
# ATIS-1000668.1999(S2020)

## Signalling System Number 7 (SS7) – Facility Request to Pivot (FRP)



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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 G Street, N.W. Suite 500**
**Washington, DC 20005**

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**T1.668-1999(S2020)**

American National Standard
for Telecommunications –

# Signalling System Number 7 (SS7) – Facility Request to Pivot (FRP)

Secretariat

**Alliance for Telecommunications Industry Solutions**

Approved May 24, 1999

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**American National Standards Institute, Inc.**
**11 West 42nd Street, New York, NY 10036**



Printed in the United States of America

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## Foreword (This foreword is not part of American National Standard T1.668-1999.)

FRP 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 destination switch other than itself, to have the connection established from a switch earlier in the call path. If the connection attempt from the earlier switch to the destination switch fails, the current switch will forward route the call to the destination switch. FRP 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)*, ANSI T1.113-1995, which includes an overview, messages and signals, protocol formats, procedures, and a chapter on performance. It should be noted, however, that some procedures specific to this standard are extensions beyond ANSI T1.113-1995.

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.

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

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# Signalling System Number 7 (SS7) – Facility Request to Pivot (FRP)

## 1 Scope, Purpose, and Application

The Facility Request to Pivot (FRP) network capability permits an ISUP-capable SS7 Signalling Point that has received a call from another ISUP capable node, and has determined that 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. FRP functionality is shared between the Request and Pivot nodes. The FRP 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 FRP is not within the scope of this network capability description. In particular, the service or network capability that invokes FRP at each node determines whether to request pivoting the call at a prior FRP-capable node, to release the call, or to 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 FRP 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 Request 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 ANSI T1.113. This standard should be used in conjunction with other American National Standards related to supplementary services and network capabilities for a complete understanding of the interactions between FRP and other services and network capabilities.

## 2 Normative References

The following document contains provisions that, 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 T1.113-1995, *Telecommunications - Signalling System Number 7 (SS7) - Integrated Services Digital Network (ISDN) User Part* [1)]

## 3 Abbreviations and Definitions

### 3.1 Abbreviations

ACM Address Complete Message

ANM Answer Message

[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.