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Digital Terrestrial TV Broadcast Receivers; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU

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

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HARMONISED EUROPEAN STANDARD

**Digital Terrestrial TV Broadcast Receivers;
Harmonised Standard covering the essential requirements
of article 3.2 of Directive 2014/53/EU**

Reference

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Foreword

This Harmonised European Standard (EN) has been produced by ETSI Technical Committee Electromagnetic compatibility and Radio spectrum Matters (ERM).

The present document has been prepared under the Commission's standardisation request C(2015) 5376 final [i.11] 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 [i.3].

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.

The present document has a number of interference test data files that are contained in archive en_303340v010102p0.zip which accompanies the present document.

National transposition dates	
Date of latest announcement of this EN (doa):	30 December 2016
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 June 2017
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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).

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1 Scope

The present document applies to digital terrestrial television broadcast receivers fitted with an external antenna input (tuner port) capable of receiving DVB-T and/or DVB-T2 signals. Receivers without external antenna connectors, receivers with diversity, and receivers intended for mobile or automotive reception are not covered by the present document.

The present document contains the requirements for digital terrestrial television broadcast receivers to meet the essential requirements of article 3.2 of Directive 2014/53/EU [i.3] that radio equipment both effectively uses and supports the efficient use of radio spectrum in order to avoid harmful interference.

The present document includes considerations of interference from LTE transmissions in the 700 MHz and 800 MHz bands and DTT transmissions in UHF band IV. The requirements of the installation system (antenna, feeder cable, amplifiers, etc.) are not addressed.

Table 1: Broadcast frequency bands

Broadcast frequency bands
VHF III
UHF IV and V

There are country specific variations of frequency usage for digital terrestrial television reception and other users such as mobile broadband.

The tests in the present document only apply if the DTT broadcast receiver supports the wanted signal configuration used by the test in question. The applicable tests are summarized in annex E, table E.1.

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.

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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] CENELEC EN 55032:2015: "Electromagnetic compatibility of multimedia equipment. Emission requirements".

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] Nordig: "NorDig Unified Test Plan for Integrated Receiver Decoders v2.4".
- [i.2] British Broadcasting Corporation and Arqiva, WHP288: "WSD Coexistence Testing at the Building Research Establishment: An Experimental Validation of Ofcom Regulatory Proposals".
- [i.3] 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.
- [i.4] ETSI EN 300 744 (V1.6.1): "Digital Video Broadcasting (DVB); Framing structure, channel coding and modulation for digital terrestrial television".
- [i.5] ETSI EN 302 755 (V1.3.1): "Digital Video Broadcasting (DVB); Frame structure channel coding and modulation for a second generation digital terrestrial television broadcasting system (DVB-T2)".
- [i.6] ETSI TR 100 028-1 (V1.4.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 1".
- [i.7] ETSI TR 100 028-2 (V1.4.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2".
- [i.8] CEPT/ERC/Recommendation 74-01E (2011): "Unwanted emissions in the spurious domain".
- [i.9] ECC Report 186 (2013): "Technical and operational requirements for the operation of white space devices under geo-location approach".
- [i.10] Recommendation ITU-R BT.1729 (2005): "Common 16:9 or 4:3 aspect ratio digital television reference test pattern".
- [i.11] 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.
- [i.12] Recommendation ITU-R BT.419-3 (1990): "Directivity and polarization discrimination of antennas in the reception of television broadcasting".

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