



ATIS-0300231.2019

Layer 1 In-Service Transmission Performance Monitoring

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American National Standard for Telecommunications

# Layer 1 In-Service Transmission Performance Monitoring

**Alliance for Telecommunications Industry Solutions**

Approved: August 1, 2019

**American National Standards Institute, Inc.**

## **Abstract**

This standard provides performance monitoring (PM) functions and requirements applicable to Layer 1 transmission signals for the covered levels of the North American transmission hierarchy. This standard provides functional requirements to support maintenance and is not meant to be an equipment specification.

## Foreword

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The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. As such, this Foreword may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

The Alliance for Telecommunication Industry Solutions (ATIS) serves the public through improved understanding between providers, customers, and manufacturers. The Telecom Management and Operations Committee (TMOC) develops operations, administration, maintenance and provisioning standards, and other documentation related to Operations Support System (OSS) and Network Element (NE) functions and interfaces for communications networks - with an emphasis on standards development related to U.S.A. communication networks in coordination with the development of international standards.

This standard specifies a basic set of monitoring requirements, and provides criteria common to a set of standards in the ATIS-0300231 series, which define applications for a specific level in the hierarchy. The documents, which are included in the T1.231 series (at the time that this document is approved), are listed below:

- ATIS-0300231, *Layer 1 In-Service Transmission Performance Monitoring*.
- ATIS-0300231.01, *DSL – Layer 1 In-Service Digital Transmission Performance Monitoring*.
- ATIS-0300231.02, *DS1 – Layer 1 In-Service Digital Transmission Performance Monitoring*.
- ATIS-0300231.03, *DS3 – Layer 1 In-Service Digital Transmission Performance Monitoring*.
- ATIS-0300231.04, *SONET – Layer 1 In-Service Digital Transmission Performance Monitoring*.

ANSI guidelines specify two categories of requirements: mandatory and recommendation. The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. When both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, TMOC, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time of consensus on this document, TMOC, which was responsible for its development, had the following leadership:

- P. Galarza, TMOC Chair (iconectiv)
- T. Barrett, Technical Editor (AT&T)

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