

STN	Zariadenia pre biele miesta (WSD) Bezdrôtové prístupové systémy pracujúce v televíznom vysielacom pásme od 470 MHz do 790 MHz Harmonizovaná norma vzťahujúca sa na základné požiadavky podľa článku 3.2 Smernice 2014/53/EU	STN EN 301 598 V2.1.1 87 1598
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White Space Devices (WSD); Wireless Access Systems operating in the 470 MHz to 790 MHz TV broadcast band; 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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**White Space Devices (WSD);
Wireless Access Systems operating in the 470 MHz to 790 MHz
TV broadcast band;
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 Broadband Radio Access Networks (BRAN).

The present document has been prepared under the Commission's standardisation request C(2015) 5376 final [i.13] 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.

National transposition dates	
Date of adoption of this EN:	8 January 2018
Date of latest announcement of this EN (doa):	30 April 2018
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Date of withdrawal of any conflicting National Standard (dow):	31 October 2019

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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Introduction

The present document covers TV band high performance wireless access systems (WAS) including RLAN equipment which is used in wireless local area networks. Such networks provide high speed data communications in between devices connected to the wireless infrastructure. The present document also covers ad-hoc networking where devices communicate directly with each other, without the use of a wireless infrastructure.

The methods and principles used in the present document for the operation of TV White Space devices in the band 470 MHz to 790 MHz are taken from the ECC Report 186 [i.6], which explains the regulatory principles under which it is envisaged such devices will be permitted to operate in Europe. This approach is also explained in further detail in chapter 9 of "Dynamic White Space Spectrum Access" [i.12].

A requirement to facilitate coexistence between TVWSDs is not considered essential with respect to compliance with article 3.2 of Directive 2014/53/EU [i.3] and therefore is not included in the current version of the present document. This may change in the future, resulting in the inclusion of mitigation techniques in a revision of the present document, to improve the coexistence among TVWSDs, if considered essential in order to comply with article 3.2 of Directive 2014/53/EU [i.3].

1 Scope

The present document specifies technical characteristics and methods of measurements for TV white space devices (TVWSDs) controlled by a TV white space database (TVWSDB) and which operate in the TV broadcast band 470 MHz to 790 MHz.

The present document applies to the following radio equipment types:

- 1) Master TV white space device (TVWSD)
- 2) Slave TV white space device (TVWSD)

The present document applies to TVWSDs with integral, dedicated or external antennas, where TVWSDs using external antennas are intended only for fixed use.

The present document covers the essential requirements of article 3.2 of Directive 2014/53/EU [i.3] under the conditions identified in annex A.

2 References

2.1 Normative references

References are specific, identified by date of publication and/or edition number or version number. Only the cited version applies.

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

- | | |
|-----|--|
| [1] | Void. |
| [2] | Void. |
| [3] | Void. |
| [4] | IETF RFC 4122 (07-2005): "A Universally Unique IDentifier (UUID) URN Namespace". |

NOTE: Available at <http://www.ietf.org/rfc/rfc4122.txt>.

2.2 Informative references

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- | | |
|-------|-------|
| [i.1] | Void. |
| [i.2] | Void. |

- [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 TR 100 028 (all parts) (12-2001): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics".
- [i.5] ETSI TR 100 028-2 (V1.4.1) (12-2001): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics; Part 2".
- [i.6] ECC Report 186: "Technical and operational requirements for the operation of white space devices under geo-location approach", January 2013.
- [i.7] ETSI TR 102 273-2: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Improvement on Radiated Methods of Measurement (using test site) and evaluation of the corresponding measurement uncertainties; Part 2: Anechoic chamber".
- [i.8] ETSI TR 102 273-3: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Improvement on Radiated Methods of Measurement (using test site) and evaluation of the corresponding measurement uncertainties; Part 3: Anechoic chamber with a ground plane".
- [i.9] ETSI TR 102 273-4: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Improvement on Radiated Methods of Measurement (using test site) and evaluation of the corresponding measurement uncertainties; Part 4: Open area test site".
- [i.10] ETSI TR 103 231: "White Space Devices (WSD); Wireless Access Systems operating in the 470 MHz to 790 MHz TV broadcast band; Information on weblistings of TV White Space Databases (TVWSDBs)".
- [i.11] ECC Report 159: "Technical and operational requirements for the possible operation of cognitive radio systems in the "white spaces" of the frequency band 470-790 MHz", January 2011.
- [i.12] William Webb and contributors: "Dynamic White Space Spectrum Access".
- NOTE: Available at <http://www.webbsearch.co.uk/publications/>.
- [i.13] 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.14] NIMA Technical Report TR8350.2 (1984, including amendment 1 of 03 January 2000 and amendment 2 of 23 June 2004): "Department of Defense World Geodetic System 1984. Its Definition and Relationships with Local Geodetic Systems".

NOTE: Available at <http://earth-info.nga.mil/GandG/publications/tr8350.2/wgs84fin.pdf>.

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