



SLOVENSKI STANDARD

DSIST EN 301 065-3:2003

01-XYW a Vyf!% - -

8 [[]HJbc`ca fYy`Y`n]bhY[f]fUb]a]'glcf]hj Ua]'fG8 BŁ!`8 cdc`b]bUglcf]hYj .
Xc_cb Ub`Y`_]WUb`UŁ_c`b]`cXn]j Uf7 7 BFŁ!`Dfclc_c`X][]HJbY`bUfc b]y_Y
g][bU]nUWY`Y`yH`%fB GG%Ł!` "XY.`N[fUXVUdfYg_i yUby[Ub]nU]b`bUa Yb
dfYg_i yUb`U`fHGG/ HDŁ!`GdYVWZ_UWY`UnUi dcfUVb]_U

Integrated Services Digital Network (ISDN); Completion of Calls on No Reply (CCNR) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 3: Test Suite Structure and Test Purposes (TSS&TP) specification for the user

Ta slovenski standard je istoveten z: EN 301 065-3 V1.1.3.% - , !%\$

ICS:

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

DSIST EN 301 065-3:2003 en

EN 301 065-3 V1.1.3 (1998-10)

European Standard (Telecommunications series)

**Integrated Services Digital Network (ISDN);
Completion of Calls on No Reply (CCNR)
supplementary service;
Digital Subscriber Signalling System No. one (DSS1) protocol;
Part 3: Test Suite Structure and Test Purposes (TSS&TP)
specification for the user**



Reference

DEN/SPS-05115-3 (9v0r0ie0.PDF)

Keywords

ISDN, DSS1, supplementary service, CCNR,
testing, TSS&TP, user

ETSI

Postal address

F-06921 Sophia Antipolis Cedex - FRANCE

Office address

650 Route des Lucioles - Sophia Antipolis
Valbonne - 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

Internet

secretariat@etsi.fr
<http://www.etsi.org>

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 1998.
All rights reserved.

Contents

Intellectual Property Rights.....	4
Foreword	4
1 Scope.....	5
2 Normative 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 EN 301 065-1	6
3.2 Abbreviations.....	7
4 Test Suite Structure (TSS)	8
5 Test Purposes (TP).....	8
5.1 Introduction.....	8
5.1.1 TP naming convention.....	8
5.1.2 Source of TP definition	8
5.1.3 TP structure.....	9
5.1.4 Test strategy	9
5.2 User TPs for CCNR.....	9
5.2.1 Signalling procedures at the coincident S and T reference point.....	10
5.2.1.1 Activation	10
5.2.1.2 Deactivation.....	11
5.2.1.3 Interrogation	11
5.2.1.3.1 General interrogation	11
5.2.1.3.2 Specific interrogation.....	12
5.2.1.4 Invocation and operation	13
5.2.1.4.1 Recall indication	13
5.2.1.4.2 CCNR call request	13
5.2.1.4.3 Network initiated deactivation procedure	14
5.2.1.4.4 B free but A busy procedure	14
5.2.1.4.5 User A monitoring procedure.....	14
5.2.1.5 Call information retention.....	15
5.2.2 Procedures for interworking with private ISDNs	15
5.2.2.1 Procedures for the originating T reference point	15
5.2.2.2 Procedures for the destination T reference point	17
6 Compliance	19
7 Requirements for a comprehensive testing service.....	19
History	20

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 SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available **free of charge** from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://www.etsi.fr/ipr> or <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 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 Signalling Protocols and Switching (SPS).

The present document is part 3 of a multi-part standard covering the Digital Subscriber Signalling System No. one (DSS1) protocol specification for the Integrated Services Digital Network (ISDN) Completion of Calls on No Reply (CCNR) 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: "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:	9 October 1998
Date of latest announcement of this EN (doa):	31 January 1999
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 July 1999
Date of withdrawal of any conflicting National Standard (dow):	31 July 1999

1 Scope

This third part of EN 301 065 specifies the Test Suite Structure and Test Purposes (TSS&TP) for the User 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 Completion of Calls on No Reply (CCNR) supplementary service for the pan-European Integrated Services Digital Network (ISDN) by means of the Digital Subscriber Signalling System No. one (DSS1) protocol, EN 301 065-1 [1].

A further part of the present document specifies the Abstract Test Suite (ATS) and partial PIXIT proforma based on the present document. Other parts specify the TSS&TP and the ATS and partial PIXIT proforma for the Network side of the T reference point or coincident S and T reference point of implementations conforming to EN 301 065-1 [1].

2 Normative references

References may be made to:

- a) specific versions of publications (identified by date of publication, edition number, version number, etc.), in which case, subsequent revisions to the referenced document do not apply; or
- b) all versions up to and including the identified version (identified by "up to and including" before the version identity); or
- c) all versions subsequent to and including the identified version (identified by "onwards" following the version identity); or
- d) publications without mention of a specific version, in which case the latest version applies.

A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

- [1] EN 301 065-1 (V1.1): "Integrated Services Digital Network (ISDN); Completion of Calls on No Reply (CCNR) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".
- [2] EN 301 065-2 (V1.1): "Integrated Services Digital Network (ISDN); Completion of Calls on No Reply (CCNR) supplementary service; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 2: Protocol Implementation Conformance Statement (PICS) proforma specification".
- [3] ISO/IEC 9646-1 (1994): "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 1: General concepts".
- [4] ISO/IEC 9646-2 (1994): "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 2: Abstract test suite specification".
- [5] ISO/IEC 9646-3 (1992): "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 3: The Tree and Tabular Combined Notation (TTCN)".
- [6] EN 300 196-1: "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-T Recommendation I.411 (1993): "ISDN user-network interfaces; Reference configurations".
- [8] EN 300 403-1: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 1: Protocol specification [ITU-T Recommendation Q.931 (1993), modified]".
- [9] ITU-T Recommendation I.112 (1993): "Vocabulary of terms for ISDNs".
- [10] CCITT Recommendation E.164 (1997): "The international public telecommunication numbering plan".

- [11] ITU-T Recommendation I.210 (1993): "Principles of the telecommunication services supported by an ISDN and the means to describe them".
- [12] EN 300 403-3: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Signalling network layer for circuit-mode basic call control; Part 3: Protocol Implementation Conformance Statement (PICS) proforma specification".

3 Definitions and abbreviations

3.1 Definitions

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

3.1.1 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].

active test: a test case where the IUT is required to send a particular message, but not in reaction to a received message. This would usually involve the use of PIXIT information to see how this message can be generated and quite often is specified in an ATS using an implicit send event.

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

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

Lower Tester (LT): refer to ISO/IEC 9646-1 [3].

passive test: a test case where the IUT is required to respond to a protocol event (e.g. received message) with another protocol event (e.g. send message) which normally does not require any special operator intervention as associated with the implicit send event.

Point of Control and Observation (PCO): 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 (SUT): refer to ISO/IEC 9646-1 [3].

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

3.1.2 Definitions related to EN 301 065-1

component: see EN 300 196-1 [6], subclause 11.2.2.1.

dummy call reference: see EN 300 403-1 [8], subclause 4.3.

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 EN 300 196-1 [6], subclause 11.2.2.1.

return error component: see EN 300 196-1 [6], subclause 11.2.2.1.