



ATIS STANDARD

ATIS-1000118.1992(S2020)

**Signalling System Number 7 (SS7) –
Intermediate Signalling Network Identification (ISNI)**

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ATIS-1000118.1992(S2020)
(formerly T1.118-1992)

American National Standard
for Telecommunications –

Signalling System Number 7 (SS7) –
Intermediate Signalling Network
Identification (ISNI)

Secretariat

Exchange Carriers Standards Association
Approved September 15, 1992

American National Standards Institute, Inc.
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Foreword (This foreword is not part of American National Standard T1.118-1992.)

This document is entitled *American National Standard for Telecommunications – Signalling system number 7 (SS7) – Intermediate signalling network identification (ISNI)*. ISNI is a network capability that allows an application process in an origination network to specify intermediate signalling networks for non-circuit-associated signalling messages, or to notify an application process in the destination network about such intermediate signalling network(s) or to do both. ISNI has been developed for use between U.S. networks to meet the anticipated needs and applications of those entities. This standard is the result of extensive work by members of the T1S1.3 Working Group on U.S. Standards for Common Channel Signalling.

This standard is intended for use in conjunction with *American National Standard for Telecommunications – Signalling system number 7 (SS7) – Signalling connection control part (SCCP)*, ANSI T1.112-1992. It should be noted, however, that the procedures specific to this standard are extensions beyond ANSI T1.112-1992.

Future control of this document will reside with Accredited Standards Committee on Telecommunications, T1. This control of additions to the specification, such as operational requirements, will permit compatibility among U.S. networks. Such additions will be incorporated in an orderly manner with due consideration to the CCITT-layered model principles, conventions, and functional boundaries.

There are two annexes in this standard. Annex A is normative and is considered part of this standard. Annex B is informative and is not considered part of this standard.

Suggestions for improving 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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Signalling System Number 7 (SS7) – Intermediate Signalling Network Identification (ISNI)

1 Scope, purpose, and application

The Intermediate Signalling Network Identification (ISNI) capability allows an application process in the origination network to specify intermediate signalling network(s) for non-circuit-associated signalling messages, or to notify an application process in the destination network about such intermediate signalling network(s), or to do both. ISNI may be invoked by a variety of services.

The end user can interact with an end user service that may invoke the ISNI capability. The specific end user service that invokes ISNI is not within the scope of this capability description. The ISNI capability is therefore not visible to the end user, but allows an end user service to take place. Thus, there is a “layering” of services and capabilities, and the visible end user services may need the ISNI capability to complete. The specification of the intermediate signalling networks or the decision to request that the application process in the destination network be notified about the intermediate networks may be determined by end users or networks.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this American National Standard. At the time of publication, the edition indicated was 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 edition of the standard indicated below.

ANSI T1.112-1992, *Telecommunications – Signalling System number 7 (SS7) – Signalling Connection Control Part (SCCP)*

3 Definitions

3.1 end user: The end user is the subscriber to one or more services that utilize the ISNI capability.

3.2 origination network: This network is the signalling network that initiates a non-circuit-related message using the ISNI capability.

3.3 destination network: This network is the signalling network that receives a non-circuit-related message containing ISNI information. This network may send subsequent messages based on the received ISNI information.

3.4 intermediate network: This network is a signalling network, between the origination and destination networks, traversed by a non-circuit-related message.¹⁾

3.5 constrained routing information: If a message arriving at an ISNI-capable STP includes constrained routing information, the constrained routing information indicates one or more networks that the message will traverse. The constrained routing information may or may not indicate every network in the message path. It may or may not also indicate