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ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
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G.998.4

Corrigendum 1
(11/2010)

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

Digital sections and digital line system – Access networks

Improved impulse noise protection for DSL
transceivers

**Corrigendum 1: Clarification of the definition of
actual INP**

CAUTION !

PREPUBLISHED RECOMMENDATION

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Corrigendum 1 to Recommendation ITU-T G.998.4 (06/2010)

Improved impulse noise protection for DSL transceivers

Corrigendum 1: Clarification of the definition of actual INP

Summary

Corrigendum 1 to Recommendation ITU-T G.998.4 (06/2010) clarifies clauses 11.2.3 and 11.2.4 concerning the definition of actual INP.

Corrigendum 1 to Recommendation ITU-T G.998.4 (06/2010)

Improved impulse noise protection for DSL transceivers Corrigendum 1: Clarification of the definition of actual INP

1) Revise clauses 11.2.3 and 11.2.4 as follows:

11.2.3 Actual INP against SHINE (*INP_act_SHINE*)

The test parameter *INP_act_SHINE* is defined as the actual INP against SHINE of the latency path with retransmission under following specific conditions:

- Assuming impulse noise protection against REIN equal to *INPmin_rein*
- Assuming $EFTR \geq ETR$

NOTE – If the reference transmit state machine is used by the transmitter (§8.6.4), the actual INP against SHINE of the latency path with retransmission is the greatest value of *INP_min* that is compatible with the constraints defined in §9.5.1 or §9.5.2 and the above specific conditions.

It shall be calculated by the transmitter during initialization and updated upon OLR.

The test parameter *INP_act_SHINE* shall be represented as a 16-bit unsigned integer expressing the value in fractions of DMT symbols with a granularity of 0.1 symbols.

The valid range is from 0 to 204.6. The special value 204.7 indicates a value of 204.7 or higher.

NOTE – The linear format is chosen for simplicity reason and does not imply any future accuracy requirements.

The test parameter *INP_act_SHINE* shall be mapped on the reporting parameter ACTINP. The downstream and upstream values shall be reported in the CO-MIB.

11.2.4 Actual INP against REIN (*INP_act_REIN*)

The test parameter *INP_act_REIN* is defined as the minimum of

1) the actual INP against REIN of the latency path with retransmission under the following specific conditions :

- Assuming impulse noise protection against SHINE equal to *INP_min_SHINE*,
- Assuming $EFTR \geq ETR$; and

NOTE – If the reference transmit state machine is used by the transmitter (§8.6.4), the actual INP against REIN of the latency path with retransmission is the greatest value of *INP_min_rein* that is compatible with the constraints defined in §9.5.1 or §9.5.2 and the above specific conditions.

2) the actual INP in the latency path carrying the overhead channel.

It shall be calculated by the transmitter during initialization and updated upon OLR.

The test parameter *INP_act_REIN* shall be represented as a 8 bit unsigned integer expressing the value is coded in fractions of DMT symbols with a granularity of 0.1 symbols.

The range is from 0 to 25.4. The special value 25.5 indicates a value of 25.5 or higher.

NOTE – The linear format is chosen for simplicity reason and does not imply any future accuracy requirements.

The test parameter *INP_act_REIN* shall be mapped on the reporting parameter ACTINP_REIN. The downstream and upstream values shall be reported in the CO-MIB.