

# ETSI EN 301 166-2 V1.2.3 (2009-11)

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*Harmonized European Standard (Telecommunications series)*

**Electromagnetic compatibility  
and Radio spectrum Matters (ERM);  
Land Mobile Service;  
Radio equipment for analogue and/or digital  
communication (speech and/or data) and operating on  
narrow band channels and having an antenna connector;  
Part 2: Harmonized EN covering essential requirements  
of article 3.2 of the R&TTE Directive**

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Reference

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Keywords

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## Foreword

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

The present document has been produced by ETSI in response to a mandate from the European Commission issued under Council Directive 98/34/EC [i.4] (as amended) 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.3] 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" [i.3]).

The present document is part 2 of a multi-part deliverable covering Land Mobile Service; Radio equipment for analogue and/or digital communication (speech and/or data) and operating on narrow band channels and having an antenna connector, as identified below:

Part 1: "Technical characteristics and methods of measurement";

**Part 2: "Harmonized EN covering essential requirements of article 3.2 of the R&TTE Directive".**

Technical specifications relevant to Directive 1999/5/EC [i.3] are given in annex A.

<b>National transposition dates</b>	
Date of latest announcement of this EN (doa):	28 February 2010
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 August 2010
Date of withdrawal of any conflicting National Standard (dow):	31 August 2011

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## 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 [i.3]. The modular structure is shown in EG 201 399 [i.2].

# 1 Scope

The present document applies to radio transmitters and receivers used in stations in the Private Mobile Radio (PMR) service. It applies to use in the land mobile service capable of operating in all or any part of the frequency bands given below.

**Table 1: Radiocommunications service frequency bands**

<b>Radiocommunications service frequency bands</b>	
Transmit	30 MHz to 3 000 MHz
Receive	30 MHz to 3 000 MHz

The present document applies to equipment operating with narrow channel separations (CSP) (less than 10 kHz) and intended for speech and/or data. It is the intention of the present document to cover any Channel BandWidths (CBW) permitted by National Administrations for such systems e.g. 6,25 kHz.

In the present document different requirements are given for the different radio frequency bands, environmental conditions and types of equipment where appropriate.

In the present document, data transmission systems are defined as systems which transmit and/or receive data and/or digitized voice. The equipment comprises a transmitter and associated encoder and modulator and/or a receiver and associated demodulator and decoder.

The present document covers equipment which may use constant envelope or non-constant envelope modulation.

The types of equipment covered by the present document are as follows:

- base station: equipment fitted with antenna connector;
- mobile station: equipment fitted with antenna connector;
- handportable stations:
  - a) either fitted with an antenna connector; or
  - b) without an external antenna connector but fitted with a permanent internal or a temporary internal 50  $\Omega$  RF connector which allows access to the transmitter output and the receiver input.

Handportable station equipment without an external or internal Radio Frequency (RF) connector and without the possibility of having a temporary internal 50  $\Omega$  RF connector is not covered by the present document.

The present document is intended to cover the provisions of article 3.2 of Directive 1999/5/EC [i.3] (R&TTE Directive), 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 [i.3] may apply to equipment within the scope of the present document.

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