

Your response

Question	Your response
Question 1: Do you have any comments on Ofcom's proposed Plan of Work 2023/24?	<p>Intelsat welcomes the opportunity to comment on Ofcom's proposed Plan of Work 2023/24 which sets out the priorities of Ofcom for the upcoming two years.</p> <p>During the event held on 26th January a representative of Ofcom mentioned that as the Ofcom budget is getting tighter, the role of this Plan of Work becomes even more important, ensuring that Ofcom focuses on the right areas. To this end, it would be preferable to see a</p>

larger role of satellite communications in this Plan of Work and future planned projects. Specifically considering that with the new cost-recovery policy Ofcom has adopted, the satellite industry is contributing to the overall Ofcom budget considerably.

Regarding the planned project work outlined in Section A2, Intelsat offers the following views for consideration of Ofcom:

- **Impact of fibre roll-out and emerging technologies on future use of wireless fixed links.**

Regarding spectrum demand for fixed links, Ofcom mentions LEO as a new emerging wireless technology that could have an impact on future use and spectrum needs of fixed links. However, rapid innovation is taking shape also for GEO satellites. HTS, VHTS and software-defined GEO satellites (SDS) offer very competitive CAPEX/Gbps economies for example for cellular backhaul. Of course there is also innovation with regards to MEO constellations which are known to deliver fibre-like performance which should be factored within Ofcom's policy.

- **Wireless broadband evolution and spectrum implications.**

Ofcom plans to work towards understanding the potential spectrum requirements of future mobile generations, i.e. 6G, by monitoring emerging demand for spectrum, particularly in the 7-20 GHz range. Intelsat would like to draw the attention of Ofcom to the recently published study by Plum Consulting commissioned within the UK Spectrum Policy Forum (SPF) which was also supported by DCMS, this study concludes that *"Extensive allocations and active use of allocated bands indicate that there is no clear sufficiently large contiguous spectrum available for 6G use based on current technologies and current allocations. There needs to be sharing arrangements to admit additional services. Many stakeholders suggested that sharing should be an integral part of 6G specifications. We have noted in this report the existing use of AI assisted sensing and polite access to bands used by services such as defence. As 6G use cases and their quality of*

service requirements are not well defined yet it is not possible at this time to foresee whether/how these novel sharing strategies could be put into practice but they clearly warrant investigation alongside the introduction of new technologies.¹ Intelsat would also like to highlight that this frequency range includes some of the core satellite bands with deployments characterized by ubiquitous earth station receivers providing direct-to-consumer services for media, broadband, cellular backhaul and mobility with extensive level of global and European wide harmonization, which would be exposed to high interference risk with an IMT identification in the same bands. These satellite resources are extensively used and satellite operators are already struggling to accommodate the growing service demand while sharing the resource among themselves. Intelsat would encourage Ofcom to take an evidence-based approach on determining the future need of spectrum for 6G first and foremost, rather than acting purely based on interest expressed by some in the mobile industry. Especially considering the future with different technologies converging to offer wireless broadband connectivity, it is important to ensure a balanced approach to managing spectrum resources. This would also discourage the usage of ESIM within the Ku band and go in contradiction to the recently supported Ofcom policy to relax the licensing provisions for ESIMs in Ku band.

▪ **Testing innovation via sandboxes.**

While Intelsat welcomes the approach from Ofcom to enable innovation and sharing by experimenting in sandboxes i.e., in specific geographic locations and bands, we hope that any such experiments are done in a cautious manner and by including all spectrum users, to avoid any possible detrimental effect to services offered by existing spectrum users both in band and in adjacent bands.

▪ **Implementing our Space Spectrum Strategy.**

Intelsat welcomes the Ofcom view on the importance of convergence between

¹ Plum consulting: Opportunities for 6G in 7 – 24 GHz, December 2022.

different technologies in fostering competition and innovation in future networks. However, looking at the planned project work, Intelsat would welcome a more ambitious plan and an active role from Ofcom in terrestrial and satellite convergence than just monitoring developments. There is a variety of ongoing activities taking place around integrating non-terrestrial networks into future mobile networks in e.g. in ITU-R, 3GPP as well as research forums. Engaging with stakeholders regarding these activities e.g. in a form of workshops or consultations would not only provide valuable feedback to Ofcom on the progress but also provide important networking opportunities.