

TECHNICAL REPORT

DSL Forum TR-031

ADSL ANSI T1.413-1998 Conformance Testing

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ADSL ANSI T1.413-1998 Conformance Testing

1. Introduction

This document defines tests to verify an ADSL modem U interface conforms to ANSI T1.413-1998. These tests are organized in a hierarchical model beginning with physical media dependent measurements and concluding with ATM Transmission Convergence layer measurements. Section 3 lists electrical conformance tests for ANSI T1.413-1998, while Section 4 details initialization tests for ANSI T1.413-1998, and Section 5 lists tests of the ATM TC layer.

2. Test Format

2.1 Overview

These test proposals have been developed to help vendors evaluate the compatibility of their ADSL products based on initialization procedures. These tests do not determine if a product conforms to an ADSL standard. Rather, they provide one method to isolate initialization problems within an ADSL device. Successful completion of all tests contained within this document does not guarantee complete conformance to the standards or interoperability with other ADSL devices.

Organization of Tests

The test descriptions contained in this document have been structured to simplify the execution of testing, ensuring consistent execution. Each test description contains a series of elements that are of an informational or descriptive nature. Each test contains the following:

Test Number

Specifies the number of the current test and provides a simple global identification system.

Test Label

The label associated with each test follows a hierarchical domain-naming algorithm, with subgroups separated by periods. More specific identifiers are located to the left; higher order identifiers are located to the right. For example, the "Insertion Loss" test is identified by the following label:

insertion_loss.voice_band.dmt.adsl

Purpose

The purpose is a short statement that describes what the test hopes to achieve. The purpose is written at the functional level. For example, the purpose statement for the "Insertion Loss" test is:

To measure and determine if the insertion loss, at 1004Hz, from the source to the termination for each of the test loops shown in figure 1 (at the end of this test) is acceptable according to ANSI T1.413-1998.

References

The reference section lists cross-references to the ADSL standard and other relevant documentation that might be useful in understanding and evaluating the test and its results.

Resource Requirements

The resource requirements section specifies the test equipment that will be needed to perform the test.

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