

# ETSI TS 102 490 V1.8.1 (2014-06)



Technical Specification

**Electromagnetic compatibility  
and Radio spectrum Matters (ERM);  
Peer-to-Peer Digital Private Mobile Radio using FDMA  
with a channel spacing of 6,25 kHz with e.r.p. of up to 500 mW**

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Reference

RTS/ERM-TGDMM-320

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Keywords

air interface, digital, FDMA, PMR, protocol, radio

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## Foreword

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

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# 1 Scope

The present document covers digital private mobile radio equipment operating in peer-to-peer mode only.

The equipment is based on FDMA with channel spacing of 6,25 kHz supporting voice and data applications.

It covers only hand portable equipment complying with EN 301 166-2 [1] and having an integral antenna.

This equipment is for use:

- i) In accordance with ECC/DEC/(05)12 [i.1] on harmonized frequencies, technical characteristics, exemption from individual licensing and free carriage and use of digital PMR 446 applications operating in the frequency band 446,100 MHz to 446,200 MHz.

NOTE 1: The technical requirements for Digital PMR 446 included in ECC/DEC/(05)12 [i.1] are: operation in the frequency range 446,100 MHz to 446,200 MHz, maximum e.r.p. of 500 mW, and a maximum transmitter time-out-time of 180 seconds.

- ii) In the frequency band 149,01875 MHz to 149,11875 MHz under exemption from individual licensing.

NOTE 2: These requirements are: maximum e.r.p. of 500 mW, and a maximum transmitter time-out-time of 180 seconds.

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# 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.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

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

## 2.1 Normative references

The following referenced documents are necessary for the application of the present document.

- [1] ETSI EN 301 166-2: "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".
- [2] Void.
- [3] ETSI ETS 300 230: "Radio Equipment and Systems (RES); Land mobile service; Binary Interchange of Information and Signalling (BIIS) at 1200 bit/s (BIIS 1 200)".
- [4] MPT 1327 (June 1997): "A Signalling Standard for Trunked Private Land Mobile Radio Systems".

## 2.2 Informative references

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.

- [i.1] CEPT ECC/DEC/(05)12: "ECC Decision of 28 October 2005 on harmonized frequencies, technical characteristics, exemption from individual licensing and free carriage and use of digital PMR 446 applications operating in the frequency band 446.1-446.2 MHz".