



# SLOVENSKI STANDARD SIST EN 301 276-3 V1.1.1:2005

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ü]fc\_cdUgcj bc`X][ ]HJbc`ca fYy`Y`n`]bhY[ f]fUb]a ]`g]cf]hj Ua ]`f6 !-G8 BŁĚ`Dfclc\_c`  
X][ ]HJbY`bUfc b]ý\_Y`g][ bU]nUWY`Y`ýH`&fB GG&ŁĚ`? UFU\_hYf]gh\_Y`nj YnY`Ě`Df]U[ cX]b]  
dcg]cd\_]nUdUfUa YfY`fU`bY`WY`] bY\ ]f]cgh]Ě` "XY.`N[ fUXVUdfYg\_i ýU`bY[ U`b]nU  
]b`bUa Yb`dfYg\_i ýU`b`U`fHGG` HDŁĚ`GdYVWZ\_UWY`U`nU`i dcfUWb]\_U

Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; Modification procedures for sustainable cell rate parameters; Part 3: Test Suite Structure and Test Purposes (TSS&TP) specification for the user

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# ETSI EN 301 276-3 V1.1.1 (2001-09)

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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;  
Modification procedures for sustainable cell rate parameters;  
Part 3: Test Suite Structure and Test Purposes (TSS&TP)  
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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 Digital Subscriber Signalling System No. two (DSS2) protocol specification for the B-ISDN modification procedures for sustainable cell rate parameters, as identified below:

- Part 1: "Protocol specification [ITU-T Recommendation Q.2963.2 (1997), 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:	14 September 2001
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## 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 modification procedures for sustainable cell rate parameters of the Digital Subscriber Signalling System No. 2 (DSS2) protocol for the pan-European Broadband Integrated Services Digital Network (B-ISDN), EN 301 276-1 [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.

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## 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 301 276-1: "Broadband Integrated Services Digital Network (B-ISDN); Digital Subscriber Signalling System No. two (DSS2) protocol; Connection characteristics; Modification procedures for sustainable cell rate parameters; Part 1: Protocol specification [ITU-T Recommendation Q.2963.2 (1997), modified]".
- [4] ETSI EN 301 003-2: "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 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 301 276-1 [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 [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].

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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
IUT	Implementation Under Test
MBS	Maximum Burst Size
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
SCR	Sustainable Cell Rate
TP	Test Purpose
TSS	Test Suite Structure
U10	Active call state
U13	Modify Requested call state



## 4 Test Suite Structure (TSS)

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

Modification procedures at the requesting entity. .... (01)

Modification procedures at the responding entity. .... (02)

**Figure 1: Test suite structure**

## 5 Test Purposes (TP)

### 5.1 Introduction

The modification procedures for sustainable cell rate parameters 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>
<suite_id>	= type of IUT: "SCMU" for Sustainable Cell rate Modification, 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 301 276-1 [3].

#### 5.1.3 Test strategy

As the base standard EN 301 276-1 [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 301 003-2 [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]).