



IR 2078 - UK Interface Requirement 2078

Fixed Wireless Systems in the frequency band 57.1– 63.9 GHz

Publication date: October 2010
98/34/EC Notification number: 2009/667/UK

Contents

Section		Page
1	References	3
2	Foreword	4
3	Minimum requirements for operation within the UK	5
4	Additional performance parameters	8
5	Contact details	9
6	Document history	10

Section 1

References

- 1.1 ETSI EN 302 217 - Fixed Radio Systems; Characteristics and requirements for point-to-point equipment and antennas.
- 1.2 ECC Recommendation (09)01 - Use of the 57 - 64 GHz frequency band for point-to-point fixed wireless systems.

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 licensing and use of Fixed Wireless Systems (FWS) in the specified 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 authorisation of FWS.
- 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 FWS.
- 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 FWS. 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 authorisation of FWS in the UK. Table 3.1 contains 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 FWS in the band 57.1 – 63.9 GHz 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 the 57.1 – 63.9 GHz band and 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 the 57.1 – 63.9 GHz spectrum (60 GHz band) by making clear the assumptions that are made in planning the use of the 60 GHz spectrum 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: FWS operating in the 57.1 - 63.9GHz band

Mandatory (1-10)		
1	Frequency band(s)	57.1 - 63.9 GHz
2	Radiocommunication Service	Fixed
3	Application	Fixed Links
4	Channelling	
5	Modulation / Occupied bandwidth	
6	Direction / Separation	
7	/Maximum Transmit Power / Power Density	Maximum transmit power of 10 dBm and a maximum EIRP of 55 dBm. Minimum antenna gain of 30 dBi. Transmission not permitted in certain areas (See table 4.1)
8	Channel access and occupation rules	
9	Authorisation regime	Licence exempt
10	Additional essential requirements	N/A
Informative (11-13)		
11	Frequency planning assumptions	
12	Planned changes	
13	Reference	ETSI EN 302 217 - Fixed Radio Systems; Characteristics and requirements for point-to-point equipment and antennas. ECC Recommendation (09)01 - Use of the 57 - 64 GHz frequency band for point-to-point fixed wireless systems.
14	Notification	
15	Remarks	None

Section 4

Additional performance parameters

(Mandatory)

Exclusion zones for the 59 – 63.9 GHz band

In the three geographical areas outlined in Table 4.1 no transmissions are permitted.

Table 4.1: 59 – 63.9 GHz transmission exclusion zones

Site Name	Site Location	Radius of exclusion zone from the centre of site location
Site 1	07° 23' 36.6" W, 57° 21' 3.6" N	6 Km
Site 2	04° 58' 21" W, 51° 37' 16.8" N	6 Km
Site 3	00° 36' 22.8" W, 52° 38' 1.8" N	6 Km

Section 5

Contact details

Fixed Wireless Services
Ofcom,
Riverside House
2a Southwark Bridge Road
London, SE1 9HA

Email: fws@ofcom.org.uk

Website: <http://www.ofcom.org.uk/radiocomms/>

Section 6

Document history

Version	Date	Changes
0.1	11 December 2009	Document drafted
1.0	October 2010	Document published