
# ATIS-1000661.2000(S2020)

# Signalling System Number 7 (SS7) – Release to Pivot (RTP)



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American National Standard
for Telecommunications –

# Signalling System Number 7 (SS7) – Release to Pivot (RTP)

Secretariat

**Alliance for Telecommunications Industry Solutions**

Approved May 19, 2000

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## Contents

## Foreword (This foreword is not part of American National Standard T1.661-2000.)

This document is entitled *American National Standard for Telecommunications - Signalling System Number 7 (SS7) - Release to Pivot (RTP)*. RTP is a network capability that allows an application process or other network capability at a switch, having determined that a received call should be connected to a switch other than itself, to have the connection established from a switch earlier in the call path. RTP 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) - ISDN User Part (ISUP),* T1.113-2000.

Revisions to this standard from the 1997 version include alignment with the emerging international standard, through the addition of "return to the invoking exchange," "reasons for redirection," and "redirection will not be invoked." The ability of the invoking exchange to indicate the preferred carrier for the pivoted call has also been added. Functions that were included in the 1997 version are documented as basic functions in this version.

Footnotes are not officially part of this standard.

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

Suggestions for improvement of this standard will be welcome. These should be sent to the Alliance for Telecommunications Industry Solutions, T1 Secretariat, 1200 G Street, NW, Suite 500, Washington DC 20005.

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American National Standard
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# Signalling System Number 7 (SS7) – Release to Pivot (RTP)

## 1 Scope, Purpose, and Application

The Release To Pivot (RTP) network capability permits an SS7 Signalling Point that has received a call from another Node, and has determined the call should be connected to a Destination Node other than itself, to have the connection established from a Node earlier in the call path. RTP functionality is shared between the Release Node and the Pivot Node. The RTP capability may be invoked by an end user service or other network capability on a per call basis. The specific end user service or other network capability that may invoke RTP is not within the scope of this network capability description. In particular, the service or network capability that invokes RTP at each node determines whether to release the call to a prior RTP-capable node, to release the call and end the call setup, or progress the call forward. The service or network capability similarly determines whether to offer its node as a possible point for connection to a different destination, should a new destination be derived. The RTP capability is not visible to the end user, but does allow an end user service the option of invoking it. Thus, there is a "layering" of services and capabilities.

If the Pivot and Release Nodes are in different networks, the transmission of information elements and related procedures defined in this document may require appropriate agreements between transmitting and receiving networks. These agreements are beyond the scope of this document.

This standard applies to the Integrated Services Digital Network (ISDN) User Part (ISUP) and is intended to supplement the signalling functions and call procedures described in T1.113. This standard should be used in conjunction with other ANSI standards related to supplementary services and network capabilities for a complete understanding of the interactions between RTP and other services and network capabilities.

## 2 Normative References

The following standards 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 standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

T1.113-1995, *American National Standard for Telecommunications - Signalling System Number 7 (SS7) - Integrated Services Digital Network (ISDN) User Part*[1)2)]

## 3 Definitions and Abbreviations

### 3.1 Definitions

**3.1.1 Capability Information:** When a Pivot Node determines the call being set up to a Release Node is eligible for Redirection, the Pivot Node sends Capability Information to the Release Node. Re-

[1)] For electronic copies of some standards, visit ANSI's Electronic Standards Store (ESS) at www.ansi.org. For printed versions of all these standards, contact Global Engineering Documents, 15 Inverness Way East, Englewood, CO 80112-5704, (800) 854-7179.

[2)] This standard is currently undergong the revision process. Contact the secretariat for more information.