

# **TR-138**

## **Accuracy Tests for Test Parameters**

Issue: 1 Corrigendum 1  
Issue Date: April 2010

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**Issue History**

<b>Issue Number</b>	<b>Issue Date</b>	<b>Issue Editor</b>	<b>Changes</b>
1 Corrigendum 1	April 2010	Frank Van der Putten, Alcatel-Lucent	Corrigenda items for TR-138 Issue 1

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**Executive Summary**

The document contains corrections to TR-138 Issue 1.

## **1 Purpose**

### **1.1 Purpose**

The corrections specified in the following sections apply to TR-138 Issue 1.

## 2 Correction to Table 6-9/TR-138, SNR Method of Procedure for G.992.3 and G.992.5

Update the Expected Result row in Table 6.9/TR-138 as follows

Expected Result	<p>For at least 95% of the downstream sub-carriers where the SNRpsds accuracy requirements apply, i.e.:</p> <ul style="list-style-type: none"> <li>• subcarrier is at least 50 kHz away from the lower and higher passband edges;</li> <li>• BITSpsds_T1 &gt; 0 and BITSpsds_T2 &gt; 0;</li> <li>• Noise_PSDps_UR2_T1 and Noise_PSDps_UR2_T2 &gt; -120 dBm/Hz ;</li> <li>• (SNRpsds_T1-GAINSpds_T1) and (SNRpsds_T2-GAINSpds_T2) &lt; 40 dB,</li> </ul> <p>and where:</p> <ul style="list-style-type: none"> <li>▪ (GAINSpds_T1=GAINSpds_T1') and</li> <li>▪ (GAINSpds_T2=GAINSpds_T2'),</li> </ul> <p>the following requirements SHALL apply:</p> <ol style="list-style-type: none"> <li>1. If the line does not reinitialize over a time period T1 to T2: <math> (SNRpsds\_T2 - GAINSpds\_T2) - (SNRpsds\_T1 - GAINSpds\_T1) - \Delta SNRps\_reference\_ds  \leq 1.3</math> dB (see NOTE 1);</li> <li>2. Statistical sample variance of (SNRpsds-GAINSpds) (all samples taken over a 10-minute time interval, without line re-initialization in this time interval, and under the same loop, noise, temperature and configuration settings) SHALL be <math>\leq 0.5</math> (see NOTE 2).</li> </ol> <p>For at least 95% of the upstream sub-carriers where the SNRpsus accuracy requirements apply, i.e.:</p> <ul style="list-style-type: none"> <li>▪ subcarrier is at least 50 kHz away from the lower and higher passband edges;</li> <li>▪ BITSpsus_T1 &gt; 0 and BITSpsus_T2 &gt; 0;</li> <li>▪ Noise_PSDps_UC2_T1 and Noise_PSDps_UC2_T2 &gt; -100 dBm/Hz;</li> <li>▪ (SNRpsus_T1-GAINSpus_T1) and (SNRpsus_T2-GAINSpus_T2) &lt; 40 dB;</li> </ul> <p>and where:</p> <ul style="list-style-type: none"> <li>▪ (GAINSpus_T1=GAINSpus_T1') and</li> <li>▪ (GAINSpus_T2=GAINSpus_T2'),</li> </ul> <p>the following requirements SHALL apply:</p> <ol style="list-style-type: none"> <li>1. If the line does not reinitialize over a time period T1 to T2: <math> (SNRpsus\_T2 - GAINSpus\_T2) - (SNRpsus\_T1 - GAINSpus\_T1) - \Delta SNRps\_reference\_us  \leq 1.3</math> dB (see NOTE 1);</li> <li>2. Statistical sample variance of (SNRpsus-GAINSpus) (all samples taken over a 10-minute time interval, without line re-initialization in this time interval, and under the same loop, noise, temperature and configuration settings) SHALL be <math>\leq 0.5</math> (see NOTE 2).</li> </ol> <p>NOTE 1 – Includes 0.5 dB to accommodate for test equipment tolerance. NOTE 2 – For each sample of (SNRps-GAINSp), the GAINSp SHALL be recorded</p>
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	before and after the recording of the SNRps. Only if these GAINSpS values are equal, the SNRps-GAINSpS value SHALL be included in the sample variance calculation.
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End of Broadband Forum Technical Report TR-138