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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** 

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Corrigendum 1 to ITU-T Recommendation G.983.4

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

### **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 is applied to B-PON with DBA (Dynamic Bandwidth Assignment).

#### In 8.3.5.10.1.3.3 of G.983.4

This sub clause should be replaced into the following text and table.

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.

Queue Length	<b>Binary Input (ONU/ONT)</b>	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	00001abcxxxxxx	11110abc	00001abc1111111
2048-4095	0001abxxxxxxxxx	111110ab	0001ab11111111
4096-8191	001axxxxxxxxxxxx	1111110a	001a1111111111
>8191	0100000000000000	1111110	011111111111111
	:		
	111111111111111		
Invalid	N/A	1111111	N/A

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

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 arrival of minislot for the T-CONT. Although the bandwidth update mechanism in this case is out of this recommendation, LOMSi is not generated.