Your response

Question	Your response
Q1: Do you agree with our proposal to open access to the bands shown in Table 1 for satellite gateway use under the existing NGSO gateway and PES licences with the associated licensing process and fees? Are there other uses of these frequencies which you would prefer to be authorised in these bands?	Telesat strongly supports Ofcom's proposal to open access to the 27.8285 – 28.0525 GHz band, paired with the 28.8365 – 29.0605 GHz band and to the guard bands 28.1645 – 28.1925 GHz, 28.3045 – 28.3325 GHz, 29.1725 – 29.2005 GHz and 29.3125 – 29.3405 GHz for satellite gateway use. Ofcom correctly identifies that the 28 GHz band is an important band for FSS and that there is a growing demand for use of this band by satellite operators globally. In fact, the 28 GHz band (i.e. 27.5 – 30 GHz) is extensively used also by NGSO systems operating or planning to operate, serving a wide range of satellite broadband applications in urban, suburban and rural locations alike, and also offer services via earth stations in motion (ESIM), providing broadband for air and sea vessels as well as land-based users on vehicles, buses, and trains. Notably, the new Telesat LEO system, Telesat Lightspeed, which is now fully confirmed with the choice of manufacturer finalized[1], will use the 27.5-29.1 GHz and 29.5-30.0 GHz bands in the Earth-to-space direction for both user terminals and gateway earth stations. **Additional Use of the 27.8285 – 28.0525 GHz band paired with the 28.8365 – 29.0605 GHz band by Satellite User Terminals.** Telesat understands that Ofcom plans to authorize the use of 27.8285 – 28.0525 GHz band and the 28.8365 – 29.0605 GHz band **only** for NGSO and GSO satellite gateways. However, Telesat would like to note that the 28 GHz band is also important for operation of user terminals. Telesat notes Ofcom's intention, as referenced in Space Spectrum Strategy (5.16), to review an extension of ESIM authorizations to larger range of frequencies within the 27.5-30 GHz band while noting that this could not be applied for land ESIM as coexistence with Spectrum Access Licensees would be difficult. Telesat is of

[1] https://www.telesat.com/press/press-releases/telesat-contracts-mda-as-primesatellite-manufacturer-for-its-advanced-telesat-lightspeed-low-earth-orbit-constellation/.

	the view that Ofcom has the opportunity to implement its Space Spectrum Strategy plans by allocating Arqiva's released spectrum bands (or parts thereof) also to user terminals addressing the growing demand for satellite spectrum in the Ka band. In addition, Telesat notes that the frequency bands 27.5-27.8185 GHz and 28.4545-28.8265 MHz are available for both satellite gateways and user terminal use under the current UK band plan in the 27.5-29.5 GHz (28 GHz) band. Telesat is of the view that by allocating the 27.8285-28.0525 GHz and 28.8365-29.0606 GHz spectrum bands also to user terminals, the existing segmentation in the larger 27.5-30 GHz band will be reduced and adverse impact on connectivity resulting from it, will be minimized. Contiguous spectrum for both satellite gateways and user terminals would facilitate the provision of advanced satellite services for UK customers, achieving higher throughput.

Question	Your response
Q2: Do you agree with our initial assessment that our proposals would benefit citizens and consumers and would not materially affect existing users of the 28 GHz band as well as future users of the unassigned spectrum?	Telesat fully agrees with Ofcom's assessment that its proposals will not impact existing users of the 28GHz and future users of the unassigned spectrum. Enabling satellite gateway access to the unassigned spectrum as well as the four guard bands addresses the growing demand for satellite spectrum while ensuring protection of existing and future users of these bands. Satellite gateways will be deployed in specific locations and they will be limited in number, therefore protection of potential Fixed Wireless Access users can be ensured. Furthermore, Telesat is of the view that there will be no impact for existing satellite users of the 28 GHz band and potential future satellite users of the unassigned spectrum as satellite systems are able to co-exist and share spectrum.

Question	Your response
Q3: Do you have further views / comments that you wish to make in respect of this consultation?	**Access to certain parts of the 28 GHz band** Telesat notes that certain parts of the 28 GHz band (i.e. 28.0525-28.445 GHz and 29.060529.4525 GHz) are licensed to terrestrial operators on an exclusive basis. Currently, satellite operators can access these bands only if they establish commercial agreements with terrestrial mobile operators which can be costly and time consuming. In addition, there is no regulatory certainty for satellite operators to deploy services in these bands as the Spectrum Access Licensees may decide to surrender their licenses at any time in the future. Therefore, Telesat encourages Ofcom to take steps towards allowing satellite operators to obtain access to these frequencies while ensuring that the existing Spectrum Access Licensees services will be protected. In particular, satellite coordinated earth stations (i.e gateways) can coexist with Spectrum Access Licensees since as already mentioned above, the protection of existing fixed wireless users can be achieved due to the potentially limited number of coordinated earth stations deployed at specific locations in the UK. With respect to user terminals, and as mentioned in 5.16 of Space Spectrum Strategy, Ofcom has already considered to open access to more spectrum in the 28GHz band for ship and aircraft ESIMs. Telesat encourages Ofcom to implement this proposal and is of the view that the conditions provided in the Annex 2 of ECC/DEC/(15)04 decision are sufficient to protect the spectrum allocated to Spectrum Access Licensees. **Time for re-authorization of the 28GHz** To conclude, Telesat fully supports Ofcom's proposal to allocate Arqiva's released spectrum and the 28 GHz guard bands 28.1645 – 28.1925 GHz, 28.3045 – 28.3325 GHz, 29.1725 – 29.2005 GHz and 29.3125 – 29.3405 GHz to satellite GSO and NGSO gateways. In addition, Telesat proposes to allocate Arqiva's spectrum also to user terminals and to open access to the

	spectrum assigned to Spectrum Access Licensees for satellite gateways and maritime and aeronautical terminals, with adequate sharing criteria. The evidenced growing demand for satellite connectivity on the move and the recent developments in relation to Arqiva's 28 GHz released spectrum clearly show that there is stronger demand for satellite services than for terrestrial links. Therefore, Telesat respectfully requests Ofcom to consider the above-mentioned proposals to promote innovation in satellite network technologies and meet customers' growing demand for satellite connectivity.