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ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

G.997.1

Amendment 7
(12/2017)

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

Digital sections and digital line system – Metallic access
networks

Physical layer management for digital subscriber
line transceivers

Amendment 7

CAUTION !

PREPUBLISHED RECOMMENDATION

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Amendment 7 to Recommendation ITU-T G.997.1 (2012)

Physical layer management for digital subscriber line transceivers: Amendment 7

Summary

Amendment 7 to Recommendation ITU-T G.997.1 (2012) includes:

- Management parameters for the support of G.993.5 Annex B (Vectored Long Reach VDSL) and G.993.2 Annex D (Unvectored Long Reach VDSL)
- Management parameters for the support of G.993.5 Annex A (Mitigating strong FEXT)
- Add missing parameter INM_INPEQ_FORMAT for the support of INM in G.993.2.

Amendment 7 to Recommendation ITU-T G.997.1 (2012)

Physical layer management for digital subscriber line transceivers: Amendment 7

1) Management parameters for the support of G.993.5 Annex B (Vectored Long Reach VDSL) and G.993.2 Annex D (Unvectored Long Reach VDSL)

Add definition in section 3 :

3.16 VDSL2-LR mode : VDSL2-LR mode refers to operation according to G.993.2 Annex D or G.993.5 Annex B.

Add section 7.3.1.16

7.3.1.16 VDSL2-LR configuration parameter

7.3.1.16.1 VDSL2-LR ~~mode enable~~ (VDSL2-LR ~~MODEENABLE~~)

This parameter specifies ~~if the~~which VDSL2-LR ~~mode is disabled, enabled, or forced to switch to the long loop operation~~operation types are allowed. The parameter ~~can take three values: 0 (disabled), 1 (enabled) and 2 (forced to long loop operation)~~is encoded as a bitmap representation (0 is not allowed, 1 is allowed):

Bit 0: short loop operation type.

Bit 1: medium loop operation type.

Bit 2: long loop operation type.

If no operation type is allowed, the VDSL2-LR mode is disabled. If at least one operation type is allowed, the VDSL2-LR mode is enabled.

For detailed specification of this parameter see G.993.5/B.10.1.1.

Add section 7.5.1.44

7.5.1.44 Line status parameter for VDSL2-LR

7.5.1.44.1 VDSL2-LR ~~actual mode~~actual operation type (VDSL2-LR ~~ACTMODE~~ACTOPTYPE)

This parameter reports the actual ~~mode~~operation type of VDSL2-LR.

If VDSL2-LR_~~ACTMODE~~ACTOPTYPE equals 0, the line ~~is not initialized in the VDSL2-LR operation over long loop~~does not operate in VDSL2-LR mode.

If VDSL2-LR_~~ACTMODE~~ACTOPTYPE equals 1, the line ~~is initialized in the VDSL2-LR operation over medium loop~~operates according to the short loop operation type of VDSL2-LR.

If VDSL2-LR_~~ACTMODE~~ACTOPTYPE equals 2, the line ~~is initialized in the VDSL2-LR operation over long loop~~operates according to the medium loop operation type of VDSL2-LR.

If VDSL2-LR_~~ACTMODE~~ACTOPTYPEequals 3, the line is initialized in the VDSL2-LR operation over long loopoperates according to the long loop operation type of VDSL2-LR.

For detailed specification of this parameter see G.993.5/B.10.2.1.