



ATIS-1000619.1992(S2020)

**Integrated Services Digital Network (ISDN) –
Multi-Level Precedence and Preemption (MLPP) Service
Capability**

AMERICAN NATIONAL STANDARD FOR TELECOMMUNICATIONS



As a leading technology and solutions development organization, the Alliance for Telecommunications Industry Solutions (ATIS) brings together the top global ICT companies to advance the industry's most pressing business priorities. ATIS' nearly 200 member companies are currently working to address the All-IP transition, 5G, network functions virtualization, big data analytics, cloud services, device solutions, emergency services, M2M, cyber security, network evolution, quality of service, billing support, operations, and much more. These priorities follow a fast-track development lifecycle — from design and innovation through standards, specifications, requirements, business use cases, software toolkits, open source solutions, and interoperability testing.

ATIS is accredited by the American National Standards Institute (ANSI). The organization is the North American Organizational Partner for the 3rd Generation Partnership Project (3GPP), a founding Partner of the oneM2M global initiative, a member of the International Telecommunication Union (ITU), as well as a member of the Inter-American Telecommunication Commission (CITEL). For more information, visit www.atis.org.

AMERICAN NATIONAL STANDARD

Approval of an American National Standard requires review by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer.

Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made towards their resolution.

The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether it has approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards.

The American National Standards Institute does not develop standards and will in no circumstances give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretations should be addressed to the secretariat or sponsor whose name appears on the title page of this standard.

CAUTION NOTICE: This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken periodically to reaffirm, revise, or withdraw this standard. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute.

Notice of Disclaimer & Limitation of Liability

The information provided in this document is directed solely to professionals who have the appropriate degree of experience to understand and interpret its contents in accordance with generally accepted engineering or other professional standards and applicable regulations. No recommendation as to products or vendors is made or should be implied.

NO REPRESENTATION OR WARRANTY IS MADE THAT THE INFORMATION IS TECHNICALLY ACCURATE OR SUFFICIENT OR CONFORMS TO ANY STATUTE, GOVERNMENTAL RULE OR REGULATION. AND FURTHER, NO REPRESENTATION OR WARRANTY IS MADE OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE, OR AGAINST INFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS. ATIS SHALL NOT BE LIABLE, BEYOND THE AMOUNT OF ANY SUM RECEIVED IN PAYMENT BY ATIS FOR THIS DOCUMENT, AND IN NO EVENT SHALL ATIS BE LIABLE FOR LOST PROFITS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES. ATIS EXPRESSLY ADVISES THAT ANY AND ALL USE OF OR RELIANCE UPON THE INFORMATION PROVIDED IN THIS DOCUMENT IS AT THE RISK OF THE USER.

NOTE - The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights. By publication of this standard, no position is taken with respect to whether use of an invention covered by patent rights will be required, and if any such use is required no position is taken regarding the validity of this claim or any patent rights in connection therewith. Please refer to [<http://www.atis.org/legal/patentinfo.asp>] to determine if any statement has been filed by a patent holder indicating a willingness to grant a license either without compensation or on reasonable and non-discriminatory terms and conditions to applicants desiring to obtain a license.

ATIS-1000619.1992(S2020), *Integrated Services Digital Network (ISDN) – Multi-Level Precedence and Preemption (MLPP) Service Capabilities*

Is an American National Standard developed by the **Signaling, Architecture, and Control (SAC)** Subcommittee under the **ATIS Packet Technologies and Systems Committee (PTSC)**.

Published by
Alliance for Telecommunications Industry Solutions
1200 25th Street, NW, Suite 500
Washington, DC 20005

Copyright © 2020 by Alliance for Telecommunications Industry Solutions
All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher. For information contact ATIS at 202.628.6380. ATIS is online at < <http://www.atis.org> >.

American National Standard
for Telecommunications –
Integrated Services
Digital Network (ISDN) –
Multi-Level Precedence and
Preemption (MLPP) Service Capability

Secretariat

Exchange Carriers Standards Association

Approved February 28, 1992

American National Standards Institute, Inc.

American National Standard

Approval of an American National Standard requires verification by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer.

Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he has approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards.

The American National Standards Institute does not develop standards and will in no circumstances give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretations should be addressed to the secretariat or sponsor whose name appears on the title page of this standard.

CAUTION NOTICE: This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken periodically to reaffirm, revise, or withdraw this standard. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute.

Published by

American National Standards Institute
11 West 42nd Street, New York, New York 10036

Copyright © 1992 by Exchange Carriers Standards Association
All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without prior written permission of the publisher.

Printed in the United States of America

ACM3C1092/120

Contents

	Page
Foreword	iii
1 Scope, purpose, and application	1
2 Normative references	1
3 Definitions and abbreviations	2
4 Description of MLPP service from the user's perspective	4
5 Functional capabilities and information flows needed for MLPP service	11
6 Switching and signaling specification for MLPP at the user-network interface	32
7 Switching and signaling specification for MLPP at interconnecting interfaces	53
8 Specifications for protocol interworking	76
Tables	
1 Subscription options for the MLPP service (per ISDN number/ bearer service, set of bearer services, or all bearer services)	6
Figures	
1 SDL diagram of MLPP (preemption at the called user's interface)	7
2 SDL diagram of MLPP (preemption in the network)	8
3 Functional model for the MLPP service	12
4 Information flow for preemption in the network with the LFB option	15
5 Information flow for preemption in the network without the LFB option	16
6 Information flow for preemption in the user access area	17
7 SDL for FE3	18
8 SDL for FE4	21
9 SDL for FE6	26
10 Normal operation for MLPP without LFB option (successful preemption)	40
11 Normal operation for MLPP with LFB option (successful preemption)	46
12 MLPP successful call setup without LFB option	71
13 MLPP successful call setup with LFB option	72
14 Parameter – Provide value for LFB query	73
15 MLPP unsuccessful call setup with LFB option	74
16 MLPP reservation response indicates path reservation denied; also sent on expiration of timer T_L	75
17 LFB transaction messages (SS7/DSS1)	77

Annexes

A	DSS1 SDL diagrams for MLPP	79
B	Breakdown of functional models for the MLPP service with and without the LFB option	94
C	Invoke and return result components within the facility information element of DSS1 for MLPP	96
D	Application of the signal information element to tones and alerting patterns for MLPP service	98
E	SS7 SDL diagrams for MLPP	99

Currently in preview, click buy full version

Foreword (This foreword is not part of American National Standard T1.619-1992.)

This American National Standard defines and describes the multi-level precedence and preemption (MLPP) supplementary service in the context of an integrated services digital network (ISDN). The MLPP service provides a prioritized call handling service. This service has two parts – precedence and preemption. Precedence involves assigning to a call, on a per call basis, a priority level and validating the priority level. Preemption involves seizing of resources, which are in use by calls of lower precedences, by a higher precedence call in the absence of idle resources. Preemption may occur in the network or user access. As a service provider option, before preemption of lower precedence calls, a network may provide a search and reservation of network resources via a look-ahead for busy (LFB) function to ensure that network and called user access resources are available to complete the higher precedence call prior to preemption. This service applies to both an ISDN basic rate access and an ISDN primary rate access. It is intended to supplement

a) the basic circuit mode bearer services contained in ANSI T1.604-1990, *American National Standard for Telecommunications – Integrated services digital network (ISDN) – Minimal set of bearer services for the basic rate interface*;

b) the signalling system number 7 (SS7) basic call signaling procedures contained in ANSI T1.113-1988, *American National Standard for Telecommunications – Signalling system number 7 (SS7) – Integrated services digital network (ISDN) user part*;

c) the digital subscriber signaling system number 1 (DSS1) basic call signaling procedures contained in ANSI T1.607-1990, *American National Standard for Telecommunications – Integrated services digital network (ISDN) – Layer 3 signaling specification for circuit-switched bearer service for digital subscriber signaling system number 1 (DSS1)*;

d) the generic procedures for use with ISDN supplementary services contained in ANSI T1.610-1990, *American National Standard for Telecommunications – Digital subscriber signaling system number 1 (DSS1) – Generic procedures for the control of ISDN supplementary services*.

This standard also defines the interactions of the MLPP service with other ISDN supplementary services.

Manufacturers of ISDN user terminals and customer premise equipment (CPE) and manufacturers of ISDN switching equipment can apply this standard to the design and development of their products.

There are five annexes to this standard. Annex A is normative and is considered part of this standard; annexes B to E are informative and are not considered part of this standard.

This standard was developed over the past several years by Technical Subcommittee T1S1 of Accredited Standards Committee T1 – Telecommunications.

Suggestions for improvement of this standard will be welcome. They should be sent to the Exchange Carriers Standards Association, 1200 G Street, NW, Suite 500, Washington, DC 20005.

This standard was processed and approved for submittal to ANSI by Accredited Standards Committee on Telecommunications, T1. Committee approval of the standard does not imply that all committee members voted for its approval. At the time it approved this standard, Accredited Standards Committee T1 had the following members:

Ivor N. Knight, Chairman
 Arthur K. Reilly, Vice-Chairman
 O. J. Gusella, Jr., Secretary

<i>Organization Represented</i>	<i>Name of Representative</i>
EXCHANGE CARRIERS	
Ameritech Services, Inc.	Laurence A. Young Robert Koren (Alt.)
Bell Atlantic	John W. Seazholtz Roger Nucho (Alt.)
Bellcore	G. Gary Schlanger Ralph E. Jensen (Alt.)
Bellsouth Services	Leonard Strickland, Jr. William J. McNamara, III (Alt.)
Centel Corporation	(Representation Vacant) Bruce Becker (Alt.)
Cincinnati Bell Telephone	William P. Keidel T.C. Grimes (Alt.)
Contel Corporation	Steve Linskey Stephen F. Veach (Alt.)
Exchange Carriers Standards Association	Joseph Mendoza Gregory L. Thomas (Alt.)
GTE Telephone Operations	Gregory L. Theus Richard Cochran (Alt.)
National Telephone Cooperative Association	Joseph M. Flanigan Lanola Jenkins
NYNEX	Lee Katz (Alt.)
Pacific Bell	Fred Doell Stanley Chum (Alt.)
Puerto Rico Telephone Company	Segundo Ruiz
Southwestern Bell Corporation	C. C. Bailey Joseph Mendoza (Alt.)
U S West	James L. Eitel James Dahl (Alt.)
United Telecommunications, Inc.	Robert P. McCabe Harold L. Fuller (Alt.)
US Telephone Association – USA	Paul K. Hart Thomas Gajeski (Alt.)
INTEREXCHANGE CARRIERS	
AT&T Communications	Gerald H. Peterson Dennis Thovson (Alt.)
COMSAT Corporation	Carl A. Sederquist Mark T. Neibert (Alt.)
CONTEL ASC	Horst Bornkast Kap Kim (Alt.)
International Telecharge, Inc.	Dennis Garaghty Diane Harbaugh (Alt.)
MCI Telecommunications Corporation	Michael Varrassi Stephen J. Engelman (Alt.)
National Telecommunications Network	John Gurzick Phillip E. Belevre (Alt.)
Operator Assistance Network	Louis Wardlow Joseph E. Sharkey (Alt.)
Telecom Canada	E. J. Exton Doug R. Saunders (Alt.)
Unitel Communications, Inc.	David H. Whyte George Tadros (Alt.)

<i>Organization Represented</i>	<i>Name of Representative</i>
US Sprint	Peter J. May Eric Scace (Alt.)
VYVX National Video Network	Howard Meiseles Ray Sensney (Alt.)

MANUFACTURERS

ADC Telecommunications, Inc.	Mike Lefkowitz Steve Grady (Alt.)
AG Communication Systems.....	Nigel J. E. Reynolds J. C. Gibson (Alt.)
Alcatel Network Systems Corporation	Kenneth P. Ray Neven Karlovac (Alt.)
Amdahl Corporation.....	Paul Lue Peter Arseniu (Alt.)
AMP, Inc.	George Lawrence Jack Bradbery (Alt.)
ANT Telecommunications, Inc.	James Seago Howard Carnes (Alt.)
Apple Computer, Inc.....	Karen Higginbottom
AT&T Network Systems	Stanley W. Johnston Sigrid K. Llewellyn (Alt.)
Digital Equipment Corporation	Thomas Szczepanski Richard Tovey (Alt.)
DSC Communications Corporation.....	Allen Adams Kishor Shenoit (Alt.)
ECI Telecom, Inc.....	Douglas E. Peterson Brian Murphy (Alt.)
Ericsson, Inc.	David Breeding Guy Campbell (Alt.)
Fujitsu America, Inc.....	Steven A. Minneman Rodney Boehm (Alt.)
General Datacomm, Inc.....	Frederick Cronin Frederick Lucas (Alt.)
Harris Corporation.....	Allen Jackson Yogi Mistry (Alt.)
Hekimian Laboratories.....	Michael J. Tesoriere Mike F. Toohig (Alt.)
Hewlett-Packard	Don C. Loughry Richard van Gelder (Alt.)
IBM Corporation	Robert M. Amy Nicholas S. Huslak (Alt.)
Infotron Systems Corporation.....	Stig Persson Philip J. Bird (Alt.)
Memorex Telex Corporation.....	William Greason Douglas O. Kendrick (Alt.)
Mitel Corporation	Keith Richardson David Gleave (Alt.)
Mitsubishi Electronics America	Philip Jongeneel David Morgan
Motorola, Inc.....	Gail Smith (Alt.) Jerome F. Kemp
MTR Corporation.....	Thomas W. Kern (Alt.) Art Graham
NEC America, Inc.....	Donovan Nak (Alt.) Mel N. Woinsky
Northern Telecom, Inc.....	Myron Allen (Alt.) M. Farrant
Plantronics, Inc.	Brian Cole (Alt.) Donald O'Connor
Racal-Milgo, Inc.	Peter Brackett (Alt.) Everett Turvey
Rockwell International Corporation	Paul Littlewood (Alt.) Michael A. Pierce
Siemens Stromberg-Carlson	Robert Pognant (Alt.) M. J. Narasimha
Telecom Solutions.....	Robert Yapp (Alt.)

<i>Organization Represented</i>	<i>Name of Representative</i>
Telecommunications Techniques	Joseph A. Sciulli Bernard E. Worne (Alt.)
Teleos Communications, Inc.	Hascall Sharp Ken Araujo (Alt.)
Tellabs, Inc.	Charles Rohrs Michael J. Birck (Alt.)
Timeplex, Inc.	D. Protopapas L. H. Eberl (Alt.)
Transwitch Corporation	Daniel Upp
Verilink Corporation	William J. Buckley Robert Beebe (Alt.)

GENERAL INTEREST

American Broadcasting Company	Ken Michel
Ashford Associates	Donald A. Ashford
Base-2 Systems, Inc.	Douglas M. Brady John Huft (Alt.)
Carter Hawley Hale-Information Services	James A. Rothenberger Bert D. Siewert (Alt.)
Creative Communications Consulting	Richard Bobilin James Boe (Alt.)
Defense Communications Agency	C. Joseph Pasquariello Granger Kelley (Alt.)
Electronic Data Systems Corporation	Douglas Zolnick
National Communications System	Dennis Bodson Frank M. McClellan (Alt.)
National Institute of Standards and Technology	Robert Rousee, Jr. Michael D. Hagan (Alt.)
National Telecommunications and Information Administration/Institute for Telecommunication Sciences (NTIA/ITS)	William F. Utlaut Neal P. Seitz (Alt.)
NTT America, Inc.	Koji Aihara Takashi Nishimura (Alt.)
OMNICOM, Inc.	Harold C. Folts
Rural Electrification Administration	Donald M. Van Bellinger George J. Bagnall (Alt.)
U.S. General Services Administration	Douglas K. Arai Larry L. Jackson (Alt.)

At the time it approved this standard, Technical Subcommittee T1S1 on Services Architecture and Signaling had the following members:

W. F. Utlaut, Chairman
Robert Amy, Vice-Chairman
Marcie Geissinger, Secretary

<i>Organization Represented</i>	<i>Name of Representative</i>
AG Communication Systems	T.E. McAndrew S.O. Goldman (Alt.)
Alcatel Network Systems Corporation	Albert Azzam
Amdahl Corporation	Paul Lue
Ameritech Services, Inc.	James E. Bendel Wayne Heinmiller (Alt.)
AT&T Communications	Gary Fishman
AT&T Network Systems	R. B. Waller Alex S. Wu (Alt.)
Bell Atlantic	Harry A. Hetz Brad Frison (Alt.)
Bencore	R. G. Spusta E. R. Hapeman (Alt.)
Bellsouth Services	William L. Smith N.Y. Chu (Alt.)
BT Tymnet, Inc.	Richard A. Rawson Michel J. Darnaud (Alt.)

<i>Organization Represented</i>	<i>Name of Representative</i>
Computer Consoles, Inc.	Kenneth P. Sympton
COMSAT Corporation.....	(Representation Vacant)
	Mark T. Neibert (Alt.)
COMSAT Laboratories.....	Larry White
Creative Communications Consultants.....	Richard Bobilin
	James Boe (Alt.)
Defense Communications Agency.....	Michael DeFrancesco
	Robert Beall (Alt.)
Digital Equipment Corporation.....	Fred R. Goldstein
	Paul Bendeck (Alt.)
DSC Communications Corporation.....	Mo Shabana
	Tom Hess (Alt.)
Electronic Data Systems Corporation.....	Douglas Zolnick
	Mark Terry (Alt.)
Ericsson, Inc.	David Breeding
	Ake Berg (Alt.)
Fujitsu America, Inc.....	Priscilla Lau
	Richard Srch (Alt.)
General Datacomm, Inc.	William Dattisman
	Joseph Konepka (Alt.)
GTE Spacenet.....	Alan Briancon
	W. Nakamine (Alt.)
GTE Telephone Operations.....	D. J. Kostas
	Jay R. Hilton (Alt.)
Harris Corporation.....	Allen Jackson
	Martha Haywood (Alt.)
Hekimian Laboratories.....	Mike F. Toohig
	J. P. Drzewiecki (Alt.)
Hewlett-Packard.....	Richard Van Gelder
IBM Corporation.....	Robert M. Amy
	Stavros Boindiris (Alt.)
Infotron Systems Corporation.....	Philip J. Bird
	Moshe Zobery (Alt.)
MCI Telecommunications Corporation.....	Michael Varrassi
	Robert Traylor (Alt.)
Mitel Corporation.....	David Gleave
	Nancy Poon (Alt.)
Mitre Corporation.....	Joseph Podvojsky
	Steve Silverman (Alt.)
Mitsubishi Electronics America.....	Philip Jongeneel
Motorola, Inc.	Gail Smith
	Ken Felix (Alt.)
National Communications System.....	D. D. Wilson
	Gary Rekstad (Alt.)
National Institute of Standards and Technology.....	David Su
	David Cypher (Alt.)
National Telecommunications Network.....	John Gurzick
	Phillip E. Belevre (Alt.)
National Telecommunications and Information Administration/Institute for Telecommunication Sciences (NTIA/ITS).....	William F. Utlaut
NCR Corporation.....	Javier Kim
	Bob Busse (Alt.)
NEC America, Inc.....	Steven Agard
	T. K. Lala (Alt.)
Newbridge Networks Corporation.....	Malcolm Anderson
	Peter Sommerer (Alt.)
Northern Telecom, Inc.	Joseph Samuel
	Mel N. Woinsky (Alt.)
NTT America, Inc.	Ken-Ichi Aihara
	Takashi Nishimura (Alt.)
NYNEX Service Company.....	Jim Papadopoulos
	V. Arabagian (Alt.)
Pacific Bell.....	R. S. Schwab
	Fred Doell (Alt.)
Racal-Milgo, Inc.	Donald O'Connor
	Kang-Sen Lu (Alt.)

<i>Organization Represented</i>	<i>Name of Representative</i>
Rockwell International Corporation	Dick Surma Tom Holtaway (Alt.)
Siemens Communication Systems, Inc.....	Michael A. Pierce Ben Wagner (Alt.)
Southern New England Telephone.....	J. A. Yanosy E.J. Soltysiak (Alt.)
Southwestern Bell Corporation	Robert Hall John E. Roquet
Stratacom, Inc.	Charles M. Corbalis Lionel A. Bustini (Alt.)
Stromberg-Carlson Corporation	G. Stagg T. Miller (Alt.)
Tandem Telecommunications Systems, Inc.....	John L. Schantz Robert J. Brooks (Alt.)
Telecom Canada	D. G. Wherry Keith Percival (Alt.)
Telecom Solutions	M. J. Narasimha Richard T. Bobilin (Alt.)
Teleos Communications, Inc.	Rod Randall Hascall Sharp (Alt.)
Tellabs, Inc.	Harvey Scull Mark Erlenborn (Alt.)
Timeplex, Inc.....	D. Protopapas R. Karim (Alt.)
* U S West.....	Jesse Smith Ann Merrell (Alt.)
United Telecommunications, Inc.	Sam Samra John Sweitzer (Alt.)
UNITEL Communications, Inc.	George Tadros D. L. Milloy (Alt.)
US Sprint	Joe Christie Peter J. May (Alt.)
US Telephone Association-USTA.....	Dennis Byrne Thomas Gajeski (Alt.)
VVXX National Video Network	Steve Tabaska Helmo Raag (Alt.)

Technical Subcommittee T1S1 developed this standard under the direction of the following individuals:

W. Zeuch, T1S1.1 Chair	N. Chu
N. Huslak, T1S1.2 Chair	M. Durrwachter
A. Wu, T1S1.3 Chair	B. Foster
	J. Kiel
	A. Merrill

Over the course of its development, the following individuals made the most significant contributions to the standard:

D. Gan, Integrated Text and DSS1 Editor	J. Brown	N. Mitra
M. Durrwachter, Stage 1 and Stage 2 Editor	D. Choi	B. Murphy
R. Wilmot, SS7 Editor	R. Jepson	V. Nikanorov
	P. Lau	M. Pierce
	A. Matsuo	N. Smith

American National Standard
for Telecommunications –

Integrated Services Digital Network (ISDN) – Multi-Level Precedence and Preemption (MLPP) Service Capability

1 Scope, purpose, and application

1.1 Scope and purpose

This standard is one of a series that defines and describes service capabilities within the context of an integrated services digital network (ISDN). This service capability may be made available on a demand or subscription arrangement. The interaction of this service capability with other service capabilities defined in other American National Standards is also included. The purpose of this standard is to allow maximum compatibility among network- and user-owned telecommunications equipments in order to increase the attractiveness and usefulness of ISDN-based capabilities.

The multi-level precedence and preemption (MLPP) service provides prioritized call handling service. This service has two parts – precedence and preemption. Precedence involves assigning a priority level to a call. Preemption involves the seizing of resources, which are in use by a call of a lower precedence, by a higher level precedence call in the absence of idle resources.

1.2 Application

This standard applies to both an ISDN basic rate access and ISDN primary rate access and is intended to supplement the basic circuit mode call control procedures described in ANSI T1.607 and ANSI T1.113. It should be used in conjunction with other American National Standards for ISDN supplementary services for a complete understanding of the interactions between this and other services.

This supplementary service is applicable to the following circuit mode bearer services:

- a) speech;
- b) 3.1-kHz audio (voice-band data);
- c) 64-kbit/s unrestricted (data).

2 Normative references

The following standards contain provisions which, 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 on the next page.