



SLOVENSKI STANDARD

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Electromagnetic compatibility and Radio Spectrum Matters (ERM); Harmonized EN for CT2 cordless telephone equipment covering essential requirements under article 3.2 of the R&TTE directive

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Candidate Harmonized European Standard (Telecommunications series)

**Electromagnetic compatibility
and Radio Spectrum Matters (ERM);
Harmonized EN for
CT2 cordless telephone equipment
covering essential requirements
under article 3.2 of the R&TTE directive**

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Contents

Intellectual Property Rights	6
Foreword.....	6
Introduction	7
1 Scope	9
2 References	9
3 Definitions and abbreviations.....	10
3.1 Definitions	10
3.2 Abbreviations	10
4 Radio frequency interface.....	11
4.1 General	11
4.2 Channel frequencies	11
4.2.1 Channel centre frequencies	11
4.2.2 Channel frequency accuracy	11
4.2.3 Rate of change of transmit centre frequency	11
4.2.4 CTA access	11
4.3 Signalling strategy.....	11
4.3.1 CTA access	11
4.3.2 Signalling whilst in the communication state	11
4.3.3 Signalling outside the communication state	11
4.4 Dynamic channel allocation strategy.....	12
4.4.1 Incoming calls	12
4.4.2 Outgoing calls	12
4.4.3 Channel selection strategies	12
4.4.4 Free channel	12
4.4.4.1 Free channel selection for primary services	12
4.4.4.2 Free channel selection for secondary services.....	13
4.5 Radio transmitters.....	13
4.5.1 RF power	13
4.5.1.1 Maximum RF power	13
4.5.2 Modulation.....	13
4.5.3 Transmitter burst envelope	14
4.5.3.1 Amplitude.....	14
4.5.3.2 Synchronization of transmitter burst envelopes	14
4.5.4 Adjacent channel power (narrow band).....	14
4.5.5 Out of band power arising from transmitter transients	14
4.5.6 Intermodulation attenuation	14
4.6 Radio receivers	14
4.6.1 Sensitivity	14
4.6.1.1 Receiver sensitivity for CFP or CPP using an integral or supplied antenna.....	15
4.6.1.2 Receiver sensitivity with a 50 ohm connector.....	15
4.7 Combined radio transmitter/receivers	15
4.7.1 Adverse power supply conditions	15
4.7.2 Spurious emissions of the combined transmitter/receiver.....	15
4.8 Termination of the communication state	15
4.8.1 Clear down signal sequence.....	15
4.8.2 Cessation of RF activity.....	15
4.8.3 Off-line timing	16
4.9 Channel scanning	16
4.9.1 Response times	16
4.9.1.1 Outgoing	16
4.9.1.2 Incoming	16
4.10 Controls	16

5	Radio frequency parametric and system tests	16
5.1	Test conditions, power sources and ambient temperatures.....	16
5.1.1	Normal and extreme test conditions.....	16
5.1.2	Test power source	16
5.1.3	Normal test conditions	17
5.1.3.1	Normal temperature and humidity	17
5.1.3.2	Normal test power source.....	17
5.1.3.2.1	Mains voltage	17
5.1.3.2.2	Regulated lead acid battery power sources.....	17
5.1.3.2.3	Nickel cadmium battery.....	17
5.1.3.2.4	Other power sources	17
5.1.4	Extreme test conditions.....	17
5.1.4.1	Extreme temperatures.....	17
5.1.4.2	Extreme test source voltages	17
5.1.4.2.1	Mains voltage	17
5.1.4.2.2	Regulated lead acid battery power sources.....	18
5.1.4.2.3	Nickel cadmium battery.....	18
5.1.4.2.4	Other power sources	18
5.1.5	Procedure for tests at extreme temperatures	18
5.2	Electrical test conditions	18
5.2.1	Arrangements for signals to be applied to the fixed and portable receivers	18
5.2.2	Artificial antenna	19
5.2.3	Test fixture for integral antenna.....	19
5.2.4	Test site and general arrangements for measurements involving the use of radiated fields.....	19
5.2.4.1	Outdoor test site	19
5.2.4.2	Test antenna	19
5.2.4.3	Substitution antenna.....	20
5.2.4.4	Optional additional indoor site.....	20
5.2.5	Combined transmitter/receiver test facility	21
5.2.6	Guidance on the use of radiation test sites	21
5.2.7	Further optional alternative indoor test site using an anechoic chamber	21
5.2.8	Test frequencies	21
5.3	Transmitter	22
5.3.1	Transmitter carrier power	22
5.3.1.1	Definition	22
5.3.1.2	Method of measurement for equipment with an antenna connection.....	22
5.3.1.3	Method of measurement for equipment with an integral antenna	22
5.3.1.3.1	Method of measurement under normal test conditions.....	22
5.3.1.3.2	Method of measurement under extreme test conditions	23
5.3.1.4	Limits	23
5.3.2	Adjacent channel power (narrow-band).....	23
5.3.2.1	Definition	23
5.3.2.2	Method of measurement.....	23
5.3.2.3	Limits	24
5.3.3	Out of band power arising from transmitter transients	24
5.3.3.1	Definition	24
5.3.3.2	Method of measurement.....	24
5.3.3.3	Limits	24
5.3.4	Intermodulation attenuation	24
5.3.4.1	Definition	24
5.3.4.2	Method of measurement.....	24
5.3.4.3	Limits	25
5.3.5	Prevention of mis-operation due to adverse power supply conditions.....	25
5.3.5.1	Definition	25
5.3.5.2	Method of measurement.....	25
5.3.5.3	Limits	25
5.4	Spurious emissions	25
5.4.1	Spurious emissions of the combined transmitter/receiver.....	25
5.4.1.1	Definition	25
5.4.1.2	Method of measuring the power level, subclause 5.4.1.1, (1).....	26
5.4.1.3	Method of measuring the effective radiated power, subclause 5.4.1.1, (2).....	26
5.4.1.4	Limits	26

5.5	Radio frequency system operation	27
5.5.1	Definitions	27
5.5.2	Channel frequencies.....	27
5.5.2.1	Ability to receive when the carrier frequency is up to ± 10 kHz from nominal	27
5.5.2.2	Ability to receive when carrier frequency is varying at a rate of up to 1 kHz/ms	27
5.5.3	Dynamic RF channel allocation strategy	27
5.5.3.1	No channel is occupied	27
5.5.3.2	One channel only below the threshold	27
5.5.3.3	All channels occupied	27
5.5.4	RF modulation	27
5.5.4.1	Peak frequency deviation: transmission.....	27
5.5.4.2	Peak frequency deviation: reception	28
5.5.5	RF envelope	28
5.5.5.1	Transmitter output: ramp-down	28
5.5.5.2	Transmitter output: ramp-up	28
5.5.5.3	CPP transmit amplitude during off period	28
5.5.5.4	CFP transmit amplitude during off period	28
5.5.6	Radio receiver sensitivity.....	28
5.5.6.1	Raw bit error rate	28
5.6	Transmitter modulation	29
5.7	Power supply units	29
5.8	Declarations by the manufacturer.....	30
5.9	Identification	30
Annex A (normative): The EN Requirements Table (EN-RT)		31
Annex B (normative): Accuracy of measurement.....		33
B.1	Radio frequency parametric and system tests	33
History		34

SIST EN 301 797:2001

<https://standards.iteh.ai/catalog/standards/sist/37239b94-8f6c-4d2a-8f3d-0e3e4093de0f/sist-en-301-797-2001>

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Foreword

This Candidate 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 [7] 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 [1] 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").

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National transposition dates	
Date of adoption of this EN:	21 July 2000
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Date of latest publication of new National Standard or endorsement of this EN (dop/e):	30 April 2001
Date of withdrawal of any conflicting National Standard (dow):	30 April 2001

Introduction

The present document is part of a set of standards designed to fit in a modular structure to cover all radio and telecommunications terminal equipment under the R&TTE Directive [1]. Each standard is a module in the structure. The modular structure is shown in figure 1.

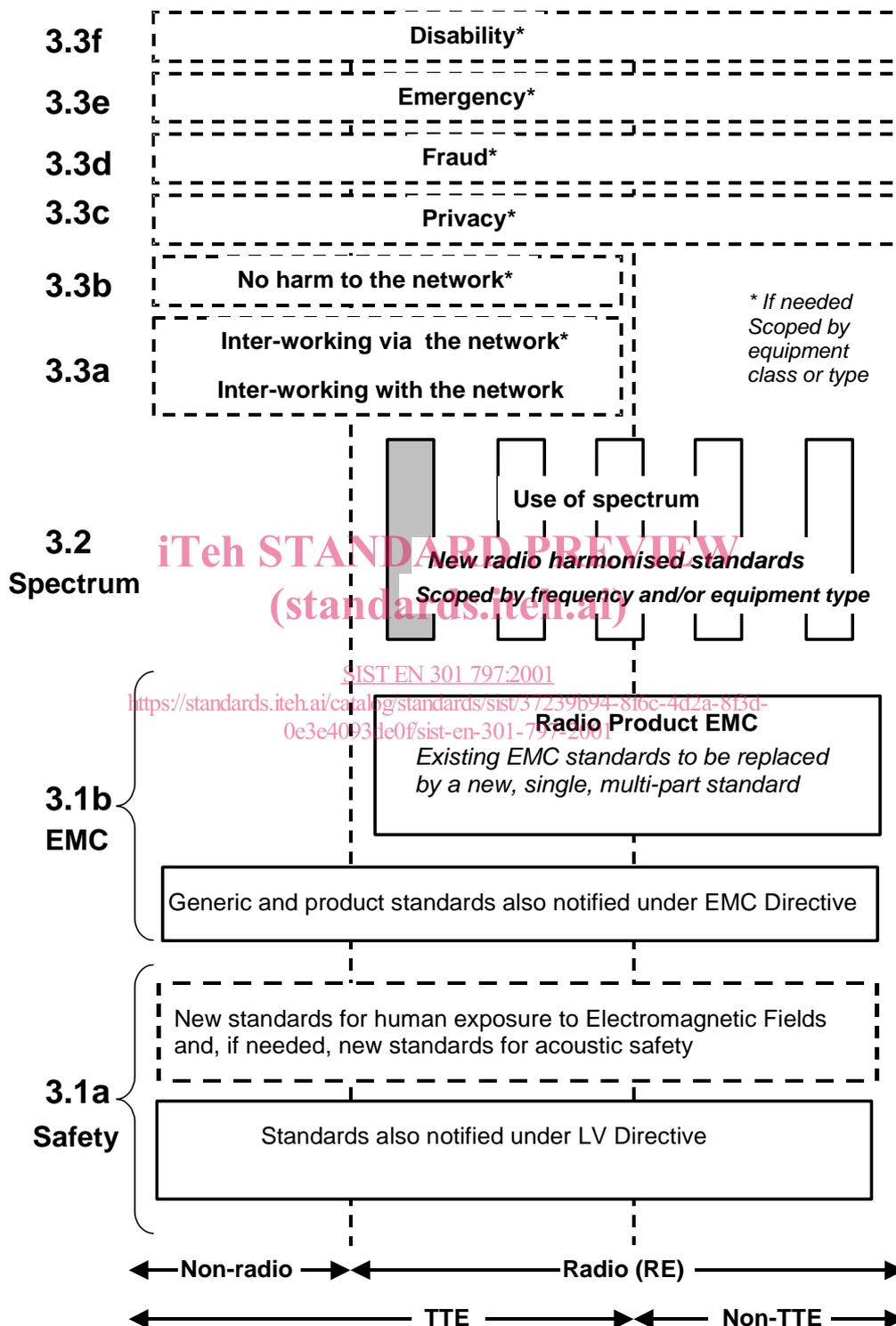


Figure 1: Modular structure for the various standards used under the R&TTE Directive [1]

The left hand edge of the figure 1 shows the different subclauses of Article 3 of the R&TTE Directive [1].

For article 3.3 various horizontal boxes are shown. Dotted lines indicate that at the time of publication of the present document essential requirements in these areas have to be adopted by the Commission. If such essential requirements are adopted, and as far and as long as they are applicable, they will justify individual standards whose scope is likely to be specified by function or interface type.

The vertical boxes show the standards under article 3.2 for the use of the radio spectrum by radio equipment. The scopes of these standards are specified either by frequency (normally in the case where frequency bands are harmonized) or by radio equipment type.

For article 3.1b the diagram shows the new single multi-part product EMC standard for radio, and the existing collection of generic and product standards currently used under the EMC Directive [2]. The parts of this new standard will become available in the second half of 2000, and the existing separate product EMC standards will be used until it is available.

For article 3.1a the diagram shows the existing safety standards currently used under the LV Directive [3] and new standards covering human exposure to electromagnetic fields. New standards covering acoustic safety may also be required.

The bottom of the figure shows the relationship of the standards to radio equipment and telecommunications terminal equipment. A particular equipment may be radio equipment, telecommunications terminal equipment or both. A radio spectrum standard will apply if it is radio equipment. An article 3.3 standard will apply as well only if the relevant essential requirement under the R&TTE Directive [1] is adopted by the Commission and if the equipment in question is covered by the scope of the corresponding standard. Thus, depending on the nature of the equipment, the essential requirements under the R&TTE Directive [1] may be covered in a set of standards.

The modularity principle has been taken because:

- it minimizes the number of standards needed. Because equipment may, in fact, have multiple interfaces and functions it is not practicable to produce a single standard for each possible combination of functions that may occur in an equipment;
- it provides scope for standards to be added:
 - under article 3.2 when new frequency bands are agreed; or
 - under article 3.3 should the Commission take the necessary decisions;
 without requiring alteration of standards that are already published;
- it clarifies, simplifies and promotes the usage of Harmonized Standards as the relevant means of conformity assessment.

1 Scope

The present document applies to CT2 cordless telephone terminal equipment.

CT2 telephone terminal equipment is capable of operating in all or any part of the frequency bands given below:

Table 1: Cordless Telephone service frequency bands

	Cordless Telephone service frequency bands
Transmit CT2	864,1 MHz to 868,1 MHz
Receive CT2	864,1 MHz to 868,1 MHz

It shall be noted that the above frequency bands are not harmonized throughout the community.

The existence of this Harmonized Standard does not imply the availability of the above frequency spectrum for the particular types of equipment covered by the present document.

The present document is intended to cover the provisions of Directive 1999/5/EC [1] (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 [1] will 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>.

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2 References

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The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

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- References are either specific (identified by date of publication, edition number, Version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest Version applies.
- A non-specific reference to an ETS shall also be taken to refer to later Versions published as an EN with the same number.

- [1] Directive 1999/5/EC 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 (R&TTE Directive).
- [2] Council Directive 89/336/EEC of 3 May 1989 on the approximation of the laws of the Member States relating to electromagnetic compatibility (EMC Directive).
- [3] Council Directive 73/23/EEC of 19 February 1973 on the harmonization of the laws of the Member States relating to electrical equipment designed for use within certain voltage limits (LV Directive).
- [4] ETSI-ETS 300 131 (1994): "Radio Equipment and Systems (RES); Common air interface specification to be used for the interworking between cordless telephone apparatus in the frequency band 864,1 MHz to 868,1 MHz, including public access services".
- [5] ETSI ETS 300 086 (1991): "Radio Equipment and Systems (RES); Land mobile group; Technical characteristics and test conditions for radio equipment with an internal or external RF connector intended primarily for analogue speech".

- [6] ETSI ETR 028 (1994): "Radio Equipment and Systems (RES); Uncertainties in the measurement of mobile radio equipment characteristics".
- [7] Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations.

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions in the R&TTE Directive [1], and the following terms and definitions apply:

active mode: any mode of operation of a CFP or CPP in which the CFP or CPP is transmitting only or transmitting and receiving.

communication state: phase of a call between link set up and link termination.

idle mode: any mode of operation of a CFP or CPP which is not the active mode.

PACKET: layer two entity comprising Address Code Word and any following Data Code Words transmitted as a single unit over which the signalling protocol may operate.

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

AFC	Automatic Frequency Control
BER	Bit Error Ratio
CAI	Common Air Interface
CFP	Cordless Fixed Part
CIS	CFP Information and Status codeword
CPP	Cordless Portable Part.
CT2	Second Generation Cordless Telephone
CTA	Cordless Telephone Apparatus
EMC	Electro-Magnetic Compatibility
f_c	Nominal Channel Centre Frequency
FSK	Frequency Shift Keying
LV	Low Voltage
MUX1.2	Signalling Multiplex Mode 1 (two-bit signalling)
MUX1.4	Signalling Multiplex Mode 1 (four-bit signalling)
MUX2	Signalling Multiplex Mode 2
MUX3	Signalling Multiplex Mode 3
NPSS	Normal Power Secondary Service
PCM	Pulse Code Modulation
PSTN	Public Switched Telephone Network
R&TTE	Radio and Telecommunications Terminal Equipment
RE	Radio Equipment
RF	Radio Frequency
RFP	Radio Fixed Part
SABM_ACK	Layer two acknowledgment to SABM. Unless otherwise stated, SABM_ACK refers to either the basic or extended form of the message.
TTE	Telecommunications Terminal Equipment