  
ATTRIBUTES  
    **eSBNearEnd** GET;  
REGISTERED AS {g774-6Package 13};

**eSBNearEndHistoryDataPackageBehaviour** BEHAVIOUR  
DEFINED AS  
"This package is used to store the corresponding errored seconds of type B at the near end at the end of the granularity period.";

## 7.14 Failure counts far-end history data package

**failureCountsFarEndHistoryDataPackage** PACKAGE  
BEHAVIOUR  
    **failureCountsFarEndHistoryDataPackageBehaviour**;  
ATTRIBUTES  
    **fCFarEnd** GET;  
REGISTERED AS {g774-6Package 14};

**failureCountsFarEndHistoryDataPackageBehaviour** BEHAVIOUR  
DEFINED AS  
"This package is used to store the corresponding failure counts at the far end at the end of the granularity period.";

## 7.15 Errored seconds type A far-end history data package

**eSAFarEndHistoryDataPackage** PACKAGE  
BEHAVIOUR  
    **eSAFarEndHistoryDataPackageBehaviour**;  
ATTRIBUTES  
    **eSAFarEnd** GET;  
REGISTERED AS {g774-6Package 15};

**eSAFarEndHistoryDataPackageBehaviour** BEHAVIOUR  
DEFINED AS  
"This package is used to store the corresponding errored seconds of type A at the far end at the end of the granularity period.";

## 7.16 Errored seconds type B far-end history data package

```
eSBFarEndHistoryDataPackage PACKAGE
  BEHAVIOUR
    eSBFarEndHistoryDataPackageBehaviour;
  ATTRIBUTES
    eSBFarEnd GET;
REGISTERED AS {g774-6Package 16};
```

```
eSBFarEndHistoryDataPackageBehaviour BEHAVIOUR
DEFINED AS
```

"This package is used to store the corresponding errored seconds of type B at the far end at the end of the granularity period.";

## 7.17 Out of frame second current data package

```
oFSCurrentDataPackage PACKAGE
  BEHAVIOUR
    oFSCurrentDataPackageBehaviour;
  ATTRIBUTES
    oFS REPLACE-WITH-DEFAULT GET;
REGISTERED AS {g774-01Package 10};
```

```
oFSCurrentDataPackageBehaviour BEHAVIOUR
DEFINED AS
```

"This package is used to store the counter of one second intervals containing one or more Out of Frame.";

## 7.18 Out of frame second history data package

```
oFSHistoryDataPackage PACKAGE
  BEHAVIOUR
    oFSHistoryDataPackageBehaviour;
  ATTRIBUTES
    oFS GET;
REGISTERED AS {g774-01Package 11};
```

```
oFSHistoryDataPackageBehaviour BEHAVIOUR
DEFINED AS
```

"This package is used to record the corresponding current data attribute values at the end of the granularity period.";

# 8 Attributes definitions

## 8.1 Near-end unavailable seconds

```
nEUAS ATTRIBUTE
  DERIVED FROM "Recommendation X.721": counter;
  BEHAVIOUR nEUASBeh BEHAVIOUR
    DEFINED AS
```

"The value of the **nEUAS** attribute represents the count of one-second intervals pertaining to an UnavailableTime at the near end.";

```
REGISTERED AS {g774-6Attribute 1};
```

## 8.2 Far-end unavailable seconds

### fEUAS ATTRIBUTE

DERIVED FROM "Recommendation X.721": counter;  
BEHAVIOUR fEUASBeh BEHAVIOUR  
DEFINED AS

"The value of the **fEUAS** attribute represents the count of one-second intervals pertaining to an UnavailableTime at the far end.";;  
REGISTERED AS {g774-6Attribute 2};

## 8.3 Failure counts near-end

### fCNearEnd ATTRIBUTE

DERIVED FROM "Recommendation X.721": counter;  
BEHAVIOUR fCNearEndBeh BEHAVIOUR  
DEFINED AS

"This parameter is a count of the number of occurrences of near-end failure events.";;  
REGISTERED AS {g774-6Attribute 3};

## 8.4 Errored seconds type A near-end

### eSANearEnd ATTRIBUTE

DERIVED FROM "Recommendation X.721": counter;  
BEHAVIOUR eSANearEndBeh BEHAVIOUR  
DEFINED AS

"This parameter is a count of errored seconds of type A at the near end."  
";;  
REGISTERED AS {g774-6Attribute 4};

## 8.5 Errored seconds type B near-end

### eSBNearEnd ATTRIBUTE

DERIVED FROM "Recommendation X.721": counter;  
BEHAVIOUR eSBNearEndBeh BEHAVIOUR  
DEFINED AS

"This parameter is a count of errored seconds of type B at the near end."  
";;  
REGISTERED AS {g774-6Attribute 5};

## 8.6 Failure counts far-end

### fCFarEnd ATTRIBUTE

DERIVED FROM "Recommendation X.721": counter;  
BEHAVIOUR fCFarEndBeh BEHAVIOUR  
DEFINED AS

"This parameter is a count of the number of occurrences of far-end failure events."  
";;  
REGISTERED AS {g774-6Attribute 6};

## 8.7 Errored seconds type A far-end

```
eSAFarEnd ATTRIBUTE
  DERIVED FROM "Recommendation X.721": counter;
  BEHAVIOUR eSAFarEndBeh BEHAVIOUR
  DEFINED AS
    "This parameter is a count of the errored seconds of type A at the far
end.
";
REGISTERED AS {g774-6Attribute 7};
```

## 8.8 Errored seconds type B far-end

```
eSBFarEnd ATTRIBUTE
  DERIVED FROM "Recommendation X.721": counter;
  BEHAVIOUR eSBFarEndBeh BEHAVIOUR
  DEFINED AS
    "This parameter is a count of errored seconds of type B at the far end.
";
REGISTERED AS {g774-6Attribute 8};
```

## 8.9 Out of frame second

```
oFS ATTRIBUTE
  DERIVED FROM "Rec. X.721 | ISO/IEC 10165-2": counter;
  BEHAVIOUR
  oFSBeh BEHAVIOUR
DEFINED AS
"The value of the oFS attribute represents the count of seconds with at least one
Out Of Frame Event during the available time of the monitored resource during the
corresponding granularity period."
;;
REGISTERED AS {g774-01Attribute 14};
```

## 8.10 Pointer justification count high

```
pJCHigh ATTRIBUTE
  DERIVED FROM "Rec. X.721 | ISO/IEC 10165-2": counter;
  BEHAVIOUR
  pJCHighBehaviour BEHAVIOUR
DEFINED AS
"The value of the pJCHigh attribute represents the positive PJE count on one
selectable outgoing AU within an STM-N signal after the AU has been
resynchronized to the local clock."
;;
REGISTERED AS {g774-01Attribute 23};
```

## 8.11 Pointer justification count low

```
pJCLow ATTRIBUTE
  DERIVED FROM "Rec. X.721 | ISO/IEC 10165-2": counter;
  BEHAVIOUR
  pJCLowBehaviour BEHAVIOUR
DEFINED AS
"The value of the pJCLow attribute represents the negative PJE count on one
selectable outgoing AU within an STM-N signal after the AU has been
resynchronized to the local clock."
;;
REGISTERED AS {g774-01Attribute 24};
```

## 9 Actions

None.

## 10 Notifications

None.

## 11 Parameters

None.

## 12 Name binding definitions

### 12.1 MS current data near-end – MS TTP sink

```
msCurrentDataNearEnd-msTTPSink NAME BINDING
SUBORDINATE OBJECT CLASS msCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
  SUPERIOR OBJECT CLASS "Recommendation G.774":msTTPSink AND SUBCLASSES;
  WITH ATTRIBUTE "Recommendation X.739":scannerId;
CREATE
  WITH-REFERENCE-OBJECT ,
  WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
  DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 1};
```

### 12.2 MS current data near-end threshold reset – MS TTP sink

```
msCurrentDataNearEndTR-msTTPSink NAME BINDING
SUBORDINATE OBJECT CLASS msCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
  SUPERIOR OBJECT CLASS "Recommendation G.774":msTTPSink AND SUBCLASSES;
  WITH ATTRIBUTE "Recommendation X.739":scannerId;
CREATE
  WITH-REFERENCE-OBJECT ,
  WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
  DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 2};
```

### 12.3 RS current data – RS TTP sink

```
rsCurrentData-rsTTPSink NAME BINDING
SUBORDINATE OBJECT CLASS rsCurrentData AND SUBCLASSES;
NAMED BY
  SUPERIOR OBJECT CLASS "Recommendation G.774": rsTTPSink AND SUBCLASSES;
  WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
  WITH-REFERENCE-OBJECT,
  WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
  DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-01NameBinding 7};
```



## 12.4 RS current data threshold reset – RS TTP sink

```
rsCurrentDataTR-rsTTPSink NAME BINDING
SUBORDINATE OBJECT CLASS rsCurrentDataTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774": rsTTPSink AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-01NameBinding 8};
```

## 12.5 MS current data far-end – MS TTP sink

```
msCurrentDataFarEnd-msTTPSink NAME BINDING
SUBORDINATE OBJECT CLASS msCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":msTTPSink AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 13};
```

## 12.6 MS current data far-end threshold reset – MS TTP sink

```
msCurrentDataFarEndTR-msTTPSink NAME BINDING
SUBORDINATE OBJECT CLASS msCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":msTTPSink AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 14};
```

## 12.7 Path termination current data near-end – AU4 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEnd-au4SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":au4SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 69};
```

## 12.8 Path termination current data near-end – AU3 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEnd-au3SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":au3SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 70};
```

## 12.9 Path termination current data near-end – TU3 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEnd-tu3SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu3SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 71};
```

## 12.10 Path termination current data near-end – TU2 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEnd-tu2SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu2SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 72};
```

## 12.11 Path termination current data near-end – TU12 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEnd-tu12SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu12SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 73};
```

## 12.12 Path termination current data near-end – TU11 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEnd-tu11SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu11SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 74};
```

## 12.13 Path termination current data far-end – AU4 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEnd-au4SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":au4SupervisedCTPSinkR1
AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 75};
```

## 12.14 Path termination current data far-end – AU3 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEnd-au3SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":au3SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 76};
```

## 12.15 Path termination current data far-end – TU3 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEnd-tu3SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu3SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 77};
```

## 12.16 Path termination current data far-end – TU2 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEnd-tu2SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu2SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 78};
```

## 12.17 Path termination current data far-end – TU12 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEnd-tu12SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu12SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 79};
```

## 12.18 Path termination current data far-end – TU11 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEnd-tu11SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu11SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 80};
```

## 12.19 Path termination current data near-end TR – AU4 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEndTR-au4SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":au4SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 81};
```

## 12.20 Path termination current data near-end TR – AU3 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEndTR-au3SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":au3SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 82};
```

## 12.21 Path termination current data near-end TR – TU3 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEndTR-tu3SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu3SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 83};
```

## 12.22 Path termination current data near-end TR – TU2 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEndTR-tu2SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu2SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 84};
```

## 12.23 Path termination current data near-end TR – TU12 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEndTR-tu12SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu12SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 85};
```

## 12.24 Path termination current data near-end TR – TU11 supervised CTP SinkR1

```
pathTerminationCurrentDataNearEndTR-tu11SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu11SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 86};
```

## 12.25 Path termination current data far-end TR – AU4 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEndTR-au4SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":au4SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 87};
```

## 12.26 Path termination current data far-end TR – AU3 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEndTR-au3SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":au3SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 88};
```

## 12.27 Path termination current data far-end TR – TU3 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEndTR-tu3SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu3SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 89};
```

## 12.28 Path termination current data far-end TR – TU2 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEndTR-tu2SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu2SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 90};
```

## 12.29 Path termination current data far-end TR – TU12 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEndTR-tu12SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu12SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 91};
```

## 12.30 Path Termination current data far-end TR – TU11 supervised CTP SinkR1

```
pathTerminationCurrentDataFarEndTR-tu11SupervisedCTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS pathTerminationCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774.05":tu11SupervisedCTPSinkR1 AND
SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 92};
```

## 12.31 Path termination current data near-end – VC4 TTP SinkR1

```
pathTerminationCurrentDataNearEnd-vc4TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 49};
```

### 12.32 Path termination current data near-end – VC3 TTP SinkR1

```
pathTerminationCurrentDataNearEnd-vc3TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 50};
```

### 12.33 Path termination current data near-end – VC2 TTP SinkR1

```
pathTerminationCurrentDataNearEnd-vc2TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 51};
```

### 12.34 Path termination current data near-end – VC12 TTP SinkR1

```
pathTerminationCurrentDataNearEnd-vc12TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc12TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 52};
```

### 12.35 Path termination current data near-end – VC11 TTP SinkR1

```
pathTerminationCurrentDataNearEnd-vc11TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataNearEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 53};
```



### 12.36 Path termination current data near-end threshold reset – VC4 TTP SinkR1

```
pathTerminationCurrentDataNearEndTR-vc4TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 54};
```

### 12.37 Path termination current data near-end threshold reset – VC3 TTP SinkR1

```
pathTerminationCurrentDataNearEndTR-vc3TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 55};
```

### 12.38 Path termination current data near-end threshold reset – VC2 TTP SinkR1

```
pathTerminationCurrentDataNearEndTR-vc2TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 56};
```

### 12.39 Path termination current data near-end threshold reset – VC12 TTP SinkR1

```
pathTerminationCurrentDataNearEndTR-vc12TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc12TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 57};
```

## 12.40 Path termination current data near-end threshold reset – VC11 TTP SinkR1

```
pathTerminationCurrentDataNearEndTR-vc11TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataNearEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 58};
```

## 12.41 Path termination current data far-end – VC4 TTP SinkR1

```
pathTerminationCurrentDataFarEnd-vc4TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 59};
```

## 12.42 Path termination current data far-end – VC3 TTP SinkR1

```
pathTerminationCurrentDataFarEnd-vc3TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 60};
```

## 12.43 Path termination current data far-end – VC2 TTP SinkR1

```
pathTerminationCurrentDataFarEnd-vc2TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 61};
```

#### 12.44 Path termination current data far-end – VC12 TTP SinkR1

```
pathTerminationCurrentDataFarEnd-vc12TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc12TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 62};
```

#### 12.45 Path termination current data far-end – VC11 TTP SinkR1

```
pathTerminationCurrentDataFarEnd-vc11TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataFarEnd AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 63};
```

#### 12.46 Path termination current data far-end threshold reset – VC4 TTP SinkR1

```
pathTerminationCurrentDataFarEndTR-vc4TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 64};
```

#### 12.47 Path termination current data far-end threshold reset – VC3 TTP SinkR1

```
pathTerminationCurrentDataFarEndTR-vc3TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 65};
```

## 12.48 Path termination current data far-end threshold reset – VC2 TTP SinkR1

```
pathTerminationCurrentDataFarEndTR-vc2TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 66};
```

## 12.49 Path termination current data far-end threshold reset – VC12 TTP SinkR1

```
pathTerminationCurrentDataFarEndTR-vc12TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc12TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 67};
```

## 12.50 Path termination current data far-end threshold reset – VC11 TTP SinkR1

```
pathTerminationCurrentDataFarEndTR-vc11TTPSinkR1 NAME BINDING
SUBORDINATE OBJECT CLASS
pathTerminationCurrentDataFarEndTR AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT ,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 68};
```

## 12.51 MS adaptation current data – AU4 CTP source

```
msAdaptationCurrentData-au4CTPSource NAME BINDING
SUBORDINATE OBJECT CLASS msAdaptationCurrentData AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774": au4CTPSource AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 93};
```

## 12.52 MS adaptation current data – AU3 CTP source

```
msAdaptationCurrentData-au3CTPSource NAME BINDING
SUBORDINATE OBJECT CLASS msAdaptationCurrentData AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS "Recommendation G.774": au3CTPSource AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation X.739": scannerId;
CREATE
WITH-REFERENCE-OBJECT,
WITH-AUTOMATIC-INSTANCE-NAMING;
DELETE
DELETES-CONTAINED-OBJECTS;
REGISTERED AS {g774-6NameBinding 94};
```

## 13 Subordination rules

None.

## 14 Pointer constraints

None.

## 15 Supporting ASN.1 productions

```
SDHPMUNIASN1 {itu-t(0) recommendation(0) g(7) g774(774) hyphen(127) pmUni(06)
informationModel(0) asn1Module(2) sdhpmUni (0)}
```

```
DEFINITIONS IMPLICIT TAGS ::=
```

```
BEGIN
```

```
-- EXPORTS everything
```

```
IMPORTS
```

```
SDHGranularityPeriod, SDHPVGranularityPeriod FROM SDHPMASN1 {itu-t(0)
recommendation(0) g(7) g774(774) hyphen(127) pm(01) informationModel(0)
asn1Module(2) sdhpm (0)}
```

```
TimePeriod FROM MetricModule {joint-iso-itu-t ms(9) function(2) part11(11)
asn1Module(2) 0};
```

```
sdhPMUni OBJECT IDENTIFIER ::= {itu-t(0) recommendation(0) g(7) g774(774)
hyphen(127) pmUni(06) informationModel(0)}
```

```
g774-6ManagedObjectClass OBJECT IDENTIFIER ::= {sdhPMUni managedObjectClass(3)}
```

```
g774-6Attribute OBJECT IDENTIFIER ::= {sdhPMUni attribute(7)}
```

```
g774-6NameBinding OBJECT IDENTIFIER ::= {sdhPMUni nameBinding(6)}
```

```
g774-6Package OBJECT IDENTIFIER ::= {sdhPMUni package(4)}
```

```

sdhPM OBJECT IDENTIFIER ::= {itu-t(0) recommendation(0) g(7) g774(774)
hyphen(127) pm(01) informationModel(0) }
g774-01ManagedObject OBJECT IDENTIFIER ::= {sdhPM managedObjectClass(3)}
g774-01Attribute OBJECT IDENTIFIER ::= {sdhPM attribute(7)}
g774-01NameBinding OBJECT IDENTIFIER ::= {sdhPM nameBinding(6)}
g774-01Package OBJECT IDENTIFIER ::= {sdhPM package(4)}

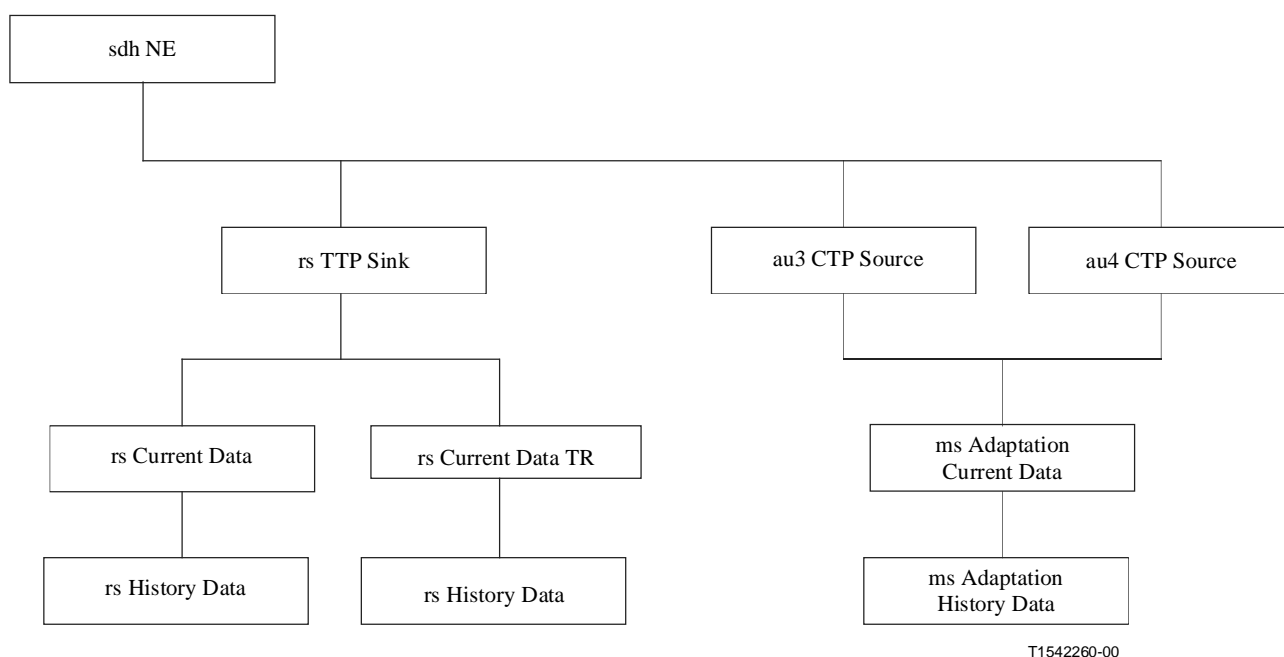
```

END -- end of SDHPMUNIASN1

## APPENDIX I

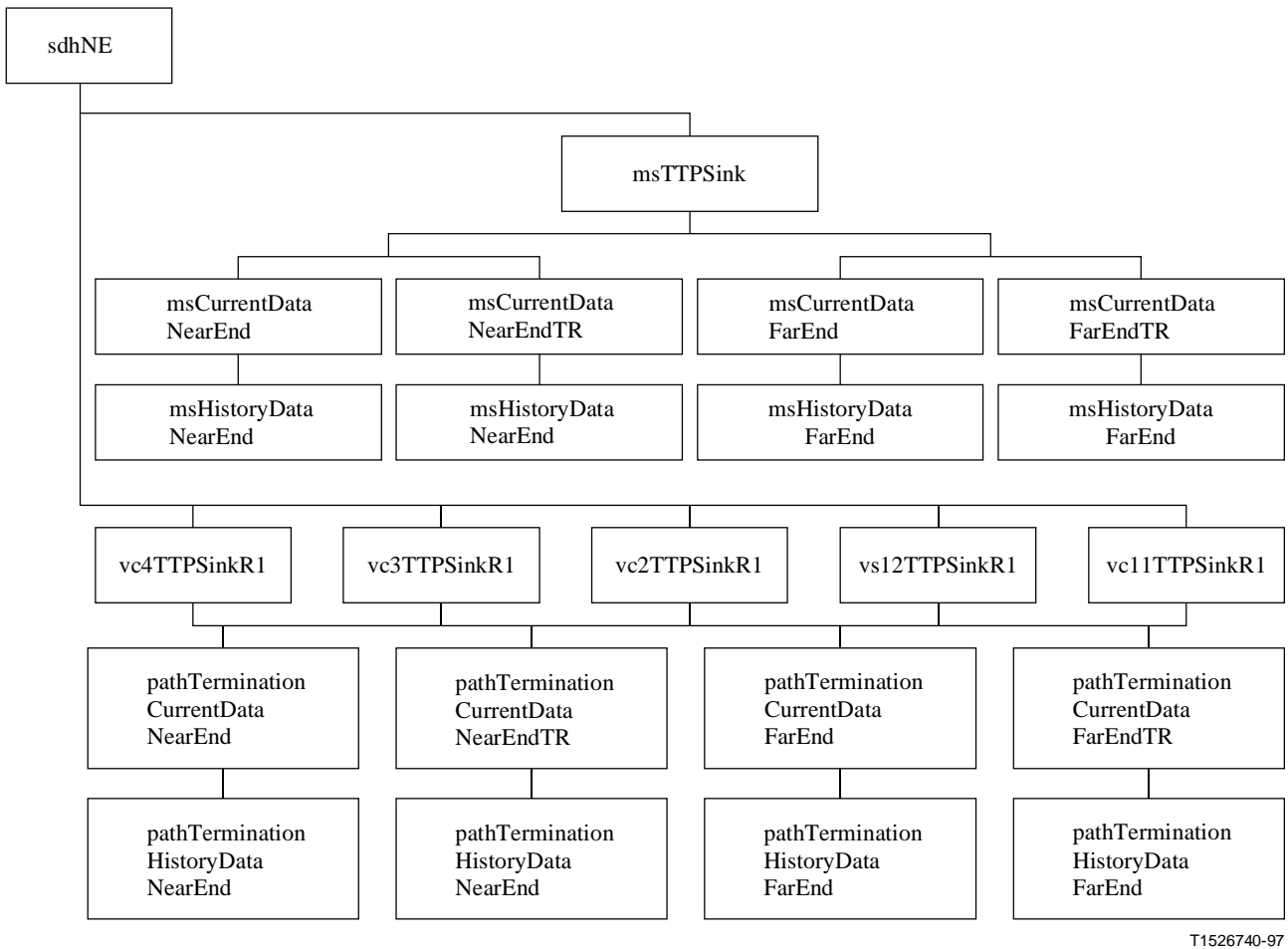
### Naming and inheritance diagrams

The naming and inheritance trees cover only the managed object classes of this Recommendation (see Figures I.1, I.2, I.3, I.4 and I.5).

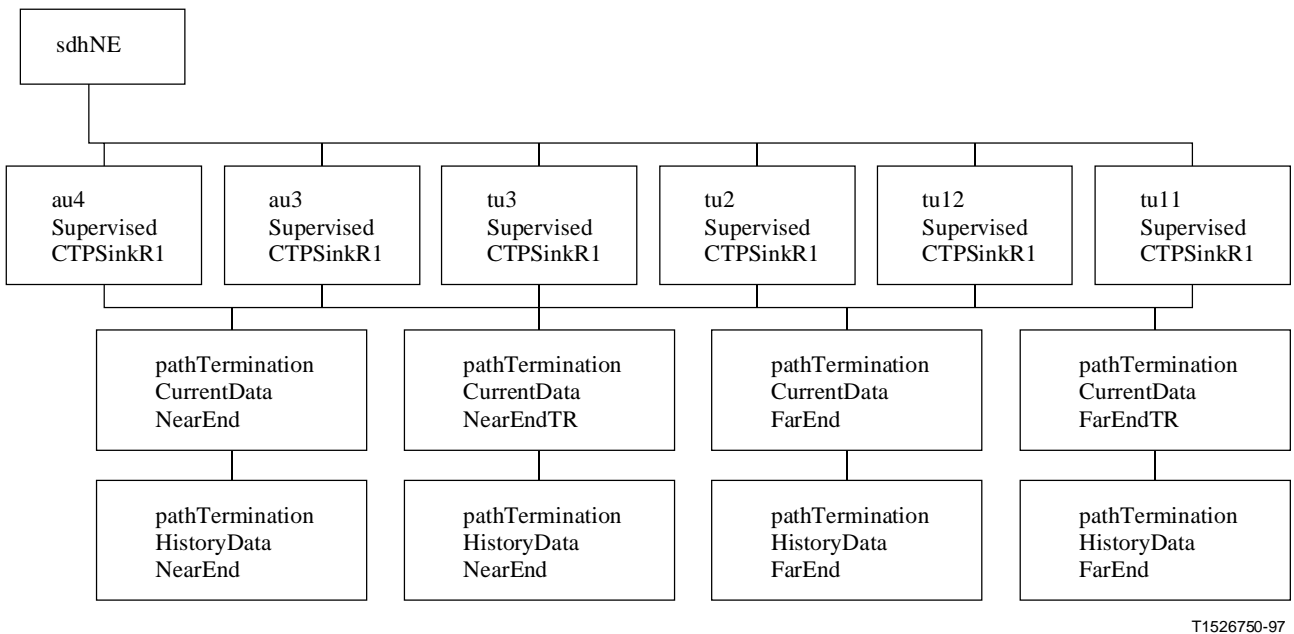


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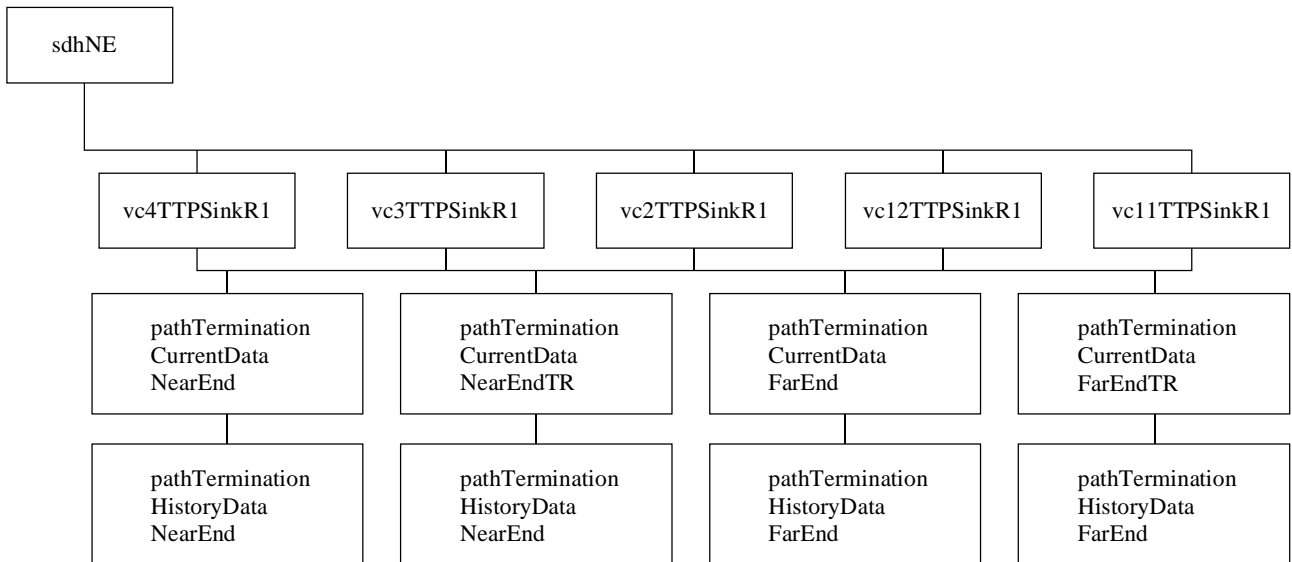
**Figure I.1/G.774.6 – Object name binding for the unidirectional performance monitoring**



**Figure I.2/G.774.6 – Object name binding for the unidirectional performance monitoring**

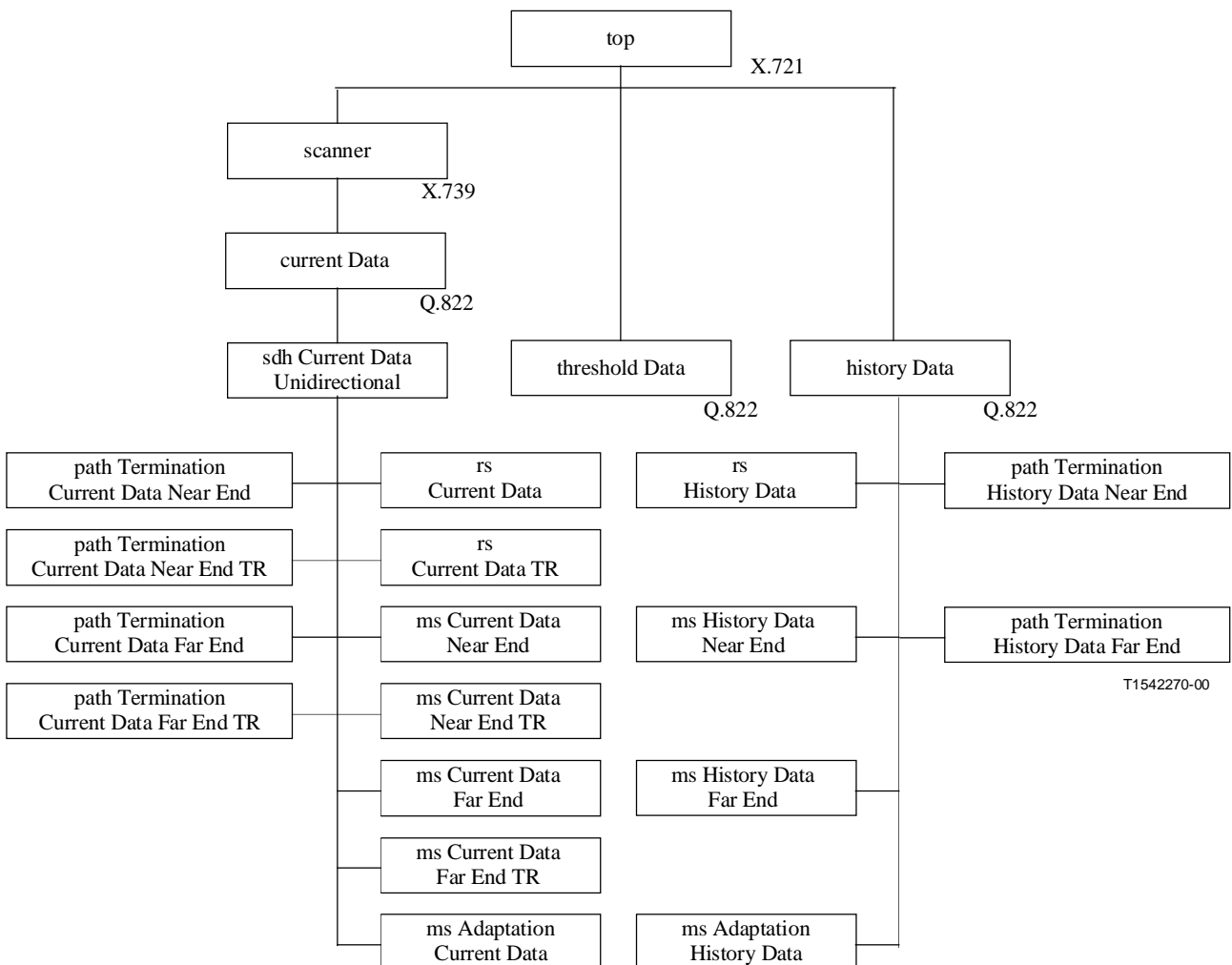


**Figure I.3/G.774.6 – Object name binding for the unidirectional performance monitoring**



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**Figure I.4/G.774.6 – Object name binding for the unidirectional performance monitoring**



T1542270-00

**Figure I.5/G.774.6 – Inheritance tree for the unidirectional performance monitoring**





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