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STN	**Digitálne bezšnúrové telekomunikácie (DECT). Spoločné rozhranie (CI). Časť 3: Vrstva riadenia prístupu na prenosové prostredie (MAC).**	**STN EN 300 175-3 V2.5.1** 87 0175

Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 3: Medium Access Control (MAC) layer

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/13

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Contents

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Foreword

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

The present document is part 3 of a multi-part deliverable ([1] to [8]). Full details of the entire series can be found in part 1 [1].

Further details of the DECT system may be found in TR 101 178 [i.1] and ETR 043 [i.2].

National transposition dates	
Date of adoption of this EN:	20 August 2013
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1 Scope

The present document is one of the parts of the specification of the Digital Enhanced Cordless Telecommunications (DECT) Common Interface (CI).

The present document specifies the Medium Access Control (MAC) layer. The MAC layer is part 3 of the DECT Common Interface standard and layer 2a of the DECT protocol stack.

It specifies three groups of MAC services:

- the broadcast message control service;
- the connectionless message control service; and
- the multi-bearer control service.

It also specifies the logical channels that are used by the above mentioned services, and how they are multiplexed and mapped into the Service Data Units (SDUs) that are exchanged with the Physical Layer (PHL).

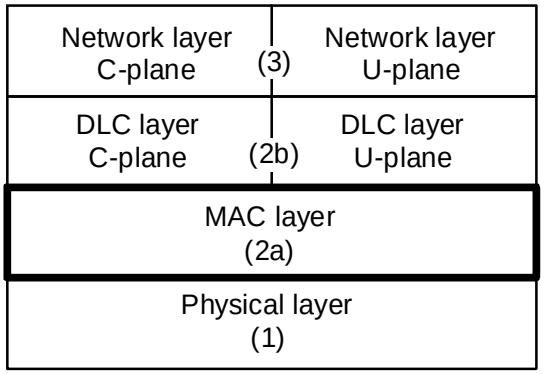

Figure 1.1: The DECT protocol stack

The present document includes New Generation DECT, a further development of the DECT standard introducing wideband speech, improved data services, new slot types and other technical enhancements.

2 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 reference 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.

2.1 Normative references

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

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

[2] ETSI EN 300 175-2: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 2: Physical Layer (PHL)".

[3] Void.

[4] ETSI EN 300 175-4: "Digital Enhanced Cordless Telecommunications (DECT); Common Interface (CI); Part 4: Data Link Control (DLC) layer".

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

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

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

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

[9] ETSI EN 301 649: "Digital Enhanced Cordless Telecommunications (DECT); DECT Packet Radio Service (DPRS)".

[10] ETSI EN 300 176-1: "Digital Enhanced Cordless Telecommunications (DECT); Test specification; Part 1: Radio".

2.2 Informative references

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] W.W. Peterson and E.J. Weldon (1972, 2nd edition): "Error Correcting Codes" (MIT Press, Cambridge, MA).

[i.4] Berrou, Glavieux and Thitimajshima: "Near Shannon limit error-correcting coding and decoding: Turbo Codes", Proceedings of the ICC conference, May 1993.

[i.5] Berrou and Jézéquel: "Frame-oriented convolutional turbo codes", Electronic Letters, Vol. 32, N 15, pp. 1362-1364, July 1996.

[i.6] P. Robertson, P. Hoeher and E. Villebrun: "Optimal and sub-optimal maximum a posteriori algorithms suitable for turbo decoding", European Trans. Commun., Vol. 8, N 2, pp. 119-125, March-April 1997.

[i.7] I. Siaud: "On COFDM performance of Digital Radio Systems in AM and HF bands over multipath ionospheric channels", Nordic HF'01 Conference, 14-16 August 2001, Färo.

[i.8] ETSI EN 300 444: "Digital Enhanced Cordless Telecommunications (DECT); Generic Access Profile (GAP)".

[i.9] Siaud.I, Ulmer-Moll A.M.: "Turbo-like Processing for Scalable Interleaving Pattern Generation: application to 60 GHz UWB-OFDM systems", ICUWB'07, Singapore, September 2007.

[i.10] 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.11] ETSI TS 102 527-4: "Digital Enhanced Cordless Telecommunications (DECT); New Generation DECT; Part 4: Light Data Services; Software Update Over The Air (SUOTA), content downloading and HTTP based applications".