

STN	Zariadenia krátkeho dosahu Telematika v doprave a prevádzke (TTT) Ultraširokopásmové radarové zariadenia pracujúce vo frekvenčných pásmach od 24,25 GHz do 26,65 GHz Harmonizovaná norma vzťahujúca sa na základné požiadavky podľa článku 3.2 Smernice 2014/53/EU	STN EN 302 288 V2.1.1 87 2288
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**Short Range Devices;
Transport and Traffic Telematics (TTT);
Ultra-wideband radar equipment operating
in the 24,25 GHz to 26,65 GHz range;
Harmonised Standard covering the essential requirements
of article 3.2 of Directive 2014/53/EU**

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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.8] 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:	24 April 2017
Date of latest announcement of this EN (doa):	31 July 2017
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 January 2018
Date of withdrawal of any conflicting National Standard (dow):	31 January 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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1 Scope

The present document specifies the technical characteristics and test methods for automotive ultra-wideband (UWB) radar equipment fitted with integral antennas operating in the frequency range from 24,25 GHz to 26,65 GHz working as broadband devices with at least 500 MHz bandwidth and references CEPT/ERC Recommendation 70-03 [i.1] and EC Decision 2013/752/EU [i.2].

This equipment is intended for Transport and Traffic Telematics (TTT) applications according to ERC Recommendation 70-03 [i.1], annex 5, such as obstacle detection, stop and go, blind spot detection, parking aid, backup aid, precrash and other automotive applications.

Table 1 shows the frequency bands as designated to ultra-wideband (UWB) radar.

Table 1: Frequency of operation

	Frequency bands / frequencies	Frequency bands / frequencies
Transmit 1	24,25 GHz to 26,65 GHz	UWB mode
Receive 1	24,25 GHz to 26,65 GHz	UWB mode
Transmit 2	24,05 GHz to 24,25 GHz (see note)	Single carrier emissions (see note)
Receive 2	24,05 GHz to 24,25 GHz (see note)	Single carrier emissions (see note)
NOTE:	Single carrier emissions in the SRD band from 24,05 GHz to 24,25 GHz according to the present document may not be used on its own, but only in conjunction with UWB emissions in the 24,25 GHz to 26,65 GHz range. For 24,05 GHz to 24,25 GHz devices the present document does not apply and the correct standard is ETSI EN 302 858 [i.11].	

In case of differences (for instance concerning special conditions, definitions, abbreviations) between the present document and ETSI EN 303 396 [1], the provisions of the present document take precedence.

The present document covers transmitters intended to operate in a temporary frequency designation under the ECC decision CEPT/ECC/DEC/(04)10 [i.6], the EU Commission decision 2005/50/EC [i.7] and the amendment as presented in RSCOM11-07 [i.9].

- The operating frequency range for intentional UWB emissions has been determined from 21,65 GHz to 26,65 GHz until 30th June 2013. This is no longer covered by the present document.
- Since 30th June 2013 the operating frequency range for intentional UWB has reduced frequency band from 24,25 GHz to 26,65 GHz until 1st January 2018, with an extension for car models which have received type approval before 1st January 2018 and which can continue to be put on the market until 1st January 2022 [i.6]. This equipment is covered by the present document.

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.

Referenced documents which are not found to be publicly available in the expected location might be found at <https://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 303 396 (V1.1.1) (12-2016): "Short Range Devices; Measurement Techniques for Automotive and Surveillance Radar Equipment".

- [2] ETSI EN 303 883 (V1.1.1) (09-2016): "Short Range Devices (SRD) using Ultra Wide Band (UWB); Measurement Techniques".

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.

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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] CEPT/ERC Recommendation 70-03: "Relating to the use of Short Range Devices (SRD)". Tromsø 1997, subsequent amendments 27 May 2016.
- [i.2] EC Decision 2013/752/EU: "Commission implementing Decision of 11 December 2013 amending Decision 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices and repealing Decision 2005/928/EC".
- [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] CEPT/ERC/REC 74-01E: "Unwanted emissions in the spurious domain", Recommendation adopted by the Working Group "Spectrum Engineering" (WGSE).
- [i.5] ETSI EG 203 336: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Guide for the selection of technical parameters for the production of Harmonised Standards covering article 3.1(b) and article 3.2 of Directive 2014/53/EU".
- [i.6] ECC decision CEPT/ECC/DEC/(04)10: "The frequency bands to be designated for the temporary introduction of Automotive Short Range Radars (SRR)", approved 12 November 2004, amended 1 June 2012, corrected 6 March 2015.
- [i.7] EC Decision 2005/50/EC of 17 January 2005 on the harmonization of the 24 GHz range radio spectrum band for the time-limited use by automotive short-range radar equipment in the Community.
- [i.8] 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.9] RSCOM11-07, Amending Decision 2005/50/EC on the harmonisation of the 24 GHz range radio spectrum band for the time-limited use by automotive short-range radar equipment in the Community (Update with published EC Decision).
- [i.10] ECC Report 158: "The impact of 26 GHz SRR applications using Ultra-WideBand (UWB) technology on radio services", Cardiff, January 2011.
- [i.11] ETSI EN 302 858: "Short Range Devices; Transport and Traffic Telematics (TTT); Radar equipment operating in the 24,05 GHz to 24,25 GHz or 24,05 GHz to 24,50 GHz range; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU".

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