



Licence Exemption of Wireless Telegraphy Devices

Candidates for 2015

Statement

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About this document

Ofcom has today published a statement on plans to make regulations that will amend the existing Wireless Telegraphy Act 2006 licence exemption criteria for some wireless devices. Most people will interact with licence-exempt, low-power, wireless devices in an average day – from Wi-Fi routers to car key-fobs and wireless doorbells.

Today's decision follows on from Ofcom's consultation published on 31 July that closed on 20 September 2015. The consultation proposed some minor changes to the existing exemption criteria for the following devices:

- Personal Mobile Radio (PMR) 446 – liberalising the use of this band (446.0 to 446.2 MHz) by removing analogue and digital demarcations from the frequency bands;
- Railway Level Crossing Radar – replacing the current 'exclusion zones' surrounding Radio Astronomy sites with 'coordination zones'; and
- Digital Enhanced Cordless Telecommunications (DECT) equipment – reclassifying the technical requirements, currently classed as Cordless Telephony, to Short Range Devices.

Following this statement Ofcom plans to introduce regulations in early 2016.

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Section 1

Executive summary

- 1.1 This document sets out Ofcom's decision regarding changes to the licence exemption criteria for some Wireless Telegraphy devices. This decision follows on from our consultation "Licence Exemption of Wireless Telegraphy Devices: Candidates for 2015" (the "2015 Consultation")¹ that we published on 31 July 2015.
- 1.2 Ofcom is responsible for authorising civil use of the radio spectrum. Under section 8(1) of the Wireless Telegraphy Act 2006 (the 'WT Act'), it is an offence to establish, install or use equipment for wireless telegraphy without holding a licence granted by us, unless the use of such equipment is exempted. We are able to make regulations exempting the use of equipment by using powers conferred by section 8(3) of the WT Act.
- 1.3 As we set out in the 2015 Consultation, as technology develops we regularly review our regulations to allow new devices to be made available on a licence-exempt basis or to amend the current provisions to take into account technology changes. The 2015 Consultation proposed some minor changes to the existing exemption criteria for the following devices:
 - Private Mobile Radio (PMR) 446 - liberalising the use of the band (446.0 to 446.2 MHz) by removing the analogue and digital demarcations from the frequency bands;
 - Railway Level Crossing Radar - replacing the current exclusion zones surrounding Radio Astronomy sites with coordination zones; and
 - Digital Enhanced Cordless Telecommunications (DECT) equipment – moving the technical requirements from being classified as Cordless Telephony to Short Range Devices.
- 1.4 We received 4 responses to the consultation. These are summarised in Section 3 of this document along with our response to these. Taking into consideration these responses we are to proceed with making changes to the licence-exemption regulations.
- 1.5 We intend to issue a notice containing the draft licence exemption regulations early next year. In accordance with the requirements of section 122(4) and (5) of the WT Act we will allow one month for representations to be made concerning the drafting of the regulations.

¹ <http://stakeholders.ofcom.org.uk/consultations/wta-exemptions-jul15/>

Section 2

Background

- 2.1 In section 3 of the 2015 Consultation we outlined in detail the background to our proposals and how we proposed to implement these. We asked for views on the following changes:
- i) Private Mobile Radio (PMR) 446 - liberalising the use of the band (446.0 to 446.2 MHz) by removing the analogue and digital demarcations from the frequency bands;
 - ii) Railway Level Crossing Radar - replacing the current exclusion zones surrounding Radio Astronomy sites with coordination zones; and
 - iii) Digital Enhanced Cordless Telecommunications (DECT) equipment – moving the technical requirements from being classified as Cordless Telephony to Short Range Devices.
- 2.2 The sections below provide a high level description of the changes proposed in the 2015 Consultation.

PMR 446

- 2.3 As a result of changes introduced by Conference of Postal and Telecommunications Administrations (CEPT)² we proposed to amend the current licence-exemption criteria for PMR446 equipment. On 3 July CEPT replaced the two current PMR 446 decisions with Electronic Communications Committee (ECC) Decision (05)15 (the “ECC Decision”)³. The purpose of the new ECC Decision was to make a number of changes to the harmonised usage conditions for analogue and digital PMR 446 radio equipment throughout Europe.
- 2.4 In order for us to implement the recommendations of the ECC Decision in the 2015 Consultation we are proposed to amend the current IR 2009 in regards to the following criteria:
- expand the analogue frequency band by 100 kHz from 446.0 to 446.1 MHz to 446.0 to 446.2 MHz;
 - include the 180 second maximum transmit limit to the channel access and occupation requirements; and
 - update references to the relevant ETSI standards which include the requirements for new equipment to have improved receiver performance.

² <http://www.cept.org/>

³ <http://www.erodocdb.dk/Docs/doc98/official/pdf/ECCDEC1505.PDF>

Railway Level Crossing Radar

- 2.5 In 2010 we exempted the use of the Railway Level Crossing Radar equipment. Due to a potential risk of interference to Radio Astronomy a condition of the 2010 licence exemption was that no devices could be installed within 20 km of six Radio Astronomy sites.
- 2.6 The 2015 Consultation proposed that we would remove the exclusion requirement and replace it with a coordination process. This change would allow the deployment of Railway Level Crossing Radars, providing that a coordination agreement is in place with the Radio Astronomy user. We advised that the methodology, decision and appeal processes to determine whether a device can be deployed in the coordination zone is to be agreed between the rail network operators and the Radio Astronomy service.

DECT equipment

- 2.7 The use of DECT equipment has been exempt for a number of years in the UK. The 2015 Consultation proposed a slight amendment to the way that the equipment is described. The current criteria for exemption are contained in the “Wireless Telegraphy (Exemption) Regulations 2003⁴” (the “2003 Exemption Regulations”) and falls under Schedule 4 on Cordless Telephony in the regulations. Under this regulation devices must operate in accordance with IR 2011⁵.
- 2.8 We proposed to move the technical requirements from the cordless telephony section (schedule 4) of the 2003 Exemption Regulations and place them with other licence exempt Short Range Devices⁶. This will require us to include the transmission parameters in IR 2030 and update the reference to the document in the regulations. This is an administrative change and imposes no additional requirements on users.

⁴

⁵ <http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/ukinterface2011.pdf>

⁶ Currently these are included in the Wireless Telegraphy (Exemption and Amendment) Regulations 2010.

Section 3

Responses to the consultation

- 3.1 This section outlines the comments we received to the 2015 Consultation and our response to these.
- 3.2 We received 4 non-confidential responses. These are published in full on our website.⁷ Following consideration of the responses as outlined below, we have decided to proceed with our proposals as outlined in the 2015 Consultation.

Stakeholder responses to the consultation and Ofcom's response

PMR 446

Question 1) Do you agree with our proposals to amend the current licence exemption criteria in order to implement the ECC Decision and allow analogue PMR 446 equipment to use the 446.0 to 446.2 MHz band?

- 3.3 We received a number of comments regarding our proposals. Mr Stoker and Mr Gilliver both supportive the proposed changes.
- 3.4 Mr Gilliver raised a point regarding the imposition of stricter controls on pre-existing equipment especially the requirement for a 180 time-out. He requested that we introduce wording to give effect that this would only apply to equipment going forward. He advised that this might be necessary for two reasons: (a) the type of user who is likely to have purchased such equipment is highly unlikely to follow developments in regulations such as these, (b) enforcement were this not to be the case is unlikely to be practical, anyway.
- 3.5 Mr Gilliver and another respondent did raise concerns over the imposition of restrictions, as set out in the ECC Decision, to limit the devices to handheld only with integral antennas.
- 3.6 Another respondent stated that they were against the decision to allow analogue equipment to use the digital portion of the band as it would discourage the adoption of the more spectrally efficient digital PMR446 equipment. They also added that the use of analogue PMR446 users may cause a lot of interference to digital users who are using 6.25 kHz wide channels. It was proposed that we wait until the deployment of digital PMR446 equipment is as common as the analogue equipment until introducing this change.

Ofcom's response

- 3.7 We would like to thank those that responded to the consultation. In relation to the implementation of more stringent controls on equipment we would like to clarify that we were not proposing to implement a restriction on handheld only or integral antennas. The technical parameters including handheld only, integral antennas and repeater use are already requirements set out in the harmonised standard that

⁷ <http://stakeholders.ofcom.org.uk/consultations/wta-exemptions-jul15/?showResponses=true>

PMR446 equipment needs to comply with in order to be placed on the European market.⁸

- 3.8 In regards to equipment compliance, it should be noted that if equipment that has been modified in a way that is not certified by the manufacturer for use with the apparatus (for example adding an antenna, antenna connector or using amateur radio transceivers enabled to transmit on PMR 446 channels), the person doing that modification is bringing a new variant of transmitting device into use. Therefore the radio equipment falls outside of the manufacturer's compliance declaration. If the apparatus is modified then the implications are that the person doing that modification remains responsible for meeting the totality of the regulations relating to the R&TTE Directive. Failure to comply may constitute a criminal offence. Ofcom provides further information regarding the R&TTE Directive on our website⁹.
- 3.9 Regarding the proposals concerning the 180 second time-out, as with all changes with licence exemption regulations these will only apply to compliant equipment newly put into use.
- 3.10 Finally in response to the request to delay the introduction of the proposals, the ECC Decision already sets out a timetable for the implementation of the measures. We do not believe that delaying the implementation of the ECC Decision would be in line with our duties concerning the efficient use of spectrum. In regards to analogue PMR446 equipment interfering coexisting with digital PMR446 equipment, this was discussed in the Working Group on Frequency Management (WGFM) of CEPT. The issue was set out in detail in document FM(14)081 Annex 13.¹⁰ WGFM made the revised ECC Decision based upon the analysis set out in that document.
- 3.11 As a result of the comments received we are to proceed with making the changes as described in the 2015 Consultation.

Railway Level Crossing Radar

Question 2) Do you agree with our proposal to change the Railway Level Crossing Radar exemption criteria in regards to exclusion zones?

- 3.12 Mr Gilliver responded advising that unless caveats were in place so that the Radio Astronomy service would be under no pressure, financial or otherwise, to accept any such suggestion then he was against the proposal. He also stated that Astronomy service should have the right of absolute veto on any deployments.

Ofcom's response

- 3.13 The request to change the current licence exemption criteria came from both Network Rail and the Radio Astronomy service. As stated in the 2015 Consultation document any deployment within the 20 km coordination zones would require a coordination agreement to be in place between the users. The methodology and decision process regarding the coordination agreement has been left to Network Rail and the Radio Astronomy service to agree.

⁸ Equipment that does not meet the standard can still be placed on the market under the R&TTE Directive (soon to be replaced by the Radio Equipment Directive) but requires manufactures to get approval from a Notified Body.

⁹ http://stakeholders.ofcom.org.uk/spectrum/technical/rtte/rtte_faq/

¹⁰ [http://www.cept.org/Documents/se-7/18789/SE7\(14\)066_Final-minutes-of-the-80th-WG-FM-meeting-Trondheim-26-30-May-2014](http://www.cept.org/Documents/se-7/18789/SE7(14)066_Final-minutes-of-the-80th-WG-FM-meeting-Trondheim-26-30-May-2014)

- 3.14 Given the responses received we are to proceed with making the changes as outlined in the 2015 Consultation.

DECT

Question 3) Do you agree with our proposal to move DECT equipment from Cordless Telephony to the Short Range Device category?

- 3.15 We received no significant comments regarding our proposed DECT change and therefore are to proceed as outlined in the 2015 Consultation.

Next steps

- 3.16 Following on from this statement, we intend to issue a notice containing the draft licence exemption regulations early next year. In accordance with the requirements of section 122(4) and (5) of the WT Act we will allow one month for representations to be made concerning the drafting of the regulations
- 3.17 In addition to the proposals set out in this document, any proposed regulations may also implement other decisions that Ofcom has or is currently consulting on. This is likely to include 4G handsets that connect to networks associated with spectrum bands that we are to award as part of the 2.3 MHz and 3.4 GHz release programme¹¹.
- 3.18 As part of this update we may also use this opportunity to review the existing legislation with a view to consolidate where appropriate. We believe that this could make it easier for stakeholders to understand the regulatory environment and reduce the administrative burden.

¹¹ Further information on these proposals can be found at <http://stakeholders.ofcom.org.uk/spectrum/spectrum-awards/>

Annex 1

List of Respondents

Name Withheld 1

Name Withheld 2

Mr Gilliver

Mr Stoker