

Office of the Communications Authority 29/F., Wu Chung House 213 Queen's Road East Wan Chai Hong Kong

22 August 2018

RE: Proposed Allocation of the 26 GHz and 28 GHz Bands to Mobile Service and the Associated Arrangements for Spectrum Assignment and Spectrum Utilisation Fee

The Global VSAT Forum (GVF) welcomes this opportunity to provide comments and views in response to the public consultation, jointly issued by the Secretary for Commerce and Economic Development (SCED) and Communications Authority (CA) of Hong Kong.

GVF serves as the unified voice of the global satellite communications industry. It brings together organizations engaged in the delivery of advanced broadband and narrowband satellite services to consumers, and commercial and government enterprises worldwide.<sup>1</sup>

GVF fully supports comments submitted to the Hong Kong authorities by other satellite industry groups and trade associations, including APSCC, AVIA and ESOA. In particular, GVF wishes to reinforce the following points:

- Several satellites from GVF members, including from Hong Kong, already use all or parts of the 27.0-28.35 GHz band to deliver Fixed Satellite Services (FSS), and major teleports in Hong Kong have operational, licensed satellite antennas transmitting within this very band
- A growing number of satellite operators are thus deploying High Throughput Satellites (HTS) using
  the 27.0-28.35 GHz band to offer more capacity and higher bandwidth to meet the connectivity
  demands of users, including through mobile terminals known as Earth Stations In Motion (ESIMs).
  HTS satellites are vital to enabling the 5G applications associated with vehicular, aeronautical, and
  mobile connectivity for end users. Thus, access to this spectrum is critical for both
  communications with end users and gateways.

<sup>&</sup>lt;sup>1</sup> More information on GVF can be found at www.gvf.org.



- Satellites most often have regional or global coverage. Without first ensuring compatibility, assignment of spectrum extensively used by FSS to 5G will create unforeseen and unfillable gaps in the satellite coverage area. In general, for services such as 5G and satellite, global harmonization of spectrum is not only good practice, but an essential requirement for global intercompatibility.
- Taking a global harmonised approach to the allocation of radio spectrum for 5G as well as for satellite communications is of utmost importance. As per the WRC-15 outcomes, the usage of the 27.5-28.35 GHz band for terrestrial 5G systems is not on the WRC-19 agenda precisely to avoid the likely unsolvable problems of 5G compatibility with existing and widespread satellite use of the band. It is to be reminded that WRC-19 Agenda item 1.13 on the identification of spectrum for 5G systems has already listed several frequency bands up to the 86 GHz band for a total amount of 33 GHz of spectrum is being studied for potential availability for 5G.

For these reasons, and the reasons stated in the submissions of other satellite organizations, GVF would urge the Communications Authority to reserve the 27.5-28.35 GHz for satellite broadband applications, consistent with the approach in other parts of the world. It should consider only the 24.25-27.5 GHz band for terrestrial 5G services, and then only with appropriate conditions for the protection of space station receivers and for the continuing deployment of FSS earth stations in the 24.75-25.25 GHz and 27.0-27.5 GHz sub-bands allocated to the FSS.

Sincere regards,

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