



Notice of proposal to make the
Wireless Telegraphy (Vehicle
Based Intelligent Transport
Systems)(Exemption) Regulations
2009

Consultation

Publication date: 11 November 2008

Closing Date for Responses: 12 December 2008

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Section 1

Executive Summary

- 1.1 This document consults on draft regulations to exempt the use of vehicle based safety-related applications of Intelligent Transport Systems (ITS) from the requirement to be licensed. This notice outlines our intention to make the Wireless Telegraphy (Vehicle Based Intelligent Transport Systems) (Exemption) Regulations 2009 (“the Proposed Regulations”).
- 1.2 The Proposed Regulations will implement the vehicle based requirements of the Commission Decision of 5 August 2008 on the harmonised use of radio spectrum in the 5875 - 5905 MHz frequency band for safety-related applications of Intelligent Transport Systems (ITS) 2008/671/EC¹ (the “Decision”). A copy of the Decision can be found in Annex 6. The Decision aims to support the European Union’s eSafety Initiative with its goal to reduce the number of road fatalities each year.
- 1.3 ITS is an umbrella term, to describe a number of transport supporting services, ranging from driver aids intended to mitigate against accidents through to commercial services for drivers and passengers. These systems are intended to provide drivers with additional information and give an early warning of potential dangers. ITS as a system includes equipment able to communicate between cars and between the car and any roadside infrastructure.
- 1.4 We are proposing to only exempt from licensing safety-related vehicle based applications. For safety-related ITS infrastructure we plan to issue licences on non-exclusive basis. This consultation is asking for comments on the drafting of the Proposed Regulations and is not intended to address issues surrounding the general policy on the use of spectrum for this purpose or the deployment of non-safety related ITS in the UK.
- 1.5 A Regulatory Impact Assessment (RIA) for the Regulations is available at Annex 4 to this document. The RIA sets out the risks, costs and benefits of our decision and the effects that these will have on the costs to business.
- 1.6 The Proposed Regulations are included in this document at Annex 5.² Comments on the regulations are invited by **5pm on 12 December 2008**. Subject to consideration of responses we intend to bring the new Regulations into force by February 2009.

¹ <http://www.erodocdb.dk/docs/doc98/official/pdf/2008671EC.pdf>

² Further copies may be obtained from www.ofcom.org.uk or from Ofcom at Riverside House, 2a Southwark Bridge Road, London SE1 9HA.

Section 2

Background

- 2.1 We are responsible for authorising civil use of the radio spectrum and achieve this by granting wireless telegraphy licences under the Wireless Telegraphy Act 2006 (“the Wireless Telegraphy Act”) and by making regulations exempting users of particular equipment from the requirement to hold such a licence. Under section 8(1) of the Wireless Telegraphy Act, it is an offence to establish, install or use equipment to transmit without holding a licence granted by us unless the use of such equipment is exempted. Under section 8(4) of the Wireless Telegraphy Act, we must make regulations to exempt equipment if its installation or use is unlikely to cause undue interference.
- 2.2 In accordance with the requirements of section 122(4) and (5) of the Wireless Telegraphy Act this document gives notice of our intention to make the Proposed Regulations.

What are safety-related ITS applications

- 2.3 Safety-related ITS applications are intended to provide information to vehicles to avoid potentially dangerous traffic situations or to reduce the seriousness of an accident. This information, when received in advance, provides an early warning to the driver and becomes increasingly time-critical as the vehicle approaches the site of an incident or potential accident.

Table 1: Examples of safety-related ITS applications

Application	Description
Cooperative Collision Warning	Cooperative collision warning collects surrounding vehicle locations and dynamics and warns the driver when a collision is likely.
Work Zone Warning	Work zone safety warning refers to the detection of a vehicle in an active work zone area and the indication of a warning to its driver.
Approaching Emergency Vehicle Warning	This application provides the driver a warning to yield the right of way to an approaching emergency vehicle.
Traffic Signal Violation Warning	Traffic signal violation warning uses infrastructure-to-vehicle communication to warn the driver to stop at the legally prescribed location if the traffic signal indicates a stop and it is predicted that the driver will be in violation.
Emergency Vehicle Signal Pre-emption	This application allows an emergency vehicle to request right of way from traffic signals in its direction of travel.
In-Vehicle Signage	The in-vehicle signage application provides the driver with information that is typically conveyed by traffic signs.
Road Condition Warning	Road condition warning is used to provide warning messages to nearby vehicles when the road surface is icy, or when traction is otherwise reduced.
Low Bridge Warning	Low bridge warning is used to provide warning messages especially to commercial vehicles when they are approaching a bridge of low height.
Highway/Rail Collision Warning	Railroad collision avoidance aids in preventing collisions between vehicles and trains on intersecting paths.
Wrong Way Driver Warning	This application warns drivers that a vehicle is driving or about to drive against the flow of traffic.
Emergency Electronic Brake Lights	When a vehicle brakes hard, the Emergency Electronic Brake light application sends a message to other vehicles following behind.
Right Turn Assistant	The Right Turn Assistant application provides information to drivers about oncoming traffic to help them make a right turn at a signalised intersection without a phasing right turn arrow.
Curve Speed Warning	Curve speed warning aids the driver in negotiating curves at appropriate speeds.
Vehicle-Based Road Condition Warning	This in-vehicle application will detect marginal road conditions using on-board systems and sensors (e.g. stability control, ABS), and transmit a road condition warning, if required, to other vehicles via broadcast.

Application	Description
Low Parking Structure Warning	This application provides drivers with information concerning the clearance height of a parking structure.
Lane Change Warning	This application provides a warning to the driver if an intended lane change may cause a crash with a nearby vehicle.
Highway Merge Assistant	This application warns a vehicle on a highway on-ramp if another vehicle is in its merge path (and possibly in its blind spot).
Cooperative Glare Reduction	This application uses C2C-C to allow a vehicle to automatically switch from high-beams to low-beams when trailing another vehicle.
Intelligent Intersection Control	Alerts driver to other vehicles at intersections.

Source: Extract from ETSI TR 102 492-1

European Commission Decision

- 2.4 The European Union launched in 2002, in partnership with the automotive industry and other stakeholders, its eSafety Initiative with the goal to reduce the number of road fatalities.³
- 2.5 The European Commission decision on safety-related ITS is the culmination of work over the last two years, starting with their mandate to European Conference of Postal and Telecommunications Administrations (CEPT), "To study harmonised radio spectrum use for safety critical intelligent transport systems in the European Union"⁴ issued on 5 July 2006. In response to this mandate the Electronic Communications Committee produced CEPT Report 20 on 21 December 2007.⁵
- 2.6 The result of the work carried out by CEPT was the Decision. It requires Member States to designate and make available on a non-exclusive basis the frequency band 5875-5905 MHz for safety-related ITS. Member States have six months to implement the Decision.
- 2.7 The European Telecommunications Standards Institute (ETSI) is currently working to finalise a Harmonised Standard EN 302 571 for ITS, which is timetabled for publication in the Official Journal on 2 December 2008.

Different regulatory approach to vehicle based equipment and infrastructure

- 2.8 We consider it appropriate to licence exempt the vehicle based safety-related ITS immediately. Due to dynamic transmit power controls in place, the transmissions from vehicles are likely to be much lower than those from the infrastructure, so we do not consider it practical or necessary to license vehicle based safety-related ITS.
- 2.9 In order to enable the possibility of different ITS operators coexisting without causing a significant loss in the effectiveness of the networks, we believe that a coordinated approach for infrastructure is likely to be necessary. Technical studies carried out by CEPT that underpin the Decision are based on channel access technology where only one device is active on a channel at the same point in time in a given area and all units are operating in the same network. If there is more than one infrastructure network and those networks are not coordinated, there is a likelihood of harmful interference which may prevent the safety-related aims of the Decision from being fully realised. At present the development of ITS infrastructure systems is less mature than vehicle based ITS systems. We will ensure that separate proposals, which are likely to involve licensing, are subsequently brought in for the authorisation of safety-related ITS infrastructure.

³ http://ec.europa.eu/information_society/activities/esafety/index_en.htm

⁴ http://ec.europa.eu/information_society/policy/radio_spectrum/docs/current/mandates/ec_to_cept_its_06_06.pdf

⁵ <http://www.erodocdb.dk/Docs/doc98/official/Word/CEPTREP020.DOC>

Next steps

- 2.10 Following the publication of this consultation document, stakeholders are welcome to provide their feedback. The deadline to submit responses to us is 5pm on 12 December 2008. We expect to release a Statement on this consultation in January 2009, having taken into account the stakeholder responses to our proposals and to make, and bring into force, the regulations by February 2009.

Section 3

General effect of the Wireless Telegraphy (Vehicle Based Intelligent Transport Systems) (Exemption) Regulations 2009

The legislative framework

- 3.1 We can exempt the establishment, installation and use of wireless telegraphy equipment by making Regulations under section 8(3) of the Wireless Telegraphy Act. We propose to implement the changes proposed in this document by making the Proposed Regulations. The Proposed Regulations are included in Annex 5 of this document.

Extent of application

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

Regulations to exempt vehicle based safety-related ITS

- 3.3 The Proposed Regulations we are now consulting on will exempt the use of vehicle based safety-related ITS pursuant to section 8(4) of the Wireless Telegraphy Act. The Proposed Regulations mirror the technical parameters and standards set in the Decision. They set the terms, provisions and limitations to be complied with for the safety-related ITS. The Proposed Regulations provide that the exemption shall apply if:
- The wireless telegraphy apparatus is or is part of a safety-related intelligent transport system.
 - The wireless telegraphy apparatus is within or fixed to a vehicle.
 - The wireless telegraphy apparatus only operates in the frequency band 5875 - 5905 MHz.
 - The wireless telegraphy apparatus transmission power has at its highest point if power control is implemented:
 - a maximum mean e.i.r.p. density no greater than 23 dBm per MHz; and
 - a maximum mean e.i.r.p. no greater than 33 dBm.
 - The wireless telegraphy apparatus use techniques to mitigate interference providing at least equivalent performance to ETSI standards.
 - The apparatus uses transmitter power control with a range of at least 30 dB.
 - The wireless telegraphy apparatus does not cause or contribute to undue interference to any wireless telegraphy.

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 12 December 2008**.
- A1.2 We strongly prefer to receive responses using the online web form at http://www.ofcom.org.uk/consult/condocs/wtf_vehicle, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 3), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.
- A1.3 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 its 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 in early 2009.
- 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

Ofcom's consultation principles

A2.1 Ofcom has published the following seven principles that it will follow for each public written consultation:

Before the consultation

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

During the consultation

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

A2.4 We will make the consultation document as short and simple as possible with a summary of no more than two pages. We will try to make it as easy as possible to give us a written response. If the consultation is complicated, we may provide a shortened version for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.

A2.5 We will normally allow ten weeks for responses to consultations on issues of general interest. However, as Ofcom is required to implement the Commission Decision this consultation will last for the statutory period of one month.

A2.6 There will be a person within Ofcom who will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organizations interested in the outcome of our decisions. This individual (who we call the consultation champion) will also be the main person to contact with views on the way we run our consultations.

A2.7 If we are not able to follow one of these principles, we will explain why. This may be because a particular issue is urgent. If we need to reduce the amount of time we have set aside for a consultation, we will let those concerned know beforehand that this is a 'red flag consultation' which needs their urgent attention.

After the consultation

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

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 in this document represents an impact assessment, as defined in section 7 of the Communications Act 2003 (“the 2003 Act”) for making the Wireless Telegraphy (Vehicle Based Intelligent Transport Systems) (Exemption) Regulations 2009.
- A4.2 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 policymaking. This is reflected in section 7 of the 2003 Act, which means that generally Ofcom will carry out impact assessments where proposals would be likely to have a significant effect on businesses or the general public, or when there is a major change in Ofcom’s activities. However, as a matter of policy Ofcom is committed to carrying out and publishing impact assessments in relation to the great majority of our policy decisions. In accordance with section 7 of the 2003 Act, in producing this RIA, Ofcom has had regard to such general guidance as it considers appropriate including related to Cabinet Office guidance. For further information about our approach to impact assessments, see the guidelines, “Better policy-making: Ofcom’s approach to impact assessment”, which are on our website: http://www.ofcom.org.uk/consult/policy_making/guidelines.pdf

Background

- A4.3 In the UK, Ofcom is responsible for the authorisation of civil use of the radio spectrum and achieves this by granting Wireless Telegraphy licences under the Wireless Telegraphy Act 2006 (the “Wireless Telegraphy Act”) and by making Regulations exempting users of particular equipment from the requirement to hold such a licence. Under section 8(1) of the Wireless Telegraphy Act, it is an offence to establish, install or use equipment to transmit without holding a licence granted by Ofcom, unless the use of such equipment is exempted.
- A4.4 A European Commission Decision of 5 August 2008 on the harmonised use of radio spectrum in the 5875 - 5905 MHz frequency band for safety-related applications of Intelligent Transport Systems (ITS) 2008/671/EC⁶ “the Decision” was made to allow the use of the radio spectrum for safety related Intelligent Transport Systems (ITS) equipment in a harmonised manner in the Community.
- A4.5 The Decision was addressed to all Member States and requires them to, not later than six months after entry into force of this Decision, designate the frequency band 5875 - 5905 MHz for Intelligent Transport Systems and, as soon as reasonably practicable following such designation, make that frequency band available on a non-exclusive basis. The Decision expects that Member States will make the spectrum available for vehicle to vehicle ITS communications within the six-month period during which they are to designate the frequency band 5875 - 5905 MHz according to this Decision. The Decision further notes that:

⁶ <http://www.erodocdb.dk/docs/doc98/official/pdf/2008671EC.pdf>

- it may prove difficult for some Member States to finalise an appropriate licensing framework or a coordination mechanism for roadside infrastructure installation of different ITS operators within this timeframe.
- any delays in making the spectrum available beyond this period may impact negatively on the wide take-up of safety-related ITS applications in the European Union and should therefore be limited and duly justified.

A4.6 The band 5850 - 5925 MHz has been allocated to the Programme Making & Special Events (PMSE) technology of wireless cameras, however, there is not as yet any PMSE use in this band. The implications of the ITS Decision along with the proposal for PMSE use of the band are intended to be addressed within the wider discussion on the award of the spectrum 5850 - 5925 MHz. Ofcom has consulted separately on details of the award for PMSE.⁷

Proposal

A4.7 This RIA relates to the proposal to make new regulations in order to comply with the Decision. For the vehicle based elements of safety-related ITS, Ofcom is of the opinion that the Decision will be implemented by the allocation of the band 5875 - 5905 MHz to safety related ITS and the exemption of the apparatus.

The citizen and/or consumer interest

A4.8 Ofcom takes account of the impact of its decisions upon both citizen and consumer interests in the markets it regulates. As a Member State, the UK is bound by the terms of the Decision and the requirement to implement them by 4 February 2009. However in addition:

- the measures proposed will allow the use of vehicle based safety related ITS equipment on a licence-exempt basis which reduces the regulatory and administrative burden on motorists and the automotive industry;
- the introduction of safety related ITS systems are intended to improve road safety. The European Commission states⁸ that in 2006 42,000 people were killed on the roads of Europe. The cost of accidents to society is clearly high. The Impact Assessment included as Annex 2 of the CEPT Report 20,⁹ concluded in paragraph 4.3 that even a marginal reduction in road casualties would provide a greater benefit than alternative uses for the radio spectrum 5875 - 5905 MHz. The report suggests that just a 1% reduction in casualties would be of very significant value to European society.

Ofcom's policy objective

A4.9 As a Member State, the UK is bound by the terms of the Decision and the requirement to implement them by 4 February 2009.

⁷ <http://www.ofcom.org.uk/consult/condocs/bandmgr/> Paragraphs 5.37 and 5.38

⁸ Press notice

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

⁹ CEPT Report 20. Report from CEPT to EC in response to the Mandate on "the harmonised radio spectrum use for safety critical applications of Intelligent Transport Systems (ITS) in the European Union" <http://www.erodocdb.dk/Docs/doc98/Official/Pdf/CEPTRep020.pdf>

A4.10 The national regulatory authority with responsibility for the management of the radio spectrum in the UK is Ofcom, which is not directly bound by the obligations in the Decision. Ofcom's power to create exemption regulations may be exercised where appropriate so as to give effect to the Decision. Other parts of the legislature may also make regulations where necessary to implement the Decision.

Options considered

A4.11 The options open to Ofcom in relation to the implementation of the Decision are as follows:

- to make Regulations that are compliant with the Decision; or
- to do nothing.

Analysis of the different options

Make new regulations

A4.12 The most efficient route to mandatory compliance is to make Regulations that enact the Decision as closely as possible.

A4.13 As set out earlier, there could be significant benefits for UK consumers and citizens from the development of ITS systems in the 5875 - 5905 MHz band. However, it should be noted that the designation of the spectrum is not sufficient to fully realise these benefits. Some of the safety benefits will undoubtedly be achieved by vehicle to vehicle communication, but significant infrastructure investment will also be required to achieve all of the safety benefits ITS has the potential to deliver. Given the uncertainty over whether this investment will be forthcoming there is a risk that this spectrum will not be fully exploited by safety related ITS in the UK. However, if this is the case, it would still be possible for alternative uses to access this spectrum.

A4.14 There is currently limited use of this band by other uses (such as PMSE). The future needs of PMSE users across the key PMSE bands is being considered separately. We intend to consider the implications of safety related ITS use of these frequencies in the award process, which would take into account the needs of the different potential users of this band and Ofcom's duty to promote optimal use of the radio spectrum. However, we note here that we believe that it might be possible for some PMSE use to coexist with the proposed ITS systems.

Do nothing

A4.15 Without the benefit of an exemption from the Wireless Telegraphy Act users of safety related ITS equipment would need a licence which would result in a greater regulatory and administrative burden on individuals.

A4.16 The do nothing option could result in consumers and citizens not benefiting from the development of safety related ITS systems in the UK.

The preferred option

A4.17 The preferred option therefore is to make Regulations to allow the use of vehicle mounted safety related ITS equipment on a licence-exempt basis, in order to comply with the Decision. The benefits of this option are compliance with European

Community law, a reduction in the regulatory and administrative burden for stakeholders wishing to use compliant safety related ITS devices and more generally benefits to consumers from the potential introduction of a technology designed to improve road safety.

Annex 5

Proposed Regulations

STATUTORY INSTRUMENTS

2009 No. XXXX

ELECTRONIC COMMUNICATIONS

The Wireless Telegraphy (Vehicle Based Intelligent Transport Systems) (Exemption) Regulations 2009

Made - - - - *****

Coming into force - - *4th February 2009*

The Office of Communications (“OFCOM”), make the following Regulations in exercise of the power conferred by section 8(3) of the Wireless Telegraphy Act 2006⁽¹⁰⁾ (“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 that notice in accordance with section 122(4)(c) of the Act.

Citation and commencement

1. These Regulations may be cited as the Wireless Telegraphy (Intelligent Transport Systems) (Exemption) Regulations 2009 and shall come into force on 4th February 2009.

Interpretation

2. In these Regulations—

“dB” means decibels;

“dBm” means decibels of power referenced to one milliWatt;

“e.i.r.p.” means equivalent isotropic radiated power;

“intelligent transport system” means a system or service, based on information and communications technologies, including processing, control, positioning, communication and electronics, that is applied to a road transportation system;

“MHz” means megahertz; and

“vehicle” means any motor vehicle intended for travel on land and propelled by mechanical power, but not running on rails, and any trailer, whether or not coupled.

⁽¹⁰⁾ 2006 c. 36

Exemption

3. The installation and use of apparatus complying with the terms, provisions and limitations in regulation 4 is hereby exempt from the provisions of section 8(1) of the Wireless Telegraphy Act 2006.

Terms, provisions and limitations

4. The apparatus must—

- (1) be, or be part of, a safety-related intelligent transport system;
- (2) be within or fixed to a vehicle;
- (3) only operate in the frequency band 5 875 MHz to 5 905 MHz;
- (4) only emit emissions which when measured in any direction during the transmission burst which corresponds to the highest power if power control is implemented have:
 - (a) a maximum mean e.i.r.p. density of no greater than 23 dBm per MHz; and
 - (b) a maximum mean e.i.r.p. no greater than 33 dBm;
- (5) use techniques to mitigate interference that provide at least equivalent performance to the techniques described in the European Telecommunications Standards Institute standard EN 302 571⁽¹¹⁾;
- (6) use transmitter power control with a range of at least 30 dB; and
- (7) not cause or contribute to undue interference to any wireless telegraphy.

]]

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

[] 2009

⁽¹¹⁾ [due December 2008]

Annex 6

Safety-related ITS Decision

L 220/24

EN

Official Journal of the European Union

15.8.2008

COMMISSION

COMMISSION DECISION

of 5 August 2008

on the harmonised use of radio spectrum in the 5 875-5 905 MHz frequency band for safety-related applications of Intelligent Transport Systems (ITS)

(notified under document number C(2008) 4145)

(Text with EEA relevance)

(2008/671/EC)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

those objectives, communications between vehicles and road infrastructure must be reliable and fast.

Having regard to the Treaty establishing the European Community,

(4) Given the mobility of vehicles and the need to ensure the achievement of the internal market and the increase in road safety throughout Europe, spectrum used by ITS cooperative systems should be made available in a harmonised way throughout the European Union.

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,

(5) Pursuant to Article 4(2) of Decision No 676/2002/EC, on 5 July 2006 the Commission issued a mandate to the European Conference of Postal and Telecommunications Administrations (CEPT) to verify the spectrum requirements for safety-critical applications in the context of ITS and cooperative systems and to undertake technical compatibility studies between safety-critical ITS applications and potentially affected radio services in the frequency ranges under consideration. CEPT was also requested to develop optimal channel plans for the bands identified for ITS.

Whereas:

(1) The Council ⁽²⁾ and the European Parliament ⁽³⁾ have stressed the importance of increasing road safety in Europe. Intelligent Transport Systems (ITS) are central to an integrated approach in road safety ⁽⁴⁾ by adding information and communication technologies (ICT) to transport infrastructure and vehicles so as to avoid potentially dangerous traffic situations and reduce number of accidents.

(6) The relevant results of the work carried out by CEPT constitute the technical basis for this Decision.

(2) Effective and coherent use of radio spectrum is essential for the development of new wireless equipment in the Community ⁽⁵⁾.

(7) CEPT concluded in its report of 21 December 2007 (CEPT Report 20) that the 5 GHz band, in particular the range 5 875-5 905 MHz, was appropriate for safety-related ITS applications, which improve road safety by increasing the information to the driver and the vehicle on the environment, other vehicles and other road users. Furthermore, ITS are compatible with all the services studied in that band, and with all other existing services studied below 5 850 MHz and above 5 925 MHz, as long as they comply with certain emission limits as defined in the CEPT Report. The selection of this band would also be in line with spectrum use in other regions of the world and thus foster global harmonisation. Moreover, ITS could not claim protection from fixed-satellite service (FSS) earth stations and unwanted emissions from ITS equipment need to be limited in order to protect FSS.

(3) ITS include cooperative systems based on vehicle-to-vehicle, vehicle-to-infrastructure and infrastructure-to-vehicle communications for the real time transfer of information. Those systems potentially offer major improvements in transport system efficiency, in safety for all road users and in mobility comfort. To fulfil

⁽¹⁾ OJ L 108, 24.4.2002, p. 1.

⁽²⁾ Council Conclusions 15101/03 of 5.12.2003 and Verona 2 Conclusions of 26.10.2004.

⁽³⁾ OJ C 244 E, 18.10.2007, p. 220.

⁽⁴⁾ COM(2006) 314.

⁽⁵⁾ Council Conclusions 15530/04 and 15533/04 of 3.12.2004.

- (8) Harmonised standard EN 302 571 is being finalised by European Telecommunications Standard Institute (ETSI) in line with the CEPT compatibility studies in order to give presumption of conformity to Article 3(2) of Directive 1999/5/EC of the European Parliament and the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity⁽¹⁾, thus ensuring that compliant ITS equipment avoids causing harmful interference. ITS transmitters are expected to maximise the use of the spectrum and control their transmitted power to the minimum level to use the spectrum allocated to ITS effectively so as to avoid harmful interference.
- (9) For the above reason, the standard foresees that a transmitter power control (TPC) is implemented with a range of at least 30 dB with regard to the maximum total transmit power of 33 dBm mean e.i.r.p. If some manufacturers chose not to use the techniques identified in this standard, any alternative methods would be required to provide at least an equivalent level of interference mitigation as that provided by the standard.
- (10) Harmonisation under this Decision should not exclude the possibility for a Member State to apply, where justified, transitional periods or radio spectrum-sharing arrangements.
- (11) It is expected that Member States will make the spectrum available for vehicle-to-vehicle ITS communications within the six-month period during which they are to designate the frequency band 5 875-5 905 MHz according to this Decision. However, for infrastructure-to-vehicle and vehicle-to-infrastructure ITS communications, it may prove difficult for some Member States to finalise an appropriate licensing framework or a coordination mechanism for roadside infrastructure installation of different ITS operators within this timeframe. Any delays in making the spectrum available beyond this period may impact negatively on the wide take-up of safety-related ITS applications in the European Union and should therefore be limited and duly justified.
- (12) Considering the market developments and evolution of technologies, the scope and application of this Decision may need to be reviewed in the future, based in particular on information on such developments and evolution provided by the Member States.
- (13) 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 frequency band 5 875-5 905 MHz for safety related applications of Intelligent Transport Systems (ITS) in the Community.

Article 2

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

1. 'Intelligent Transport Systems' mean a range of systems and services, based on Information and Communications technologies, including processing, control, positioning, communication and electronics, that are applied to a road transportation system;
2. 'mean equivalent isotropically radiated power (e.i.r.p)' means e.i.r.p. during the transmission burst which corresponds to the highest power, if power control is implemented.

Article 3

1. Member States shall, not later than six months after entry into force of this Decision, designate the frequency band 5 875-5 905 MHz for Intelligent Transport Systems and, as soon as reasonably practicable following such designation, make that frequency band available on a non-exclusive basis.

Such designation shall be in compliance with the parameters set out in the Annex.

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

Article 4

Member States shall keep the use of the 5 875-5 905 MHz band under scrutiny and report their findings to the Commission to allow for a review of this Decision if necessary.

⁽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).

Article 5

This Decision is addressed to the Member States.

Done at Brussels, 5 August 2008.

For the Commission
Viviane REDING
Member of the Commission

ANNEX

Technical parameters for safety related applications of Intelligent Transport Systems in the 5 875-5 905 MHz band

Parameter	Value
Maximum spectral power density (mean e.i.r.p.)	23 dBm/MHz
Maximum total transmit power (mean e.i.r.p.)	33 dBm
Channel access and occupation rules	Techniques to mitigate interference that provide at least equivalent performance to the techniques described in harmonised standards adopted under Directive 1999/5/EC must be used. These require a transmitter power control (TPC) range of at least 30 dB.