



SLOVENSKI STANDARD  
SIST EN 300 497-8 V0.3.2:2003  
01-december-2003

8 [[ ]HJbY]nVc`ýUbYvfYnj fj ] bYHfY\_ca i b]\_UMfYfB97HLÈG\_i db]j a Ygb]\_`f7 ÷È  
?b^yb]WUdfYg\_i ýUb]`df]a Yfcj`fH7 @È, "XY.`N] fUXVUdfYg\_i ýUbY[ Ub]nUfHGG  
]b`bUa Yb]dfYg\_i ýUb`UfHDLÈCa fYybUd`UghfBK ?È: ]\_gbUfUX]g\_U nU`f ]hY  
fl HŁ

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)

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

<https://standards.iteh.ai/catalog/standards/sist/1c985119-6de5-48c9-bb41-31841bc85244/sist-en-300-497-8-v0-3-2-2003>

Ta slovenski standard je istoveten z: **EN 300 497-8 Version 0.3.2**

**ICS:**

33.070.30      Öä ää) ^/ä à| |zä ^      Digital Enhanced Cordless  
à!^: çicã} ^/ä ^\ [ { ~ } ä ää      Telecommunications (DECT)  
ÖÖÖVD

**SIST EN 300 497-8 V0.3.2:2003**      en

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

SIST EN 300 497-8 V0.3.2:2003

<https://standards.iteh.ai/catalog/standards/sist/1c985119-6de5-48c9-bb41-31841bc85244/sist-en-300-497-8-v0-3-2-2003>

# ETSI EN 300 497-8 V0.3.2 (1999-09)

---

*European Standard (Telecommunications series)*

**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)**

---

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

[SIST EN 300 497-8 V0.3.2:2003](https://standards.iteh.ai/catalog/standards/sist/1c985119-6de5-48c9-bb41-31841bc85244/sist-en-300-497-8-v0-3-2-2003)

<https://standards.iteh.ai/catalog/standards/sist/1c985119-6de5-48c9-bb41-31841bc85244/sist-en-300-497-8-v0-3-2-2003>



---

**Reference**

REN/DECT-040131-8 (4lq0011c.PDF)

---

**Keywords**

DECT, network, FT, testing, TSS&TP

**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-Prefecture de Grasse (06) N° 7803/88

<https://standards.etsi.org/standards-search/31841bc85244/sist-en-300-497-8-v0-3-2-2003>

---

**Internet**

[secretariat@etsi.fr](mailto: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](mailto: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 1999.  
All rights reserved.

# Contents

Intellectual Property Rights.....	5
Foreword .....	5
1 Scope.....	6
2 References.....	6
3 Definitions and abbreviations .....	7
3.1 Definitions .....	7
3.2 Abbreviations.....	7
4 Test Suite Structure (TSS) .....	9
4.1 TSS overview.....	9
4.2 Test groups.....	10
4.2.1 Protocol groups .....	10
4.2.1.1 Call Control (CC) .....	10
4.2.1.2 Mobility Management (MM).....	10
4.2.1.3 Lower layer Management Entity (ME) .....	10
4.2.1.4 Link Control (LC).....	10
4.2.1.5 Call Independent Supplementary Services (CISS).....	10
4.2.1.6 Connection Oriented Message Services (COMS).....	10
4.2.1.7 Connectionless Message Services (CLMS) .....	10
4.2.2 Main test groups .....	10
4.2.2.1 Basic Interconnection tests (IT).....	10
4.2.2.2 Capability tests (CA) .....	10
4.2.2.3 Valid Behaviour tests (BV).....	10
4.2.2.4 Invalid Behaviour tests (BI).....	11
4.2.2.5 Inopportune Behaviour tests (BO).....	11
4.2.2.6 Timer expiry and counter mismatch tests (TI).....	11
5 Test Purposes (TP).....	11
5.1 Introduction.....	11
5.1.1 TP definition conventions .....	11
5.1.2 References .....	11
5.1.3 TP naming conventions .....	12
5.2 CC test purposes .....	12
5.2.1 CC/IT test purposes.....	13
5.2.2 CC/CA test purposes .....	13
5.2.3 CC/BV test purposes .....	13
5.2.3.1 CC/BV/OC test purposes .....	14
5.2.3.2 CC/BV/IC test purposes .....	14
5.2.3.3 CC/BV/CI test purposes .....	15
5.2.3.4 CC/BV/CR test purposes .....	16
5.2.3.5 CC/BV/SC test purposes.....	17
5.2.3.6 CC/BV/PM test purposes.....	17
5.2.3.7 CC/BV/RS test purposes.....	17
5.2.3.8 CC/BV/HP test purposes .....	18
5.2.4 CC/BO test purposes .....	18
5.2.5 CC/BI test purposes.....	19
5.2.6 CC/TI test purposes.....	19
5.3 MM test purposes.....	20
5.3.1 MM/IT test purposes .....	20
5.3.2 MM/CA test purposes .....	20
5.3.3 MM/BV test purposes .....	20
5.3.3.1 MM/BV/ID test purposes .....	20
5.3.3.2 MM/BV/AU test purposes .....	21
5.3.3.3 MM/BV/LO test purposes .....	22
5.3.3.4 MM/BV/AR test purposes .....	23

5.3.3.5	MM/BV/KA test purposes .....	23
5.3.3.6	MM/BV/PR test purposes .....	24
5.3.3.7	MM/BV/CH test purposes .....	24
5.3.3.8	MM/BV/HP test purposes .....	25
5.3.4	MM/BO test purposes .....	26
5.3.5	MM/BI test purposes .....	26
5.3.6	MM/VI test purposes .....	27
5.4	ME test purposes .....	27
5.4.1	ME/BV test purposes .....	28
5.4.2	ME/BO test purposes .....	28
5.5	LC test purposes .....	28
5.5.1	LC/BV test purposes .....	28
5.5.1.1	LC/BV/LE test purposes .....	29
5.5.1.2	LC/BV/LR test purposes .....	29
5.5.1.3	LC/BV/LS test purposes .....	29
5.5.1.4	LC/BV/CL test purposes .....	30
5.5.2	LC/BI test purposes .....	30
5.5.3	LC/VI test purposes .....	30
5.6	IS test purposes .....	30
5.6A	IS/BV test purposes .....	31
5.7	MO test purposes .....	31
5.8	CL test purposes .....	31
5.9	CL/BV test purposes .....	31
	Bibliography .....	32
	History .....	33

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

[SIST EN 300 497-8 V0.3.2:2003](https://standards.iteh.ai/catalog/standards/sist/1c985119-6de5-48c9-bb41-31841bc85244/sist-en-300-497-8-v0-3-2-2003)

<https://standards.iteh.ai/catalog/standards/sist/1c985119-6de5-48c9-bb41-31841bc85244/sist-en-300-497-8-v0-3-2-2003>

## 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 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 8 of a multi-part EN covering the Common Interface (CI) Test Case Library (TCL), as identified below:

- Part 1: "Test Suite Structure (TSS) and Test Purposes (TP) for Medium Access Control (MAC) layer";
- Part 2: "Abstract Test Suite (ATS) for Medium Access Control (MAC) layer - Portable radio Termination (PT)";
- Part 3: "Abstract Test Suite (ATS) for Medium Access Control (MAC) layer - Fixed radio Termination (FT)";
- Part 4: "Test Suite Structure (TSS) and Test Purposes (TP) - Data Link Control (DLC) layer";
- Part 5: "Abstract Test Suite (ATS) - Data Link Control (DLC) layer";
- Part 6: "Test Suite Structure (TSS) and Test Purposes (TP) - Network (NWK) layer - Portable radio Termination (PT)";
- Part 7: "Abstract Test Suite (ATS) for Network (NWK) layer - Portable radio Termination (PT)";
- Part 8: "Test Suite Structure (TSS) and Test Purposes (TP) - Network (NWK) layer - Fixed radio Termination (FT)";**
- Part 9: "Abstract Test Suite (ATS) for Network (NWK) layer - Fixed radio Termination (FT)".

### National transposition dates

Date of adoption of this EN:	27 August 1999
Date of latest announcement of this EN (doa):	30 November 1999
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 May 2000
Date of withdrawal of any conflicting National Standard (dow):	31 May 2000

---

# 1 Scope

The present document contains the test specification for the Digital Enhanced Cordless Telecommunications (DECT) (EN 300 175 parts 1 to 8 [1] to [8]).

The objective of this test specification is to provide a basis for approval tests for DECT equipment giving a high probability of air interface inter-operability between different manufacturer's DECT equipment. This test specification defines the Test Suite Structure (TSS) and Test Purposes (TP) for testing of the Network (NWK) layer at the Fixed radio Termination (FT).

The ISO standard for the methodology of conformance testing (ISO/IEC 9646-1 [12]) as well as the ETSI rules for conformance testing (ETS 300 406 [9]) are used as a basis for the test methodology.

Test specifications for the Physical layer (PHL) are provided in other DECT standards.

---

# 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, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, 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.

- iTeh STANDARD PREVIEW*  
*(standards.iteh.ai)*
- <https://standards.iteh.ai/catalog/standards/sist/1c983119-0dc3-48c9-bb41-31841bc85244/sist-en-300-497-8-v0-3-2-2003>
- [SIST EN 300 497-8 V0.3.2:2003](https://standards.iteh.ai/catalog/standards/sist/1c983119-0dc3-48c9-bb41-31841bc85244/sist-en-300-497-8-v0-3-2-2003)
- [1] EN 300 175-1: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".
- [2] EN 300 175-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical Layer (PHL)".
- [3] EN 300 175-3: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".
- [4] EN 300 175-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".
- [5] EN 300 175-5: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".
- [6] EN 300 175-6: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing".
- [7] EN 300 175-7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features".
- [8] EN 300 175-8: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 8: Speech coding and transmission".
- [9] ETS 300 406: "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".
- [10] EN 300 444: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP)".
- [11] EN 300 824: "Digital Enhanced Cordless Telecommunications (DECT); Cordless Terminal Mobility (CTM), CTM Access Profile (CAP)".



- [12] ISO/IEC 9646-1: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 1: General concepts".
- [13] ISO/IEC 9646-2: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 2: Abstract Test Suite Specification".

## 3 Definitions and abbreviations

### 3.1 Definitions

For the purposes of the present document, the terms and definitions given in ISO/IEC 9646-1 [12], ISO/IEC 9646-2 [13], EN 300 175-1 [1], EN 300 175-5 [5], EN 300 175-6 [6] and EN 300 175-7 [7] apply.

### 3.2 Abbreviations

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

AC	Authentication Code
AR	Access Rights
AU	Authentication
BI	Invalid Behaviour
BO	Inopportune Behaviour
BV	Valid Behaviour
CA	Capability
CC	Call Control
CI	Call Information
CISS	Call Independent Supplementary Services
CLMS	Connectionless Message Services
COMS	Connection Oriented Message Services
CR	Call Release
DECT	Digital Enhanced Cordless Telecommunications
FT	Fixed radio Termination
HP	Handover Procedure
IC	Incoming Call
ID	Identification
IPUI	International Portable User Identity
IUT	Implementation Under Test
KA	Key Allocation
LC	Link Control
LE	Connection oriented Link Establishment
LL	Connectionless Link control
LO	Location
LR	Connection oriented Link Release
LS	Connection oriented Link Suspend and resume
LT	Lower Tester
ME	Management Entity
MM	Mobility Management
MO	Connection Oriented Message Services
NWK	Network layer
OC	Outgoing Call
PARK	Portable Access Rights Key
PDU	Protocol Data Unit
PHL	Physical layer
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation Extra Information for Testing
PM	Packet Mode
PR	Parameter Retrieval

PT	Portable radio termination
RS	Call Related Supplementary Services
SC	Service Change
TP	Test Purposes
TSS	Test Suite Structure
TTCN	Tree and Tabular Combined Notation
UAK	User Authentication Key

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

[SIST EN 300 497-8 V0.3.2:2003](https://standards.iteh.ai/catalog/standards/sist/1c985119-6de5-48c9-bb41-31841bc85244/sist-en-300-497-8-v0-3-2-2003)

<https://standards.iteh.ai/catalog/standards/sist/1c985119-6de5-48c9-bb41-31841bc85244/sist-en-300-497-8-v0-3-2-2003>

## 4 Test Suite Structure (TSS)

### 4.1 TSS overview

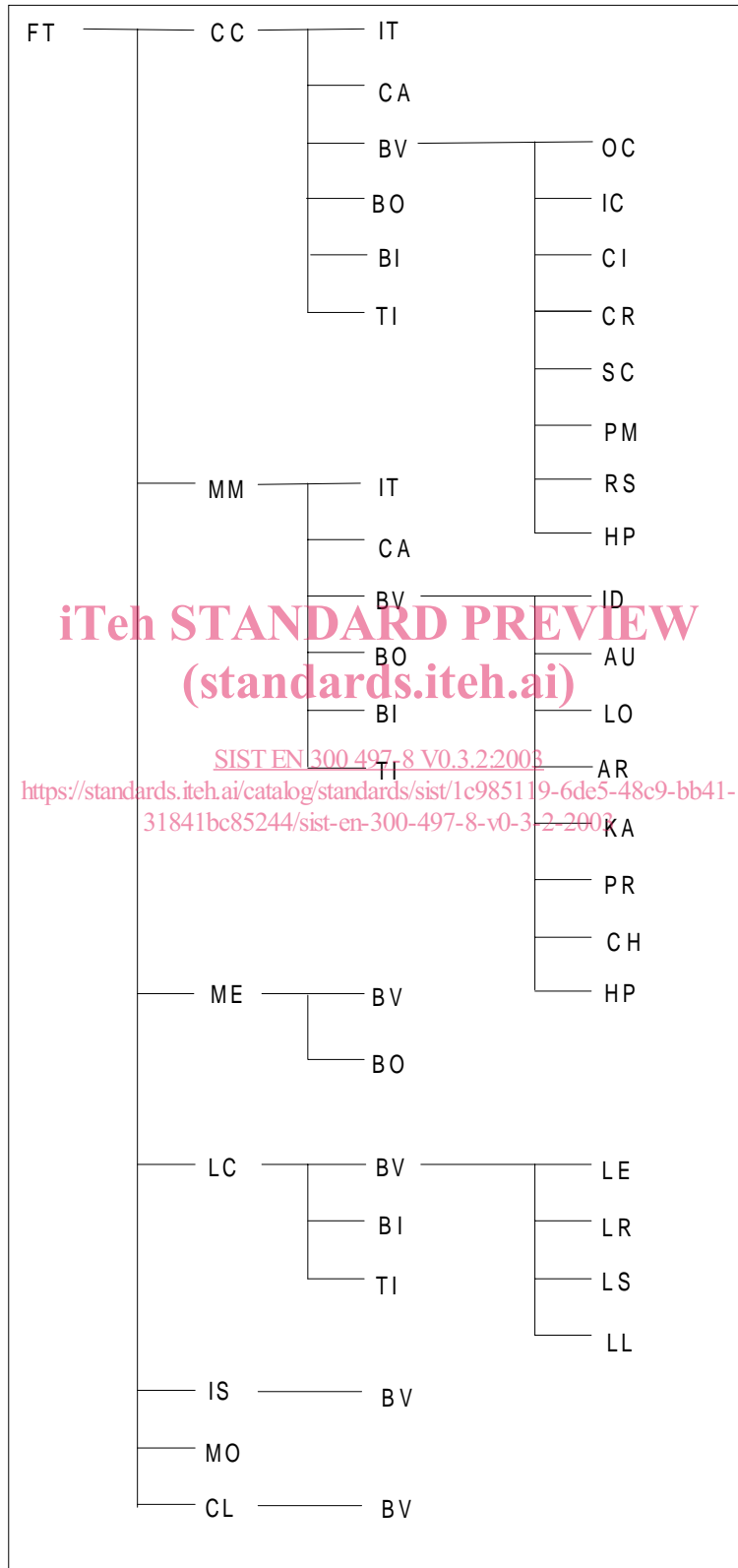


Figure 1: TSS

## 4.2 Test groups

### 4.2.1 Protocol groups

#### 4.2.1.1 Call Control (CC)

Reference: EN 300 175-5 [5], subclause 5.2, clause 9 and subclause 15.7.

#### 4.2.1.2 Mobility Management (MM)

Reference: EN 300 175-5 [5], subclause 5.6, clause 13 and subclause 15.7.

#### 4.2.1.3 Lower layer Management Entity (ME)

Reference: EN 300 175-5 [5], clause 15.

#### 4.2.1.4 Link Control (LC)

Reference: EN 300 175-5 [5], subclause 5.7 and clause 14.

#### 4.2.1.5 Call Independent Supplementary Services (CISS)

Reference: EN 300 175-5 [5], subclauses 5.3 and 10.4.2.2.

#### 4.2.1.6 Connection Oriented Message Services (COMS)

Reference: EN 300 175-5 [5], subclause 5.4 and clause 11.

#### 4.2.1.7 Connectionless Message Services (CLMS)

Reference: EN 300 175-5 [5], subclause 5.5 and clause 12.

### 4.2.2 Main test groups

#### 4.2.2.1 Basic Interconnection tests (IT)

IT tests provide limited testing of an Implementation Under Test (IUT) in order to establish that there is sufficient conformance for possible interconnection without trying to perform thorough testing. In particular, only those test cases will be executed which will assure the sufficient interconnection between the IUT of the NWK layer and the test system exists, so that the rest of the test cases can then be put into execution.

#### 4.2.2.2 Capability tests (CA)

CA tests provide limited testing that the observable capabilities of the IUT are in accordance with the static conformance requirements and the additional capabilities claimed in the Protocol Implementation Conformance Statement / Protocol Implementation Extra Information for Testing (PICS/PIXIT). In particular, this test group can be regarded as a set of spot checks for all the capabilities of the IUT stated in the PICS/PIXIT. Scope of the test group is the observable capabilities of the IUT with respect to NWK layer connection, call control, and the mobility management.

#### 4.2.2.3 Valid Behaviour tests (BV)

BV group tests an IUT in response to valid behaviour of the test system. "Valid" means that a test event is syntactically and contextually correct. All test cases in the valid behaviour group are intended to verify as thoroughly as possible the various functions of the protocol.