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Digital Enhanced Cordless Telecommunications (DECT); General terminal attachment requirements: Telephony applications

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ICS:

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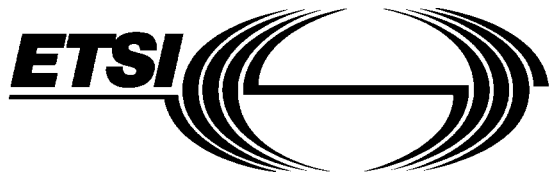
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General terminal attachment requirements:
Telephony applications**

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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) and was adopted having passed through the ETSI standards approval procedure.

This TBR covers the general attachment requirements for terminal equipment for the Digital European Cordless Telecommunications (DECT) common interface.

This TBR contains the procedures and requirements for the type examination of Digital European Cordless Telecommunications (DECT) equipment supporting a 3,1 kHz telephony teleservice.

The requirements of TBR 6 [22] apply in addition to this TBR.

This TBR is based on the DECT Common Interface ETS 300 175 [1] - [8] and [32], and I-ETS 300 176 [31].

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1 Scope

This Technical Basis for Regulation (TBR) specifies the technical characteristics particular to telephony applications provided by terminal equipment which is capable of connection to a public telecommunications network and which uses Digital European Cordless Telecommunications (DECT). The cordless transmissions for such terminal equipment operate within the frequency band 1 880 - 1 900 MHz.

The objective of this TBR is to ensure interworking of terminal equipment via the public network.

The requirements in this TBR apply in addition to the attachment requirements for the appropriate public network (see NOTE) and the TBR for DECT general attachment requirements.

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

This TBR is applicable to simple telephony terminals as well as to the telephony function of multi-function or multi-service terminals.

This TBR includes the speech quality and transmission requirements for a 3,1 kHz telephony teleservice.

For each requirement in this TBR, a test is given, including measurement methods. The terminal equipment may be stimulated to perform the tests by additional equipment if necessary.

This TBR is not applicable to terminal equipment specially designed for the disabled (e.g. with amplification of received speech as an aid for the hard-of-hearing).

DECT comprises two equipment elements, referred to as a Fixed Part (FP) and a Portable Part (PP). This TBR is structured to allow type approval of either a) the FP and PP together, or b) the FP and PP as separate items. Where the DECT FP is connected to a PSTN, and there are any national peculiarities in the requirements for voice telephony, these shall be accommodated within the FP.

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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 (1992): "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT) Common Interface Part 1: Overview".
- [2] ETS 300 175-2 (1992): "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT) Common Interface Part 2: Physical layer".
- [3] ETS 300 175-3 (1992): "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT) Common Interface Part 3: Medium access control layer".
- [4] ETS 300 175-4 (1992): "Digital European Cordless Telecommunications Common Interface Part 4: Data Link Control layer".
- [5] ETS 300 175-5 (1992): "Digital European Cordless Telecommunications Common Interface Part 5: Network layer".
- [6] ETS 300 175-6 (1992): "Digital European Cordless Telecommunications Common Interface Part 6: Identities and addressing".
- [7] ETS 300 175-7 (1992): "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT) Common Interface Part 7: Security features".
- [8] ETS 300 175-8 (1992): "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT) Common Interface Part 8: Speech coding and transmission".
- [9] ETS 300 085 (1991): "Integrated Services Digital Network (ISDN); 3,1 kHz telephony teleservice. Attachment requirements for handset terminals" (Candidate NET 33). CTR 8 will replace this ETS when available.
- [10] CCITT Revised Recommendation G.726 (IUT April 1991): "40, 32, 24, 16 kbit/s Adaptive Differential Pulse Code Modulation (ADPCM)".
- [11] CCITT Recommendation G.122 (1988): "Influence of national systems on stability, talker echo, and listener echo in international connections".
- [12] CCITT Recommendation O.132 (1988): "Quantization distortion measurement equipment using a sinusoidal input signal".
- [13] CCITT Recommendation G.223 (1988): "Assumptions for the calculation of noise on hypothetical reference circuits for telephony".
- [14] CCITT Recommendation G.714 (1988): "Separate performance characteristics for the encoding and decoding sides of PCM channels applicable to 4-wire voice frequency interfaces".
- [15] CCITT Revised Recommendation P.51 (1993): "Artificial mouth".
- [16] CCITT Revised Recommendation P.64 (1993): "Determination of sensitivity/frequency characteristics of local telephone systems to permit calculation of their loudness ratings".

- [17] CCITT Revised Recommendation P.79 (1993): "Calculation of loudness ratings".
- [18] CCITT Recommendation G.711 (1988): "Pulse Code Modulation (PCM) of voice frequencies".
- [19] CCITT Revised Recommendation P.57 (1993): "Artificial ears".
- [20] ISO 3 (1973): "Preferred numbers - series of preferred numbers".
- [21] CCITT Revised Recommendation P.50 (1993): "Artificial Voices".
- [22] TBR 6: "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT) General terminal attachment requirements".
- [23] CCITT Revised Recommendation P.80 (1993): "Methods for subjective determination of transmission quality".
- [24] IEC 651: "Sound level meters".
- [25] ETS 300 111: "ISDN telephony 3,1 kHz teleservice; service description".
- [26] CCITT Recommendation G.101 (1988): "The Transmission Plan".
- [27] CCITT Recommendation O.133 (1988): "Specification for equipment to measure the performance of PCM encoders and decoders".
- [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)
- [29] ETS 300 001(1992): "Attachments to Public Switched Telephone Network (PSTN); General technical requirements for equipment connected to an analogue subscriber interface in the PSTN (NET 4)".
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- [30] 73/23/EEC: Council Directive of 19 February 1973 on the harmonization of the laws of the Member States relating to electrical equipment designed for use within certain voltage limits. (Low Voltage Directive)
- [31] I-ETS 300 176 (1992): "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT) Approval test specification".
- [32] ETS 300 175-9 (1992): "Radio Equipment and Systems (RES); Digital European Cordless Telecommunications (DECT) Common Interface Part 9: Public access profile".
- [33] ISO DIS 9614: "Acoustic determination of sound power levels of noise sources using sound intensity, Part 1 Measurement at discrete points".