

FINAL PROPOSALS ON THE PROPOSED CONSOLIDATED WIRELESS TELEGRAPHY LICENCE-EXEMPTION REGULATION

1. Executive Summary

1.1 The Secretary of State proposes to consolidate the existing licence-exempt Regulations (SI 930/1999, SI 1012/2000, SI 730/2001 and SI 1590/2002) into one combined Regulation, with the aim of making existing Regulations for licence exempt radio equipment more transparent and clear.

1.2 In advising the Secretary of State, The Radiocommunications Agency (The Agency) have taken the opportunity afforded by the consolidation exercise also to introduce a number of new bands for licence exempt equipment. The new Regulations allow public and private services to operate on a licence exempt basis in the following frequency bands:

- 5150 - 5350 MHz (Band A: indoor use only);
- 5470 - 5725 MHz (Band B: indoor and outdoor use);
- 57.1 – 58.9 GHz (for fixed terrestrial point-to-point links, replacing the current licensing regime)

1.3 Equipment operating in these bands must operate in accordance with the technical requirements as specified in the appropriate UK Interface Requirement.

1.4 The Agency has previously consulted on the proposals for new exemptions contained within the “Consolidated Licence-Exemption Regulation”, and it is with these previous consultation processes in mind that the Agency seeks final comments on its proposals. Responses to this 28-day consultation should be sent no later than **11 October 2002**. Please send your final comments to the following address:

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Publication of responses

1.5 Respondents to this 28-day consultation should note that in the interests of open government:

- Unless confidentiality is expressly requested, individual responses will be placed in the public domain in printed or electronic form, together with the names and contact details of authors. Respondents are requested to make it very clear if they wish to keep some or all of their responses confidential;
- Unconditional permission to publish responses will be assumed unless the author expressly states otherwise;
- Any copyright attached to responses will be assumed to have been relinquished unless it is expressly reserved; and
- The provisions of the Data Protection Act will apply to information in electronic form, and to certain manual filing systems.

2. Consolidated Regulations: Proposals and Reasoning

2.1 Since the current licence-exemption regulation (SI 1999/930) was made, there have been three amendment regulations to the original. This has resulted in the arrangements for licence exemption becoming unwieldy and difficult to identify which equipment is exempted from requiring a Wireless Telegraphy Act licence. Therefore the Agency is proposing to consolidate the above Regulations. This should

help make existing arrangements for licence exempt radio equipment more clear and transparent.

The new Regulation will cover all equipment that are listed in the current Regulations such as¹:

- Land Mobile Satellite Services
- Digital European Cordless Telephony (DECT) 1880-1900MHz
- Short Range Devices (SRD)
- Public Mobile Radio (PMR)
- Various Public Mobile Operator Licences:
 - (a) Public Mobile Data Systems
 - (b) Meteor Burst Data Systems
- User equipment which communicates with various Cellular Radiotelephone Systems:
 - (a) GSM 900 and GSM 1800
 - (b) Universal Mobile Telecommunication System Radiotelephones (UMTS) (3G)
- User equipment which communicates with:
 - (a) Railways GSM
 - (b) Public Access Mobile Radio Systems
 - (c) Public Two-Way Paging Systems
 - (d) Common Base Station Systems
- CDMA Spread Spectrum Data Asset-Tracking Systems
- Fixed Terrestrial (Point-to-Point) links operating in the 57.1GHz to 58.9GHz frequency band.
- Radio Local Area Networks (RLANs).

¹ This list is not exhaustive of equipment that is currently exempted from needing a Wireless Telegraphy Act licence.

3. 5 GHz Issues

3.1 It is proposed that the new regulations will allow both public and private services to operate on a licence exempt basis in the frequency bands:

- 5150 - 5350 MHz (Band A: indoor use only);
- 5470 - 5725 MHz (Band B: indoor and outdoor use).

Equipment operating in these bands must operate in accordance with UK Interface Requirement IR 2006 (Draft).

Consultation processes

3.2 RLAN equipment operating in the 5GHz band has the potential to provide short range, high data rate, radio connectivity to support a wide range of broadband services. Such technology is commonly referred to as Radio Local Area Networks or RLANs. The 2.4 GHz band is currently available for both public and private RLANs. The 5 GHz band can support higher data rates and a better quality of service than offered by the 2.4 GHz band and therefore offers a future migration path.

3.3 The Agency's proposals for 5 GHz RLANs, including the removal within Regulations of any distinction between public and private applicants have been subject to extensive consultation via a number of separate, but inter-related, consultative exercises. The two key themes addressed by previous consultations were:

- I. Technology - The nature of equipment allowed at 5GHz; and
- II Public Services - Whether licence-exempt public telecommunication services should be permitted.

Technology

3.4 Proposals for the technology to be allowed in the 5 GHz band were set out in document "Consultation on proposals for Technical Requirements for Short Range, High Data Rate Equipment operating in the frequency range 5150-5875 MHz - Final

Stage" (December 2001)". The proposed Consolidated Exemption Regulation take forward proposals for two of the three available bands (Band A for indoor use only and Band B for both indoor and outdoor use). The recommendation proposals were well supported by industry and are consistent with European developments (including the European Radiocommunications Committee Decision 99/23 recommending the harmonisation of spectrum for RLANs across Europe). The Agency is aware that equipment incorporating Dynamic Frequency Selection (DFS), as mandated by ERC Decision (99)23 is currently not available commercially. The technical requirements stated in IR2006 (Draft), which is currently undergoing a European Community notification procedure, therefore includes an *interim arrangement* that will allow equipment without the full implementation of DFS to operate in a limited part of the available spectrum. The remaining spectrum for RLANs at 5 GHz (Band C) is not included in the proposed Consolidated Exemption Regulations as further technical studies must be completed before regulatory arrangements are finalised.

Public Services

3.5 Following a consultation on the use of licence-exempt spectrum for the provision of public telecommunication services and subsequent amendment to Exemption Regulations on 8 July 2002, to allow public telecommunications in the 2.4 GHz band, the Agency proposes within the Consolidated Exemption Regulations to extend this to parts of the 5 GHz band. The Agency believes that the provision of public telecommunication services in the 5 GHz licence-exempt band will increase the prospect of product innovation, and provision of public services at greater data rates than is currently possible.

3.6 In addition to the majority of responses received during the consultation on the use of licence-exempt spectrum for the provision of public telecommunication services, proposals to allow public services in the 5 GHz band have been generally supported throughout the 5 GHz consultation process and were one of the recommendations of the *final report of the 5 GHz Advisory Group*.

4. Fixed terrestrial (point-to-point) links on a non co-ordinated basis

4.1 The second new band the Agency propose to make available on a licence exempt basis is the 58 GHz band. This exemption will replace the current licensing arrangements for this band. Exemptions will make licensing no longer necessary, provided the apparatus conforms with the relevant technical requirements.

4.2 The 58 GHz band has been available for fixed terrestrial (point-to-point) links on an unco-ordinated basis for the past 10 years. A relaxed licensing regime has applied under which applicants register with the Agency, the frequency used, currently paying £50 on issue of the licence and at annual renewal. A review of this regime through the Agency's *Fixed Links Consultative Committee (FLCC)* has been undertaken, and recommended that this product should be made licence-exempt to all users subject to the technical criteria stated in the *UK Interface Requirement 2000* . The exemption regulation will permit third party traffic to be carried on the stated fixed-links operating in this frequency band.

5. *Quality of service*

5.1 The technical characteristics of equipment operating in the 5 GHz and 58 GHz bands reduces the risk of users of these bands interfering with each other. However, due to the uncoordinated nature of use, it is not possible to guarantee that users will not suffer interference. The Agency will not investigate or offer protection from interference to systems operating in these bands arising from other authorised radio use. Users should therefore consider whether such equipment is suitable for their business needs.