



ATIS-1000619.1992(S2020)

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



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

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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.

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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.

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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.