



# Policy guidance regarding licensing for Earth Stations on Vessels (ESVs)

Publication date: 23 October 2007



# Contents

Section		Page
1	Policy Guidance regarding licensing for Earth Stations on Vessels (ESVs)	1

## Section 1

# Policy Guidance regarding licensing for Earth Stations on Vessels (ESVs)

## Summary

- 1.1 This document explains that it is no longer necessary for Satellite Network Operators to hold a licence when providing services to satellite earth stations on vessels. The requirement for vessels to hold a Notice of Variation to the ship radio for the installation of satellite earth stations remains.
- 1.2 Earth stations on vessels (ESVs) are used to enable broadband access, data communications and telephony from vessels worldwide via an established satellite link, operating in the fixed satellite service.
- 1.3 Ofcom facilitates the licensing of ESV within UK territorial waters, specifically in the 14.0-14.25 GHz frequency band. UK registered vessels using an ESV are licensed by issuing a "Notice of Variation" (NoV) to their ship radio licence. Foreign registered vessels operating ESVs within UK territorial waters are considered to operate under the same conditions as identified within the NoV issued to UK registered ships.
- 1.4 The licensing of ESVs is necessary to prevent interference to other radio services. Under section 8 of the Wireless Telegraphy Act 2006, installation and use of wireless telegraphy apparatus, which includes the ESV terminal, must be subject to a licence or exemption regulations. Earth Stations on Vessel satellite terminals are not licence exempt.
- 1.5 Until October 2007 there was also a requirement for an ESV Satellite network operator to hold a network operator licence. However with the removal of the main radio site clearance limitations for operation of ESVs within UK territorial waters, there is no longer a requirement for this satellite network operator licence in order to reduce the regulatory burden on our licensees.
- 1.6 Foreign registered ship radio licences are provided by the country of the ship's registration and are not issued by the UK. It is common practice that a ship radio licence issued by one administration for systems related to the communication and navigation of the vessel are recognised by other administrations.
- 1.7 "Visiting vessels" are bound by the provisions of Statutory Instrument 1998 No. 2970 The Wireless Telegraphy (Visiting Ships and Aircraft) Regulations, which require that all apparatus for wireless telegraphy on board a visiting ship or visiting aircraft shall be so used as not to interfere with the emitting or receiving of any wireless telegraphy.
- 1.8 The NoV granted to an operator of a UK registered vessel details the frequency ranges of the radio equipment on-board the vessel (such as those used for communication etc.) and the terms and conditions with which the licensee is obliged to comply.
- 1.9 If your organisation is considering installing and using ESVs either on a UK registered vessel, or a foreign registered vessel within UK territorial waters, and you

have further questions, you should contact Ofcom for further details of the current regulatory requirements. Contact details are set out in section 3 below.

- 1.10 This Policy Guidance note contains further background information regarding regulation of ESV systems in the UK. Your attention is drawn in particular to the General Disclaimer given in section 4 below.

### **Relevant background**

- 1.11 At the international level, the operation of Earth Stations on Vessels in C (5925-6425 MHz) and Ku (14.0/14.5 GHz) bands was recognised by the ITU-R World Radiocommunication Conference in 2003 under a new radio regulatory provision. This provision states that:
- 1.12 In the bands 5925-6425 MHz and 14.0-14.5 GHz, earth stations on board vessels may communicate with space stations of the fixed-satellite service, in accordance with Resolution 902(WRC-03). This Resolution states that: "The minimum distances from the low-water mark as officially recognised by the coastal State beyond which ESVs can operate without the prior agreement of any administration are 300 km in the 5925-6425 MHz band and 125 km in the 14.0-14.5 GHz band, taking into account the technical limitations in Annex 2. Any transmissions from ESVs within the minimum distances shall be subject to the agreement of the concerned administration(s)".
- 1.13 The CEPT/ECC/PT has developed further information on this topic and it has agreed an ECC Decision (05)10 that, subject to certain conditions, should allow the free circulation and use of ESVs, operating in Ku-band, within the CEPT countries. In addition ETSI Working Group SES-ESV has prepared a harmonised standard EN 302 340 on the radio aspects of ESVs operating in Ku-band.
- 1.14 Ofcom has contributed to these developments within the international radiocommunication community and with the removal of the ESV satellite network operator licence requirement we have simplified implementation of resulting measures as far as practicable, taking into account the particular situation in the UK including the national use of these frequency bands by other radio services.
- 1.15 In the UK, the frequency bands 5925 - 6425 MHz and 14.25 - 14.5 GHz are already used extensively by fixed services and therefore Ofcom will not grant licences for the operation of ESVs within these bands in UK territorial waters.
- 1.16 However, the band 14.0 - 14.25 GHz is mainly used at present for satellite earth station operation in the UK and is therefore in Ofcom's view suitable for ESV operation. The technical characteristics of ESV systems that Ofcom require compliance with as part of any licence allowing ESV operation are set out in section 2 below.

### **Relevant Characteristics**

- 1.17 Ofcom's Notice of Variation to a ship radio licence for a UK registered vessel includes the technical and operational conditions for operation in UK territorial waters.
- 1.18 The details of these variation conditions are listed on the Ofcom website:

[www.ofcom.org.uk/radiocomms/ifi/licensing/classes/maritime/information/esv\\_nov.pdf](http://www.ofcom.org.uk/radiocomms/ifi/licensing/classes/maritime/information/esv_nov.pdf)

## Licensing Procedures

- 1.19 Within the band 14.0 - 14.25 GHz, ESV network operators or operators of vessels intending to offer ESV services, will need to ensure that a vessel registered in the UK has a suitable NoV to its ship radio licence for ESV operation. If other vessels in the network are foreign registered, then the network operator is encouraged to verify that those characteristics are equivalent to the UK NoV conditions quoted above to preclude interference to other radio services.
- 1.20 As all UK registered vessels with radio equipment on board will already hold a ship radio licence, Ofcom consider it appropriate to permit subject to authorisation, ESV use on board the particular vessel. This authorisation will be in the form of a Notice of Variation to the existing Ship Radio Licence which will be issued free of charge upon request. This request should be addressed to:

**Ofcom Licensing Centre - ESV**  
**Riverside House**  
**2a Southwark Bridge Road**  
**London**  
**SE1 9HA**  
**Email: [licensingcentre@ofcom.org.uk](mailto:licensingcentre@ofcom.org.uk)**  
**Telephone: 020 7981 3131**

Specific policy questions should be addressed to;

**Ofcom**  
**Spectrum Policy Group - SR-2 Space**  
**Riverside House**  
**2a Southwark Bridge Road**  
**London**  
**SE1 9HA**  
**Email: [satellite.licences@ofcom.org.uk](mailto:satellite.licences@ofcom.org.uk)**  
**Telephone: 020 7981 3995**

## General Disclaimer

- 1.21 The information given in this Policy Guidance is not an exhaustive account of the relevant legal requirements and should not be regarded as a complete or authoritative statement of the law. Ofcom recommends that you seek independent professional advice in this respect.
- 1.22 The issue of licences or the making of exemption regulations pursuant to the Wireless Telegraphy Act 2006 remains entirely within Ofcom's discretion, subject to relevant legal requirements. The information given in this Policy Guidance should not be taken as making any express or implied representation regarding the grant of a licence to any person, or an exemption being made in respect of particular apparatus.
- 1.23 Ofcom may wish to revise and update this Policy Guidance in light of future developments. Please contact Ofcom should you wish to discuss this further.