#### STATUTORY INSTRUMENTS

## 2015 No. 591

# The Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) Regulations 2015

### PART 1

#### INTRODUCTORY

#### Interpretation

#### 3. In these regulations—

"automotive vehicle" has the meaning given for "vehicle" by Article 3 of [<sup>F1</sup>Regulation (EU) 2018/858 of the European Parliament and of the Council of 30 May 2018 on the approval and market surveillance of motor vehicles and their trailers, and of systems, components and separate technical units intended for such vehicles];

"building material analysis device" means a type of material sensing device that is designed to detect the location of objects within a building structure or to determine the physical properties of building material;

"dB" means decibel;

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

"dBm/MHz" means decibels of power referenced to one milliWatt per megahertz;

"detect and avoid mitigation technique" means a technique which is used to detect other transmissions and avoid interference with those transmissions;

"e.i.r.p." 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;

"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 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 bandwidth expressed in MHz;

"ETSI" means European Telecommunications Standards Institute;

"exterior limit" is the maximum mean power spectral density for emissions measured outside a vehicle at elevation angles higher than 0 degrees as described in harmonised standard EN302 065-3(1);

"GHz" means gigahertz;

"harmonised standard" means an ETSI standard for ultra-wideband equipment whose reference numbers have been published in the Official Journal of the European Union under

<sup>(1)</sup> EN 302 065-3 (Version 1.1.1) published in April 2014.

Article 5 of Council Directive 1999/5/EC on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity(**2**);

"horizontal plane" means a horizontal plane with a tolerance of -20 degrees to 30 degrees elevation;

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

"listen before talk" is a mechanism that detects whether other operating system are transmitting prior to transmission in order to reduce the likelihood of interference between operating systems;

"location tracking system" means a system intended for location tracking of people and objects;

"low duty cycle mitigation technique" means a technique which is used to limit the length of time of transmissions made from ultra-wideband equipment;

"material sensing device" means a radiodetermination device designed to detect the location of objects within a structure or to determine the physical properties of a material;

"maximum mean power spectral density" means the maximum mean e.i.r.p. of a radio device under test at a particular frequency with the average power per unit bandwidth centred on that frequency, radiated in the direction of the maximum level;

"MHz" means megahertz;

"peak power" means the peak e.i.r.p. contained within a 50 MHz bandwidth at the frequency at which the highest mean radiated power occurs, radiated in the direction of the maximum level;

"railway vehicle" has the meaning given by Article 3 of Regulation (EC) No 91/2003 of the European Parliament and of the Council of 16 December 2002 on rail transport statistics(3);

"the Act" means the Wireless Telegraphy Act 2006;

"total power control" means a mechanism to reduce the amount of power to that necessary for successful communication;

"total radiated power spectral density" means the average of the mean power spectral density values measured over a sphere around the measurement scenario [ $^{F2}$ contained within harmonised standard ETSI EN302 065-4]<sup>M1</sup> with a resolution of at least 15 degrees between each measurement point;

"transmit power control mitigation technique" means a technique that mitigates interference arising from the aggregate power from a number of items of ultra-wideband equipment by reducing the amount of power necessary for those apparatus to operate; and

"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.

<sup>(2)</sup> OJ No L 911, 7.4.1999, p10. Article 5 was amended by Regulation (EC) No 596/2009 of the European Parliament and of the Council, OJ L 188, 18.07.2009, p10. There are other amendments to Council Directive 1999/5/EC not relevant to these regulations.

<sup>(3)</sup> OJ No L 14, 21.1.03, p1. Article 3 was amended by Commission Regulation (EC) No 1192/2003 amending Regulation (EC) No 91/2003 of the European Parliament and of the Council on rail transport statistics, OJ No L 167, 4.7.2003, p13. Regulation (EC) No 91/2003 has also been amended by Commission Regulation (EC) No 1304/2007, OJ No L 290, 8.11.07, p14 and by Regulation (EC) No 219/2009 of the European Parliament and of the Council, OJ L 87, 31.3.09, p109.

#### **Textual Amendments**

- **F1** Words in reg. 3 substituted (1.9.2020) by The Road Vehicles (Approval) Regulations 2020 (S.I. 2020/818), reg. 1(b), **Sch. 6 para. 31(2)** (with Sch. 4 paras. 16, 17)
- **F2** Words in reg. 3 and footnote substituted (6.2.2018) by The Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) (Amendment) Regulations 2018 (S.I. 2018/44), regs. 1, **2(2)**

#### **Commencement Information**

I1 Reg. 3 in force at 25.3.2015, see reg. 1

#### **Marginal Citations**

M1 [ETSI EN 302 065-4 (version 1.1.1) published in July 2017.]

**Changes to legislation:** There are currently no known outstanding effects for the The Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) Regulations 2015, Section 3.