

# ITU-T

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

## G.992.3

### Corrigendum 2

(06/2011)

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

Digital sections and digital line system – Access networks

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Asymmetric digital subscriber line transceivers 2  
(ADSL2)

**Corrigendum 2**

Recommendation ITU-T G.992.3 (2009) –  
Corrigendum 2

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# Recommendation ITU-T G.992.3

## Asymmetric digital subscriber line transceivers 2 (ADSL2)

### Corrigendum 2

#### Summary

Corrigendum 2 to Recommendation ITU-T G.992.3 (2009) describes the exchange of virtual noise shape in loop diagnostics.

#### History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T G.992.3	2002-07-29	15
1.1	ITU-T G.992.3 (2002) Amend. 1	2003-05-22	15
1.2	ITU-T G.992.3 (2002) Cor. 1	2003-12-14	15
1.3	ITU-T G.992.3 (2002) Cor. 2	2004-02-22	15
1.4	ITU-T G.992.3 (2002) Amend. 2	2004-04-30	15
1.5	ITU-T G.992.3 (2002) Amend. 3	2004-06-13	15
1.6	ITU-T G.992.3 (2002) Amend. 4	2004-06-13	15
2.0	ITU-T G.992.3	2005-01-13	15
2.1	ITU-T G.992.3 (2005) Amend. 1	2005-09-22	15
2.2	ITU-T G.992.3 (2005) Amend. 2	2006-03-29	15
2.3	ITU-T G.992.3 (2005) Amend. 3	2006-12-14	15
2.4	ITU-T G.992.3 (2005) Amend. 4	2007-07-29	15
2.5	ITU-T G.992.3 (2005) Amend. 5	2008-06-22	15
3.0	ITU-T G.992.3	2009-04-22	15
3.1	ITU-T G.992.3 (2009) Cor. 1	2009-11-13	15
3.2	ITU-T G.992.3 (2009) Amend. 1	2010-03-01	15
3.3	ITU-T G.992.3 (2009) Amend. 2	2010-07-29	15
3.4	ITU-T G.992.3 (2009) Amend. 3	2010-11-29	15
3.5	ITU-T G.992.3 (2009) Cor. 2	2011-06-22	15

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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.992.3

### Asymmetric digital subscriber line transceivers 2 (ADSL2)

#### Corrigendum 2

##### 1 The exchange of Virtual Noise shape in Loop Diagnostic (corrigendum)

Add a row to Table 8-20/G.992.3 after the one for "support of downstream virtual noise" as follows:

**Table 8-20/G.992.3 – ATU-C CL message Par(2) PMD bit definitions**

NPar(2) bit	Definition
<u>Support of downstream virtual noise in diagnostics mode</u>	<u>When set to 1, indicates that the ATU-C supports the transmission of the downstream virtual noise parameter in the C-MSG-PCB message during diagnostics mode (see Table 8-44).</u> <u>When set to 0, no indication is given as to whether or not the ATU-C supports the transmission of the downstream virtual noise parameter in the C-MSG-PCB message during diagnostics mode.</u> <u>If this bit is set to 1, then the bit indicating support of downstream virtual noise shall also be set to 1.</u>

Add a row at the end of Table 8-21/G.992.3 as follows:

**Table 8-21/G.992.3 – ATU-C MS message Par(2) PMD bit definitions**

NPar(2) bit	Definition
<u>Support of downstream virtual noise in diagnostics mode</u>	<u>Set to 1 if and only if this bit was set to 1 in both the last previous CL and the last previous CLR message and the diagnostics mode bit is set to 1 in this MS message.</u> <u>When set to 1, indicates that the ATU-C shall transmit the downstream virtual noise parameter in the C-MSG-PCB message during diagnostics mode (see Table 8-44).</u> <u>When set to 0, indicates that the ATU-C shall not transmit the downstream virtual noise parameter in the C-MSG-PCB message during diagnostics mode.</u> <u>NOTE – The behavior of the ATU-R is unspecified if this bit is set to 0 while both the diagnostics mode bit and the support of downstream virtual noise bit are set to 1.</u>

Add a row to Table 8-22/G.992.3 after the one for "support of downstream virtual noise" as follows:

**Table 8-22/G.992.3 – ATU-R CLR message Par(2) PMD bit definitions**

NPar(2) bit	Definition
<u>Support of downstream virtual noise in diagnostics mode</u>	<u>When set to 1, indicates that the ATU-R supports the reception of the downstream virtual noise parameter in the C-MSG-PCB message during diagnostics mode (see Table 8-44).</u> <u>When set to 0, no indication is given as to whether or not the ATU-R supports the reception of the downstream virtual noise parameter in the C-MSG-PCB message during diagnostics mode.</u> <u>If this bit is set to 1, then the bit indicating support of downstream virtual noise shall also be set to 1.</u>

Add a row at the end of Table 8-23/G.992.3 as follows:

**Table 8-23/G.992.3 – ATU-R MS message Par(2) PMD bit definitions**

NPar(2) bit	Definition
<u>Support of downstream virtual noise in diagnostics mode</u>	<p>Set to 1 if and only if this bit was set to 1 in both the last previous CL and the last previous CLR message and the diagnostics mode bit is set to 1 in this MS message. When set to 1, indicates that the ATU-C shall transmit the downstream virtual noise parameter in the C-MSG-PCB message during diagnostics mode (see Table 8-44). When set to 0, indicates that the ATU-C shall not transmit the downstream virtual noise parameter in the C-MSG-PCB message during diagnostics mode (see Table 8-44).</p> <p><u>NOTE – The behavior of the ATU-R is unspecified if this bit is set to 0 while both the diagnostics mode bit and the support of downstream virtual noise bit are set to 1.</u></p>

Modify Table 8-44/G.992.3 in clause 8.15.2.1 as follows:

**Table 8-44/G.992.3 – Bit definition for the C-MSG-PCB message**

Bit index	Parameter	Definition
5 ... 0	<i>C-MIN_PCB_DS</i>	See Table 8-27
11 ... 6	<i>C-MIN_PCB_US</i>	See Table 8-27
13 ... 12	<i>HOOK_STATUS</i>	See Table 8-27
15 ... 14		Reserved, set to 0
<i>NSCus</i> + 15 ... 16	<i>C_BLACKOUT</i>	See Table 8-27
<u><math>24 \times NBPds + 15 + NSCus</math> ... <math>16 + NSCus</math></u>	<u><i>TXREFVNdS</i></u>	<u><i>NBPds</i> breakpoints for downstream virtual noise PSD (24 bits per breakpoint, as defined in clause 8.5.1.1.2) (see NOTE)</u>
<u><math>24 \times NBPds + NSCus + 23</math> ... <math>24 \times NBPds + NSCus + 16</math></u>	Pass/Fail	Success or Failure Cause indication of last previous initialization
<u><math>24 \times NBPds + NSCus + 31</math> ... <math>24 \times NBPds + NSCus + 24</math></u>	Last_TX_State	Last transmitted state of last previous initialization
<p><u>NOTE – This parameter shall be included in the message if and only if the support of downstream virtual noise during diagnostics mode bit is set to 1 in the G.994.1 MS message (see Table 8-21 and Table 8-23). If this parameter is not included in the message, then the bit index for other parameters shall be determined with <math>NBPds = 0</math>.</u></p>		



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