

Proposal to make the Radio Frequency Identification Equipment (Exemption) (Amendment) Regulations 2007 Statutory Notice

Consultation

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Contents

| Section | | Page |
|---------|---|------|
| 1 | Summary | 1 |
| 2 | Proposal | 3 |
| 3 | General Effect of the draft Wireless Telegraphy (Radio Frequency Identification Equipment) (Exemption) (Amendment) Regulations 2007 | 6 |
| Annex | | Page |
| 1 | Responding to this Notice | 8 |
| 2 | Ofcom's consultation principles | 10 |
| 3 | Consultation response cover sheet | 11 |
| 4 | Regulatory Impact Assessment | 13 |
| 5 | Proposed Amendment Regulations | 16 |
| 6 | The Decision | 18 |

Section 1

Summary

Notice

- 1.1 This document gives notice of Ofcom's proposal to make an amendment to the terms of the Wireless Telegraphy (Radio Frequency Identification Equipment) (Exemption) Regulations 2005¹ (the "2005 Regulations"). Ofcom is required to make changes to the 2005 Regulations in order to comply with a European Commission Decision² (the "Decision") the implementation of which is mandatory for all European Union (EU) Member States by 23 May 2007.
- 1.2 In order to implement the required changes Ofcom will make a new Statutory Instrument, the Wireless Telegraphy (Radio Frequency Identification Equipment) (Exemption) (Amendment) Regulations 2007 (the "Proposed Amendment Regulations").
- 1.3 A draft of the Proposed Amendment Regulations is set out for comment at Annex 5. Further hard copies of these Regulations are available from Ofcom at 2a Southwark Bridge Road, London SE1 9HA from the contact specified in Annex 1 for responding to this Notice.
- 1.4 In accordance with the requirements of section 403(4) and (5) of the Communications Act 2003 (the "2003 Act") this Notice enables stakeholders to comment upon the drafting of the Proposed Amendment Regulations. Ofcom does not consider it appropriate in this instance to first conduct a policy consultation for the following reasons:
 - the Proposed Amendment Regulations seek only to remove certain technical restrictions from the 2005 Regulations; this action is mandatory to ensure that Ofcom complies with the Decision; and
 - the 2005 Regulations already implement a policy previously announced and consulted on by Ofcom and its predecessor regulator to authorise the use of the 865 - 868 MHz band for Radio Frequency Identification (RFID) equipment on a licence exempt basis.

Background

1.5 In the United Kingdom Ofcom is responsible for the authorisation of civil use of the radio spectrum and achieves this by granting wireless telegraphy ("WT") licences under the Wireless Telegraphy Act 2006 (the "2006 Act") and by making Regulations exempting users of particular equipment from the requirement to hold such a licence. Under section 8(1) of the 2006 Act, it is an offence to install or use equipment to transmit without holding a licence granted by Ofcom, unless the use of such equipment is exempted.

Available at http://www.opsi.gov.uk/si/si2005/uksi 20053471 en.pdf

² Commission Decision of 23 November 2006 on harmonisation of the radio spectrum for radio frequency identification (RFID) devices operating in the ultra high frequency (UHF) band (2006/804/EC)

- 1.6 Ofcom made the 2005 Regulations in order to permit the use of RFID equipment in the 865-868 MHz band on a licence exempt basis and in line with European Conference of Communications and Postal Administrations ("CEPT") Recommendation (CEPT/ERC/Rec 70-03 Relating to the use of Short Range Devices (SRD))("the CEPT Recommendation").
- 1.7 Since 2005, the Decision has been developed to implement a binding commitment from EU Member States in order to ensure the legal stability of the frequency harmonisation achieved by CEPT.
- 1.8 The Decision is fundamentally in line with the 2005 Regulations already in place in the UK, that is, it mandates authorisation on a licence exempt basis with the same basic technical parameters proposed by CEPT. However, the Decision removes some technical restrictions which are currently included in both the CEPT Recommendation and hence the 2005 Regulations. These restrictions are related to the operation of a Listen Before Talk (LBT) polite protocol, the duration of signals and the shape of signal beams. The European Commission consider and Member States agreed that it is not necessary to mandate these restrictions through the Decision since the use of RFID devices must comply with the essential requirements of the Radio and Telecommunications Terminal Equipment (R&TTE) Directive to ensure the protection of other spectrum users. This compliance can be achieved through the use of the relevant Harmonised Standard (EN 302 208) or by using the same level of protection as the Harmonised Standard does.
- 1.9 Section 2 of this document discusses the background to Ofcom's proposal in more detail.

Effect of proposed change

- 1.10 In accordance with the Decision, Ofcom proposes to remove all technical restrictions from the 2005 Regulations (through the Proposed Amendment Regulations) other than the restrictions on Frequency Band, Channel Bandwidth and the Maximum permissible power all of which remain unchanged. As stated above however, the removal of these restrictions from UK legislation does not mean that they need no longer be observed since they remain in the Harmonised Standard for the protection of other spectrum users.
- 1.11 Section 3 of this document discusses the general effect of the Proposed Amendment Regulations.

Section 2

Proposal

Introduction

2.1 RFID is a generic term for technologies that use radio waves to automatically identify or provide information about objects. There are several methods of identification, but the most common is to store a serial number that identifies the object and perhaps other information, on a microchip that is attached to an antenna. (The chip and the antenna together are commonly called an RFID tag.) At present, the majority of RFID tags are "passive", which means they rely on a minute electrical current induced in their antenna by the incoming radio frequency scan of the reader to provide enough power for the tag to send a response and provide data. Tags may also be "active", which means they do not rely upon power from the reader but have their own means of sending a signal. This process is a similar to and can be a replacement for traditional optical bar-coding reading, which is already used heavily in the retail industry. Although similar, RFID devices use radio waves rather than light to collect or read the information on an item or bar code.

Current authorisation of RFID

- 2.2 Many applications of this technology are a familiar feature of everyday life such as shop security systems, where a tag is used to deter shoplifting by alerting staff to an individual trying to leave retail premises with un-paid goods, or in the access control systems used in many buildings or transport networks. RFID tags are also commonly used commercially in pallet and container tracking, and truck and trailer tracking in shipping yards.
- 2.3 RFID equipment operating in the Ultra High Frequency (UHF) range is particularly useful for certain applications because of the propagation characteristics of this frequency band. As the spectrum available can also support high data rates, more information about the object can be stored on the tags. Currently a limited amount of spectrum is available in this range (865 868 MHz and 869.4 869.65 MHz).
- 2.4 At present the UK authorises the use of RIFD equipment in accordance with the 2005 Regulation adopting the parameters set out in the CEPT Recommendation which includes a specific allocation for RFID devices in the 865 - 868 MHz band. In addition to this the European Telecommunications Standards Institute (ETSI) has developed a technical standard (EN 302 208) for RFID equipment in this band.

European developments for RFID

- 2.5 Because CEPT Decisions and Recommendations are only adopted by CEPT countries on a voluntary basis, the harmonisation process can sometimes be slow cumbersome and incomplete. Consequently some EU Member States had not implemented the CEPT Recommendation and the RFID community sought more formal arrangements. The Commission recognised the need for RFID equipment to be able to operate in the UHF band throughout the EU under the formal harmonisation that a Decision brings.
- 2.6 Through the experience of operating under the CEPT Recommendation and the 2005 Regulations, operators and retailers expressed difficulties obtaining the full and most efficient use of their RFID equipment. They argued that this was due to

frequency reuse problems being caused by the LBT levels that had been mandated in the CEPT Recommendation and the 2005 Regulations.

- 2.7 Of com had already stated in the consultation document³ in support of making the 2005 Regulations that in co-operation with the RFID and SRD communities it would continue to review the need for LBT to remain in the 2005 Regulations.
- 2.8 Discussions on what the Decision should cover included debate on the LBT issue at the EU Radio Spectrum Committee. The conclusion of this debate, which Ofcom supported, was that Member State Regulations should not mandate the LBT requirement. This will enable the marketplace to debate and implement a solution without the need for regulatory intervention. As a result of this manufacturers have now raised Work Items in ETSI to develop a solution for the next version of the Harmonised Standard.
- 2.9 In the meantime and in line with the Decision, Ofcom proposes to amend the 2005 Regulations to remove all technical parameters other than the restrictions on Frequency Band, Channel Bandwidth and the maximum permissible power. However, the Decision makes clear that the essential requirements of the R&TTE Directive will continue to ensure the protection of other spectrum users. RFID devices will continue to fulfil these essential requirements in practice usually by declaring compliance with the relevant Harmonised Standard (which at the moment does still include LBT and other technical restrictions included in the 2005 Regulations).
- 2.10 In practice, therefore, the removal of the LBT and other restrictions from the 2005 Regulations does not mean that these requirements are no longer part of the equipment compliance process.
- 2.11 Ofcom does not expect any immediate impact from this regulatory change, in respect of the types of RFID apparatus that can be marketed, brought into service and used in the UK. Looking forward, changes to the types of apparatus that will be placed on the market in the UK will in all likelihood only occur when amendments are made to Harmonised Standard EN 302 208.
- 2.12 A Regulatory Impact Assessment (RIA)⁴ carried out by Ofcom in support of the 2005 Regulations noted that additional benefits to UK industry would accrue from wider European harmonisation of this technology. Therefore Ofcom supported this measure and its goal to formally harmonise the frequency allocation and technical parameters for this technology across the EU.
- 2.13 A further brief RIA relating to the Proposed Amendment Regulations only is contained in Annex 4. This RIA does not revisit the benefits of authorising the 865-868 MHz band for RFID on a licence exempt basis as this was covered when the 2005 Regulations were proposed.

^{3 &}quot;Notice of Ofcom's proposal to exempt the use of radio frequency identification equipment in the 865-868 MHz band from Wireless Telegraphy licensing". See http://www.ofcom.org.uk/consult/condocs/wireless865_868/

⁴ Contained in the "Notice of Ofcom's proposal to exempt the use of radio frequency identification equipment in the 865-868 MHz band from Wireless Telegraphy licensing". See <u>http://www.ofcom.org.uk/consult/condocs/wireless865_868/</u>

Next steps

- 2.14 This consultation document provides an opportunity to make representations about the Proposed Amendment Regulations as the means by which Ofcom intends to transpose the Decision into UK legislation, rather than views on the content of the actual Decision itself. The full text of the Decision is available at Annex 6 of this document.
- 2.15 Responses should be sent to Ofcom in accordance with the instructions set out in Annex 1 and should reach Ofcom no later than Tuesday 10 April 2007. Following finalisation of the Proposed Amendment Regulations, Ofcom intends to bring them into force to meet the Decision's deadline of 23 May. A statement will be issued in May.

Section 3

General Effect of the draft Wireless Telegraphy (Radio Frequency Identification Equipment) (Exemption) (Amendment) Regulations 2007

Introduction

- 3.1 Under section 8(1) of the 2006 Act it is an offence to install or use equipment to transmit without holding a licence granted by Ofcom unless the installation or use of such equipment is exempted. Ofcom can exempt the establishment, installation and use of wireless telegraphy (WT) equipment by making regulations under section 8(3) of the 2006 Act.
- 3.2 Of commade the 2005 Regulations to exempt the operation of RFID equipment in the 865 868 MHz frequency band from the requirement to hold a WT licence.
- 3.3 If the Proposed Amendment Regulations are enacted, this will result in some minor alterations to the nature of the existing exemption in order to implement the Decision on RFID. A draft of the Proposed Amendment Regulations is set out at Annex 5 of this document.

Extent of application

3.4 The 2005 Regulations apply to the UK, the Channel Islands and the Isle of Man. Ofcom anticipates that the Proposed Amendment Regulations will also apply to the UK, the Channel Islands and the Isle of Man, subject to formal agreement of the Island Authorities.

The Proposed Amendment Regulations

- 3.5 The Proposed Amendment Regulations would make the minimum possible changes to the 2005 Regulations in order to maintain consistency, while giving effect to the Decision on the nature of the exemption that should be granted for RFID. The proposed changes to the 2005 Regulations are set out in regulation 2.
- 3.6 The Decision in respect of frequency bands, channels of operation and power effective radiated power limits aligns with the exemption in the 2005 Regulations so no changes are required to these parameters.
- 3.7 However, the Decision has not included any specific restrictions on equipment that is capable of initiating communications with other equipment. In the 2005 Regulations, this equipment was referred to as an "interrogator". The 2005 Regulations had the effect of exempting interrogator equipment that:
 - a) only transmits with a certain beam-width;
 - b) only begins transmitting at the effective radiated power levels stated where the signal level at the receiver of the interrogator is at the levels stipulated;

- c) operates so that the duration of each transmission from an interrogator is no longer than four seconds; and
- d) operates with an interval between each transmission from the interrogator using the same channel of not less than 100 milliseconds (regulation 4(2)).
- 3.8 Therefore, paragraph 4 of regulation 2 of the Proposed Amendment Regulations, removes the requirements applicable to interrogator equipment. Paragraph 2 of regulation 2 removes definitions from the 2005 Regulations particular to interrogators which are not used elsewhere in the 2005 Regulations.
- 3.9 Paragraph 3 of regulation 2 of the Proposed Amending Regulations updates the reference made to the Wireless Telegraphy Act 1949 so that it will refer to the 2006 Act.
- 3.10 Ofcom believes the Proposed Amendment Regulations represent the best way to ensure that an appropriate authorisation regime is in place for RFID use in accordance with the Decision.
- 3.11 As always, Ofcom welcomes views going forward on the spectrum management framework and associated Regulations that are needed to support future developments in RFID technology and use.

Responding to this Notice

How to respond

- A1.1 Ofcom invites written views and comments on the issues raised in this document, to be made **by 5pm on Tuesday 10 April 2007**.
- A1.2 Ofcom strongly prefers to receive responses using the online web form at http://www.ofcom.org.uk/consult/condocs/rfid/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 3), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.
- A1.3 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

A1.4 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.

Further information

A1.5 If you want to discuss this Notice or need advice on the appropriate form of response, please contact Helen Hearn on 020 7981 3214.

Confidentiality

- A1.6 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, <u>www.ofcom.org.uk</u>, 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.
- A1.7 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.
- A1.8 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's approach on intellectual property

rights is explained further on its website at <u>http://www.ofcom.org.uk/about/accoun/disclaimer/</u>

Next steps

- A1.9 After considering any representations made to Ofcom before the end of the notification period, Ofcom intends to finalise the Proposed Amendment Regulations and will publish a statement as soon as possible. The UK is required to implement the Decision before 23 May 2007
- A1.10 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: <u>http://www.ofcom.org.uk/static/subscribe/select_list.htm</u>

Ofcom's consultation processes

- A1.11 Ofcom seeks to ensure that responding to a consultation is easy as possible. For more information please see our consultation principles in Annex 2.
- A1.12 If you have any comments or suggestions on how Ofcom conducts its consultations, please call our consultation helpdesk on 020 7981 3003 or e-mail us at <u>consult@ofcom.org.uk</u>. 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.
- A1.13 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

Ofcom's consultation principles

A2.1 Ofcom has published the following seven principles that it 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 who 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 with a summary of no more than two pages. 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 version for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.
- A2.5 We will normally allow ten weeks for responses to consultations on issues of general interest.
- A2.6 There will be a person within Ofcom who will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organizations interested in the outcome of our decisions. This individual (who we call the 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. This may be because a particular issue is urgent. If we need to reduce the amount of time we have set aside for a consultation, we will let those concerned know beforehand that this is a 'red flag consultation' which needs their urgent attention.

After the consultation

A2.8 We will look at each response carefully and with an open mind. We will give reasons for our decisions and will give an account of how the views of those concerned helped shape those decisions.

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, <u>www.ofcom.org.uk</u>.
- 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 <u>www.ofcom.org.uk/consult/</u>.
- 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 Name/contact details/job title | | | | | | |
| Whole response Organisation | | | | | | |
| Part of the response 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) | | | | | | |

Regulatory Impact Assessment

Introduction

- A4.1 In accordance with government practice, where a statutory regulation is proposed, a Regulatory Impact Assessment (RIA) must be undertaken. The analysis presented in this Annex represents a Regulatory Impact assessment, as defined in section 7 of the Communications Act 2003 (the "2003 Act") for amending the Wireless Telegraphy (Radio Frequency Identification Equipment) (Exemption) Regulations 2005 (the "2005 Regulations").
- A4.2 You should send any comments on this RIA to Ofcom by 5pm on Tuesday 10 April 2007. We will consider all comments received before this date in deciding whether to implement our proposals.
- A4.3 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. This is reflected in section 7 of the 2003 Act, which means that generally Ofcom will 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 Ofcom's activities. However, as a matter of policy Ofcom is 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 2003 Act, in producing this RIA, Ofcom has had regard to such general guidance as it considers appropriate including related to 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

- A4.4 In the UK, Ofcom is responsible for the authorisation of civil use of the radio spectrum and achieves this by granting Wireless Telegraphy ("WT") licences under the Wireless Telegraphy Act 2006 (the "2006 Act") and by making Regulations exempting users of particular equipment from the requirement to hold such a licence. Under section 8(1) of the 2006 Act, it is an offence to install or use equipment to transmit without holding a licence granted by Ofcom, unless the use of such equipment is exempted.
- A4.5 Ofcom made the 2005 Regulations to facilitate access to the 865 868 MHz band for the use of Radio Frequency Identification (RFID) equipment on a licence exempt basis. This was in response to significant stakeholder demand. The basic technical parameters on which the 2005 Regulations were based have now been incorporated into a European Commission Decision⁵ ("the Decision) which mandates implementation by all European Union Member States by 23 May 2007. Some technical restrictions contained in the 2005 Regulations are not included in the Decision. As a consequence, in order to comply with the Decision, Ofcom must amend the 2005 Regulations to remove these restrictions and intends to do this

⁵ Commission Decision of 23 November 2006 on harmonisation of the radio spectrum for radio frequency identification (RFID) devices operating in the ultra high frequency (UHF) band (2006/804/EC)

through making a new statutory instrument, the Wireless Telegraphy (Radio Frequency Identification Equipment) (Exemption) (Amendment) Regulations 2007 (the "Proposed Amendment Regulations").

Proposal

- A4.6 This RIA relates to the proposal to update the 2005 Regulations in order to comply with the Decision. The nature of the changes required and affected by the Proposed Amendment Regulations are as follows:
 - removal of all technical restrictions except Frequency Band, Power limits and Channel spacing;
 - editorial updates.

The citizen and/or consumer interest

A4.7 Ofcom takes account of the impact of its decisions upon both citizen and consumer interests in the markets it regulates. When the 2005 Regulations were proposed, the impact of the decision to authorise the use of RFID equipment in the 865-868 MHz band on a licence exempt basis was considered in the consultation run at that time⁶. This consultation examined both the benefits of RFID technology and the wider impact of such issues as privacy concerns. (RFID has been linked to breach of privacy and data protection concerns.) In this instance, the Proposed Amendment Regulations represent no material change to the already established operation of RFID equipment in the 865-868 MHz band and thus no additional impact upon citizen/consumers.

Ofcom's policy objective

- A4.8 Ofcom seeks wherever possible to reduce the regulatory burden on its stakeholders and has supported the development of the Decision to provide a formal basis for the harmonised use of RFID equipment across the EU in the 865-868 MHz band on a licence exempt basis. The Decision establishes a formal regulatory framework in which to promote the benefits of the use of RFID technology.
- A4.9 As an EU Member State, the UK is bound by the terms of the Decision and the requirement to implement them by 23 May 2007.

Options considered

- A4.10 The options open to Ofcom in relation to the implementation of the Decision are as follows:
 - to amend the 2005 Regulations to make them fully compliant;
 - to do nothing.

⁶ Notice of Ofcom's proposal to exempt the use of radio frequency identification equipment in the 865-868 MHz band from Wireless Telegraphy licensing. See http://www.ofcom.org.uk/consult/condocs/wireless865_868/

Analysis of the different options

Amend the 2005 Regulations

A4.11 The 2005 Regulations already encompass the requirements of the Decision but impose additional technical restrictions which are no longer mandated through the regulatory framework. The most efficient route to mandatory compliance therefore is to remove these restrictions.

Do nothing

A4.12 By doing nothing and leaving the 2005 Regulations unchanged, Ofcom would be in breach of the Decision and could be open to infraction proceedings initiated by the European Commission. The Decision allows for Member States to be less restrictive in implementation but not more restrictive. Left unchanged, the 2005 Regulations would impose additional restrictions which do not feature in the Decision.

The preferred option

A4.13 The preferred option therefore is to make the Proposed Amendment Regulations as indicated in order to comply with the Decision. The benefits of this option are the removal of technical restrictions from the 2005 Regulations and compliance with EU law.

Proposed Amendment Regulations

DRAFT STATUTORY INSTRUMENTS

2007 No. []

ELECTRONIC COMMUNICATIONS

The Wireless Telegraphy (Radio Frequency Identification Equipment) (Exemption) (Amendment) Regulations 2007

| Made | - | - | I |] |
|-------------------|---|---|---|---|
| Coming into force | - | - | [|] |

The Office of Communications ("OFCOM") make the following Regulations in exercise of the power conferred by section 8(3) of the Wireless Telegraphy Act $2006(^7)$ ("the Act").

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 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 and commencement

1. These Regulations may be cited as the Wireless Telegraphy (Radio Frequency Identification Equipment) (Exemption) (Amendment) Regulations 2007 and shall come into force on [] May 2007.

Interpretation

2.— \circ The Wireless Telegraphy (Radio Frequency Identification Equipment) (Exemption) Regulations 2005(⁸) are amended in accordance with the following provisions of this regulation.

(1) In regulation 2—

- (a) omit paragraph (a);
- (b) omit paragraph (b);
- (c) omit paragraph (e);

(2) In regulation 3 for "section 1(1) of the Wireless Telegraphy Act 1949" substitute "section 8(1) of the Wireless Telegraphy Act 2006";

(3) In regulation 4 omit paragraph (2) in its entirety.

Chief Executive of the Office of Communications

⁷ 2006 c.36

⁸ S.I. 2005/3471

[] April 2007

For and by the authority of the Office of Communications

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations amend the Wireless Telegraphy (Radio Frequency Identification Equipment) (Exemption) Regulations 2005 (S.I. 2005/3471) (the "principal Regulations") to give effect to the European Commission Decision 2006/804/EC on harmonisation of the radio spectrum frequency for radio frequency identification (RFID) devices operating in the ultra high frequency band(⁹) (the "Decision"). The principal Regulations exempt the establishment or installation of radio frequency identification equipment and the use of radio frequency identification equipment so established or installed from the requirement to be licensed under section 8(1) of the Wireless Telegraphy Act 2006 (c.36) (the "Act").

Regulation 2 amends the principal Regulations to align with the Decision and updates references to the Act.

A full regulatory impact assessment and report of the effect of the Regulations will have on the costs to business is available from OFCOM at Riverside House, 2a Southwark Bridge Road, London SE1 9HA (tel: 020 7981 3000) or on the OFCOM internet web site at <u>www.ofcom.org.uk</u>. Copies of the report have also been placed in the libraries of both Houses of Parliament.

9

OJ L329, 25.11.2006 p64. Notified under document number C(2006) 5599



EN

COMMISSION DECISION

of 23 November 2006

on harmonisation of the radio spectrum for radio frequency identification (RFID) devices operating in the ultra high frequency (UHF) band

(notified under document number C(2006) 5599)

(2006/804/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Decision No 676/2002/EC of the European Parliament and of the Council of 7 March 2002 on a regulatory framework for radio spectrum policy in the European Community (Radio Spectrum Decision) (¹), and in particular Article 4(3) thereof,

Whereas:

- (1) Radio frequency identification (RFID) technology, a specific type of short-range devices, offers potentially significant economic and societal benefits in Europe. Different RFID applications are possible, such as automatic article identification, asset tracking, security and alarm systems, waste management, proximity sensors, anti-theft systems, location systems, data transfer to handheld devices and wireless control systems. The development of devices based on ultra high frequency (UHF) RFID in the EC will contribute to development of the information society and to promotion of innovation.
- (2) Harmonised conditions and legal certainty for the availability of radio spectrum for UHF RFID devices are necessary to allow the identification of products incorporating UHF RFID or services relating to RFID to function throughout Europe. Ensuring a functioning internal market will assist the successful and rapid uptake of RFID technology by supporting economies of scale and cross-border use.
- (3) The purpose of this Decision is limited to RFID systems in which the devices attached to the items to be identified have no autonomous source of energy for radio transmission and transmit solely by reusing the energy radiated onto them by reader devices. So their potential to cause interference to other spectrum users is typically limited. Therefore such devices can share frequency bands with other services which are, or are not, subject to authorisation, without causing harmful interference, and can co-exist with other short range devices. Their

use should therefore not be subject to an individual authorisation pursuant to the Authorisation Directive 2002/20/EC of the European Parliament and of the Council (2). In addition, radio communications services, as defined in the International Telecommunications Union Radio Regulations, have priority over such RFID devices and are not required to ensure the protection of RFID devices against interference and RFID systems shall not cause interference to these radio communications services. Since no protection against interference can therefore be guaranteed to users of RFID devices, it is the responsibility of manufacturers of RFID devices to protect such devices against harmful interference from radio communications services as well as from other short range devices operating in accordance with the applicable Community or national regulations. Pursuant to Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity (³) (the R&TTE Directive) manufacturers should ensure, that RFID devices effectively use the radio frequency spectrum so as to avoid harmful interference to other short-range devices.

- (4) On 11 March 2004 the Commission therefore issued a mandate (⁴) to the CEPT, pursuant to Article 4(2) of the Radio Spectrum Decision, to harmonise frequency use for short-range devices, including RFID devices. In response to that mandate, in its report (⁵) of 15 November 2004 the CEPT established the list of voluntary harmonisation measures which exist in the European Community for short-range devices and stated that a more binding commitment is required from Member States in order to ensure the legal stability of the frequency harmonisation achieved in the CEPT, in particular for the UHF spectrum used by RFIDs.
- (5) The bands proposed by CEPT for harmonisation are covered for use by RFID by harmonised standard EN 302 208 adopted pursuant to Directive 1999/5/EC. This standard describes a listen-before-talk technique meant to provide appropriate mitigation levels to avoid harmful interference to other users in the band. The use of this standard or other relevant harmonised standards gives the presumption of conformity with the essential requirements of the R&TTE Directive.

- (⁴) Mandate to CEPT to analyse further harmonisation of frequency bands in use for short-range devices.
- ⁽⁵⁾ Final report by the ECC in response to the EC mandate to the CEPT on radio frequency identification radio spectrum harmonisation.

⁽¹⁾ OJ L 108, 24.4.2002, p. 1.

⁽²⁾ OJ L 108, 24.4.2002, p. 21.

⁽³⁾ OJ L 91, 7.4.1999, p. 10.

- (6) Harmonisation under this Decision does not exclude the possibility for a Member State to apply, where justified, transitional periods or radio spectrum-sharing arrangements pursuant to Article 4(5) of the Radio Spectrum Decision.
- (7) The use of spectrum is subject to the requirements of Community law for public health protection in particular Directive 2004/40/EC of the European Parliament and of the Council (¹) and Council Recommendation 1999/519/EC (²). Health protection for radio equipment is ensured by conformity of such equipment to the essential requirements pursuant to the R&TTE Directive.
- (8) Due to rapid technological change, new UHF RFID and similar devices will emerge, which will require updates of spectrum harmonisation conditions, taking into account their economic benefits and the requirements of industry and users. Updates of this Decision will therefore be necessary to respond to new developments in the market and technology. If a review reveals the necessity to adapt the Decision, changes will be decided following the procedures specified in the Radio Spectrum Decision for the adoption of implementing measures. The updates could include transition periods to accommodate legacy situations.
- (9) The measures provided for in this Decision are in accordance with the opinion of the Radio Spectrum Committee,

HAS ADOPTED THIS DECISION:

Article 1

The purpose of this Decision is to harmonise the conditions for the availability and efficient use of radio spectrum for RFID devices operating in the ultra high frequency (UHF) band.

Article 2

For the purpose of this Decision:

1. 'RFID devices' means devices for, inter alia, tracking and identification of items by the use of a radio system,

consisting on the one hand of passive devices (tags) mounted on items and, on the other, of transmitter/receiver units (readers) which activate the tags and receive data back;

 'non-interference, and non-protected basis' means that no harmful interference may be caused to any radio communications service and that no claim may be made for protection of these devices against harmful interference originating from radio communications services.

Article 3

1. Member States shall designate and make available, within six months after the entry into force of this Decision and on a non-exclusive, non-interference and non-protected basis, the frequency bands for RFID devices, subject to the specific conditions, as laid down in the Annex to this Decision.

2. Notwithstanding paragraph 1, Member States may request transitional periods and/or radio spectrum-sharing arrangements, pursuant to Article 4(5) of the Radio Spectrum Decision.

3. This Decision is without prejudice to the right of Member States to allow the use of the frequency bands under less restrictive conditions than specified in the Annex to this Decision.

Article 4

Member States shall keep the use of the relevant bands under scrutiny and report their findings to the Commission to allow a timely review of the Decision.

Article 5

This Decision is addressed to the Member States.

Done at Brussels, 23 November 2006.

For the Commission Viviane REDING Member of the Commission

^{(&}lt;sup>1</sup>) OJ L 159, 30.4.2004, p. 1.

⁽²⁾ OJ L 199, 30.7.1999, p. 59.

EN

| UHF Frequency band | Specific conditions | | | |
|-----------------------------|---------------------------|-----------------|--|--|
| Off Frequency band | Max. power/Field strength | Channel spacing | | |
| Sub-band A: 865-865,6 MHz | 100 mW e.r.p. | 200 kHz | | |
| Sub-band B: 865,6-867,6 MHz | 2 W e.r.p. | 200 kHz | | |
| Sub-band C. 867,6-868 MHz | 500 mW e.r.p. | 200 kHz | | |

ANNEX

Channel centre frequencies are 864,9 MHz + (0,2 MHz \times channel number).

The available channel numbers for each sub-band are:

Sub-band A: channel numbers 1 to 3;

Sub-band B: channel numbers 4 to 13;

Sub-band C: channel numbers 14 and 15.

Note: The same equipment is allowed to operate in several sub-bands.