
STATUTORY INSTRUMENTS

2007 No. 2084

ELECTRONIC COMMUNICATIONS

The Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) Regulations 2007

Made - - - - *20th July 2007*

Coming into force - - *13th August 2007*

The Office of Communications (“OFCOM”) make the following Regulations in exercise of the power conferred by section 8(3) of the Wireless Telegraphy Act 2006⁽¹⁾ (“the Act”).

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 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 and commencement

1. These Regulations may be cited as the Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) Regulations 2007 and shall come into force on 13th August 2007.

Interpretation

2. In these Regulations—

“automotive vehicle” has the meaning given for “vehicle” by Article 2 of Council Directive [70/156/EEC](#) on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers⁽²⁾, as amended⁽³⁾;

“dBm” means decibel milliWatt;

“dBm/MHz” means decibel per milliWatt;

“e.i.r.p.” means equivalent isotropic radiated power;

“equivalent transmission level” means the peak level of transmission contained within a bandwidth which is other than 50 MHz, centred on the frequency at which the highest mean

(1) [2006 c.36](#).

(2) OJ No L 42, 23.2.70, p1.

(3) Article 2 was amended by Council Directive No [92/53/EEC](#) amending Directive 70/156 on the approximation of laws of the Member States relating to the type-approval of motor vehicles and their trailers, OJ No L 225, 10.8.92, p1. There are other amendments to Article 2 and to other parts of Directive 70/156 not relevant to these Regulations.

radiated power occurs, and which is the relevant maximum peak e.i.r.p. scaled down by a factor of $20\log(50/x)$ dB, where “x” is the other bandwidth expressed in MHz;

“GHz” means gigahertz;

“indoors” means inside buildings or places in which the shielding will typically provide the necessary attenuation to protect wireless telegraphy against harmful interference;

“mean e.i.r.p. density” means the mean e.i.r.p. measured with a 1 MHz resolution bandwidth, a root-mean-square detector and an averaging time of one millisecond or less;

“MHz” means megahertz;

“peak e.i.r.p.” means the peak e.i.r.p. contained within a 50 MHz bandwidth centred on the frequency at which the highest mean radiated power occurs;

“railway vehicle” has the meaning given by Article 3 of EC Regulation 91/2003 of the European Parliament and of the Council of 16 December 2002 on rail transport statistics⁽⁴⁾, as amended⁽⁵⁾;

“ultra-wideband equipment” means a wireless telegraphy station or wireless telegraphy apparatus incorporating, as an integral part or as an accessory, technology for short-range radiocommunication involving the intentional generation and transmission of radio-frequency energy that spreads over a frequency range wider than 50 MHz, which may overlap several frequency bands allocated to wireless telegraphy.

Exemption

3. The establishment, installation or use of ultra-wideband equipment complying with the terms, provisions and limitations set out in regulation 4 is hereby exempt from the provisions of section 8(1) of the Act.

Terms, provisions and limitations

4.—(1) The exemption provided for in regulation 3 shall be limited to ultra-wideband equipment which satisfies the conditions set out in paragraphs (2) to (5) of this regulation.

(2) The equipment is used—

- (a) indoors; or
- (b) other than indoors provided it is not attached to:
 - (i) a fixed installation;
 - (ii) a fixed infrastructure;
 - (iii) a fixed outdoor antenna; or
 - (iv) an automotive vehicle or railway vehicle.

(3) The equipment does not cause or contribute to undue interference to any wireless telegraphy.

(4) The equipment only emits transmissions at frequencies up to and including 3.4 GHz or at frequencies above 4.8 GHz which:

- (a) at frequencies below and up to and including 1.6 GHz when measured in any direction have:
 - (i) a maximum mean e.i.r.p. density no greater than -90.0 dBm/MHz; and

⁽⁴⁾ OJ No L 14, 21.1.03, p1.

⁽⁵⁾ Article 3 was amended by [Commission Regulation \(EC\) No 1192/2003](#), OJ No L 167, 4.7.03, p13. There are other amendments to Article 3 and to other parts of Regulation (EC) No 91/2003 not relevant to these Regulations.

- (ii) a maximum peak e.i.r.p. no greater than -50.0 dBm or the equivalent transmission level;
 - (b) at frequencies between 1.6 GHz and up to and including 3.4 GHz when measured in any direction have:
 - (i) a maximum mean e.i.r.p. density no greater than -85.0 dBm/MHz; and
 - (ii) a maximum peak e.i.r.p. no greater than -45.0 dBm or the equivalent transmission level;
 - (c) at frequencies between 4.8 GHz and up to and including 6.0 GHz when measured in any direction have:
 - (i) a maximum mean e.i.r.p. density no greater than -70.0 dBm/MHz; and
 - (ii) a maximum peak e.i.r.p. no greater than -30.0 dBm or the equivalent transmission level;
 - (d) at frequencies between 6.0 GHz and up to and including 8.5 GHz when measured in any direction have:
 - (i) a maximum mean e.i.r.p. density no greater than -41.3 dBm/MHz; and
 - (ii) a maximum peak e.i.r.p. no greater than 0.0 dBm or the equivalent transmission level;
 - (e) at frequencies between 8.5 GHz and up to and including 10.6 GHz when measured in any direction have:
 - (i) a maximum mean e.i.r.p. density no greater than -65.0 dBm/MHz; and
 - (ii) a maximum peak e.i.r.p. no greater than -25.0 dBm or the equivalent transmission level;
 - (f) at frequencies above 10.6 GHz when measured in any direction have:
 - (i) a maximum mean e.i.r.p. density no greater than -85.0 dBm/MHz; and
 - (ii) a maximum peak e.i.r.p. no greater than -45.0 dBm or the equivalent transmission level.
- (5) The equipment only emits transmissions at frequencies between 3.4 GHz and up to and including 4.8 GHz which:
- (a) at frequencies between:
 - (i) 3.4 GHz and up to and including 3.8 GHz when measured in any direction have:
 - (aa) a maximum mean e.i.r.p. density no greater than -85.0 dBm/MHz; and
 - (bb) a maximum peak e.i.r.p. no greater than -45.0 dBm or the equivalent transmission level;
 - (ii) 3.8 GHz and up to and including 4.2 GHz when measured in any direction have:
 - (aa) a maximum mean e.i.r.p. density no greater than -70.0 dBm/MHz; and
 - (bb) a maximum peak e.i.r.p. no greater than -30.0 dBm or the equivalent transmission level;
 - (iii) 4.2 GHz and up to and including 4.8 GHz when measured in any direction have:
 - (aa) a maximum mean e.i.r.p. density no greater than -41.3 dBm/MHz; and
 - (bb) a maximum peak e.i.r.p. no greater than 0.0 dBm or the equivalent transmission level; or
 - (b) at frequencies between 3.4 GHz and up to and including 4.8 GHz when measured in any direction have a maximum mean e.i.r.p. density no greater than -41.3 dBm/MHz provided a low duty cycle applies such that:

Status: This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

- (i) the duration of each transmission does not exceed five milliseconds;
- (ii) the sum of all transmitted signals in any second is less than 5% of that second;
- (iii) the sum of all transmitted signals in any hour is less than 0.5% of that hour; and
- (iv) the maximum peak e.i.r.p. is no greater than 0.0 dBm or the equivalent transmission level.

Ed Richards
Chief Executive of the Office of
Communications
For and by authority of the Office of
Communications

20th July 2007

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations give effect to the European Commission Decision [2007/131/EC\(6\)](#) on allowing the use of radio spectrum equipment using ultra-wideband technology in a harmonised manner in the Community. These Regulations exempt the establishment, installation or use of equipment using ultra-wideband technology from the requirement to be licensed under section 8(1) of the Wireless Telegraphy Act [2006 \(c.36\)](#) (the “Act”).

Regulation 3 exempts the establishment, installation or use of equipment complying with the specifications in regulation 4 from the need to be licensed under the Act. Under regulation 4, the exemption is limited to equipment which will be operated indoors (paragraph (2)(a)), or where it is not used indoors, is not attached to a fixed installation, fixed infrastructure, fixed outdoor antenna, or an automotive vehicle or railway vehicle (paragraph (2)(b)), does not cause or contribute to undue interference (paragraph (3)), and which only emits transmissions at the specified frequency bands in accordance with the maximum power levels set out in paragraphs (4) and (5).

A full regulatory impact assessment and report of the effect of the Regulations will have on the costs to business is available from OFCOM at Riverside House, 2a Southwark Bridge Road, London SE1 9HA (tel: 020 7981 3000) or on the OFCOM internet web site at www.ofcom.org.uk. Copies of the report have also been placed in the libraries of both Houses of Parliament.

(6) OJ No L55, 23.2.07, p33.