

ETSI TS 103 388 V1.1.1 (2008-05)

Technical Specification

Transmission and Multiplexing (TM); Access transmission systems on metallic access cables; Asymmetric Digital Subscriber Line (ADSL2) - European specific requirements

[ITU-T Recommendation G.992.3 modified]



Reference

DTS/ATTM-06008-1

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Access, Terminals, Transmission and Multiplexing (ATTM).

1 Scope

The present document specifies European requirements for ADSL2.

The present document endorses ITU-T Recommendation G.992.3 [1] and amendments 1 [2], 2 [3] and 3 [4], the contents of which apply together with the addition of the modifications being covered herein, to the exclusion of annex C in ITU-T Recommendation G.992.3 [1]. In particular the aspects covered by the present document are related to:

- 1) Define INP values as mandatory.
- 2) Define European specific tests.
- 3) Define mandatory S&D values.

2 References

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2.1 Normative references

The following referenced documents are indispensable for the application of the present document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

- | | |
|-----|---|
| [1] | ITU-T Recommendation G.992.3 (01/05): "Asymmetric digital subscriber line (ADSL) transceivers (ADSL2)". |
| [2] | ITU-T Recommendation G.992.3 (09/05) Amendment 1: "Asymmetric digital subscriber line (ADSL) transceivers". |
| [3] | ITU-T Recommendation G.992.3 (03/06) Amendment 2: "Asymmetric digital subscriber line (ADSL) transceivers". |
| [4] | ITU-T Recommendation G.992.3 (02/07) Amendment 3: "Asymmetric digital subscriber line (ADSL) transceivers". |

- [5] DSL Forum, TR-100 (2007): "ADSL2/ADSL2plus Performance test plan".
- [6] ETSI TS 101 388 (V1.4.1): "Access Terminals Transmission and Multiplexing (ATTM); Access transmission systems on metallic access cables; Asymmetric Digital Subscriber Line (ADSL) - European specific requirements [ITU-T Recommendation G.992.1 modified]".

2.2 Informative references

The following referenced documents are not essential to the use of the present document but they assist the user with regard to a particular subject area. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Not applicable.

3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

DSL	Digital Subscriber Line
INP	Impulse Noise Protection
REIN	Repetitive Electrical Impulse Noise

4 Test methods

All test methods shall be as defined in TS 101 388 [6], and DSL Forum Technical report TR-100 [5], as required by test definitions in clause 5.

5 Other specific requirements

5.1 European specific tests

This clause contains European specific tests. Other performance requirements are for further study.

5.1.1 Repetitive Electrical Impulse Noise (REIN) test

The test method shall be identical to the section 7.2.2 of DSL Forum TR-100 [5].

5.2 Framing related requirements

This clause contains European specific requirements related to framing parameter and framing parameter control.

5.2.1 Requirements for INP

The mandatory values for Impulse Noise Protection (INP) for upstream and downstream transmission in European ADSL2 transmission systems are 0, ½, 1, 2, 4, 8 and 16.

The choice of values for INP_min and Delay_max can dramatically affect the resulting net data rate of the transmission system. This is illustrated in tables K.3a/G.992.3 and K.3b/G.992.3 of ITU-T Recommendation G.992.3 [1] for upstream and downstream transmission.

5.2.2 Requirements for S&D framing parameters

The mandatory downstream framing control parameter support for the mandatory latency path 0 is extended as follows (extension of table 7-9/G.992.3 of ITU-T Recommendation G.992.3 amendment 1 [2]). The values in the table shall be supported in the transmitter and receiver.

Table 1: Mandatory downstream control parameter support for latency path #0

Parameter	Capability
D_0	1, 2, 4, 8, 16, 32, 64, 96, 128, 160, 192, 224, 256, 288, 320. Support of the mandatory D_0 values above 64 shall be indicated during initialization, through individual indication with 1 bit per value. Support of additional optional D_0 values is indicated during initialization. All indicated values of D_0 shall be supported.
S_0	$1/11 \leq S_0 < 64$. Support of these mandatory S_0 values shall be indicated during initialization, through $S_{0 \min}$, with $S_{0 \min} \leq 1/11$. Support of additional optional S_0 values is indicated during initialization, through $S_{0 \min}$, with $1/16 \leq S_{0 \min} < 1/11$. All values of S_0 , with $S_{0 \min} \leq S_0 \leq 1/11$, shall be supported.

History

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