TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

**G.774.02**Corrigendum 1
(11/96)

SERIES G: TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS

Digital transmission systems – Terminal equipments – Operations, administration and maintenance features of transmission equipment

Synchronous Digital Hierarchy (SDH) configuration of the payload structure for the network element view

**Corrigendum 1** 

ITU-T Recommendation G.774.02 - Corrigendum 1

(Previously CCITT Recommendation)

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## **ITU-T RECOMMENDATION G.774.02**

# SYNCHRONOUS DIGITAL HIERARCHY (SDH) CONFIGURATION OF THE PAYLOAD STRUCTURE FOR THE NETWORK ELEMENT VIEW

**CORRIGENDUM 1** 

### **Source**

Corrigendum 1 to ITU-T Recommendation G.774.02 was prepared by ITU-T Study Group 15 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 8th of November 1996.

#### **FOREWORD**

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. The 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 Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 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, the 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.

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#### **Recommendation G.774.02**

# SYNCHRONOUS DIGITAL HIERARCHY (SDH) CONFIGURATION OF THE PAYLOAD STRUCTURE FOR THE NETWORK ELEMENT VIEW

#### **CORRIGENDUM 1**

(Geneva, 1996)

## 1 Scope

## 1.1 Scope of this Recommendation

## Revisions that do not require re-registration

The following text replaces the entire text within 1.1/G.774.02 (1994). All additions are marked in **bold** for clarity.

SDH Payload Configuration Functions are used to configure the various SDH adaptation functions.

Modification of the SDH payload structure is done by applying an action on relevant managed objects. These actions are included by subclassing of existing G.774 managed object Classes.

The new objects defined in this Recommendation supersede those defined in Recommendation G.774.02 (1994). For each object class, attribute, action, notification, parameter defined in this Recommendation it shall be indicated what the impacts upon the existing Recommendation G.774.02 (1994) are.

#### 1.2 Structure of this Recommendation

No revisions are required.

#### 2 References

No revisions are required.

## 3 Definitions

No revisions are required.

#### 4 Abbreviations

No revisions are required.

### 5 Payload Configuration Information Model

No revisions are required.

#### 5.1 Overview

No revisions are required.

## 5.2 Requirements

No revisions are required.

## 6 Object Classes

## **Revisions that require re-registration**

This clause provides replacement managed object class definitions for the existing Recommendation G.774.02 (1994). Any managed object class replaced by one in this clause is considered to be deprecated. The reasons for the replacement of a managed object class are as follows:

- 1) The replaced managed object class is faulty and must be fixed.
- 2) The replaced managed object class includes an attribute, package, notification or action which has been re-registered in this or another Recommendation.
- 3) The replaced managed object class inherits from a managed object class which has been re-registered in this or another Recommendation.

In each case where a class is replaced, the new class will be registered within this Recommendation. The textual label for the class will be revised to include the text "R1". For example, in the revision of the G.774.02 (1994) managed object class "modifiableVC4TTPBidirectional", the revised label will become "modifiableVC4TTPBidirectionalR1".

Below is a table of classes deprecated from G.774.02 (1994) and the G.774.02 classes which replace them:

#### Deprecated G.774.02 1994 Classes

modifiableVC4TTPBidirectional modifiableVC4TTPSink modifiableVC4TTPSource modifiableVC3TTPBidirectional modifiableVC3TTPSink modifiableVC3TTPSource modifiableVC2TTPBidirectional modifiableVC2TTPBidirectional modifiableVC12TTPBidirectional modifiableVC12TTPBidirectional modifiableVC11TTPBidirectional modifiableVC11TTPBidirectional modifiableVC11TTPBidirectional modifiableVC11TTPBidirectional modifiableVC11TTPSink

#### Replacement G.774.02 Classes

modifiable VC4TTPBidirectionalR1
 modifiable VC4TTPSinkR1
 modifiable VC4TTPSourceR1
modifiable VC3TTPBidirectionalR1
 modifiable VC3TTPSinkR1
 modifiable VC3TTPSourceR1
modifiable VC2TTPBidirectionalR1
 modifiable VC2TTPBidirectionalR1
 modifiable VC12TTPBidirectionalR1
modifiable VC12TTPSinkR1
 modifiable VC11TTPBidirectionalR1
modifiable VC11TTPSinkR1
modifiable VC11TTPSinkR1

#### **High Order Path Layer**

```
modifiableVC4TTPBidirectionalR1 MANAGED OBJECT CLASS

DERIVED FROM "Recommendation G.774": vc4TTPBidirectionalR1;
CHARACTERIZED BY
"Recommendation M.3100:1992": supportableClientListPackage,
modifiableVC4TTPBidR1Package PACKAGE

BEHAVIOUR
modifiableVC4TTPBidR1Behaviour BEHAVIOUR
DEFINED AS
*This CLASS shall be instantiated when change of the SDH frame structure by
management operation is supported*;;
ACTIONS
"Recommendation G.774.02:1993":defineVC4Structure;;;

REGISTERED AS { g774-02MObjectClass 25 };
```

```
modifiableVC4TTPSinkR1 MANAGED OBJECT CLASS
      DERIVED FROM "Recommendation G.774": vc4TTPSinkR1;
      CHARACTERIZED BY
      "Recommendation M.3100:1992": supportableClientListPackage,
      modifiableVC4TTPSinkR1Package PACKAGE
            BEHAVIOUR
            modifiableVC4TTPSinkR1Behaviour
                                                     BEHAVIOUR
           DEFINED AS
            *This CLASS shall be instantiated when change of the SDH frame
            structure by management operation is supported*;;
      ACTIONS
      "Recommendation G.774.02:1993":defineVC4Structure:::
REGISTERED AS { g774-02MObjectClass 26 };
modifiableVC4TTPSourceR1 MANAGED OBJECT CLASS
      DERIVED FROM "Recommendation G.774": vc4TTPSourceR1;
     CHARACTERIZED BY
      "Recommendation M.3100:1992": supportableClientListPackage,
      modifiableVC4TTPSourceR1Package PACKAGE
            BEHAVIOUR
            modifiableVC4TTPSourceR1Behaviour BEHAVIOUR
            DEFINED AS
            *This CLASS shall be instantiated when change of the SDH frame
            structure by management operation is supported*;;
      ACTIONS
      "Recommendation G.774.02:1993":defineVC4Structure;;;
REGISTERED AS { g774-02MObjectClass 27 };
modifiable VC3TTPBidirectionalR1 MANAGED OBJECT CLASS
      DERIVED FROM "Recommendation G.774": vc3TTPBidirectionalR1;
      CHARACTERIZED BY
      "Recommendation M.3100:1992": supportableClientListPackage,
      modifiableVC3TTPBidR1Package PACKAGE
           BEHAVIOUR
            modifiableVC3TTPBidR1Behaviour
                                                     BEHAVIOUR
            DEFINED AS
            *This CLASS shall be instantiated when change of the SDH frame
            structure by management operation is supported*;;
      ACTIONS
      "Recommendation G.774.02:1993":defineVC3Structure;;;
REGISTERED AS { g774-02MObjectClass 28 };
modifiableVC3TTPSinkR1 MANAGED OBJECT CLASS
      DERIVED FROM "Recommendation G.774": vc3TTPSinkR1;
      CHARACTERIZED BY
      "Recommendation M.3100:1992": supportableClientListPackage,
      modifiableVC3TTPSinkR1Package PACKAGE
           BEHAVIOUR
            modifiable VC3TTPS in kR1Behaviour\\
                                                     BEHAVIOUR
           DEFINED AS
            *This CLASS shall be instantiated when change of the SDH frame
            structure by management operation is supported*;;
      ACTIONS
      "Recommendation G.774.02:1993":defineVC3Structure;;;
REGISTERED AS { g774-02MObjectClass 29 };
modifiable VC3TTPSourceR1 MANAGED OBJECT CLASS
      DERIVED FROM "Recommendation G.774": vc3TTPSourceR1;
      CHARACTERIZED BY
      "Recommendation M.3100:1992": supportableClientListPackage,
      modifiableVC3TTPSourceR1Package PACKAGE
```

```
BEHAVIOUR
            modifiableVC3TTPSourceR1Behaviour BEHAVIOUR
            DEFINED AS
            *This CLASS shall be instantiated when change of the SDH frame
            structure by management operation is supported*;;
      ACTIONS
      "Recommendation G.774.02:1993":defineVC3Structure;;;
REGISTERED AS { g774-02MObjectClass 30 };
Low Order Path Layer
modifiable VC2TTPBidirectionalR1 MANAGED OBJECT CLASS
      DERIVED FROM "Recommendation G.774": vc2TTPBidirectionalR1;
     CHARACTERIZED BY
      "Recommendation M.3100:1992": supportableClientListPackage,
      modifiableVC2TTPBidR1Package PACKAGE
           BEHAVIOUR
            modifiableVC2TTPBidR1Behaviour BEHAVIOUR
           DEFINED AS
            *This CLASS shall be instantiated when change of the SDH frame
            structure by management operation is supported*;;
      "Recommendation G.774.02:1993":defineClientType;;;
REGISTERED AS { g774-02MObjectClass 31 };
modifiableVC2TTPSinkR1 MANAGED OBJECT CLASS
     DERIVED FROM "Recommendation G.774": vc2TTPSinkR1;
      CHARACTERIZED BY
      "Recommendation M.3100:1992": supportableClientListPackage,
      modifiableVC2TTPSinkR1Package PACKAGE
            BEHAVIOUR
            modifiableVC2TTPSinkR1Behaviour BEHAVIOUR
           DEFINED AS
            *This CLASS shall be instantiated when change of the SDH frame
            structure by management operation is supported*;;
      ACTIONS
      "Recommendation G.774.02:1993":defineClientType;;;
REGISTERED AS { g774-02MObjectClass 32 };
modifiableVC12TTPBidirectionalR1 MANAGED OBJECT CLASS
      DERIVED FROM "Recommendation G.774": vc12TTPBidirectionalR1;
      CHARACTERIZED BY
      "Recommendation M.3100:1992": supportableClientListPackage,
      modifiableVC12TTPBidR1Package PACKAGE
            BEHAVIOUR
            modifiableVC12TTPBidR1Behaviour BEHAVIOUR
            DEFINED AS
            *This CLASS shall be instantiated when change of the SDH frame
            structure by management operation is supported*;;
      ACTIONS
      "Recommendation G.774.02:1993":defineClientType;;;
REGISTERED AS { g774-02MObjectClass 33 };
modifiable VC12TTPSinkR1 MANAGED OBJECT CLASS
     DERIVED FROM "Recommendation G.774": vc12TTPSinkR1;
     CHARACTERIZED BY
      "Recommendation M.3100:1992": supportableClientListPackage,
      modifiableVC12TTPSinkR1Package PACKAGE
           BEHAVIOUR
            modifiable VC12TTPSinkR1Behaviour BEHAVIOUR
```

```
DEFINED AS
            *This CLASS shall be instantiated when change of the SDH frame
            structure by management operation is supported*;;
      ACTIONS
      "Recommendation G.774.02:1993":defineClientType;;;
REGISTERED AS { g774-02MObjectClass 34 };
modifiable VC11TTPBidirectionalR1 MANAGED OBJECT CLASS
      DERIVED FROM "Recommendation G.774": vc11TTPBidirectionalR1;
      CHARACTERIZED BY
      "Recommendation M.3100:1992": supportableClientListPackage,
      modifiableVC11TTPBidR1Package PACKAGE
           BEHAVIOUR
            modifiableVC11TTPBidR1Behaviour
                                                     BEHAVIOUR
            DEFINED AS
            *This CLASS shall be instantiated when change of the SDH frame
            structure by management operation is supported*;;
      ACTIONS
      "Recommendation G.774.02:1993":defineClientType;;;
REGISTERED AS { g774-02MObjectClass 35 };
modifiable VC11TTPSinkR1 MANAGED OBJECT CLASS
      DERIVED FROM "Recommendation G.774": vc11TTPSinkR1;
      CHARACTERIZED BY
      "Recommendation M.3100:1992": supportableClientListPackage,
      modifiableVC11TTPSinkR1Package PACKAGE
           BEHAVIOUR
            modifiableVC11TTPSinkR1Behaviour BEHAVIOUR
           DEFINED AS
            *This CLASS shall be instantiated when change of the SDH frame
```

structure by management operation is supported\*;;

"Recommendation G.774.02:1993":defineClientType;;;

REGISTERED AS { g774-02MObjectClass 36 };

## 7 Packages

**ACTIONS** 

No revisions are required.

#### 8 Attributes

No revisions are required.

#### 9 Actions

No revisions are required.

#### 10 Notifications

No revisions are required.

## 11 Parameters

No revisions are required.

## 12 Namebindings

### **Revisions that require re-registration**

This clause provides replacement namebinding definitions for the existing Recommendation G.774.02 (1994). Any namebinding replaced by one in this clause is considered to be deprecated. The reasons for the replacement of a namebinding are as follows:

- 1) The replaced namebinding is faulty and must be fixed.
- 2) The replaced namebinding refers to a superior managed object class which has been re-registered in this or another Recommendation.
- 3) The replaced namebinding refers to a subordinate managed object class which has been re-registered in this or another Recommendation.
- 4) The replaced namebinding refers to a naming attribute which has been re-registered in this or another Recommendation.

In each case where a namebinding is replaced, the new namebinding will be registered within this Recommendation. The textual label for the namebinding will be revised to include the text "R1". For example, in the revision of the G.774.02 (1994) namebinding "au3CTPSink-augSink", the revised label will become "au3CTPSink-augSinkR1". Note the "R1" is placed immediately following the revised class which impacts the namebinding.

Below is a table of namebindings deprecated from Recommendation G.774.02 (1994) and the G.774.02 namebindings which replace them:

## Deprecated G.774.02 1994 Namebindings

au3CTPSink-augSink

au4CTPSink-augSink

tu11CTPSink-tug2Sink

tu12CTPSink-tug2Sink

tu2CTPSink-tug2Sink

tu3CTPSink-tug3Sink

tug2Source-vc3TTPSource

tug3Sink-vc4TTPSink

tug3Source-vc4TTPSource

vc11TTPSink-sdhNE

vc12TTPSink-sdhNE

vc2TTPSink-sdhNE

vc3TTPSink-sdhNE

vc3TTPSource-sdhNE

vc4TTPSink-sdhNE

vc4TTPSource-sdhNE

vcnUserChannelCTPSink-vc3TTPSink

vcnUserChannelCTPSource-vc3TTPSource

vcnUserChannelCTPSink-vc4TTPSink

vcnUserChannelCTPSource-vc4TTPSource

## Replacement G.774 Namebindings

au3CTPSinkR1-augSink

au 4CTPS in kR1-augSink

tu11CTPSinkR1-tug2Sink

tu12CTPSinkR1-tug2Sink

tu2CTPSinkR1-tug2Sink

tu3CTPSinkR1-tug3Sink

tug2Source-vc3TTPSourceR1

tug3Sink-vc4TTPSinkR1

tug3Source-vc4TTPSourceR1

vc11TTPSinkR1-sdhNE

```
vc12TTPSinkR1-sdhNE
      vc2TTPSinkR1-sdhNE
      vc3TTPSinkR1-sdhNE
      vc3TTPSourceR1-sdhNE
      vc4TTPSinkR1-sdhNE
      vc4TTPSourceR1-sdhNE
      vcnUserChannelCTPSink-vc3TTPSinkR1
      vcnUserChannelCTPSource-vc3TTPSourceR1
      vcnUserChannelCTPSink-vc4TTPSinkR1
      vcnUserChannelCTPSource-vc4TTPSourceR1
au3CTPSinkR1-augSink NAME BINDING
      SUBORDINATE OBJECT CLASS
      "Recommendation G.774": au3CTPSinkR1 AND SUBCLASSES;
      NAMED BY
     SUPERIOR OBJECT CLASS
      "Recommendation G.774": augSink AND SUBCLASSES;
      WITH ATTRIBUTE "Recommendation G.774": au3CTPId;
      BEHAVIOUR
           au3CTPSinkR1-augSinkBehaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed objects are automatically instantiated when the superior
                 managed object is instantiated, according to the make-up and mode of operation of
                 the NE.*
REGISTERED AS { g774-02NameBinding 59 };
au4CTPSinkR1-augSink NAME BINDING
      SUBORDINATE OBJECT CLASS
      "Recommendation G.774": au4CTPSinkR1 AND SUBCLASSES;
     NAMED BY
      SUPERIOR OBJECT CLASS
      "Recommendation G.774": augSink AND SUBCLASSES;
      WITH ATTRIBUTE "Recommendation G.774": au4CTPId;
      BEHAVIOUR
           au4CTPSinkR1-augSinkBehaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed object is automatically instantiated when the superior
                 managed object is instantiated, according to the make-up and mode of operation of
                 the NE.*
REGISTERED AS { g774-02NameBinding 60 };
tu11CTPSinkR1-tug2Sink NAME BINDING
      SUBORDINATE OBJECT CLASS
      "Recommendation G.774": tu11CTPSinkR1 AND SUBCLASSES;
      NAMED BY
      SUPERIOR OBJECT CLASS
      "Recommendation G.774": tug2Sink AND SUBCLASSES;
      WITH ATTRIBUTE "Recommendation G.774": tu11CTPId;
      BEHAVIOUR
           tu11CTPSinkR1-tug2SinkBehaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed objects are automatically instantiated when the superior
                 managed object is instantiated, according to the make-up and mode of operation of
                 the NE.*
REGISTERED AS { g774-02NameBinding 61 };
```

```
tu12CTPSinkR1-tug2Sink NAME BINDING
      SUBORDINATE OBJECT CLASS
      "Recommendation G.774": tu12CTPSinkR1 AND SUBCLASSES;
      NAMED BY
      SUPERIOR OBJECT CLASS
      "Recommendation G.774": tug2Sink AND SUBCLASSES;
      WITH ATTRIBUTE "Recommendation G.774": tu12CTPId;
      BEHAVIOUR
           tu12CTPSinkR1-tug2SinkBehaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed objects are automatically instantiated when the superior
                 managed object is instantiated, according to the make-up and mode of operation of
                 the NE.*
REGISTERED AS { g774-02NameBinding 62 };
tu2CTPSinkR1-tug2Sink NAME BINDING
      SUBORDINATE OBJECT CLASS
      "Recommendation G.774":tu2CTPSinkR1 AND SUBCLASSES:
      NAMED BY
     SUPERIOR OBJECT CLASS
      "Recommendation G.774": tug2Sink AND SUBCLASSES;
      WITH ATTRIBUTE "Recommendation G.774": tu2CTPId;
           tu2CTPSinkR1-tug2SinkBehaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed object is automatically instantiated when the superior
                 managed object is instantiated, according to the make-up and mode of operation of
                 the NE.*
REGISTERED AS { g774-02NameBinding 63 };
tu3CTPSinkR1-tug3Sink NAME BINDING
      SUBORDINATE OBJECT CLASS
      "Recommendation G.774":tu3CTPSinkR1 AND SUBCLASSES;
      NAMED BY
     SUPERIOR OBJECT CLASS
      "Recommendation G.774": tug3Sink AND SUBCLASSES;
      WITH ATTRIBUTE "Recommendation G.774": tu3CTPId;
      BEHAVIOUR
           tu3CTPSinkR1-tug3SinkBehaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed object is automatically instantiated when the
                 superior managed object is instantiated, according to the make-up and mode of
                 operation of the NE.*
REGISTERED AS { g774-02NameBinding 64 };
tug2Source-vc3TTPSourceR1 NAME BINDING
      SUBORDINATE OBJECT CLASS
      "Recommendation G.774": tug2Source AND
SUBCLASSES;
     NAMED BY
     SUPERIOR OBJECT CLASS
      "Recommendation G.774":vc3TTPSourceR1 AND SUBCLASSES:
      WITH ATTRIBUTE "Recommendation G.774": tug2Id;
      BEHAVIOUR
           tug2Source-vc3TTPSourceR1Behaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed objects are automatically instantiated when the
```

```
superior managed object is instantiated, according to the make-up and mode of
                 operation of the NE.*
REGISTERED AS { g774-02NameBinding 65 };
tug3Sink-vc4TTPSinkR1 NAME BINDING
     SUBORDINATE OBJECT CLASS
     "Recommendation G.774": tug3Sink AND SUBCLASSES;
     NAMED BY
     SUPERIOR OBJECT CLASS
      "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES;
     WITH ATTRIBUTE "Recommendation G.774": tug3Id;
     BEHAVIOUR
           tug3Sink-vc4TTPSinkR1Behaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed objects are automatically instantiated when the
                 superior managed object is instantiated, according to the make-up and mode of
                 operation of the NE.*
REGISTERED AS { g774-02NameBinding 66 };
tug3Source-vc4TTPSourceR1 NAME BINDING
     SUBORDINATE OBJECT CLASS
      "Recommendation G.774": tug3Source AND SUBCLASSES;
     NAMED BY
     SUPERIOR OBJECT CLASS
      "Recommendation G.774":vc4TTPSourceR1 AND SUBCLASSES;
     WITH ATTRIBUTE "Recommendation G.774": tug3Id;
     BEHAVIOUR
           tug3Source-vc4TTPSourceR1Behaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed objects are automatically instantiated when the
                 superior managed object is instantiated, according to the make-up and mode of
                 operation of the NE.*
REGISTERED AS { g774-02NameBinding 67 };
vc11TTPSinkR1-sdhNE NAME BINDING
     SUBORDINATE OBJECT CLASS
     "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES;
     NAMED BY
     SUPERIOR OBJECT CLASS
      "Recommendation G.774": sdhNE AND SUBCLASSES;
     WITH ATTRIBUTE "Recommendation G.774": vc11TTPId;
     CREATE
           WITH-REFERENCE-OBJECT,
           WITH-AUTOMATIC-INSTANCE-NAMING;
     DELETE
           DELETES-CONTAINED-OBJECTS;
REGISTERED AS { g774-02NameBinding 68 };
vc12TTPSinkR1-sdhNE NAME BINDING
     SUBORDINATE OBJECT CLASS
      "Recommendation G.774":vc12TTPSinkR1 AND SUBCLASSES;
     NAMED BY
     SUPERIOR OBJECT CLASS
      "Recommendation G.774": sdhNE AND SUBCLASSES;
     WITH ATTRIBUTE "Recommendation G.774": vc12TTPId;
     CREATE
           WITH-REFERENCE-OBJECT,
           WITH-AUTOMATIC-INSTANCE-NAMING;
```

```
DELETE
```

**DELETES-CONTAINED-OBJECTS**;

REGISTERED AS { g774-02NameBinding 69 };

vc2TTPSinkR1-sdhNE NAME BINDING

SUBORDINATE OBJECT CLASS

"Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES;

NAMED BY

SUPERIOR OBJECT CLASS

"Recommendation G.774": sdhNE AND SUBCLASSES;

WITH ATTRIBUTE "Recommendation G.774": vc2TTPId;

**CREATE** 

WITH-REFERENCE-OBJECT,

WITH-AUTOMATIC-INSTANCE-NAMING;

**DELETE** 

DELETES-CONTAINED-OBJECTS;

REGISTERED AS { g774-02NameBinding 70 };

vc3TTPSinkR1-sdhNE NAME BINDING

SUBORDINATE OBJECT CLASS

"Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES;

NAMED BY

SUPERIOR OBJECT CLASS

"Recommendation G.774": sdhNE AND SUBCLASSES;

WITH ATTRIBUTE "Recommendation G.774": vc3TTPId;

**CREATE** 

WITH-REFERENCE-OBJECT,

WITH-AUTOMATIC-INSTANCE-NAMING;

**DELETE** 

**DELETES-CONTAINED-OBJECTS**;

REGISTERED AS { g774-02NameBinding 71 };

vc3TTPSourceR1-sdhNE NAME BINDING

SUBORDINATE OBJECT CLASS

"Recommendation G.774":vc3TTPSourceR1 AND SUBCLASSES;

NAMED BY

SUPERIOR OBJECT CLASS

"Recommendation G.774": sdhNE AND SUBCLASSES;

WITH ATTRIBUTE "Recommendation G.774": vc3TTPId;

**CREATE** 

WITH-REFERENCE-OBJECT,

WITH-AUTOMATIC-INSTANCE-NAMING;

**DELETE** 

DELETES-CONTAINED-OBJECTS;

REGISTERED AS { g774-02NameBinding 72 };

vc4TTPSinkR1-sdhNE NAME BINDING

SUBORDINATE OBJECT CLASS

"Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES;

NAMED BY

SUPERIOR OBJECT CLASS

"Recommendation G.774": sdhNE AND SUBCLASSES;

WITH ATTRIBUTE "Recommendation G.774": vc4TTPId;

**CREATE** 

WITH-REFERENCE-OBJECT,

WITH-AUTOMATIC-INSTANCE-NAMING;

**DELETE** 

**DELETES-CONTAINED-OBJECTS**;

REGISTERED AS { g774-02NameBinding 73 };

```
vc4TTPSourceR1-sdhNE NAME BINDING
     SUBORDINATE OBJECT CLASS
     "Recommendation G.774":vc4TTPSourceR1 AND SUBCLASSES:
     NAMED BY
     SUPERIOR OBJECT CLASS
     "Recommendation G.774": sdhNE AND SUBCLASSES;
     WITH ATTRIBUTE "Recommendation G.774": vc4TTPId;
     CREATE
           WITH-REFERENCE-OBJECT.
           WITH-AUTOMATIC-INSTANCE-NAMING;
     DELETE
           DELETES-CONTAINED-OBJECTS;
REGISTERED AS { g774-02NameBinding 74 };
vcnUserChannelCTPSink-vc3TTPSinkR1 NAME BINDING
     SUBORDINATE OBJECT CLASS
     "Recommendation G.774": vcnUserChannelCTPSink AND SUBCLASSES;
     NAMED BY
     SUPERIOR OBJECT CLASS
     "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES;
     WITH ATTRIBUTE "Recommendation G.774:1992": vcnUserChannelCTPId;
     BEHAVIOUR
           vcnUserChannelCTPSink-vc3TTPSinkR1Behaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed object is automatically instantiated when the superior
                 managed object is instantiated, according to the make-up and mode of operation of
                 the NE.*
REGISTERED AS { g774-02NameBinding 75 };
vcnUserChannelCTPSource-vc3TTPSourceR1 NAME BINDING
     SUBORDINATE OBJECT CLASS
     "Recommendation G.774": vcnUserChannelCTPSource AND SUBCLASSES:
     NAMED BY
     SUPERIOR OBJECT CLASS
     "Recommendation G.774":vc3TTPSourceR1 AND SUBCLASSES;
     WITH ATTRIBUTE "Recommendation G.774": vcnUserChannelCTPId;
     BEHAVIOUR
           vcnUserChannelCTPSource-vc3TTPSourceR1Behaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed object is automatically instantiated when the superior
                 managed object is instantiated, according to the make-up and mode of operation of
                 the NE.*
REGISTERED AS { g774-02NameBinding 76 };
vcnUserChannelCTPSink-vc4TTPSinkR1 NAME BINDING
     SUBORDINATE OBJECT CLASS
     "Recommendation G.774": vcnUserChannelCTPSink AND SUBCLASSES;
     NAMED BY
     SUPERIOR OBJECT CLASS
     "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES;
     WITH ATTRIBUTE "Recommendation G.774": vcnUserChannelCTPId;
     BEHAVIOUR
           vcnUserChannelCTPSink-vc4TTPSinkR1Behaviour BEHAVIOUR
                 DEFINED AS
                 *The subordinate managed object is automatically instantiated when the superior
                 managed object is instantiated, according to the make-up and mode of operation of
                 the NE.*
REGISTERED AS { g774-02NameBinding 77 };
```

```
vcnUserChannelCTPSource-vc4TTPSourceR1 NAME BINDING
SUBORDINATE OBJECT CLASS
"Recommendation G.774": vcnUserChannelCTPSource AND SUBCLASSES;
NAMED BY
SUPERIOR OBJECT CLASS
"Recommendation G.774":vc4TTPSourceR1 AND SUBCLASSES;
WITH ATTRIBUTE "Recommendation G.774": vcnUserChannelCTPId;
BEHAVIOUR
vcnUserChannelCTPSource-vc4TTPSourceR1Behaviour BEHAVIOUR
DEFINED AS
*The subordinate managed object is automatically instantiated when the superior managed object is instantiated, according to the make-up and mode of operation of the NE.*

;;

REGISTERED AS { g774-02NameBinding 78 };
```

#### 13 Constraint Rules

### 13.1 Constraint Rules Extended Syntax

No revisions are required.

## 13.1.1 Constraint Rules Grammar

No revisions are required.

#### **13.1.2** Constraint Rule Templates

No revisions are required.

## 13.2 Connectivity Pointer Constraints

## Revisions that do not require re-registration

The following text replaces the text within 13.2/G.774.02 (1994) associated with the following listed constraint rules only:

```
upstreamConnectivityPointer-rsTTPSink upstreamConnectivityPointer-rsTTPSource
```

Any constraint rules defined in Recommendation G.774.02 (1994) which are not referred to here are retained unaltered.

upstreamConnectivityPointer-rsTTPSink CONSTRAINT RULE

```
OBJECT CLASS
    rsTTPSink AND SUBCLASSES;
IS RELATED TO
    rsCTPSink AND SUBCLASSES;
USING ATTRIBUTE
    "Recommendation M.3100":upstreamConnectivityPointer;
CASE {
    single ACCORDING TO RULE
        SET SIZE(1) OF CHOICE {
        rsCTPSink AND SUBCLASSES }
};
```

```
downstreamConnectivityPointer-rsTTPSource CONSTRAINT RULE
OBJECT CLASS
        rsTTPSource AND SUBCLASSES;
IS RELATED TO
        rsCTPSource AND SUBCLASSES;
USING ATTRIBUTE
        "Recommendation M.3100":downstreamConnectivityPointer;
CASE {
        single ACCORDING TO RULE
        SET SIZE(1) OF CHOICE {
        rsCTPSource AND SUBCLASSES }
    };
:
```

### **Revisions that require re-registration**

This clause provides replacement constraint rule definitions for the existing Recommendation G.774.02 (1994). Any constraint rule replaced by one in this clause is considered to be deprecated. The reasons for the replacement of a constraint rule are as follows:

- 1) The replaced constraint rule is faulty and must be fixed.
- 2) The replaced constraint rule refers to a managed object class which has been re-registered in this or another Recommendation.
- 3) The replaced constraint rule refers to an attribute which has been reregistered in this or another Recommendation.

In each case where a constraint is replaced, the new constraint will be registered within this Recommendation. The textual label for the constraint will be revised to include the text "R1". For example, in the revision of the G.774.02 (1994) constraint "downstreamConnectivityPointer-au3CTPSink", the revised label will become "downstreamConnectivityPointer-au3CTPSinkR1". Note the "R1" is placed immediately following the revised class which impacts the constraint. In the case where the class within the label has not changed but the constraint is still altered because the constraint refers to a class that has changed, then the "R1" is placed immediately following the "downstreamConnectivityPointer" text of the revised constraint label. For example, in the revision of the G.774.02 (1994) constraint "downstreamConnectivityPointer-au3CTPSource", the revised label will become "downstreamConnectivityPointerR1-au3CTPSource".

The syntax, grammar and templates used for these constraint rules are defined in Recommendation G.774 (1992) and extended in Recommendation G.774.02 (1994).

Below is a table of constraint rules deprecated from Recommendation G.774.02 (1994) and the G.774.02 constraint rules which replace them:

#### Deprecated G.774.02 1994 Constraint Rules

downstreamConnectivityPointer-au3CTPSink upstreamConnectivityPointer-au4CTPSource downstreamConnectivityPointer-au4CTPSink upstreamConnectivityPointer-au4CTPSource downstreamConnectivityPointer-tu11CTPSink upstreamConnectivityPointer-tu11CTPSource downstreamConnectivityPointer-tu12CTPSink upstreamConnectivityPointer-tu12CTPSink upstreamConnectivityPointer-tu2CTPSource downstreamConnectivityPointer-tu2CTPSource downstreamConnectivityPointer-tu3CTPSink upstreamConnectivityPointer-tu3CTPSink upstreamConnectivityPointer-tu3CTPSource upstreamConnectivityPointer-vc11TTPSource upstreamConnectivityPointer-vc11TTPSink downstreamConnectivityPointer-vc11TTPSource

upstreamConnectivityPointer-vc12TTPSink downstreamConnectivityPointer-vc12TTPSource upstreamConnectivityPointer-vc2TTPSink downstreamConnectivityPointer-vc2TTPSource upstreamConnectivityPointer-vc3TTPSink downstreamConnectivityPointer-vc3TTPSource upstreamConnectivityPointer-vc4TTPSink downstreamConnectivityPointer-vc4TTPSource

#### Replacement G.774.02 Constraint Rules

downstreamConnectivityPointer-au3CTPSinkR1 upstreamConnectivityPointerR1-au3CTPSource downstreamConnectivityPointer-au4CTPSinkR1 upstreamConnectivityPointerR1-au4CTPSource downstreamConnectivityPointer-tu11CTPSinkR1 upstreamConnectivityPointerR1-tu11CTPSource downstreamConnectivityPointer-tu12CTPSinkR1 upstreamConnectivityPointerR1-tu12CTPSource downstreamConnectivityPointer-tu2CTPSinkR1 upstreamConnectivityPointerR1-tu2CTPSource downstreamConnectivityPointer-tu3CTPSinkR1 upstreamConnectivityPointerR1-tu3CTPSource upstreamConnectivityPointer-vc11TTPSinkR1 downstreamConnectivityPointerR1-vc11TTPSource upstreamConnectivityPointer-vc12TTPSinkR1 downstream Connectivity Pointer R1-vc12 TTP SourceupstreamConnectivityPointer-vc2TTPSinkR1 downstreamConnectivityPointerR1-vc2TTPSource upstreamConnectivityPointer-vc3TTPSinkR1 downstreamConnectivityPointer-vc3TTPSourceR1 upstreamConnectivityPointer-vc4TTPSinkR1 downstreamConnectivityPointer-vc4TTPSourceR1

```
downstreamConnectivityPointer-au3CTPSinkR1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":au3CTPSinkR1 AND SUBCLASSES;
     IS RELATED TO
           vc3TTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":au3CTPSource AND SUBCLASSES,
           "Recommendation G.774":tu3CTPSource AND SUBCLASSES,
           "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":downstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                SET SIZE(1) OF CHOICE {
                      "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":au3CTPSource AND SUBCLASSES,
                      "Recommendation G.774":tu3CTPSource AND SUBCLASSES,
                      "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES},
           broadcast ACCORDING TO RULE
                SET SIZE(1) OF CHOICE {
                      SET SIZE(1..N) OF CHOICE {
                            "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES,
                            "Recommendation G.774":tu3CTPSource AND SUBCLASSES,
                            "Recommendation G.774":au3CTPSource AND SUBCLASSES},
                      SET SIZE(1..N) OF CHOICE {
                            "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES}
                 }
     };
```

```
upstreamConnectivityPointerR1-au3CTPSource CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":au3CTPSource AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc3TTPSourceR1 AND SUBCLASSES,
           "Recommendation G.774":au3CTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":tu3CTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":vc4TTPSourceR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":upstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                      "Recommendation G.774":vc3TTPSourceR1 AND SUBCLASSES,
                      "Recommendation G.774":au3CTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":tu3CTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":vc4TTPSourceR1 AND SUBCLASSES}
     };
downstreamConnectivityPointer-au4CTPSinkR1 CONSTRAINT RULE
     OBJECT CLASS
           au4CTPSinkR1 AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":au4CTPSource AND SUBCLASSES,
           "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":downstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                      "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":au4CTPSource AND SUBCLASSES},
           broadcast ACCORDING TO RULE
                 SET SIZE(1..N) OF CHOICE {
                      "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":au4CTPSource AND SUBCLASSES}
     };
upstreamConnectivityPointerR1-au4CTPSource CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":au4CTPSource AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":au4CTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":vc4TTPSourceR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":upstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                      "Recommendation G.774":vc4TTPSourceR1 AND SUBCLASSES,
                      "Recommendation G.774":au4CTPSinkR1 AND SUBCLASSES}
     }:
downstreamConnectivityPointer-tu11CTPSinkR1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":tu11CTPSinkR1 AND SUBCLASSES;
```

```
IS RELATED TO
           "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":tu11CTPSource AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":downstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                      "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":tu11CTPSource AND SUBCLASSES},
           broadcast ACCORDING TO RULE
                 SET SIZE(1..N) OF CHOICE {
                      "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES,
                       "Recommendation G.774":tu11CTPSource AND SUBCLASSES }
     };
upstreamConnectivityPointerR1-tu11CTPSource CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":tu11CTPSource AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc11TTPSource AND SUBCLASSES,
           "Recommendation G.774":tu11CTPSinkR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":upstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                      "Recommendation G.774":vc11TTPSource AND SUBCLASSES,
                      "Recommendation G.774":tu11CTPSinkR1 AND SUBCLASSES}
     };
downstreamConnectivityPointer-tu12CTPSinkR1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":tu12CTPSinkR1 AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc12TTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":tu12CTPSource AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":downstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc12TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":tu12CTPSource AND SUBCLASSES},
           broadcast ACCORDING TO RULE
                 SET SIZE(1..N) OF CHOICE {
                      "Recommendation G.774":vc12TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":tu12CTPSource AND SUBCLASSES }
     };
upstreamConnectivityPointerR1-tu12CTPSource CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":tu12CTPSource AND SUBCLASSES:
     IS RELATED TO
           "Recommendation G.774":vc12TTPSource AND SUBCLASSES,
           "Recommendation G.774":tu12CTPSinkR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":upstreamConnectivityPointer;
```

```
CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc12TTPSource AND SUBCLASSES,
                      "Recommendation G.774":tu12CTPSinkR1 AND SUBCLASSES}
     };
downstreamConnectivityPointer-tu2CTPSinkR1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":tu2CTPSinkR1 AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":tu2CTPSource AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":downstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":tu2CTPSource AND SUBCLASSES},
           broadcast ACCORDING TO RULE
                 SET SIZE(1..N) OF CHOICE {
                       "Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES,
                       "Recommendation G.774":tu2CTPSource AND SUBCLASSES }
     };
upstreamConnectivityPointerR1-tu2CTPSource CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":tu2CTPSource AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc2TTPSource AND SUBCLASSES,
           "Recommendation G.774":tu2CTPSinkR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":upstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc2TTPSource AND SUBCLASSES,
                      "Recommendation G.774":tu2CTPSinkR1 AND SUBCLASSES }
     };
downstreamConnectivityPointer-tu3CTPSinkR1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":tu3CTPSinkR1 AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":au3CTPSource AND SUBCLASSES,
           "Recommendation G.774":tu3CTPSource AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":downstreamConnectivityPointer;
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES,
                       "Recommendation G.774":au3CTPSource AND SUBCLASSES,
                      "Recommendation G.774":tu3CTPSource AND SUBCLASSES},
```

```
broadcast ACCORDING TO RULE
                 SET SIZE(1..N) OF CHOICE {
                       "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES,
                       "Recommendation G.774":au3CTPSource AND SUBCLASSES,
                      "Recommendation G.774":tu3CTPSource AND SUBCLASSES }
     };
upstreamConnectivityPointerR1-tu3CTPSource CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":tu3CTPSource AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc3TTPSourceR1 AND SUBCLASSES,
           "Recommendation G.774":au3CTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":tu3CTPSinkR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":upstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc3TTPSourceR1 AND SUBCLASSES,
                       "Recommendation G.774":au3CTPSinkR1 AND SUBCLASSES,
                       "Recommendation G.774":tu3CTPSinkR1 AND SUBCLASSES }
     };
upstreamConnectivityPointer-vc11TTPSinkR1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc11TTPSource AND SUBCLASSES,
           "Recommendation G.774":tu11CTPSinkR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":upstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc11TTPSource AND SUBCLASSES,
                       "Recommendation G.774":tu11CTPSinkR1 AND SUBCLASSES}
     };
downstreamConnectivityPointerR1-vc11TTPSource CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":vc11TTPSource AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":tu11CTPSource AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":downstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":tu11CTPSource AND SUBCLASSES},
           broadcast ACCORDING TO RULE
                 SET SIZE(1..N) OF CHOICE {
                      "Recommendation G.774":vc11TTPSinkR1 AND SUBCLASSES,
                       "Recommendation G.774":tu11CTPSource AND SUBCLASSES}
     };
```

```
upstreamConnectivityPointer-vc12TTPSinkR1 CONSTRAINT RULE
     OBJECT CLASS
           vc12TTPSinkR1 AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc12TTPSource AND SUBCLASSES,
           "Recommendation G.774":tu12CTPSinkR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":upstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                SET SIZE(1) OF CHOICE {
                      "Recommendation G.774":vc12TTPSource AND SUBCLASSES,
                      "Recommendation G.774":tu12CTPSinkR1 AND SUBCLASSES }
     };
downstreamConnectivityPointerR1-vc12TTPSource1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":vc12TTPSource AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc12TTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":tu12CTPSource AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":downstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                SET SIZE(1) OF CHOICE {
                      "Recommendation G.774":vc12TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":tu12CTPSource AND SUBCLASSES},
           broadcast ACCORDING TO RULE
                SET SIZE(1..N) OF CHOICE {
                      vc12TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":tu12CTPSource AND SUBCLASSES}
     };
upstreamConnectivityPointer-vc2TTPSinkR1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc2TTPSource AND SUBCLASSES,
           "Recommendation G.774":tu2CTPSinkR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":upstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                SET SIZE(1) OF CHOICE {
                      "Recommendation G.774":vc2TTPSource AND SUBCLASSES,
                      "Recommendation G.774":tu2CTPSinkR1 AND SUBCLASSES }
     };
downstreamConnectivityPointerR1-vc2TTPSource CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":vc2TTPSource AND SUBCLASSES:
     IS RELATED TO
           "Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES
           "Recommendation G.774":tu2CTPSource AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":downstreamConnectivityPointer;
```

```
CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES,
                       "Recommendation G.774":tu2CTPSource AND SUBCLASSES},
           broadcast ACCORDING TO RULE
                 SET SIZE(1..N) OF CHOICE {
                       "Recommendation G.774":vc2TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":tu2CTPSource AND SUBCLASSES }
     };
upstreamConnectivityPointer-vc3TTPSinkR1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc3TTPSourceR1 AND SUBCLASSES,
           "Recommendation G.774":au3CTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":tu3CTPSinkR1 AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":upstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc3TTPSourceR1,
                      "Recommendation G.774":au3CTPSinkR1,
                       "Recommendation G.774":tu3CTPSinkR1 }
     };
downstreamConnectivityPointer-vc3TTPSourceR1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":vc3TTPSourceR1 AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":au3CTPSource AND SUBCLASSES,
           "Recommendation G.774":tu3CTPSource AND SUBCLASSES;
     USING ATTRIBUTE
           "Recommendation M.3100:1992":downstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc3TTPSinkR1 AND SUBCLASSES,
                       "Recommendation G.774":au3CTPSource AND SUBCLASSES,
                       "Recommendation G.774":tu3CTPSource AND SUBCLASSES},
           broadcast ACCORDING TO RULE
                 SET SIZE(1..N) OF CHOICE {
                      vc3TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":au3CTPSource AND SUBCLASSES,
                       "Recommendation G.774":tu3CTPSource AND SUBCLASSES }
     };
upstreamConnectivityPointer-vc4TTPSinkR1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES:
     IS RELATED TO
           "Recommendation G.774":vc4TTPSourceR1 AND SUBCLASSES,
           "Recommendation G.774":au4CTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":au3CTPSinkR1 AND SUBCLASSES;
```

```
USING ATTRIBUTE
           "Recommendation M.3100:1992":upstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc4TTPSourceR1 AND SUBCLASSES,
                      "Recommendation G.774":au4CTPSinkR1 AND SUBCLASSES },
           concatenated ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                      SEQUENCE SIZE(3) OF
                            "Recommendation G.774":au3CTPSinkR1 AND SUBCLASSES}
      };
downstreamConnectivityPointer-vc4TTPSourceR1 CONSTRAINT RULE
     OBJECT CLASS
           "Recommendation G.774":vc4TTPSourceR1 AND SUBCLASSES;
     IS RELATED TO
           "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES,
           "Recommendation G.774":au4CTPSource AND SUBCLASSES,
           "Recommendation G.774":au3CTPSource AND SUBCLASSES;
      USING ATTRIBUTE
           "Recommendation M.3100:1992":downstreamConnectivityPointer;
     CASE {
           single ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                       "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":au4CTPSource AND SUBCLASSES },
           broadcast ACCORDING TO RULE
                 SET SIZE(1..N) OF CHOICE {
                       "Recommendation G.774":vc4TTPSinkR1 AND SUBCLASSES,
                      "Recommendation G.774":au4CTPSource AND SUBCLASSES},
           concatenated ACCORDING TO RULE
                 SET SIZE(1) OF CHOICE {
                      SEQUENCE SIZE(3) OF
                            "Recommendation G.774":au3CTPSource AND SUBCLASSES},
           broadcastConcatenated ACCORDING TO RULE
                 SET SIZE(1..N) OF CHOICE {
                      SEQUENCE SIZE(3) OF
                            "Recommendation G.774":au3CTPSource AND SUBCLASSES}
     };
```

#### **14** Subordination Rules

### Revisions that do not require re-registration

The following text replaces the text within clause 14/G.774.02 (1994) associated with the following listed subordination rules only. All additions are marked in **bold** for clarity.

```
tug3BidirectionalSubordination
```

Any subordination rules defined in Recommendation G.774.02 (1994) which are not referred to here are retained unaltered.

```
tug3BidirectionalSubordination SUBORDINATION RULE
SUPERIOR OBJECT CLASS
tug3Bidirectional;
```

```
NAMES SUBORDINATES
      tug2Sink, tug2Source, tug2Bidirectional,
      modifiableTug2Sink.
      modifiableTug2Source,
      modifiableTug2Bidirectional,
      tu3CTPSink,
      tu3CTPSource,
      tu3CTPBidirectional;
ACCORDING TO RULE
      CHOICE {
            SET SIZE(1) OF CHOICE {
                  tu3CTPSink,
                  tu3CTPSource,
                  tu3CTPBidirectional },
            SET SIZE(7) OF CHOICE {
                  tug2Sink, tug2Source, tug2Bidirectional,
                  modifiableTug2Sink,
                  modifiableTug2Source,
                  modifiableTug2Bidirectional
      };
```

## **Revisions that require re-registration**

This clause provides replacement subordination rule definitions for the existing Recommendation G.774.02 (1994). Any subordination rule replaced by one in this clause is considered to be deprecated. The reasons for the replacement of a subordination rule are as follows:

- 1) The replaced subordination rule is faulty and must be fixed.
- 2) The replaced subordination rule refers to a managed object class which has been reregistered in this or another Recommendation.

In each case where a subordination rule is replaced, the new subordination rule will be registered within this Recommendation. The textual label for the subordination rule will be revised to include the text "R1". For example, in the revision of the G.774.02 (1994) subordination rule "vc3TTPSinkSubordination", the revised label will become "vc3TTPSinkR1Subordination". Note the "R1" is placed immediately following the revised class which impacts the subordination rule. In the case where the class within the label has not changed but the subordination rule is still altered because the subordination rule refers to a class that has changed, then the "R1" is placed at the end of the revised subordination rule label. For example, in the revision of the G.774.02 (1994) subordination rule "modifiableAugSinkSubordination", the revised label will become "modifiableAugSinkSubordinationR1".

Below is a table of subordination rules deprecated from Recommendation G.774.02 (1994) and the G.774.02 subordination rules which replace them.

### Deprecated G.774.02 1994 Subordination Rules

modifiableAugSinkSubordination modifiableAugBidirectionalSubordination modifiableTug2SinkSubordination modifiableTug2BidirectionalSubordination modifiableTug3SinkSubordination tug3BidirectionalSubordination modifiableVC3TTPSinkSubordination vc3TTPSinkSubordination modifiableVC3TTPSourceSubordination

```
vc3TTPSourceSubordination
      modifiable VC3TTPBidirectional Subordination
      vc3TTPBidirectionalSubordination
      modifiable VC4TTPSinkSubordination
      vc4TTPSinkSubordination
      modifiable VC4TTPS ource Subordination
      vc4TTPSourceSubordination
      modifiable VC4TTPBidirectional Subordination
      vc4TTPBidirectionalSubordination
      Replacement G.774.02 Subordination Rules
      modifiable Aug Sink Subordination R1\\
      modifiable Aug Bidirectional Subordination R1\\
      modifiableTug2SinkSubordinationR1
      modifiable Tug 2 Bidirectional Subordination R1\\
      modifiableTug3SinkSubordinationR1
      tug3BidirectionalSubordinationR1
      modifiable VC3TTPSinkR1Subordination
      vc3TTPSinkR1Subordination
      modifiable VC3TTPSourceR1Subordination
      vc3TTPSourceR1Subordination
      modifiable VC3TTP Bidirectional R1Subordination\\
      vc3TTPBidirectionalR1Subordination
      modifiable VC4TTPSinkR1Subordination
      vc4TTPSinkR1Subordination
      modifiable VC4TTPSourceR1Subordination
      vc4TTPSourceR1Subordination
      modifiableVC4TTPBidirectionalR1Subordination
      vc4TTPBidirectionalR1Subordination
modifiableAugSinkSubordinationR1 SUBORDINATION RULE
      SUPERIOR OBJECT CLASS
            "Recommendation G.774.02":modifiableAugSink;
      NAMES SUBORDINATES
            "Recommendation G.774":au4CTPSinkR1,
            "Recommendation G.774":au3CTPSinkR1;
      ACCORDING TO RULE
            CHOICE {
                  SET SIZE(1) OF "Recommendation G.774":au4CTPSinkR1,
                  SET SIZE(3) OF "Recommendation G.774":au3CTPSinkR1
            };
modifiableAugBidirectionalSubordinationR1 SUBORDINATION RULE
      SUPERIOR OBJECT CLASS
            "Recommendation G.774.02":modifiableAugBidirectional;
      NAMES SUBORDINATES
            "Recommendation G.774":au4CTPSinkR1,
            "Recommendation G.774":au4CTPSource,
            "Recommendation G.774":au4CTPBidirectionalR1,
            "Recommendation G.774":au3CTPSinkR1,
            "Recommendation G.774":au3CTPSource,
            "Recommendation G.774":au3CTPBidirectionalR1;
      ACCORDING TO RULE
            CHOICE {
                  SET SIZE(1) OF CHOICE {
                         "Recommendation G.774":au4CTPSinkR1,
```

"Recommendation G.774":au4CTPSource,

"Recommendation G.774":au4CTPBidirectionalR1 },

```
SET SIZE(3) OF CHOICE {
                        "Recommendation G.774":au3CTPSinkR1,
                        "Recommendation G.774":au3CTPSource,
                        "Recommendation G.774":au3CTPBidirectionalR1 }
           };
modifiableTug2SinkSubordinationR1 SUBORDINATION RULE
     SUPERIOR OBJECT CLASS
            "Recommendation G.774.02":modifiableTug2Sink;
     NAMES SUBORDINATES
            "Recommendation G.774":tu11CTPSinkR1,
            "Recommendation G.774":tu12CTPSinkR1,
            "Recommendation G.774":tu2CTPSinkR1;
      ACCORDING TO RULE
           CHOICE {
                 SET SIZE(1) OF "Recommendation G.774":tu2CTPSinkR1,
                 SET SIZE(3) OF "Recommendation G.774":tu12CTPSinkR1,
                 SET SIZE(4) OF "Recommendation G.774":tu11CTPSinkR1
            };
modifiableTug2BidirectionalSubordinationR1 SUBORDINATION RULE
     SUPERIOR OBJECT CLASS
            "Recommendation G.774.02":modifiableTug2Bidirectional;
     NAMES SUBORDINATES
            "Recommendation G.774":tu11CTPSinkR1,
            "Recommendation G.774":tu11CTPSource,
            "Recommendation G.774":tu11CTPBidirectionalR1,
            "Recommendation G.774":tu12CTPSinkR1,
            "Recommendation G.774":tu12CTPSource,
            "Recommendation G.774":tu12CTPBidirectionalR1,
            "Recommendation G.774":tu2CTPSinkR1,
            "Recommendation G.774":tu2CTPSource,
            "Recommendation G.774":tu2CTPBidirectionalR1;
      ACCORDING TO RULE
           CHOICE {
                       SET SIZE(1) OF CHOICE {
                              "Recommendation G.774":tu2CTPSinkR1,
                              "Recommendation G.774":tu2CTPSource,
                              "Recommendation G.774":tu2CTPBidirectionalR1 },
                       SET SIZE(3) OF CHOICE {
                             tu12CTPSinkR1,
                              "Recommendation G.774":tu12CTPSource,
                              "Recommendation G.774":tu12CTPBidirectionalR1 },
                       SET SIZE(4) OF CHOICE {
                              "Recommendation G.774":tu11CTPSinkR1,
                              "Recommendation G.774":tu11CTPSource,
                              "Recommendation G.774":tu11CTPBidirectionalR1 }
            };
modifiableTug3SinkSubordinationR1 SUBORDINATION RULE
     SUPERIOR OBJECT CLASS
            "Recommendation G.774.02":modifiableTug3Sink;
     NAMES SUBORDINATES
            "Recommendation G.774":tug2Sink,
            "Recommendation G.774.02":modifiableTug2Sink,
            "Recommendation G.774":tu3CTPSinkR1;
```

```
ACCORDING TO RULE
            CHOICE {
                  SET SIZE(1) OF "Recommendation G.774":tu3CTPSinkR1,
                  SET SIZE(7) OF CHOICE {
                        "Recommendation G.774":tug2Sink,
                        "Recommendation G.774.02":modifiableTug2Sink }
            };
tug3BidirectionalSubordinationR1 SUBORDINATION RULE
      SUPERIOR OBJECT CLASS
            "Recommendation G.774":tug3Bidirectional;
      NAMES SUBORDINATES
            "Recommendation G.774":tug2Sink,
            "Recommendation G.774":tug2Source,
            "Recommendation G.774":tug2Bidirectional,
            "Recommendation G.774.02":modifiableTug2Sink,
            "Recommendation G.774.02":modifiableTug2Source,
            "Recommendation G.774.02":modifiableTug2Bidirectional,
            "Recommendation G.774":tu3CTPSinkR1,
            "Recommendation G.774":tu3CTPSource,
            "Recommendation G.774":tu3CTPBidirectionalR1;
      ACCORDING TO RULE
            CHOICE {
                  SET SIZE(1) OF CHOICE {
                        "Recommendation G.774":tu3CTPSinkR1,
                        "Recommendation G.774":tu3CTPSource,
                        "Recommendation G.774":tu3CTPBidirectionalR1 },
                  SET SIZE(7) OF CHOICE {
                        "Recommendation G.774":tug2Sink,
                        "Recommendation G.774":tug2Source,
                        "Recommendation G.774":tug2Bidirectional,
                        "Recommendation G.774.02":modifiableTug2Sink,
                        "Recommendation G.774.02":modifiableTug2Source,
                        "Recommendation G.774.02":modifiableTug2Bidirectional
                  }
            };
modifiable VC3TTPSinkR1Subordination SUBORDINATION RULE
      SUPERIOR OBJECT CLASS
            "Recommendation G.774":modifiable VC3TTPSinkR1;
      NAMES SUBORDINATES
            "Recommendation G.774":tug2Sink,
            "Recommendation G.774.02":modifiableTug2Sink,
            "Recommendation G.774":vcnUserChannelCTPSink;
      ACCORDING TO RULE
            SET {
                  SET SIZE(7) OF CHOICE {
                        "Recommendation G.774":tug2Sink,
                        "Recommendation G.774.02":modifiableTug2Sink },
                  SET SIZE(1) OF
                        "Recommendation G.774":vcnUserChannelCTPSink
            };
vc3TTPSinkR1Subordination SUBORDINATION RULE
      SUPERIOR OBJECT CLASS
```

"Recommendation G.774":vc3TTPSinkR1;

```
NAMES SUBORDINATES
            "Recommendation G.774":tug2Sink,
            "Recommendation G.774.02":modifiableTug2Sink,
            "Recommendation G.774":vcnUserChannelCTPSink;
      ACCORDING TO RULE
           SET {
                 SET SIZE(7) OF CHOICE {
                        "Recommendation G.774":tug2Sink,
                       "Recommendation G.774.02":modifiableTug2Sink },
                 SET SIZE(1) OF
                        "Recommendation G.774":vcnUserChannelCTPSink
            };
modifiable VC3TTPSourceR1Subordination SUBORDINATION RULE
      SUPERIOR OBJECT CLASS
            "Recommendation G.774":modifiableVC3TTPSourceR1;
     NAMES SUBORDINATES
            "Recommendation G.774":tug2Source,
            "Recommendation G.774.02":modifiableTug2source,
            "Recommendation G.774":vcnUserChannelCTPSource;
      ACCORDING TO RULE
           SET {
                 SET SIZE(7) OF CHOICE {
                        "Recommendation G.774":tug2Source,
                       "Recommendation G.774.02":modifiableTug2Source },
                 SET SIZE(1) OF
                        "Recommendation G.774":vcnUserChannelCTPSource
            };
vc3TTPSourceR1Subordination SUBORDINATION RULE
     SUPERIOR OBJECT CLASS
            "Recommendation G.774":vc3TTPSourceR1;
     NAMES SUBORDINATES
            "Recommendation G.774":tug2Source,
            "Recommendation G.774.02":modifiableTug2source,
            "Recommendation G.774":vcnUserChannelCTPSource;
      ACCORDING TO RULE
           SET {
                 SET SIZE(7) OF CHOICE {
                       "Recommendation G.774":tug2Source,
                       "Recommendation G.774.02":modifiableTug2Source },
                 SET SIZE(1) OF
                        "Recommendation G.774":vcnUserChannelCTPSource
            };
modifiable VC3TTPBidirectionalR1Subordination SUBORDINATION RULE
     SUPERIOR OBJECT CLASS
            "Recommendation G.774":modifiableVC3TTPBidirectionalR1;
     NAMES SUBORDINATES
            "Recommendation G.774":tug2Bidirectional,
            "Recommendation G.774.02":modifiableTug2Bidirectional,
            "Recommendation G.774":vcnUserChannelCTPSink,
            "Recommendation G.774":vcnUserChannelCTPSource,
            "Recommendation G.774":vcnUserChannelCTPBidirectional;
```

```
ACCORDING TO RULE
           SET {
                  SET SIZE(7) OF CHOICE {
                        "Recommendation G.774":tug2Bidirectional,
                       "Recommendation G.774.02":modifiableTug2Bidirectional },
                 SET SIZE(1) OF CHOICE {
                        "Recommendation G.774":vcnUserChannelCTPSink,
                       "Recommendation G.774":vcnUserChannelCTPSource,
                        "Recommendation G.774":vcnUserChannelCTPBidirectional }
            };
vc3TTPBidirectionalR1Subordination SUBORDINATION RULE
      SUPERIOR OBJECT CLASS
            "Recommendation G.774":vc3TTPBidirectionalR1;
      NAMES SUBORDINATES
            "Recommendation G.774":tug2Bidirectional,
            "Recommendation G.774.02":modifiableTug2Bidirectional,
            "Recommendation G.774":vcnUserChannelCTPSink,
            "Recommendation G.774":vcnUserChannelCTPSource,
            "Recommendation G.774":vcnUserChannelCTPBidirectional;
      ACCORDING TO RULE
            SET {
                 SET SIZE(7) OF CHOICE {
                        "Recommendation G.774":tug2Bidirectional,
                       "Recommendation G.774.02":modifiableTug2Bidirectional },
                 SET SIZE(1) OF CHOICE {
                        "Recommendation G.774":vcnUserChannelCTPSink,
                       "Recommendation G.774":vcnUserChannelCTPSource,
                       "Recommendation G.774":vcnUserChannelCTPBidirectional }
            };
modifiableVC4TTPSinkR1Subordination SUBORDINATION RULE
      SUPERIOR OBJECT CLASS
            "Recommendation G.774":modifiableVC4TTPSinkR1;
     NAMES SUBORDINATES
            "Recommendation G.774":tug3Sink,
            "Recommendation G.774.02":modifiableTug3Sink,
            "Recommendation G.774":vcnUserChannelCTPSink;
      ACCORDING TO RULE
           SET {
                 SET SIZE(3) OF CHOICE {
                        "Recommendation G.774":tug3Sink,
                        "Recommendation G.774.02":modifiableTug3Sink },
                 SET SIZE(1) OF
                        "Recommendation G.774":vcnUserChannelCTPSink
            };
vc4TTPSinkR1Subordination SUBORDINATION RULE
     SUPERIOR OBJECT CLASS
            "Recommendation G.774":vc4TTPSinkR1;
     NAMES SUBORDINATES
            "Recommendation G.774":tug3Sink,
            "Recommendation G.774.02":modifiableTug3Sink,
            "Recommendation G.774":vcnUserChannelCTPSink;
```

```
ACCORDING TO RULE
            SET {
                  SET SIZE(3) OF CHOICE {
                        "Recommendation G.774":tug3Sink,
                       "Recommendation G.774.02":modifiableTug3Sink },
                 SET SIZE(1) OF
                       "Recommendation G.774":vcnUserChannelCTPSink
            };
modifiable VC4TTPSourceR1Subordination SUBORDINATION RULE
     SUPERIOR OBJECT CLASS
            "Recommendation G.774":modifiable VC4TTPSourceR1;
     NAMES SUBORDINATES
            "Recommendation G.774":tug3Source,
            "Recommendation G.774.02":modifiableTug3source,
            "Recommendation G.774":vcnUserChannelCTPSource;
      ACCORDING TO RULE
           SET {
                 SET SIZE(3) OF CHOICE {
                       "Recommendation G.774":tug3Source,
                       "Recommendation G.774.02":modifiableTug3Source },
                 SET SIZE(1) OF
                        "Recommendation G.774":vcnUserChannelCTPSource
            };
vc4TTPSourceR1Subordination SUBORDINATION RULE
     SUPERIOR OBJECT CLASS
            "Recommendation G.774":vc4TTPSourceR1;
     NAMES SUBORDINATES
            "Recommendation G.774":tug3Source,
            "Recommendation G.774.02":modifiableTug3source,
            "Recommendation G.774":vcnUserChannelCTPSource;
      ACCORDING TO RULE
           SET {
                 SET SIZE(3) OF CHOICE {
                       "Recommendation G.774":tug3Source,
                       "Recommendation G.774.02":modifiableTug3Source },
                 SET SIZE(1) OF
                        "Recommendation G.774":vcnUserChannelCTPSource
            };
modifiable VC4TTPBidirectionalR1Subordination SUBORDINATION RULE
     SUPERIOR OBJECT CLASS
            "Recommendation G.774":modifiableVC4TTPBidirectionalR1;
     NAMES SUBORDINATES
            "Recommendation G.774":tug3Bidirectional,
            "Recommendation G.774.02":modifiableTug3Bidirectional,
            "Recommendation G.774":vcnUserChannelCTPSink,
            "Recommendation G.774":vcnUserChannelCTPSource,
            "Recommendation G.774":vcnUserChannelCTPBidirectional;
      ACCORDING TO RULE
           SET {
                 SET SIZE(3) OF CHOICE {
                       "Recommendation G.774":tug3Bidirectional,
                        "Recommendation G.774.02":modifiableTug3Bidirectional },
```

```
SET SIZE(1) OF CHOICE {
                        "Recommendation G.774":vcnUserChannelCTPSink,
                        "Recommendation G.774":vcnUserChannelCTPSource,
                        "Recommendation G.774":vcnUserChannelCTPBidirectional }
            };
vc4TTPBidirectionalR1Subordination SUBORDINATION RULE
      SUPERIOR OBJECT CLASS
            "Recommendation G.774":vc4TTPBidirectionalR1;
     NAMES SUBORDINATES
            "Recommendation G.774":tug3Bidirectional,
            "Recommendation G.774.02":modifiableTug3Bidirectional,
            "Recommendation G.774":vcnUserChannelCTPSink,
            "Recommendation G.774":vcnUserChannelCTPSource,
            "Recommendation G.774":vcnUserChannelCTPBidirectional;
      ACCORDING TO RULE
            SET {
                  SET SIZE(3) OF CHOICE {
                        "Recommendation G.774":tug3Bidirectional,
                        "Recommendation G.774.02":modifiableTug3Bidirectional },
                  SET SIZE(1) OF CHOICE {
                        "Recommendation G.774":vcnUserChannelCTPSink,
                        "Recommendation G.774":vcnUserChannelCTPSource,
                        "Recommendation G.774":vcnUserChannelCTPBidirectional }
            };
```

## 15 Supporting ASN.1 Productions

No revisions are required.

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