

I n t e r n a t i o n a l T e l e c o m m u n i c a t i o n U n i o n

**ITU-T**

**G.808.2  
Implementers'  
Guide**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

(9 February 2018)

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

Digital networks – General aspects

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**Implementers' guide for Recommendation ITU-T  
G.808.2 (11/2013)**

## **Summary**

This document is an Implementers' Guide for Recommendation ITU-T G.808.2 (11/2013).

This version contains all updates submitted up to and including those at Study Group 15 Plenary meeting in January 2018.

This document was approved by ITU-T Study Group 15 on 9 February 2018.

**Change log**

9 February 2018      The first version created.

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## **Implementers' guide for Recommendation ITU-T G.808.2**

### **1 Scope**

This guide indicates that the definitions of the terms related to protection switching time intervals should be replaced by references to G.808.

### **2 Introduction**

This implementers' guide is a compilation of reported defects for all versions of the Recommendation ITU-T G.808.2. In this edition of the guide, reported defects identified as of 2018-02 are given for:

Recommendation ITU-T G.808.2 (2013).

The guide must be read in conjunction with Recommendation ITU-T G.808.2 (2013) to serve as an additional source of information for implementers. The changes, clarifications and corrections defined herein are expected to be included in future versions of the affected Recommendations.

### **3 Defect resolution procedure**

Upon discovering technical defects with any components of the texts covered by this implementers' guide, please provide a written description directly to the editors of the affected Recommendation(s) with a copy to the respective Rapporteur (See contacts above on page iii). The template for a defect report is located at the end of this guide. Return contact information should also be supplied so a dialogue can be established to resolve the matter and an appropriate reply to the defect report can be conveyed. This defect resolution process is open to any interested party. Formal membership in the ITU is not required to participate in this process.

### **4 References**

This document refers to the following ITU-T Recommendations:

- ITU-T Recommendation G.808.2 (2013), *Generic protection switching – Ring protection*.
- ITU-T Recommendation G.808 (2016), *Terms and definitions for network protection and restoration*.

### **5 Nomenclature**

In addition to traditional revision marks, the following marks and symbols are used to indicate to the reader how changes to the text of a Recommendation should be applied:

<b>Symbol</b>	<b>Description</b>
<u>[Begin Correction]</u>	Identifies the start of revision marked text based on extractions from the published Recommendations affected by the correction being described.
<u>[End Correction]</u>	Identifies the end of revision marked text based on extractions from the published

	Recommendations affected by the correction being described.
...	Indicates that the portion of the Recommendation between the text appearing before and after this symbol has remained unaffected by the correction being described and has been omitted for brevity.
--- SPECIAL INSTRUCTIONS --- {instructions}	Indicates a set of special editing instructions to be followed.

## 6 Technical and editorial corrections to ITU-T G.808.2

### 6.1 Modification to Clause 13

Clause 13 of ITU-T G.808.2 describes a protection switching temporal model and defines the model parameters. As ITU-T G.808 is amended to include the protection switching temporal model and definitions of its parameters which are not exactly the same as in clause 13 of ITU-T G.808.2, it is required to resolve these inconsistencies between two Recommendations. Since ITU-T G.808 becomes the single normative source for terms in network protection and restoration area, the definitions of the model parameters in clause 13 of ITU-T G.808.2 are replaced by references to ITU-T G.808 as follows:

*[Begin Correction]*

### 13 Protection switching performance

The protection switching temporal model derived from [ITU-T M.495] ~~is illustrated in Figure 13-1 and M~~ model parameters are defined in [ITU-T G.808] ~~as follows.~~

~~*detection time,  $T_1$*~~

~~Time interval between the occurrence of a network impairment and the detection of a signal fail (SF) or signal degrade (SD) triggered by that network impairment.~~

~~*hold-off time,  $T_2$*~~

~~Time interval after the detection of a SF or SD and its confirmation as a condition requiring the protection switching procedure.~~

~~NOTE Recommendation [ITU-T M.495] identifies time  $T_2$  as the "waiting time".~~

~~*protection switching operations time,  $T_3$*~~

~~Time interval between the confirmation of a SF or SD and completion of the processing and transmission of the control signals required to effect protection switching.~~

~~*protection switching transfer time,  $T_4$*~~

~~Time interval between completion of the processing and transmission of the control signals required to effect protection switching and the completion of protection switching operations.~~

~~*recovery time,  $T_5$*~~

~~Time interval between the completion of protection switching operations and the full restoration of protected traffic signal.~~

~~NOTE—This may include the verification of switching operations, re-synchronization of digital transmission, etc.~~

~~**confirmation time,  $T_c$ :**~~

~~—The time from the occurrence of the network impairment to the instant when the triggered SF or SD is confirmed as requiring protection switching operations:  $T_c = T_1 + T_2$ .~~

~~**transfer time,  $T_t$ :**~~

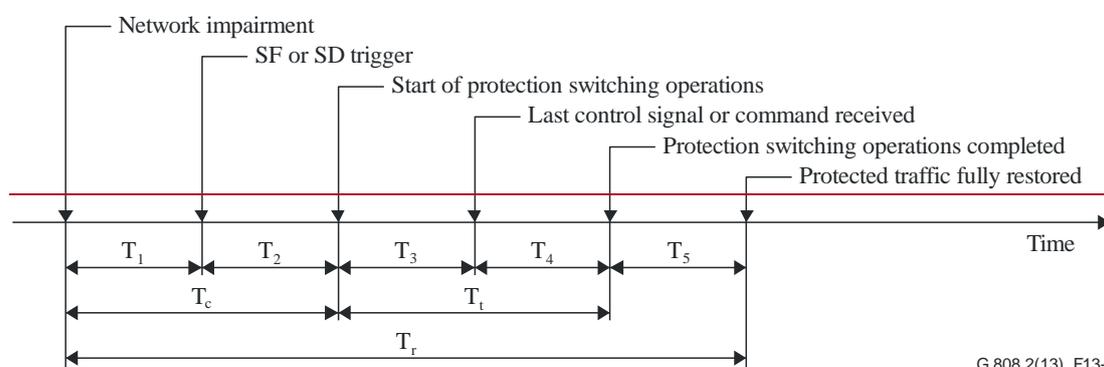
~~—The time interval after the confirmation that a SF or SD requires protection switching operations to the completion of the protection switching operations:  $T_t = T_3 + T_4$ .~~

~~**protected traffic signal restoration time,  $T_r$ :**~~

~~—The time from the occurrence of the network impairment to the restoration of protected traffic signal:~~

~~$T_r = T_1 + T_2 + T_3 + T_4 + T_5 = T_c + T_t + T_5$~~

~~NOTE—An apparent network impairment might be detected by an equipment and not confirmed after confirmation operations. In this case, only times  $T_1$  and  $T_2$  are relevant.~~



G.808.2(13)\_F13-1

**Figure 13-1—Protection switching temporal model**

[End Correction]

**6.2 Modification to Clause 2**

--- Add the following to Clause 2 References ---

[ITU-T G.808] ITU-T Recommendation G.808 (2016), *Terms and definitions for network protection and restoration*.

**6.3 Modification to Clause 3.1**

Clause 10 of ITU-T G.808.2 uses the term “protection switching time” without definition. For clarity, this term is added to clause 3.1.

--- Insert the following subclause to Clause 3.1 in alphabetical order and renumber the subsequent subclauses accordingly ---

**3.1.9 switching time:** [ITU-T G.808].

<b>Annex: ITU-T G.808.2 Defect Report Form</b>
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<b>DATE:</b>	
<b>CONTACT INFORMATION</b> <b>NAME:</b> <b>COMPANY:</b> <b>ADDRESS:</b>  <b>TEL:</b> <b>FAX:</b> <b>E-MAIL:</b>	
<b>AFFECTED RECOMMENDATIONS:</b>	
<b>DESCRIPTION OF PROBLEM:</b>	
<b>SUGGESTIONS FOR RESOLUTION:</b>	

NOTE - Attach additional pages if more space is required than is provided above.

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