

INTERNATIONAL TELECOMMUNICATION UNION





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

Digital terminal equipments – Principal characteristics of multiplexing equipment for the synchronous digital hierarchy

Characteristics of synchronous digital hierarchy (SDH) equipment functional blocks

Corrigendum 1

ITU-T Recommendation G.783 (2004) - Corrigendum 1

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# **ITU-T Recommendation G.783**

# Characteristics of synchronous digital hierarchy (SDH) equipment functional blocks

# **Corrigendum 1**

#### Summary

This corrigendum contains editorial and technical corrections, to the fourth revision (02/2004) of ITU-T Rec. G.783.

## Source

Corrigendum 1 to ITU-T Recommendation G.783 (2004) was approved on 13 June 2004 by ITU-T Study Group 15 (2001-2004) under the ITU-T Recommendation A.8 procedure.

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# **ITU-T Recommendation G.783**

# Characteristics of synchronous digital hierarchy (SDH) equipment functional blocks

# **Corrigendum 1**

## 1) Subclause 3.2

#### Replace the paragraph:

The signal on the protection SNC/trail may either be one of the normal traffic signals, an extra traffic signal, or the null signal (e.g., an all-ONEs signal, a test signal, one of the normal traffic signals). At the source end, one of these signals is connected to the protection SNC/trail. At the sink end, the signals from the working SNCs/trails are selected as the normal signals. When a defect condition is detected on a working SNC/trail or under the influence of certain external commands, the transported signal is bridged to the protection SNC/trail. At the sink end, the signal from this protection SNC/trail is then selected instead.

With:

The signal on the protection SNC/trail may either be one of the normal traffic signals, an extra traffic signal, or the null signal (e.g., an all-ONEs signal, a test signal, one of the normal traffic signals). At the source end, one of these signals is connected to the protection SNC/trail. At the sink end, the signals from the working SNCs/trails are selected as the normal <u>traffic signals</u>. When a defect condition is detected on a working SNC/trail or under the influence of certain external commands, the transported signal is bridged to the protection SNC/trail. At the sink end, the signal from this protection SNC/trail is then selected instead.

## 2) Subclause 3.4

Remove this subclause (which contains the definition of the term APId).

#### 3) Subclause 3.33

*Replace this subclause:* 

**3.33** extra traffic signal: See ITU-T Rec. G.841.

With:

**3.33** extra traffic-signal: See ITU-T Rec. G.841.

## 4) Subclause 3.51

Replace this subclause:

**3.51** normal signal: See ITU-T Rec. G.841.

With:

## **3.51** normal signal traffic: See ITU-T Rec. G.841.

## 5) Subclause 3.58

Replace this subclause:

#### **3.58** protection trail/path/section/SNC/NC: See ITU-T Rec. G.841.

With:

# **3.58** protection trail/path/section/SNC/NC: <u>A trail/path/section/SNC/NC that acts as a protection channel. See ITU-T Rec. G.841 for the definition of protection channels.</u>

# 6) Subclause 3.72

Remove this subclause (which contains the definition of the term standby trail/path/section/SNC).

# 7) Subclauses 3.84 and 3.88

Remove these subclauses (which contain the definition of the terms TTI, unprotected).

# 8) Subclause 3.90

Replace this subclause:

# **3.90** working trail/path/section/SNC/NC: See ITU-T Rec. G.841.

With:

**3.90** working trail/path/section/SNC/NC: <u>A trail/path/section/SNC/NC that acts as a working channel. See ITU-T Rec. G.841 for the definition of working channels.</u>

# 9) Subclauses 3.92 and 3.93

*Remove these subclauses (which contain empty entries for the definitions of the terms undefined bit, undefined byte).* 

# 10) Clause 4

*Remove the following entry from the abbreviation list:* 

APId Access Point Identifier

# 11) Subclause 11.4.1

Renumber the currently existing note (on use of MSP in long-delay networks) Note 1, and add the following Note 2:

<u>NOTE 2 – In order to facilitate interworking among equipment with different capabilities, it is recommended that equipment supporting 1:1 architectures also support 1+1 architectures.</u>

# 12) Subclause 11.4.1.1

# *a) Replace the paragraph:*

To prevent frequent operation of the protection switch due to an intermittent failure (e.g., BER fluctuating around the SD threshold), a failed section must become fault-free (i.e., BER less than a restoration threshold). After the failed section meets this criterion, a fixed period of time shall elapse before it is used again by a working channel. This period, called wait-to-restore (WTR) period should be of the order of 5-12 minutes and should be capable of being set. An SF or SD condition shall override the WTR.

With:

To prevent frequent operation of the protection switch due to an intermittent failure (e.g., BER fluctuating around the SD threshold), a failed section must become fault-free (i.e., BER less than a restoration threshold). After the failed section meets this criterion, a fixed period of time shall elapse before it is used again by a working channel. This period, called wait-to-restore (WTR)

period should be of the order in the range of 51-12 minutes and should be capable of being set. An SF or SD condition shall override the WTR.

# *b) Replace the paragraph:*

Where neither an extra traffic nor a normal signal input is to be connected to the protection section output then either an all-ONEs, an Sn unequipped, a working signal input, or other suitable test signal will be connected to the protection section output.

With:

Where neither an extra traffic nor a normal <u>traffic</u> signal input is to be connected to the protection section output then either an all-ONEs, an Sn unequipped, a working signal input, or other suitable test signal will be connected to the protection section output.

# 13) Subclauses 12.1.1.1 and 13.1.1.1

# Replace the paragraph:

To prevent frequent operation of the protection switch due to an intermittent fault, a failed (sub)network connection must become fault-free. After the failed (sub)network connection meets this criterion, a fixed period of time shall elapse before it is used again by a working channel. This period, called wait-to-restore (WTR) period should be of the order of 5-12 minutes and should be capable of being set. An SSF, TSF or TSD condition shall override the WTR.

With:

To prevent frequent operation of the protection switch due to an intermittent fault, a failed (sub)network connection must become fault-free. After the failed (sub)network connection meets this criterion, a fixed period of time shall elapse before it is used again by a working channel. This period, called wait-to-restore (WTR) period should be of the orderin the range of 51-12 minutes and should be capable of being set. An SSF, TSF or TSD condition shall override the WTR.

# 14) Subclause 13.5.1.1

Replace the contiguous paragraphs:

For S11\_Xv 1  $\leq$  X  $\leq$  64, S12\_Xv 1  $\leq$  X  $\leq$  63, S2\_Xv 1  $\leq$  X  $\leq$  21 when mapped in a VC-4.

NOTE – Even though 84 VC-11s can be multiplexed into a VC-4, the number of VC-11s that can be virtually concatenated is limited to 64 by the 6-bit sequence number.

For S11\_Xv 1  $\leq$  X  $\leq$  28, S12\_Xv 1  $\leq$  X  $\leq$  21, S2\_Xv 1  $\leq$  X  $\leq$  7 when mapped in a higher-order VC-3.

With:

For S11 Xv 1  $\leq$  X  $\leq$  64, S12 Xv 1  $\leq$  X  $\leq$  6364, S2 Xv 1  $\leq$  X  $\leq$  21-64. when mapped in a VC-4.

NOTE Even though 84 VC-11s can be multiplexed into a VC-4, the number of VC-11s that can be virtually concatenated is limited to 64 by the 6-bit sequence number.

For S11\_Xv 1  $\leq$  X  $\leq$  28, S12\_Xv 1  $\leq$  X  $\leq$  21, S2\_Xv 1  $\leq$  X  $\leq$  7 when mapped in a higher-order VC-3.

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