

Your response

Question	Your response
<p>Question 1: Have you identified an alternative use for the 14.25-14.5 GHz band which could lead to greater benefits for consumers and citizens than our proposal to extend satellite ESN authorisations? Please provide evidence to support your comments.</p>	<p><i>Is this response confidential? – N</i></p> <p>Extension of satellite ESN authorization is needed by FSS operators to meet the increasing demand for satellite capacity in the UK. This demand is being driven by mobile communications in the form of airplanes, ships, and land-based vehicles. One recent study concludes that Europe (including the United Kingdom) will see the highest growth rate for inflight entertainment and connectivity during the 2022-2027 period. Inflight Entertainment and Connectivity Market Size, Share, Growth (2022 - 27) (mordorintelligence.com) Increasing demand, driven in part by advances in satellites and terminals, has resulted in a serious strain on the Ku-band spectrum for satellite services. GSO and NGSO satellites covering the UK require the extended use of the 14.25-14.5 GHz band and no other use for the band which could lead to greater benefits has been identified.</p> <p>Given the increased demand for satellite capacity in the UK and resulting serious strain on the Ku-band spectrum, Ofcom should decline considering any additional International Mobile Telecommunications (IMT) frequencies as the mobile industry has not yet demonstrated that it will need or efficiently use the IMT frequencies already identified as evidenced by the fact that WRC-19 identified a total of 17.5 GHz bandwidth for IMT and only a handful of countries have used it for 5G.</p>
<p>Question 2: Do you agree with our proposal to extend access in the 14.25-14.5 GHz band for satellite connectivity, for future broadband, air, sea, energy and transport uses? Please provide evidence to support your comments.</p>	<p><i>Is this response confidential? – N</i></p> <p>Yes, GVF agrees with the proposal. Due to the ability of communications satellites to provide high-throughput, low-latency, and cost-effective connectivity anywhere and anytime, communications satellites are uniquely able to provide needed communications links to mobile platforms such as airplanes and ships as well as to remote locations such as mines and offshore energy platforms requiring reliable and robust communications links.</p> <p>Ofcom's proposal to enable access to the 14.25-14.5 GHz band for satellite connectivity would be coherent with ECC Decisions (03)04, (05)11, (17)04 and (18)05, mentioned by Ofcom in section 3.3, but also ECC Decisions (05)11 and (18)04. It would align the UK with the many CEPT countries allowing the deployment of satellite terminals in the 14.25-14.5 GHz frequency band.</p>

Question 3: Do you agree with our proposed protection requirements for a) radio astronomy users of 14.47-14.5 GHz; b) remaining fixed link users (at specified frequencies and locations) and c) Crown users?

Is this response confidential? – N

a) RAS stations can be protected by GSO and NGSO FSS earth stations ceasing transmissions on channels overlapping with the 14.47-14.5 GHz band when RAS stations are performing observations in the secondary RAS allocation in this band. Ofcom might only mute Aero terminals in the upper 30 MHz in areas near RAS stations as ECC report 271 concludes that FSS terminals with an e.i.r.p. towards the horizon of -20 dBW/(40 kHz) can produce an area size up to 340 Km (single entry analysis) and current terminals can mute their transmission if within this range. In fact, in the US, the radius of protection zones for astronomical observatories is a maximum of 160km, with the majority only requiring 50km.

Modern FSS terminals on board aircrafts have the ability to both avoid interference and take action if interference is detected. This ability is largely the result of software on the antenna system which monitors the system and mutes transmissions along with the Network Control and Monitoring Center (NMC) facility that controls and monitors the aero terminal when it enters an exclusion zone. The ability of the NMC to avoid interference and take corrective action only requires Ofcom to provide a record of the RSA locations (latitude and longitude) and transmit frequency to the NMC.

b) Remaining fixed link users: GVF understands that only 30 pairs of fixed links are currently active in the UK and that the majority of these will be retired by the end of 2022. Publication of those remaining links beyond 2022 and clear plan for their removal should be made.

To promote efficiency, GVF urges Ofcom to adopt the CEPT's PFD mask from the recent ECC report 271 rather than the ITU-R recommendation M.1643 that was developed twenty years ago, particularly since there will be fewer than 15 fixed links after 2022.

Question 4: Do you agree with our proposed authorisation approach and draft licence conditions for a) ESN licences, and b) other licensees wishing to take advantage of enhanced satellite connectivity (i.e. aircraft, ships, unmanned aircraft systems).

Is this response confidential? – N

GVF agrees in principle. However, we would like to know more about Ofcom's approach to update and establish the technical conditions necessary to ensure no harmful interference is caused by FSS stations operating with GSO and NGSO FSS satellite systems and how this would be captured in the ESN framework.

Question 5: Do you have any other comments on our proposals?

Is this response confidential? – N

No other comments.