Notice of Ofcom’s proposal to exempt automotive short-range radar users at 79 GHz from wireless telegraphy licensing

Consultation

Publication date: 14 January 2005
Closing Date for Responses: 9 December 2004
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Section 1

Summary

1.1 In July 2004, as part of its eSafety initiative to improve road safety in Europe, the European Commission adopted a Decision (2004/545/EC) on the harmonisation of radio spectrum in the 79 GHz range for the use of automotive short-range radar equipment (“SRR equipment”) in the Community (the “Decision”). The Decision requires that the 79 GHz band be designated and made available for SRR equipment. This band includes 77, 78, 79 and 80 GHz. The Decision 2004/545/EC is available at Annex 4 of this document.

1.2 The Decision is addressed to all Member States, and the measures provided for in it should be implemented by 1st January 2005, although 79GHz SRR devices are not expected to be commercially available for several years.

1.3 To implement the Decision Ofcom proposes to:

i. designate the 79 GHz band for use by SRR equipment in the UK Plan for Frequency Authorisation\(^1\); and

ii. make the band available for this purpose by a statutory instrument (regulations) which will permit the use of SRR equipment without the need to hold a licence under the Wireless Telegraphy Act 1949 (the “1949 Act”).

1.4 In order to exempt the use of the equipment Ofcom will make new regulations: the Wireless Telegraphy (Automotive Short Range Radar) (Exemption) Regulations 2005 (the “Proposed Regulations”). The Proposed Regulations will be made in line with the measures provided for in the Decision.

1.5 The Proposed Regulations are available for comment and are included at Annex 3 of this document. A number of statutory steps have to be taken to bring the regulations into force and this consultation forms part of that process.

1.6 Section 2 of this document discusses the background to Ofcom’s proposals and contains the notice of Ofcom’s proposal to make the Proposed Regulations.

1.7 Section 3 of this document sets out the extent of application, scope and intended effect of the draft Proposed Regulations.

1.8 A Regulatory Impact Assessment (RIA) for the Proposed Regulations is available in section 4. The RIA sets out the risks, costs and benefits of the proposals and the effects that the proposals will have on the costs to business.

1.9 Comments are requested by 14 January 2005. Ofcom then intends to make the final regulations as soon as practical.

\(^1\) [http://www.ofcom.org.uk/static/archive/ra/topics/eudirectives/fap/fapsearch.htm](http://www.ofcom.org.uk/static/archive/ra/topics/eudirectives/fap/fapsearch.htm)
Notice of Ofcom’s proposal to exempt automotive short-range radar users at 79 GHz from wireless telegraphy licensing

Section 2

Notice

Background to proposals

2.1 Information communications technologies and intelligent road safety systems such as automotive short-range radar equipment (SRR) have been identified by the European Commission’s (EC) eSafety initiative as a significant tool for the improvement of road safety in Europe and as one of a number of measures that could address the overall transport policy goal for reducing road fatalities in Europe by half by 2010.

2.2 The Commission’s policy includes the development and operation of SRR equipment in new vehicles sold within the common market at the earliest date. However, for this to happen, it is necessary to identify and make available harmonised frequency bands at a community level in order to provide confidence to the industry to make the appropriate investments.

2.3 Within this context, the EC issued a mandate to the European Conference of Postal and Telecommunications Administrations (CEPT) to harmonise spectrum to facilitate a coordinated EU introduction of automotive SRR systems. As a result of that mandate, the 79GHz band, covering 77-81 GHz, has been identified by the CEPT as the most suitable band for the permanent development and deployment of SRR equipment. Following the results of that work the EC adopted a decision on the harmonisation of radio spectrum in the 79GHz range for the use of automotive SRR equipment in the Community (the ‘Decision’). The Decision is available at Annex 4 to this document.

2.4 The Decision designates the use of SRR in the 79GHz band in order to encourage the industry to deploy automotive SRR equipment that can operate on that band.

2.5 In the United Kingdom (U.K), the relevant authority that has the power to implement the measures provided for in the Decision into national law is Ofcom. Ofcom makes and applies the United Kingdom Plan for Frequency Authorisation under section 153 of the Communications Act 2003.

2.6 Ofcom is also responsible for granting wireless telegraphy licences under the 1949 Act and for making regulations exempting users of particular equipment from the requirement to hold such a licence. Under section 1 of the 1949 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.

2.7 Ofcom considers that because “users” of SRR equipment will be vehicle drivers, licensing is impractical and cumbersome. If a licensing approach were adopted the driver of each vehicle with SRR equipment installed in it in the U.K. would need a

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2 http://europa.eu.int/information_society/programmes/esafety/index_en.htm
4 Mandate to CEPT to harmonise radio spectrum to facilitate a coordinated EU introduction of automotive short-range radar systems, August 5th 2003 at http://europa.eu.int/information_society/topics/radio_spectrum/docs/pdf/mandates/rscom0315_mandate_srr.pdf
6 http://www.ofcom.org.uk/static/archive/ra/topics/eudirectives/fap/fapsearch.htm
wireless telegraphy licence in order to use the equipment. Further, licence exemption is appropriate because there are presently no other users of this band in the UK currently and there is therefore no current need to impose licensing in order to avoid the effects of harmful interference on other users of that band.

2.8 Designating the 79GHz band for licence exempt use by SRR equipment does not result in any exclusion of other uses of this band in the future. In other words, when we make exemption regulations users should bear in mind that users are quite likely to be sharing the relevant spectrum with present and future users.

2.9 It should be noted that technology for the 79GHz band is not yet commercially available. The European Commission, Member States and the automotive industry are also currently considering allowing temporary limited use of the 24GHz band, covering 21.5-26.5GHz for SRR equipment. A final decision on the 24GHz band has not yet been reached. This may be the subject of further exemption regulations in due course.

Notice of proposal

2.10 Ofcom proposes to make the Wireless Telegraphy (Automotive Short Range Radar) (Exemption) Regulations 2005 (the ‘Proposed Regulations’) by exempting the establishment, installation and use of SRR equipment in the 79 GHz range from the requirement to hold a licence contained in section 1(1) of the 1949 Act. The draft Wireless Telegraphy Automotive Short Range Radars (Exemption) Regulations 2005 are available in Annex 3 to this document.

2.11 The general effect of the Proposed Regulations is discussed in section 3 of this document.

2.12 A Regulatory Impact Assessment (RIA) for the Proposed Regulations is available in section 4. The RIA sets out the risks, costs and benefits of the proposals and the effects that the proposals will have on the costs to business.

2.13 Comments or representations with respect to the proposed regulations are invited by 14 January 2005. A one month consultation period reflects statutory requirements. Comments should be sent to:

Christina Spyrelli
Ofcom
Riverside House
2a Southwark Bridge Road
London SE1 9HA
020 7783 4312

2.14 Following this consultation, Ofcom intends to make the final regulations as soon as practicable in 2005.

2.15 Hard copies of this notice and the draft Wireless Telegraphy (Automotive Short Range Radar) (Exemption) Regulations 2005 can be obtained from:

Christina Spyrelli
Ofcom
Riverside House
2a Southwark Bridge Road
London SE1 9HA
020 7783 4312
2.16 Electronic copies are also available and this notice has been placed on Ofcom’s website.
Notice of Ofcom’s proposal to exempt automotive short-range radar users at 79 GHz from wireless telegraphy licensing

Section 3

General effect of the draft Wireless Telegraphy (Automotive Short Range Radar) (Exemption) Regulations 2005

The legislative framework

3.1 These regulations are to be made under sections 1(1) of the 1949 Act and section 403(7) of the Communications Act 2003. According to these sections Ofcom can by regulations exempt the establishment, installation and use of wireless telegraphy equipment.

3.2 A draft of the Proposed Regulations is set out in Annex 3 of this document.

Extent of application

3.3 The Proposed Regulations will apply in the United Kingdom and in the Channel Islands and Isle of Man, provided that the Island Authorities agree.

Intended effect of the Proposed Regulations

3.4 SRR equipment is defined in the Proposed Regulations as equipment installed in a vehicle providing radar functions for collision mitigation and traffic safety applications.

3.5 The Proposed Regulations will exempt users of SRR equipment operating in 79 GHz band from the requirement under section 1 of the 1949 Act to hold a wireless telegraphy licence. In accordance with the Decision, the 79GHz band is defined as the frequency range between 77 and 81GHz.

3.6 Also, in accordance with the Decision, the regulations require that the maximum mean power density must not exceed the -3dBm/MHz effective isotropic radiated power (e.i.r.p.) associated with a peak limit of 55dBm e.i.r.p and must be less than -9 dBm/MHz outside the vehicle in which it is installed.

3.7 The Decision requires that the 79 GHz band is designated for SRR equipment on a “non-interference and non-protected basis”. The Decision defines that expression as meaning 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 operators operating in the band”. The 79 GHz band is to be designated on that basis in the UK Plan for Frequency Authorisation.

3.8 These requirements are also reflected in the Proposed Regulations. The SRR equipment will be exempt from licensing on the basis that it does not contribute to undue interference to wireless telegraphy to other users of the band by virtue of regulation 5(1)(c) of the Wireless Telegraphy (Exemption) Regulations 2003. Under section 19(5) of the Wireless Telegraphy Act 1949, interference is not to be considered "undue" unless it is also harmful.

3.9 Under the Proposed Regulations (and the Wireless Telegraphy (Exemption) Regulations 2003) no legal protection from harmful interference by other users of the

http://www.ofcom.org.uk/static/archive/ra/topics/eudirectives/fap/fapsearch.htm
band is offered to SRR equipment (and other exempt equipment) and so the exemption is consistent with the “non-protected” requirement.
Section 4

Regulatory Impact Assessment – The draft Wireless Telegraphy (Automotive Short Range Radar) (Exemption) Regulations 2005

4.1 The analysis presented in this section of this document, when read in conjunction with the rest of this document, represents a Regulatory Impact Assessment (RIA), as defined by section 7 of the Communications Act 2003 (the 'Act'). You should send any comments on this RIA to us by the closing date for this consultation. We will consider all comments before deciding whether to implement our proposals.

4.2 RIAs provide a valuable way of assessing different options for regulation and showing why the preferred option was chosen. They form part of best practice policy-making and are commonly used by other regulators. This is reflected in section 7 of the Act, which means that generally we have to carry out RIAs where our 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. In accordance with section 7 of the Act, in producing the RIA in this document Ofcom has had regard to such general guidance as it considers appropriate, including related Cabinet Office guidance.

Proposal, purpose and intended effect

4.3 Ofcom is proposing to:

1. Designate the 79GHz band for use by automotive short-range radar equipment (SRR); and

2. Permit the use of SRR equipment without the need to hold a licence (i.e. national regulations will set the conditions for use).

4.4 The intended purpose of this measure is to facilitate the development and uptake of SRR equipment within UK, with a view to improving road safety through the use of intelligent road safety systems to both avoid and mitigate road accidents. These systems can, for example, provide collision warnings, warnings about excessive speed, or assist with safe following.

4.5 Research into the road safety initiatives has identified information communications technologies and intelligent road safety systems, such as those based around SRR equipment, as one of the most important tools in achieving the EC road safety goal of reducing road fatalities in Europe by half by 2010. With this in mind, the European Commission Decision 2004/545/EC has designated the 79GHz band as the harmonised band for this equipment.
Benefits and costs

Designating 79GHz band for SRR equipment

4.6 In 2000 road accidents killed over 40,000 people in the EU and injured more than 1.7 million, at an estimated cost of €160 billion (equivalent to 2% of Gross Domestic Product). In the UK alone there were approaching 4,000 fatalities in 2000 and this number has remained broadly constant since then. For example, in 2002 3,431 people were killed and 299,174 were injured in road accidents in the UK.

4.7 The Department for Transport (DFT) provides estimates of the value generated (i.e. benefits) from preventing road fatalities and injuries. Its estimates for 2002, which include both the economic and social benefits generated from preventing road accident casualties, indicate an average benefit of £40,290 per casualty prevented (this is the average over fatalities, serious and slight injuries). Therefore, preventing only 1% of the casualties in the UK in 2002 would have been expected to benefit the UK economy and its citizens by £122 million (in 2002 prices). This estimate only includes the benefits from preventing casualties hence will under-estimate the total benefits to the UK economy. Other benefits which would accrue from accident prevention include a reduction in vehicle damage costs in damage-only accidents. These benefits could be significant, for example, the DFT estimated that damage-only accidents cost £4,951 million in 2002.

4.8 Using estimates of the rate of uptake of road safety technology in new vehicles (for example, the rate of update for Anti-lock Breaking (ABS) and Electronic Stability Programme (ESP) systems) an estimate of the proportion of the vehicle stock which may be fitted with SRR equipment has been derived. This evidence suggests that between 2010 and 2014 the percentage of the total vehicle stock fitted with this equipment may increase from 1% to 13%. Based on this information, and assuming that this equipment may only be successful in stopping 5% to 10% of accidents involving vehicles with the equipment installed, the net present value of the benefits from using SRR are estimated to range from £139 to £279 million over this period.

4.9 Whilst the results presented above are only indicative in nature, as it is not possible to provide precise quantification of the reduction in road casualties which would be achieved through the use of SRR equipment in the 79GHz band, the results obtained indicate that significant benefits can be achieved by relatively limited reductions in the number of accidents.

4.10 Despite the lack of precise quantitative indications there is evidence to suggest that the impact of SRR equipment on road accident rates may be significant. Road safety initiatives, such as improved crashworthiness, mandating the wearing of seatbelts, and the introduction of air bags and improved braking systems (such as ABS), have resulted in the number of deaths in the EU falling year on year whilst road use has increased significantly. However, the EU eSafety forum considers that the contribution of these conventional safety measures is reaching its limit and that intelligent vehicle safety (IVS) systems are a necessary development for further reductions in the level of road fatalities.

4.11 This is supported by research into the cause of accidents, which has shown that in almost 75% of all accidents human behaviour is the sole cause. Therefore, equipment which corrects for human error would be expected to have an appreciable impact upon the incidence of accidents. Further to this, estimates by the US National Highway Traffic Safety Agency suggest that accidents caused by lane changes and lane departures, which are two of the most important causes of road deaths, would be
expected to fall by 50% due to the introduction of IVS systems. Whilst, a study completed in the Netherlands estimated that the introduction of this technology would be expected to reduce all side impact accidents by 37% and all single vehicle accidents due to lane departures by 24%.

4.12 Therefore, the evidence presented above suggests that significant benefits could accrue from the use of the 79GHz spectrum to provide SRR equipment for use in IVS systems. Additionally, the harmonisation of the use of this band would be expected to increase these benefits through faster development of the technology and continuity of road safety protection when travelling throughout the EU.

4.13 The technology underlying IVS systems is currently costly (for example, the cost to automotive manufactures of the systems which are currently on the market is in the region of €2,000 per vehicle). This cost, when compared to the price of middle and bottom of the range vehicles, would be expected to act as a limiting factor upon the uptake of these systems. One variable which would assist in reducing the cost of these systems is the volume of production. The fixed costs involved in developing these systems (due to, for example, the research and development required) means that increasing the production volume would be expected to lower the price of these systems. Harmonising the spectrum band for the use of this equipment across Europe would assist in allowing manufacturers to generate higher volumes for this equipment. It may even be the case that Europe-wide production volumes represent the minimum efficient scale of production for the development of some IVS systems.

4.14 In comparison to the benefits, the costs of regulating this band for use of SRR equipment are likely to be both minimal (in the short to medium term) and uncertain (in the longer term). The 79GHz band is currently unencumbered, and as technological developments are still required to facilitate use of this spectrum, there are unlikely to be any other possible users of this band in the short to medium term. This however, also creates uncertainty about the possible future opportunity cost of allowing SRR usage in this band, as it is not possible to predict the value which could be generated by other future users of this spectrum.

Allowing licence exempt use of SRR equipment in the 79GHz band

4.15 The users of SRR equipment within this band will be individual vehicle owners. Given the number of vehicles within the UK the cost of imposing a licensing regime on use of this band would be expected to involve significant costs, both on the licensing body and upon individual users. These costs could accrue from both administering the licensing regime and from a smaller reduction in casualties if licensing acted as a barrier to use of the technology.

4.16 These costs would need to be assessed against the possible benefits of licensing rather than allowing licence exempt use. There are two reasons to suggest that these benefits would be small in magnitude:

4.17 Firstly, as there are currently no other users of this band, use of this equipment will not create interference to other users (in this band). Secondly, there are reasons to suggest that any interference that would be caused by this technology (both in terms of in-band and out-of-band interference) would be both minimal and transitory in nature: the radar equipment uses wide-band technology, the radar travels only limited distances, and (expect in the vicinity of busy roads) will be present in a particular locality for a limited period of time (as a vehicle passes through).
4.18 This suggest that, in qualitative terms, the costs of a licensing regime would be expected to outweigh the benefits of licensing rather than allowing licence exempt use.

**Risk assessment**

4.19 The risk of doing nothing is that the development and uptake of SRR equipment, and the IVS systems which use it, would be significantly hampered. This could impose significant costs in terms of additional road fatalities and injuries. Other costs which could be imposed by doing nothing could be a lack of harmonisation on the spectrum used by this technology and the resulting limitation on both the rate of development and uptake of these systems, and on the road safety benefits for UK citizens when travelling throughout the EU.

4.20 There is also a risk that designating this spectrum band for licence exempt use by SRR equipment could preclude other uses of this band in the future. The uncertainty surrounding other potential future uses makes the magnitude of this risk difficult to quantify. However, some of the characteristics of this technology mentioned above could be thought to mitigate the risk of precluding (at least some) other future uses: namely the limited distance travelled by this radar equipment and the mobile nature of its use may allow other possible future uses of this band to co-exist with SRR equipment. For example, any in-building use, particularly when not in close proximity to a major road, would be expected to cause very limited interference to SRR equipment in IVS systems.

4.21 Thirdly, there is a risk that the benefits of uptake of this technology may be overstated. The value of preventing accidents is largely determined by the estimate of the human cost of injuries based on estimates of willingness to pay. This calculation will be subject to a margin of error and therefore, could result in an overstatement of the possible benefits. However, the human cost, is only one element of the benefit of preventing casualties, and even if the human/social benefits are excluded from the calculation, the estimate of the benefit generated over the period 2010 and 2014 if the percentage of the total vehicle stock fitted with this equipment increases from 1% to 13% over this period is still between £35 and £71 million (in net present value terms).

4.22 Additionally, there are other factors which suggests that the benefits based on the DFT’s value of preventing road casualties may be an under estimate of the total benefits. Firstly, these figures do not include damage only accidents for which the DFT estimated a value of prevention of £4,951 million in 2002. Secondly, these benefits do not include the value generated to the UK economy of any expansion the automotive telematics industry. Thirdly, whilst the benefits calculation takes account of the growth in the total vehicle stock, the ratio of accidents to vehicles is assumed to remain stable. It could be assumed that as the vehicle stock increases, and as roads become more congested, the ratio of the number of vehicles to the number of accidents may increase.

4.23 Finally, there is a risk that designating the 79GHz band for use by SRR equipment, rather than an alternative band, could hamper the uptake of this equipment. The radar technology required to exploit this band is still under development, and it may be a number of years before the SRR equipment which can operate in this band becomes available. In order to enable early adoption of IVS using SRR equipment the EU is proposing to allow limited use of the 24GHz band in the short term. This will allow equipment using the 24GHz band to be installed from 2005 to 2014, in up to a maximum of 8.3% of the total vehicle stock. Ofcom is to consult on the use of the 24GHz band by SRR equipment during 2005.
Conclusions

4.24 Indicative estimates of the benefits which may accrue from use of SRR equipment in the 79GHz band suggest that these benefits are significant. However, the costs of this regulating are likely to be both minimal (in the short to medium term) and uncertain (in the longer term).

4.25 Qualitative assessment of the likely costs and benefits from allowing licence exempt use of the 79GHz band rather than imposing a licensing regime suggests that the costs of a licensing regime would be expected to outweigh the benefits of licensing rather than allowing licence exempt use.

4.26 Analysis of the risks involved in the proposed regulation of this band indicates that the risk of doing nothing may be significant. Other risks identified with the proposal have mitigating factors and/or are limited in nature hence are not viewed to be significant.

Signature
Section 5

Responding to this consultation

How to respond

Ofcom invites written views and comments on the issues raised in this document, to be made by 5pm on 14 January 2005.

Ofcom strongly prefers to receive responses as e-mail attachments, in Microsoft Word format, 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 2), among other things to indicate whether or not there are confidentiality issues. The cover sheet can be downloaded from the ‘Consultations’ section of our website.

Please can you send your response to christina.spyrelli@ofcom.org.uk

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

Christina Spyrelli
Spectrum Markets, Competition & Markets
4th floor
Ofcom
Riverside House
2A Southwark Bridge Road
London SE1 9HA

Fax: 020 7783 4103

Note that we do not need a hard copy in addition to an electronic version. Also note that Ofcom will not routinely acknowledge receipt of responses.

Further information

If you have any want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please contact Christina Spyrelli on 020 7783 4312.

Confidentiality

Ofcom thinks 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 (when respondents confirm on their response cover sheet that this is acceptable).

All comments will be treated as non-confidential unless respondents specify that part or all of the response is confidential and should not be disclosed. Please place any confidential parts of a response in a separate annex, so that non-confidential parts may be published along with the respondent’s identity.

Ofcom reserves its power to disclose certain confidential information where this is necessary to fulfil its functions, although in practice it would do so only in limited circumstances.
Please also note that copyright and all other intellectual property in responses will be assumed to be assigned to Ofcom unless specifically retained.

**Next steps**

Following the end of the consultation period, Ofcom intends to make the final regulations in 2005 to enable the regulations to come into force.

Please note that you can register to get automatic notifications of when Ofcom documents are published, at [http://www.ofcom.org.uk/static/subscribe/select_list.htm](http://www.ofcom.org.uk/static/subscribe/select_list.htm).

**Ofcom's consultation processes**

Ofcom is keen to make responding to consultations easy, and has published some consultation principles (see Annex 1) which it seeks to follow, including on the length of consultations.

This consultation is shorter than Ofcom's standard 10 week period because it represents a statutory one month consultation.

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 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, whose views are less likely to be obtained in a formal consultation.

If you would like to discuss these issues, or Ofcom's consultation processes more generally, you can alternatively contact Philip Rutnam, Partner, Competition and Strategic Resources, who is Ofcom’s consultation champion:

Philip Rutnam  
Ofcom  
Riverside House  
2A Southwark Bridge Road  
London SE1 9HA  
Tel: 020 7981 3585  
Fax: 020 7981 3333  
E-mail: philip.rutnam@ofcom.org.uk
Annex 1

Ofcom’s consultation principles

Ofcom has published the following seven principles that it will follow for each public written consultation:

Before the consultation

1. 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

2. We will be clear about who we are consulting, why, on what questions and for how long.

3. 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.

4. We will normally allow ten weeks for responses, other than on dispute resolution.

5. 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 organisations 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.

6. 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

7. 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.
Annex 2

Consultation response cover sheet

A2.1 In the interests of transparency, we will publish all consultation responses in full on our website, www.ofcom.org.uk, unless a respondent specifies that all or part of their response is confidential. We will also refer to the contents of a response when explaining our decision, unless we are asked not to.

A2.2 We have produced a cover sheet for responses (see below) and would be very grateful if you could send one with your response. This will speed up our processing of responses, and help to maintain confidentiality by allowing you to state very clearly what you don’t want to be published. We will keep your completed cover sheets confidential.

A2.3 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 confirm on the response cover sheet that Ofcom can publish their responses upon receipt.

A2.4 We strongly prefer to receive responses in the form of a Microsoft Word attachment to an email. Our website therefore includes an electronic copy of this cover sheet, which you can download from the ‘Consultations’ section of our website.

A2.5 Please put any confidential parts of your response in a separate annex to your response, so that they are clearly identified. This can include information such as your personal background and experience. If you want your name, 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: Notice of Ofcom’s proposal to exempt automotive short-range radar users at 79 GHz from wireless telegraphy licensing

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

**CONFIDENTIALITY**

What do you want Ofcom to keep confidential?

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If you want part of your response, your name or your organisation to be confidential, 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. It can be published in full on Ofcom’s website, unless otherwise specified on this cover sheet, and I authorise Ofcom to make use of the information in this response to meet its legal requirements. 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)
Notice of Ofcom’s proposal to exempt automotive short-range radar users at 79 GHz from wireless telegraphy licensing

Annex 3

Draft Wireless Telegraphy (Automotive Short Range Radar) (Exemption) Regulations 2005

STATUTORY INSTRUMENTS

42004 No. XXXX

ELECTRONIC COMMUNICATIONS

The Wireless Telegraphy (Automotive Short Range Radar) (Exemption) Regulations 2005

Made - - [ ] 2005

Coming into force - [ ] 2005

Whereas the Office of Communications (“OFCOM”) have given notice of their proposal to make these Regulations in accordance with section 403(4)(a) of the Communications Act 2003( ) (“the 2003 Act”) and published notice of their proposal in accordance with section 403(4)(b) of the 2003 Act and have considered the representations made to them before the time specified in the notice;

Now, therefore, OFCOM, in exercise of the powers conferred upon them by section 1(1) of the Wireless Telegraphy Act 1949( ) and now vested in them( ) and section 403(7) of the 2003 Act hereby makes the following Regulations—

Citation, commencement and extent

1. These Regulations may be cited as the Wireless Telegraphy (Automotive Short Range Radar) (Exemption) Regulations 2005 and shall come into force on [ ] 2005.

2. [These Regulations shall extend to the Channel Islands and to the Isle of Man.]

Interpretation

3. In these Regulations —

   a. “automotive short range radar equipment” means equipment installed in a vehicle providing radar functions for collision mitigation and traffic safety applications;

   b. “dBm” means decibel milliWatt;

   c. “dBm/MHz” means decibel milliWatt per megahertz; and

   d. “eirp” means effective isotropically radiated power.
Exemption

4. Subject to regulation 5, the establishment, installation and use of automotive short range radar equipment is hereby exempt from the provisions of section 1(1) of the Wireless Telegraphy Act 1949.

5. The exemption provided for in regulation 4 shall be limited to automotive short range radar equipment which —

   a. operates within the frequency band between 77 gigahertz and 81 gigahertz;

   b. emits a mean power density no greater than —

      i. -3 dBm/MHz eirp associated with a peak limit of 55 dBm eirp; and

      ii. -9 dBm/MHz eirp outside the vehicle in which it is installed; and

   c. does not cause undue interference to other users of the frequency band between 77 gigahertz and 81 gigahertz.

Chief Executive of the Office of Communications

Date

For and by authority of the Office of Communications
Notice of Ofcom’s proposal to exempt automotive short-range radar users at 79 GHz from wireless telegraphy licensing

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations [ ]
Notice of Ofcom's proposal to exempt automotive short-range radar users at 79 GHz from wireless telegraphy licensing

Annex 4

Decision 2004/545/EC

Commission Decision of 8 July 2004 on the harmonisation of radio spectrum in the 79GHz range for the use of automotive short-range radar equipment in the Community


COMMISSION

COMMISSION DECISION

of 8 July 2004

on the harmonisation of radio spectrum in the 79 GHz range for the use of automotive short-range radar equipment in the Community

(notified under document number C(2004) 2591)

(Text with EEA relevance)

(2004/545/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) In its Communication to the Council and the European Parliament of 15 September 2003, entitled "information and Communications technologies for safe and intelligent vehicles"(2), the Commission announced its intention to improve road safety in Europe, to be known as the obility initiative. Such improvements can in particular be achieved by using new information communications technologies and intelligent road safety systems such as automotive short-range radar equipment (SRR). The Council also called on 5 December 2003, in its Conclusions on road safety(3), for the improvement of vehicle safety through the promotion of new technologies such as electronic safety.

(2) The rapid and coordinated development and deployment of short-range radar within the Community requires that harmonised radio frequency bands be available without delay and on a stable and permanent basis, so as to provide confidence to industry to make the necessary investments.

(3) With a view to such harmonisation, a mandate(*) was issued on 5 August 2003 by the Commission to the European Conference of Postal and Telecommunications Administrations (CEPT), pursuant to Article 4(2) of Decision 676/2002/EC, to harmonise radio spectrum and to facilitate a coordinated introduction of automotive short-range radar (SRR) systems.

(4) As a result of that mandate, the 79 GHz range band has been identified by the CEPT, acting through its Electronic Communications Committee (the ECC), as the most suitable band for long-term and permanent development and deployment of short-range radar. The ECC has concluded that operation of the band should proceed on a non-interference and non-protected basis, in accordance with Radio Regulations adopted by the International Telecommunications Union and pursuant to technical specifications set out by the ECC in its decision of 19 March 2004.

(5) The results of the work carried out pursuant to the mandate given to CEPT as regards identification of a long-term and permanent band for short-range radar are acceptable and should be made applicable in the Community in order to ensure the availability and efficient use of the radio spectrum necessary for the establishment and functioning of the internal market. The use of short-range radar in the 79 GHz band should therefore be allowed as soon as possible and by 1 January 2005 at the latest so as to encourage the industry to develop, manufacture and market SRR equipment operating on that band.

(*) Mandate to CEPT to harmonise radio spectrum to facilitate a coor- dinated EU introduction of automotive short-range radar systems.

(3) 15038/03 TRANG 307.
Notice of Ofcom’s proposal to exempt automotive short-range radar users at 79 GHz from wireless telegraphy licensing


(6) Short-range radar should be used with due consideration to health and safety of the user and any other person, taking in particular account the Council Recommendation 1999/519/EC of 12 July 1999 on the limitation to exposure of the general public to electromagnetic fields (0 to 300 GHz)(1) and Article 3(a) of 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(2).

(7) 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 harmonize the conditions for the availability and efficient use of the 79 GHz range radio spectrum band for automotive short-range radar equipment.

Article 2

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

(a) ‘79 GHz range radio spectrum band’ shall mean the frequency range between 77 and 81 gigahertz;

(b) ‘automotive Short-Range Radar equipment’ shall mean equipment providing road vehicle based radar functions for collision mitigation and traffic safety applications;

(c) a ‘non-interference and non-protected basis’ shall mean 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 operators operating in that band.

Article 3

The 79 GHz range radio spectrum band shall be designated and made available for automotive short-range radar equipment as soon as possible and no later than 1 January 2005, on a non-interference and non-protected basis.

The maximum mean power density shall be of –3 dBm/MHz effective isotropic radiated power (e.i.r.p.) associated with a peak limit of 55 dBm e.i.r.p.

Article 4

The maximum mean power density outside a vehicle resulting from the operation of one short-range radar shall not exceed –9 dBm/MHz e.i.r.p.

This Decision is addressed to the Member States.

Done at Brussels, 8 July 2004.

For the Commission

EIdi LIikanEN
Member of the Commission

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