



Policy guidance regarding authorisation for Earth Stations on Vessels (ESVs)

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Section 1

Policy Guidance regarding authorisation of Earth Stations on Vessels (ESVs)

Summary

- 1.1 This document explains that it is not necessary for satellite network operators to hold a licence when providing services to satellite earth stations on vessels (ESV) in the band 14.0-14.25 GHz. The requirement for vessels to hold a Notice of Variation (NoV) to the ship's radio licence for the installation of an ESV remains. The removal of the requirement for a network licence only applies to the ESV satellite networks in the band 14.0-14.25 GHz.
- 1.2 There is no change to the current UK position for any other frequency band, specifically ESVs operating to satellite networks in the band 5925-6425 MHz, are not authorised within 300km of the UK coastline.
- 1.3 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.
- 1.4 Ofcom facilitates the authorisation of ESVs within UK territorial waters, specifically in the 14.0-14.25 GHz frequency band. UK registered vessels using an ESV are authorised 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.
- 1.5 The authorisation 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 ESVs, must be subject to a licence or exemption regulations. ESVs are not licence exempt.
- 1.6 Radio licences for foreign registered ships 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 the licensing procedures section 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 details of the general disclaimer section below.

Relevant background

- 1.11 At the international level, the ITU World Radiocommunication Conference in 2003 recognised the operation of ESV in the 5925-6425 MHz and 14.0-14.5 GHz bands under a new radio regulatory provision. This provision states that:
- 1.11.1 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. Such use shall be 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)". The UK has not agreed to transmissions from ESVs within the minimum distance of 300km, in accordance with Resolution 902 of WRC 03.
- 1.12 The CEPT has adopted ECC Decision (05)10 that, subject to certain conditions, allows the free circulation and use of ESVs, operating in the 14-14.5 GHz band, within the CEPT countries. In addition ETSI has published a harmonised standard EN 302 340 on the radio aspects of ESVs operating in the 11/12/14 GHz frequency bands allocated to the Fixed Satellite Service.
- 1.13 Ofcom 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 the 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.
- 1.14 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.
- 1.15 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 with which Ofcom requires compliance as part of a licence allowing ESV operation are set out in the section on relevant characteristics below.

Relevant Characteristics

- 1.16 Ofcom's notice of variation to a ship radio licence for a UK registered vessel includes the technical and operating conditions for operation in UK territorial waters.

- 1.17 We list the details of the variation conditions within the guidance part of the licensing section for ship's radio or ship's portable radio within the main home page for licensing on the main Ofcom website.

http://licensing.ofcom.org.uk/binaries/spectrum/ships-radio/esv_nov.pdf .

Licensing Procedures

- 1.18 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.
- 1.19 As all UK registered vessels with radio equipment on board will already hold a ship radio licence, Ofcom considers 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
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
Telephone: 020 7981 3995

General Disclaimer

- 1.20 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.
- 1.21 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.

- 1.22 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.