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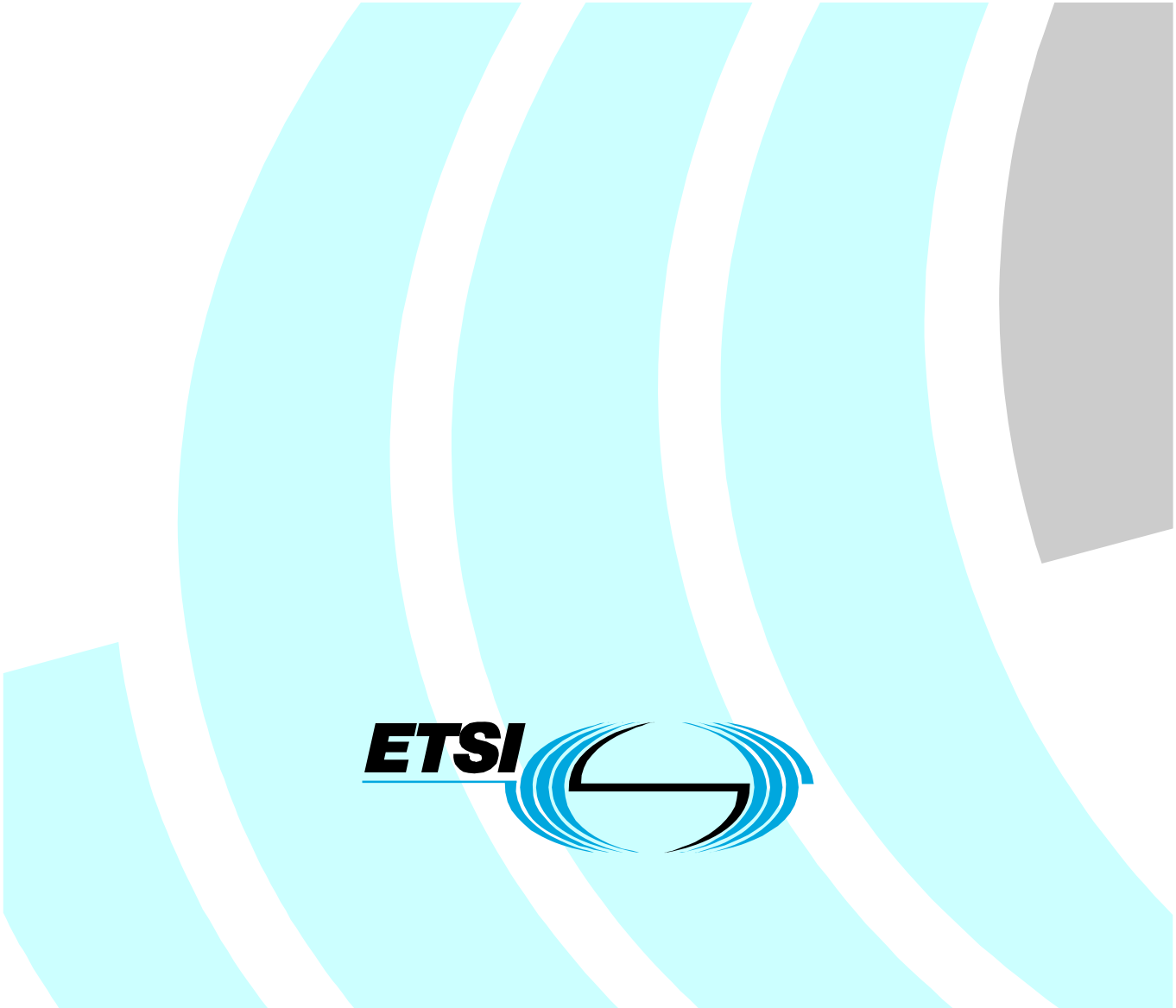
European Standard (Telecommunications series)

Electromagnetic compatibility and Radio spectrum Matters (ERM); Short range devices; Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Part 1: Technical characteristics and test methods



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Contents

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Foreword

This European Standard (Telecommunications series) 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 includes improvements to the previous version of the standard that take advantage of technical developments within the SRD industry. In particular this includes optional features such as Listen Before Talk (LBT) and Detect And Avoid (DAA).

The present document is part 1 of a multi-part deliverable covering Electromagnetic compatibility and Radio spectrum Matters (ERM); Short range devices; Radio equipment to be used in the 1 GHz to 40 GHz frequency range, as identified below:

Part 1: "Technical characteristics and test methods";

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

National transposition dates	
Date of adoption of this EN:	17 August 2010
Date of latest announcement of this EN (doa):	30 November 2010
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 May 2011
Date of withdrawal of any conflicting National Standard (dow):	31 May 2011

1 Scope

The present document applies to the following Short Range Device major equipment types:

- Generic Short Range Devices, including alarms, telecommand, telemetry, data transmission in general, etc.
- Radio Frequency IDentification (RFID).
- Radiodetermination, including detection, movement and alert applications.

These radio equipment types are capable of operating in the permitted frequency bands within the 1 GHz to 40 GHz range as specified in table 1:

- either with a Radio Frequency (RF) output connection and dedicated antenna or with an integral antenna;
- for all types of modulation;
- with or without speech.

Table 1 shows a list of the frequency bands as designated by the European Commission Decisions on Short Range Devices [i.6], [i.7] and the CEPT/ERC Recommendation 70-03 [i.1] as known at the date of publication of the present document.

Table 1: Short Range Devices within the 1 GHz to 40 GHz permitted frequency bands

	Frequency Bands	Applications	Notes
Transmit and Receive	2 400 MHz to 2 483,5 MHz	Generic use	
Transmit and Receive	2 400 MHz to 2 483,5 MHz	Detection, movement and alert applications	
Transmit and Receive	(a) 2 446 MHz to 2 454 MHz	RFID	See annex C
Transmit and Receive	(b) 2 446 MHz to 2 454 MHz	RFID	See annex C
Transmit and Receive	5 725 MHz to 5 875 MHz	Generic use	
Transmit and Receive	9 200 MHz to 9 500 MHz	Radiodetermination: radar, detection, movement and alert applications	
Transmit and Receive	9 500 MHz to 9 975 MHz	Radiodetermination: radar, detection, movement and alert applications	
Transmit and Receive	10,5 GHz to 10,6 GHz	Radiodetermination: radar, detection, movement and alert applications	
Transmit and Receive	13,4 GHz to 14,0 GHz	Radiodetermination: Radar, detection, movement and alert applications	
Transmit and Receive	17,1 GHz to 17,3 GHz	Radiodetermination: GBSAR detecting, movement and alert applications	See annex E
Transmit and Receive	24,00 GHz to 24,25 GHz	Generic use and for Radiodetermination: detection, movement and alert applications	
NOTE: (a) and (b) refer to two different operational restrictions for different power levels in the same frequency band.			

NOTE 1: Table 1 represents the most widely implemented position within the European Union [i.6], [i.7] and the CEPT countries [i.1], but it should not be assumed that all designated bands are available in all countries.

NOTE 2: In addition, it should be noted that other frequency bands may be available in a country within the frequency range 1 GHz to 40 GHz covered by the present document. See the European Commission Decisions on Short Range Devices [i.6], [i.7] and the CEPT ERC Recommendation 70-03 [i.1] as implemented through National Radio Interfaces (NRI) and additional NRI as relevant.