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Radio Equipment and Systems (RES); Attachment requirements for terminal equipment for Digital Enhanced Cordless Telecommunications (DECT) Generic Access Profile (GAP) applications

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Ta slovenski standard je istoveten z: **TBR 022 Edition 1**

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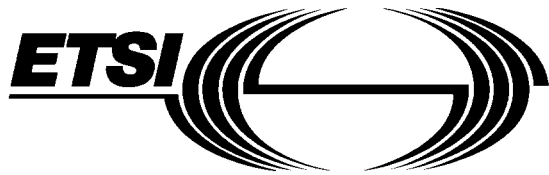
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**T**ECHNICAL  
**B**ASIS for  
**R**EGULATION

**TBR 22**

January 1997

Source: ETSI TC-RES

Reference: DTBR/RES-03055

ICS: 33.020

**Key words:** Access, DECT, type approval

**Radio Equipment and Systems (RES);**  
**Attachment requirements for terminal equipment for**  
**Digital Enhanced Cordless Telecommunications (DECT)**  
**Generic Access Profile (GAP) applications**

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## Foreword

This Technical Basis for Regulation (TBR) has been produced by the Radio Equipment and Systems (RES) Technical Committee of the European Telecommunications Standards Institute (ETSI).

Details of the Digital Enhanced Cordless Telecommunications (DECT) Common Interface (CI) may be found in ETS 300 175, Parts 1 - 9 [1] to [9].

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## 1 Scope

This TBR specifies the technical characteristics which shall be provided by terminal equipment which is capable of connection to a public telecommunications network (see note) and which uses DECT cordless communications. These requirements shall apply to equipment providing any DECT telephony application. The cordless transmissions for such terminal equipment operate within the frequency band 1880-1900 MHz.

This TBR shall apply in addition to the attachment requirements for the appropriate public network; and in addition to the CTRs for DECT General attachment requirements and for telephony applications.

DECT comprises two equipment elements, referred to as Fixed Part (FP) and Portable Part (PP).

The objective of this TBR is to ensure the air interface interoperability of DECT equipment capable of telephony applications, in such a way that any DECT PP conforming to the procedures described in this TBR shall be capable of interoperability with any DECT FP conforming to the procedures described in this TBR.

The FP and /or the PP shall conform to the requirements and tests in this TBR. This TBR is structured to allow type approval of the FP and PP as separate items. Where the DECT FP is connected to a PSTN, and where there are specific national variations in the requirements for voice telephony, these shall be accommodated within the FP so that the PP shall be common.

NOTE: CTR for basic ISDN, CTR for primary rate ISDN, or national regulations (implementing ETS 300 001) for PSTN. Interconnection of DECT terminal to GSM network is still under study; in due course, the scope statement may need amending to reflect this point.

This TBR is based on the radio and protocol provisions of ETS 300 175, Parts 1 to 8 [1] - [8].

## 2 Normative references

This TBR 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 TBR 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 300 175-8: "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 (1995): "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Generic Access Profile (GAP)".
- [11] prETS 300 476-1 (1996): "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)".
- [12] prETS 300 476-2 (1996): "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 2: Data Link Control (DLC) layer - Portable radio Termination (PT)".
- [13] prETS 300 476-3 (1996): "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 3: Medium Access Control (MAC) layer - Portable radio Termination (PT)".
- [14] prETS 300 476-4 (1996): "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 4: Network (NWK) layer - Fixed radio Termination (FT)".
- [15] prETS 300 476-5 (1996): "Radio Equipment and Systems (RES); 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)".
- [16] prETS 300 476-6 (1996): "Radio Equipment and Systems (RES); 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)".
- [17] prETS 300 476-7 (1996): "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Protocol Implementation Conformance Statement (PICS) proforma; Part 7: Physical layer".
- [18] prETS 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)".
- [19] prETS 300 474-2: "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 2: Fixed radio Termination (FT)".
- [20] Reserved value.

- [21] 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)).
- [22] 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)).
- [23] 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)).
- [24] 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)).
- [25] 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)).
- [26] ISO/IEC 9646-6 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 6: Protocol profile test specification".
- [27] ISO/IEC 9646-7 (1991): "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 7: Implementation conformance statement".
- [28] 91/263/EEC: "Council Directive of 29 April 1991 on the approximation of the laws of the Member States concerning telecommunications terminal equipment, including the mutual recognition of their conformity. (Terminal Directive)".  
<https://standards.iteh.ai/catalog/standards/sist/91-263-eeec/91-263-eeec>  
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- [29..40] Reserved values.
- [41] I-ETS 300 176: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); Approval test specification".
- [42] TBR 6: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); General terminal attachment requirements".
- [43] TBR 10: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT); General terminal attachment requirements: Telephony applications".
- [44 .. 46] Reserved values.
- [47] prETS 300 497: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI) Test Case Library (TCL)".
- [48] prETS 300 494-1: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP); Profile Test Specification (PTS); Part 1: Summary".
- [49] prETS 300 494-2: "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)".

[50] prETS 300 494-3: "Radio Equipment and Systems (RES); 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 this TBR, the definitions given in ETS 300 444 [10] and ETS 300 175, Parts 1 to 7 [1] to [7] apply:

#### 3.2 Abbreviations

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

AC	Authentication Code
ATS	Abstract Test Suit
C	Category
CC	Call Control
CI	Common Interface
CTR	Common Technical Regulation
Cxxx	Conditional under number "xxx"
DCK	Derived Cipher Key
DECT	Digital Enhanced Cordless Telecommunications
DLC	Data Link Control
FP	Fixed Part
FT	Fixed radio Termination
GAP	Generic Access Profile
I	Out of scope
ICS	Implementation Conformance Statement
IPUI	International Portable User Identity
IUT	Implementation Under Test
IXIT	Implementation extra Information for Testing
LCE	Link Control Entity
LLME	Lower Layer Management Entity
LLN	Logical Link Number
M	Mandatory
MAC	Medium Access Control
MM	Mobility Management
N/A	Not Applicable
NLF	New Link Flag
NWK	NetWork
O	Optional
PARK	Portable Access Rights Key
PH	PHysical
PICS	Protocol Implementation Conformance Statement
PIXIT	Protocol Implementation eXtra Information for Testing
PP	Portable Part
PSTN	Public Switched Telephone Network
PSTS	Profile Specific Test Specification
PT	Portable radio Termination
PTS	Profile Test Specification
RT	Requirements Tables
SARI	Secondary Access Rights Identity
Sp	Support
St	Status
SUT	System Under Test
TBR	Technical Basis for Regulation
TPUI	Temporary Portable User Identity
TS	Test System
TSS&TP	Test Suit Structure & Test Purposes

## 4 How to use this TBR

This TBR contains one set of tables for the PP and one set of tables for the FP. Each set of tables is divided in subsets dependant on the particular DECT layer comprising:

- a Test suit structure table;
- a Test case index table;
- a TBR-RT feature table;
- a TBR-RT procedure table;
- a messages/frames table;
- a information elements table; and
- a timer table.

If a particular feature, procedure, message, information element or timer specified in DECT CI ETS 300 175 1 to 8 [1] to [8] is not listed in any table it shall be considered as out of scope of this TBR and shall not be tested.

## 5 Requirements

The GAP features, services and requirements as defined in ETS 300 444 [10] are considered to fall under the essential requirements specified in Article 4 of the Council directive 91/263/EEC [28] applying to terminal equipment, given in the following subclauses. The column TD Cat (Terminal Directive Category) identifies the applicable clauses of Article 4 of directive 91/263/EEC [28].

NOTE 1: This clause does not specify the exact status (e.g. mandatory or optional) of the listed features, services and requirements. This is specified in annex A.

NOTE 2: When a feature relates to business environment it has been considered that the particular private network (e.g. PBX) is to be connected to public network, therefore that feature has been qualified as implicitly relating to item (f).