

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
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G.997.1

Corrigendum 1
(11/2009)

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

Digital sections and digital line system – Access networks

Physical layer management for digital subscriber
line (DSL) transceivers

Corrigendum 1

Recommendation ITU-T G.997.1 (2009) –
Corrigendum 1

ITU-T G-SERIES RECOMMENDATIONS

TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS

INTERNATIONAL TELEPHONE CONNECTIONS AND CIRCUITS	G.100–G.199
GENERAL CHARACTERISTICS COMMON TO ALL ANALOGUE CARRIER-TRANSMISSION SYSTEMS	G.200–G.299
INDIVIDUAL CHARACTERISTICS OF INTERNATIONAL CARRIER TELEPHONE SYSTEMS ON METALLIC LINES	G.300–G.399
GENERAL CHARACTERISTICS OF INTERNATIONAL CARRIER TELEPHONE SYSTEMS ON RADIO-RELAY OR SATELLITE LINKS AND INTERCONNECTION WITH METALLIC LINES	G.400–G.449
COORDINATION OF RADIOTELEPHONY AND LINE TELEPHONY	G.450–G.499
TRANSMISSION MEDIA AND OPTICAL SYSTEMS CHARACTERISTICS	G.600–G.699
DIGITAL TERMINAL EQUIPMENTS	G.700–G.799
DIGITAL NETWORKS	G.800–G.899
DIGITAL SECTIONS AND DIGITAL LINE SYSTEM	G.900–G.999
General	G.900–G.909
Parameters for optical fibre cable systems	G.910–G.919
Digital sections at hierarchical bit rates based on a bit rate of 2048 kbit/s	G.920–G.929
Digital line transmission systems on cable at non-hierarchical bit rates	G.930–G.939
Digital line systems provided by FDM transmission bearers	G.940–G.949
Digital line systems	G.950–G.959
Digital section and digital transmission systems for customer access to ISDN	G.960–G.969
Optical fibre submarine cable systems	G.970–G.979
Optical line systems for local and access networks	G.980–G.989
Access networks	G.990–G.999
MULTIMEDIA QUALITY OF SERVICE AND PERFORMANCE – GENERIC AND USER-RELATED ASPECTS	G.1000–G.1999
TRANSMISSION MEDIA CHARACTERISTICS	G.6000–G.6999
DATA OVER TRANSPORT – GENERIC ASPECTS	G.7000–G.7999
PACKET OVER TRANSPORT ASPECTS	G.8000–G.8999
ACCESS NETWORKS	G.9000–G.9999

For further details, please refer to the list of ITU-T Recommendations.

Recommendation ITU-T G.997.1

Physical layer management for digital subscriber line (DSL) transceivers

Corrigendum 1

Summary

Corrigendum 1 to Recommendation ITU-T G.997.1 contains a correction to the definition of LATN and SATN to line them up with the relevant xDSL Recommendation.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T G.997.1	1999-07-02	15
2.0	ITU-T G.997.1	2003-05-22	15
2.1	ITU-T G.997.1 (2003) Amend. 1	2003-12-14	15
2.2	ITU-T G.997.1 (2003) Amend. 2	2005-01-13	15
3.0	ITU-T G.997.1	2005-09-06	15
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4.1	ITU-T G.997.1 (2006) Cor. 1	2006-12-14	15
4.2	ITU-T G.997.1 (2006) Amend. 1	2006-12-14	15
4.3	ITU-T G.997.1 (2006) Amend. 2	2007-11-22	15
4.4	ITU-T G.997.1 (2006) Amend. 3	2008-08-22	15
5.0	ITU-T G.997.1	2009-04-22	15
5.1	ITU-T G.997.1 (2009) Cor. 1	2009-11-13	15

FOREWORD

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The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 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.

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Recommendation ITU-T G.997.1

Physical layer management for digital subscriber line (DSL) transceivers

Corrigendum 1

1) Definition of SATN and LATN

Modify clauses 7.5.1.9, 7.5.1.10, 7.5.1.11 and 7.5.1.12 as follows:

7.5.1.9 Downstream line attenuation per band (LATNds)

This parameter is defined per usable band. It is the squared magnitude of the channel characteristics function $H(f)$ measured difference in the total power transmitted in this band by the xTU-C and the total power received in this band by the xTU-R over all subcarriers averaged over of this band, and measured during loop diagnostic mode and initialization. The exact definition is included in the relevant xDSL ITU-T Recommendation. The downstream line attenuation ranges per band from 0 to +127 dB with 0.1 dB steps. A special value indicates the line attenuation per band is out of range to be represented.

For ADSL systems, a single parameter is defined as a single downstream band is usable.

7.5.1.10 Upstream line attenuation per band (LATNus)

This parameter is defined per usable band. It is the squared magnitude of the channel characteristics function $H(f)$ measured difference in dB in the total power transmitted in this band by the xTU-R and the total power received in this band by the xTU-C over all subcarriers of averaged over this band and measured during loop diagnostic mode and initialization. The exact definition is included in the relevant xDSL ITU-T Recommendation. The upstream line attenuation ranges per band from 0 to +127 dB with 0.1 dB steps. A special value indicates the line attenuation per band is out of range to be represented.

For ADSL systems, a single parameter is defined as a single upstream band is usable.

7.5.1.11 Downstream signal attenuation per band (SATNds)

This parameter is defined per usable band. It is the measured difference in the total power transmitted in this band by the xTU-C and the total power received in this band by the xTU-R ~~over all subcarriers of~~ in this band during loop diagnostic mode, initialization and showtime. The exact definition is included in the relevant DSL ITU-T Recommendation. The downstream signal attenuation per band ranges from 0 to +127 dB with 0.1 dB steps. A special value indicates the signal attenuation per band is out of range to be represented.

For ADSL systems, a single parameter is defined as a single downstream band is usable.

NOTE – During showtime, only a subset of the subcarriers may be transmitted by the xTU-C, as compared to loop diagnostic mode and initialization. Therefore, the downstream signal attenuation value during showtime may be significantly lower than the downstream Line-signal attenuation value during loop diagnostic mode and initialization.

7.5.1.12 Upstream signal attenuation per band (SATNus)

This parameter is defined per usable band. It is the measured difference in dB in the total power transmitted in this band by the xTU-R and the total power received in this band by the xTU-C ~~over all subcarriers of~~ in this band during loop diagnostic mode, initialization and showtime. The exact definition is included in the relevant DSL ITU-T Recommendation. The upstream signal attenuation per band ranges from 0 to +127 dB with 0.1 dB steps. A special value indicates the signal attenuation per band is out of range to be represented.

For ADSL systems, a single parameter is defined as a single upstream band is usable.

NOTE – During showtime, only a subset of the subcarriers may be transmitted by the xTU-R, as compared to loop diagnostic mode and initialization. Therefore, the upstream signal attenuation value during showtime may be significantly lower than the upstream ~~Line-signal~~ attenuation value during loop diagnostic mode and initialization.

SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of ITU-T
Series D	General tariff principles
Series E	Overall network operation, telephone service, service operation and human factors
Series F	Non-telephone telecommunication services
Series G	Transmission systems and media, digital systems and networks
Series H	Audiovisual and multimedia systems
Series I	Integrated services digital network
Series J	Cable networks and transmission of television, sound programme and other multimedia signals
Series K	Protection against interference
Series L	Construction, installation and protection of cables and other elements of outside plant
Series M	Telecommunication management, including TMN and network maintenance
Series N	Maintenance: international sound programme and television transmission circuits
Series O	Specifications of measuring equipment
Series P	Terminals and subjective and objective assessment methods
Series Q	Switching and signalling
Series R	Telegraph transmission
Series S	Telegraph services terminal equipment
Series T	Terminals for telematic services
Series U	Telegraph switching
Series V	Data communication over the telephone network
Series X	Data networks, open system communications and security
Series Y	Global information infrastructure, Internet protocol aspects and next-generation networks
Series Z	Languages and general software aspects for telecommunication systems