International Telecommunication Union

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

G.998.4

Corrigendum 2

(04/2011)

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 2

Recommendation ITU-T G.998.4 (2010) – Corrigendum 2

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Recommendation ITU-T G.998.4

Improved impulse noise protection for DSL transceivers

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Summary

Corrigendum 2 to Recommendation ITU-T G.998.4 (2010) fixes a minor issue pertaining to the retransmission return channel (RRC).

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T G.998.4	2010-06-11	15
1.1	ITU-T G.998.4 (2010) Cor. 1	2010-11-29	15
1.2	ITU-T G.998.4 (2010) Cor. 2	2011-04-13	15

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

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.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

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As of the date of approval of this Recommendation, ITU had received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at http://www.itu.int/ITU-T/ipr/.

Recommendation ITU-T G.998.4

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1) Revise the text in clause 8.4 "Retransmission Return Channel (RRC)" as follows:

8.4 Retransmission Return Channel (RRC)

The retransmission return channel is used to acknowledge the DTUs. It consists in 24 bits multiplexed with the latency paths every data frame. The RRC payload contains three fields:

1) A field of 5 bits, AbsoluteDTUCountLsbs, that contains the LSBs of the absolute number of the last received DTU. The absolute number of a DTU is the count of all DTUs (new or retransmitted, with or without error) received prior to this DTU since entering Showtime. For the first received DTU upon entering Showtime, AbsoluteDTUCountLsbs shall be zero.

2) A field of 2 bits, Nack[k] (k=0,1), that indicates the status of the two last received DTUs. Nack[0] indicates the status of the last received DTU and Nack[1] indicates the status of the penultimate received DTU. Nack[k]=0 if the DTU is acknowledged, otherwise Nack[k]=1.

3) A field of 5 bits, ConsecutiveGoodDTUs, that indicates:
   - if Nack[1]=0, this field indicates the number of DTUs prior to the penultimate received DTU that are acknowledged. If the number is greater than 31, this field shall be set to 31.
   - if Nack[1]=1, this field indicates the number of consecutive DTUs acknowledged, where the consecutive DTUs are counted starting from *lb* (see clause 8.6) DTUs preceding the penultimate received DTU.

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