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Part 1: Profile Test Specification (PTS) summary**

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## Foreword

This draft European Telecommunication Standard (ETS) has been produced by the Radio equipment and Systems (RES) Technical Committee of the European Telecommunications Standards Institute (ETSI), and is now submitted for the Public Enquiry phase of the ETSI standards approval procedure.

The meaning of the abbreviation DECT has been changed to Digital Enhanced Cordless Telecommunications (DECT) by the decision of the 23rd ETSI Technical Assembly (TA), 7th November 1995.

This ETS comprises three parts:

**Part 1:**                               **PTS - summary**

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

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

<b>Proposed transposition dates</b>	
Date of latest announcement of this ETS (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	6 months after doa

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## 1 Scope

This ETS specifies the Profile Test Specification summary referencing all the documents necessary for the conformance testing of the Digital Enhanced Cordless Telecommunications/Global System for Mobile communications (DECT/GSM) Inter-Working Profile (IWP) as specified in ETS 300 370 [11].

This ETS together with the references in clause 2 constitute the DECT/GSM IWP PTS.

This ETS has the following structure:

Clause 4 contains general information relative to the profile including references to the related standards.

Clause 5 contains a summary and references to the standards relevant for each of DECT protocol layers to be tested.

## 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 ETS 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 (PHL) 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 300 175-8: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 8: Speech Coding and Transmission".
- [9] ETS 300 175-9: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Common Interface (CI); Part 9: Public Access Profile (PAP)".
- [10] ETS 300 444: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Generic Access Profile (GAP)".

- [11] ETS 300 370: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications/Global System for Mobile communications (DECT/GSM) inter-working profile; Access and mapping (Protocol/procedure description for 3,1 kHz speech services)".
- [12] prETS 300 476-1: "Radio Equipment and Systems; Digital European Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS); Part 1: Network (NWK) layer -Portable radio Termination (PT)".
- [13] prETS 300 476-2: "Radio Equipment and Systems; Digital European Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS); Part 2: Data Link Control (DLC) layer -Portable radio Termination (PT)".
- [14] prETS 300 476-3: "Radio Equipment and Systems; Digital European Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS); Part 3: Medium Access Control (MAC) layer - Portable radio Termination (PT)".
- [15] prETS 300 476-4: "Radio Equipment and Systems; Digital European Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS); Part 4: Network (NWK) layer - Fixed radio Termination (FT)".
- [16] prETS 300 476-5: "Radio Equipment and Systems; Digital European Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS); Part 5: Data Link Control (DLC) layer - Fixed radio Termination (FT)".
- [17] prETS 300 476-6: "Radio Equipment and Systems; Digital European Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS); Part 6: Medium Access Control (MAC) layer - Fixed radio Termination (FT)".
- [18] prETS 300 476-7: "Radio Equipment and Systems; Digital European Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS); Part 7: Physical (PHL) layer".
- [19] prETS 300 474-1: "Radio Equipment and Systems; Digital European Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile specific Implementation Conformance Statement (ICS); Part 1: Portable radio Termination (PT)".
- [20] prETS 300 474-2: "Radio Equipment and Systems; Digital European Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile specific Implementation Conformance Statement (ICS); Part 2: Fixed radio Termination (FT)".
- [21] prETS 300 704-1: "Radio Equipment and Systems; Digital Enhanced Cordless Telecommunications/Global System for Mobile communications (DECT/GSM) interworking profile; Profile Implementation Conformance Statement (ICS); Part 1: Portable radio Termination (PT)".
- [22] prETS 300 704-2: "Radio Equipment and Systems; Digital Enhanced Cordless Telecommunications/Global System for Mobile communications (DECT/GSM) interworking profile; Profile Implementation Conformance Statement (ICS), Fixed radio Termination (FT)".
- [23] prETS 300 497-1: "Radio Equipment and Systems (RES), Digital European Cordless Telecommunications (DECT): Common Interface (CI), Test Case Library (TCL), Test Suite Structure and Test Purposes, Medium Access Control (MAC) layer".



- [24] prETS 300 497-2: "Radio Equipment and Systems (RES), Digital European Cordless Telecommunications (DECT): Common Interface (CI), Test Case Library (TCL), Abstract Test Suite, Medium Access Control (MAC) layer, Portable radio Termination (PT)".
- [25] prETS 300 497-3: "Radio Equipment and Systems (RES), Digital European Cordless Telecommunications (DECT): Common Interface (CI), Test Case Library (TCL), Abstract Test Suite, Medium Access Control (MAC) layer, Fixed radio Termination (FT)".
- [26] prETS 300 497-4: "Radio Equipment and Systems (RES), Digital European Cordless Telecommunications (DECT): Common Interface (CI), Test Case Library (TCL), Test Suite Structure and Test Purposes, Data Link Control (DLC) layer".
- [27] prETS 300 497-5: "Radio Equipment and Systems (RES), Digital European Cordless Telecommunications (DECT): Common Interface (CI), Test Case Library (TCL), Abstract Test Suite, Data Link Control (DLC) layer".
- [28] prETS 300 497-6: "Radio Equipment and Systems (RES), Digital European Cordless Telecommunications (DECT): Common Interface (CI), Test Case Library (TCL), Test Suite Structure and Test Purposes, Network (NWK) layer, Portable radio Termination (PT)".
- [29] prETS 300 497-7: "Radio Equipment and Systems (RES), Digital European Cordless Telecommunications (DECT): Common Interface (CI), Test Case Library (TCL), Abstract Test Suite, Network (NWK) layer, Portable radio Termination (PT)".
- [30] prETS 300 497-8: "Radio Equipment and Systems (RES), Digital European Cordless Telecommunications (DECT): Common Interface (CI), Test Case Library (TCL), Test Suite Structure and Test Purposes, Network (NWK) layer, Fixed radio Termination (FT)".
- [31] prETS 300 497-9: "Radio Equipment and Systems (RES), Digital European Cordless Telecommunications (DECT): Common Interface (CI), Test Case Library (TCL), Abstract Test Suite, Network (NWK) layer, Fixed radio Termination (FT)".
- [32] prETS 300 494-1: "Radio Equipment and Systems Digital European Cordless Telecommunications Generic Access Profile (GAP), Profile Test Specification (PTS) - Summary".
- [33] prETS 300 494-2: "Radio Equipment and Systems Digital European Cordless Telecommunications Generic Access Profile (GAP), Profile Test Specification (PTS), Profile Specific Test Specification (PSTS), Portable radio Termination (PT)".
- [34] prETS 300 494-3: "Radio Equipment and Systems Digital European Cordless Telecommunications Generic Access Profile (GAP), Profile Test Specification (PTS), Profile Specific Test Specification (PSTS), Fixed radio Termination (FT)".
- [35] prETS 300 702-2: "Radio Equipment and Systems Digital Enhanced Cordless Telecommunications/Global System for Mobile telecommunications (DECT/GSM) interworking profile, Profile Test Specification (PTS), Profile Specific Test Specification (PSTS), Portable radio Termination (PT)".
- [36] prETS 300 702-3: "Radio Equipment and Systems Digital Enhanced Cordless Telecommunications/Global System for Mobile telecommunications (DECT/GSM) interworking profile, Profile Test Specification (PTS), Profile Specific Test Specification (PSTS), Fixed radio Termination (FT)".

- [37] ISO/IEC 9646-1: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 1: General concepts". (See also CCITT Recommendation X.290 (1991)).
- [38] ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance Testing Methodology and Framework - Part 2: Abstract Test Suite Specification". (See also CCITT Recommendation X.291 (1991)).
- [39] ISO/IEC 9646-3: "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)).
- [40] ISO/IEC 9646-4: "Information technology - Open Systems Interconnection - Conformance Testing Methodology and Framework - Part 4: Test realisation". (See also CCITT Recommendation X.292 (1992)).
- [41] ISO/IEC 9646-5: "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)).
- [42] ISO/IEC 9646-6: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol Profile Test Specification".
- [43] ISO/IEC 9646-7: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation Conformance Statements".
- [44] prETS 300 176-1: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Approval Test Specification (ATS); Part 1: Radio".

### 3 Definitions and abbreviations

#### 3.1 Definitions

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

- definitions in ETS 300 370 [11];
- definitions in ISO/IEC 9646, Parts 1 to 7 [37] to [43].

#### 3.2 Abbreviations

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

ATS	Abstract Test Suit
ATM	Abstract Test Method
CC	Call Control entity
CI	Common Interface
DECT	Digital Enhanced Cordless Telecommunications/Digital European Cordless Telecommunications
DLC	Data Link Control
FT	Fixed radio Termination
GAP	Generic Access Profile
GSM	Global System for Mobile communications
ICS	Implementation Conformance Statement
IXIT	Implementation eXtra Information for Testing
IWP	InterWorking Profile
LCE	Link Control Entity
MAC	Medium Access Control

MM	Mobility Management entity
NWK	NetWork
PHL	PHysical
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
SCS	System Conformance Statement

#### 4 Profile identification

**Table 1**

No.	Profile identification	
1	Profile identifier	DECT/GSM IWP
2	Profile specification	ETS 300 370 [11]
3	Profile ICS proforma	ETS 300 704-1 [21]: DECT/GSM IWP Profile ICS Portable radio Termination (PT) ETS 300 704-2 [22]: DECT/GSM IWP Profile ICS Fixed radio Termination (FT)
4	PSTS	ETS 300 702-2 [35]: DECT GSM IWP, PTS, PSTS, Portable radio Termination (PT)  ETS 300 702-3 [36]: DECT GSM IWP, PTS, PSTS, Fixed radio Termination (FT)
5	Profile IXIT proforma	ETS 300 702-2 [35]: DECT GSM IWP, PTS, PSTS, Portable radio Termination (PT)  ETS 300 702-3 [36]: DECT GSM IWP, PTS, PSTS, Fixed radio Termination (FT)
6	SCS proforma	ETS 300 702-2 [35]: DECT GSM IWP, PTS, PSTS, Portable radio Termination (PT)  ETS 300 702-3 [36]: DECT GSM IWP, PTS, PSTS, Fixed radio Termination (FT)
<b>Comments:</b>		

## 5 Elements of the PTS

### 5.1 Conformance testing for NWK layer

**Table 2**

No.	Protocol	
1	Protocol identification	ETS 300 175-5 [5]
2	PICS proforma	ETS 300 476-1 [12] and ETS 300 476-4 [15]
3	TSS & TP	ETS 300 497-6 [28]: Test Suite Structure and Test Purposes, Network (NWK) layer, Portable radio Termination (PT) ETS 300 497-8 [30]: Test Suite Structure and Test Purposes, Network (NWK) layer, Fixed radio Termination (FT)
4	ATS	ETS 300 497-7 [29]: Abstract Test Suite, Network (NWK) layer, Portable radio Termination (PT) ETS 300 497-9 [31]: Abstract Test Suite, Network (NWK) layer, Fixed radio Termination (FT)
5	Applicability of ATS	Basic speech covered. Basic services and procedures concerning CC, MM and LCE entities covered
6	ATM	Remote
7	Partial PIXIT	ETS 300 497-7 [29]: Abstract Test Suite, Network (NWK) layer, Portable radio Termination (PT) ETS 300 497-9 [31]: Abstract Test Suite, Network (NWK) layer, Fixed radio Termination (FT)

**Table 3**

No.	GAP Profile	
1	Profile identification	ETS 300 444 [10]
2	Profile ICS proforma	ETS 300 474 Parts 1 and 2 [19] and [20]
3	PTS - Summary	ETS 300 494-1 [32]: Generic Access Profile (GAP), PTS
4	TSS & TP	ETS 300 494 Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS
5	ATS	ETS 300 494: Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS
6	Applicability of ATS	Basic speech covered. Basic services and procedures concerning CC, MM and LCE entities covered
7	ATM	Remote
8	Partial PIXIT	ETS 300 494: Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS

**Table 4**

No.	DECT/GSM IWP Profile	
1	Profile ICS proforma	ETS 300 704 Parts 1 and 2 [21] and [22]
2	Additional TSS & TP	
3	ATM	Remote
4	Additional test cases	
5	Partial Profile IXIT proforma	ETS 300 702 Parts 2 and 3 [35] and [36] DECT/GSM IWP, PTS, PSTS
6	Modified selection expressions	

## 5.2 Conformance testing for DLC layer

Table 5

No.	Protocol	
1	Protocol identification	ETS 300 175-4 [4]
2	PICS proforma	ETS 300 476-2 [13] and ETS 300 476-5 [16]
3	TSS & TP	ETS 300 497-4 [26]: Test Suite Structure and Test Purposes, DLC layer
4	ATS	ETS 300 497-5 [27]: Abstract Test Suite, DLC layer
5	Applicability of ATS	Basic connection, C-plane: Class-A service, U-plane: class 0/min_delay, FU1 frame, handover, ciphering
6	ATM	Remote
7	Partial PIXIT	ETS 300 497-5 [27]: Abstract Test Suite, DLC layer

Table 6

No.	GAP Profile	
1	Profile identification	ETS 300 444 [10]
2	Profile ICS proforma	ETS 300 474 Parts 1 and 2 [19] and [20]
3	PTS - Summary	ETS 300 494-1 [32] Generic Access Profile (GAP), PTS
4	TSS & TP	ETS 300 494 Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS
5	ATS	ETS 300 494 Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS
6	Applicability of ATS	Basic connection, C-plane: Class-A service, U-plane: class 0/min_delay, FU1 frame, handover, ciphering
7	ATM	Remote
8	Partial PIXIT	ETS 300 494 Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS

Table 7

No.	DECT/GSM IWP Profile	
1	Profile ICS proforma	ETS 300 704 Parts 1 and 2 [21] and [22]
2	Additional TSS & TP	No
3	ATM	Remote
4	Additional test cases	No
5	Partial Profile IXIT proforma	ETS 300 702 Parts 2 and 3 [35] and [36] DECT/GSM IWP, PTS, PSTS
6	Modified selection expressions	No

## 5.3 Conformance testing for MAC layer

Table 8

No.	Protocol	
1	Protocol identification	ETS 300 175-3 [3]
2	PICS proforma	ETS 300 476 Parts 3 and 6 [14] and [17]
3	TSS & TP	ETS 300 497-1 [23]: Test Suite Structure and Test Purposes, MAC layer
4	ATS	ETS 300 497-2 [24]: Abstract Test Suite, MAC layer (NWK), Portable radio Termination (PT) ETS 300 497-3 [25]: Abstract Test Suite, MAC layer, Fixed radio Termination (FT)
5	Applicability of ATS	C <sub>S</sub> higher layer signalling, Basic connections, Continuous broadcast, Short page, normal/extended paging, SARI support, encryption, bearer handover, connection handover, quality control, T-MUX, U-MUX,
6	ATM	Remote (modified)
7	Partial PIXIT	ETS 300 497-2 [24]: Abstract Test Suite, MAC layer (NWK), Portable radio Termination (PT) ETS 300 497-3 [25]: Abstract Test Suite, MAC layer, Fixed radio Termination (FT)

Table 9

No.	GAP Profile	
1	Profile identification	ETS 300 444 [10]
2	Profile ICS proforma	ETS 300 474 Parts 1 and 2 [19] and [20]
3	PTS - Summary	ETS 300 494-1 [32]: Generic Access Profile (GAP), PTS
4	TSS & TP	ETS 300 494 Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS
5	ATS	ETS 300 494 Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS
6	Applicability of ATS	C <sub>S</sub> higher layer signalling, Basic connections, Continuous broadcast, Short page, normal/extended paging, SARI support, encryption, bearer handover, connection handover, quality control, T-MUX, U-MUX,
7	ATM	Remote (modified)
8	Partial PIXIT	ETS 300 494 Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS

Table 10

No.	DECT/GSM IWP Profile	
1	Profile ICS proforma	ETS 300 704 Parts 1 and 2 [21] and [22]
2	Additional TSS & TP	No
3	ATM	Remote (modified)
4	Additional test cases	No
5	Partial Profile IXIT proforma	ETS 300 702 Parts 2 and 3 [35] and [36] DECT/GSM IWP, PTS, PSTS
6	Modified selection expressions	No

## 5.4 Conformance testing for PHL layer

**Table 11**

No.	Protocol	
1	Protocol identification	ETS 300 175-2: Physical layer [2]
2	PICS proforma	ETS 300 476-7 [18]
3	TSS & TP	ETS 300 176-1 [44]
4	ATS	ETS 300 176-1 [44]
5	Applicability of ATS	General terminal attachment requirements, basic telephony applications
6	ATM	-
7	Partial PIXIT	-

**Table 12**

No.	GAP Profile	
1	Profile identification	ETS 300 444 [10]
2	Profile ICS proforma	ETS 300 474 Parts 1 and 2 [19] and [20]
3	PTS - Summary	ETS 300 494-1 [32]: Generic Access Profile (GAP), PTS
4	TSS & TP	ETS 300 494 Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS
5	ATS	ETS 300 494 Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS
6	Applicability of ATS	General terminal attachment requirements, basic telephony applications
7	ATM	-
8	Partial PIXIT	ETS 300 494 Parts 2 and 3 [33] and [34] Generic Access Profile (GAP), PTS, PSTS

**Table 13**

No.	DECT/GSM IWP Profile	
1	Profile ICS proforma	ETS 300 704 Parts 1 and 2 [21] and [22]
2	Additional TSS & TP	No
3	ATM	Remote (modified)
4	Additional test cases	No
5	Partial Profile IXIT proforma	ETS 300 702 Parts 2 and 3 [35] and [36] DECT/GSM IWP, PTS, PSTS
6	Modified selection expressions	No

## 6 Conformance

The test realized of a Means Of Testing (MOT) for this PTS summary shall comply with the requirements of ISO/IEC 9646-4 [40].

In particular, the realization of each referenced ATS shall conform to the ATS specification consistent with the modifications made by the PSTS referenced by this PTS summary. The realisation of the ATS within the PSTS shall conform to the PSTS.

The laboratories running conformance test services according to this PTS summary shall comply with ISO/IEC 9646-5 [41].

## History

Document history	
January 1996	Public Enquiry PE 99: 1996-01-01 to 1996-04-26