

ETSI EN 302 686 V1.1.1 (2011-02)

Harmonized European Standard

**Intelligent Transport Systems (ITS);
Radiocommunications equipment operating
in the 63 GHz to 64 GHz frequency band;
Harmonized EN covering the essential requirements
of article 3.2 of the R&TTE Directive**

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ReferenceDEN/ERM-TG37-008

Keywords

ITS, radio, regulation, testing

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Foreword

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

For non-EU countries, the present document may be used for regulatory (Type Approval) purposes.

The present document has been produced by ETSI in response to a mandate from the European Commission issued under Council Directive 98/34/EC (as amended) [i.4] laying down a procedure for the provision of information in the field of technical standards and regulations.

The present document is intended to become a Harmonized Standard, the reference of which will be published in the Official Journal of the European Communities referencing the Directive 1999/5/EC [i.9] of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity ("the R&TTE Directive").

The requirements relevant to Directive 1999/5/EC [i.9] are summarised in annex A.

Equipment compliant with the present document can be intended for fitment into road vehicles, therefore it is subject to automotive EMC type approval and Directive 95/54/EC [i.7]. For use on vehicles outside the scope of Directive 95/54/EC [i.7], compliance with an EMC directive/standard appropriate for that use is required.

National transposition dates

Date of adoption of this EN:	31 January 2011
Date of latest announcement of this EN (doa):	30 April 2011
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 October 2011
Date of withdrawal of any conflicting National Standard (dow):	31 October 2012

Introduction

The present document is part of a set of standards developed by ETSI and is designed to fit in a modular structure to cover all radio and telecommunications terminal equipment within the scope of the R&TTE Directive. The modular structure is shown in EG 201 399 [i.8].

1 Scope

The present document applies to corporate communications using radio transmitters and receivers for Intelligent Transport Systems (ITS). ITS communications may comprise vehicle-to-vehicle, vehicle-to-infrastructure and infrastructure-to-vehicle.

The equipment is comprised of a transmitter and associated encoder and modulator and/or a receiver and associated demodulator and decoder. The types of equipment covered by the present document are as follows:

- OnBoard Equipment (OBE equipment fitted with an integral or dedicated antenna(s), intended for use in vehicles, e.g. a road or a rail vehicle).
- Road Side Equipment (RSE equipment fitted with an antenna socket, integral or dedicated antenna(s), normally used as a fixed station); e.g. a road or rail infrastructure.

These networks operate over a short range with very wideband communications using a variety of directional medium and high gain antennas to enable a high degree of spectrum reuse, and may use a flexible bandwidth scheme under which they normally operate in a wideband mode, and periodically reduce their bandwidth (e.g. for antenna training and other activities).

The technical characteristics of these applications are described in TR 102 400 [i.1], where ITS applications in the 63 GHz to 64 GHz band is described. The present document is also in line with the results of the of the spectrum compatibility study in the CEPT ECC Report 113 [i.3].

These radio equipment types are capable of operating in all or any part of the frequency bands given in table 1.

Table 1: Radiocommunications service frequency bands

Radiocommunications service frequency bands	
Transmit	63 GHz to 64 GHz
Receive	63 GHz to 64 GHz

The present document is intended to cover the provisions of Directive 1999/5/EC [i.9] (R&TTE Directive), article 3.2, which states that "..... radio equipment shall be so constructed that it effectively uses the spectrum allocated to terrestrial/space radio communications and orbital resources so as to avoid harmful interference".

In addition to the present document, other ENs that specify technical requirements in respect of essential requirements under other parts of article 3 of the R&TTE Directive may apply to equipment within the scope of the present document.

NOTE: A list of such ENs is included on the web site <http://www.newapproach.org>.

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.

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