



Electromagnetic compatibility and Radio spectrum Matters (ERM); Definition of radio parameters

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Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Electromagnetic compatibility and Radio spectrum Matters (ERM).

Modal verbs terminology

In the present document "**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).

"**must**" and "**must not**" are NOT allowed in ETSI deliverables except when used in direct citation.

Introduction

Many ETSI deliverables address radio parameters. In order to make these documents easy to read and practical for the user, the authors usually include the definitions of those parameters in the text corresponding to the appropriate clauses. Sometimes these definitions are not exact copies from the ETSI Terms and Definitions database "TEDDI" or from other ETSI deliverables, but are (slightly) adapted versions.

As a result many radio parameters have several different variants of their definitions used within ETSI.

The aim of the present document is to trace all those definitions (which are usually not included in "clause 3" of the ETSI deliverables).

It may be possible, then, to try and harmonize them (work to be done in a later "phase").

Because there are many ETSI deliverables it is a large amount of work to find all the definitions by hand. Therefore, a computer program that searches for definitions in ETSI documents has been written. The goal of this program (or set of programs) is to assist tracing the definitions found outside of "clause 3".

In the present document the results of searches by hand (see clause 5 and annex A) and automatic searches (see annex B) co-exist to make comparisons and verifications more easy.

Practical experience has shown that some of the outputs provided by a computer program, when versions 1.1.1 and 1.1.2 of the present document had been prepared needed some further editing by hand. Therefore, in order to prepare version 1.2.1 of the present document another set of programmes (Matlab scripts) was written.

During a first stage of the work, ETSI deliverables of early Autumn 2016 had been used. The more recent internal versions of the present document use files provided by ETSI early October 2017 (and are therefore expected to include most of the Harmonised Standards revised in support of the Radio Equipment Directive).

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1 Scope

The present document is intended to provide an overview of the various definitions of radio parameters that can be found in ETSI deliverables.

The present document includes definitions found in ETSI TRs, TSs, ESs, EGs and ENs, gathered in October 2017.

As some consolidation work in the area of Radio Definitions had already been done in the early days of ETSI, definitions in ETSI ETR 027 [i.78] and ETSI TR 100 027 [i.79] had also been searched "by program".

Older types of documents, such as TBRs, have not been analysed, in fine, for various reasons:

- if they had contained interesting definitions, it is likely that such definitions would also have been found in more recent documents;
- their structure and layout is sufficiently different from more recent ETSI deliverables that the programs (Scripts) used for recent ETSI deliverables have difficulty to "synchronize" and find possible definitions.

2 References

2.1 Normative references

Normative references are not applicable in the present document.

2.2 Informative 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 referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

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.

To be noted that, for practical reasons, the list below does not include the references to the ETSI ENs and TSs that were searched by program. However, as some of the ETSI ENs have been analysed both by hand and by program, some of the references to ENs, below, are also relevant to the searches done by program.

- [i.1] ITU Radio Regulations.
- [i.2] ETSI EN 301 893 (V1.4.1): "5 GHz RLAN; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU".
- [i.3] ETSI EN 302 502 (V1.2.1): "Wireless Access Systems (WAS); 5,8 GHz fixed broadband data transmitting systems; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU".
- [i.4] ETSI EN 301 406 (V1.5.1): "Digital Enhanced Cordless Telecommunications (DECT); Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU".
- [i.5] ETSI EN 301 908-11 (V3.2.1): "IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 11: CDMA Direct Spread (UTRA FDD) Repeaters".

- [i.6] ETSI EN 302 426 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Harmonized EN for CDMA spread spectrum Repeaters operating in the 450 MHz cellular band (CDMA450) and the 410 MHz, 450 MHz and 870 MHz PAMR bands (CDMA-PAMR) covering essential requirements of article 3.2 of the R&TTE Directive".
- [i.7] ETSI EN 300 607-1 (V8.1.1): "Digital cellular telecommunications system (Phase 2+) (GSM); Mobile Station (MS) conformance specification; Part 1: Conformance specification (GSM 11.10-1 version 8.1.1 Release 1999)".
- [i.8] ETSI EN 300 162-1 (V1.4.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Radiotelephone transmitters and receivers for the maritime mobile service operating in VHF bands; Part 1: Technical characteristics and methods of measurement".
- [i.9] ETSI EN 301 025-1 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); VHF radiotelephone equipment for general communications and associated equipment for Class "D" Digital Selective Calling (DSC); Part 1: Technical characteristics and methods of measurement".
- [i.10] ETSI EN 301 178-1 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Portable Very High Frequency (VHF) radiotelephone equipment for the maritime mobile service operating in the VHF bands (for non-GMDSS applications only); Part 1: Technical characteristics and methods of measurement".
- [i.11] ETSI EN 300 698-1 (V1.2.1): "ElectroMagnetic Compatibility and Radio Spectrum Matters (ERM); Radio telephone transmitters and receivers for the maritime mobile service operating in the VHF bands used on inland waterways; Part 1: Technical characteristics and methods of measurement".
- [i.12] ETSI EN 300 720-1 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Ultra-High Frequency (UHF) on-board vessels communications systems and equipment; Part 1: Technical characteristics and methods of measurement".
- [i.13] ETSI EN 301 929-1 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); VHF transmitters and receivers as Coast Stations for GMDSS and other applications in the maritime mobile service; Part 1: Technical characteristics and methods of measurement".
- [i.14] ETSI EN 300 086-1 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Radio equipment with an internal or external RF connector intended primarily for analogue speech; Part 1: Technical characteristics and methods of measurement".
- [i.15] ETSI EN 300 296-1 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Radio equipment using integral antennas intended primarily for analogue speech; Part 1: Technical characteristics and methods of measurement".
- [i.16] ETSI EN 300 341-1 (V1.3.1): "ElectroMagnetic Compatibility and Radio Spectrum Matters (ERM); Land Mobile Service (RP 02); Radio equipment using an integral antenna transmitting signals to initiate a specific response in the receiver; Part 1: Technical characteristics and methods of measurement".
- [i.17] ETSI EN 300 390-1 (V1.2.1): "ElectroMagnetic Compatibility and Radio Spectrum Matters (ERM); Land Mobile Service; Radio equipment intended for the transmission of data (and speech) and using an integral antenna; Part 1: Technical characteristics and test conditions".
- [i.18] ETSI EN 301 166-1 (V1.3.1): "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 1: Technical characteristics and methods of measurement".
- [i.19] ETSI EN 302 561 (V2.1.1): "Land Mobile Service; Radio equipment using constant or non-constant envelope modulation operating in a channel bandwidth of 25 kHz, 50 kHz, 100 kHz or 150 kHz; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU".

- [i.20] ETSI EN 300 113-1 (V1.6.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land mobile service; Radio equipment intended for the transmission of data (and/or speech) using constant or non-constant envelope modulation and having an antenna connector; Part 1: Technical characteristics and methods of measurement".
- [i.21] ETSI EN 300 761-1 (V1.2.1): "ElectroMagnetic Compatibility and Radio Spectrum Matters (ERM); Short Range Devices (SRD); Automatic Vehicle Identification (AVI) for railways operating in the 2,45 GHz frequency range; Part 1: Technical characteristics and methods of measurement".
- [i.22] ETSI EN 300 220-1 (V2.1.1): "Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz; Part 1: Technical characteristics and methods of measurement".
- [i.23] ETSI EN 300 330-1 (V1.5.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment in the frequency range 9 kHz to 25 MHz and inductive loop systems in the frequency range 9 kHz to 30 MHz; Part 1: Technical characteristics and test methods".
- [i.24] ETSI EN 300 440-1 (V1.4.1): "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".
- [i.25] ETSI EN 301 908-2 (V3.2.1): "IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 2: CDMA Direct Spread (UTRA FDD) User Equipment (UE)".
- [i.26] ETSI TS 125 141 (V8.4.0): "Universal Mobile Telecommunications System (UMTS); Base Station (BS) conformance testing (FDD) (3GPP TS 25.141 version 8.4.0 Release 8)".
- [i.27] ETSI EN 301 908-3 (V3.2.1): "IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 3: CDMA Direct Spread (UTRA FDD) Base Stations (BS)".
- [i.28] ETSI EN 301 908-4 (V3.2.1): "IMT cellular networks; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 4: CDMA Multi-Carrier (cdma2000) User Equipment (UE)".
- [i.29] ETSI EN 301 908-5 (V3.2.1): "IMT cellular networks; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 5: CDMA Multi-Carrier (cdma2000) Base Stations (BS)".
- [i.30] ETSI EN 301 908-6 (V3.2.1): "IMT cellular networks; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 6: CDMA TDD (UTRA TDD) User Equipment (UE)".
- [i.31] ETSI EN 301 908-7 (V3.2.1): "IMT cellular networks; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive; Part 7: CDMA TDD (UTRA TDD) Base Stations (BS)".
- [i.32] ETSI EN 301 908-8 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS) and User Equipment (UE) for IMT-2000 Third-Generation cellular networks; Part 8: Harmonized EN for IMT-2000, TDMA Single-Carrier (UWC 136) (UE) covering essential requirements of article 3.2 of the R&TTE Directive".
- [i.33] ETSI EN 300 219-1 (V1.2.1): "ElectroMagnetic Compatibility and Radio Spectrum Matters (ERM); Land Mobile Service; Radio equipment transmitting signals to initiate a specific response in the receiver; Part 1: Technical characteristics and methods of measurement".
- [i.34] ETSI EN 300 433-1 (V1.1.3): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Citizens' Band (CB) radio equipment; Part 1: Technical characteristics and methods of measurement".

- [i.35] ETSI EN 301 908-9 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS) and User Equipment (UE) for IMT-2000 Third-Generation cellular networks; Part 9: Harmonized EN for IMT-2000, TDMA Single-Carrier (UWC 136) (BS) covering essential requirements of article 3.2 of the R&TTE Directive".
- [i.36] ETSI EN 300 373-2 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Maritime mobile transmitters and receivers for use in the MF and HF bands; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive".
- [i.37] ETSI TS 101 087 (V8.9.0): "Digital cellular telecommunications system (Phase 2 and Phase 2+); Base Station System (BSS) equipment specification; Radio aspects (3GPP TS 11.21 version 8.9.0 Release 1999)".
- [i.38] ETSI EN 300 392-2 (V3.2.1): "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 2: Air Interface (AI)".
- [i.39] ETSI EN 300 396-2 (V1.3.1): "Terrestrial Trunked Radio (TETRA); Technical requirements for Direct Mode Operation (DMO); Part 2: Radio aspects".
- [i.40] ETSI EN 300 396-4 (V1.3.1): "Terrestrial Trunked Radio (TETRA); Technical requirements for Direct Mode Operation (DMO); Part 4: Type 1 repeater air interface".
- [i.41] ETSI EN 300 396-7 (V1.2.1): "Terrestrial Trunked Radio (TETRA); Technical requirements for Direct Mode Operation (DMO); Part 7: Type 2 repeater air interface".
- [i.42] ETSI EN 300 396-5 (V1.2.1): "Terrestrial Trunked Radio (TETRA); Technical requirements for Direct Mode Operation (DMO); Part 5: Gateway air interface".
- [i.43] ETSI EN 301 908-10 (V2.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Base Stations (BS), Repeaters and User Equipment (UE) for IMT-2000 Third-Generation cellular networks; Part 10: Harmonised Standard for IMT-2000, FDMA/TDMA (DECT) covering the essential requirements of article 3.2 of the Directive 2014/53/EU".
- [i.44] ETSI EN 302 195-1 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Radio equipment in the frequency range 9 kHz to 315 kHz for Ultra Low Power Active Medical Implants (ULP-AMI) and accessories; Part 1: Technical characteristics and test methods".
- [i.45] ETSI EN 302 510-1 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Radio equipment in the frequency range 30 MHz to 37,5 MHz for Ultra Low Power Active Medical Membrane Implants and Accessories; Part 1: Technical characteristics and test methods".
- [i.46] ETSI EN 302 571 (V2.1.1): "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".
- [i.47] ETSI TS 151 010-1 (V4.9.0): "Digital cellular telecommunications system (Phase 2+); Mobile Station (MS) conformance specification; Part 1: Conformance specification (3GPP TS 51.010-1 version 4.9.0 Release 4)".
- [i.48] ETSI EN 300 065-1 (V1.1.3): "ElectroMagnetic Compatibility and Radio Spectrum Matters (ERM); Narrow-band direct-printing telegraph equipment for receiving meteorological or navigational information (NAVTEX); Part 1: Technical characteristics and methods of measurement".
- [i.49] ETSI EN 300 609-4 (V8.0.2): "Digital cellular telecommunications system (Phase 2 and Phase 2+) (GSM); Base Station System (BSS) equipment specification; Part 4: Repeaters (GSM 11.26 version 8.0.2 Release 1999)".
- [i.50] ETSI EN 301 908-12 (V3.1.1): "IMT cellular networks; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU; Part 12: CDMA Multi-Carrier (cdma2000) Repeaters".
- [i.51] ETSI EN 301 783-1 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Commercially available amateur radio equipment; Part 1: Technical characteristics and methods of measurement".

- [i.52] ETSI EN 301 526 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Harmonized EN for CDMA spread spectrum mobile stations operating in the 450 MHz cellular band (CDMA 450) and 410, 450 and 870 MHz PAMR bands (CDMA-PAMR) covering essential requirements of article 3.2 of the R&TTE Directive".
- [i.53] ETSI EN 300 471-1 (V1.2.1): "ElectroMagnetic Compatibility and Radio Spectrum Matters (ERM); Land Mobile Service; Rules for Access and the Sharing of common used channels by equipment complying with EN 300 113; Part 1: Technical characteristics and methods of measurement".
- [i.54] Recommendation ITU-T O.41: "Psophometer for use on telephone-type circuits".
- [i.55] Recommendation ITU-T P.53: "Psophometer for use on telephone-type circuits".
- [i.56] ETSI EN 302 480 (V1.1.2): "Mobile Communication On Board Aircraft (MCOBA) systems; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU".
- [i.57] ETSI EN 301 449 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Harmonized EN for CDMA spread spectrum base stations operating in the 450 MHz cellular band (CDMA 450) and 410, 450 and 870 MHz PAMR bands (CDMA-PAMR) covering essential requirements of article 3.2 of the R&TTE Directive".
- [i.58] ETSI EN 300 328 (V1.7.1): "Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU".
- [i.59] ETSI EN 302 288-1 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices; Road Transport and Traffic Telematics (RTTT); Short range radar equipment operating in the 24 GHz range; Part 1: Technical requirements and methods of measurement".
- [i.60] ETSI EN 300 422-1 (V1.3.2): "Wireless Microphones; Audio PMSE up to 3 GHz; Part 1: Class A Receivers; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU".
- [i.61] ETSI EN 301 357-1 (V1.4.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Cordless audio devices in the range 25 MHz to 2 000 MHz; Part 1: Technical characteristics and test methods".
- [i.62] ETSI EN 301 797 (V1.1.1): "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".
- [i.63] ETSI EN 302 064-1 (V1.1.2): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Wireless Video Links (WVL) operating in the 1,3 GHz to 50 GHz frequency band; Part 1: Technical characteristics and methods of measurement".
- [i.64] ETSI EN 302 291-2 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Close Range Inductive Data Communication equipment operating at 13,56 MHz; Part 2: Harmonized EN under article 3.2 of the R&TTE Directive".
- [i.65] ETSI EN 302 500-1 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD) using Ultra WideBand (UWB) technology; Location Tracking equipment operating in the frequency range from 6 GHz to 9 GHz; Part 1: Technical characteristics and methods of measurement".
- [i.66] ETSI EN 302 208-1 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Radio Frequency Identification Equipment operating in the band 865 MHz to 868 MHz with power levels up to 2 W and in the band 915 MHz to 921 MHz with power levels up to 4 W; Part 1: Technical requirements and methods of measurement".
- [i.67] ETSI EN 302 065 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD) using Ultra Wide Band technology (UWB) for communications purposes; Harmonized EN covering the essential requirements of article 3.2 of the R&TTE Directive".

- [i.68] CEPT Recommendation 74-01: "Spurious Emissions".
- [i.69] ETSI EN 300 674-1 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Road Transport and Traffic Telematics (RTTT); Dedicated Short Range Communication (DSRC) transmission equipment (500 kbit/s / 250 kbit/s) operating in the 5,8 GHz Industrial, Scientific and Medical (ISM) band; Part 1: General characteristics and test methods for Road Side Units (RSU) and On-Board Units (OBU)".
- [i.70] ETSI EN 300 224-1 (V1.3.1): "ElectroMagnetic Compatibility and Radio Spectrum Matters (ERM); On-site paging service; Part 1: Technical and functional characteristics, including test methods".
- [i.71] ETSI EN 301 091-1 (V1.3.3): "Short Range Devices; Transport and Traffic Telematics (TTT); Radar equipment operating in the 76 GHz to 77 GHz range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU; Part 1: Ground based vehicular radar".
- [i.72] ETSI EN 301 839-1 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Ultra Low Power Active Medical Implants (ULP-AMI) and Peripherals (ULP-AMI-P) operating in the frequency range 402 MHz to 405 MHz; Part 1: Technical characteristics and test methods".
- [i.73] ETSI EN 302 537-1 (V1.1.2): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Ultra Low Power Medical Data Service Systems operating in the frequency range 401 MHz to 402 MHz and 405 MHz to 406 MHz; Part 1: Technical characteristics and test methods".
- [i.74] ETSI EN 302 536-1 (V1.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Short Range Devices (SRD); Radio equipment in the frequency range 315 kHz to 600 kHz; Part 1: Technical characteristics and test methods".
- [i.75] ETSI EN 300 135-1 (V1.2.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Citizens' Band (CB) radio equipment; Angle-modulated Citizens' Band radio equipment (PR 27 Radio Equipment); Part 1: Technical characteristics and methods of measurement".
- [i.76] ETSI EN 300 910: "Digital cellular telecommunications system (Phase 2+) (GSM); Radio transmission and reception (GSM 05.05)".
- [i.77] ETSI EG 201 015: "Methods for Testing and Specification (MTS); Standards engineering process; A Handbook of validation methods".
- [i.78] ETSI ETR 027 (edition 1): "Radio Equipment and Systems (RES); Methods of measurement for private mobile radio equipment".
- [i.79] ETSI TR 100 027 (V1.2.1): "ElectroMagnetic Compatibility and Radio Spectrum Matters (ERM); Methods of measurement for private mobile radio equipment".
- [i.80] ETSI EG 201 399 (V3.1.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); A guide to the production of Harmonized Standards for application under the Radio & Telecommunication Terminal Equipment Directive 1999/5/EC (R&TTE) and a first guide on the impact of the Radio Equipment Directive 2014/53/EU (RED) on Harmonized Standards".
- [i.81] ETSI EN 300 113 (V2.2.1): "Land Mobile Service; Radio equipment intended for the transmission of data (and/or speech) using constant or non-constant envelope modulation and having an antenna connector; Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU".
- [i.82] ETSI EN 300 220 (all parts): "Short Range Devices (SRD) operating in the frequency range 25 MHz to 1 000 MHz".