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Integrated Services Digital Network (ISDN) Management – Basic Rate Physical Layer

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American National Standard for Telecommunications

Integrated Services Digital Network (ISDN) Management – Basic Rate Physical Layer

Alliance for Telecommunications Industry Solutions

Approved April 8, 2013

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Abstract

The purpose of this standard is to establish required capabilities for the maintenance and operations needed for the basic rate physical layer associated with access to Integrated Services Digital Networks (ISDNs). This standard establishes needed maintenance functionality in customer and network equipment, particularly from the perspectives of maintenance functionality available at the network boundary and from Operations Systems.

Foreword

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.

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*. Where 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:

T. Barrett, TMOC Chair (AT&T)
L. Garbanati, TMOC Vice- Chair (AT&T)
L. Garbanati, Technical Editor
C. Underkoffler, ATIS Chief Editor

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1 Purpose, Scope, & Structure

1.1 Purpose

The purpose of this standard is to establish required capabilities for the maintenance and operations needed for the basic rate physical layer associated with access to Integrated Services Digital Networks (ISDNs). This standard establishes needed maintenance functionality in customer and network equipment, particularly from the perspective of maintenance functionality available at the network boundary and from Operations Systems.

1.2 Scope

This document covers maintenance of the Basic Rate Access (BRA) physical layer, which consists of equipment and facilities that exist as part of the Customer Access and the Customer Installation (see Figure 1).

Maintenance of the data link and network layers associated with the basic rate interface is covered in another ISDN management standard.

1.3 Structure

Clause 1 describes the purpose, scope, and structure of this document. Clause 2 lists referenced documents. Clause 3 provides definitions of new terms introduced by this standard. Clause 4 describes BRA models that are used in Clauses 5 and 6 to help describe the required capabilities for maintenance of the Customer Access, and the optional capabilities for maintenance of the Customer Installation. Annex A gives guidance on the use of performance monitoring capabilities from the user point of view. A list of acronyms used in this document is provided in Annex B.

2 Normative References

The following standards and publications contain provisions that, through reference in this text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

ATIS-0300206.2001 (R2011), *Digital Exchanges and PBXs – Digital Circuit Loopback Test Line with N - DS0 Capability.*[1]

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[1] This document is available from the Alliance for Telecommunications Industry Solutions (ATIS), 1200 G Street N.W., Suite 500, Washington, DC 20005. < https://www.atis.org/docstore/default.aspx >