

ESOA response to the RSPG Opinion on 5G implementation challenges (RSPG 3rd opinion on 5G)

26 November 2018

About ESOA

ESOA, the EMEA Satellite Operators Association, is the world's only CEO-driven satellite association and leads a coordinated and impactful response to the global challenges and opportunities the commercial satellite communications sector faces. Established as a non-profit organisation, ESOA has as its objective to serve and promote the common interests of global and regional satellite operators headquartered in Europe, the Middle East, Africa and the Commonwealth of Independent States (CIS) who deliver information communication services across the globe.¹

ESOA comments

ESOA welcomes the opportunity to respond to the RSPG on their 3rd Opinion on 5G and offers the following two aspects for the consideration of the RSPG.

1. Defragmentation of the 3.4-3.8 GHz band

The 3.4-3.8 GHz band is very heavily used for fixed satellite service (FSS) earth stations in all parts of the world and the satellite industry depends on continued access to the 3.4-3.8 GHz spectrum globally. Therefore, ESOA would like to emphasize that any reference to the defragmentation of the 3.4-3.8 GHz band should strictly relate to existing terrestrial electronic communication services (ECS) in the band. Such statement should not be used to try to undermine the position of other existing primary services, such as FSS, in the band. In accordance to the EC Decision on this band (2008/411/EC), harmonising the use of the band for terrestrial services should be done without prejudice to the protection and continued operation of other existing use in this band. Already the RSPG 2nd opinion on 5G has encouraged administrations to find a proper balance between the benefits of allowing 5G use and keeping access to satellite operators in the 3600 MHz band.

¹ A complete list of ESOA Members can be found at www.esoa.net

2. Connectivity for vertical industries

It is increasingly being recognised that Satellite will play an essential role in the global 5G network, especially when considering vertical industries such as IoT, M2M, media services, connected transport networks and many other services. Such services benefit greatly from the reach and resilience of satellite networks, as well as the amount of data that can be delivered for backhauling or broadcasting to users, base stations and devices. The role of satellite in 5G has been recognized and elaborated at European level by the ECC report "Satellites in 5G"².

At international level, the ITU-R is currently working on the report on the key elements for integration of satellite systems into Next Generation Access Technologies. Additionally, there is ongoing work in the international standardisation body 3GPP in the form of two work items³ dedicated to ensuring satellite networks integration into the 5G ecosystem. Further information on the role of satellite in 5G can be found from the paper "*Satellite Communication Services: An integral part of the 5G Ecosystem*"⁴.

A mix of technologies will be essential to address all 5G connectivity needs. It is expected that terrestrial fixed and mobile networks as well as satellite networks will play a role together in achieving the ambitious goals identified by the EU in its 5G Action Plan.⁵ ESOA stands strongly committed to contribute and cooperate to this end.

² <https://www.ecodocdb.dk/download/e1f5f839-ba17/ECCRep280.pdf>

³ 3GPP TR 38.811 v0.3.0 "Study on New Radio (NR) to support non terrestrial networks (Release 15)" and 3GPP TR 22.822 "Technical Specification Group Services and System Aspects; Study on using Satellite Access in 5G" Stage 1 (Release 16).

⁴ <https://gscoalition.org/cms-data/position-papers/GSC%205G.pdf>

⁵ <https://ec.europa.eu/digital-single-market/en/5g-europe-action-plan>