

UK Interface Requirement 2009

**Private Mobile Radio operating in the licence exempt analogue PMR 446
and Digital PMR 446 frequency bands**

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Section 1

References

- 1.1 EN 300 296 Electromagnetic compatibility and Radio spectrum Matters (ERM); Land Mobile Service; Radio equipment using integral antennas intended primarily for analogue speech; Part 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
- 1.2 EN 300 113-2 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 2: Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive
- 1.3 EN 301 166 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
- 1.4 dpmr446iu.pdf Digital PMR446 Ofcom Information Sheet (available from Ofcom Website or Contact Centre)
- 1.5 OFW57 Analogue PMR446 Ofcom Information Sheet (available from Ofcom Website or Contact Centre)

Section 2

Foreword

- 2.1 The Radio Equipment and Telecommunications Terminal Equipment Directive 99/5/EC (R&TTE Directive) was implemented in the United Kingdom (UK) on the 8 April 2000 by The Radio Equipment and Telecommunications Terminal Equipment Regulations 2000, Statutory Instrument 2000 No. 730. In accordance with Articles 4.1 and 7.2 of Directive 1999/5/EC, this UK Interface Requirement contains the requirements for the use of private mobile radio (PMR) systems in the analogue PMR446 and Digital PMR446 frequency bands.
- 2.2 Nothing in this UK Radio Interface Requirement shall preclude the need for equipment to comply with Directive 1999/5/EC.
- 2.3 It is required by the Wireless Telegraphy Act 2006 that no radio equipment is installed or used in the UK except under the authority of a licence granted by or otherwise exempted by regulations made by Ofcom. It is a condition of such a licence or exemption regulations as appropriate that, in order to be installed or used in the UK, the equipment must meet the minimum requirements specified in this UK Interface Requirement for the stated equipment types and for the stated frequency bands. Nothing in this UK Interface Requirement shall preclude equipment from being placed on the market in the UK that complies with the 'essential requirements' specified in Directive 1999/5/EC.
- 2.4 The requirements given in the main body of this UK Radio Interface Requirement will apply to the use of private mobile radio (PMR) systems in the analogue PMR446 and Digital PMR446 frequency bands.
- 2.5 This UK Radio Interface Requirement will be revised as necessary, for example to follow:
- i) current technology developments for reasons related to the effective and appropriate use of the spectrum in particular maximising spectrum utilisation; and
 - ii) changes to the available spectrum allocated for use of private mobile radio (PMR) systems in the analogue PMR446 and Digital PMR446 frequency bands.
- 2.6 All UK Radio Interface Requirements notified under Directive 1998/34/EC will be published and will be made available free of charge from the Ofcom web-site at http://www.ofcom.org.uk/radiocomms/ifi/tech/interface_req/.
- 2.7 Further information on this UK Radio Interface Requirement can be obtained from the technical enquiry contact given at the back of this document.

Section 3

Minimum requirements for operation within the UK

- 3.1 The minimum requirements in this document are made for reasons related to the effective and appropriate use of the radio spectrum, in particular maximising spectrum utilisation.
- 3.2 This UK Radio Interface Requirement gives a high level description of how the spectrum in the UK is used for private mobile radio (PMR) systems in the analogue PMR446 and Digital PMR446 frequency bands. It does not prescribe technical interpretation of the 'essential requirements' of Directive 1999/5/EC.
- 3.3 This UK Radio Interface Requirement therefore stipulates the necessary equipment parameters for the use of private mobile radio (PMR) systems in the analogue PMR446 and Digital PMR446 frequency bands. Tables 3.1 and 3.2 contain the relevant equipment parameters. These taken together with the 'essential requirements' detailed in Article 3.2 of Directive 1999/5/EC constitute the minimum requirements for use of for private mobile radio (PMR) systems in the analogue PMR446 and Digital PMR446 frequency bands within the UK. Nothing in this UK Interface Requirement shall preclude equipment from being placed on the market in the UK that complies with the 'essential requirements' specified in Directive 1999/5/EC.
- 3.4 The technical parameters specified in the UK Radio Interface Requirement are applied to achieve the desired level of compatibility within for private mobile radio (PMR) systems in the analogue PMR446 and Digital PMR446 frequency bands with other radiocommunications services, whilst promoting enterprise, innovation and competition.
- 3.5 This UK Radio Interface requirement provides the necessary technical information which facilitates access to spectrum allocated to for private mobile radio (PMR) systems in the analogue PMR446 and Digital PMR446 frequency bands in the UK. It is not the intention of this UK Radio Interface Requirement to duplicate or impose any additional 'essential requirements' of the Directive 1999/5/EC on products. Any specified parameters within this document are for the purpose of identifying product options and not as a national de facto product requirement.

Table 3.1: Minimum requirements for the use of: - Private Mobile Radio (PMR) systems in the analogue PMR446 frequency band

Mandatory (1-9)		
1	Frequency band	446.0 MHz to 446.1 MHz
2	Radio service	Mobile
3	Application	Private Mobile Radio
4	Channelling / modulation	Channel spacing:- 12.5 kHz ITU class of emission:- F3E
5	Maximum transmit power limit	-3 dBW (500mW) ERP.
6	Channel occupation rules	Speech /Audio only
7	Duplex type/separation	Single-frequency simplex
8	Licensing Regime	Licence exempt
9	Additional essential requirements (Article 3.3e)	Not applicable
Informative (10-13)		
10	Frequency planning assumptions	
11	Reference	EN 300 113
12	Remarks	
13	EU Notification Number	2006/423/UK

Table 3.2: Minimum requirements for the use of: - Private Mobile Radio (PMR) systems in the Digital PMR446 frequency band

Mandatory (1-9)		
1	Frequency band	446.1 MHz to 446.2 MHz
2	Radio service	Mobile
3	Application	Private Mobile Radio
4	Channelling / modulation	Channel spacing:- 12.5 kHz or 6.25 kHz ITU class of emission:- F1W
5	Maximum transmit power limit	-3 dBW (500 mW) ERP. Maximum transmitter time-out time ≤180 seconds
6	Channel occupation rules	Speech and /or data
7	Duplex type/separation	Single-frequency simplex
8	Licensing Regime	Licence exempt
9	Additional essential requirements	Not applicable
Informative (10-13)		
10	Frequency planning assumptions	
11	Reference	EN 301 166
12	Remarks	
13	EU Notification Number	2006/423/UK

Section 4

Contact details

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Section 5

Document history

Version	Date	Changes
Draft 2.0	31 10 2003	First Publication by Ofcom
Draft 3.0	31 07 2006	Digital PMR446 added
Draft 3.1	15 08 2006	Editorial amendments to EU guidelines
Draft 3.2	7 11 2006	Further amendments at request of EC