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# UK Interface Requirement (IR) 2105

Shared Access Indoor 26 GHz

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# Contents

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## Section

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

# 1. References

## 26 GHz

Commission Implementing Decision (EU) 2019/784 of 14 May 2019 on harmonisation of the 24,25-27,5 GHz frequency band for terrestrial systems capable of providing wireless broadband electronic communications services in the Union

ECC/DEC/(18)06 ECC Decision of 6 July 2018 on the harmonised technical conditions for Mobile/Fixed Communications Networks (MFCN) in the band 24.25-27.5 GHz, corrected 26 October 2018

ECC/REC/(19)01 ECC Recommendation of 8 March 2019 on technical toolkit to support the introduction of 5G while ensuring, in a proportionate way, the use of existing and planned EESS/SRS receiving earth stations in the 26 GHz band and the possibility for future deployment of these earth stations

CEPT Report 068 Report B from CEPT to the European Commission in response to the Mandate “to develop harmonised technical conditions for spectrum use in support of the introduction of next-generation (5G) terrestrial wireless systems in the Union” Harmonised technical conditions for the 24.25-27.5 GHz ('26 GHz') frequency band

## 2. Foreword

- 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 terrestrial systems capable of providing electronic communications services 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 indoor terrestrial systems capable of providing electronic communications services in the 24.25 to 26.5 GHz frequency band (the "26 GHz band").
- 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 indoor terrestrial systems capable of providing electronic communications services in the 26 GHz band.
- 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 website 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.

## 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 technologies covered by the Shared Access Indoor 26 GHz licence product in the frequency band 24.25 to 26.5 GHz (the “26 GHz band”). 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 equipment parameters for the authorisation of indoor terrestrial systems capable of providing electronic communications services in the 26 GHz band 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 2014/53/EU constitute the minimum requirements for terrestrial systems capable of providing electronic communications services in the 26 GHz frequency band 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 spectrum for indoor terrestrial systems capable of providing electronic communications services in the 26 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 Shared Access spectrum by making clear the assumptions that are made in planning the use of the spectrum for terrestrial systems capable of providing electronic communications services in the 26 GHz band 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.

**Table 3.1: Minimum requirements for the use of: Indoor Shared Access equipment operating in the 24.25 to 26.5 GHz band**

<b>Mandatory (1-10)</b>		
1	Radiocommunication Service	Mobile service or Fixed service
2	Application	Indoor TRA-ECS (Terrestrial radio applications capable of providing electronic communications services)
3	Frequency band(s)	24.25 to 26.5 GHz
4	Channelling	50 MHz, 100 MHz and 200 MHz
5	Modulation / Occupied bandwidth	
6	Direction / Separation	Time-division duplex (TDD)
7	Maximum Transmit Power / Power Density	<p><b>Base &amp; repeater stations:</b> 23dBm/200MHz TRP</p> <p><b>Mobile or nomadic terminal stations:</b> 23dBm TRP</p> <p><b>Fixed or installed terminal stations:</b> 23dBm TRP</p>
8	Channel access and occupation rules	Not specified
9	Authorisation regime	WT Act licence for all equipment.
10	Additional essential requirements	<p>Maximum transmit power within 23.6 – 24 GHz, as required by (EU) 2019/784:</p> <ul style="list-style-type: none"> <li>• Base &amp; Repeater Stations: <i>Initial limit before 1 January 2024: -33 dBW / 200 MHz</i> <i>Final limit from 1 January 2024: -39 dBW / 200 MHz</i></li> <li>• Terminal Stations: <i>Initial limit before 1 January 2024: -29 dBW / 200 MHz</i> <i>Final limit from 1 January 2024: -35 dBW / 200 MHz</i></li> </ul>
<b>Informative (11-13)</b>		

11	Frequency Planning	All base, repeater and terminal station deployments must be indoors.
12	Planned changes	-
13	Reference	(EU)2019/784
14	Notification	2019/381/UK
15	Remarks	<p>The TRP is defined as the integral of the power transmitted in different directions over the entire radiation sphere.</p> <p>“indoor” means inside premises which have a ceiling or a roof; and except for any doors, windows or passageways, are wholly enclosed.</p>

## 4. Additional performance parameters

### Informative

4.1 None specified



## 5. Contact details

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Fax: 020 7981 3333

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Technical enquiries to **Shared Spectrum Access Team**

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Licensing enquiries to **Spectrum Licensing Team**

Email: [spectrum.licensing@ofcom.org.uk](mailto:spectrum.licensing@ofcom.org.uk)

## 6. Document history

<b>Version</b>	<b>Date</b>	<b>Changes</b>
0.1	25 July 2019	Draft Published
1.0	9 December 2019	Published
1.1	16 September 2022	Amending the out-of-band emissions as per our statement to implement the harmonised limits.