

# IR 2096 - UK Interface Requirement 2096

**Licence exempt White Space Devices operating in  
470 MHz to 790 MHz band**

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## Section 1

# References

[1]	ETSI EN 301 598 V1.1.1 (2014-04)	White Space Devices (WSD); Wireless Access Systems operating in the 470 MHz to 790 MHz TV broadcast band; Harmonized EN covering the essential requirements of article 3.2 of the Radio Equipment Directive (Directive 2014/53/EU)
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## Section 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.
- 2.2 In accordance with Articles 8 and 7 of Directive 2014/53/EU, this UK Interface Requirement contains minimum requirements for the establishment, installation and use of licence exempt White Space Devices in the UK in the 470 MHz to 790 MHz band.
- 2.3 Nothing in this UK Radio Interface Requirement shall preclude the need for equipment to comply with Directive 2014/53/EU.
- 2.4 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.
- 2.5 The requirements given in the main body of this UK Radio Interface Requirement will apply to the licence exemption of White Space Devices in the 470 MHz to 790 MHz band.
- 2.6 This UK Radio Interface Requirement will be revised as necessary, for example to follow
  - i) future 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 for White Space Devices.
- 2.7 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://stakeholders.ofcom.org.uk>.
- 2.8 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 and avoidance of harmful interference.
- 3.2 This UK Radio Interface Requirement gives a high level description of how the radio spectrum in the UK is used by White Space Devices in the 470 MHz to 790 MHz 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 licence exemption of White Space Devices in the 470 MHz to 790 MHz band within the UK. Table 3.1, Table 3.2 contain 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 the use of WSDs in the 470 MHz to 790 MHz 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 minimum requirements specified in the UK Radio Interface Requirement are applied to achieve the desired level of compatibility of White Space Devices operating in the 470 MHz to 790 MHz band with other radiocommunication services in the band and adjacent to the band, whilst promoting enterprise, innovation and competition.
- 3.5 In this document, the following terms shall have the following meanings:
  - **Database** means a database operated by an organisation which has been listed in Schedule 1 of the Wireless Telegraphy (White Space Devices) (Exemption) Regulations 2015 (S.I. 2015/2066).
  - **Dedicated Antenna:** means a removable antenna which has been designed for use and supplied with a device.
  - **External Antenna:** means a removable antenna which is not a Dedicated Antenna.
  - **Integral Antenna:** means a fixed antenna forming part of a device.
  - **Master Device:** means a device capable of communicating with and obtaining master operational parameters from a Database for the purpose of transmitting within the frequency band 470 MHz to 790 MHz.

- **Slave Device:** means a device capable of transmitting within the frequency band 470 MHz to 790 MHz after receiving slave operational parameters from a Master Device.
- **Type A equipment:** means a device which has an Integral Antenna, a Dedicated Antenna or an External Antenna and is intended for fixed location use only.
- **Type B equipment:** means a device which has an Integral Antenna or a Dedicated Antenna and is not intended for fixed location use.
- **White Space Device:** means wireless telegraphy stations or wireless telegraphy apparatus which:
  - transmit within the frequency band 470 to 790 MHz;
  - are Master Devices or Slave Devices; and
  - are Type A equipment or Type B equipment.



**Table 3.1: Minimum requirements for the use of Master Devices and Slave Devices**

Mandatory (1-10)		
1	Frequency band(s)	470 MHz to 790 MHz
2	Radiocommunication Service	Mobile service or fixed service
3	Application	TRA-ECS (Terrestrial radio applications capable of providing electronic communications services)
4	Channelling	Specified by a Database
5	Modulation / Occupied bandwidth	Not specified
6	Direction / Separation	Not specified
7	Maximum Transmit Power / Power Density	Specified by a Database but in all cases subject to a maximum limit of 36 dBm/(8 MHz)
8	Channel access and occupation rules	Specified by a Database
9	Authorisation regime	Licence exempt
10	Additional essential requirements	Not applicable
Informative (11-13)		
11	Frequency planning assumptions	Not applicable
12	Planned changes	Not applicable
13	Reference	ETSI EN 301 598
14	Notification	2015/0329/UK
15	Remarks	Not specified

## Section 4

# Contact details

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## Section 5

# Document history

Version	Date	Changes
0.1	June 2015	Notified to European Commission
1.0	January 2016	Document published
1.1	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