SLOVENSKI STANDARD
SIST EN 301 406 V2.2.2:2016

01-november-2016

Digitalne izboljšane brezvrvične telekomunikacije (DECT) - Harmonizirani standard, ki zajema bistvene zahteve člena 3.2 direktive 2014/53/EU

Digital Enhanced Cordless Telecommunications (DECT) - Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU

Ta slovenski standard je istoveten z: ETSI EN 301 406 V2.2.2 (2016-09)

ICS:

33.070.30	Digitalne izboljšane brezvrvične telekomunikacije (DECT)	Digital Enhanced Cordless Telecommunications (DECT)

SIST EN 301 406 V2.2.2:2016 **en**

ETSI EN 301 406 V2.2.2 (2016-09)

Digital Enhanced Cordless Telecommunications (DECT); Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU

Reference
REN/DECT-000300-CR

Keywords
DECT, digital, generic, radio, regulation, testing

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

The present document can be downloaded from:
http://www.etsi.org/standards-search

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the only prevailing document is the print of the Portable Document Format (PDF) version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at
https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx

If you find errors in the present document, please send your comment to one of the following services:
https://portal.etsi.org/People/CommiteeSupportStaff.aspx

Copyright Notification

Contents

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (https://ipr.etsi.org/).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Harmonised European Standard (EN) has been produced by ETSI Technical Committee Digital Enhanced Cordless Telecommunications (DECT).

The present document has been prepared under the Commission's standardisation request C(2015) 5376 final [i.16] to provide one voluntary means of conforming to the essential requirements of Directive 2014/53/EU on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC [8].

Once the present document is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of the present document given in table A.1 confers, within the limits of the scope of the present document, a presumption of conformity with the corresponding essential requirements of that Directive and associated EFTA regulations.

National transposition dates	
Date of latest announcement of this EN (doa):	23 December 2016
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 June 2017
Date of withdrawal of any conflicting National Standard (dow):	30 June 2018

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

1 Scope

The present document applies to the following equipment types for the Digital Enhanced Cordless Telecommunications (DECT) common interface:

a) Fixed Part (FP);

b) Portable Part (PP);

c) Cordless Terminal Adapter (CTA);

d) Wireless Relay Station (WRS) (FP and PP combined);

e) Hybrid Part (HyP) (a PP with capability to act as a FP to provide PP to PP communication).

These radio equipment types are capable of operating in all or any part of the frequency bands given in table 1.

Table 1: Radiocommunications service frequency bands

	Radiocommunications service frequency bands
Transmit	1 880 MHz to 1 900 MHz
Receive	1 880 MHz to 1 900 MHz

The DECT service frequency band for transmitting and receiving for all elements is 1 880 MHz to 1 900 MHz.

Details of the DECT Common Interface may be found in ETSI EN 300 175-1 [i.10], ETSI EN 300 175 parts 2 to 3 [1] to [2], ETSI EN 300 175-4 [i.11], ETSI EN 300 175 parts 5 to 6 [3] to [4], and ETSI EN 300 175 parts 7 to 8 [i.12] to [i.13]. Further details of the DECT system may be found in the ETSI Technical Reports, ETSI TR 101 178 [i.1] and ETSI ETR 043 [i.2]. Information about ULE may be found in the ETSI Technical Specifications ETSI TS 102 939-1 [i.14] and ETSI TS 102 939-2 [i.15].

The present document contains requirements to demonstrate that radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at http://docbox.etsi.org/Reference.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

[1] ETSI EN 300 175-2 (V2.6.1) (07-2015): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical layer (PHL)".

[2] ETSI EN 300 175-3 (V2.6.1) (07-2015): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) Layer".

[3] ETSI EN 300 175-5 (V2.6.1) (07-2015): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 5: Network (NWK) layer".

[4] ETSI EN 300 175-6 (V2.6.1) (07-2015): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 6: Identities and addressing".

[5] Void.

[6] ETSI EN 300 700 (V1.2.1) (09-2000): "Digital Enhanced Cordless Telecommunications (DECT); Wireless Relay Station (WRS)".

[7] Recommendation ITU-T O.153 (1992): "Basic parameters for the measurement of error performance at bit rates below the primary rate".

[8] Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC.

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] ETSI TR 101 178: "Digital Enhanced Cordless Telecommunications (DECT); A High Level Guide to the DECT Standardization".

[i.2] ETSI ETR 043: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Services and facilities requirements specification".

[i.3] Void.

[i.4] Void.

[i.5] Void.

[i.6] Void.

[i.7] Void.

[i.8] ETSI TR 100 028: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics".

[i.9] ISO/IEC 9646-1 (1994): "Information technology; Open Systems Interconnection; Conformance testing methodology and framework; Part 1: General concepts".

[i.10] ETSI EN 300 175-1 (V2.6.1) (07-2015): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 1: Overview".

[i.11] ETSI EN 300 175-4 (V2.6.1) (07-2015): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) Layer".

[i.12] ETSI EN 300 175-7 (V2.6.1) (07-2015): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 7: Security features".

[i.13] ETSI EN 300 175-8 (V2.6.1) (07-2015): "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 8: Speech and audio coding and transmission".

[i.14] ETSI TS 102 939-1: "Digital Enhanced Cordless Telecommunications (DECT); Ultra Low Energy (ULE); Machine to Machine Communications; Part 1: Home Automation Network (phase 1)".

[i.15] ETSI TS 102 939-2: "Digital Enhanced Cordless Telecommunications (DECT); Ultra Low Energy (ULE); Machine to Machine Communications; Part 2: Home Automation Network (phase 2)".

[i.16] Commission Implementing Decision C(2015) 5376 final of 4.8.2015 on a standardisation request to the European Committee for Electrotechnical Standardisation and to the European Telecommunications Standards Institute as regards radio equipment in support of Directive 2014/53/EU of the European Parliament and of the Council.

3 Definitions, symbols and abbreviations

3.1 Definitions

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

antenna diversity: feature that implies that the Radio Fixed Part (RFP) is able to select for each bearer independently different antenna properties such as gain, polarization, coverage patterns, and other features that may affect the practical coverage

NOTE: A typical example is space diversity, provided by two vertically polarized antennas separated by 10 cm to 20 cm.

bearer handover: internal handover process provided by the Medium Access Control (MAC) layer, whereby one MAC connection can modify its underlying bearers while maintaining the service provided to the Data Link Control (DLC) layer

NOTE: Bearer handover is slot based.

cell: domain served by a single antenna system (including a leaky feeder) of one FP

NOTE: A cell may include more than one source of radiated Radio Frequency energy (i.e. more than one Radio End Point).

Central Control Fixed Part: physical grouping that contains the central control elements of one or several FPs

NOTE: An FP may be split in the control part (CCFP) and the Radio part (RFP). A CCFP may control one or more RFPs.

conducted measurements: measurements which are made using a direct connection to the equipment under test

Cordless Terminal Adapter: physical grouping that contains a DECT portable termination and a line interface

DECT Distributed communications: communication capability of a DECT Local Network that allows a number of DECT terminals (a FP and number of PPs) to co-exist and directly communicate one with another

DECT-like carrier: modulated RF DECT carrier used for interference testing which conforms to the requirements in ETSI EN 300 175-2 [1] in terms of frequency and timing and uses a pseudo-random sequence for modulation

double slot: one 12th of a Time Division Multiple Access (TDMA) frame which is used to support one high capacity physical channel

duplex bearer: use of two simplex bearers operating in opposite directions on two physical channels

NOTE: These pairs of channels always use the same RF carrier and always use evenly spaced slots (i.e. separated by 0,5 TDMA frame).

environmental profile: range of environmental conditions under which equipment within the scope of the present document is required to comply with the provisions of the present document

Equipment Under Test: equipment submitted to the test laboratory for type examination