

<b>STN</b>	<b>Intelligentné dopravné systémy (ITS) Rádiokomunikačné zariadenia pracujúce vo frekvenčnom pásme od 5 855 MHz do 5 925 MHz Harmonizovaná norma vzťahujúca sa na základné požiadavky podľa článku 3.2 smernice 2014/53/EÚ</b>	<b>STN EN 302 571 V2.1.1</b>  87 2571
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Intelligent Transport Systems (ITS); Radiocommunications equipment operating in the 5 855 MHz to 5 925 MHz frequency 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.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/18

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# ETSI EN 302 571 V2.1.1 (2017-02)



**Intelligent Transport Systems (ITS);  
Radiocommunications equipment operating  
in the 5 855 MHz to 5 925 MHz frequency band;  
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.5] 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.4].

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:	6 February 2017
Date of latest announcement of this EN (doa):	31 May 2017
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 November 2017
Date of withdrawal of any conflicting National Standard (dow):	30 November 2018

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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 specifies technical characteristics and methods of measurement for radio transmitters and receivers operating in the frequency range 5 855 MHz to 5 925 MHz. The spectrum usage conditions are set out in ECC Decision (08)01 [i.1] for the frequency range 5 875 MHz to 5 925 MHz (with 5 905 MHz to 5 925 MHz considered as a future ITS extension) and in ECC Recommendation (08)01 [i.2] for the frequency range 5 855 MHz to 5 875 MHz. The Commission Decision 2008/671/EC [i.3] mandates a harmonised use of the frequency band 5 875 MHz to 5 905 MHz dedicated to safety-related applications of ITS throughout the member states of the European Union. Table 1 outlines the 5 GHz ITS frequency band segmentation.

**Table 1: 5 GHz ITS frequency band segmentation**

Frequency range	Usage	Regulation
5 855 MHz to 5 875 MHz	ITS non-safety applications	ECC Recommendation (08)01 [i.2]
5 875 MHz to 5 905 MHz	ITS road safety	Commission Decision 2008/671/EC [i.3], ECC Decision (08)01 [i.1]
5 905 MHz to 5 925 MHz	Future ITS applications	ECC Decision (08)01 [i.1]

The present document covers the essential requirements of article 3.2 of Directive 2014/53/EU [i.4] under the conditions identified in annex A.

Interference mitigation techniques in the present document are provided to protect road tolling applications using CEN DSRC or HDR DSRC.

## 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] ETSI TS 102 792 (V1.2.1) (06-2015): "Intelligent Transport Systems (ITS); Mitigation techniques to avoid interference between European CEN Dedicated Short Range Communication (CEN DSRC) equipment and Intelligent Transport Systems (ITS) operating in the 5 GHz frequency range".
- [2] ETSI EN 302 637-2 (V1.3.2) (11-2014): "Intelligent Transport Systems (ITS); Vehicular Communications; Basic Set of Applications; Part 2: Specification of Cooperative Awareness Basic Service".
- [3] Void.
- [4] CISPR 16 (parts 1-1 (2015), 1-4 (2010) and 1-5 (2014)): "Specifications for radio disturbance and immunity measuring apparatus and methods; Part 1: Radio disturbance and immunity measuring apparatus".
- [5] CEN EN 12253:2004: "Road transport and traffic telematics - Dedicated short-range communication - Physical layer using microwave at 5,8 GHz".

- [6] ETSI ES 200 674-1 (V2.4.1) (05-2013): "Intelligent Transport Systems (ITS); Road Transport and Traffic Telematics (RTTT); Dedicated Short Range Communications (DSRC); Part 1: Technical characteristics and test methods for High Data Rate (HDR) data transmission equipment operating in the 5,8 GHz Industrial, Scientific and Medical (ISM) band".

## 2.2 Informative references

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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] ECC Decision (08)01: "ECC Decision of 14 March 2008 on the harmonised use of the 5875-5925 frequency band for Intelligent Transport Systems (ITS)", approved 14 March 2008 and amended 3 July 2015.
- [i.2] ECC Recommendation (08)01: "Use of band 5855-5875 MHz for Intelligent Transport Systems (ITS)", approved 21 February 2008 and amended 3 July 2015.
- [i.3] Commission Decision 2008/671/EC of 5 August on the harmonised use of radio spectrum in the 5875-5905 MHz frequency band for safety related application of Intelligent Transport Systems (ITS).
- [i.4] 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.5] 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.6] ETSI TR 100 028 (all parts) (V1.4.1) (12-2001): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Uncertainties in the measurement of mobile radio equipment characteristics".
- [i.7] 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.8] ETSI TS 103 175 (V1.1.1) (06-2015): "Intelligent Transport Systems (ITS); Cross Layer DCC Management Entity for operation in the ITS G5A and ITS G5B medium".
- [i.9] IEEE 802.11™-2012: "IEEE Standard for Information technology - Telecommunications and information exchange between systems - Local and metropolitan area networks - Specific requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications".

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