



Regulatory Impact Assessment

Wireless Telegraphy (Exemption) Regulation 2003

January 2003

The Radiocommunications Agency is an Executive Agency of the Department of Trade and Industry.
The Agency's website is located at www.radio.gov.uk

1. Title

Wireless Telegraphy (Exemption) Regulation 2003.

1(i) This RIA has been published to support Regulations consolidating existing Statutory Instruments on Wireless Telegraphy licence exemption, i.e. SI 1999/930 as amended by SI 2000/1012, SI 2001/730 and SI 2002/1590. By exempting additional equipment, the Regulations will allow these devices to be used without the need for licensing or payment of licence fees under section 1(1) of the Wireless Telegraphy Act 1949.

1(ii) The RIA also supports the change in the Wireless Telegraphy Regulations 1999 to allow public telecommunications services into both the 5 GHz and the 58 GHz licence-exempt bands.

2. The Issue

The new Regulations will consolidate the existing Statutory Instruments on licence exemption, and will also include additional equipment, which will be made exempt from the Wireless Telegraphy licensing regime. Equipment using both the 5 GHz and the 58 GHz bands will be allowed to use this spectrum on a licence-exempt basis, and will also be able to provide public telecommunications services. All proposals for new equipment exemptions have been subject to previous consultation.¹

3. The Objective

The objectives of the proposed Regulations are:

- to aid transparency on licence-exemption regulation through a consolidated Statutory Instrument;
- to provide a stimulus for innovative radio technologies;

¹ Consultation on proposals for technical requirements for short range, high data rate equipment operating in the frequency range 5150 to 5875 MHz – final stage (December 2001). Consultation on the use of licence-exempt spectrum for the provision of public telecommunication services (October 2001). Proceedings of the Radiocommunications Agency's Fixed Links Consultative Committee.

- to increase competition and consumer choice;
- to increase the market potential for affordable broadband communications;
- to allow third-party traffic to be carried in the 58 GHz and 5 GHz licence-exempt bands, and to lessen the regulatory burden to this part of the radio sector;
- to increase competition and consumer choice in the radio local area network (RLAN) marketplace; and
- to provide spectrum for new, higher data-rate, more spectrally efficient RLAN services.

4. Risk Assessment

4(i) Risk from maintaining the existing Regulations

a. Consolidation of the existing Regulations

It is becoming increasingly unwieldy to have numerous Regulations on the topic of licence exemption. Maintaining the current Regulations on licence exemption will not address these concerns, and will not address the transparency requirements of National Regulatory Authorities (of which the Radiocommunications Agency is one) stemming from the forthcoming Authorisation Directive.

b. Fixed terrestrial (point-to-point) links in the unco-ordinated 57.1 to 58.9 GHz band

The 57.1 to 58.9 GHz band has been available for fixed terrestrial (point-to-point) links on an unco-ordinated basis for the past ten years. A relaxed licensing regime has applied, under which applicants register the frequency they use with the Radiocommunications Agency, paying £50 on issue of the licence at annual renewal. A review of this regime through the Agency's Fixed Links Consultative Committee (FLCC) has recommended that fixed-link usage of this band should be made licence-


See www.radio.gov for full details of the consultative process mentioned.

exempt to all users, subject to the technical criteria stated in Interface Requirement 2000. This recommendation has industry support due to its deregulatory nature.

c. Short-range, high-data-rate equipment operating in the 5150 to 5725 MHz band

Licence-exempt use of this equipment is not currently permitted within the 5 GHz band. This technology could potentially be a ubiquitous feature of many consumer electronic products. A regulatory regime based on individual equipment licensing would be a barrier to its success. Proposals to allow licence-exempt use have been subject to extensive consultation and have industry support due to their deregulatory nature. Furthermore, similar regimes have been adopted by countries throughout Europe and the rest of the world as a way of maximising the potential of this technology.

If both public and private use of this equipment is not permitted, there is a risk that the UK will fall behind other parts of the world in the provision of short-range broadband public-access telecommunication services, and that the demand for these services will remain unsatisfied and undeveloped. This will ultimately restrict consumer choice and reduce competition.

 operators are currently offering public-access services in the 2.4 GHz licence-exempt band. Most are planning to offer a migration path to 5 GHz in order to provide higher data rates and a better quality of service. Successful service planning for current 2.4 GHz services requires certainty in relation to the availability of additional spectrum at 5 GHz.

4(ii) Risk from changing the existing Regulations

a. Consolidation of existing Regulations

There are no known risks in consolidating the existing Regulations on Wireless Telegraphy licence exemption.

b. Fixed terrestrial (point-to-point) links in the unco-ordinated 57.1 to 58.9 GHz band

The equipment used for this frequency band is for small, powered short-hop links. The interference potential is small but valid. Due to the nature of deregulation, the Radiocommunications Agency will not be in a position to know where users are in this frequency band.

c. Short-range, high-data-rate equipment operating in the 5150 to 5725 MHz band

There is a risk that services in the 5 GHz licence-exempt spectrum will not be able to maintain a satisfactory grade of service to end customers, particularly where there are existing or new radar and outside broadcast service deployments, and where there is an unusually high concentration of this equipment. However, the large blocks of spectrum that have been allocated in this band, and the technical criteria stated in Interface Requirement 2006, considerably reduce the risk of interference.

Furthermore, most respondents to the 5 GHz consultative document² stated that, for RLANs, interference could be resolved most effectively on site by the service provider. They noted that there was a commercial incentive to resolve potential interference issues, as well as an understanding that licence-exempt spectrum is available on a non-interference and non-protected basis.

5. Identifying the Benefits

a. Consolidation of existing Regulations

Consolidating the Regulations will aid transparency in identifying equipment that is exempted from needing a Wireless Telegraphy licence (i.e. that may be used without

² Consultation on proposals for technical requirements for short range, high data rate equipment operating in the frequency range 5150 to 5875 MHz – final stage (December 2001).

the need for licensing or payment of licence fees under Section 1(1) of the Wireless Telegraphy Act 1949).

Consolidation will also assist the free circulation of new and existing equipment, which will benefit UK manufacturers, small businesses and UK service providers and retailers.

b. Fixed terrestrial (point-to-point) links in the unco-ordinated 57.1 to 58.9 GHz band

Removes the fiscal need for businesses to apply for a licence, which costs £50 annually. It will also allow the quicker deployment of links, as an operator will not need the Radiocommunications Agency's agreement before deploying a service. This will also support the deregulatory theme set out in the forthcoming Authorisation Directive.

c. Short-range, high-data-rate equipment operating in the 5150 to 5725 MHz band

Allowing new RLAN services to operate on a licence-exempt basis in the 5 GHz band is expected to enable:

- an increase in the provision of affordable broadband telecommunications;
- product innovation; and
- the creation of products and services that will provide greater data rates and quality of service.


Ultimately, the consumer will benefit from increased choice and greater competition in the telecommunication sector. The overall benefit to the UK will derive from an increase in the economic value of the 5 GHz bands.

d. Land mobile satellite service terminals

Where reciprocal agreements to assist in global markets are being developed, this Regulation will encourage an open market, which will help to deliver economic benefits for businesses in the land mobile satellite service (LMSS) sector. LMSS personal terminals can be used almost anywhere within the UK, and will particularly benefit remote communities where current fixed/mobile telecommunications are prohibitively difficult or expensive to install. The Regulation will exempt two additional brands of LMSS terminal, Orbcomm and Spacechecker, from needing a Wireless Telegraphy Act licence.

6. Business Sectors and End Users Affected

Many sectors of the economy would benefit by the proposed Regulations, including:

-  telecommunication industry;
- radio equipment manufacturers and suppliers;
- the electronics consumer market;
- the retail consumer market;
- fixed terrestrial network operators;
- the satellite industry; and
- most other business sectors (as consumers).

7. Consultation

The Radiocommunications Agency has recently carried out major consultation exercises into the public/private use of deregulated spectrum and the future use of 5 GHz spectrum. These consultation documents³ can be found on the Agency's website at www.radio.gov.uk.



³ Final proposals on the proposed Consolidated Wireless Telegraphy Licence-Exemption Regulation (September 2002).

Consultation on proposals for technical requirements for short range, high data rate equipment operating in the frequency range 5150 to 5875 MHz – final stage (December 2001).

8. Summary

Objective	Costs	Benefits
<p>The Regulations will exempt additional equipment from the requirement to be licensed under section 1(1) of the Wireless Telegraphy Act 1949, specifically to the following:</p> <ul style="list-style-type: none"> • fixed terrestrial (point-to-point) links in the unco-ordinated 57.1 to 58.9 GHz band; • Land mobile satellite services (LMSS) – Orbcomm and Spacechecker; and 	<p>No direct costs incurred for businesses or individuals, as no licence fee will be payable.</p> <p>No direct costs to businesses or individuals. The loss in Agency revenue due to the new arrangement will be in the region of £25,000.</p> <p>No direct costs to businesses or individuals. The Regulation on LMSS does not affect the licensing provision of the networks, as it only concerns the user mobile terminals that are configured to these networks.</p>	<p>Facilitating an open market for businesses and individuals alike in the radio sector.</p> <p>The Agency will recover most of the lost revenue through administrative cost savings.</p> <p>Facilitating an open global market for satellite personal communications service terminals and opening up communications to remote communities.</p>

<ul style="list-style-type: none"> • short-range, high-data-rate equipment operating in the 5150 to 5725 MHz band. 	<p>No direct costs to businesses or individuals.</p>	<p>Facilitating an open market for businesses and individuals alike in the radio sector. The consumer benefits generated by the introduction of public RLANs have been estimated to be £500 million per year⁴. Total welfare gains would be higher if the benefits of all new services and the benefits to producers are included.</p>
-----------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

9. Recommendation

The recommendation is to make the Regulations.

⁴ See Annex 1 for the calculation of the consumer benefits of introducing public RLANs.

Declaration

I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Signed by the responsible Minister

Signature.....

Minister of State for e-Commerce and Competitiveness

Date.....

RIA prepared by:

Paul Redwin, Licensing Policy Unit, Radiocommunications Agency, 10R/3A,
Wyndham House, 189 Marsh Wall, London, E14 9SX.

Tel: 020 7211 0075. Email: paul.redwin@ra.gsi.gov.uk