



ATIS STANDARD

**ATIS-1000631-2005(S2020)**

**Signaling System No. 7 (SS7) –  
High Probability of Completion (HPC) Network Capability**

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## ATIS-1000631.2005(S2020), Signaling System No. 7 (SS7) – High Probability of Completion (HPC) Network Capability

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

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**ATIS-1000631.2005(S2020)**

[Revision of T1.631-1993 (R1999)]

American National Standard for Telecommunications

**SIGNALING SYSTEM NO. 7 (SS7) –  
HIGH PROBABILITY OF COMPLETION (HPC) NETWORK CAPABILITY**

Secretariat

**Alliance for Telecommunications Industry Solutions**

Approved August 12, 2005

**American National Standards Institute, Inc.**

**Abstract**

The Office of the Manager, National Communications System (OMNCS), tasked by directives from the White House to ensure that a survivable and enduring National Security and Emergency Preparedness (NS/EP) telecommunications capability is available during national emergencies has endorsed the development and adoption of a standard to support increased call completion capabilities for critical users. The High Probability of Completion (HPC) network capability would be applied during the call setup of NS/EP calls by providing for an identifier for those calls on the SS7 network protocol. This identifier would allow NS/EP calls to be recognized as they are transported across and between networks so that call completion improvement techniques could be applied by service providers to increase the probability of completion during periods of network congestion or damage.

**FOREWORD**

The information contained in this Foreword is not part of this American National Standard (ANS) and has not been processed in accordance with ANSI's requirements for an ANS. As such, this Foreword may contain material that has not been subjected to public review or a consensus process. In addition, it does not contain requirements necessary for conformance to the Standard.

The Packet Technologies and Systems Committee (PTSC) -- formerly T1S1 -- develops and recommends standards and technical reports related to services, architectures, and signaling, in addition to related subjects under consideration in other North American and international standards bodies. PTSC coordinates and develops standards and technical reports relevant to telecommunication networks in the U.S., reviews and prepares contributions on such matters for submission to U.S. ITU-T and U.S. ITU-R Study Groups or other standards organizations, and reviews for acceptability or per contra the positions of other countries in related standards development and takes or recommends appropriate actions.

ANSI guidelines specify two categories of requirements: mandatory and recommendation. The mandatory requirements are designated by the word *shall* and recommendations by the word *should*. Where both a mandatory requirement and a recommendation are specified for the same criterion, the recommendation represents a goal currently identifiable as having distinct compatibility or performance advantages.

This standard is based on T1.113-2000 *American National Standard for Telecommunications – Signaling System No. 7 (SS7) – Integrated Services Digital Network (ISDN) User Part*. It is suited for anticipated needs and applications within and between U.S. networks. These specifications are the result of extensive work by the members of the ATIS PTSC.

This revision to T1.631-1993 replaces the text in clause 3.7 with new text and adds a new clause, 3.8, to clarify procedures at domestic and international gateway exchanges.

This standard contains 1 informative annex, which is not considered part of this standard.

Suggestions for improvement of this document are welcome. They should be sent to the Alliance for Telecommunications Industry Solutions, PTSC Secretariat, 1200 G Street NW, Suite 500, Washington, DC 20005.

At the time it approved this document, PTSC, which is responsible for the development of this Standard, had the following members:

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**TABLE OF CONTENTS**

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**PREFACE**..... **II**

**1 SCOPE, PURPOSE, & APPLICATION**..... **1**

**2 NORMATIVE REFERENCES**..... **1**

**3 GENERAL DESCRIPTION**..... **2**

    3.1 OPERATION AT ORIGINATING EXCHANGE.....2

    3.2 OPERATION AT THE TRANSIT EXCHANGE .....3

    3.3 OPERATION AT THE TERMINATING EXCHANGE .....3

    3.4 OPERATION AT AN INTERWORKING EXCHANGE (NON-ISDN TO ISDN) .....3

    3.5 OPERATION AT AN INTERWORKING EXCHANGE (ISDN TO NON-ISDN) .....3

    3.6 OPERATION AT THE STP .....4

    3.7 OPERATION AT A DOMESTIC GATEWAY EXCHANGE .....4

    3.8 OPERATION AT AN INTERNATIONAL GATEWAY EXCHANGE .....4

**4 SWITCHING AND SIGNALING SPECIFICATIONS FOR HPC**..... **4**

    4.1 FORMATS AND CODING.....4

    4.2 PROCEDURES .....4

    4.3 HPC MESSAGES PRIORITY ASSIGNMENT.....5

**ANNEX A NS/EP TELECOMMUNICATIONS SERVICE CALL EXAMPLES**..... **8**

    A.1 EXAMPLE 1 .....8

    A.2 EXAMPLE 2 .....8

**TABLE OF FIGURES**

---

FIGURE 1: CONFIGURATION OF EQUIPMENT OF THE HPC NETWORK CAPABILITY .....6

FIGURE 2: NORMAL HPC CALL SET-UP.....7

FIGURE A.1: EXAMPLE 1 CALL FLOW.....9

FIGURE A.2: EXAMPLE 2 CALL FLOW.....10