



INTERNATIONAL TELECOMMUNICATION UNION

# ITU-T

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

# G.828

**Corrigendum 1**  
(07/2001)

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

Digital networks – Quality and availability targets

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Error performance parameters and objectives for  
international, constant bit-rate synchronous digital  
paths

**Corrigendum 1**

ITU-T Recommendation G.828 – Corrigendum 1

(Formerly CCITT Recommendation)

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## **ITU-T Recommendation G.828**

### **Error performance parameters and objectives for international, constant bit-rate synchronous digital paths**

#### **CORRIGENDUM 1**

#### **Summary**

This corrigendum corrects a defect identified in ITU-T G.828 (2000). Clause 6.1 of ITU-T G.828 is modified to avoid text ambiguities.

#### **Source**

Corrigendum 1 to ITU-T Recommendation G.828 was prepared by ITU-T Study Group 13 (2001-2004) and approved under the WTSA Resolution 1 procedure on 13 July 2001.

## FOREWORD

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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.

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## ITU-T Recommendation G.828

### Error performance parameters and objectives for international, constant bit-rate synchronous digital paths

#### CORRIGENDUM 1

##### 1) Introduction

Clause 6.1 of ITU-T G.828 (2000) contains the following sentences:

"Synchronous digital paths operating at bit rates covered by this Recommendation are carried by transmission systems (digital sections) operating at equal or higher bit rates. Such systems must meet their allocations of the end-to-end objectives for the highest bit-rate paths which are foreseen to be carried. Meeting the allocated objectives for this highest bit-rate path should be sufficient to ensure that all paths through the system are achieving their objective. For example, in SDH, an STM-1 section may carry a VC-4 path and therefore the STM-1 section should be designed such that it will ensure that the objectives as specified in this Recommendation for the bit rate corresponding to a VC-4 path are met."

If this requirement is observed, it would for instance mean that in case of STM-1, the ES objective is met if the ESR does not exceed the appropriate allocation of 0.04. If this STM-1 section carries – perhaps at a later stage – paths operating at lower bit rates, the objectives for such low bit-rate paths may not be met – depending on the error distribution – because the objectives are getting tighter with lower bit rates.

##### 2) Resolved defect

*Replace the second before last paragraph of clause 6.1/G.828 with the following text:*

Digital paths operating at bit rates covered by this Recommendation are carried by transmission systems (digital sections) operating at equal or higher bit rates. Such systems must meet their allocations of the end-to-end objectives for the most demanding paths which are foreseen to be carried. For example, in SDH, an STM-1 section may carry a VC-11/VC-12 path and therefore the STM-1 section should be designed such that it will ensure that the objectives as specified in this Recommendation for the bit rate corresponding to a VC-11/VC-12 path are met. Under the assumption of random error distribution, meeting the allocated objectives in Table 1/G.828 for the highest bit rate should be sufficient to ensure that all paths through the system are achieving their objectives.

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