



Notice of Ofcom's proposal to
amend the Wireless Telegraphy
(Automotive Short Range Radar)
(Exemption) (No.2) Regulations
2005

Statutory Notice

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Closing date for responses:	22 March 2010

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Section 1

Executive summary

- 1.1 This document outlines Ofcom's (the Office of Communications) proposal to make the Wireless Telegraphy (Automotive Short Range Radar) (Exemption) (No.2) (Amendment) Regulations 2010 (the "Proposed Amendment Regulations"). These will change the current licence exemption arrangements for the establishment, installation and use of Automotive Short Range Radar equipment ("SRR equipment") in the 23.6 to 24 GHz band.
- 1.2 In 2005, the European Commission adopted Decision (2005/50/EC) on the harmonisation of the 24 GHz range radio spectrum band (21.65 to 26.65 GHz) for the time-limited use by automotive short range radar equipment (the "Decision")¹. The Decision required Member States to permit the use of SRR equipment in this band until 30 June 2013. We implemented this Decision by making The Wireless Telegraphy (Automotive Short Range Radar) (Exemption) (No.2) Regulations 2005 (the "SRR Exemption Regulations")². The SRR Exemption Regulations were amended in 2008 by The Wireless Telegraphy (Automotive Short Range Radar) (Exemption) (No.2) (Amendment) Regulations 2008³.
- 1.3 The Proposed Amendment Regulations alter the current licence exemption parameters in the SRR Exemption Regulations for emissions within the 23.6 to 24.0 GHz band that appear 30° or greater above the horizontal plane. At present emissions within the 23.6 to 24.0 GHz band that appear 30° or greater above the horizontal plane have to be attenuated by at least 25 dB. We propose to increase the required level of attenuation to at least 30 dB as required by Article 4, paragraph 3 of the Decision. As a Member State, the UK is bound by the terms of the Decision and we are obliged to implement them. We therefore have an obligation to transpose this requirement into UK law.
- 1.4 In accordance with the requirements of section 122(4) of the Wireless Telegraphy Act 2006 this document enables stakeholders to comment on the drafting of the Proposed Amendment Regulations. We do not consider it appropriate to first conduct a policy consultation as implementing the Proposed Amendment Regulations is mandatory to ensure that we comply with the Decision. This document therefore gives notice of our proposal to amend the SRR Exemption Regulations.
- 1.5 An impact assessment for the Proposed Amendment Regulations is available at Annex 4 to this document.

Responding to this Notice

- 1.6 This Notice provides an opportunity to make representations about the Proposed Amendment Regulations as the means by which we intend to transpose Article 4, paragraph 3 of the Decision on SRR equipment into UK legislation, rather than seeking views on the content of the Decision itself. The full text of the Decision is set out at Annex 6 and the draft Proposed Amendment Regulations are included in this

¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:021:0015:0020:EN:PDF>

² SI 2005/1585, <http://www.opsi.gov.uk/si/si2005/20051585.htm>

³ SI 2008/237, http://www.opsi.gov.uk/si/si2008/pdf/uksi_20080237_en.pdf

document at Annex 5. Further copies of the draft Proposed Amendment Regulations may be obtained from www.ofcom.org.uk or from Ofcom at Riverside House, 2a Southwark Bridge Road, London SE1 9HA.

- 1.7 Comments on the Proposed Amendment Regulations are invited by **5pm** on **22 March 2010**.

Section 2

Notice

- 2.1 This document discusses our proposal to make the Wireless Telegraphy (Automotive Short Range Radar) (Exemption) (No.2) (Amendment) Regulations 2010 (the “Proposed Amendment Regulations”) to amend the Wireless Telegraphy (Automotive Short Range Radar) (Exemption) (No.2) Regulations 2005 (the “SRR Exemption Regulations”) ⁴.
- 2.2 Information communications technologies and intelligent road safety systems such as SRR equipment have been identified by the EC *eSafety* initiative ⁵ as a significant tool for the improvement of road safety in Europe ⁶.
- 2.3 In January 2005, as part of its *eSafety* initiative to improve road safety in Europe, the EC adopted a Decision (2005/50/EC) (the “Decision”) on the harmonisation of the 24 GHz range radio spectrum band (21.65 to 26.65 GHz) for the time-limited use by automotive short range radar equipment (“SRR equipment”) in the community ⁷. The Decision requires that the 24 GHz band be designated and made available for SRR equipment until 30 June 2013. We consulted on and then implemented the Decision by making the SRR Exemption Regulations ⁸.
- 2.4 The Decision also included a number of future changes to the technical criteria for SRR equipment falling within the exemption. This included that from 30 June 2007 manual deactivation of SRR equipment when entering an exclusion zone around certain radio astronomy sites would no longer be permitted for new units. We consulted on and then implemented this requirement by making the Wireless Telegraphy (Automotive Short Range Radar) (Exemption) (No.2) (Amendment) Regulations 2008 ⁹.
- 2.5 Article 4, paragraph 3 of the Decision now requires a second change to be made to the SRR Exemption Regulations. This paragraph requires that by 2010, emissions within the 23.6 to 24.0 GHz band that appear 30° or greater above the horizontal plane shall be attenuated by at least 30 dB (previously they had been required to be attenuated by at least 25 dB). This document discusses the proposal to make the Proposed Amendment Regulations in order to implement this requirement.
- 2.6 As a Member State of the European Union, the UK is bound by the terms of the Decision and we are required to implement them. We therefore have an obligation to transpose this requirement into UK law. This document therefore gives notice of our intention to amend the SRR Exemption Regulations by making the Proposed Amendment Regulations.

⁴ <http://www.opsi.gov.uk/si/si2005/20051585.htm>

⁵ http://europa.eu.int/information_society/programmes/esafety/index_en.htm

Commission Communication on a European Road Safety Action Programme, COM(2003)311, June 2nd, 2003 at http://europa.eu.int/comm/transport/road/library/rsap/com_2003_0311_en.pdf, and Council Conclusions on the European Road Safety Action Programme, June 5th, 2003

⁷ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:021:0015:0020:EN:PDF>

⁸ <http://www.opsi.gov.uk/si/si2005/20051585.htm>, consultation document and statement <http://www.ofcom.org.uk/consult/condocs/24ghz/>

⁹ http://www.opsi.gov.uk/si/si2008/pdf/uksi_20080237_en.pdf, consultation document and statement <http://www.ofcom.org.uk/consult/condocs/srr/>

Structure of the document

- 2.7 Section 3 describes the general effect of the Proposed Amendment Regulations.
- 2.8 Annexes 1-3 provide information on how to respond to this consultation and our consultation principles.
- 2.9 Annex 4 contains a Regulatory Impact Assessment (RIA) for the Proposed Amendment Regulations. The RIA sets out the risks, costs and benefits of the proposals.
- 2.10 Annex 5 contains a draft copy of the Proposed Amendment Regulations
- 2.11 Annex 6 contains a copy of the Decision.

Next steps

- 2.12 Following the publication of this consultation document, stakeholders are welcome to provide their feedback. The deadline to submit responses to us is **5pm 22 March 2010**. Following the consultation and subject to consideration of responses, we plan to issue a statement and make the final Regulations by May 2010.

Section 3

General effect of the Proposed Regulations

The Legislative Framework

- 3.1 Under section 8(1) of the Wireless Telegraphy Act 2006 (the “WT Act”), it is an offence to install or use wireless telegraphy equipment without holding a licence granted by us, unless the installation or use of such equipment is exempted. We can exempt the establishment, installation and use of wireless telegraphy equipment by making Regulations under section 8(3) of the WT Act. We propose to implement the change outlined in this document by making Proposed Amendment Regulations to amend the SRR Exemption Regulations.
- 3.2 A draft copy of the Proposed Amendment Regulations is included in Annex 5 of this document.

Extent of application

- 3.3 The SRR Exemption Regulations apply in the United Kingdom, the Channel Islands and Isle of Man, and we anticipate that the Proposed Amendment Regulations will also apply in the United Kingdom, the Channel Islands and Isle of Man, subject to formal agreement of the Island Authorities.

The Regulations

- 3.4 Regulation 2 of the Proposed Amendment Regulations introduces new emission limits within the 23.6 to 24.0 GHz band for emissions that appear 30° or greater above the horizontal plane. The effect of the proposed change is to alter the required level of attenuation of emissions within the 23.6 to 24.0 GHz band that appear 30° or greater above the horizontal plane from at least 25 dB to at least 30 dB. This is in line with Article 4, paragraph 3 of the Decision. We believe the Proposed Amendment Regulations represent the best way to ensure that an appropriate authorisation regime is in place for the use of SRR equipment in accordance with the Decision.

Annex 1

Responding to this consultation

How to respond

- A1.1 We invite written views and comments on the issues raised in this document, to be made **by 5pm on 22 March 2010**.
- A1.2 We strongly prefer to receive responses using the online web form at <http://www.ofcom.org.uk/consult/condocs/asrr/howtorespond/form>, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 4), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.
- A1.3 For larger consultation responses - particularly those with supporting charts, tables or other data - please email paul.chapman@ofcom.org.uk attaching your response in Microsoft Word format, together with a consultation response coversheet.
- A1.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.
- Paul Chapman
Floor 3
Spectrum Policy Group
Riverside House
2A Southwark Bridge Road
London SE1 9HA
- Fax: 020 7981 3921
- A1.5 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.

Further information

- A1.6 If you want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please contact Paul Chapman on 020 7981 3069.

Confidentiality

- A1.7 We believe it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all responses on our website, www.ofcom.org.uk, ideally on receipt. If you think your response should be kept confidential, can you please specify what part or whether all of your response should be kept confidential, and specify why. Please also place such parts in a separate annex.
- A1.8 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.

- A1.9 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Our approach on intellectual property rights is explained further on our website at <http://www.ofcom.org.uk/about/accoun/disclaimer/>

Next steps

- A1.10 Following the end of the consultation period, we intend to publish a statement by May 2010.
- A1.11 Please note that you can register to receive free mail Updates alerting you to the publications of relevant Ofcom documents. For more details please see: http://www.ofcom.org.uk/static/subscribe/select_list.htm

Ofcom's consultation processes

- A1.12 We seek to ensure that responding to a consultation is easy as possible. For more information please see our consultation principles in Annex 2.
- A1.13 If you have any comments or suggestions on how we conduct our consultations, please call our consultation helpdesk on 020 7981 3003 or e-mail us at consult@ofcom.org.uk. We would particularly welcome thoughts on how Ofcom could more effectively seek the views of those groups or individuals, such as small businesses or particular types of residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.14 If you would like to discuss these issues or Ofcom's consultation processes more generally you can alternatively contact Vicki Nash, Director Scotland, who is Ofcom's consultation champion:

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

Tel: 0141 229 7401
Fax: 0141 229 7433

Email vicki.nash@ofcom.org.uk

Annex 2

Our consultation principals

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

Before the consultation

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

During the consultation

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

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

A2.5 We will consult for up to 10 weeks depending on the potential impact of our proposals.

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

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

After the consultation

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

Annex 3

Consultation response cover sheet

- A3.1 In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website, www.ofcom.org.uk.
- A3.2 We have produced a coversheet for responses (see below) and would be very grateful if you could send one with your response (this is incorporated into the online web form if you respond in this way). This will speed up our processing of responses, and help to maintain confidentiality where appropriate.
- A3.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to complete their coversheet in a way that allows Ofcom to publish their responses upon receipt, rather than waiting until the consultation period has ended.
- A3.4 We strongly prefer to receive responses via the online web form which incorporates the coversheet. If you are responding via email, post or fax you can download an electronic copy of this coversheet in Word or RTF format from the 'Consultations' section of our website at www.ofcom.org.uk/consult/.
- A3.5 Please put any parts of your response you consider should be kept confidential in a separate annex to your response and include your reasons why this part of your response should not be published. This can include information such as your personal background and experience. If you want your name, address, other contact details, or job title to remain confidential, please provide them in your cover sheet only, so that we don't have to edit your response.

Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

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

Nothing	<input type="checkbox"/>	Name/contact details/job title	<input type="checkbox"/>
Whole response	<input type="checkbox"/>	Organisation	<input type="checkbox"/>
Part of the response	<input type="checkbox"/>	If there is no separate annex, which parts?	

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

DECLARATION

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

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

Name

Signed (if hard copy)

Annex 4

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 here, when read in conjunction with the rest of this document, represents an RIA as defined by section 7 of the Communications Act 2003 (“the Communications Act”) for the Wireless Telegraphy (Automotive Short Range Radar) (Exemption) (No.2) (Amendment) Regulations 2010 (the “Proposed Amendment Regulations”).
- A4.2 You should send us any comments on this RIA by the closing date for this consultation. We will consider all comments before deciding whether to implement our proposals.
- 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 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 assessment¹⁰.

Background

- A4.4 In the UK, we are responsible for the authorising of 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 wireless telegraphy equipment without holding a licence granted by us, unless the use of such equipment is exempted. Section 8(3) enables us to make regulations exempting equipment from the requirement to hold a licence subject to specified terms, provisions and limitations, and under section 8(4) of the WT Act we must make regulations to exempt equipment if it is unlikely to cause undue interference.
- A4.5 Commission Decision 2005/50/EC on harmonisation of the 24 GHz range radio spectrum band for the time-limited use by automotive short-range radar equipment in the Community (the “Decision”) was published on 25 January 2003¹¹. This Decision allowed the use of automotive short range radar in the 24 GHz band and was implemented in the UK through the Wireless Telegraphy (Automotive Short

¹⁰ Available at http://www.ofcom.org.uk/consult/policy_making/guidelines.pdf.

¹¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:021:0015:0020:EN:PDF>

Range Radar) (Exemption) (No. 2) Regulations 2005 (the “SRR Exemption Regulations”).

Proposal

A4.6 This RIA relates to the proposal to make regulations in order to amend the SRR Exemption Regulations to comply with Article 4, paragraph 3 of the Decision. Article 4, paragraph 3 of the Decision requires that by 2010, emissions within the 23.6 to 24.0 GHz band that appear 30° or greater above the horizontal plane shall be attenuated by at least 30 dB (previously they had been required to be attenuated by at least 25 dB).

The citizen and/or consumer interest

A4.7 We take account of the impact of our decisions have upon both citizen and consumer interests in the markets we regulate. In proposing changes to the existing regulations we have considered the wider impact beyond immediate stakeholders in the radiocommunications community. We believe that the proposals will be of benefit to consumers for the following reasons:

- i) It supports measures to improve road safety and may assist in reducing the number of road traffic accidents in the UK, and
- ii) The measure proposed concerns the use of radio equipment on a licence-exempt basis which reduces the regulatory and administrative burden on our stakeholders.

A4.8 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.

A4.9 Based on an initial EIA screening we consider that the Proposed Amendment Regulations have no direct implications for equality or diversity.

Ofcom’s policy objective

A4.10 As a Member State, the UK is bound by the terms of the Decision and the requirement to implement them.

Options considered

A4.11 The options open to us in relation to the implementation of Article 4, paragraph 3 of the Decision are as follows:

- to make the Proposed Amendment Regulations that are compliant with Article 4, paragraph 3 of the Decision; or
- to do nothing.

Analysis of options

Make new regulations

A4.12 The most efficient route to compliance with the Decision is to make the Proposed Amendment Regulations, and ensure that these are as consistent with the Decision as possible.

Do nothing

A4.13 By doing nothing, we would be in breach of the Decision and could be open to infraction proceedings initiated by the European Commission.

The preferred option

A4.14 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 that the UK remains compliant with European Community law.

Evaluation

A4.15 Article 5 of the Decision requires that that the continued availability of this spectrum for short-range radar applications be kept under active scrutiny to ensure that the main premise of the opening this band to such systems remains valid.

A4.16 We will assist the Commission in carrying out these reviews as required.

Annex 5

Proposed Amendment Regulations

DRAFT STATUTORY INSTRUMENTS

2010 No. XXXXX

ELECTRONIC COMMUNICATIONS

The Wireless Telegraphy (Automotive Short Range Radar) (Exemption) (No. 2) (Amendment) Regulations 2010

Made - - - - - ***

Coming into force - - - - - ***

The Office of Communications (“OFCOM”) make the following Regulations in exercise of the powers conferred by section 8(3) of the Wireless Telegraphy Act 2006⁽¹²⁾ (“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 section 122(4)(b) of the Act and have considered the representations made to them before the time specified in the notice in accordance with section 122(4)(c) of the Act.

Citation and Commencement

1. These Regulations may be cited as The Wireless Telegraphy (Automotive Short Range Radar) (Exemption) (No. 2) (Amendment) Regulations 2010 and shall come into force on [date].

Amendment of the Wireless Telegraphy (Automotive Short Range Radar) (Exemption) (No. 2) Regulations 2005

2.—(1) The Wireless Telegraphy (Automotive Short Range Radar) (Exemption) (No. 2) Regulations⁽¹³⁾ are amended in accordance with the following paragraph of this regulation.

(2) In regulation 4(5) for “by at least 25 decibels” substitute “by at least 30 decibels”.

[Date]

Chief Executive of the Office of Communications
For and by the Office of Communications

⁽¹²⁾ 2006 c.36

⁽¹³⁾ S.I. 2005/1585, amended by S.I. 2008/237

Annex 6

European Commission Decision

25.1.2005

EN

Official Journal of the European Union

L 2

COMMISSION

COMMISSION DECISION

of 17 January 2005

on the harmonisation of the 24 GHz range radio spectrum band for the time-limited use by automotive short-range radar equipment in the Community

(notified under document number C(2005) 34)

(Text with EEA relevance)

(2005/50/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) The Commission communication to the Council and the European Parliament of 2 June 2003 on 'European Road Safety Action Programme — Halving the number of road accident victims in the European Union by 2010: a shared responsibility'⁽²⁾ sets out a coherent approach to road safety in the European Union. Furthermore, in its communication to the Council and the European Parliament of 15 September 2003, entitled 'Information and communications technologies for safe and intelligent vehicles'⁽³⁾, the Commission announced its intention to improve road safety in Europe, to be known as the eSafety initiative, by using new information and communications technologies and intelligent road safety systems, such as automotive short-range radar equipment. On 5 December 2003 in its conclusions on road safety⁽⁴⁾ the Council also called for the improvement of vehicle safety by the promotion of new technologies such as electronic safety.

⁽¹⁾ OJ L 108, 24.4.2002, p. 1.

⁽²⁾ COM(2003) 311.

⁽³⁾ COM(2003) 542.

⁽⁴⁾ Conclusions of the Council of the European Union on road safety, 15058/03 TRANS 307.

(2) The rapid and coordinated development and deployment of automotive short-range radar within the Community require a harmonised radio frequency band to be available for this application in the Community with delay and on a stable basis, in order to provide necessary confidence for industry to make necessary investments.

(3) On 5 August 2003, with a view to such harmonisation the Commission issued a mandate, pursuant to Article 4(2) of Decision No 676/2002/EC, to the European Conference of Postal and Telecommunications Administrations (CEPT), to harmonise the radio spectrum and facilitate a coordinated introduction of automotive short-range radar.

(4) As a result of that mandate, the 79 GHz range band has been identified by CEPT as the most suitable band for long term development and deployment of automotive short-range radar, with the introduction of this measure by January 2005 at the latest. The Commission therefore adopted Decision 2004/545/EC of 8 July 2004 on the harmonisation of the radio spectrum in the 79 GHz range for the use of automotive short-range radar equipment in the Community⁽⁵⁾.

(5) However, automotive short-range radar technology in the 79 GHz range band is still under development and is not immediately available on a cost-effective basis, although it is understood that the industry will promote the development of such a technology in order to make it available at the earliest possible date.

⁽⁵⁾ OJ L 241, 13.7.2004, p. 66.

- (6) In its report of 9 July 2004 to the European Commission under the mandate of 5 August 2003, CEPT identified the 24 GHz range radio spectrum band as being a temporary solution which would enable the early introduction of automotive short-range radar in the Community to meet the objectives of the *e-Safety* initiative, since technology is considered sufficiently mature for operation in that band. Therefore, Member States should take the appropriate measures based on their particular national radio spectrum situation to make sufficient radio spectrum available on a harmonised basis in the 24 GHz range radio spectrum band (21,65 to 26,65 GHz), while protecting existing services operating in that band from harmful interference.
- (7) According to footnote 5.340 of the Radio Regulations of the ITU, all emissions are prohibited in the band 23,6 to 24,0 GHz, in order to protect the use on a primary basis of this band by the radio astronomy, earth exploration satellite and space research passive services. This prohibition is justified by the fact that harmful interference to these services by emissions in the band cannot be tolerated.
- (8) Footnote 5.340 is subject to national implementation and may be applied in conjunction with Article 4.4 of the Radio Regulations, pursuant to which no frequency may be assigned to a station in derogation of the Radio Regulations, except on the express condition that such a station, when using such a frequency assignment, shall not cause harmful interference to a station operating in accordance with the provision of the ITU rules. Therefore, in its report to the Commission, CEPT pointed out that footnote 5.340 does not strictly prevent administrations from using bands falling under the footnote, provided that they are neither impacting services of other administrations nor trying to have international recognition under the ITU of such use.
- (9) The 23,6 to 24,0 GHz frequency band is of primary interest for the scientific and meteorological communities to measure water vapour content essential for temperature measurements for the earth exploration satellite service. In particular, this frequency plays an important role in the Global Monitoring for Environment and Security initiative (GMES) aiming at an operational European warning system. The 22,21 to 24,00 GHz frequency range is also needed to measure spectral lines of ammonia and water as well as continuum observations for the radio astronomy service.
- (10) The bands 21,2 to 23,6 GHz and 24,5 to 26,5 GHz are allocated to the fixed service on a primary basis in the ITU Radio Regulations and are extensively used by fixed links to meet the infrastructure requirement for existing 2G and 3G mobile networks and to develop broadband fixed wireless networks.
- (11) Based on studies of compatibility between automotive short-range radar and fixed services, earth exploration satellite services and radio astronomy services, CEPT has concluded that an unlimited deployment of automotive short-range radar systems in the 24 GHz range radio spectrum band will create unacceptable harmful interference to existing radio applications operating in this band. Considering ITU Radio Regulations and the importance of these services, any introduction of automotive short-range radar at 24 GHz could be made only on condition that these services in the band are sufficiently protected. In this respect, while the signal emanating from automotive short-range radar equipment is extremely low in most of the 24 GHz frequency range, it is important to take into account the cumulative effect of the use of many devices, which individually might not cause harmful interference.
- (12) According to CEPT, existing applications operating in or around the 24 GHz band would increasingly suffer significant levels of harmful interference if a certain level of penetration of vehicles using the 24 GHz range radio spectrum band for automotive short-range radars were to be exceeded. CEPT concluded in particular that sharing between earth exploration satellite services and automotive short-range radar could only be feasible on a temporary basis if the percentage of vehicles equipped with 24 GHz automotive short-range radar was limited to 7,0% in each national market. While this percentage has been calculated on the basis of earth exploration satellite pixels, national markets are used as the reference against which to calculate the threshold, as this represents the most effective means of carrying out this monitoring.
- (13) Furthermore, the CEPT report concluded that to maintain the protection requirements of the fixed service, sharing with automotive short-range radar could only be feasible on a temporary basis if the percentage of vehicles equipped with automotive short-range radar within sight of a fixed service receiver was limited to less than 10%.
- (14) It is therefore presumed on the basis of the work carried out by CEPT that harmful interference should not be caused to other users of the band where the total number of vehicles registered, placed on the market or put into service equipped with 24 GHz automotive short-range radar does not exceed the level of 7% of the total number of vehicles in circulation in each Member State.
- (15) It is not presently anticipated that this threshold will be reached before the reference date of 30 June 2013.

- (16) Several Member States also use the 24 GHz range radio spectrum band for radar speed meter control which contributes to traffic safety. Following compatibility studies with automotive short-range radar of a number of these devices operating in Europe, CEPT has concluded that compatibility is possible under certain conditions, principally by decoupling the centre frequencies of the two systems by at least 25 MHz, and that the risk of harmful interference is low and will not create false speed measurements. Manufacturers of vehicles using automotive short-range radar systems have also committed themselves to continue taking appropriate steps to ensure that the risk of interference to radar speed meters is minimal. The reliability of radar speed meter equipment will therefore not be affected by the operation of automotive short-range radar to any significant extent.
- (17) Some Member States will in the future use the band 21,4 to 22,0 GHz for broadcast satellite services in the direction space-to-earth. Following compatibility studies, relevant national administrations have concluded that no compatibility problems exist if the emissions of automotive short-range radar are limited to no more than $-61,3$ dBm/MHz for frequencies below 22 GHz.
- (18) The above presumptions and precautions need to be kept under ongoing objective and proportionate review by the Commission assisted by the Member States, in order to assess on the basis of concrete evidence whether the threshold of 7% will be breached in any national market before the reference date, whether harmful interference has been or is likely to be caused within a short period of time to other users of the band by the breach of the threshold of 7% in any national market, or whether harmful interference has been caused to other users of the band even below the threshold.
- (19) Therefore, as a result of information that becomes available as part of the review process, modifications to the present Decision may turn out to be necessary, in particular to ensure that there is no harmful interference caused to other users of the band.
- (20) Accordingly, there can be no expectation that the band of 24 GHz will continue to be available for automotive short-range radar until the reference date, if any of the abovementioned presumptions prove not to be valid at any time.
- (21) In order to facilitate and render more effective the monitoring of the use of the 24 GHz band and the review process, Member States may decide to draw more directly upon manufacturers and importers for information required in relation to the review process.
- (22) As reported by CEPT, sharing between automotive short-range radar and the radio astronomy service within the 22,21 to 24,00 GHz band could lead to harmful interference for the latter if short-range radar-equipped vehicles were allowed to operate unhindered within a certain distance from each radio astronomy station. Therefore, and bearing in mind that 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⁽¹⁾ requires that radio equipment must be constructed so as to avoid harmful interference, automotive short-range radar systems operating in bands used by radio astronomy in the 22,21 to 24,00 GHz range should be deactivated when moving within these areas. The relevant radio astronomy stations and their associated exclusion zones should be defined and justified by national administrations.
- (23) In order to be effective and reliable, such deactivation is best done automatically. However, to allow an early implementation of automotive short-range radar in 24 GHz, a limited amount of transmitters with manual deactivation can be allowed as, with such a limited deployment, the probability of causing harmful interference to the radio astronomy service is expected to remain low.
- (24) The temporary introduction of automotive short-range radar in the 24 GHz range radio spectrum band has an exceptional character and must not be considered as a precedent for the possible introduction of other applications in the bands where ITU Radio Regulations footnote 5.340 applies, be it for temporary or permanent use. Moreover, automotive short-range radar must not be considered as a safety-of-life service within the meaning of the ITU Radio Regulations and must operate on a non-interference and non-protected basis. Furthermore, automotive short-range radar should not constrain the future development in the use of the 24 GHz band of applications which are protected by footnote 5.340.
- (25) The placing on the market and operation of 24 GHz automotive short-range radar equipment in a stand-alone mode or retrofitted in vehicles already on the market would not be compatible with the objective of avoiding harmful interference to existing radio applications operating in this band, since it could lead to an uncontrolled proliferation of such equipment. In contrast, it should be easier to control the use of automotive short-range radar systems in the 24 GHz band solely as part of a complex integration of the electrical harness, automotive design and software package of a vehicle and originally installed in the new vehicle, or as replacement of original vehicle-mounted automotive short-range radar equipment.

⁽¹⁾ OJ L 91, 7.4.1999, p. 10. Directive as last amended by Regulation (EC) No 1882/2003 (OJ L 284, 31.10.2003, p. 1).

(26) This Decision will apply taking into account and without prejudice to Council Directive 70/156/EEC of 6 February 1970 on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers⁽¹⁾ and to Directive 1999/5/EC.

(27) 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 the 24 GHz range radio spectrum band for automotive short-range radar equipment.

Article 2

For the purposes of this Decision, the following definitions shall apply:

1. '24 GHz range radio spectrum band' means the 24,15 +/- 2,50 GHz frequency band;
2. 'automotive short-range radar equipment' means equipment providing road vehicle-based radar functions for collision mitigation and traffic safety applications;
3. 'automotive short-range radar equipment put into service in the Community' means automotive short-range radar equipment originally installed or replacing one so installed in a vehicle which will be or which has been registered, placed on the market or put into service in the Community;
4. 'on non-interference and non-protected basis' means that no harmful interference may be caused to other users of the band and that no claim may be made for protection from harmful interference received from other systems or services operating in that band;
5. 'reference date' means 30 June 2013;
6. 'transition date' means 30 June 2007;
7. 'vehicle' means any vehicle as defined by Article 2 of Directive 70/156/EEC;
8. 'deactivation' means the termination of emissions by automotive short-range radar equipment;
9. 'exclusion zone' means the area around a radio astronomy station defined by a radius equivalent to a specific distance from the station;

⁽¹⁾ OJ L 42, 23.2.1970, p. 1. Directive as last amended by Commission Directive 2004/104/EC (OJ L 337, 13.11.2004, p. 13).

10. 'duty cycle' means the ratio of time during any one-hour period when equipment is actively transmitting.

Article 3

The 24 GHz range radio spectrum band shall be designated and made available as soon as possible and no later than 1 July 2005, on a non-interference and non-protected basis, for automotive short-range radar equipment put into service in the Community which complies with the conditions laid down in Articles 4 and 6.

The 24 GHz range radio spectrum band shall remain so available until the reference date, subject to the provisions of Article 5.

After that date, the 24 GHz range radio spectrum band shall cease to be available for automotive short-range radar equipment mounted on any vehicle except where that equipment was originally installed, or is replacing equipment so installed, in a vehicle registered, placed on the market or put into service before that date in the Community.

Article 4

The 24 GHz range radio spectrum band shall be available for the ultra-wide band part of automotive short-range radar equipment with a maximum mean power density of -41,3 dBm/MHz effective isotropic radiated power (e.i.r.p.) and peak power density of 0 dBm/50MHz e.i.r.p., except for frequencies below 22 GHz, where the maximum mean power density shall be limited to -61,3 dBm/MHz e.i.r.p.

The 24,05 to 24,25 GHz radio spectrum band is designated for the narrow-band emission mode/component, which may consist of an unmodulated carrier, with a maximum peak power of 20 dBm e.i.r.p. and a duty cycle limited to 10% for peak emissions higher than -10 dBm e.i.r.p.

Emissions within the 23,6-24,0 GHz band that appear 30° or greater above the horizontal plane shall be attenuated by at least 25 dB for automotive short-range radar equipment placed on the market before 2010 and thereafter by at least 30 dB.

Article 5

1. The continued availability of the 24 GHz range radio spectrum band for automotive short-range radar applications shall be kept under active scrutiny to ensure that the main premise of opening this band to such systems remains valid, which is that no harmful interference is caused to other users of the band, in particular through the timely verification of:

- (a) the total number of vehicles registered, placed on the market or put into service equipped with 24 GHz automotive short-range radar in each Member State, to verify that this number does not exceed the level of 7% of the total number of vehicles in circulation in each Member State;
- (b) whether adequate information has been made available by Member States or by manufacturers and importers regarding the number of 24 GHz short-range radar-equipped vehicles for the purpose of monitoring effectively the use of the 24 GHz band by automotive short-range radar equipment;
- (c) whether the individual or cumulative use of 24 GHz automotive short-range radar is causing or is likely to cause within a short period of time harmful interference to other users in the 24 GHz band or in adjacent bands in at least one Member State, whether or not the threshold referred to in (a) has been reached;
- (d) the continuing appropriateness of the reference date.

2. In addition to the review process in paragraph 1, a fundamental review shall be carried out by 31 December 2009 at the latest to verify the continuing relevance of the initial assumptions concerning the operation of automotive short-range radar in the 24 GHz range radio spectrum band, as well as to verify whether the development of automotive short-range radar technology in the 79 GHz range is progressing in such a way as to ensure that automotive short-range radar applications operating in this radio spectrum band will be readily available by 1 July 2013.

3. The fundamental review may be triggered by a reasoned request by a member of the Radio Spectrum Committee, or at the Commission's own initiative.

4. The Member States shall assist the Commission to carry out the reviews referred to in paragraphs 1 and 2 by ensuring that the necessary information is collected and provided to the Commission in a timely manner, in particular the information set out in the Annex.

Article 6

1. Automotive short-range radar equipment mounted on vehicles shall only operate when the vehicle is active.
2. Automotive short-range radar equipment put into service in the Community shall ensure protection of the radio astronomy stations operating in the radio spectrum band 22,21 to 24,00 GHz defined in Article 7 through automatic deactivation in a defined exclusion zone or via another method providing equivalent protection for these stations without driver intervention.
3. By way of derogation to paragraph 2, manual deactivation will be accepted for automotive short-range radar equipment put into service in the Community operating in the 24 GHz range radio spectrum band before the transition date.

Article 7

Each Member State shall determine the relevant national radio astronomy stations to be protected pursuant to Article 6(2) in its territory and the characteristics of the exclusion zones pertaining to each station. This information, supported by appropriate justification, shall be notified to the Commission within six months of adoption of this Decision, and published in the *Official Journal of the European Union*.

Article 8

This Decision is addressed to the Member States.

Done at Brussels, 17 January 2005.

For the Commission
Viviane REDING
Member of the Commission

ANNEX

Information required for monitoring the use of the 24 GHz range radio spectrum band by automotive short-range radar

This Annex establishes the data required to verify the penetration rate of automotive vehicles equipped with short-range radar in each Member State of the European Union in accordance with Article 5. This data shall be used to calculate the proportion of vehicles equipped with short-range radar using the 24 GHz range radio spectrum compared to the total number of vehicles in circulation in each Member State.

The following data shall be collected on a yearly basis:

- (1) the number of vehicles equipped with short-range radar using the 24 GHz range radio spectrum band produced and/or placed on the market and/or registered for the first time during the reference year in the Community;
- (2) the number of vehicles equipped with short-range radar using the 24 GHz range radio spectrum band imported from outside the Community during the reference year;
- (3) the total number of vehicles in circulation during the reference year.

All data shall be accompanied by an evaluation of the uncertainty related to the information.

In addition to the above data, any other relevant information which would assist the Commission in maintaining an adequate overview on the continued use of the 24 GHz range radio spectrum band by automotive short-range radar devices shall be made available in a timely fashion, including information on:

- current and future market trends, both within and outside the Community,
- after-market sales and retrofitting of equipment,
- the state of progress of alternative technologies and applications, notably automotive short-range radar operating in the 79 GHz range radio spectrum band according to Decision 2004/545/EC.