



# Ofcom's decision on changes to the licence exemption of Wireless Telegraphy Devices

Statement

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## Section 1

# Executive summary

- 1.1 This statement confirms that, following formal consultation, Ofcom has proceeded with proposals to allow some devices to operate without a Wireless Telegraphy Act 2006 ('WT Act') 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 Ofcom unless the use of such equipment is exempted.
- 1.2 Ofcom has made the following licence exemption regulations:
- the Wireless Telegraphy (Exemption) (Amendment) Regulations 2011 (the 'Amendment Regulations') entering into force on 31 December 2011;
  - the Wireless Telegraphy (Intelligent Transport Systems) (Exemption) Regulations 2011 (the 'ITS Regulations') entering into force on 31 December 2011; and
  - the Wireless Telegraphy (Exemption and Amendment) (Amendment) Regulations 2011 (the 'SRD Regulations') entering into force on 12 January 2012.
- 1.3 The regulations will permit the licence exempt use of the following devices:
- Personal Locator Beacons (PLBs) on land;
  - wireless access user equipment in the 3400 to 3800 MHz band;
  - safety-related Intelligent Transport Systems (ITS) infrastructure at 5875 to 5905 MHz;
  - user equipment connecting to the 2012 London Games Tetra (Apollo) Network;
  - fourth Generation (4G) mobile user equipment (LTE and WiMAX) in the 900 / 1800 MHz band<sup>1</sup>; and
  - some low power Short Range Devices (SRDs).
- 1.4 Before deciding to make the regulations and in accordance with the requirements of section 122(4) of the WT Act, we published a Statutory Notice "Notice of Ofcom's proposals for changes to the licence exemption of Wireless Telegraphy devices" (the 'Notice')<sup>2</sup>. The Notice contained drafts of the regulations and invited comments from stakeholders. We received no responses to the Notice.
- 1.5 On reviewing the proposed regulations we decided to make a number of minor editorial changes. The changes that we introduced into the regulations are outlined in section 4 of this document. None of these changes alter the technical parameters for the devices.

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<sup>1</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:106:0009:0010:EN:PDF>

<sup>2</sup> <http://stakeholders.ofcom.org.uk/binaries/consultations/notice-wireless-telegraphy/summary/main.pdf>

- 1.6 We are required to comply with the fourth update of Commission Decision 2006/771/EC on short-range devices (the 'SRD Decision')<sup>3</sup>, the implementation of which is mandatory on all European Union (EU) Member States. This statement also confirms that by making the SRD Regulations we have implemented the SRD Decision.
- 1.7 The regulations will be available on the website [www.legislation.gov.uk](http://www.legislation.gov.uk) under the titles listed above. Copies of Regulatory Impact Assessments (RIA) are also included in Annexes to this statement.

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<sup>3</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:329:0010:0018:EN:PDF>

## Section 2

# Introduction

## Background

- 2.1 This Statement confirms that following a formal consultation process between 7 April and 21 November 2011, Ofcom has made the following Wireless Telegraphy Exemption Regulations:
- the Wireless Telegraphy (Exemption) (Amendment) Regulations 2011 (the ‘Amendment Regulations’) entering into force on 31 December 2011;
  - the Wireless Telegraphy (Intelligent Transport Systems) (Exemption) Regulations 2011 (the ‘ITS Regulations’) entering into force on 31 December 2011; and
  - the Wireless Telegraphy (Exemption and Amendment) (Amendment) Regulations 2011 (the ‘SRD Regulations’) entering into force on 12 January 2012.
- 2.2 The Regulations provide for the use of certain radio equipment without the need to hold a WT Act Licence. On 7 April 2011 we published the consultation “Licence Exemption of Wireless Telegraphy Devices - Candidates for 2011” (the ‘2011 Consultation’)<sup>4</sup>. In this we set out a range of proposals asked stakeholders for their views. We received two confidential and eighteen non-confidential responses, the majority of which supported our proposals... After consideration of these responses we decided to proceed with our exemption proposals with the exception of an interim authorisation of 2GHz user terminals for use with mobile satellite networks
- 2.3 In order to implement our proposals, and in accordance with Ofcom’s statutory obligations under section 122(4) of the WT Act, draft regulations along with a summary of the consultation responses were the subject of a further one month consultation document; the “Notice of Ofcom’s proposals for changes to the licence exemption of Wireless Telegraphy devices” (the ‘Notice’)<sup>5</sup>. Additionally, the draft regulations included measures necessary to implement European Union (EU) spectrum policy decisions.
- 2.4 We asked interested parties to consider the following questions when responding to the Notice.

*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 drafting of the Proposed SRD Regulations that implement European and UK proposals?*

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

*Do you have any comments on the Regulatory Impact Assessment?*

<sup>4</sup> <http://stakeholders.ofcom.org.uk/consultations/licence-exemption-candidates-11/>

<sup>5</sup> <http://stakeholders.ofcom.org.uk/binaries/consultations/notice-wireless-telegraphy/summary/main.pdf>

2.5 We received no responses to the Notice.

## Section 3

# Scope of the Regulations

3.1 This section provides information on the devices that will be made licence exempt once the regulations have come into force. The regulations permit the licence exempt use of the following devices:

- Personal Locator Beacons (PLBs) on land;
- wireless access user equipment in the 3400 to 3800 MHz band;
- safety-related Intelligent Transport Systems (ITS) infrastructure at 5875 to 5905 MHz;
- user equipment connecting to the 2012 London Games Tetra (Apollo) Network;
- fourth Generation (4G) mobile user equipment (LTE and WiMAX) in the 900 / 1800 MHz band<sup>6</sup>; and
- a number of SRDs<sup>7</sup>.

## Land use of Personal locators beacons (PLBs)

3.2 PLBs will be permitted for land use, on a licence exempt basis, providing that they meet the technical conditions as set out in “IR 2084 – UK interface requirement 2084 Cospas-Sarsat locator beacons for use on land”<sup>8</sup> and are not used airborne or on a ship. PLBs for airborne and ship use are already authorised and registered as part of the licensing regime for ships and aircraft.

## Registration of PLBs

3.3 We recommend that all PLBs for land use should be registered on the UK Epirb Registry. To do this either complete and return the registration card supplied with the PLB to the address provided or download the registration form and send it to the Falmouth Maritime Rescue Co-ordination Centre<sup>9</sup>.

## User terminals in the 3400 to 3800 MHz band

3.4 User terminals under the control of a licensed network in the 3400 to 3800 MHz band will not require a licence, providing the technical parameters meet “IR 2015 – UK Interface Requirements 2015.1 to 2015.3 Spectrum Access in the 3400 to 4009 MHz

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<sup>6</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:106:0009:0010:EN:PDF>

<sup>7</sup> [http://ec.europa.eu/information\\_society/policy/ecomms/radio\\_spectrum/document\\_storage/rsc/rsc36\\_public\\_docs/rscom11-26\\_draft\\_decision\\_amending\\_srd.pdf](http://ec.europa.eu/information_society/policy/ecomms/radio_spectrum/document_storage/rsc/rsc36_public_docs/rscom11-26_draft_decision_amending_srd.pdf)

<sup>8</sup> [http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR\\_2084\\_PLB.pdf](http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR_2084_PLB.pdf)

<sup>9</sup> Forms and address details can be found at <http://www.dft.gov.uk/mca/epirb>.

band"<sup>10</sup> and the conditions of Wireless Telegraphy (Exemption) Regulations 2003 (the '2003 Regulations')<sup>11</sup>, as amended by the Amendment Regulations.

### **Safety related intelligent transport systems (ITS) at 5875 to 5905 MHz**

- 3.5 Safety-related ITS equipment (both vehicle-based and infrastructure) operating at 5875 to 5905 MHz and meeting the requirements set out in the ITS Regulations will be licence exempt. For information only, we have published on our website "IR 2086 – UK Interface Requirement 2086 Safety Related Applications of Intelligent Transport Systems"<sup>12</sup>. The IR mirrors the technical specifications as set out in the ITS Regulations.

### **User equipment connecting to the 2012 London Games Tetra (Apollo) Network**

- 3.6 User terminals which are part of the network used by Airwave Solutions Limited under licence number 0857910/1 will not require a licence, providing the technical parameters meet "IR 2085 - UK Interface Requirement 2085 London 2012 Games Tetra Network (Apollo)"<sup>13</sup> and the conditions of 2003 Regulations, as amended by the Amendment Regulations.

### **Fourth Generation (4G) mobile user equipment (LTE and WiMAX) in the 900 / 1800 MHz band**

- 3.7 User terminals which form part of a licensed network will not require a licence, providing the technical parameters of "IR 2087 - UK Interface Requirement 2087 LTE and WiMAX equipment in 900 and 1800 MHz Bands"<sup>14</sup> and the conditions of 2003 Regulations, as amended by the Amendment Regulations, are met.
- 3.8 Please note that before 4G services will be available a variation of the mobile operators network licence would also be needed. Ofcom has a power to decide to vary existing mobile network licences to allow the deployment of LTE and/or WIMAX systems, and has as yet made no decisions in this regard.

### **Short Range Devices (SRDs)**

- 3.9 The SRD Regulations will make a number of changes to licence exempt use of spectrum by SRDs. Some of these changes will implement the SRD Decision (mandatory for all Member States) whilst others align the UK with European Conference of Postal and Telecommunications Administrations (CEPT) recommendations (non-mandatory). The following changes have been introduced

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<sup>10</sup> [http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR\\_2015\\_3\\_4GHz.pdf](http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR_2015_3_4GHz.pdf)

<sup>11</sup> <http://www.legislation.gov.uk/ukxi/2003/74/made/data.pdf>

<sup>12</sup> [http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR\\_2086\\_ITS\\_final.pdf](http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR_2086_ITS_final.pdf)

<sup>13</sup> [http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR\\_2085\\_Tetra\\_Apollo.pdf](http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR_2085_Tetra_Apollo.pdf)

<sup>14</sup> [http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR\\_2087\\_LTE\\_WiMAX\\_900\\_1800.pdf](http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR_2087_LTE_WiMAX_900_1800.pdf)

into “IR 2030 – UK Interface Requirement 2030 Licence exempt Short Range Devices”<sup>15</sup>:

- a new allocation for Non-specific SRDs at 138.2 to 138.45 MHz;
- the bands 122 to 123 and 244 to 246 MHz are now allocated for Non-specific SRDs. This is a new spectrum allocation for SRDs within these internationally recognised industrial, scientific and medical (ISM) bands;
- ITS is now authorised in the band 63 to 64 GHz. This is a new authorisation for SRDs, although the UK Frequency Allocation Table (FAT) has for some time now listed the allocation of this band to Road Transport and Traffic Telematics (RTTT), RTTT being a form of ITS;
- in the band 127 to 135 kHz there is a change that amounts to a 0.4dB increase in power for Inductive Applications;
- the restriction of “for vehicle radar only” for 0.1 mW e.i.r.p. devices and devices operating in the frequency range 24.050 to 24.075 GHz and above 24.150 GHz has been removed for existing licence exempt 24 GHz vehicular radar;
- in the 87.5 to 108 MHz band the title of the permitted devices has been amended from Wireless Audio Applications to Low Power FM Transmitters; and
- for Radio-frequency identification (RFID) operating in the 2446 to 2454 MHz band the power has increased to 500 mW e.i.r.p. including airborne use.

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<sup>15</sup> [http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR\\_2030.pdf](http://stakeholders.ofcom.org.uk/binaries/spectrum/spectrum-policy-area/spectrum-management/research-guidelines-tech-info/interface-requirements/IR_2030.pdf)

## Section 4

# The regulations in detail

## The legislative framework

- 4.1 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. However, under section 8(3) of the WT Act, we have the power to make regulations exempting equipment from the need to be licensed, either absolutely or subject to such terms, provisions and limitations as we may specify. Sections 8(3A) and 8(3B) of the WT Act state that any terms, provisions or limitations must fall within Part A of the Annex to Directive 2002/20/EC and must be (a) objectively justifiable in relation to the wireless telegraphy stations or wireless telegraphy apparatus to which they relate, (b) not such as to discriminate unduly against particular persons or against a particular description of persons, (c) proportionate to what they are intended to achieve, and (d) in relation to what they are intended to achieve, transparent.
- 4.2 The EU regulatory framework, from which section 8 of the WT Act is derived, requires Member States to authorise use via general authorisations, and only adopt an individual licensing approach when required in order to avoid harmful interference, ensure technical quality of service, safeguard the efficient use of spectrum or fulfil other objectives of general interest as defined by Member States in accordance with Community law<sup>16</sup>.

## Extent of application

- 4.3 The Amendment Regulations, SRD Regulations and ITS Regulations apply in the United Kingdom, the Channel Islands and the Isle of Man.

## Wireless Telegraphy (Exemption) (Amendment) Regulations 2011

### Changes

- 4.4 In regulation 2(2) we have changed the reference from “IR 2015 – UK Interface Requirement 2015 Public Fixed Wireless Access Radio Systems Operating within the 3 to 11 GHz Frequency Bands Administered by Ofcom” to “IR 2015 – UK Interface Requirements 2015.1 to 2015.3 Spectrum Access in the 3400 to 4009 MHz band”. This reflects an update to the title of the document. The technical parameters remain the same.

### Final regulations

- 4.5 The Amendment Regulations made the following changes to the 2003 Regulations:
- i) Regulation 2 inserts provisions into the 2003 Regulations in order to licence exempt LTE and WiMAX user equipment in the 900 and 1800 MHz bands, user equipment in the 3.6 GHz band, and user equipment which is part of the special communications network being operated under licence number 0857910/1 for the London 2012 Olympic and Paralympic Games. Regulation 2 also inserts

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<sup>16</sup> See Article 5 of Directive 2002/20/EC, as amended by Article 3 (3) of Directive 2009/140/EC.

provisions which contain references to the technical references that the above equipment must comply with in order to be licence exempt.

## **Wireless Telegraphy (Exemption and Amendment) (Amendment) Regulations 2011**

### **Changes**

- 4.6 We have changed the title of the regulations from Wireless Telegraphy (Exemption and Amendment) (No.2) Regulations 2011 to the Wireless Telegraphy (Exemption and Amendment) (Amendment) Regulations 2011. We have also removed the definition of “ship” as it was unnecessary. “Ship” is defined in the WT Act from which the power to make the regulations is derived. The technical parameters remain the same.

### **Final regulations**

- 4.7 The SRD Regulations will make the following changes to the Wireless Telegraphy (Exemption and Amendment) Regulations 2010 (the ‘2010 Regulations’)<sup>17</sup>:
- i) Regulation 2 (a) updates the relevant reference to Interface Requirement 2030 in order to make the necessary changes required to implement the SRD Decision and the changes to Non-specific SRD at 138.2 to 138.45 MHz.
  - ii) Regulation 2(c) inserts a new exemption for land use of PLBs providing they meet the requirements of IR 2084 and are not used whilst airborne or on a ship.

## **Wireless Telegraphy (Intelligent Transport Systems) (Exemption) Regulations 2011**

### **Changes**

- 4.8 We have removed the reference to the required transmitter power control as we consider that this requirement forms part of EN302 571 (which users are required to comply with pursuant to regulation 5(c)). The technical parameters therefore remain the same.

### **Final regulations**

- 4.9 The ITS Regulations made the following changes:
- i) Regulation 2 revokes the Wireless Telegraphy (Vehicle Based Intelligent Transport Systems) (Exemption) Regulations 2009<sup>18</sup>.
  - ii) Regulation 4 sets out the frequency band that the service must operate in.
  - iii) Regulation 5 set out the technical criteria that the equipment must comply with, as described in Common Decision of 5 August 2008 on the harmonised use of radio spectrum in the 5875 to 5905 MHz frequency band for safety-related applications of Intelligent Transport Systems (ITS).

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<sup>17</sup> <http://www.legislation.gov.uk/uksi/2010/2512/made/data.pdf>

<sup>18</sup> <http://www.legislation.gov.uk/uksi/2009/65/made/data.pdf>

## Annex 1

# RIA Amendment Regulations

## Introduction

- A1.1 In accordance with Government practice, where a statutory regulation is made, a Regulatory Impact Assessment (RIA) must be undertaken. The analysis presented in this annex represents an impact assessment, as defined in section 7 of the Communications Act 2003,<sup>19</sup> for the Wireless Telegraphy (Exemption) (Amendment) Regulations 2011 (the 'Amendment Regulations'). Further information can be found in our consultation, Licence Exemption of Wireless Telegraphy Devices – Candidates for 2011 dated 7 April 2011<sup>20</sup> and the Notice of Ofcom's proposals for changes to the licence exemption of Wireless Telegraphy Devices dated 20 October 2011<sup>21</sup>.
- A1.2 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](http://www.ofcom.org.uk/consult/policy_making/guidelines.pdf).

## Background

- A1.3 In the UK, Ofcom is responsible for authorising civil use of the radio spectrum and achieves 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 install or use equipment to transmit without holding a licence granted by us, unless the use of such equipment is exempted. Under section 8(3) of the WT Act, we have the power to make regulations exempting equipment from the need to be licensed, either absolutely or subject to such terms, provisions and limitations as we may specify. Sections 8(3A) and 8(3B) state that any terms, provisions or limitations must fall within Part A of the Annex to Directive 2002/20/EC and must be (a) objectively justifiable in relation to the wireless telegraphy stations or wireless telegraphy apparatus to which they relate, (b) not such as to discriminate unduly against particular persons or against a particular description of persons, (c) proportionate to what they are intended to achieve, and (d) in relation to what they are intended to achieve, transparent.

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<sup>19</sup> [www.opsi.gov.uk/acts/acts2003/pdf/ukpga\\_20030021\\_en.pdf](http://www.opsi.gov.uk/acts/acts2003/pdf/ukpga_20030021_en.pdf).

<sup>20</sup> <http://stakeholders.ofcom.org.uk/consultations/licence-exemption-candidates-11/>

<sup>21</sup> <http://stakeholders.ofcom.org.uk/consultations/notice-wireless-telegraphy/>

## Proposal

- A1.4 This RIA relates to the decision to make exemption regulations exempting a number of user terminal devices which meet certain criteria from the need for a WT Act licence. This was achieved through making the Amendment Regulations.
- A1.5 The changes introduce measures to introduce new technologies such as Wireless Access Terminals operating as part of Wireless Access Systems in the 3400 to 3800 MHz band, LTE and WiMAX in the 900 and 1800 MHz band. In addition, the Amendment Regulations allow handsets to be used which are part of the special communications system being operated for the London 2012 Olympic and Paralympic Games.

## The citizen and / or consumer interest

- A1.6 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 making the decision to change the existing Regulations we have considered the wider impact beyond immediate stakeholders in the radiocommunications community. We believe that this decision will be of benefit to consumers for the following reasons:
- i) The measures 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) Licence-exemption is proposed only in areas where use of equipment is unlikely to cause undue interference to other spectrum users; and
  - iii) The exemptions support the introduction of new and innovative technologies that will be of benefit to consumers in general.
- A1.7 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. Following an initial assessment of our policy proposals we considered that it was reasonable to assume that any impacts on consumers and citizens arising from the Regulations would not differ significantly between groups or classes of UK consumers and citizens.
- A1.8 We did not carry out a full EIA in relation to race equality or equality schemes under the Northern Ireland and disability equality schemes. This was because we were not aware that our decision was intended (or would, in practice) have a significant differential impact on different gender or racial groups, on consumers in Northern Ireland or on disabled consumers compared to consumers in general.

## Our policy objective

- A1.9 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 an individual licence to authorise the use of radio equipment. 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 Act licence provided they comply with the terms of the Regulations.

- A1.10 In accordance with the WT Act, we aim to exempt from licensing the use of specified equipment where it is not likely that such use will cause undue interference and the other criteria set out in paragraph A1.3. We are also 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

- A1.11 As set out in section 8(3) of the WT Act Ofcom can exempt equipment from the need to be licensed. The EU regulatory framework, from which section 8 of the WT Act is derived, requires Member States to authorise use via a general authorisation, and only adopt an individual licensing approach when required in order to avoid harmful interference, ensure technical quality of service, safeguard the efficient use of spectrum or fulfil other objectives of general interest as defined by Member States in accordance with Community law<sup>22</sup>.
- A1.12 All of these proposals deal with the authorisation of user equipment as part of an authorised network in certain frequency bands. This Decision and the RIA do not consider whether the spectrum should be made available for that use - the decisions as to whether the spectrum should be made available for the respective purposes of LTE, WiMax, Wireless Access and the Olympics network in these bands have either already been taken, or will be taken separately.
- A1.13 All the licence-exemption measures considered involved removing regulatory burdens on stakeholders, a duty placed on Ofcom. Generally, licence-exemption presents the lowest barrier to entry compared with other forms of authorisation, such as individual licences. Our analysis took this proposition as a starting point and then assesses concerns over harmful interference or congestion to existing users (if any) or potential new users of the band. Harmful interference or congestion could negate the benefits of any reductions in the regulatory burden gained from exemption. Quantitative estimates would involve significant uncertainty and are unlikely to give a robust basis for analysis.
- A1.14 Some of the measures also involve implementation of EU Decisions that require specific technologies to be allowed in specific spectrum bands e.g. LTE and WiMAX. EU Decisions are binding on the EU Member States and we are therefore legally required to implement them. A considerable amount of consultation is involved in developing these EU Decisions and therefore our analysis of the final measures for implementing EU Decisions tends to be less detailed than for nationally based policy initiatives.

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<sup>22</sup> See Article 5 of Directive 2002/20/EC, as amended by Article 3 (3) of Directive 2009/140/EC.

## **Analysis of options**

### **Removing regulatory burdens**

A1.15 Table A1 below presents our analysis of measures which deal with our decision to remove regulatory burdens on spectrum users. The table considers the arguments for authorising versus not authorising the use / change proposed.

**Table A1: Assessment of costs and benefits of authorising vs not authorising use**

Device	General benefit of authorising	Potential costs
Wireless Access user equipment in the 3400 to 3800 MHz band	<p>Networks operating and 3400 to 3800 MHz have already been authorised. Exemption of user terminals would remove a potential inconsistency in regulation between these services and other mobile services.</p> <p>Exemption would remove the administrative burden on users, as they would not need to hold a licence to use the network.</p> <p>May encourage competition as it enables 3400 to 3800 MHz operators to provide a service to consumers in a similar way to Mobile Network Operators.</p>	One off cost of statutory instrument. We do not expect a negative impact on other users as terminals can only transmit when within the coverage footprint of an authorised network.
LTE and WiMAX user terminals in the 900 and 1800 MHz bands	Authorisation required as part of Ofcom's implementation of the EC Decision. Licence exemption enables the equipment using new technologies such as LTE and WiMax to be used once authorisation for the use of those technologies in the relevant spectrum band has been made. Licence exemption is in line with existing authorisations for other mobile services.	One off cost of statutory instrument. We do not expect a negative impact on other users as terminals can only transmit when within the coverage footprint of an authorised network.
Tetra terminals for the 2012 London Games Apollo network	Reduce administrative burden to allow authorisation of terminals which are part of the special communications network being used for the duration of the London 2012 Olympic and Paralympic Games. Terminals will be used by LOCOG, the teams and other organisations to support the running of the Games.	One off cost of statutory instrument. We do not expect a negative impact on other users as terminals can only transmit when within the coverage footprint of an authorised network. Terminals are under control of the network so low risk of interference.

## Costs to business

- A1.16 Costs to business could arise insofar as the proposals impact on business use of the spectrum. However, for each of the measures our view is that the potential impact on other users of the spectrum, in terms of the risk of undue interference or increased congestion, is low. Hence, we consider that each of the measures should impose very little cost on business.
- A1.17 Costs to business are likely to be lower under a licence-exemption approach than the requirement for users to obtain individual licences. Licence-exemption represents the least cost regulatory approach to authorisations on the use of spectrum. For example if use of terminal equipment is authorised through a WT licence, businesses and consumers would face administrative costs associated with applying for the licence. In addition there are licence charges that must be paid on the initial issue of the licence and on its renewal.

## Costs to Ofcom

- A1.18 There are one-off administrative costs associated with making Statutory Instruments. We considered that 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.

## Decision

- A1.19 In summary, we considered that it was appropriate to exercise our power to licence exempt the above devices, under section 8(3) of the WT Act. We consider that the Regulations meet the requirements in section 8(3A) and 8(3B) of the WT Act outlined above.
- A1.20 We also considered that implementing the measures listed above was 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). We considered that each measure is unlikely to impose costs on other users. Therefore the effect of implementing the measures would be likely to be positive overall.

## Annex 2

# RIA SRD Regulations

## Introduction

- A2.1 In accordance with Government practice, where a statutory regulation is made, a Regulatory Impact Assessment (RIA) must be undertaken. The analysis presented in this annex represents an impact assessment, as defined in section 7 of the Communications Act 2003<sup>23</sup>, for the Wireless Telegraphy (Exemption and Amendment) (No.2) Regulations 2011 (the 'SRD Regulations'). Further information can be found in our consultation, Licence Exemption of Wireless Telegraphy Devices – Candidates for 2011 dated 7 April 2011<sup>24</sup> and the Notice of Ofcom's proposals for changes to the licence exemption of Wireless Telegraphy Devices dated 20 October 2011<sup>25</sup>.
- A2.2 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](http://www.ofcom.org.uk/consult/policy_making/guidelines.pdf).

## Background

- A2.3 In the UK, 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 install or use equipment to transmit without holding a licence granted by us, unless the use of such equipment is exempted.
- A2.4 Under section 8(3) of the WT Act, we have the power to make regulations exempting equipment from the need to be licensed, either absolutely or subject to such terms, provisions and limitations as we may specify. Sections 8(3A) and 8(3B) state that any terms, provisions or limitations must fall within Part A of the Annex to Directive 2002/20/EC and must be (a) objectively justifiable in relation to the wireless telegraphy stations or wireless telegraphy apparatus to which they relate, (b) not such as to discriminate unduly against particular persons or against a particular description of persons, (c) proportionate to what they are intended to achieve, and (d) in relation to what they are intended to achieve, transparent.

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<sup>23</sup> [www.opsi.gov.uk/acts/acts2003/pdf/ukpga\\_20030021\\_en.pdf](http://www.opsi.gov.uk/acts/acts2003/pdf/ukpga_20030021_en.pdf).

<sup>24</sup> <http://stakeholders.ofcom.org.uk/consultations/licence-exemption-candidates-11/>

<sup>25</sup> <http://stakeholders.ofcom.org.uk/consultations/notice-wireless-telegraphy/>

- A2.5 Commission Implementing Decision of 8 December 2011 (the 2011 Decision) amended Decision 2006/771/EC on harmonisation of the radio spectrum for use by short-range devices (2011/829/EU)<sup>26</sup> (the ‘SRD Decision’).
- A2.6 The SRD decision harmonises the technical conditions for use of spectrum for a wide variety of short-range devices, including applications such as alarms, local communications equipment, door openers and medical implants. Short-range devices are typically mass-market and/or portable products which can easily be taken and used across borders and therefore differences in spectrum access conditions would prevent their free movement, increase their production costs and create risks of harmful interference with other radio applications and services.
- A2.7 As a result of changes in technologies the European Commission regularly updates the list of and technical parameters of devices to be available for use in certain spectrum bands in the EU. The 2011 Decision is the fourth amendment to the original SRD Decision of 2006, and updates the list of and technical parameters of devices to be available for use in the EU. Member States are required to implement the SRD Decision by 1 June 2012.

## Proposal

- A2.8 This RIA relates to Ofcom’s decision to make exemption regulations exempting a number of low powered devices (which meet certain criteria) from the need for a WT licence. This was achieved through making the SRD Regulations.
- A2.9 The SRD Regulations implement the SRD Decision where the UK’s current authorisation is not as extensive as that required by the 2011 amendments to the SRD Decision. In addition we have also made a number of changes that we believe to be to the benefit of citizens and consumers.
- A2.10 The changes fall into the following categories:
- Measures to introduce the new technology such as Personal Locator Beacons (PLBs) on land;
  - Measures to liberalise current licence exemption criteria for some low power Short Range Devices (SRD); and
  - Measure to implement the 2011 Decision, amending the SRD Decision.

## The citizen and / or consumer interest

- A2.11 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 making the decision to change the existing Regulations we have considered the wider impact beyond immediate stakeholders in the radiocommunications community. We believe that this decision will be of benefit to consumers for the following reasons:

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<sup>26</sup> <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:329:0010:0018:EN:PDF>

- i) The measures 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) Licence-exemption is proposed only in areas where use of equipment is unlikely to cause undue interference to other spectrum users;
- iii) The exemptions support the introduction of new and innovative technologies that will be of benefit to consumers in general; and
- iv) The exemption will allow the deployment of a service (PLB) that has significant safety of life implications and would be a benefit to citizens.

A2.12 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. Following an initial assessment of our policy proposals we considered that it was reasonable to assume that any impacts on consumers and citizens arising from the SRD Regulations would not differ significantly between groups or classes of UK consumers and citizens, all of whom would have access to these services.

A2.13 We did not carry out a full Equality Impact Assessment in relation to race equality or equality schemes under the Northern Ireland and disability equality schemes. This was because we were not aware that our decision was intended (or would, in practice) have a significant differential impact on different gender or racial groups, on consumers in Northern Ireland or on disabled consumers compared to consumers in general.

## **Our policy objective**

A2.14 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 an individual licence to authorise the use of radio equipment. 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 Act licence provided they comply with the terms of the Regulations.

A2.15 In accordance with the WT 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 also 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**

A2.16 All the options considered either involved removing regulatory burdens on stakeholders, and making use of spectrum licence-exempt, or taking no action.

A2.17 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 was 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.

- A2.18 Our consideration also took into account whether the appropriate means of authorising use is through exemption. Generally, licence-exemption presents the lowest barrier to entry compared with other forms of authorisation, such as individual licences. Our analysis took this proposition as a starting point and then assesses concerns over harmful interference or congestion to existing users (if any) or potential new users of the band. Harmful interference or congestion could negate the benefits of any reductions in the regulatory burden gained from exemption.
- A2.19 However, most of the measures involved the implementation of the SRD Decision that requires the allocation of specified spectrum bands to a particular device. EU Decisions are binding on the EU Member States and we are therefore legally required to implement them. A considerable amount of consultation is involved in developing these decisions and therefore our analysis of the final measures for implementing EU Decisions tends to be less detailed than for nationally based policy initiatives.

## **Analysis of options**

- A2.20 Table A2 below presents our analysis of measures which deal with our decision to remove regulatory burdens on spectrum users for our proposals not covered by the SRD Decision. Table A3 outlines the analysis of the proposals that implement the SRD Decision. The tables consider the cost and benefits of authorising the licence exempt use of the proposed devices.

**Table A2: Assessment of costs and benefits of authorising via exemption – exemptions not required by 2011 Decision**

Description of exemption	General benefit of authorising	Potential costs
To allow the use personal locator beacons (PLBs) on land.	Improves the safety of citizens taking part in outdoor activities in remote areas. Helps to reduce the number of casualties and fatalities by providing search and rescue services with information to aid rescue more rapidly. This could in some cases reduce costs to these emergency responders.	PLBs have been in use on ships and aircraft for several years, therefore the majority of the cost in the recommended registration service is already there. There may be some additional cost due to the increase in number of registrations. There is a potential additional cost to emergency services of allowing PLB use on land as result of an increase in false alarms. However, this is outweighed by the potential cost reductions that location information may provide.
Exemption of non-specific SRD in the 138.2 to 138.45 MHz band	Brings the UK into line with other European countries (see ECC Recommendation (ERC\REC 70-03). Can for instance to allow use of fire safety systems improving safety for citizens.	Sonobuoys are authorised to use this frequency in UK waters. Interference from non-specific SRDs is unlikely to occur due to geographic separation from the low power SRDs.

**Table A3: Implementation of 2011 Decision amending SRD Decision**

Description of exemption	General benefit of authorising	Potential costs
A new spectrum allocation for non specific SRD in the 122 to 123 GHz and 244 to 246 GHz bands	Implementation of SRD Decision. SRDs will be able to operate in bands that are already internationally recognised for industrial, scientific and medical (ISM) use and the Earth Exploration Satellite Service (EESS).	There is currently no known use of this apparatus in this band. Studies are ongoing in CEPT on the possible increase in aggregate noise levels in these bands and the impact this may have. This would ensure that any apparatus brought onto the market in the EU does not have potential to cause a problem to the already existing EESS use. However, as ISM is already authorised in these bands we do not expect an increase in interference to EESS.
New exemption for Intelligent Transport Systems (ITS) in the 63 to 64 GHz band.	Implementation of SRD Decision. This will allow ITS systems to be used in this band. Allocation already in the UK Frequency Allocation Table for Road Transport and Traffic Telematics (RTTT).	Studies in the ECC have indicated that there is compatibility between this service and other services previously introduced in 60 GHz bands therefore we do not believe there is a risk to existing users.
Minor change (less than 0.4 dB) to the power level required for inductive applications in the 127 to 135 kHz band	Implementation of SRD Decision.	No costs associated other than one-off administrative cost of making exemption regulation.
Alternative technical parameters for vehicle radar already authorised for use in the UK in the frequency range 24.050 to 24.250 GHz.	Implementation of SRD Decision.	No costs associated other than one-off administrative cost of making exemption regulation.
Amendment of title of the permitted devices from “wireless audio applications” to “low power FM transmitters” in the 87.5 to 108 MHz band.	No change. SRD Decision only updates the apparatus name.	No costs associated other than one-off administrative cost of making exemption regulation.
Alignment of power limitation already permitted (500 mW) for terrestrial apparatus to airborne apparatus for RFID operating in the 2446 to 2454 MHz band.	Implementation of SRD Decision. 2.4 GHz RFID interrogators will be able to equally operate on an aircraft in motion as well as on the ground, at the increased power (500mW) rather than the (100 mW) present airborne limitation. This should allow a better read rate of RFID tags.	This 7 dB power increase for airborne applications is unlikely to have much impact; 1) because there is little “in-transit” use of RFID and 2) a localised terrestrial unit is far more likely to cause interference to other 2.4 GHz devices than any similar power device shielded within an aircraft at some distance (height).



## Costs to business

- A2.21 Our assessment of the potential costs from each of the 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 measures our view is that the potential impact on other users of the spectrum, in terms of the risk of undue interference or increased congestion, is low. Hence, we consider that each of the measures should impose very little cost on business.
- A2.22 Moreover, costs to business are likely to be lower under a licence-exemption approach than the requirement for users to obtain individual licences. Licence-exemption represents the least cost regulatory approach to authorisations on the use of spectrum. For example if use of spectrum is authorised through a WT Act 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

- A2.23 There are one-off administrative costs associated with making Statutory Instruments. We considered that 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.

## Decision

- A2.24 In summary, we considered that it was appropriate for Ofcom to exercise its power under section 8(3) of the WT Act and to extend the current licence exemptions to include those outlined above. We consider that the Regulations meet the requirements in section 8(3A) and 8(3B) of the WT Act.
- A2.25 The SRD Regulations implement the SRD Decision where the UK's current authorisation is not as extensive as that required by the 2011 amendments to the SRD Decision. In addition we have also made a number of changes that we believe to be to the benefit of citizens and consumers.
- A2.26 The benefits of this option were compliance with European Community law, a reduction in the regulatory and administrative burden for stakeholders wishing to use a variety of user terminals. In addition, the authorisation of PLBs has a safety of life benefit to citizens.

## Annex 3

# RIA ITS Regulations

## Introduction

- A3.1 In accordance with Government practice, where a statutory regulation is made, a Regulatory Impact Assessment (RIA) must be undertaken. The analysis presented in this annex represents an impact assessment, as defined in section 7 of the Communications Act 2003,<sup>27</sup> for the Wireless Telegraphy (Intelligent Transport Systems) (Exemption) Regulations 2011 (the 'ITS Regulations'). Further information can be found in our consultation, Licence Exemption of Wireless Telegraphy Devices – Candidates for 2011 dated 7 April 2011<sup>28</sup> and the Notice of Ofcom's proposals for changes to the licence exemption of Wireless Telegraphy Devices dated 20 October 2011<sup>29</sup>.
- A3.2 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](http://www.ofcom.org.uk/consult/policy_making/guidelines.pdf).

## Background

- A3.3 In the UK, Ofcom is responsible for authorising civil use of the radio spectrum and achieves 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 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(3) of the WT Act, we have the power to make regulations exempting equipment from the need to be licensed, either absolutely or subject to such terms, provisions and limitations as we may specify. Sections 8(3A) and 8(3B) state that any terms, provisions or limitations must fall within Part A of the Annex to Directive 2002/20/EC and must be (a) objectively justifiable in relation to the wireless telegraphy stations or wireless telegraphy apparatus to which they relate, (b) not such as to discriminate unduly against particular persons or against a particular description of persons, (c) proportionate to what they are intended to achieve, and (d) in relation to what they are intended to achieve, transparent.

<sup>27</sup> [www.opsi.gov.uk/acts/acts2003/pdf/ukpga\\_20030021\\_en.pdf](http://www.opsi.gov.uk/acts/acts2003/pdf/ukpga_20030021_en.pdf).

<sup>28</sup> <http://stakeholders.ofcom.org.uk/consultations/licence-exemption-candidates-11/>

<sup>29</sup> <http://stakeholders.ofcom.org.uk/consultations/notice-wireless-telegraphy/>

- A3.4 A European Commission Decision of 5 August 2008 on the harmonised use of radio spectrum in the 5875 to 5905 MHz frequency band for safety-related applications of Intelligent Transport Systems (ITS) 2008/671/EC<sup>30</sup> (the 'ITS Decision') was made to allow the use of the radio spectrum for safety-related ITS equipment in a harmonised manner in the Community. ITS are systems and services which use information and communication technologies to help drivers to avoid potentially dangerous traffic situations (e.g. by giving early warning of potential dangers). ITS includes equipment able to communicate between cars and between the car and any roadside infrastructure.
- A3.5 The Decision was addressed to all Member States and required them to, not later than six months after entry into force of the ITS Decision, designate the frequency band 5875 to 5905 MHz for ITS and, as soon as reasonably practicable following such designation, make that frequency band available on a non-exclusive basis. The ITS Decision expected that Member States would make the spectrum available for vehicle to vehicle ITS communications within the six-month period during which they were to designate the frequency band 5875 to 5905 MHz according to the ITS Decision. The Decision recognised that it may not be possible for some Member States to implement exemptions for vehicle-to-infrastructure and infrastructure-to-vehicle ITS communications, in the initial six month period.
- A3.6 Ofcom implemented this ITS Decision by making the vehicle based equipment licence-exempt via the Wireless Telegraphy (Vehicle based Intelligent Transport System) (Exemption) Regulations 2009<sup>31</sup> (the '2009 Regulations') and by separately licensing the infrastructure equipment. At the time there was a possibility that infrastructure users would interfere with each other at the same location and therefore a licensing approach was needed for these users.

## Proposal

- A3.7 This RIA relates to the decision to make exemption regulations exempting all safety-related ITS in the 5875 to 5905 MHz band from the need for a WT Act licence. This was achieved through making the ITS Regulations and revoking the 2009 Regulations.
- A3.8 The changes introduce measures to allow the technology to be used on a licence-exempt basis and to simplify the regulatory regime.

## The citizen and / or consumer interest

- A3.9 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 making the decision to change the existing Regulations we have considered the wider impact beyond immediate stakeholders in the radiocommunications community. We believe that this decision will be of benefit to consumers for the following reasons:

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<sup>30</sup> <http://www.erodocdb.dk/docs/doc98/official/pdf/2008671EC.pdf>

<sup>31</sup> <http://www.legislation.gov.uk/uksi/2009/65/made/data.pdf>

- i) the measures will allow the use of safety-related ITS in the 5875 to 5905 MHz band on a licence exempt basis, which reduces the regulatory and administrative burden on motorists, the automotive industry and infrastructure agencies; and
- ii) the introduction of safety-related ITS systems are intended to improve road safety. The European Commission stated<sup>32</sup> that in 2006 42,000 people were killed on the roads of Europe. The cost of accidents to society is clearly high. The Impact Assessment included as Annex 2 of the European Conference of Postal and Telecommunications Administrations (CEPT) Report 20,<sup>33</sup> concluded in paragraph 4.3 that even a marginal reduction in road casualties would provide a greater benefit than alternative uses for the radio spectrum 5875 to 5905 MHz. The report suggests that just a 1% reduction in casualties would be of very significant value to European society.

A3.10 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. Following an initial assessment of our policy proposals we considered that it was reasonable to assume that any impacts on consumers and citizens arising from the ITS Regulations would not differ significantly between groups or classes of UK consumers and citizens, all of whom would have access to these services.

A3.11 We did not carry out a full EIA in relation to race equality or equality schemes under the Northern Ireland and disability equality schemes. This was because we were not aware that our decision was intended (or would, in practice) have a significant differential impact on different gender or racial groups, on consumers in Northern Ireland or on disabled consumers compared to consumers in general.

## Our policy objective

A3.12 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 an individual licence to authorise the use of radio equipment. 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.

A3.13 In accordance with the WT 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 also required to implement European Union (EU) legislation relating to radio spectrum and from time to time this requires licence exemption arrangements to be changed.

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<sup>32</sup> Press notice

<http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/1240&format=HTML&aged=0&language=EN&guiLanguage=en>

<sup>33</sup> CEPT Report 20. Report from CEPT to EC in response to the Mandate on “the harmonised radio spectrum use for safety critical applications of Intelligent Transport Systems (ITS) in the European Union” <http://www.erodocdb.dk/Docs/doc98/Official/Pdf/CEPTRep020.pdf>

## Options considered

A3.14 These measures involve the implementation of EU Decision that requires the allocation of specified spectrum bands for ITS. EU Decisions are binding on the EU Member States and we are therefore legally required to implement them. A considerable amount of consultation is involved in developing these decisions and therefore our analysis of the final measures for implementing EU Decisions tends to be less detailed than for nationally based policy initiatives.

A3.15 The options considered were to:

- Option 1 - Do nothing and continue to licence safety-related ITS infrastructure; and
- Option 2 - Licence exempt safety-related ITS infrastructure in line with vehicle based equipment.

## Analysis of options

### Option 1

A3.16 The current policy to licence infrastructure based ITS services met the obligations of the ITS Decision and enabled users to deployment safety-related ITS infrastructure.

A3.17 Stakeholders are subject to a licence fee and associated administrative costs. Ofcom has to run and maintain a licensing system and administer applications, revocations and renewals of licences. The development of European Harmonised Standards means that infrastructure based system deployments no longer cause undue interference with wireless telegraphy. Therefore we consider that it is an unnecessary regulatory burden and cost for stakeholders to be required to apply for individual licences for such equipment. However, as the development of European Harmonised Standards means that the system deployments are not likely to involve undue interference with wireless telegraphy (coordination issues have been resolved), we consider that it is now appropriate to licence exempt infrastructure based ITS services.

### Option 2

A3.18 Proposal would continue to meet the obligations of the ITS Decision by making the spectrum available on a non-exclusive basis and would remove an unnecessary regulatory burden on stakeholders. It would bring infrastructure authorisation into line with similar equipment based on vehicles.

A3.19 Potential for increase in users in the same location that may lead to an increase in congestion and may reduce slightly the effectiveness of such a system. However, this would not involve undue interference or significantly affect the overall technical quality of service. Licence exemption would not allow users to easily identify other operators at the same location. Given the safety-related nature of the system we believe that the deployment of infrastructure equipment would be co-ordinated by the appropriate authority (e.g. Highways Agency or local council) for this not to be an issue.

## Costs to business

- A3.20 Our assessment of the potential costs to business from each of the 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 measures our view is that the potential impact on other users of the spectrum, in terms of the risk of undue interference or increased congestion, is low. Hence, we consider that each of the measures should impose very little cost on business.
- A3.21 Moreover, costs to business are likely to be lower under a licence-exemption approach than the requirement for users to obtain individual licences. Licence-exemption represents the least cost regulatory approach to authorisations on the use of spectrum. For example if use of spectrum is authorised through a WT licence, businesses face administrative costs associated with applying for the licence. In addition there are licence charges that must be paid on the initial issue of the licence and on its renewal.

## Costs to Ofcom

- A3.22 There are one-off administrative costs associated with making Statutory Instruments. We considered that 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.

## Decision

- A3.23 The preferred option was to make regulations to allow the use of safety-related ITS equipment on a licence-exempt basis. We considered that it was appropriate for Ofcom to exercise its power under section 8(3) of the WT Act and to extend the licence exemption to include infrastructure. We consider that the Regulations meet the requirements in section 8(3A) and 8(3B) of the WT Act outlined in section 1.3 above. The ITS Regulations continue to meet all the requirements of the ITS Decision.
- A3.24 The benefits of this option were a reduction in the regulatory and administrative burden for stakeholders wishing to use compliant safety-related ITS devices and more generally benefits to consumers from the potential introduction of a technology designed to improve road safety.

## Evaluation

- A3.25 Article 4 of the ITS Decision requires that the bands identified for safety-related ITS be kept under active scrutiny by Member States and report their findings to the Commission to allow a timely review of this Decision.
- A3.26 We will assist the Commission in carrying out these reviews as required.

## Annex 4

# Glossary of abbreviations

<b>CEPT</b>	European Conference of Postal and Telecommunications Administrations
<b>Cospas-Sarsat</b>	International satellite-based search and rescue system
<b>dB</b>	Decibels
<b>dBm</b>	Decibels relative to a milliwatt
<b>ECC</b>	Electronic Communications Committee
<b>e.i.r.p.</b>	Equivalent isotropic radiated power
<b>ETSI</b>	European Telecommunications Standards Institute
<b>EC</b>	European Community
<b>EU</b>	European Union
<b>FSS</b>	Fixed Satellite Service
<b>FWS</b>	Fixed Wireless Service
<b>GHz</b>	Gigahertz (one thousand Megahertz)
<b>GSM</b>	Global System for Mobile communications
<b>IR</b>	Interface Requirement
<b>ITS</b>	Intelligent Transport System
<b>kHz</b>	Kilohertz (one thousand Hertz)
<b>LMSS</b>	Land MSS
<b>LTE</b>	Long Term evolution
<b>MHz</b>	Megahertz (one thousand Kilohertz)
<b>MSS</b>	Mobile Satellite Services
<b>mW</b>	Milliwatt (a thousandth of a Watt)
<b>PLB</b>	Personal Locator Beacon
<b>R&amp;TTE</b>	Radio and Telecommunications Terminal Equipment Directive
<b>RIA</b>	Regulatory Impact Assessment
<b>RFID</b>	Radio-frequency identification

<b>RTTT</b>	Road Transport and Traffic Telematics
<b>RSC</b>	Radio Spectrum Committee
<b>SRD</b>	Short range device
<b>TRP</b>	Total Radiated Power
<b>UMTS</b>	Universal Mobile Telecommunications System
<b>WBDTS</b>	Wideband Data Transmission Systems
<b>WiMAX</b>	Worldwide Interoperability for Microwave Access
<b>WT Act</b>	Wireless Telegraphy Act 2006