Notice of Ofcom's proposals for changes to licence exemption for Wireless Telegraphy Devices

Consultation

Publication date: 26 July 2010
Closing date for responses 6 September 2010

Contents

Section 1

Executive Summary

1.1 This document outlines our decisions in relation to the consultation we published on 12 March 2010 "Licence exemption of wireless telegraphy devices" (the "2010 Consultation")[1]. In accordance with the requirements of section 122(4) and (5) of the Wireless Telegraphy Act 2006 (the "WT Act") this document gives notice of our intention to make the Wireless Telegraphy (Exemption) (Amendment) Regulations 2010 (the "Proposed Regulations").

1.2 In the 2010 Consultation we outlined proposals to change the licence exemption regime for a number of devices. We received twelve non-confidential responses to the consultation, the respondents are listed in Annex 8 of this document and copies of their responses are available on our website[2]. Of these responses the majority of supported our plans. We have however, given consideration to objections and comments which were raised and these are addressed in Section 2 of this document.

1.3 Under section 8(1) of the WT Act, it is an offence to establish, install or use equipment to transmit without holding a licence granted by us, unless the use of such equipment is exempted. The Proposed Regulations would implement a number of exemptions that we canvassed in the 2010 Consultation, including measures to:

- Liberalise current licence exemption criteria for:
  - High Density Fixed Satellite Services (HDFSS);
  - Railway Level Crossing Radar;
  - Underwater system use below 30 MHz; and
  - A number of short-range devices (SRDs).
- Implement Commission Decision of 30 June 2010 amending Decision 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices (the "SRD Decision")[3];
- Enable the use of mobile phones at 900 and 1800 MHz to connect to a UMTS network without the need for a licence in preparation for the implementation of Commission Decision 2009/766/EC of 16 October 2009 on the harmonisation of the 900 MHz and 1 800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community[4].
- Introduce Ofcom policy decisions that we have consulted separately on:

[1] http://www.ofcom.org.uk/consult/condocs/devices/devices.pdf
[2] http://www.ofcom.org.uk/consult/condocs/devices/responses/
[3] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:166:0033:0041:EN:PDF
[4] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:274:0032:0035:EN:PDF

- 59 to 64 GHz Fixed Links[5].

1.4 An impact assessment for the Proposed Regulations is available at Annex 5 to this document. The Proposed Regulations are included in this document at Annex 6. Further copies may be obtained from www.ofcom.org.uk or from Ofcom at Riverside House, 2a Southwark Bridge Road, London SE1 9HA. Comments on the Proposed Regulations are invited by **5pm** on **6 September 2010**. Subject to consideration of responses we intend to bring the new regulations into force by November 2010.

[5] http://www.ofcom.org.uk/consult/condocs/59_64ghz/condoc.pdf

Section 2

Background

Authorising spectrum use

2.1 We are responsible for authorising civil use of the radio spectrum and achieve this by granting wireless telegraphy licences under the Wireless Telegraphy Act 2006 ("the WT Act") and by making regulations exempting users of particular equipment from the requirement to hold such a licence. Under section 8(1) of the WT Act, it is an offence to establish, install or use equipment to transmit without holding a licence granted by us unless the use of such equipment is exempted. Under section 8(4) of the WT Act, we must make regulations to exempt equipment if its installation or use is unlikely to cause undue interference.

2.2 The Wireless Telegraphy (Exemption) Regulations 2003[6] (the "Principal Regulations"), as amended[7], outline criteria that equipment must meet in order to be exempt from the need to hold a WT Act licence. In accordance with the requirements of section 122(4) and (5) of the WT Act this document gives notice of our intention to make the Proposed Regulations. The Proposed Regulations would amend the Principal Regulations and revoke the Wireless Telegraphy (Short Range Devices) (Exemption) Regulations 2009, the provisions of which would be incorporated into the Principal Regulations.

2010 Consultation

2.3 In our 2010 Consultation, we consulted on proposals to allow new types of equipment to operate on a licence-exempt basis and to amend arrangements for frequency bands and equipment which are already subject to licence exemption and included:

- Railway Level Crossing Radar;
- High Density Fixed Satellite Services (HDFSS);
- Underwater system use below 30 MHz; and
- a number of short-range devices (SRDs).

2.4 In addition we also provided information on:

- upcoming European Decisions and Directives which would be binding on the UK; and
- Ofcom policy proposals and decisions that may be included in future regulations.

Responses to the 2010 Consultation

2.5 We received twelve non-confidential responses to the consultation.

[6] SI 2003/74, available from www.opsi.gov.uk.
[7] See SI 2003/2155, SI 2005/3481; SI 2006/2994; SI 2008/236 and SI 2008/2426, all available from www.opsi.gov.uk.

2.6 A summary of the responses and our comments on these follow under the headings of the questions posed in the consultation. Respondents' comments on other issues are addressed as they arise later in this section.

Question 1) Do you agree with our proposal to permit railway level crossing radars to operate in the UK, on a licence exempt basis, providing that exclusion zones are put in place to protect Radio Astronomy sites?

2.7 One respondent agreed with the proposals but requested that the frequency band 13.4 to 14 GHz be included in IR 2080. They advised that the technical characteristics of this band make it suitable for this type of application.

2.8 The 13.4 to 14 GHz band is already available on a licence-exempt basis for Radio Determination Applications. The technical requirements for such devices are included in IR 2030/12/7 and providing that a device complies with it they can be used for railway level crossing safety systems. We do not feel that it is appropriate to include the 13.4 to 14 GHz band in IR 2080 as there are specific restrictions on the use of the 24 GHz band which would not apply to the generic radio determination allocation.

2.9 One respondent disagreed with the proposal on the grounds that for safety's sake such equipment should be wired.

2.10 We appreciate the respondent's concern. However, issues surrounding rail safety are the responsibility of the Office of Rail Regulation[8] and not Ofcom. We would advise that any safety issues concerning the deployment of this system are taken up with them.

2.11 We are therefore now proposing regulations to licence exempt railway level crossing radars in the 24.100 to 24.350 GHz band, and a new interface requirement, IR 2080[9].

Question 2) Do you agree with our proposal to exempt users of HDFSS equipment operating with e.i.r.p. no greater than 55 dBW in the 27.50 to 27.8185 GHz, 28.4585 to 28.8265 GHz and 29.4625 to 30 GHz bands from the need to possess a wireless telegraphy licence?

2.12 We received four responses in support of this proposal. Avanti, SAP REG / GVF, SES and Intellect fully supported our proposals to increase the power for these devices.

2.13 SES and SAP REG requested that we consider raising the e.i.r.p. limit to 60 dBW. SES advised that such an increase in power would be in line with the High e.i.r.p. Satellite Terminals (HEST) Decision ECC/DEC/(06)03[10] (the "HEST Decision").

2.14 If we were to exempt HDFSS terminals transmitting with e.i.r.p. greater than 55 dBW in accordance with the HEST decision as requested, we would need to employ exclusion areas extending to several kilometres beyond the boundary fence of more than 100 airfields in the UK. Unlike railway level crossing radars, we are not satisfied that the imposition of such exclusion zones would prevent undue interference from occurring.

[8] http://www.rail-reg.gov.uk/
[9] http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/DRAFT_IR_2080.pdf
[10] http://www.erodocdb.dk/Docs/doc98/official/pdf/ECCDEC0603.PDF

2.15 As more than 100 airfields are affected, not all of which are widely known, this would place additional requirements on the equipment installer to ensure that each terminal is located lawfully. With the advent of more consumer-orientated HDFSS applications (such as wireless broadband) and self-installation, the reason for such restrictions is unlikely to be understood by a relatively unsophisticated user group, and would be extremely difficult to enforce.

2.16 Our proposals allow terminals that transmit with e.i.r.p. up to 55 dBW to be located anywhere beyond the airfield perimeter fence. We believe that only a few HDFSS terminals are likely to transmit with e.i.r.p. levels greater than 55 dBW. It should be noted that HDFSS terminals transmitting with e.i.r.p. greater than 55 dBW can be authorised by obtaining an Earth Station Network or Permanent Earth Station licence.

2.17 Given the overwhelming support for our proposal we propose to make regulations exempting equipment by reference to an updated IR 2066[11] that allows an e.i.r.p. of 55 dBW.

Question 3) Do you agree with our proposal to permit underwater SRD systems to operate in the UK, providing in-air emissions meet the present limitations for licence-exempt use?

2.18 The Radio Society of Great Britain (RSGB) agreed in principle to the proposals but advised that under certain conditions, the surface emissions could be substantially increased. Due to this they would have some concerns if underwater short range devices were used in radio amateur bands.

2.19 We would like to thank the RSGB for their contributions and outlining the work carried out by SEAS DTC. Although we acknowledge that under certain conditions the power at the surface may be higher than expected, if the in-air emissions were over the present limit then the device would not be operating according to the terms of the licence exemption. The user must ensure that the apparatus is operated in accordance with the conditions of the licence exemption. The manufacturer can either place apparatus on the market that meets the regulations on use in all circumstances, or they can provide sufficient information to the consumer to enable the consumer to operate the equipment in a lawful way. Article 6.3 of the Radio and Telecommunications Terminal Equipment Directive 1999/5/EC (the "R&TTE Directive")[12] sets out these requirements in detail.

2.20 We propose to implement changes to the Principal Regulations to permit underwater SRD systems to transmit at higher powers providing that at the air interface the limit meets the present limits. These are included in IR 2030/15/10, IR 2030/15/13, IR 2030/15/14, IR 2030/15/16, IR 2030/15/17, IR 2030/15/19, IR 2030/15/21, IR 2030/15/23, IR 2030/15/24, IR 2030/15/26, IR 2030/15/27, IR 2030/15/28, IR 2030/15/29, IR 2030/15/30 and IR 2030/15/32[13].

Question 4) Do you agree with our proposal to remove restrictions where a more liberal duplication of the regulations exists elsewhere in the UK licence exemption

[11] http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/draft_IR_2066_2010.pdf
[12] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1999:091:0010:0028:en:PDF
[13] http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR2030.pdf

regulations and incorporate all relevant information for licence exempt SRD into a single Interface requirement document?

2.21 In paragraph 3.36.4 of our 2010 Consultation we advised that we were proposing to remove the airborne restrictions for Wireless Access Systems (WAS) at 5 GHz and on page 27 of IR 2030 we included two tables dealing with WAS. In the comments column of these tables we used the expression "*Equipment may be used airborne*". However we now realise the term 'airborne' could be misinterpreted to mean that aeronautical communications (e.g. air to ground) would be permitted. This is not the intention - our intention is for these systems to be used only internally within the cabin of an aircraft. This is in line with the associated European Commission (EC) Decision on 5 GHz WAS (2005/513/EC[14] as amended by 2007/90/EC[15]). We have now corrected this error in the draft IR 2030/8/1 and IR 2030/8/2 and propose to make regulations accordingly.

2.22 We received six responses to this question. WiTNESSS and another respondent fully supported our proposals.

2.23 The Civil Aviation Authority requested that proposals to remove airborne restrictions for 2.4 GHz and 5.8 GHz devices be coordinated with aviation authorities to ensure that EMC issues are addressed. They have particular concerns over devices carried on board by passengers.

2.24 The removal of the airborne restrictions on 2.4 GHz and 5.8 GHz devices is required by the SRD Decision. As a Member State we are required to implement the decision by the date required. However, we recognise that the use of radio communications equipment on board an aircraft is ultimately a matter for the aircraft operator and aviation regulations.

2.25 The interface requirement for SRDs operates on three levels. First of all there are non-specific requirements that any application can use, secondly there are generic requirements that apply to certain applications, e.g. radio determination and finally there are sector specific requirements that apply, e.g. vehicle radar.

2.26 One respondent was concerned about arrangements where, for example, equipment did not comply with the interface requirement specifically for that equipment type, but did comply with a more general interface requirement.

2.27 What we propose is that where requirements for specific devices are more restrictive than those applied to non-specific devices we should remove these restrictions. As manufacturers may use either interface requirement we do not feel it is appropriate to maintain these restrictions on specific devices.

2.28 Manufacturers are not required to use the specific interface requirement for a sector as indicated in their example. Where more than one interface requirement applies a manufacturer may use any one of the requirements. Usually sector specific requirements are more permissive compared to non-specific or generic applications due to the nature of their deployment.

2.29 We propose to implement the changes as outlined in our 2010 Consultation in the Proposed Regulations. Besides those considered above, these included some small corrections in IR2030 and some changes in conformity with the recommendation of

[14] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:187:0022:0024:EN:PDF
[15] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:041:0010:0010:EN:PDF

the European Conference of Postal and Telecommunications Administrations (CEPT)[16] (the "Recommendation").

2.30 The following changes have been incorporated into IR 2030. We have:

2.30.1 Increased the permitted power for Inductive Devices in the 60.25 to 70 kHz band to 72 dBuA/m from the present 69 dBuA/m limit and in the 70 to 90 kHz band to 72 dBuA/m from the present 48 dBuA/m limit (as per the Recommendation).

2.30.2 Permitted alternative power and sweep rate conditions in the 24.05 to 24.15 GHz band for vehicle radar (as per the Recommendation).

2.30.3 Removed channel restrictions for 2.4 GHz and 5.8 GHz Wireless Video Cameras – non broadcast (because a more liberal exemption existed for non-specific devices).

2.30.4 Removed airborne restrictions for 5.8 GHz Radio Determination Applications (because a more liberal exemption existed for non-specific devices).

Impact assessment

2.31 We received one comment from the RSGB concerning the impact assessment contained in Annex 5 of the 2010 Consultation. They submitted that the Impact Assessment failed to take into consideration the impact of the proposed changes to the 433.05 to 434.79 MHz band on Amateur or other services.

2.32 As explained later in paragraph 2.42, implementing the SRD Decision for this band does not involve any material change to our regulations. The elements of the draft IR2030 to which this respondent takes exception do not involve any changes to the UK regime. We do not consider that we have evidence to suggest that a change is desirable; nor, given the state of EC law, could we increase regulation of this band to the extent they wish. We therefore did not think it appropriate to place weight on the impacts on Amateur or other services as part of the impact assessment.

Other amendments to the regulations

2.33 As advised in sections 5 and 6 of the 2010 Consultation we were also proposing to implement a number of EC and Ofcom decisions, and make a number of minor editorial changes to update the regulations as part of the proposed amendment to the licence-exemption regulations. .

EC Decisions

2.34 This section refers to measures adopted by the EC and which are legally binding on the UK and includes:

- EC Decision on Mobile Communications on board Vessels (MCV) (the "MCV Decision");
- SRD Decision; and

[16] http://www.erodocdb.dk/Docs/doc98/official/pdf/REC7003E.PDF

- European Directive on the harmonisation of the 900 MHz and 1800 MHz frequency bands.

2.35 The information below outlines how we intend to implement any requirements to exempt equipment from the need to hold a WT Act licence.

MCV Decision

2.36 On 19 March 2010 the EC adopted "Commission Decision of 19 March 2010 on harmonised conditions of use of radio spectrum for mobile communication services on board vessels (MCV services) in the European Union (2010/166/EC)" (the "MCV Decision")[17]. Member States have until March 2011 to implement the decision. MCV systems enable the use of GSM-based mobile terminals in areas are not covered by land-based transmitters. MCV systems consist of an onboard pico-cell base station and an onboard Network Control Unit (NCU). It is to this system that mobile terminals used by passengers would connect. This follows a similar Decision on allowing Mobile Communications onboard Aircraft[18].

2.37 We will be consulting on regulations to implement this decision later this year. The Proposed Regulations do not include measures to implement the MCV Decision.

SRD Decision

2.38 On 30 June 2010 the SRD Decision was made by the European Commission[19]. Member States have until 1 November 2010 to implement the decision.

2.39 Within the SRD Decision, there are no proposals for new spectrum allocations for SRD use. There are modifications to existing licence-exempt SRD allocations. The SRD Decision requires the following:

2.39.1 The addition of a note, relating to all licence exempt SRDs, making it explicit that adjacent frequency bands within an allocation can be considered as a single frequency band provided the specific conditions of each frequency band are met.

2.39.2 For medical devices, operating in the 401 to 402 MHz and 405 to 406 MHz bands a wider bandwidth operation up to 100 kHz is now permitted.

2.39.3 The Duty Cycle limit in the 869.7 to 870 MHz band is increased from 0.1% to 1% for Non-specific SRDs.

2.39.4 The indoor/outdoor power restrictions are to be replaced with a single power of 40 dBm for Wideband Data Transmission Systems (WBDTS) in the 57 to 66 GHz band. Outdoor fixed installations will still not be permitted.

2.39.5 The vast majority of allocations within the EC Decision have no restriction limiting equipment to terrestrial use. Where terrestrial limits still exist in UK regulations, for allocations listed within the 2010 Decision, these terrestrial restrictions must be removed.

[17] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:072:0038:0041:EN:PDF
[18] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:098:0019:0023:EN:PDF
[19] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:166:0033:0041:EN:PDF

2.39.6 Removal of the channel access protocol requirement in the 869.3 to 869.4 MHz frequency band for non specific devices.

2.40 As a Member State we are required to implement the SRD Decision within the time limits set by the EC. We propose to introduce these liberalisation measures for licence-exempt SRDs by adding references to associated IRs in the Proposed Regulations.

2.41 In response to our 2010 Consultation, the RSGB, David Harris and Duncan Brown all raised concerns over the requirement to remove any remaining analogue voice and digitised voice/audio/video restrictions on the 433 MHz band as introduced by the SRD Decision. They highlighted that the Amateur service was allocated Secondary user status in the UK and should be protected against harmful interference from SRDs. The requirement could potentially increase the risk of interference to their service. The RSGB requested that we delay implementation of the requirement until CEPT improves its thoroughness and maintains the restrictions in the band. Duncan Brown also said that he was not in favour of different services sharing bands.

2.42 Although we appreciate the respondents' concerns over potential interference to their service we are required to implement the SRD Decision by 1 November 2010. Non-compliance with the SRD Decision could lead to infraction proceeding against the UK. In the case of the changes to requirements for the 433.05 to 434.79 MHz band, voice/speech and music if digitised have been permitted in the UK since 2003. The SRD Decision therefore involves no change to UK law in this respect[20]. It merely moves other EU Member States closer to the current regulatory requirements in place for the UK.

2.43 Concerning the general point of services sharing spectrum, this has been essential for many years in order to enable the most efficient use of the resource. It is clear from the UK Frequency Allocation Table[21] that the overwhelming majority of the radio spectrum is shared between different radiocommunications services. Sharing has the benefit that it allows many more services to be deployed than would be the case if different services were all allocated separately. One example of sharing is within the 430 to 440 MHz band, where the Ministry of Defence (MoD) who manage this band have permitted Amateur and other services to operate within this MoD allocation.

2.44 The 433.05 to 434.79 MHz band has been internationally designated for use by industrial, scientific and medical (ISM) applications. In ISM designated bands radiocommunication services, including amateur radio, must accept harmful interference from ISM as set out in Article 5.138 of the Radio Regulations 2008[22].

European Directive on the harmonisation of the 900 MHz and 1800 MHz frequency bands

2.45 On 16 September 2009 the "Directive 2009/114/EC of the European Parliament and of the Council amending Council Directive 87/372/EEC on the frequency bands to be reserved for the coordinated introduction of public pan-European cellular digital land-based mobile communications in the Community"[23] was introduced. This required Member States to make the 880 to 915 MHz and 925 to 960 MHz frequency bands

[20] We have clarified the wording of the IR to conform with the SRD Decision
[21] http://www.ofcom.org.uk/radiocomms/isu/ukfat/ukfat08.pdf
[22] http://www.itu.int/publ/R-REG/en
[23] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:274:0025:0027:EN:PDF

(the 900 MHz band) available for GSM and UMTS systems, as well as for other terrestrial systems capable of providing electronic communications services that can coexist with GSM systems.

2.46 In addition, the EC has adopted the "Commission Decision of 16 October 2009 on the harmonisation of the 900 MHz and 1800 MHz frequency bands for terrestrial systems capable of providing pan-European electronic communications services in the Community"[24]. This required Member States to allow the use of UMTS and to other terrestrial systems capable of providing electronic communications services that can coexist with the GSM in the 900 MHz and 1800 MHz bands.

2.47 With the advent of the Commission Decision 2009/766/EC and European Directive 2009/114/EC which came into force in October and November 2009 respectively, we feel it is appropriate to include the use of UMTS 900 MHz and 1800 MHz terminal equipment in the Proposed Regulations and in IR 2019[25].

2.48 In response to the 2010 Consultation, Norlink Services Limited asked whether mobile handset devices operating in new frequency bands would be subject to regulation 4(2) of the Principal Regulations. That is the effect of our Proposed Regulations.

To implement Ofcom proposals separately consulted on

2.49 In addition to European requirements, in the 2010 Consultation we noted a number of separate Ofcom proposals that we were considering implementing in the Proposed Regulations, these included:

- 2 GHz Satellite and complementary ground component (CGC) terminals; and
- FWS in the 59 to 64 GHz band.

2 GHz Satellite

2.50 The EC has made a number of decisions that will provide Europe with new mobile satellite services in the 2 GHz MSS bands (1980 to 2010 MHz and 2170 to 2200 MHz). We advised in the 2010 Consultation that we would be consulting on proposals to set the transmission limits for terminals that operate to the satellite or CGC base station component of the MSS network.

2.51 SES raised a question concerning a previous Ofcom consultation to permit 2 GHz Satellite Complementary Ground Components (CGC) systems. They ask whether it is Ofcom's intention to apply a licence exemption regime to CGC systems.

2.52 We welcome SES comments and confirm that we will be consulting on relevant exemption regulations for 2 GHz Satellite Complementary Ground Components (CGC) systems. . We will be looking at the proposed transmission limits. This will include the parameters already for the MSS 2GHz CGC base station that we have already consulted on[26].

2.53 The final ETSI standard for the equipment has yet to be published and therefore we are unable to proceed with the exemption of these terminals at this point in time. We

[24] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:274:0032:0035:EN:PDF
[25] http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR_2019_Third_Gen_draft.pdf
[26] http://stakeholders.ofcom.org.uk/consultations/cgcs2/statement/

will be consulting on regulations to implement this decision as soon as it is practically possible. The Proposed Regulations do not include measures to implement this Decision.

FWS in the 59 to 64 GHz band

2.54 On 16 July 2009 we published a consultation document on making spectrum in the 59 to 64 GHz band available for Fixed Wireless Systems (FWS)[27]. The consultation also included a proposal to combine the 59 to 64 GHz band with the existing 57 to 59 GHz licence-exempt band under one overall licence exempt authorisation approach to create a new contiguous block of spectrum 57 to 64 GHz. On 11 December 2009 we confirmed that we were to go ahead with this decision[28].

2.55 The 59 to 64 GHz band is jointly managed by Ofcom for Fixed Service applications and the MoD for Mobile and Radiolocation applications. In order to protect MoD radiolocation systems we propose to introduce three exclusion areas in the Proposed Regulations where the licence exemption will not apply. The areas are listed in Figure 1.

Figure 1: 59 to 64 GHz band licence exempt exclusion zones

Site Name	Site Location	Radius of exclusion zone from the centre of site location
Site 1	57° 21' 3.6",-07° 23' 36.6"	6 km
Site2	51° 37' 16.8",-04° 58' 21"	6 km
Site 3	52° 38' 1.8", -00° 36' 22.8"	6 km

Source: Ofcom

2.56 The Proposed Regulations exempt this equipment as set out in our policy statement of 11 December 2009. The technical criteria for FWS operating in the 57.1 to 63.9 GHz band are outlined in IR 2078[29].

[27] http://www.ofcom.org.uk/consult/condocs/59_64ghz/condoc.pdf
[28] http://stakeholders.ofcom.org.uk/binaries/consultations/59_64ghz/statement/statement.pdf
[29] http://www.ofcom.org.uk/radiocomms/ifi/tech/interface_req/draft_ir/IR_2078.pdf

Section 3

General effect of the Wireless Telegraphy (Exemption) (Amendment) Regulations 2010

The legislative framework

3.1 We can exempt the establishment, installation and use of wireless telegraphy equipment by making Regulations under section 8(3) of the WT Act. We propose to implement the changes proposed in this document by making the Proposed Regulations. The Proposed Regulations are included in Annex 6 of this document and will amend the Wireless Telegraphy (Exemption) Regulations 2003 (the "Principal Regulations") and revoke the Wireless Telegraphy (Short Range Devices) (Exemption) Regulations 2009.

Extent of application

3.2 The Proposed Regulations would apply in the United Kingdom, the Channel Islands and the Isle of Man, subject to formal agreement of the Island Authorities.

Regulations to exempt short range devices

3.3 The Proposed Regulations would make the following changes:

3.3.1 Regulation 2 revokes the Wireless Telegraphy (Short Range Devices) (Exemption) Regulations 2010.

3.3.2 Regulation 3 states that the Principal Regulations are amended in accordance with the regulations.

3.3.3 Regulation 4 updates the existing reference to the Radio Regulations, replacing the 2004 edition with the current 2008 edition in the interpretation section of the Principal Regulations.

3.3.4 Regulation 5 amends the current exemption for 57 to 59 GHz Fixed Links to include the new 59 to 64 GHz band, replaces the reference to IR 2006 for Wireless Access Systems (WAS) with IR 2030/8/1 and IR 2030/8/2 and replaces the Interface Requirement referenced for 57 to 59 GHz Fixed Links from IR 2000 to IR 2078 (which now covers 57 to 64 GHz).

3.3.5 Regulation 6 exempts the use of UMTS mobile handsets in the new 900 and 1800 MHz bands and updates the reference to the updated IR 2019.

3.3.6 Regulation 7 replaces the referenced IR 2030 document for short range devices with a set of interface requirements presented in the EC's preferred format.

3.3.7 Regulation 8 sets out the technical criteria that 57.1 to 63.9 GHz Fixed Links equipment must meet in order to be exempt. This includes three exclusion zones where the exemption does not apply.

3.3.8 Regulation 9 removes Schedule 9 for Wireless Access Systems including Radio Local Area Networks (the relevant information is all now in Schedule 6).

3.3.9 Regulation 10 updates the referenced Interface Requirement document for HDFSS contained in Schedule 11.

3.3.10 Regulation 11 creates a new Schedule for Railway Level Crossing Radar. It sets out the technical criteria that 24.100 to 24.350 GHz equipment must meet in order to be exempt. This includes six exclusion zones where the exemption does not apply.

Do you have any comments on the drafting of the Proposed Regulations?

Annex 1

Responding to this consultation

How to respond

A1.1 We invite written views and comments on the issues raised in this document, to be made **by 5pm on 6 September 2010**.

A1.2 We strongly prefer to receive responses using the online web form at http://www.ofcom.org.uk/consult/condocs/regs2009/howtorespond/form, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 4), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.

A1.3 For larger consultation responses - particularly those with supporting charts, tables or other data – please email licence.exemption@ofcom.org.uk attaching your response in Microsoft Word format, together with a consultation response coversheet.

A1.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.

Paul Chapman
Floor 3
Spectrum Policy Group
Riverside House
2A Southwark Bridge Road
London SE1 9HA

Fax: 020 7981 3921

A1.5 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.

A1.6 It would be helpful if your response could include direct answers to the questions asked in this document, which are listed together in annex 3. It would also help if you can explain why you hold your views and how our proposals would impact on you.

Further information

A1.7 If you want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please contact Paul Chapman on 020 7981 3069.

Confidentiality

A1.8 We believe it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all responses on our website, www.ofcom.org.uk, ideally on receipt. If you think your

response should be kept confidential, can you please specify what part or whether all of your response should be kept confidential, and specify why. Please also place such parts in a separate annex.

A1.9 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and will try to respect this. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.

A1.10 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Our approach on intellectual property rights is explained further on its website at http://www.ofcom.org.uk/about/accoun/disclaimer/

Next steps

A1.11 Following the end of the consultation period, we intend to publish a statement in October 2010.

A1.12 Please note that you can register to receive free mail Updates alerting you to the publications of relevant Ofcom documents. For more details please see: http://www.ofcom.org.uk/static/subscribe/select_list.htm

Ofcom's consultation processes

A1.13 We seek to ensure that responding to a consultation is easy as possible. For more information please see our consultation principles in Annex 2.

A1.14 If you have any comments or suggestions on how we conduct our consultations, please call our consultation helpdesk on 020 7981 3003 or e-mail us at consult@ofcom.org.uk. We would particularly welcome thoughts on how Ofcom could more effectively seek the views of those groups or individuals, such as small businesses or particular types of residential consumers, who are less likely to give their opinions through a formal consultation.

A1.15 If you would like to discuss these issues or Ofcom's consultation processes more generally you can alternatively contact Vicki Nash, Director Scotland, who is Ofcom's consultation champion:

Vicki Nash
Ofcom
Sutherland House
149 St. Vincent Street
Glasgow G2 5NW

Tel: 0141 229 7401
Fax: 0141 229 7433

Email vicki.nash@ofcom.org.uk

Annex 2

Our consultation principles

A2.1 We have published the following seven principles that we will follow for each public written consultation.

Before the consultation

A2.2 Where possible, we will hold informal talks with people and organisations before announcing a big consultation to find out whether we are thinking in the right direction. If we do not have enough time to do this, we will hold an open meeting to explain our proposals shortly after announcing the consultation.

During the consultation

A2.3 We will be clear about whom we are consulting, why, on what questions and for how long.

A2.4 We will make the consultation document as short and simple as possible. We will try to make it as easy as possible to give us a written response. If the consultation is complicated, we may provide a shortened Plain English Guide for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.

A2.5 We will consult for up to 10 weeks depending on the potential impact of our proposals. As a 10 week consultation has already been published we will be consulting on the Proposed Regulations for 6 weeks.

A2.6 A person within Ofcom will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organisations interested in the outcome of our decisions. Our consultation champion will also be the main person to contact with views on the way we run our consultations.

A2.7 If we are not able to follow one of these principles, we will explain why.

After the consultation

A2.8 We think it is important for everyone interested in an issue to see the views of others during a consultation. We will usually publish all the responses we have received on our website. In our statement, we will give reasons for our decisions and will give an account of how the views of those concerned helped shape them.

Annex 3

Consultation response cover sheet

A3.1 In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website, www.ofcom.org.uk.

A3.2 We have produced a coversheet for responses (see below) and would be very grateful if you could send one with your response (this is incorporated into the online web form if you respond in this way). This will speed up our processing of responses, and help to maintain confidentiality where appropriate.

A3.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to complete their coversheet in a way that allows Ofcom to publish their responses upon receipt, rather than waiting until the consultation period has ended.

A3.4 We strongly prefer to receive responses via the online web form which incorporates the coversheet. If you are responding via email, post or fax you can download an electronic copy of this coversheet in Word or RTF format from the 'Consultations' section of our website at www.ofcom.org.uk/consult/.

A3.5 Please put any parts of your response you consider should be kept confidential in a separate annex to your response and include your reasons why this part of your response should not be published. This can include information such as your personal background and experience. If you want your name, address, other contact details, or job title to remain confidential, please provide them in your cover sheet only, so that we don't have to edit your response.

Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing ☐

Whole response ☐

Part of the response ☐

Name/contact details/job title ☐

Organisation ☐

If there is no separate annex, which parts?

If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here. ☐

Name

Signed (if hard copy)

Annex 4

Consultation question

A4.1 A list of the questions proposed in this consultation can be found below.

Do you have any comments on the drafting of the Proposed Regulations that implement European and UK proposals?

Do you have any comments on the Impact Assessment of the Proposed Regulations?

Annex 5

Impact Assessment

Introduction

A5.1 In accordance with Government practice, where a statutory regulation is proposed, a Regulatory Impact Assessment ("RIA") must be undertaken. The analysis presented here, when read in conjunction with the rest of this document, represents an RIA as defined by section 7 of the Communications Act 2003 ("the Communications Act").

A5.2 You should send us any comments on this RIA by the closing date for this consultation. We will consider all comments before deciding whether to implement our proposals.

A5.3 RIAs provide a valuable way of assessing different options for regulation and showing why the preferred option was chosen. They form part of best practice policy-making and are commonly used by other regulators. This is reflected in section 7 of the Communications Act, which means that we will generally carry out impact assessments where proposals would be likely to have a significant effect on businesses or the general public, or when there is a major change in our activities. However, as a matter of policy we are committed to carrying out and publishing impact assessments in relation to the great majority of our policy decisions. In accordance with section 7 of the Communications Act, in producing this RIA, we have had regard to such general guidance as we consider appropriate including related Cabinet Office guidance. For further information about our approach to impact assessments, see the guidelines, Better policy-making: Ofcom's approach to impact assessment, which are on our website: http://www.ofcom.org.uk/consult/policy_making/guidelines.pdf.

Background

A5.4 In the UK, we are responsible for authorising civil use of the radio spectrum and achieve this by granting wireless telegraphy ("WT") licences under the Wireless Telegraphy Act 2006 (the "WT Act") and by making Regulations exempting users of particular equipment from the requirement to hold such a licence. 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. However under Section 8(4) of the WT Act we must make regulations to exempt equipment if it is unlikely to cause undue interference.

Proposal

A5.5 This RIA relates to the proposal to make exemption regulations liberalising the licence exemption criteria for low powered devices. This will be achieved through making a new set of Regulations. The changes proposed fall into the following categories:

- Measures to introduce the new technology of Railway Level Crossing Radars;

- Measures to open the spectrum in the 59 to 64 GHz band for Fixed Wireless Systems (FWS) and to combine this with the existing 57 to 59 GHz band under one overall licence exempt authorisation approach for FWS;

- Measures to liberalise current licence exemption criteria for low power devices:

    - o High Density Fixed Satellite Services (HDFSS);

    - o Underwater system use below 30 MHz; and

    - o A range of SRDs.

The citizen and/or consumer interest

A5.6 Our principal duty under section 3 of the Communications Act 2003 is to further the interests of citizens in relation to communications matters; and of consumers in relevant markets, where appropriate by promoting competition. We take account of the impact of our decisions upon both citizen and consumer interests in the markets we regulate. We must, in particular, secure the optimal use for wireless telegraphy of spectrum and have regard to the principle under which all regulatory activities should be targeted only at cases in which action is needed. In proposing changes to the existing Regulations we have considered the wider impact beyond immediate stakeholders in the radiocommunications community and sought the advice of the Ofcom Consumer Panel. We believe that the proposals will be of benefit to consumers for the following reasons:

i) The measures proposed all concern the use of radio equipment on a licence-exempt basis, which reduces the regulatory and administrative burden on our stakeholders and helps to secure the optimal use of spectrum;

ii) The measures proposed will help improve safety for citizens when using railway level crossings;

iii) Licence-exemption is proposed only in areas where use of equipment is unlikely to cause harmful interference to other spectrum use; and

iv) The exemptions support the introduction of new and innovative technologies that will be of benefit to consumers in general.

A5.7 We are required by statute to assess the impact of all our functions, policies, projects and practices on race, disability and gender equality – an Equality Impact Assessment (EIA) is our way of fulfilling these obligations. Our EIA initial screening showed that these proposals will have little impact in equality terms save in relation to citizens with a hearing impairment. We are proposing an administrative change permitting the use of Assistive Listening Devices onboard an aircraft. We believe that this will have a positive effect on users, although the use of all radio apparatus on aircraft remains within the control of aircraft operators and the civil aviation regulations.

Our policy objective

A5.8 We seek wherever possible, to reduce the regulatory burden upon our stakeholders, in this instance users of the radio spectrum. One way in which we can do this is to remove the need for spectrum users to apply for individual licences to authorise the use of radio equipment. In line with section 8(1) of the WT Act, the

use of WT equipment in the UK is authorised either by the issue of an appropriate WT licence or by exemption from the need to hold such a licence. Under section 8(4) of the WT Act we must exempt equipment if it is unlikely to cause undue interference. Exemption is realised by describing the details of equipment and the parameters under which it may be used in a Statutory Instrument (secondary legislation called Regulations) that exempts users of such equipment from the need to hold a WT licence provided they comply with the terms of the Regulations.

A5.9 In accordance with the Communications Act, we aim to exempt from licensing the use of specified equipment where it is not likely that such use will cause undue interference to other legitimate users of the radio spectrum. We are required to implement European Union (EU) legislation relating to radio spectrum and from time to time this requires licence exemption arrangements to be changed.

Options considered

A5.10 All the licence-exemption measures considered in this consultation involve removing regulatory burdens on stakeholders.

A5.11 Some of the measures also involve implementation of European Commission (EC) Decisions that require allocation of specified spectrum bands to short range devices (SRDs).

A5.12 In considering whether spectrum should be made available for a particular use, we balance the value of the proposed use of the band against existing and potential future uses. Such judgements typically require assumptions to be made about potential future uses of each band and the potential markets (and producer and consumer benefits) that may arise. Quantitative estimates would involve significant uncertainty and are unlikely to give a robust basis for analysis. Instead our approach has been to gather available information on the potential demand from other uses for the spectrum and make qualitative assessments of the relative benefits and costs of the proposed use.

A5.13 Our consideration also takes into account whether the appropriate means of authorising use is through exemption. Generally, licence-exemption is less onerous than licensing. Our analysis takes this proposition as starting point and then focuses on whether there might be concerns over harmful interference to existing users in the band (if there are any) or potential new users. In theory harmful interference could negate the benefits of any reductions in the regulatory burden.

A5.14 We are required to implement EC Decisions by law. Therefore, our analysis of measures that involve implementation of EC decisions is less detailed than for our own policy initiatives. Each of the measures required are associated with costs and benefits. However, if we did not implement an EC decision, the EC and others could begin legal proceedings against the UK, the costs of which we deem to be potentially very high both quantitatively and qualitatively, outweighing any costs we consider to be associated with correct implementation.

Analysis of options

Removing regulatory burdens

A5.15 Table A.5.1 below presents our analysis of measures which deal with proposals that remove regulatory burdens on spectrum users. The table considers the arguments for authorising versus not authorising the use/change proposed. In considering

whether use should be authorised or not, we assess the potential demand for the spectrum from alternative uses and whether licence-exemption could mean that potentially more valuable uses could be excluded from the spectrum.

Table A.5.1: Assessment of costs and benefits of authorising vs. not authorising use

Device	Description of exemption	General benefit of authorising	Potential costs
Railway Level Crossing Radars	Permit the use of Railway Level Crossing Radars in the band 24.1 to 24.35 GHz. Devices will have a permitted e.i.r.p. of 500mW. Installations will only be allowed at railway level crossings and subject to a 20 km exclusion zone around six Radio Astronomy sites.	Improving the safety of citizens when using railway level crossings. Help to reduce the number of causalities and fatalities by providing adequate warning to ongoing trains of a potential hazard.	There are already a number of other Short Range Radar operating at 24 GHz. There is a potential risk to Radio Astronomy sites but the 20 km exclusion zone should reduce any potential interference to levels that are not likely to be harmful.
57 to 64 GHz Fixed Links	To open spectrum in the 59 to 64 GHz band for Fixed Wireless Systems (FWS) and to combine this with the existing 57 to 59 GHz band under one overall licence exempt authorisation approach. Installations will be subject to three exclusion zones in the 59 to 63.9GHz band.	Creates one contiguous and flexible block of spectrum providing 6.8 GHz of available bandwidth (57.1 to 63.9 GHz taking into account two 100 MHz guard bands) for short hop FWS systems. Change will facilitate easy and fast access to the new any combined band without any administrative burden.	No information on deployments – location and usability/density. Potential difficulty around enforcement of the MoD's exclusion zones as we would not have detailed transmitter location records. However, this is not considered a real difficulty in practice for this band due to the geographic location of the exclusion zones and the type of FWS applications to be exempted.
HDFSS Low-power satellite earth stations	Liberalise licence exemption in bands 27.50 to 27.8185 GHZ, 28.4585 to 28.8265 GHz and 29.4625 to 30 GHz for low power stations from 50 dbW to 55 dbW.	Benefits business by promoting the availability of broadband and multimedia services in rural areas. Brings the UK into line with other countries that have adopted ECC/DEC(05)01. Change would enable increase in potential download speeds from 1 to 2Mbit/s up to a rate of 2 to 10Mbit/s or greater, depending on atmospheric conditions.	There is little evidence of current or future demand for the band from alternative uses. In principle, the band could be used for Broadband Wireless Access (BWA) services. However, we have already awarded spectrum in the bands 10, 28, 32 and 40 GHz and indications are that this is likely to be sufficient to meet demand for BWA use in these frequency ranges.
Underwater communications under 30 MHz	Proposal to allow a power of 40 dBuA/m for devices operating underwater in 9 – 30000 kHz band.	Benefits to divers and offshore industry from being able to use higher power systems underwater. As they are operating underwater and the limit for in-air emissions is the same the likelihood of interference	Potential for in-air interference if devices cannot stop transmissions at the water line. There is currently no harmonised standard to measure devices not operating through the air

Device	Description of exemption	General benefit of authorising	Potential costs
		to existing users should be low.	and one may need to be developed before equipment could successfully be placed on the market.
All SRDs	Adjacent frequency bands within an allocation can be combined to create a single band provided the specific conditions of each frequency band are met.	Will enable the introduction of new wide band devices this will help encourage innovation. Compliant with SRD Decision.	None, as the devices must operate with the parameters already set out for the licence exempt devices.
Medical Devices	For the 401 to 402 and 405 to 406 MHz bands permitted band width increased to 100 kHz	Increased bandwidths would enable devices to transfer more data and would help encourage the development of new devices in this area. Compliant with SRD Decision.	The equipment is already licence exempt and existing users can continue to operate services. It is not expected that the increase in bandwidth would have an impact on other services.
Non-Specific SRDs	In the 869.7 to 870 MHz band increase the duty cycle from 0.1 to 1%.	It would enable more frequent and longer duration transmissions. This would help encourage the development of new devices in this area as more information could be transferred. Compliant with SRD Decision.	The equipment is already licence exempt and existing users can continue to operate services. It is not expected that the increase in duty cycle would have an impact on other services.
Radio Determination Applications	Removal of the airborne restriction in the 5.8 GHz band.	Removal of unnecessary constraints on the channel plan within the allocated band. This proposal brings the UK allocation in line with the SRD Decision. In addition it does not stop operators from continuing to use their equipment as they were before.	The equipment is already licence exempt and existing users can continue to operate services.
Inductive Applications	Increase the permitted power for Inductive Applications in the 60.25 to 70 kHz band to 72 dBuA/m from the present 69 dBuA/m limit and in the 70 to 90 kHz band to 72 dBuA/m from the present 48 dBuA/m limit	Removal of unnecessary constraints on the channel plan within the allocated band. This proposal brings the UK allocation in line with the Recommendation. In addition it does not stop operators from continuing to use their equipment as they were before.	The equipment is already licence exempt and existing users can continue to operate services.

Device	Description of exemption	General benefit of authorising	Potential costs
Wideband Data Transmission Systems	Implement a single power limit of 40 dBm for indoor and outdoor systems (note outdoor fixed installations not permitted)	Removal of unnecessary constraints on the channel plan within the allocated band. This proposal brings the UK allocation in line with the SRD Decision. In addition it does not stop operators from continuing to use their equipment as they were before.	The equipment is already licence exempt and existing users can continue to operate services.
Vehicle Radar	Permit alternative sweep rate and power conditions in the 24.05 to 24.15 GHz band.	Removal of unnecessary constraints on the channel plan within the allocated band. This proposal brings the UK allocation in line with the Recommendation. In addition it does not stop operators from continuing to use their equipment as they were before.	The equipment is already licence exempt and existing users can continue to operate services. Tests have shown that the deployment of these systems will have no impact on existing devices in the band.
Wireless Video Cameras – Non Broadcasting	Removal of the channel bandwidth restriction in the 2.4 GHz and 5.8 GHz bands.	Removal of unnecessary constraints on the channel plan within the allocated band. This proposal brings the UK allocation in line with the Recommendation. In addition it does not stop operators from continuing to use their equipment as they were before.	The equipment is already licence exempt and existing users can continue to operate services.
UMTS handsets	Permit the use of UMTS handsets at 900 and 1800 MHz.	Compliant with GSM Decision.	The equipment is already licence exempt and the introduction of the new frequencies does not prevent existing users to continue to operate in the band.

A5.16 In summary, we consider that there is a good case for authorising the use proposed in each case. In particular, no compelling evidence has been found that there is likely to be current or future demand for the spectrum from other more valuable uses.

A5.17 We also consider that implementing the measures listed above is likely to generate a net benefit for UK businesses and consumers and at worst would have a neutral outcome (to the extent that benefits may depend on the uptake of the new opportunities afforded by each proposal). In particular, we consider that each measure is unlikely to impose costs on other users. Therefore if there is any benefit then the overall impact of each measure is likely to be positive.

A5.18 As regards the proposed exemption for UMTS user stations, the Government has requested Ofcom not to change the licensing position as regards user stations in existing frequencies. Given that decision, we do not think it is appropriate to apply a different licensing regime in relation to user stations in the new frequencies.

Costs to business

A5.19 Our assessment of the potential costs to business from each of the proposed licence-exemption measures is detailed in the sections above under analysis of the options. Costs to business could arise insofar as the proposals impact on business use of the spectrum. However, for each of the proposed measures our view is that the potential impact on other users of the spectrum, in terms of the risk of interference or increased congestion, is low. Hence, we consider that each of the measures should impose very little cost on business.

A5.20 Moreover, costs to business are likely to be lower under a licence-exemption approach than the alternative of a licensed approach, since licence-exemption represents the least cost regulatory approach to the authorisation of spectrum use. For example if use of spectrum is authorised through a WT licence, businesses face administrative costs associated with applying for the licence. Businesses could face additional costs depending on the method of award of the licence. If licences are awarded by means of an auction, businesses face the costs (including management time) of participating in the auction. If licences are awarded on a first come first served basis, businesses typically incur the administrative costs of the initial application and annual renewal of licences.

Costs to us

A5.21 There are one-off administrative costs associated with making a Statutory Instrument. We consider the implementation costs to be low, both in absolute terms and in comparison to licensing alternatives that might require an auction or the maintenance of an annually renewable licence scheme if licences are awarded on a first come first served basis. Moreover, the costs such as they are will also be offset by the benefits to business and consumer outlined above. There may also be a slight reduction in spectrum management costs in certain areas through licence exemption.

Do you have any comments on the Impact Assessment of the Proposed Regulations?

Annex 6

Proposed Regulations

0. STATUTORY INSTRUMENTS

2010 No. XXXX

ELECTRONIC COMMUNICATIONS

The Wireless Telegraphy (Exemption) Amendment Regulations 2010

Made - - - -	*[2010]*
Coming into force- -	*29 October 2010*

1.The Office of Communications ("OFCOM") make the following Regulations in exercise of the power conferred by section 8(3) of the Wireless Telegraphy Act 2006(**30**) ("the Act").

2.Before making these Regulations OFCOM have given notice of their proposal to do so in accordance with section 122(4)(a) of the Act, published notice of their proposal in accordance with section 122(4)(b) of the Act and have considered the representations made to them before the time specified in that notice in accordance with section 122(4)(c) of the Act.

Citation, commencement and interpretation

These Regulations may be cited as the Wireless Telegraphy (Exemption) Amendment Regulations 2010 and shall come into force on 29 October 2010.

Revocation

The Wireless Telegraphy (Short Range Devices) (Exemption) Regulations 2009(**31**) are hereby revoked.

Amendment of the Wireless Telegraphy (Exemption) Regulations 2003

The Wireless Telegraphy (Exemption) Regulations 2003(**32**) are amended in accordance with the following provisions of these Regulations.

Amendment of regulation 3

In regulation 3 (interpretation), in paragraph (1), in the definition of "the Radio Regulations", for "the 2004 edition" substitute "the 2008 edition".

([30]) 2006 c.36
([31]) SI 2009/1812
([32]) SI 2003/74 as amended by SI 2003/2155, SI 2005/3481, SI 2006/2994, SI 2008/236 and SI 2008/2426

Amendment of regulation 4

In regulation 4—

in paragraph (3)(d), for "58.9" substitute "63.9";

in paragraph (4)(b), for "IR 2006 — UK Interface Requirement 2006 for Wireless Access Systems (WAS) including RLANs operating in the frequency range 5150 — 5725 MHz, published by OFCOM in November 2006", substitute "IR2030/8/1 or IR2030/8/2 of IR2030 — UK Interface Requirements 2030, Licence Exempt Short Range Devices, published by OFCOM on [DATE]";

in paragraph (4)(c), for "IR 2000 — UK Interface Requirement 2000 for Point-to-Point Radio-Relay Systems Operating in Fixed Service Frequency Bands Administered by OFCOM, published by OFCOM in July 2005", substitute "IR 2078 — Fixed Wireless Systems in the frequency band 57.1– 63.9 GHz, published by OFCOM on [DATE]".

Amendment of Schedule 3

In Schedule 3, (network user stations)—

For Part III paragraph 3 sub-paragraph (c), substitute—

"(c) Universal Mobile Telephony System radiotelephones (UMTS):

Frequency (MHz)	*BTx/MTx*
880.1–914.9	MTx
925.1–959.9	BTx
1710.1–1785	MTx
1805.1–1880	BTx
1899.9–1920	BTx/MTx in TDD
1920–1980	MTx
2110–2170	BTx

"

In Part IV, for "IR 2044 — 12.5 kHz and 25 kHz Channel spacing for Land Mobile Services, Covering CBS, Analogue PAMR, National Paging, Data Networks, TETRA/TEDS Networks, and National & Regional PMBR Authorisations, published by OFCOM in November 2006.", substitute "IR 2019 - UK Interface Requirement 2019, Third Generation Mobile, published by OFCOM on [DATE]."

Amendment of Schedule 6

In Schedule 6 (short range devices)—

in Part I (interpretation), for the whole paragraph, substitute—

"**1.** Subject to paragraph 2, in this Schedule, "prescribed apparatus" means a station or apparatus described in the Interface Requirements referred to in Part III."

in Part II (additional terms, provisions and limitations), section 1, for "the Interface Requirement" substitute "the Interface Requirements".

in Part III (interface requirement), for "IR 2030 — UK Radio Interface Requirement for Short Range Devices, published by OFCOM in September 2008", substitute "IR 2030 — UK Interface Requirements 2030, Licence Exempt Short Range Devices, published by OFCOM in DATE".

Amendment of Schedule 8

In Schedule 8 (fixed terrestrial links apparatus in the 57.1 to 58.9 GHz frequency band)—

in the Schedule title, for "FIXED TERRESTRIAL LINKS IN THE 57.1 TO 58.9 GHZ FREQUENCY BAND", substitute "FIXED WIRELESS SYSTEMS IN THE 57.1 TO 63.9 GHZ FREQUENCY BAND";

in Part I, for "analogue or digital equipment for High Density Fixed Service (HDFS) applications", substitute "fixed wireless systems";

in Part II paragraph 1, for “58.9”, substitute “63.9”;

in Part II, after paragraph 2, insert—

“**3.** Prescribed apparatus operating in the frequency band 59 to 63.9 GHz shall not be established, installed or used within 6 kilometres of the following locations (expressed by latitude and longitude coordinates) —

(a) 57° 21' 3.6",-07° 23' 36.6”;

(b) 51° 37' 16.8",-04° 58' 21"; and

(c) 52° 38' 1.8", -00° 36' 22.8".”

in Part III (interface requirement), for “IR 2000, UK Interface Requirement for Point-to-Point Radio-Relay Systems Operating in Fixed Service Frequency Bands Administered by OFCOM, published by OFCOM in July 2005.”, substitute “IR 2078, UK Interface Requirement 2078, Fixed Wireless Systems in the frequency band 57.1 – 63.9 GHz, published by OFCOM on [DATE].”

Revocation of Schedule 9

Schedule 9 (Wireless Access Systems including Radio Local Area Networks) is revoked.

Amendment of Schedule 11

In Schedule 11 (high density fixed satellite applications), in Part III (Interface Requirement), for “IR 2066 — UK Interface Requirement for High Density Fixed Satellite Applications published by OFCOM in September 2008”, substitute “IR 2066, UK Interface Requirement 2066, High Density Fixed Satellite Service Systems, published by OFCOM on [DATE].”

Addition of Schedule 12

After Schedule 11 (high density fixed satellite applications) add the following Schedule—

“SCHEDULE 12
RAILWAY LEVEL CROSSING RADAR

PART I

Interpretation

In this Schedule “prescribed apparatus” means apparatus described in the Interface Requirement referred to in Part III of this Schedule.

PART II

Additional Terms, Provisions and Limitations

1. The prescribed apparatus shall be subject to and comply with the Interface Requirement referred to in Part III of this Schedule.

2. The prescribed apparatus shall not be established, installed or used within 20 kilometres of the of the following locations (expressed by latitude and longitude coordinates)—

(a) 02° 18'26" W 53° 14'10" N;

(b) 00° 02'20" E 52° 09'59" N;

(c) 02° 08′ 35.107″ W 52° 06′00.492″ N;

(d) 02° 32'03" W 53° 09'22" N;

(e) 02° 59'45" W 52° 47'24" N; or

(f) 02° 26'38" W 53° 17'18" N.

PART III

Interface Requirement

IR 2080 – UK Interface Requirement 2080, Railway Level Crossing Radar Sensor Systems, published by OFCOM on [DATE]."

Annex 7

Glossary of abbreviations

CEPT	European Conference of Postal and Telecommunications Administrations
CGC	Complementary Ground Components
dBm	Decibels relative to milliwats
ECC	Electronic Communications Committee
e.i.r.p.	Effective isotropic radiated power
ETSI	European Technical Standards Institute
EC	European Commission
EU	European Union
FSS	Fixed Satellite Service
FWS	Fixed Wireless Systems
GHz	Gigahertz
GSM	Global System for Mobile communications
HD	High Definition
HEST	High e.i.r.p. Satellite Terminals
HDFSS	High Density Fixed Satellite Service
IR	Interface Requirement
kHz	Kilohertz
LMSS	Land MSS
MCA	Mobile Communications on Aircraft
MCV	Mobile Communications onboard Vessels
MHz	Megahertz
MoD	Ministry of Defence
MSS	Mobile Satellite Services
mW	Milliwatt
R&TTE	Radio Equipment and Telecommunications Terminal Equipment Directive

RFID	Radio Frequency Identification
RTTT	Road Transport and Traffic Telematics
RSC	Radio Spectrum Committee
SRD	Short range device
TRP	Total Radiate Power
UMTS	Universal Mobile Telecommunications System
VSAT	Very Small Aperture Terminals
WBDTS	Wideband Data Transmission Systems
WT Act	Wireless Telegraphy Act 2006

Annex 8

List of respondents

A8.1 Below is a list of all non-confidential responses received as part of this consultation.

Avanti

Radio Society of Great Britain (RSGB)

SES

Civil Aviation Authority

WiTNESSS

David Harris

Douglas Couse

Duncan Brown

Name withheld

Norlink Services Limited

SAP REG / GVF

Intellect

Annex 9

Radio Interfaces

A9.1 Listed in the table below are links to the associated IR documents referenced in this Notice.

IR Document	Link
IR 2019	http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR_2019_Third_Gen_draft.pdf
IR 2030	http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR2030.pdf
IR 2066	http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/draft_IR_2066_2010.pdf
IR 2078	http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR_2078.pdf
IR 2080	http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/DRAFT_IR_2080.pdf