



SLOVENSKI STANDARD
SIST EN 301 487-3 V1.1.1:2005
01-januar-2005

ü]fc_cdUgcj bc`X][]HJbc`ca fYy^Y`n`]bhY[f]fUbj]a]`gkcf]hj Ua]`f6 !-G8 BŁĚ`Dfclc_c`
 X][]HJbY`bUfc b]y_Y`g][bU]nUWY`Y`yH`&fB GG&ŁĚ`Na c]ybcgh_ca i HfUby`bUj]XYnbY
 dch]Ě` "XY. N[fUXVUdfYg_i yUby[U]b]nU]b`bUa Yb`dfYg_i yUb`UfHGG/ HDŁĚ
 GdYV]Z_ UWY`UnU]i dcfUVb]_U

Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Switched virtual path capability; Part 3: Test Suite Structure and Test Purposes (TSS&TP) specification for the user

ITeH STANDARD PREVIEW
(standards.iteh.ai)

<https://standards.iteh.ai/catalog/standards/sist/d07b1930-90c4-4c0f-8bcf-fa21380172ff/sist-en-301-487-3-v1-1-1-2005>

Ta slovenski standard je istoveten z: EN 301 487-3 Version 1.1.1

ICS:

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

SIST EN 301 487-3 V1.1.1:2005 **en**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 301 487-3 V1.1.1:2005](https://standards.iteh.ai/catalog/standards/sist/d07b1930-90c4-4c0f-8bcf-fa21380172ff/sist-en-301-487-3-v1-1-1-2005)

<https://standards.iteh.ai/catalog/standards/sist/d07b1930-90c4-4c0f-8bcf-fa21380172ff/sist-en-301-487-3-v1-1-1-2005>

ETSI EN 301 487-3 V1.1.1 (2001-09)

European Standard (Telecommunications series)

**Broadband Integrated Services Digital Network (B-ISDN);
Digital Subscriber Signalling System No. two (DSS2) protocol;
Switched virtual path capability;
Part 3: Test Suite Structure and Test Purposes (TSS&TP)
specification for the user**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 301 487-3 V1.1.1:2005](https://standards.iteh.ai/catalog/standards/sist/d07b1930-90c4-4c0f-8bcf-fa21380172ff/sist-en-301-487-3-v1-1-1-2005)

<https://standards.iteh.ai/catalog/standards/sist/d07b1930-90c4-4c0f-8bcf-fa21380172ff/sist-en-301-487-3-v1-1-1-2005>



Reference

DEN/SPAN-130175-3

KeywordsATM, B-ISDN, DSS2, TSS&TP, user,
UNI, broadband**ETSI**650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

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

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

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

[SIST EN 301 487-3 V1.1.1:2005](https://standards.iteh.ai/catalog/standards/sist/d07b1930-90c4-4c0f-8bcf-fa21380172ff/sist-en-301-487-3-v1-1-1-2005)<https://standards.iteh.ai/catalog/standards/sist/d07b1930-90c4-4c0f-8bcf-fa21380172ff/sist-en-301-487-3-v1-1-1-2005>

Important notice

Individual copies of the present document can be downloaded from:

<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at <http://www.etsi.org/tb/status/>

If you find errors in the present document, send your comment to:

editor@etsi.fr

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 2001.
All rights reserved.

Contents

Intellectual Property Rights	4
Foreword	4
1 Scope.....	5
2 References	5
3 Definitions and abbreviations.....	6
3.1 Definitions	6
3.1.1 Definitions related to conformance testing.....	6
3.1.2 Definitions related to the IUT.....	6
3.2 Abbreviations.....	6
4 Test Suite Structure (TSS)	7
5 Test Purposes (TP).....	7
5.1 Introduction.....	7
5.1.1 TP naming convention	7
5.1.2 Source of TP definition	7
5.1.3 Test strategy	7
5.1.4 Test of call states.....	8
5.2 TPs for the ATM traffic descriptor modification with negotiation, user.....	8
5.2.1 Signalling procedures at the coincident S_B/T_B and at the T_B reference points	8
5.2.1.1 Call/connection establishment at the originating interface (01).....	8
5.2.1.2 Call/connection establishment at the destination interface (02).....	8
5.2.1.3 Restart procedure (03)	9
5.2.1.4 Combination of parameters (04).....	9
6 Compliance	10
7 Requirements for a comprehensive testing service.....	10
Annex A (informative): Bibliography.....	11
History	12

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://www.etsi.org/ipr>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

The present document is part 3 of a multi-part deliverable covering the Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Switched virtual path capability, as identified below:

- Part 1: "Protocol Specification [ITU-T Recommendation Q.2934 (1999), modified]";
- 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: "Test Suite Structure and Test Purposes (TSS&TP) specification for the network";
- Part 6: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for the network".

National transposition dates

Date of adoption of this EN:	31 August 2001
Date of latest announcement of this EN (doa):	30 November 2001
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 May 2002
Date of withdrawal of any conflicting National Standard (dow):	31 May 2002

1 Scope

The present document specifies the user Test Suite Structure and Test Purposes (TSS&TP) for the T_B reference point or coincident S_B and T_B reference point (as defined in ITU-T Recommendation I.413 [5]) of implementations conforming to the standards for the signalling user-network layer 3 specification for the switched virtual path capability of the Digital Subscriber Signalling System No. 2 (DSS2) protocol for the pan-European Broadband Integrated Services Digital Network (B-ISDN), EN 301 487-1 [3].

A further part of the present document specifies the Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma based on the present document.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

- [1] ETSI ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
- [2] ETSI EN 300 443-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 1: Protocol specification [ITU-T Recommendation Q.2931 (1995), modified]".
- [3] ETSI EN 301 487-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling No. two (DSS2) protocol; Switched virtual path capability; Part 1: Protocol Specification [ITU-T Recommendation Q.2934 (1999), modified]".
- [4] ETSI EN 301 487-2: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for switched virtual path capability; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [5] ITU-T Recommendation I.413 (1993): "B-ISDN user-network interface".
- [6] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts".
- [7] ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification".
- [8] ITU-T Recommendation Q.2934: "Digital Subscriber Signalling System No. 2 - Switched virtual path capability".
- [9] ETSI EN 300 443-3: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; B-ISDN user-network interface layer 3 specification for basic call/bearer control; Part 3: Test Suite Structure and Test Purposes (TSS&TP) specification for the user".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in EN 301 487-1 [3], EN 300 443-1 [2] and the following apply.

3.1.1 Definitions related to conformance testing

abstract test case: Refer to ISO/IEC 9646-1 [6].

Abstract Test Method (ATM): Refer to ISO/IEC 9646-1 [6].

Abstract Test Suite (ATS): Refer to ISO/IEC 9646-1 [6].

Implementation Under Test (IUT): Refer to ISO/IEC 9646-1 [6].

lower tester: Refer to ISO/IEC 9646-1 [6].

Protocol Implementation Conformance Statement (PICS): Refer to ISO/IEC 9646-1 [6].

PICS proforma: Refer to ISO/IEC 9646-1 [6].

Protocol Implementation eXtra Information for Testing (PIXIT): Refer to ISO/IEC 9646-1 [6].

PIXIT proforma: Refer to ISO/IEC 9646-1 [6].

Test Purpose (TP): Refer to ISO/IEC 9646-1 [6].

ITeH STANDARD PREVIEW
(standards.iteh.ai)

3.1.2 Definitions related to the IUT

user: DSS2 protocol entity at the User side of the user-network interface where a T_B reference point or coincident S_B and T_B reference point applies

user (S_B/T_B): DSS2 protocol entity at the User side of the user-network interface where a coincident S_B and T_B reference point applies

user (T_B): DSS2 protocol entity at the User side of the user-network interface where a T_B reference point applies (user is a private ISDN)

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

ATM	Abstract Test Method
ATS	Abstract Test Suite
IUT	Implementation Under Test
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
TP	Test Purpose
TSS	Test Suite Structure
U0	Null call state
U1	Call Initiated call state
U7	Call Received call state
U8	Connect request call state
U9	Incoming Call Proceeding call state

4 Test Suite Structure (TSS)

Signalling procedures at the coincident S_B/T_B and at the T_B reference points

Call/connection establishment at the originating interface	(01)
Call/connection establishment at the destination interface	(02)
Restart procedure	(03)
Combination of parameters	(04)

Figure 1: Test suite structure

5 Test Purposes (TP)

5.1 Introduction

The procedures for the switched virtual path capability are based on the procedures of EN 300 443-1 [2]. Therefore the test purposes defined in EN 300 443-3 [9] apply. Consequently, only for test requirements in addition to the requirements of EN 300 443-1 [2] TPs are defined.

5.1.1 TP naming convention

Tps are numbered, starting at 01, within each group. Groups are organized according to the TSS. Additional references are added to identify the actual test suite (see table 1).

Table 1: TP identifier naming convention scheme

Identifier:	<suite_id>_<group>_<nn>		
<suite_id>	=	type of IUT:	"SVPU" for Switched Virtual Path capability, IUT = User
<group>	=	group number:	two character field representing the group reference according to TSS
<nn>	=	sequential number:	(01-99)

5.1.2 Source of TP definition

The TPs are based on EN 301 487-1 [3].

5.1.3 Test strategy

As the base standard EN 301 487-1 [3] contains no explicit requirements for testing, the TPs were generated as a result of an analysis of the base standard and the PICS specification EN 301 487-2 [4].

The TPs are only based on conformance requirements related to the externally observable behaviour of the IUT, and are limited to conceivable situations to which a real implementation is likely to be faced (ETS 300 406 [1]).