
Digitalno omrežje z integriranimi storitvami (ISDN) - Dopolnilna storitev: zadržanje klica (HOLD) - Protokol digitalne naročniške signalizacije št. 1 (DSS1) - 5. del: Zgradba preskušalnega niza in namen preskušanja (TSS&TP) - Specifikacija za omrežje

Integrated Services Digital Network (ISDN); Call Hold (HOLD) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 5: Test Suite Structure and Test Purposes (TSS&TP) specification for the network

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ETS 300 141-5:1997](https://standards.iteh.ai/catalog/standards/sist/b0c4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997)

<https://standards.iteh.ai/catalog/standards/sist/b0c4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997>

Ta slovenski standard je istoveten z: ETS 300 141-5 Edition 1

ICS:

33.080	Digitalno omrežje z integriranimi storitvami (ISDN)	Integrated Services Digital Network (ISDN)
--------	---	--

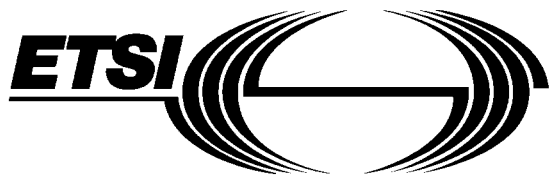
SIST ETS 300 141-5:1997

en

iTeh STANDARD PREVIEW **(standards.iteh.ai)**

[SIST ETS 300 141-5:1997](https://standards.iteh.ai/catalog/standards/sist/b0c4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997)

<https://standards.iteh.ai/catalog/standards/sist/b0c4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997>



EUROPEAN TELECOMMUNICATION STANDARD

ETS 300 141-5

October 1996

Source: ETSI TC-SPS

Reference: DE/SPS-05061-S-5

ICS: 33.080

Key words: ISDN, DSS1, supplementary service, HOLD, testing, TSS&TP, network

**Integrated Services Digital Network (ISDN);
Call Hold (HOLD) supplementary service;
Digital Subscriber Signalling System No. one (DSS1) protocol;
Part 5: Test Suite Structure and Test Purposes (TSS&TP)
specification for the network**

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 4 92 94 42 00 - **Fax:** +33 4 93 65 47 16

Copyright Notification: No part may be reproduced except as authorized by written permission. The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 1996. All rights reserved.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST ETS 300 141-5:1997](https://standards.iteh.ai/catalog/standards/sist/b0c4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997)

<https://standards.iteh.ai/catalog/standards/sist/b0c4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997>

Contents

Foreword	5
1 Scope	7
2 Normative references	7
3 Definitions	8
3.1 Definitions related to conformance testing	8
3.2 Definitions related to ETS 300 141-1	8
4 Abbreviations	9
5 Test Suite Structure (TSS)	9
6 Test Purposes (TP)	10
6.1 Introduction	10
6.1.1 TP naming convention	10
6.1.2 Source of TP definition	10
6.1.3 TP structure	10
6.1.4 Test strategy	11
6.2 Network TPs for HOLD	12
6.2.1 Network (S/T)	12
6.2.1.1 Served User	12
6.2.1.1.1 Holding	12
6.2.1.1.2 Retrieving	14
6.2.2 Remote user	15
6.2.2.1 Holding	15
6.2.2.2 Retrieving	15
6.2.3 Network (T)	16
7 Compliance	17
8 Requirements for a comprehensive testing service	17
History	18

Blank page

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ETS 300 141-5:1997](https://standards.iteh.ai/catalog/standards/sist/b0c4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997)

<https://standards.iteh.ai/catalog/standards/sist/b0c4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997>

Foreword

This European Telecommunication Standard (ETS) has been produced by the Signalling Protocols and Switching (SPS) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This ETS is part 5 of a multi-part standard covering the Digital Subscriber Signalling System No. one (DSS1) protocol specification for the Integrated Services Digital Network (ISDN) Call Hold (HOLD) supplementary service, as described below:

- Part 1: "Protocol specification";
- Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";
- Part 3: "Test Suite Structure and Test Purposes (TSS&TP) specification for the user";
- Part 4: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the user";
- Part 5: "TSS&TP specification for the network";**
- Part 6: "ATS and partial PIXIT proforma specification for the network".

Transposition dates	
Date of adoption of this ETS:	4 October 1996
Date of latest announcement of this ETS (doa):	31 January 1997
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 July 1997
Date of withdrawal of any conflicting National Standard (dow):	31 July 1997

<https://standards.iteh.ai/catalog/standards/sist/b0c4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997>

Blank page

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ETS 300 141-5:1997](https://standards.iteh.ai/catalog/standards/sist/b0c4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997)

<https://standards.iteh.ai/catalog/standards/sist/b0c4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997>

1 Scope

This fifth part of ETS 300 141 specifies the Test Suite Structure and Test Purposes (TSS&TP) for the Network side of the T reference point or coincident S and T reference point (as defined in ITU-T Recommendation I.411 [7]) of implementations conforming to the stage three standard for the Call Hold (HOLD) supplementary service for the pan-European Integrated Services Digital Network (ISDN) by means of the Digital Subscriber Signalling System No. one (DSS1) protocol, ETS 300 141-1 [1].

A further part of this ETS specifies the Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma based on this ETS. Other parts specify the TSS&TP and the ATS and partial PIXIT proforma for the User side of the T reference point or coincident S and T reference point of implementations conforming to ETS 300 141-1 [1].

2 Normative references

This ETS incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] ETS 300 141-1 (1993): "Integrated Services Digital Network (ISDN); Call Hold (HOLD) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [2] ETS 300 141-2: "Integrated Services Digital Network (ISDN); Call Hold (HOLD) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [3] ISO/IEC 9646-1: "Information Technology - OSI Conformance Testing Methodology and Framework; Part 1: General Concepts".
- [4] ISO/IEC 9646-2: "Information Technology - OSI Conformance Testing Methodology and Framework; Part 2: Abstract Test Suite specification".
- [5] ISO/IEC 9646-3: "Information Technology - OSI Conformance Testing Methodology and Framework; Part 3: The Tree and Tabular Combined Notation".
- [6] ETS 300 196-1 (1993): "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [7] ITU-Recommendation I.411 (1993): "ISDN user-network interfaces - Reference configurations".
- [8] ETS 300 102-1: "Integrated Services Digital Network (ISDN); User-network interface layer 3; Specifications for basic call control".
- [9] ITU-Recommendation I.112 (1993): "Vocabulary and terms for ISDNs".
- [10] CCITT Recommendation E.164 (1991): "Numbering plan for the ISDN era".
- [11] ITU-T Recommendation I.210 (1993): "Principles of the telecommunication services supported by an ISDN and the means to describe them".

3 Definitions

For the purposes of this ETS, the following definitions apply:

3.1 Definitions related to conformance testing

abstract test case: Refer to ISO/IEC 9646-1 [3].

Abstract Test Suite (ATS): Refer to ISO/IEC 9646-1 [3].

Implementation Under Test (IUT): Refer to ISO/IEC 9646-1 [3].

implicit send event: Refer to ISO/IEC 9646-3 [5].

lower tester: Refer to ISO/IEC 9646-1 [3].

point of control and observation: Refer to ISO/IEC 9646-1 [3].

Protocol Implementation Conformance Statement (PICS): Refer to ISO/IEC 9646-1 [3].

PICS proforma: Refer to ISO/IEC 9646-1 [3].

Protocol Implementation eXtra Information for Testing (PIXIT): Refer to ISO/IEC 9646-1 [3].

PIXIT proforma: Refer to ISO/IEC 9646-1 [3].

system under test: Refer to ISO/IEC 9646-1 [3].

Test Purpose (TP): Refer to ISO/IEC 9646-1 [3].

3.2 Definitions related to ETS 300 141-1

Call Held auxiliary state: See ETS 300 196-1 [6], subclause 7.1.2.

call reference: See ETS 300 102-1 [8], subclause 4.3.

component: See ETS 300 196-1 [6], subclause 11.2.2.1.

Idle auxiliary state: See ETS 300 196-1 [6], subclause 7.1.2.

Integrated Services Digital Network (ISDN): See ITU-T Recommendation I.112 [9], definition 308.

ISDN number: A number conforming to the numbering and structure specified in CCITT Recommendation E.164 [10].

invoke component: See ETS 300 196-1 [6], subclause 11.2.2.1.

network: The DSS1 protocol entity at the Network side of the user-network interface where a T reference point or coincident S and T reference point applies.

network (S/T): The DSS1 protocol entity at the Network side of the user-network interface where a coincident S and T reference point applies.

network (T): The DSS1 protocol entity at the Network side of the user-network interface where a T reference point applies (Network connected to Private ISDN).

return error component: See ETS 300 196-1 [6], subclause 11.2.2.1.

return result component: See ETS 300 196-1 [6], subclause 11.2.2.1.

served user: The served user is the user who invokes the HOLD supplementary service.

ITEH STANDARD PREVIEW
(standards.iteh.ai)

SIST ETS 300 141-5:1997

<https://standards.iteh.ai/catalog/standards/sist/b8-4cc0d-b8e9-4e21-8cc8-3e36a33c11d7/sist-ets-300-141-5-1997>

service; telecommunication service: See ITU-T Recommendation I.112 [9], definition 201.

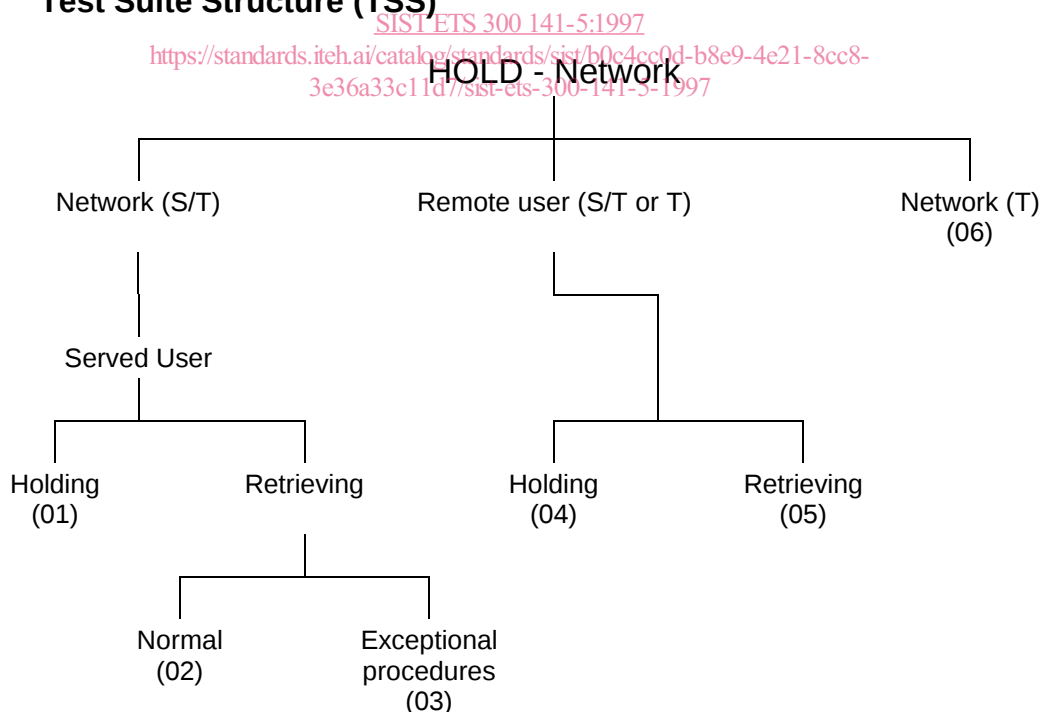
supplementary service: See CCITT Recommendation I.210 [11], subclause 2.4.

4 Abbreviations

For the purposes of this ETS, the following abbreviations apply:

ATM	Abstract Test Method
ATS	Abstract Test Suite
DSS1	Digital Subscriber Signalling System No. one
HOLD	Call Hold
ISDN	Integrated Services Digital Network
IUT	Implementation Under Test
N00	Null call state
N02	Overlap Sending call state
N03	Outgoing Call Proceeding call state
N04	Call Delivered call state
N06	Call Present call state
N07	Call Received call state
N08	Connect Request call state
N09	Incoming Call Proceeding call state
N10	Active call state
N12	Disconnect Indication call state
N19	Release Request call state
N25	Overlap Receiving call state
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation extra Information for Testing
TP	Test Purpose
TSS	Test Suite Structure

5 Test Suite Structure (TSS)



NOTE: Numbers in brackets represent group numbers and are used in TP identifiers.

Figure 1: Test suite structure