

UK Interface Requirement 2048

**For: “Spectrum Access 27.8285 GHz to 28.4445 GHz paired
with 28.8365 GHz to 29.4525 GHz”**

Publication date: October 2007
Date Amended: January 2018
2015/1535/EU Notification number: 2007/409/UK

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Section 1

References

Spectrum Regulatory

[1]	The Wireless Telegraphy (Licence Award (No. 2) Regulations 2007)	National regulations for the award of Spectrum Rights in the frequencies between 10.125 GHz to 10.575 GHz, 27.8285 GHz to 29.4525 GHz, 31.815 GHz to 33.383 GHz and 40.50 GHz to 43.50 GHz [or] in the 10, 28, 32 and 40 GHz bands
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Note:	<p>Documents listed above are not produced by Ofcom, therefore interested parties should source the documentation by their own means. For information; Government Legislation can be obtained from; http://www.opsi.gov.uk/</p> <p>The ETSI website for technical documents is; http://www.etsi.org (registration maybe required)</p> <p>Ofcom is not responsible for the content of external internet sites</p> <p>Details on how to obtain access to the spectrum noted within this IR are shown at;</p> <p>http://spectruminfo.ofcom.org.uk/spectrumInfo/ukpfa</p> <p>UK PFA “UK Plan for Frequency Authorisation</p>
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Section 2

Foreword

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- 2.1 The Radio Equipment Directive (Directive 2014/53/EU) was implemented in the United Kingdom (UK) by the Radio Equipment Regulations 2017. In accordance with Articles 8 and 7 of Directive 2014/53/EU, this UK Interface Requirement contains the requirements for the licensing and use of *Spectrum Access* in the specified frequency bands.
- 2.2 Nothing in this UK Radio Interface Requirement shall preclude the need for equipment to comply with Directive 2014/53/EU.
- 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 2014/53/EU.
- 2.4 The requirements given in the main body of this UK Radio Interface Requirement will apply to the licensing of *Spectrum Access in the band 27.8285 to 28.4445 paired with 28.8365 to 29.4525 GHz*.
- 2.5 This UK Radio Interface Requirement will be revised as necessary, for example to take into account:
- i) current technology developments for reasons related to the effective and appropriate use of the spectrum in particular maximising spectrum utilisation;
 - ii) changes to the available spectrum allocated for *Spectrum Access 27.8285 to 28.4445 paired with 28.8365 to 29.4525 GHz*;

and
 - iii) the adoption of appropriate European Harmonised Standards.
- 2.6 All UK Radio Interface Requirements notified under Directive 2015/1535/EU will be published and will be made available free of charge from the Ofcom web- site at <http://www.ofcom.org.uk>
- 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 [1] is used for <i>Spectrum Access in the band 27.8285 to 28.4445 paired with 28.8365 to 29.4525 GHz</i> It does not prescribe technical interpretation of the 'essential requirements' of Directive 2014/53/EU.
3.3	This UK Radio Interface Requirement therefore stipulates the necessary usage parameters for the licensing of <i>Spectrum Access in the band 27.8285 to 28.4445 paired with 28.8365 to 29.4525 GHz</i> in the UK [1] ¹ . Table 3.1 contains the relevant usage parameters. These taken together with the 'essential requirements' detailed in Article 3.2 of Directive 2014/53/EU constitute the minimum requirements for <i>Spectrum Access in the band 27.8285 to 28.4445 paired with 28.8365 to 29.4525 GHz</i> 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 2014/53/EU.
3.4	The technical parameters specified in the UK Radio Interface Requirement are applied to achieve the desired level of compatibility within the <i>Spectrum Access in the band 27.8285 to 28.4445 paired with 28.8365 to 29.4525 GHz</i> 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 27.8285 to 28.4445 paired with 28.8365 to 29.4525 GHz spectrum, by making clear the assumptions that are made in planning the use of the <i>Spectrum Access in the band 27.8285 to 28.4445 paired with 28.8365 to 29.4525 GHz</i> , 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 2014/53/EU 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

Section 3

Table 3.1 Minimum requirements for the use of: <i>Spectrum Access in the band 27.8285 to 28.4445 paired with 28.8365 to 29.4525 GHz</i>												
Mandatory (1-9)												
1	Frequency band (GHz)	27.8285 to 28.4445 28.8365 to 29.4525 ^{1,2} ¹ The necessary bandwidth of any transmission (as defined in ITU-R Recommendation ITU-R SM.328) must fall entirely within the paired blocks defined above. ² Although this plan assumed an FDD system, TDD systems are also permitted.										
2	Radio service	TERRESTRIAL RADIOCOMMUNICATION AND SATELLITE SERVICE										
3	Application	Spectrum Access										
4	Channelling modulation	Not specified										
5(a)	Transmit power limit (<i>terrestrial radiocommunication</i>)	<table border="1"> <thead> <tr> <th>Frequency Offset from edge of block</th> <th>Maximum EIRP level</th> </tr> </thead> <tbody> <tr> <td>in block other than that defined below</td> <td>55 dBW (any bandwidth)</td> </tr> <tr> <td>-14 MHz of block edge</td> <td>30 dBW/MHz</td> </tr> <tr> <td>Block edge when arrived at from in-block</td> <td>11 dBW/MHz</td> </tr> <tr> <td colspan="2">Where; - = in-block of block edge linear interpolation between points</td> </tr> </tbody> </table>	Frequency Offset from edge of block	Maximum EIRP level	in block other than that defined below	55 dBW (any bandwidth)	-14 MHz of block edge	30 dBW/MHz	Block edge when arrived at from in-block	11 dBW/MHz	Where; - = in-block of block edge linear interpolation between points	
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5(b)	Transmit power limit (<i>satellite service</i>)	No limit upon the maximum permitted EIRP level (on main beam of antenna, i.e. within the -3dB antenna beamwidth)
6	Channel occupation rules	Not specified
7	Duplex type separation	Not specified
8	Licensing regime	Spectrum block on a geographical basis. WT Act licence required Tradable licence. The area in which use is permitted is contained within the authorisation/licence document applicable to the band.
9	Additional essential requirements (art. 3.3)	
10	Frequency planning	Co-ordination and site clearance considerations may impose additional
11	Reference	N/A
12	Remarks	
13	Notification number	2015/1535/EUNotification Number: 2007/409/UK
14	Additional	N/A.

Section 4

Additional performance parameters (informative)

None:

Section 5

Contact details

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Section 6**Document history**

Version	Date	Changes
1.0	July 2007	
1.1	October 2007	Final Version – EC Standstill closed 19/10/2007 Minor editorials
1.2	January 2018	Replaced R&TTE Directive 1999/5/EC and Directive 98/34/EC with Radio Equipment Directive 2014/53/EU and Directive (EU) 2015/1535 respectively. Minor editorials