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STATUTORY INSTRUMENTS

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**2015 No. 591**

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

**PART 2**

**GENERAL USE OF ULTRA-WIDEBAND EQUIPMENT**

**Exemption**

**4.** The establishment, installation or use of ultra-wideband equipment complying with the terms, provisions and limitations in regulation 5 is hereby exempt from the provisions of section 8(1) of the Act.

**Terms, provisions and limitations**

**5.—(1)** The exemption provided for in regulation 4 shall apply to ultra-wideband equipment which complies with the requirements of paragraphs (2) to (4) of this regulation.

(2) The ultra-wideband equipment must be used—

- (a) indoors; or
- (b) other than indoors provided it is not attached to—
  - (i) a fixed installation;
  - (ii) fixed infrastructure; or
  - (iii) a fixed outdoor antenna.

(3) The ultra-wideband equipment must not cause or contribute to undue interference to other users of the electromagnetic spectrum.

(4) The ultra-wideband equipment must emit transmissions which are in accordance with the condition in regulation 6.

**Transmission limits**

**6.** The condition referred to in regulation 5(4) is that the ultra-wideband equipment only emits transmissions which—

- (a) in frequencies up to 1.6 GHz when measured in any direction have—
  - (i) a maximum mean power spectral density no greater than -90.0 dBm/MHz; and
  - (ii) a maximum peak power no greater than -50.0 dBm or the equivalent transmission level;
- (b) in the frequency band 1.6 GHz to 2.7 GHz when measured in any direction have—
  - (i) a maximum mean power spectral density no greater than -85.0 dBm/MHz; and
  - (ii) a maximum peak power no greater than -45.0 dBm or the equivalent transmission level;

- (c) in the frequency band 2.7 GHz to 3.1 GHz when measured in any direction have—
  - (i) a maximum mean power spectral density no greater than -70.0 dBm/MHz; and
  - (ii) a maximum peak power no greater than -36.0 dBm or the equivalent transmission level;
- (d) in the frequency band 3.1 GHz to 3.4 GHz when measured in any direction—
  - (i) have a maximum mean power spectral density—
    - (aa) no greater than -70.0 dBm/MHz; or
    - (bb) no greater than -41.3 dBm/MHz provided that one of the two techniques referred to in regulation 7 is used to mitigate interference to other users of the electromagnetic spectrum; and
  - (ii) have a maximum peak power—
    - (aa) no greater than -36.0 dBm or the equivalent transmission level; or
    - (bb) no greater than 0 dBm or the equivalent transmission level provided that one of the two techniques referred to in regulation 7 is used to mitigate interference to other users of the electromagnetic spectrum;
- (e) in the frequency band 3.4 GHz to 3.8 GHz when measured in any direction—
  - (i) have a maximum mean power spectral density—
    - (aa) no greater than -80.0 dBm/MHz; or
    - (bb) no greater than -41.3 dBm/MHz provided that one of the two techniques referred to in regulation 7 is used to mitigate interference to other users of the electromagnetic spectrum; and
  - (ii) have a maximum peak power—
    - (aa) no greater than -40.0 dBm or the equivalent transmission level; or
    - (bb) no greater than 0.0 dBm or the equivalent transmission level provided that one of the two techniques referred to in regulation 7 is used to mitigate interference to other users of the electromagnetic spectrum;
- (f) in the frequency band 3.8 GHz to 4.8 GHz when measured in any direction—
  - (i) have a maximum mean power spectral density—
    - (aa) no greater than -70.0 dBm/MHz; or
    - (bb) no greater than -41.3 dBm/MHz provided that one of the two techniques referred to in regulation 7 is used to mitigate interference to other users of the electromagnetic spectrum; and
  - (ii) have a maximum peak power—
    - (aa) no greater than -30.0 dBm or the equivalent transmission level; or
    - (bb) no greater than 0.0 dBm or the equivalent transmission level provided that one of the two techniques set out in regulation 7 is used to mitigate interference to other users of the electromagnetic spectrum;
- (g) in the frequency band 4.8 GHz to 6.0 GHz when measured in any direction have—
  - (i) a maximum mean power spectral density no greater than -70.0 dBm/MHz; and
  - (ii) a maximum peak power no greater than -30.0 dBm or the equivalent transmission level;
- (h) in the frequency band 6.0 GHz to 8.5 GHz when measured in any direction have—
  - (i) a maximum mean power spectral density no greater than -41.3 dBm/MHz; and

- (ii) a maximum peak power no greater than 0.0 dBm or the equivalent transmission level;
- (i) in the frequency band 8.5 GHz to 9 GHz when measured in any direction have—
  - (i) a maximum mean power spectral density—
    - (aa) no greater than -65.0 dBm/MHz; or
    - (bb) no greater than -41.3 dBm/MHz provided that the technique referred to in regulation 7(b) is used to mitigate interference to other users of the electromagnetic spectrum; and
  - (ii) have a maximum peak power—
    - (aa) no greater than -25.0 dBm or the equivalent transmission level; or
    - (bb) no greater than 0.0 dBm or the equivalent transmission level provided that the technique referred to in regulation 7(b) is used to mitigate interference to other users of the electromagnetic spectrum;
- (j) in the frequency band 9 GHz to 10.6 GHz when measured in any direction have—
  - (i) a maximum mean power spectral density no greater than -65.0 dBm/MHz; and
  - (ii) a maximum peak power no greater than -25.0 dBm or the equivalent transmission level; and
- (k) in frequency bands above 10.6 GHz when measured in any direction have—
  - (i) a maximum mean power spectral density no greater than -85.0 dBm/MHz; and
  - (ii) a maximum peak power no greater than -45.0 dBm or the equivalent transmission level.

### **Mitigation techniques**

7. The mitigation techniques referred to in regulation 6 are—
- (a) the low duty cycle mitigation technique and its limits described in harmonised standard EN 302 065-1(1); and
  - (b) the detect and avoid mitigation technique and its limits described in harmonised standard EN 302 065-1.