

# **TR-249**

## **Testing of G.993.2 Self-FEXT Cancellation (vectoring)**

**Issue: 1 Amendment 1**  
**Issue Date: September 2014**

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**Issue History**

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**Executive Summary**

TR-249 Issue 1 [1] provides a set of performance and functional requirements for vectoring capable VDSL2 implementations according to ITU-T Recommendation G.993.5. This Amendment to TR-249 Issue 1 enhances the performance targets defined in TR-249 Issue 1 (expressed as “SHOULD”) into requirements (expressed as “SHALL”).

## **1 Purpose and Scope**

### **1.1 Purpose**

*See Section 1.1/TR-249 Issue 1.*

### **1.2 Scope**

*See Section 1.2/TR-249 Issue 1.*

## 2 References and Terminology

### 2.1 Conventions

In this Technical Report, several words are used to signify the requirements of the specification. These words are always capitalized. More information can be found in RFC 2119 [2].

<b>SHALL</b>	This word, or the term “REQUIRED”, means that the definition is an absolute requirement of the specification.
<b>SHALL NOT</b>	This phrase means that the definition is an absolute prohibition of the specification.
<b>SHOULD</b>	This word, or the term “RECOMMENDED”, means that there could exist valid reasons in particular circumstances to ignore this item, but the full implications need to be understood and carefully weighed before choosing a different course.
<b>SHOULD NOT</b>	This phrase, or the phrase "NOT RECOMMENDED" means that there could exist valid reasons in particular circumstances when the particular behavior is acceptable or even useful, but the full implications need to be understood and the case carefully weighed before implementing any behavior described with this label.
<b>MAY</b>	This word, or the term “OPTIONAL”, means that this item is one of an allowed set of alternatives. An implementation that does not include this option SHALL be prepared to inter-operate with another implementation that does include the option.

### 2.2 References

The following references are of relevance to this Technical Report. At the time of publication, the editions indicated were valid. All references are subject to revision; users of this Technical Report are therefore encouraged to investigate the possibility of applying the most recent edition of the references listed below.

A list of currently valid Broadband Forum Technical Reports is published at [www.broadband-forum.org](http://www.broadband-forum.org).

See *Section 2.2/TR-249 Issue 1*.

Document	Title	Source	Year
[1] TR-249 Issue 1	<i>Testing of G.993.2 Self-FEXT Cancellation (vectoring)</i>	BBF	2014
[2] RFC 2119	<i>Key words for use in RFCs to Indicate Requirement Levels</i>	IETF	1997

## **2.3 Definitions**

The following terminology is used throughout this Technical Report.

See *Section 2.3/TR-249 Issue 1*.

## **2.4 Abbreviations**

This Technical Report uses the following abbreviations:

See *Section 2.4/TR-249 Issue 1*.

## **2.5 G.997.1 Parameters**

This Technical Report uses the following G.997.1 Parameters:

See *Section 2.5/TR-249 Issue 1*.

### **3 Technical Report Impact**

#### **3.1 Energy Efficiency**

TR-249 has no impact on energy efficiency.

#### **3.2 IPv6**

TR-249 has no impact on IPv6.

#### **3.3 Security**

TR-249 has no impact on security.

#### **3.4 Privacy**

Any issues regarding privacy are not affected by TR-249.

## 4 Changes relative to TR-249 Issue 1

NOTE – Section numbering below refers to sections as numbered in TR-249 Issue 1.

### 8.1.4 Pass/Fail criteria

| For the test to pass, all of the following 6 performance criteria ~~SHOULD~~SHALL be met: ...

### 8.2.4 Pass/Fail criteria

| For the test to pass, the 6 performance criteria defined in section 8.1.4 ~~SHOULD~~SHALL be met, with replacing “N” with “N-Nlegacy”.

### 8.3.4 Pass/Fail criteria

| For the test to pass, the 3 downstream performance criteria defined in section 8.1.4 ~~SHOULD~~SHALL be met over the set of N-Nfriendly vectored lines.

### 8.4.4 Pass/Fail criteria

| For the test to pass, the 6 performance criteria defined in section 8.1.4 ~~SHOULD~~SHALL be met.

### 8.5.4 Pass/Fail criteria

| For the test to pass, the 6 performance criteria defined in section 8.1.4 ~~SHOULD~~SHALL be met.

End of Broadband Forum Technical Report TR-249