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*European Standard (Telecommunications series)*

**Digital Enhanced Cordless Telecommunications (DECT);  
Generic Access Profile (GAP);  
Profile Test Specification (PTS);  
Part 1: Summary**

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Reference

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Keywords

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## Foreword

This European Standard (Telecommunications series) has been produced by ETSI Project Digital Enhanced Cordless Telecommunications (DECT), and is now submitted for the Voting phase of the ETSI standards Two-step Approval Procedure.

The present document is part 1 of a multi-part EN covering the Generic Access Profile (GAP) as identified below:

**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>Proposed national transposition dates</b>   |                                 |
|--|---------------------------------|
| Date of latest announcement of this EN (doa):  | 3 months after ETSI publication |
| Date of latest publication of new National Standard or endorsement of this EN (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

The present document specifies the Profile Test Specification (PTS) summary referencing all the ENs necessary for the conformance testing of the DECT Generic Access Profile (GAP).

This GAP PTS summary together with the ENs it references constitute the GAP PTS.

The present document has the following structure:

- clause 4 contains general information relative to the profile including references to the related ENs;
- clause 5 contains a summary and references to the ENs relevant for each of DECT protocol layers to be tested.

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# 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.

- [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] Void.
- [10] EN 300 444: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP)".
- [11] ISO/IEC 9646-1: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 1: General concepts".
- [12] ISO/IEC 9646-2: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 2: Abstract Test Suite Specification".

- [13] ISO/IEC 9646-3: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 3: The Tree and Tabular Combined Notation (TTCN)".
- [14] ISO/IEC 9646-4: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 4: Test realization".
- [15] 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".
- [16] ISO/IEC 9646-6: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 6: Protocol Profile Test Specification".
- [17] ISO/IEC 9646-7: "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 7: Implementation Conformance statement".
- [18] TR 101 101: "Methods for Testing and Specification (MTS); TTCN interim version including ASN.1 1994 support [ISO/IEC 9646-3] (Second Edition Mock-up for JTC1/SC21 Review)".
- [19] Void.
- [20] EN 300 176: "Digital Enhanced Cordless Telecommunications (DECT); Approval test specification".
- [21] ETS 300 476, part 1 to 7: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma".
- [22] 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".
- [23] 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)".
- [24] 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)".
- [25] 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".
- [26] 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".
- [27] EN 300 497-6: "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)".
- [28] EN 300 497-7: "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)".
- [29] 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)".
- [30] 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)".

- [31] ETS 300 474-1: "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)".
- [31A] ETS 300 474-2: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile requirement list and profile specific Implementation Conformance Statement (ICS) proforma; Part 2: Fixed radio Termination (FT)".
- [32] EN 300 494-2: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 2: Profile Specific Test Specification (PSTS) - Portable radio Termination (PT)".
- [33] EN 300 494-3: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 3: Profile Specific Test Specification (PSTS) - Fixed radio Termination (FT)".

## 3 Definitions and abbreviations

### 3.1 Definitions

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

- definitions in EN 300 175 Parts 1 to 8 [1] to [8];
- definitions in ISO/IEC 9646 Parts 1 to 7 [11] to [18].

### 3.2 Abbreviations

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

|       |   |
|-------|---|
| ATM   | Abstract Test Method                                  |
| ATS   | Abstract Test Suite                                   |
| 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                  |
| IXIT  | Implementation eXtra Information for Testing          |
| LCE   | Link Control Entity                                   |
| MAC   | Medium Access Control layer                           |
| MM    | Mobility Management entity                            |
| PH    | 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                            |
| SCS   | System Conformance Statement                          |
| XRL   | IXIT Requirements List                                |

## 4 Profile identification

Table 1

| No.       | Profile identification |  |
|-----------|------------------------|--|
| 1         | Profile identifier     | Generic Access Profile                 |
| 2         | Profile specification  | EN 300 444 [10]                        |
| 3         | Profile ICS proforma   | ETS 300 474 [31]                       |
| 4         | PSTS                   | EN 300 494-2 [32]<br>EN 300 494-3 [33] |
| 5         | Profile IXIT proforma  | EN 300 494-2 [32]<br>EN 300 494-3 [33] |
| 6         | SCS proforma           | EN 300 494-2 [32]<br>EN 300 494-3 [33] |
| Comments: |                        |  |

## 5 Elements of the PTS

### 5.1 Conformance testing for NWK layer

Table 2

| No. | Protocol                |  |
|-----|-------------------------|--|
| 1   | Protocol identification | EN 300 175-5 [5]   |
| 2   | PICS proforma           | ETS 300 476 [21]   |
| 3   | TSS and TP              | EN 300 497-6 [27]<br>EN 300 497-8 [29]   |
| 4   | ATS                     | EN 300 497-7 [28]<br>EN 300 497-9 [30]   |
| 5   | Applicability of ATS    | Basic speech covered. Basic services and procedures concerning CC, MM and LCE entities covered |
| 6   | ATM                     | Remote   |
| 7   | Partial PIXIT           | EN 300 497-7 [28]<br>EN 300 497-9 [30]   |

Table 3

| No | Profile                        |   |
|----|--------------------------------|---|
| 1  | Profile ICS proforma           | ETS 300 474 [31]                        |
| 2  | Additional TSS and TP          | No                                      |
| 3  | ATM                            | Remote                                  |
| 4  | Additional test cases          | No                                      |
| 5  | Partial Profile IXIT proforma  | EN 300 494-2 [32] and EN 300 494-3 [33] |
| 6  | Modified selection expressions | No                                      |



## 5.2 Conformance testing for DLC layer

**Table 4**

| No. | Protocol                |                   |
|-----|-------------------------|-------------------|
| 1   | Protocol identification | EN 300 175-4 [4]  |
| 2   | PICS proforma           | ETS 300 476 [21]  |
| 3   | TSS and TP              | EN 300 497-4 [25] |
| 4   | ATS                     | EN 300 497-5 [26] |
| 5   | Applicability of ATS    |                   |
| 6   | ATM                     | Remote            |
| 7   | Partial PIXIT           | EN 300 497-5 [26] |

**Table 5**

| No | Profile                        |   |
|----|--------------------------------|---|
| 1  | Profile ICS proforma           | ETS 300 474 [31]                        |
| 2  | Additional TSS and TP          | No                                      |
| 3  | ATM                            | Remote                                  |
| 4  | Additional test cases          | No                                      |
| 5  | Partial Profile IXIT proforma  | EN 300 494-2 [32] and EN 300 494-3 [33] |
| 6  | Modified selection expressions | No                                      |

## 5.3 Conformance testing for MAC layer

**Table 6**

| No. | Protocol                |  |
|-----|-------------------------|--|
| 1   | Protocol identification | EN 300 175-3 [3]                       |
| 2   | PICS proforma           | ETS 300 476 [21]                       |
| 3   | TSS and TP              | EN 300 497-1 [22]                      |
| 4   | ATS                     | EN 300 497-2 [23]<br>EN 300 497-3 [24] |
| 5   | Applicability of ATS    |  |
| 6   | ATM                     | Remote (modified)                      |
| 7   | Partial PIXIT           | EN 300 497-2 [23]<br>EN 300 497-3 [24] |

**Table 7**

| No | Profile                        |   |
|----|--------------------------------|---|
| 1  | Profile ICS proforma           | ETS 300 474 [31]                        |
| 2  | Additional TSS and TP          | No                                      |
| 3  | ATM                            | Remote (modified)                       |
| 4  | Additional test cases          | No                                      |
| 5  | Partial Profile IXIT proforma  | EN 300 494-2 [32] and EN 300 494-3 [33] |
| 6  | Modified selection expressions | No                                      |

## 5.4 Conformance testing for PH layer

**Table 8**

| No. | Protocol                |  |
|-----|-------------------------|--|
| 1   | Protocol identification | EN 300 175-2: Physical layer [2]                                       |
| 2   | PICS proforma           | ETS 300 476 [21]   |
| 3   | TSS and TP              | EN 300 176 [20]  |
| 4   | ATS                     | EN 300 176 [20]  |
| 5   | Applicability of ATS    | General terminal attachment requirements, basic telephony applications |
| 6   | ATM                     | -  |
| 7   | Partial PIXIT           | -  |

**Table 9**

| No | Profile                        |   |
|----|--------------------------------|---|
| 1  | Profile ICS proforma           | ETS 300 474 [31]                        |
| 2  | Additional TSS and TP          | EN 300 494-2 [32] and EN 300 494-3 [33] |
| 3  | ATM                            | -                                       |
| 4  | Additional test cases          | EN 300 494-2 [32] and EN 300 494-3 [33] |
| 5  | Partial Profile IXIT proforma  | EN 300 494-2 [32] and EN 300 494-3 [33] |
| 6  | Modified selection expressions | No                                      |

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## 6 Conformance

The test realizer of a Means Of Testing (MOT) for this PTS summary shall comply with the requirements of ISO/IEC 9646-4 [14].

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 realization 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 [15].

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## Bibliography

The following material, though not specifically referenced in the body of the present document (or not publicly available), gives supporting information.

- EWOS/ETSI Project Team No 5: "Project Report and Technical Report. OSI Conformance Testing Methodology and Procedures in Europe".
- ETR 022: "Advanced Testing Methods (ATM); Vocabulary of terms used in communication protocols conformance testing".
- ETR 141: "Methods for testing and specifications (MTS), Protocol and profile conformance testing specifications, The Tree and Tabular Combined Notation (TTCN) style guide".
- CEPT Recommendation T/SGT SF2 6/0: "Draft Recommendation T/SF Services and Facilities of Digital Enhanced Cordless Telecommunications".
- ETR 015: "Digital Enhanced Cordless Telecommunications (DECT); Reference document".
- ETR 041: "Transmission and multiplexing (TM); Digital Enhanced Cordless Telecommunications (DECT); Transmission aspects 3,1 kHz telephony Interworking with other networks".
- ETR 042: "Digital Enhanced Cordless Telecommunications (DECT); A guide to DECT features that influence the traffic capacity and the maintenance of high radio link transmission quality, including the results of simulations".
- ETR 043: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Services and Facilities requirements specification".
- ETR 056: "Digital Enhanced Cordless Telecommunications (DECT); System description document".

## History

| <b>Document history</b> |                |  |
|-------------------------|----------------|--|
| Edition 1               | August 1996    | Publication as ETS 300 494-1                     |
| V1.2.0                  | September 1998 | Public Enquiry PE 9901: 1998-09-04 to 1999-01-01 |
| V1.2.1                  | May 1999       | Vote V 9931: 1999-05-17 to 1999-07-30            |
|                         |                |  |
|                         |                |  |