



# SLOVENSKI STANDARD SIST ETS 300 494-2:1999

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Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP);  
Profile Test Specification (PTS); Part 2: Profile Specific Test Specification (PSTS) -  
Portable radio Termination (PT)

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Ta slovenski standard je istoveten z: **ETS 300 494-2 Edition 1**

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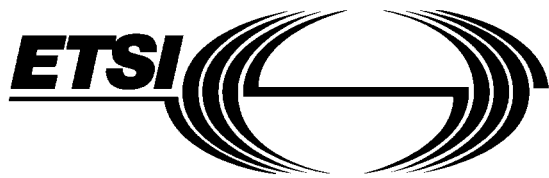
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**E**UROPEAN  
**T**ELECOMMUNICATION  
**S**TANDARD

**ETS 300 494-2**

August 1996

Source: ETSI TC-RES

Reference: DE/RES-03040-2

ICS: 33.020, 33.060.50

**Key words:** DECT, GAP, testing

**Radio Equipment and Systems (RES);  
Digital Enhanced Cordless Telecommunications (DECT);  
Generic Access Profile (GAP);  
Profile Test Specification (PTS);  
Part 2: Profile Specific Test Specification (PSTS)  
- Portable radio Termination (PT)**

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**Foreword**

This European Telecommunication Standard (ETS) has been produced by the Radio Equipment and Systems (RES) Technical Committee of the European Telecommunications Standards Institute (ETSI).

The General Access Profile (GAP) Profile Test Specification (PTS) comprises three parts:

Part 1: "Summary";

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

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

<b>Transposition dates</b>	
Date of adoption of this ETS:	16 August 1996
Date of latest announcement of this ETS (doa):	30 November 1996
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 May 1997
Date of withdrawal of any conflicting National Standard (dow):	31 May 1997

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## 1 Scope

This European Telecommunication Standard (ETS) contains the test specification for Digital Enhanced Cordless Telecommunications (DECT) Generic Access Profile (GAP) Portable Part (PP) applications.

The main objective of the GAP test specification is to provide approval tests giving a high probability of air interface inter-operability between different manufacturer's equipment in different environments (i.e. public, business and residential).

The ISO standard for the methodology of conformance testing ISO/IEC 9646 Parts 1 to 7 [9] to [15] is used as the basis for the test methodology, and as the basis for test case specification. This is considered as unsuitable for the physical layer testing, and therefore text description is used.

The test cases listed in this ETS have been derived from the DECT Common Interface (CI) Test Case Library (TCL) [47]. In addition as far as physical layer is concerned I-ETS 300 176 [16] applies. Additional GAP specific test cases are included where required. The Profile IXIT is based on the DECT CI PIXITs specified in ETS 300 497 [18].

## 2 Normative references

This ETS incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to, or revisions of, any of these publications apply to this Technical Basis for Regulation only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] ETS 300 175-1: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".
- [2] ETS 300 175-2: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical Layer".
- [3] ETS 300 175-3: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer".
- [4] ETS 300 175-4: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".
- [5] ETS 300 175-5: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".
- [6] ETS 300 175-6: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing".
- [7] ETS 300 175-7: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features".
- [8] ETS 300 444 (1995): "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Generic Access Profile (GAP)".
- [9] 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)).

- [10] 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)).
- [11] 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)).
- [12] ISO/IEC 9646-4 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 4: Test realisation". (See also CCITT Recommendation X.292 (1992)).
- [13] 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)).
- [14] ISO/IEC 9646-6 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol profile test specification".
- [15] ISO/IEC 9646-7 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation conformance statement".
- [16] I-ETS 300 176: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Approval test specification".
- [17] ETS 300 476-1: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 1: Network (NWK) layer - Portable radio Termination (PT)".  
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- [18] ETS 300 497-1: "Radio Equipment and Systems (RES); 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".
- [19] ETS 300 497-2: "Radio Equipment and Systems (RES); 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)".
- [20] ETS 300 497-3: "Radio Equipment and Systems (RES); 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)".
- [21] ETS 300 497-4: "Radio Equipment and Systems (RES); 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".
- [22] ETS 300 497-5: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 5: Abstract Test Suite (ATS) - Data Link Control (DLC) layer".

- [23] ETS 300 497-6: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 6: Test Suite Structure (TSS) and Test Purposes (TP) - Network (NWK) layer - Portable radio Termination (PT)".
- [24] ETS 300 497-7: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL); Part 7: Abstract Test Suite (ATS) for Network (NWK) layer - Portable radio Termination (PT)".
- [25] ETS 300 497-8: "Radio Equipment and Systems (RES); 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)".
- [26] ETS 300 497-9: "Radio Equipment and Systems (RES); 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)".
- [27] ETS 300 474-1: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile requirement list and profile specific Implementation Conformance Statement (ICS) proforma; Part 1: Portable radio Termination (PT)".
- [28] ETS 300 494-1: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 1: Summary"

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### 3 Definitions and abbreviations

#### 3.1 Definitions

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For the purposes of this ETS, the following definitions apply:

- terms defined in ISO/IEC 9646 Parts 1 to 7 [9] to [15];
- definitions in ETS 300 175 Parts 1 to 7 [1] to [7];
- definitions in pr ETS 300 444 [8].

### 3.2 Abbreviations

For the purposes of this ETS, the following abbreviations apply:

AC	Authentication Code
ATS	Abstract Test Suite
CC	Call Control
CI	Common Interface
DCK	Derived Cipher Key
DLC	Data Link Control
FT	Fixed radio Termination
GAP	Generic Access Profile
ICS	Implementation Conformance Statement
IPII	International Portable User Identity
IUT	Implementation Under Test
IXIT	Implementation eXtra Information for Testing
LCE	Link Control Entity
LLME	Lower Layer Management Entity
MAC	Medium Access Control
MM	Mobility Management
NLF	New Link Flag
NWK	Network
PARK	Portable Access Rights Key
PH	Physical
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
PT	Portable radio Termination
PSTS	Profile Specific Test Specification
PTS	Profile Test Specification
SARI	Secondary Access Rights Identity
SUT	System Under Test
TPUI	Temporary Portable User Identity
TS	Test System

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## 4 Relevant test cases list

### 4.1 Network (NWK) layer

This subclause includes lists of the test groups, abstract test cases and test steps relevant for GAP Profile Test Specification (PTS) - Network (NWK) layer Portable radio Termination (PT) derived from ETS 300 497-7 [24].

The page number referenced is the relative page number in the corresponding ETS where the particular item can be found.

NOTE: As ETS 300 497 [18] is a draft ETS, and some changes are likely due to the results of the Public Enquiry (PE) phase, page numbers reflecting the exact place in that ETS where a test case is to be found are not included in this ETS. They will be added in at a later stage. References when necessary are given based on the particular test case name unique through all test specification ETS 300 497 [18].

## 4.1.1 Test Suite Structure (TSS)

Table 1

TSS	
<b>Suite Name:</b>	nwk_pt
<b>Standards Ref:</b>	ETS 300 444 [8]; ETS 300 497-7 [24]
<b>Profile ICS Ref:</b>	ETS 300 474-1 [27]
<b>Profile IXIT Ref:</b>	ETS 300 494-2
<b>Test Method:</b>	remote
<b>Comments:</b>	
Test Group Reference	Test Group Objective
PT/	To check the behaviour of the NWK layer of the PT(IUT)
PT/CC/	To check the IUT CC-state machine behaviour
PT/CC/IT/	To check that the IUT CC-state machine provides sufficient conformance for possible interconnection without trying to perform thorough testing
PT/CC/CA/	Limited testing that the observable capabilities of the CC entity of the IUT are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT
PT/CC/BV/	To tests the CC entity of the IUT in response to syntactically and contextual correct behaviour of the test system
PT/CC/BV/OC/	To check the IUT's behaviours to setup an outgoing call
PT/CC/BV/IC/	To check the IUT's behaviours to setup an incoming call
PT/CC/BV/CI/	To check the IUT's behaviour in information transfer procedures
PT/CC/BV/CR/	To check the IUT's behaviours to release an outgoing/incoming call
PT/CC/BV/RS/	To check the IUT's behaviour during call related supplementary service procedures
PT/CC/BO/	To check the behaviour of the CC entity of the IUT in response to the messages that are syntactically correct but not allowed to occur in some states of the CC procedures
PT/CC/BI/	To check the behaviour of the CC entity of the IUT in response to invalid messages
PT/CC/TI/	To verify that the IUT CC timers are with correct values and the IUT is reacting properly to the expiry of a timer
PT/MM/	To check the behaviour of the Mobility Management (MM) entity of the IUT
PT/MM/IT/	To check that the MM entity of the IUT provides sufficient conformance for possible interconnection without trying to perform thorough testing
PT/MM/CA/	Limited testing that the observable capabilities of the MM entity of the IUT are in accordance with the static conformance requirements and the additional capabilities claimed in the PROFILE ICS/PROFILE IXIT
PT/MM/BV/	To tests the MM entity of the IUT in response to syntactically and contextual correct behaviour of the test system
PT/MM/BV/ID/	To check the IUT's behaviour concerning identity procedures
PT/MM/BV/AU/	To check the IUT's behaviour concerning the authentication procedures
PT/MM/BV/LO/	To check the IUT's behaviour concerning the location procedures
PT/MM/BV/AR/	To check the IUT's behaviour concerning the access rights procedures
PT/MM/BV/KA/	To check the IUT's behaviour concerning the key allocation procedure
PT/MM/BV/CH/	To check the IUT's behaviour concerning the ciphering related procedures
PT/MM/BO/	To check the IUT behaviour in response to the messages that are syntactically correct but not allowed to occur in some phase of the MM procedures
PT/MM/BI/	To check the IUT in response to invalid MM messages
PT/MM/TI/	To verify that the IUT MM timers are with correct values and the IUT is reacting properly to the expiry of a timer
	(continued)