



SLOVENSKI STANDARD
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ü]fc_cdUgcj bc`X][]HJbc`ca fYy`Y`n`]bhY[f]fUbj]a]`g]fcf]hj Ua]`f6 !-G8 BŁĚ`Dfclc_c`
 X][]HJbY`bUfc b]y`Y`g][bU]nUW`Y`y`h`&fB GG&ŁĚ`? UfU`hYf]gh`_Y`nj YnY`Ě`GdfYa Ya VU
 dfca YfbY[UXYg_f]d]hcf`U5 HA`g`dc[U`Ub`Ya`n`Ug]b]_ca`nj YnY`Ě`"XY`.N[fUXVU
 dfYg_i`y`U`bY[U`b]nU]b`bUa Yb`dfYg_i`y`Ub`U`fHGG` HDŁĚ`GdYW]Z`UW`U`nU`i`dcfUWb]_U

Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; ATM traffic descriptor modification with negotiation by the connection owner; Part 3: Test Suite Structure and Test Purposes (TSS&TP) specification for the user

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|--------|---|--|

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European Standard (Telecommunications series)

**Broadband Integrated Services Digital Network (B-ISDN);
Digital Subscriber Signalling System No. two (DSS2) protocol;
Connection characteristics;
ATM traffic descriptor modification with negotiation
by the connection owner;
Part 3: Test Suite Structure and Test Purposes (TSS&TP)
specification for the user**

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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; Connection characteristics; ATM traffic descriptor modification with negotiation by the connection owner, as identified below:

- Part 1: "Protocol specification [ITU-T Recommendation Q.2963.3, 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

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| 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 ATM traffic descriptor modification with negotiation by the connection owner of the Digital Subscriber Signalling System No. 2 (DSS2) protocol for the pan-European Broadband Integrated Services Digital Network (B-ISDN), EN 301 486-1 [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 301 486-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; ATM traffic descriptor modification with negotiation by the connection owner; Part 1: Protocol specification [ITU-T Recommendation Q.2963.3, modified]".
- [4] ETSI EN 301 486-2: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; ATM traffic descriptor modification with negotiation by the connection owner; 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] ETSI EN 301 003-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; Peak cell rate modification by the connection owner; Part 1: Protocol specification [ITU-T Recommendation Q.2963.1 (1996), modified]".
- [9] ETSI EN 301 003-3: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; Peak cell rate modification by the connection owner; 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 301 486-1 [3], EN 301 003-1 [8], 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.

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

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

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

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

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

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

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

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

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

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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 |
| IE_AI | Information element action indicator |
| IE_flag | Information element instruction indicator flag |
| IUT | Implementation Under Test |
| PICS | Protocol Implementation Conformance Statement |
| PIXIT | Protocol Implementation eXtra Information for Testing |
| TP | Test Purpose |
| TSS | Test Suite Structure |
| U10 | Active call state |
| U11 | Release Request call state |
| U13 | Modify Requested call state |
| U14 | Modify Received call state |

4 Test Suite Structure (TSS)

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

| | |
|--|------|
| Modification/Negotiation procedures at the requesting entity | |
| Modification/Negotiation request | (01) |
| Modification/Negotiation acceptance | (02) |
| Modification/Negotiation procedures at the responding entity | |
| Modification/Negotiation confirmation | (03) |

Figure 1: Test suite structure

5 Test Purposes (TP)

5.1 Introduction

The procedures for ATM traffic descriptor modification with negotiation by the connection owner are based on the modification procedures of EN 301 003-1 [8]. Therefore the test purposes defined in EN 301 003-3 [9] apply. Consequently, only for test requirements in addition to the requirements of EN 301 003-1 [8] 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> | 01 486-3 V1.1.1:2005 |
| <suite_id> | = | type of IUT: "AMNU" for ATM traffic descriptor Modification with Negotiation, 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 301 486-1 [3].

5.1.3 Test strategy

As the base standard EN 301 486-1 [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 301 486-2 [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]).