INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

G.983.4
Corrigendum 1
(01/2005)

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

Digital sections and digital line system – Optical line systems for local and access networks

A broadband optical access system with increased service capability using dynamic bandwidth assignment
Corrigendum 1

ITU-T Recommendation G.983.4 (2001) – 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 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
QUALITY OF SERVICE AND PERFORMANCE - GENERIC AND USER-RELATED ASPECTS	G.1000–G.1999
TRANSMISSION MEDIA CHARACTERISTICS	G.6000–G.6999
DIGITAL TERMINAL EQUIPMENTS	G.7000–G.7999
DIGITAL NETWORKS	G.8000–G.8999

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

ITU-T Recommendation G.983.4

A broadband optical access system with increased service capability using dynamic bandwidth assignment

Corrigendum 1

Summary

This corrigendum to ITU-T Rec. G.983.4 (11/2001) specifies revised code points in a divided slot to report the number of accumulated cells in T-CONT buffer. This corrigendum applies to B-PON with Dynamic Bandwidth Assignment (DBA).

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. 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, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

ITU-T Recommendation G.983.4

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Corrigendum 1

Clause 8.3.5.10.1.3.3, Report field coding and Table 3

Replace the text and table of this clause with the following:

The default minislot format is shown in Figure 16 in 8.3.5.10.1.3.2. The reported 1 byte queue length is the non-linear coded value of the actual number of cells in a T-CONT of a specific ONU/ONT. The mapping between the number of cells (the input), the 1 byte value (the code) and the decoded message (the output) is given in Table 3 as default code points. Note that the decoded output is effectively rounded up to the largest value that could have resulted in that particular code point. This property ensures that the coding error is always positive.

Table 3/G.983.4 – Non-linear coding for report field of minislot

Queue Length	Binary Input (ONU/ONT)	Coding of octet (minislot)	Binary Output (OLT)
0-127	00000000abcdefg	0abcdefg	00000000abcdefg
128-255	00000001abcdefx	10abcdef	00000001abcdef1
256-511	0000001abcdexxx	110abcde	0000001abcde111
512-1023	000001abcdxxxxx	1110abcd	000001abcd11111
1024-2047	00001abcxxxxxxx	11110abc	00001abc1111111
2048-4095	0001abxxxxxxxxx	111110ab	0001ab111111111
4096-8191	001axxxxxxxxxxx	1111110a	001a11111111111
>8191	010000000000000 : 111111111111111	11111110	011111111111111
Invalid	N/A	11111111	N/A

The code point described in Table 3 may be changed according to the service situation and the implementation of OLTs and ONUs/ONTs. However, alternative code points have not been specified in this Recommendation.

NOTE – Invalid code (0xFF) indicates that ONU/ONT cannot report the actual number of cells for the T-CONT. However, in this case, OLT recognizes the arrival of a minislot for the T-CONT. Although the bandwidth update mechanism in this case is beyond the scope of this Recommendation, LOMSi is not generated.

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	Telephone transmission quality, telephone installations, local line networks
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