STATUTORY INSTRUMENTS

2015 No. 2066

ELECTRONIC COMMUNICATIONS

The Wireless Telegraphy (White Space Devices) (Exemption) Regulations 2015

Made - - - -	*18th December 2015*
Coming into force - -	*31st December 2015*

The Office of Communications ("OFCOM"), in exercise of the powers conferred by section 8(3) of the Wireless Telegraphy Act 2006 (the "Act")(**1**), make the following Regulations.

Before making these Regulations, OFCOM have given notice of their proposal to do so in accordance with section 122(4)(a) of the Act, published notice of their proposal in accordance with section 122(4)(b) of the Act and have considered the representations made to them before the time specified in that notice in accordance with section 122(4)(c) of the Act.

Citation, commencement and extent

1.—(1) These Regulations may be cited as the Wireless Telegraphy (White Space Devices) (Exemption) Regulations 2015 and shall come into force on 31st December 2015.

(2) These Regulations shall not extend to the Channel Islands.

Interpretation

2. In these Regulations—

"channel usage parameters" has the meaning given in regulation 12;

"dBm" means decibels of power referenced to one milliWatt;

"dedicated antenna" means a removable antenna which has been designed for use and supplied with a device;

"database" means a database operated by an organisation which has been listed in Schedule 1;

"DTT channel" is a digital terrestrial television frequency channel of 8 MHz listed in Row 1 of the Table set out in Schedule 2 and which is known by the channel number listed in Row 2 of that Table;

(**1**) 2006 c. 36. Section 8(3) was extended to the to the Isle of Man by article 2 of the Wireless Telegraphy (Isle of Man) Order 2007 (S.I. 2007/278); to the Bailiwick of Jersey by article 2 of the Wireless Telegraphy (Jersey) Order 2006 (S.I. 2006/3324); and to the Bailiwick of Guernsey by article 2 of the Wireless Telegraphy (Guernsey) Order 2006 (S.I. 2006/3325).

"EIRP" means equivalent isotropic radiated power, which is the product of the power supplied to an antenna and the absolute or isotropic antenna gain in a given direction relative to an isotropic antenna, in dBm;

"EIRP spectral density" means EIRP, in dBm, over a bandwidth of 0.1 MHz;

"external antenna" means a removable antenna which is not a dedicated antenna;

"generic slave operational parameters" shall be construed in accordance with regulation 7(1)(a);

"geo-location capability" means the ability of a device to determine the latitude and longitude coordinates of the location of its antenna and the geo-location uncertainty of the location of its antenna;

"geo-location uncertainty" means the uncertainty (in metres) of the location of a device's antenna;

"integral antenna" means a fixed antenna forming part of a device;

"master device" shall be construed in accordance with regulation 4;

"master device characteristics" shall be construed in accordance with regulation 6(3);

"master operational parameters" has the meaning given in regulation 10;

"MHz" means megahertz;

"simultaneous operation power restriction" has the meaning given in regulation 6(8);

"slave device" shall be construed in accordance with regulation 4;

"slave device characteristics" shall be construed in accordance with regulation 7(6);

"slave operational parameters" has the meaning given in regulation 11;

"specific slave operational parameters" shall be construed in accordance with regulation 7(1)(a);

"Type A equipment" has the meaning given in regulation 4(5);

"Type B equipment" has the meaning given in regulation 4(6);

"unique identifier" means a set of characters comprising—

(a) the unique serial number of a device;

(b) a device's model number or other identifier of the product family to which the device belongs; and

(c) a set of characters identifying the manufacturer of the device;

"update period" has the meaning given in regulation 6(9); and

"white space device" shall be construed in accordance with regulation 4.

Exemption

3. The establishment, installation and use of wireless telegraphy stations or wireless telegraphy apparatus is hereby exempt from the provisions of section 8(1) of the Wireless Telegraphy Act 2006 where the terms, provisions and limitations in regulation 4 are met.

White space devices

4.—(1) The exemption provided for in regulation 3 shall only apply to wireless telegraphy stations or wireless telegraphy apparatus which are white space devices.

(2) White space devices are wireless telegraphy stations or wireless telegraphy apparatus which—

(a) transmit within the frequency band 470 to 790 MHz;

(b) are master devices or slave devices; and

(c) are Type A equipment or Type B equipment.

(3) Master devices are devices 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 and which operate in accordance with regulations 5 to 12.

(4) Slave devices are devices capable of transmitting within the frequency band 470 MHz to 790 MHz after receiving slave operational parameters from a master device and which operate in accordance with regulations 5 to 12.

(5) Type A equipment is a device which has an integral antenna, a dedicated antenna or an external antenna and is intended for fixed location use only.

(6) Type B equipment is a device which has an integral antenna or a dedicated antenna and is not intended for fixed location use.

General requirements for white space devices

5. Master devices and slave devices must—

(a) not be used airborne; and

(b) be configured such that a user is unable to input, reconfigure or alter any technical or operational settings or features of the device in a way which—

(i) would alter the technical characteristics of the device which are communicated to a database, including the master device characteristics and the slave device characteristics; or

(ii) would cause the device to operate other than in accordance with master operational parameters (if a master device) or slave operational parameters (if a slave device).

Master device requirements

6.—(1) A master device must—

(a) have a geo-location capability; and

(b) only transmit within the frequency band 470 MHz to 790 MHZ—

(i) after requesting and receiving master operational parameters from a database;

(ii) in accordance with the limitations specified in the master operational parameters it has received from that database; and

(iii) on the specific frequencies and within the specific power limits specified in the channel usage parameters which the master device has communicated to that database.

(2) If a master device operates simultaneously on more than one DTT channel and if indicated by the master operational parameters, a master device must also apply a simultaneous operation power restriction.

(3) When requesting master operational parameters from a database, a master device must communicate to that database the following information ("master device characteristics")—

(a) information specifying that it is a master device;

(b) the master device's unique identifier;

(c) information specifying that the master device is Type A equipment or Type B equipment;

(d) the location of the master device expressed as the latitude and longitude coordinates of the location of its antenna; and

(e) the geo-location uncertainty of its antenna.

(4) After receiving master operational parameters from a database, a master device must communicate its channel usage parameters to that database.

(5) After receiving master operational parameters from a database, a master device must communicate with that database every update period for confirmation that those parameters remain valid.

(6) Master operational parameters cease to be valid if—

(a) a database communicates an instruction to the master device that those master operational parameters are not valid; or

(b) the master device has not received confirmation from a database that those master operational parameters are still valid by the end of an update period.

(7) If its master operational parameters are no longer valid, a master device must—

(a) communicate an instruction to all slave devices to which that master device has communicated slave operational parameters to cease transmitting on the basis of those slave operational parameters; and

(b) thereafter itself cease transmitting on the basis of those master operational parameters.

(8) "Simultaneous operation power restriction" means a restriction on total maximum EIRP across all of the DTT channels on which a device transmits simultaneously to no greater than the lowest permitted maximum EIRP for any of those DTT channels.

(9) "Update period" means the time period (in seconds) specified by a database as part of the master operational parameters.

Slave device requirements

7.—(1) A slave device must only transmit within the frequency band 470 MHz to 790 MHZ—

(a) after receiving slave operational parameters from a master device which are either—

(i) parameters for use by all slave devices operating in the coverage area in which communications from the master device can be received ("generic slave operational parameters"); or

(ii) parameters that are specific to a particular slave device ("specific slave operational parameters");

(b) in accordance with the limitations specified in slave operational parameters which have been communicated by a master device; and

(c) on the specific frequencies and within the specific power limits specified in channel usage parameters that have been determined—

(i) by the slave device and communicated to a master device; or

(ii) by a master device for the slave device.

(2) If a slave device operates simultaneously on more than one DTT channel and if indicated by the slave operational parameters, a slave device must also apply a simultaneous operation power restriction.

(3) A slave device must cease transmitting if the slave operational parameters it has received are no longer valid.

(4) Slave operational parameters cease to be valid if—

(a) the slave device receives an instruction to cease transmissions from the master device from which it has received its slave operational parameters; or