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# **Decision to make the Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) (Amendment) Regulations 2018**

Implementing a Commission Decision

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**STATEMENT**

Publication Date: 19 January 2018

## About this document

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This statement relates to Ofcom's decision to make new regulations by statutory instrument that would amend the existing Wireless Telegraphy licence exemption criteria for Ultra Wideband (UWB) devices.

UWB devices use very large bandwidth and can transmit high data rates over short distances, but transmit at very low power levels so do not interfere with other devices. UWB uses include wireless multi-media applications, such as streaming videos and connecting cameras to TVs, as well as radar and detection devices which can be used to sense objects behind walls.

These regulations would implement a recent decision by the European Commission on UWB devices, and they will amend UWB exemption regulations we made in 2015.

The Regulations will come into force on 6 February 2018.

# Contents

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## Section

1. Executive Summary	1
2. Background	3
3. Scope of the Regulations	5

# 1. Executive Summary

- 1.1 This document sets out our decision to make Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) (Amendment) Regulations 2018 (the “Regulations”). The Regulations implement the requirements of the European Commission (“EC”) Implementation Decision of 4 August 2017 (2017/1438 /EU) (the “2017 UWB Amending Decision”).<sup>1</sup> The Regulations amend the Wireless Telegraphy (Ultra- Wideband Equipment) (Exemption) Regulations 2015 (the “Principal Regulations”)<sup>2</sup> and come into force on 6 February 2018.
- 1.2 Ultra-wideband (“UWB”) is a generic term for technologies typically characterised by the emission of very low power radiation spread over a very large radio bandwidth. This is unlike other wireless systems, which use spectrum in discrete narrow frequency bands. UWB can transfer large amounts of data wirelessly over short distances, typically less than ten metres. Using mitigation techniques multiple pieces of UWB equipment can operate in the same area.
- 1.3 The 2017 UWB Amending Decision amends Decision 2007/131/EC on allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community (the “UWB Decision”).<sup>3</sup> The UWB Decision harmonises the technical conditions for radio equipment using UWB technology in the European Union (“EU”). The 2017 UWB Amending Decision updates some references to harmonised European standards developed by the European Telecommunications Standards Institute (“ETSI”) in the UWB Decision about UWB technology based short-range devices. As an EU Member State, the UK is bound by the terms of the 2017 UWB Amending Decision and the requirement to implement them by 4 February 2018.
- 1.4 Ofcom is responsible for authorising use of the radio spectrum. We permit the use of the radio spectrum either by granting wireless telegraphy licences under the Wireless Telegraphy Act 2006 (the “WT Act”) or by making statutory regulations exempting users of particular equipment from the requirement to hold such a licence. It is unlawful and an offence to install or use wireless telegraphy apparatus without holding a licence granted by Ofcom, unless the use of such equipment is exempted
- 1.5 In order to meet the requirements of the 2017 UWB Amending Decision, we made the Regulations which:
- i) amend the Principal Regulations; and
  - ii) update references to harmonised ETSI standards.

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<sup>1</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D1438&from=EN>

<sup>2</sup> <http://www.legislation.gov.uk/ukxi/2015/591/made/data.pdf>

<sup>3</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:055:0033:0036:EN:PDF>

- 1.6 Before deciding to make the Regulations, in accordance with the requirements of section 122(4) of the WT Act, we published on 23 October 2017 the Notice<sup>4</sup> setting out our proposals to make them. The Notice contained a draft of the proposed regulations and invited comments from stakeholders on the drafting of the regulations.
- 1.7 We received no comments on the proposed regulations. We made the Regulations on 16 January 2018. This Statement confirms that the Regulations will come into force on 6 February 2018.<sup>5</sup>

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<sup>4</sup> [https://www.ofcom.org.uk/data/assets/pdf\\_file/0017/107234/Ultra-wideband-equipment-consultation.pdf](https://www.ofcom.org.uk/data/assets/pdf_file/0017/107234/Ultra-wideband-equipment-consultation.pdf)

<sup>5</sup> Copies of the 2017 Regulations can be obtained through the National Archives. The online version can be found at <http://www.legislation.gov.uk/>.

## 2. Background

- 2.1 On 21 February 2007, the European Commission (“EC”) harmonised the technical conditions for ultra-wideband (“UWB”) equipment across the European Union (“the UWB Decision”).<sup>6</sup> This was in order to eliminate barriers to the uptake of UWB equipment and created a single market that would allow manufacturers to benefit from economies of scale and allow consumers and citizens to benefit from new technologies and cheaper prices.
- 2.2 We implemented the UWB Decision into UK law by making the Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) Regulations 2007.<sup>7</sup> These Regulations were amended on 17 August 2007 to correct an error.<sup>8</sup>
- 2.3 Due to changes in technologies since the UWB Decision was adopted, the EC issued mandates to the European Conference of Postal and Telecommunications Administrations (“CEPT”) to undertake further compatibility studies of UWB technologies. This resulted in the EC amending decision (2009/343/EC) in 2009 (the “2009 UWB Amending Decision”).<sup>9</sup> The 2009 UWB Amending Decision was implemented in the UK via the Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) Regulations 2009 (the “2009 UWB Regulations”)<sup>10,11</sup> and the Amending Regulations in 2010.<sup>12</sup>
- 2.4 As part of the ongoing work on UWB the EC issued a Fifth Mandate, to CEPT on UWB technology, to clarify technical parameters in the light of a potential update to Decision 2007/131/EC. In response to this, CEPT Report 45<sup>13</sup> was produced and approved on 21 June 2013. CEPT advised the EC to take a more streamlined approach on subsequent amendments of the UWB Decision, taking into account the description of mitigation techniques with all the relevant detailed parameters within the harmonised European standards developed by the European Telecommunications Standards Institute (“ETSI”).
- 2.5 Based on CEPT Report 45, the EC decided to change the UWB Decision by making the European Commission Implementation Decision of 7 October 2014 (2014/702/EU) (the “2014 Amending Decision”)<sup>14</sup>. We implemented the 2014 Amending decision by making the Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) Regulations 2015 (the “Principal Regulations”)<sup>15</sup> which replaced the 2009 UWB Regulations.

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<sup>6</sup> <http://www.erodocdb.dk/docs/doc98/official/pdf/2007131EC.pdf>

<sup>7</sup> [http://www.legislation.gov.uk/uksi/2007/2084/pdfs/uksi\\_20072084\\_en.pdf](http://www.legislation.gov.uk/uksi/2007/2084/pdfs/uksi_20072084_en.pdf)

<sup>8</sup> [http://www.legislation.gov.uk/uksi/2007/2440/pdfs/uksi\\_20072440\\_en.pdf](http://www.legislation.gov.uk/uksi/2007/2440/pdfs/uksi_20072440_en.pdf)

<sup>9</sup> <http://www.erodocdb.dk/Docs/doc98/official/pdf/2009343EC.PDF>

<sup>10</sup> [http://www.legislation.gov.uk/uksi/2009/2517/pdfs/uksi\\_20092517\\_en.pdf](http://www.legislation.gov.uk/uksi/2009/2517/pdfs/uksi_20092517_en.pdf)

<sup>11</sup> This revoked the Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) Regulations 2007 and the Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) (Amendment) Regulations 2007.

<sup>12</sup> [http://www.legislation.gov.uk/uksi/2010/2761/pdfs/uksi\\_20102761\\_en.pdf](http://www.legislation.gov.uk/uksi/2010/2761/pdfs/uksi_20102761_en.pdf)

<sup>13</sup> <http://www.erodocdb.dk/Docs/doc98/official/pdf/CEPTREP045.PDF>

<sup>14</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014D0702&from=EN>

<sup>15</sup> <http://www.legislation.gov.uk/uksi/2015/591/made/data.pdf>

## The 2017 UWB Amending Decision

- 2.6 On 2 July 2014, the EC called on CEPT to review Decision 2007/131/EC for UWB technology based short-range devices. CEPT concluded that as regards UWB-technology based short-range devices some references to harmonised standards in Decision 2007/131/EC needed to be updated.
- 2.7 The EC adopted the CEPT recommendation by making the Commission Implementing Decision (EU) 2017/1438 of 4 August 2017 amending Decision 2007/131/EC on allowing the use of the radio spectrum for equipment using ultra-wideband technology in a harmonised manner in the Community (the “2017 UWB Amending Decision”).<sup>16</sup> All European Union Member States are required to implement the 2017 UWB Amending Decision.

## The Notice

- 2.8 We make exemption regulations by means of a statutory instrument. Before making any such regulations, we are required by section 122(4) of the WT Act to give notice of our proposal to do so. Under section 122(5), the notice must state that we propose to make the regulations in question, set out their general effects, specify an address from which a copy of the proposed regulations or order may be obtained, and specify a time period of at least one month during which any representations with respect to the proposal must be made to us.
- 2.9 On 23 October 2017, we published a consultation document entitled ‘Notice of proposals to make the Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) (Amendment) Regulations 2017’ (the “Notice”),<sup>17</sup> meeting the statutory requirements set out above. The Notice set out our intention to implement the 2017 UWB Amending Decision by making the Wireless Telegraphy (Ultra-Wideband Equipment) (Exemption) (Amendment) Regulations 2018 (the “Regulations”). The Notice included a copy of the draft regulations and it gave any person or party who wished to do so until 24 November 2017 to make representations.
- 2.10 The Notice proposed to:
- i) amend the Principal Regulations; and
  - ii) update references to harmonised ETSI standards
- 2.11 As explained in Section 1, we received no comments on the proposed regulations and we made the Regulations on 16 January 2018. The scope of the Regulations is summarised in Section 3.

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<sup>16</sup> <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017D1438&from=EN>

<sup>17</sup> [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0017/107234/Ultra-wideband-equipment-consultation.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0017/107234/Ultra-wideband-equipment-consultation.pdf)

## 3. Scope of the Regulations

3.1 This Section summarises our decision to make the Regulations.

### The Legislative Framework

3.2 Ofcom is responsible for authorising civil use of the radio spectrum and achieve this by either granting wireless telegraphy licences under the WT Act or by making regulations exempting users of particular equipment from the requirement to hold such a licence.

3.3 Under section 8(1) of the WT Act, it is an offence to install or use equipment to transmit without holding a licence granted by us, unless the use of such equipment is exempted. We can exempt the installation or use of wireless telegraphy equipment by making regulations under section 8(3) of the WT Act.

3.4 Under section 8(4) of the WT Act, we must make regulations to exempt equipment if its installation or use is not likely to:

- involve undue interference with wireless telegraphy;
- have an adverse effect on technical quality of service;
- lead to inefficient use of the part of the electromagnetic spectrum available for wireless telegraphy;
- endanger safety of life;
- prejudice the promotion of social, regional or territorial cohesion; or
- prejudice the promotion of cultural and linguistic diversity and media pluralism.

3.5 In accordance with the requirements of section 8(3B) of the WT Act, the terms, provisions and limitations specified in the regulations must be:

- objectively justifiable in relation to the wireless telegraphy stations or wireless telegraphy apparatus to which they relate;
- not such as to discriminate unduly against particular persons or against a particular description of persons;
- proportionate to what they are intended to achieve; and
- transparent in relation to what they are intended to achieve.

### Ofcom's decision

3.6 On 16 January 2018, Ofcom made the Regulations. The Regulations will come into force on 6 February 2018. They are summarised below.

3.7 We are satisfied that the Regulations satisfy the conditions referred to in paragraph 3.4 above. We also consider that the Regulations meet the requirements of section 8(3B) of the WT Act because:

- they are objectively justifiable in relation to the wireless telegraphy apparatus to which they relate in that they seek to implement the requirements set out in the 2017 UWB Amending Decision;

- they do not discriminate unduly against any particular persons or against a particular description of persons, as they apply to all persons using the relevant equipment;
- they are proportionate in that they are effective to achieve the aims of the 2017 UWB Amending Decision, and they are no more onerous than is required to achieve those aims; and
- they are transparent in relation to what they are intended to achieve in that the Regulations are themselves clear in their intentions, and they seek to provide clarity on the requirements set out (and related concepts used) in the 2017 UWB Amending Decision.

## Extent of application

3.8 The Regulations will apply in the United Kingdom, the Channel Islands and the Isle of Man.

## The Regulations

### Overall general effect

3.9 The overall general effect of the Regulations is to implement the 2017 UWB Amending Decision. The Regulations amend the Principal Regulations as set out in the section below.

### Interpretation

3.10 The Regulations amend the Principal Regulations to implement the 2017 UWB Amending Decision. We have replaced the references to ETSI standards EN302 435-1 and EN302 498-1 and EN302 498-2 with the new replacement ETSI standard EN302 065-4. This will result in amendments to the definition of “total radiated power spectral density”. In addition, regulations 25, 26, 27, 28, 30 and 31 have also been updated.

3.11 When reviewing the Principal Regulations, we noticed legacy text referring to transmissions “that are radiated into the air”. By virtue of the 2014 Amending Decision, this terminology has been replaced by the definition of “total radiated power density”. Therefore, we have removed the text “that are radiated into the air” from regulations 26 and 30.