**EXPLANATORY MEMORANDUM TO**

**THE 5875-5905 MHz FREQUENCY BAND (MANAGEMENT) REGULATIONS 2009**

**2009 No. 11**

**1.** This explanatory memorandum has been prepared by the Department for Business Enterprise & Regulatory Reform and is laid before Parliament by Command of Her Majesty.

**2. Purpose of the instrument**

These Regulations implement in the UK the requirements of Commission Decision 2008/671/EC of 5th 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) ("the Commission Decision").

**3. Matters of special interest to the Joint Committee on Statutory Instruments**

None

**4. Legislative Context**

4.1 The Commission Decision came into force on 5th August 2008.

4.2 The Commission Decision aims at harmonising the conditions for the availability and efficient use of the frequency band 5875-5905 MHz for safety-related applications of Intelligent Transport Systems in the Community.

4.3 Article 3(1) of the Commission Decision requires Member States, no later than six months after its entry into force, to designate the frequency band 5875-5905 MHz for ITS, in accordance with the parameters set out in the Annex to the Commission Decision.

4.4 Article 3(1) further requires Member States to make that frequency band available on a non-exclusive basis, as soon as reasonably practicable after the designation has been made.

4.5 Article 4 of the Commission Decision requires Member States to keep the use of the band under scrutiny and to report their findings to the Commission to allow for a review of the Decision if necessary.

4.5 The national regulatory authority with responsibility for the management of the radio spectrum in the UK is the Office of Communications established by the Office of Telecommunications Act 2002 (OFCOM).

4.6 The Wireless Telegraphy Act 2006 ("the 2006 Act") provides OFCOM with the necessary powers to give effect to the requirements of the Commission Decision in the UK through e.g. licensing (or grants of recognised spectrum access) and designation of the band/s in the 'UK Plan for Frequency Authorisation' specified in section 2 of the 2006 Act. It is proposed, therefore, that these Regulations place OFCOM under a legal duty to exercise the powers under the 2006 Act in a way that fulfil the obligations of the UK under the Commission Decision.

4.7 The relevant obligations under the Commission Decision to which OFCOM must give effect are specified in regulation 3(2) of the Regulations.

## 5. Territorial Extent and Application

This instrument applies to all of the United Kingdom.

## 6. European Convention on Human Rights

As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

## 7. Policy background

7.1 The European Commission issued a Decision designed to harmonise the conditions for the availability and efficient use of the frequency band 5875-5905 Mhz band. Member States are required to implement the Commission Decision no later than 6 months after the entry into force of the Decision.

7.2 As explained above, the national regulatory authority with responsibility for the management of the radio spectrum in the UK is OFCOM, which is not the addressee of the Decision. So as to ensure the proper transposition of the Decision in the UK, the government needs to expressly provide for Ofcom to be placed under a duty to exercise their existing powers under the 2006 Act to give effect to the requirements of the Decision.

7. 3 Government considered whether it was possible to rely on Ofcom implementing the Decision using their existing legislative powers under the 2006 Act (e.g. by way of auction under section 14 of the 2006 Act or by licence exemption regulations under section 8 of the 2006 Act), but concluded that in the present case, those powers were insufficient to give full effect to the requirements of the Decision.

7.4 Accordingly, Government concluded that, whilst Ofcom could rely on their existing powers under the 2006 Act to regulate the use of this band in accordance with the provisions of the Decision, that alone would not be sufficient for the purposes of achieving full and

transparent implementation in the UK of that Decision insofar as the Decision is addressed to the Member States, not to the national regulatory authorities (OFCOM). The Government therefore considered it necessary to impose, by way of regulations, a duty on OFCOM to carry out their functions so as to give effect to the requirements in the Decision.

## 8. Consultation outcome

No formal consultation was carried out as the government is obliged to implement such EU decisions. Additionally it is assessed that there is no additional cost or burden to businesses, citizens or consumers. This regulation is merely aimed at ensuring that the UK transparently meets its EU obligations – the frequency band covered by the Decision is already being regulated by Ofcom and will continue to be subject the same regime (albeit new harmonised conditions will apply to new licenses of this band) after implementation. Thus, it does not affect the regime currently in place.

## 9. Guidance

Guidance has not been issued because the obligations under the Regulations are placed upon OFCOM alone.

## 10. Impact

10.1 The impact of these Regulations on business, charities or voluntary bodies is negligible as the Regulations do not affect the regime currently in place.

10.2 The impact on the public sector is negligible for the same reasons.

10.3 An Impact Assessment is attached to this memorandum.

## 11. Regulating small business

The legislation does not affect small business as it merely requires Ofcom to designate and make available under harmonised conditions the radio spectrum frequency band from 5875-5905 MHz for users.

## 12. Monitoring & review

A review of the Regulations effects will be conducted 12 months after implementation and regulations amended in necessary.

## 13. Contact

James Youngs at the Department of Business, Enterprise and Regulatory Reform Tel: 020 7215 2808 or email: james.youngs@berr.gsi.gov.uk can answer any queries regarding the instrument.

# Summary: Intervention & Options

| Department /Agency: | Title: | |
|---|---|---|
| **BERR** | **Impact Assessment of The 5875-5905 MHz Frequency Band (Management) Regulations 2009** | |
| **Stage:** | **Version:** 1.1 | **Date: 17 November 2008** |
| **Related Publications:** | | |

**Available to view or download at:**
http://www.berr.gov.uk

**Contact for enquiries:** James Youngs **Telephone:** 020 7215 2808

What is the problem under consideration? Why is government intervention necessary?

Government needs to implement the European Radio Spectrum Committee's decision of 5th August 2008 on the harmonised use of radio spectrum in the 5875-5905MHz frequency band for safety-related applications of Intelligent Transport Systems (ITS) ("the Decision")

What are the policy objectives and the intended effects?

Government is obliged to implement the Decision, which it intends to do by requiring Ofcom to use its existing powers under the Wireless Telegraphy Act to give effect to it. The Commission states that 42000 people are killed on the roads of Europe each year. The cost of accidents and consequent congestion to society is clearly high. In the Impact Assessment included as Annex 2 of the CEPT Report 20 , it was concluded in paragraph 4.3 that even a marginal reduction in road casualties would provided a greater benefit than alternative uses for the radio spectrum 5875 to 5905 MHz.

What policy options have been considered? Please justify any preferred option.

Options include either doing nothing and rely on Ofcom's exercising its exitisting powers to give effect to the requirments of the Decision. However, insofar as Ofcom is not the addressee of the Decision, it is considered necessary to introduce a requirement (by means of regulations) for Ofcom to exercise its powers to give effect to the Decision.This will ensure that European requirements are implemented in a transparent and efficient manner.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects?

12 months after coming into force

**Ministerial Sign-off** For SELECT STAGE Impact Assessments:

***I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.***

Signed by the responsible Minister:

Stephen Carter

..... Date: 8th January 2008

# Summary: Analysis & Evidence

| Policy Option: | Description: |
|---|---|
| | |

**COSTS**

| ANNUAL COSTS | Description and scale of **key monetised costs** by 'main affected groups' |
|---|---|
| **One-off** **Yr** | |
| **£ 0** | |
| **Average Annual Cost** (excluding one-off) | |
| **£ 0** | **Total Cost** (PV) **£ 0** |

Other **key non-monetised costs** by 'main affected groups'

No additional costs as frequencies subject to same Ofcom licensing regime as before

**BENEFITS**

| ANNUAL BENEFITS | Description and scale of **key monetised benefits** by 'main affected groups' |
|---|---|
| **One-off** **Yr** | |
| **£ 0** | |
| **Average Annual Benefit** | |
| **£ 0** | **Total Benefit** (PV) **£ 0** |

Other **key non-monetised benefits** by 'main affected groups'

Harmonisation across Europe may make these frequencies more attractive to service providers who may offer new services benefitting citizens/consumers but difficult to monetise such benefits. The service providers themselves may also benefit but again difficult to monetise to what extent.

Key Assumptions/Sensitivities/Risks

| Price Base | Time Period | **Net Benefit Range** (NPV) **£** | **NET BENEFIT** (NPV Best estimate) **£** |
|---|---|---|---|

| | |
|---|---|
| What is the geographic coverage of the policy/option? | UK wide |
| On what date will the policy be implemented? | 3rd February 2009 |
| Which organisation(s) will enforce the policy? | Ofcom |
| What is the total annual cost of enforcement for these | £ |
| Does enforcement comply with Hampton principles? | Yes |
| Will implementation go beyond minimum EU requirements? | No |
| What is the value of the proposed offsetting measure per | £ 0 |
| What is the value of changes in greenhouse gas emissions? | £ 0 |

| Will the proposal have a significant impact on competition? | | | No | |
|---|---|---|---|---|
| Annual cost (£-£) per organisation (excluding one-off) | Micro **0** | Small **0** | Medium **0** | Large **0** |
| Are any of these organisations exempt? | No | No | N/A | N/A |

| **Impact on Admin Burdens Baseline** (2005 Prices) | | | (Increase - |
|---|---|---|---|
| Increase £ 0 | Decreas £ 0 | **Net** | **£** 0 |

Key: **Annual costs and benefits: Constant Prices**

## Evidence Base (for summa

[Use this space (with a recommended maximum of 30 pages) to set out the evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Ensure that the information is organised in such a way as to explain clearly the summary information on the preceding pages of this form.]

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

A European Commission Decision[1] (the "Decision") to allow the availability and efficient use of the radio spectrum for safety related Intelligent Transport Systems (ITS) equipment in a harmonised manner in the Community was published on 5 August 2008.

The Decision was addressed to all Member States to, not later than six months after entry into force of this Decision, designate the frequency band 5875 - 5905 MHz for Intelligent Transport Systems in accordance with the Annex and, as soon as reasonably practicable following such designation, make that frequency band available on a non-exclusive basis

To achieve the maximum capability for safety messages to be successfully transmitted, ITS safety systems in the 5875 - 5905 MHz band are based on channel access technologies where only one device is active on a channel at the same point in time in a given area and all mobile as well as roadside units are operating in the same network.

Therefore, a coordination mechanism of roadside infrastructure is considered appropriate to ensure that different safety related ITS infrastructure operators can successfully coexist. Consequently, for infrastructure-to-vehicle and infrastructure-to-infrastructure ITS communications apparatus, BERR considers that a form of licensing of safety related ITS infrastructure may be necessary to ensure an appropriate coordination mechanism.

For vehicle to vehicle and vehicle to infrastructure ITS communications, no coordination by licensing is either practical or necessary, since the technology has been specifically developed to work between automotive vehicles, whose movements are clearly outside any central control. In this instance, BERR considers it more appropriate for Ofcom to make regulations exempting users of particular safety related ITS equipment from the requirement to hold such a licence. These regulations will be made by Ofcom under Section 8(3) of the Wireless Telegraphy Act.

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 published separately details of the award for PMSE[2].

**Proposal**

[1] 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) http://www.erodocdb.dk/docs/doc98/official/pdf/2008671EC.pdf

[2] http://www.ofcom.org.uk/consult/condocs/bandmngr/ Paragraphs 5.37 and 5.38

This Impact Assessment relates to the proposal to make new regulations in order to comply with the Decision. The regulations will require Ofcom to exercise their powers to make spectrum available for safety related ITS apparatus in the frequency band 5875- 5905 MHz on a non-exclusive basis.

**The citizen and/or consumer interest**

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 safety related ITS equipment;
- the introduction of safety related ITS systems are intended to make the roads safer.

The European Commission states[3] that 42000 people are killed on the roads of Europe each year. The cost of accidents and consequent congestion to society is clearly high. In the Impact Assessment included as Annex 2 of the CEPT Report 20[4], it was concluded in paragraph 4.3 that even a marginal reduction in road casualties would provided a greater benefit than alternative uses for the radio spectrum 5875 to 5905 MHz. The report suggests that maybe just a 1% reduction in casualties would see a greater benefit to society than other radio applications.

**Options considered**

The options open to BERR 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**

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

As set out earlier, there could be significant benefits for UK consumers and citizens from the development of ITS systems in 5875 to 5905 MHz. 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, the non-exclusive basis of the Decision means that it would still be possible for alternative uses to access this spectrum.

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 by Ofcom. Ofcom intends 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 Ofcom believe that it might be possible for some PMSE use to coexist with the proposed ITS systems.

**Do nothing**

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

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[3] Press notice http://europa.eu/rapid/pressReleasesAction.do?reference=IP/08/1240&format=HTML&aged=0&language=EN&guiLanguage=en

[4] 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

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**

The preferred option therefore is to require Ofcom to exercise their powers to designate and make spectrum available for safety related ITS apparatus in the frequency band 5875- 5905 MHz on a non-exclusive basis.
The benefits of this option are compliance with European Community law and for stakeholders wishing to use compliant safety related ITS devices, the benefits from the potential introduction of a technology designed to improve road safety.

# Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

**Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.**

| **Type of testing undertaken** | ***Results in Evidence Base?*** | ***Results annexed?*** |
|---|---|---|
| Competition Assessment | No | No |
| Small Firms Impact Test | No | No |
| Legal Aid | No | No |
| Sustainable Development | No | No |
| Carbon Assessment | No | No |
| Other Environment | No | No |
| Health Impact Assessment | No | No |
| Race Equality | No | No |
| Disability Equality | No | No |
| Gender Equality | No | No |
| Human Rights | No | No |
| Rural Proofing | No | No |

# Annexes

# The 5875–5905 MHz Frequency Band (Management) Regulations 2009

## Transposition Notes

**Commission Decision 2008/671/EC 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) ("the Decision").**

The purpose of the Decision is to harmonise the conditions for the availability and efficient use of the frequency band 5875-5905 MHz for safety related applications of Intelligent Transport Systems (ITS) in the Community.

Under Article 3 of the Decision, Member States are required:-

a) By 5th February 2009, to designate the frequency band 5875-5905 MHz for applications of Intelligent Transport Systems in accordance with the parameters set out in the Annex to the Decision.

b) As soon as reasonably practicable following such designation, to make that frequency band available on a non-exclusive basis.

The Office of Telecommunications (OFCOM) is responsible for the management of the radio spectrum in the UK. Under the Wireless Telegraphy Act 2006, OFCOM has the necessary powers to give effect to the requirements of the Decision. Therefore, the Regulations implement the Decision by imposing a duty on OFCOM to exercise their functions under the Wireless Telegraphy Act 2006 so as to give effect to the obligations of the United Kingdom under the Decision.

This table has been prepared by the Department of Business Enterprise and Regulatory Reform.

| | | |
|---|---|---|
| 1. | Sets out the subject matter and scope of the Decision | No implementation required. |
| 2(1) | Sets out a definition of "Intelligent Transport Systems" (ITS) | Regulation 2 reproduces the definition but excluding the words "a range", which under domestic law add nothing to the definition. |
| 2(2) | Sets out a definition of "mean equivalent isotropically radiated power (e.i.r.p)" | No implementation is required because the defined term only appears in the technical Annex to the Decision, which (albeit incorporated by reference) is not reproduced in the Regulations. However, the Regulations require OFCOM to exercise its functions in accordance with the Annex to the Commission's Decision, which may only be understood by reference to the definitions in the Decision. |
| 3 (1) | Sets out the following requirements on Member States:-<br>(a) By 5th February, to | Regulations 3(1) and (2) place a duty on OFCOM to designate by 5th February 2009 and subsequently make available the 5875–5905MHz band for safety related applications of ITS on a non-exclusive basis. |

| | | |
|---|---|---|
| | designate the frequency band 5875-5905 MHz for ITS in accordance with the parameters set out in the Annex to the Decision, which relates to safety-related applications of ITS; and<br><br>(a) as soon as reasonably practicable following such designation, to make that frequency band available on a non-exclusive basis. | |
| 3(2) | Provides for a derogation from the requirements in Article 3(1) by allowing Member States to request transitional periods and/or radio spectrum-sharing arrangements, pursuant to Article 4(4) of the Radio Spectrum Decision (Decision No 676/2002/EC). | No derogation is needed because, by operation of these Regulations, the UK will have implemented the Decision in full. |
| 4 | Requires Member States to keep the use of the 5875-5905 MHz band under scrutiny and report their findings to the Commission to allow for a review of the Decision if necessary. | No implementation required. |
| 5 | Provides that the Decision is addressed to Member States | No implementation required. |