SLOVENSKI STANDARD
SIST EN 301 614-3:2000

01-januar-2000

Digitalne izboljġane brezvrviļ ne telekomunikacije (DECT) - Digitalno omreġje z integriranimi storitvami (ISDN) - Vzajemno delovanje DECT/ISDN v obliki posredovalnega sistema - 3. del: Preskuġevalna specifikacija, odvisna od profila (PSTS), za fiksno radijsko zaključ itev (FT)

Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for intermediate system configuration; Part 3: Profile Specific Test Specification (PSTS) for Fixed radio Termination (FT)

Ta slovenski standard je istoveten z: **EN 301 614-3 Version 1.1.2**

ICS:

33.070.30	Digitalne izboljġane brezvrviļ ne telekomunikacije (DECT)	Digital Enhanced Cordless Telecommunications (DECT)
33.080	Digitalno omrežje z integriranimi storitvami (ISDN)	Integrated Services Digital Network (ISDN)

SIST EN 301 614-3:2000 **en**

EN 301 614-3 V1.1.2 (1999-02)

European Standard (Telecommunications series)

Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for intermediate system configuration; Part 3: Profile Specific Test Specification (PSTS) for Fixed radio Termination (FT)

Reference

DEN/DECT-040104-3 (ey0r0idc.PDF)

Keywords

DECT, ICS, ISDN, profile

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
Individual copies of this ETSI deliverable
can be downloaded from
http://www.etsi.org
If you find errors in the present document, send your
comment to: editor@etsi.fr

Contents

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.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 Project Digital Enhanced Cordless Telecommunications (DECT).

The present document is part 3 of a multi-part EN covering the DECT/ISDN interworking for intermediate system configuration, as identified below:

Part 1: "Profile Test Specification (PTS) summary";

Part 2: "Profile Specific Test Specification (PSTS) for Portable radio Termination (PT)";

Part 3: "Profile Specific Test Specification (PSTS) for Fixed radio Termination (FT)".

National transposition dates	
Date of adoption of this EN:	25 December 1998
Date of latest announcement of this EN (doa):	31 March 1999
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 September 1999
Date of withdrawal of any conflicting National Standard (dow):	30 September 1999

1 Scope

The present document contains the test specification for Digital Enhanced Cordless Telecommunications/Integrated Services Digital Network (DECT/ISDN) Interworking for Intermediate system Profile (IIP) Fixed Part (FP) applications as specified in ETS 300 822 [6].

This test specification provides conformance tests for DECT/ISDN terminal equipment conforming to ETS 300 822 [6]. The main objective is to perform a high probability of inter-operability between the DECT/ISDN terminal equipment and an ISDN network. The DECT/ISDN terminal equipment contains Fixed Parts (FPs) and Portable Parts (PPs) that may be supplied by different manufacturers.

The ISO standard for the methodology of conformance testing ISO/IEC 9646 [19] to [25] is used as the basis for the test methodology, and as the basis for test case specification.

The test cases if listed in the present document have been derived from the corresponding ATS. Additional DECT/ISDN IIP specific test cases are included where required.

Annex A provides Profile Implementation eXtra Information for Testing (IXIT) proforma part of the present document.

Annex B provides Profile Conformance Test Report (Profile CTR) proforma part of the present document.

Annex C provides System Conformance Test Report (SCTR) proforma part of the present document.

Annex D provides the Profile X Requirement List (XRL) proforma part of the present document.

Annex E provides modifications of DECT layer PCTR proforma of the present document.

Annex F provides the Tree and Tabular Combined Notation (TTCN) part for DECT NWK layer conforming to the requirements of the present document.

Annex G provides the TTCN part for DECT DLC layer conforming to the requirements of the present document.

Annex H provides the TTCN part for DECT MAC layer conforming to the requirements of the present document.

Annex I provides the TTCN part for DECT/ISDN IWU - IIP profile.

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 300 175-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical Layer (PHL)".

[2] EN 300 175-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".

[3] EN 300 175-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".

[4] EN 300 175-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".

[5] EN 300 444 (1997): "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP)".

[6] ETS 300 822: "Digital Enhanced Cordless Telecommunications (DECT); Integrated Services Digital Network (ISDN); DECT/ISDN interworking for intermediate system configuration; Interworking and profile specification".

[7] EN 300 176: "Digital Enhanced Cordless Telecommunications (DECT); Approval test specification".

[8] ETS 300 476-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 4: Network (NWK) layer - Fixed radio Termination (FT)".

[9] ETS 300 476-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 5: Data Link Control (DLC) layer - Fixed radio Termination (FT)".

[10] ETS 300 476-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 6: Medium Access Control (MAC) layer - Fixed radio Termination (FT)".

[11] ETS 300 476-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 7: Physical layer".

[12] EN 301 241-2: "Digital Enhanced Cordless Telecommunications (DECT)/Integrated Services Digital Network (ISDN); DECT/ISDN interworking for intermediate system configuration; Profile Implementation Conformance Statement (ICS); Part 2: Fixed radio Termination (FT)".

[13] EN 300 497-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 1: Test Suite Structure (TSS) and Test Purposes (TP) for Medium Access Control (MAC) layer".

[14] EN 300 497-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 3: Abstract Test Suite (ATS) for Medium Access Control (MAC) layer - Fixed radio Termination (FT)".

[15] EN 300 497-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 4: Test Suite Structure (TSS) and Test Purposes (TP) - Data Link Control (DLC) layer".

[16] EN 300 497-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 5: Abstract Test Suite (ATS) - Data Link Control (DLC) layer".

[17] EN 300 497-8: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 8: Test Suite Structure (TSS) and Test Purposes (TP) - Network (NWK) layer - Fixed radio Termination (FT)".

[18] EN 300 497-9: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 9: Abstract Test Suite (ATS) for Network (NWK) layer - Fixed radio Termination (FT)".

[19] ISO/IEC 9646-1 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts". (See also CCITT Recommendation X.290 (1991)).

[20] ISO/IEC 9646-2 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification". (See also CCITT Recommendation X.291 (1991)).

[21] ISO/IEC 9646-3 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 3: The Tree and Tabular Combined Notation". (See also CCITT Recommendation X.292 (1992)).

[22] ISO/IEC 9646-4 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 4: Test realization". (See also CCITT Recommendation X.292 (1992)).

[23] ISO/IEC 9646-5 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 5: Requirements on test laboratories and clients for the conformance assessment process". (See also CCITT Recommendation X.292 (1992)).

[24] ISO/IEC 9646-6 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol profile test specification".

[25] ISO/IEC 9646-7 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statement".

[26] ETS 300 402-2: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Data link layer; Part 2: General protocol specification [ITU-T Recommendation Q.921 (1993), modified]".

[27] ETS 300 402-4: "Integrated Services Digital Network (ISDN); Digital Subscriber Signalling System No. one (DSS1) protocol; Data link layer; Part 4: Protocol Implementation Conformance Statement (PICS) proforma specification for the general protocol".

[28] ETS 300 012 (1992) including Amendment 2 (1996): "Integrated Services Digital Network (ISDN); Basic user-network interface; Layer 1 specification and test principles".

[29] Void.

[30] TBR 3: "Integrated Services Digital Network (ISDN); Attachment requirements for terminal equipment to connect to an ISDN using ISDN basic access".

[31] TBR 22: "Radio Equipment and Systems (RES); Attachment requirements for terminal equipment for Digital Enhanced Cordless Telecommunications (DECT) Generic Access Profile (GAP) applications".

[32] EN 300 497-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 2: Abstract Test Suite (ATS) for Medium Access Control (MAC) layer - Portable radio Termination (PT)".

3 Definitions and abbreviations

3.1 Definitions

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

a) The terms defined in ISO/IEC 9646-7 [25]; and

b) The definitions in ETS 300 822 [6].

3.2 Abbreviations

For the purposes of the present document, the abbreviations defined in ISO/IEC 9646-1 [19], ISO/IEC 9646-6 [24], ISO/IEC 9646-7 [25] and the abbreviations defined in ETS 300 822 [6], apply. In particular, the following abbreviations apply:

ASP	Abstract Service Primitive
ATM	Abstract Test Method
ATS	Abstract Test Suite
BI	Invalid Behaviour
BO	Inopportune Behaviour
BV	Valid Behaviour
CA	Capability tests
CC	Call Control entity
CI	Common Interface
DECT	Digital Enhanced Cordless Telecommunications
DLC	Data Link Control layer
FT	Fixed radio Termination
GAP	Generic Access Profile
ICS	Implementation Conformance Statement
ISDN	Integrated Services Digital Network
ISO	International Organization for Standardization
IUT	Implementation Under Test
IXIT	Implementation eXtra Information for Testing
IWP	Interworking Profile
LCE	Link Control Entity
LT	Lower Tester
MAC	Medium Access Control layer
MM	Mobility Management entity
MTC	Main Test Component
NWK	Network layer
PDU	Protocol Data Unit
PHL	Physical layer
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
PSTS	Profile Specific Test Specification
PT	Portable radio Termination
PTS	Profile Test Specification
SAP	Service Access Point
SCS	System Conformance Statement
SDU	Service Data Unit
SUT	System Under Test
TP	Test Purpose
TSS	Test Suite Structure
XRL	IXIT Requirements list

4 DECT NWK layer protocol

4.1 Additional test purposes

Figure 1 shows the Network (NWK) Test Suite Structure (TSS) defined in EN 300 497-8 [17] for the conformance testing.

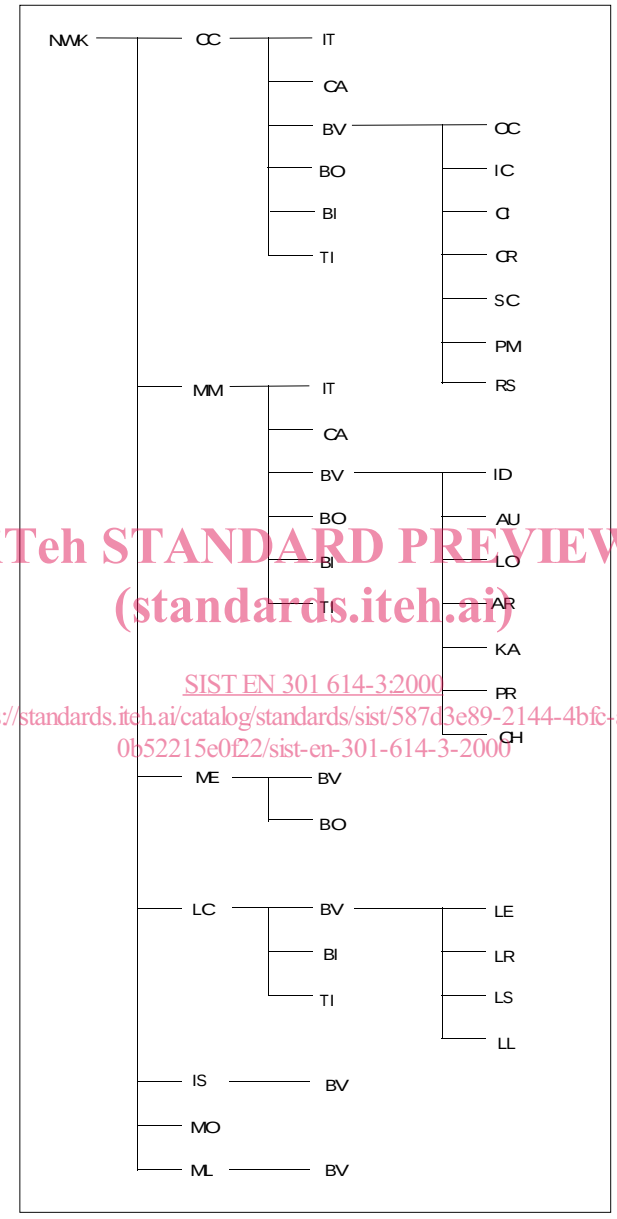

Figure 1: NWK TSS

No test purpose for CC entity of the NWK layer as specified in EN 300 497-8 [17] applies without modification.

Some of the test purposes for LCE entity of the NWK layer as specified in EN 300 497-8 [17] apply with no modifications.

No test purpose for CISS entity of the NWK layer is relevant.

4.1.1 Additional test purposes for IIP CC specific behaviours

4.1.1.1 Test group FT/CC/BV/IS

TP_FT_CC_BV_IS_01	ETS 300 822 [6], subclause 6.5 Initial condition: CC is idle, no link is established Check that, upon receipt of a correct {IWU_INFO} message containing a ISDN {SET-UP} requesting a U-plane, the IUT will reply by sending a {CC_SETUP} for an outgoing call
TP_FT_CC_BV_IS_02	ETS 300 822 [6], subclause 6.5 Initial condition: CC is idle, no link is established Check that, upon receipt of a {IWU_INFO} message containing an invalid ISDN {SET-UP}, the IUT will not reply by sending a {CC_SETUP} for an outgoing call
TP_FT_CC_BV_IS_05	ETS 300 822 [6], subclause 12.2.1 Initial condition: a link is established, using a LU1 service U-plane Check that the IUT after detecting the switching request (evaluating ISDN layer 3 messages) starts the switching procedure from LU1 to LU7.
TP_FT_CC_BV_IS_06	ETS 300 822 [6], subclause 12.2.2 Initial condition: a link is established, using a LU7 service U-plane Check that the IUT after detecting the switching request (evaluating ISDN layer 3 messages) starts the switching procedure from LU7 to LU1.
TP_FT_CC_BV_IS_07	ETS 300 822 [6], subclause 12.2.3 Initial condition: a link is established, using a LU1 service U-plane Check that the IUT after detecting the switching request (detecting the 2 100 Hz modem tone over the U-plane link) starts the switching procedure from LU1 full slot to LU8 double slot.
TP_FT_CC_BV_IS_08	ETS 300 822 [6], subclause 12.2.4 Initial condition: a link is established, using a LU8 service U-plane Check that the IUT after detecting the switching request starts the switching procedure from LU8 double slot to LU1 full slot.
TP_FT_CC_BV_IS_09	ETS 300 822 [6], subclause 12.2.4.1 Initial condition: a link is established, using a LU7 service U-plane Check that the IUT after detecting the switching request (evaluating ISDN layer 3 messages) starts the switching procedure from LU7 to LU8.
TP_FT_CC_BV_IS_10	ETS 300 822 [6], subclause 12.2.4.1 Initial condition: a link is established, using a LU8 service U-plane Check that the IUT after detecting the switching request (evaluating ISDN layer 3 messages) starts the switching procedure from LU8 to LU7.
TP_FT_CC_BV_IS_11	ETS 300 822 [6], subclause 6.7.3 Initial condition: one link is established point to point configuration. Verify that the IUT, upon receipt of a DISCONNECT in the <<IWU-to-IWU>> a {IWU-INFO}, initiates a disconnection from the network.

4.2 Abstract test method

As stated in EN 300 497-9 [18], the ATM used for the DECT NWK layer is the remote embedded test method.

The DECT/ISDN IIP implies no modification for the definition and the use of the ATM.

4.3 Relevant test cases

The test cases defined for the test group "FT/CC/BV/OC" in EN 300 497-9 [18] are not relevant for the IIP profile.

The test cases defined for the test group "FT/CC/BV/IC" in EN 300 497-9 [18] are not relevant for the IIP profile.

The test cases defined for the test group "FT/CC/BV/CI" in EN 300 497-9 [18] are not relevant for the IIP profile.

The test cases defined for the test group "FT/CC/BV/CR" in EN 300 497-9 [18] are not relevant for the IIP profile.

The test cases defined for the test group "FT/CC/BV/RS" in EN 300 497-9 [18] are not relevant for the IIP profile.