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STATUTORY INSTRUMENTS

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**2015 No. 591**

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

**PART 1**

**INTRODUCTORY**

**Citation and commencement**

1. These Regulations may be cited as the Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) Regulations 2015 and shall come into force on 25th March 2015.

**Revocation**

2. The Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) Regulations 2009<sup>(1)</sup> and The Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) (Amendment) Regulations 2010<sup>(2)</sup> are hereby revoked.

**Interpretation**

3. In these regulations—

“automotive vehicle” has the meaning given for “vehicle” by Article 3 of Council [Directive 2007/46/EC](#) of 5 September 2007 establishing a framework for the approval of motor vehicles and their trailers, and of systems, components and separate technical units for such vehicles<sup>(3)</sup>;

“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

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<sup>(1)</sup> [S.I. 2009/2517](#)

<sup>(2)</sup> [S.I. 2010/2761](#)

<sup>(3)</sup> OJ No L 263, 9.10.2007, p 5. There are amendments to Council [Directive 2007/46/EC](#) 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 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(4);

“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 Article 5 of Council [Directive 1999/5/EC](#) on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity(5);

“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(6);

“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 contained within harmonised standard EN302 435-1(7) with a resolution of at least 15 degrees between each measurement point;

(4) EN 302 065-3 (Version 1.1.1) published in April 2014.

(5) 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.

(6) 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.

(7) EN 302 435-1 (Version 1.3.1) published in December 2009.

“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.