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9 August 2023

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

Attention: Principal Regulatory Affairs Manager (R22)

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Email: consult-6-7GHz@ofca.gov.hk

Dear Madam/Sir,

The CA and SCED published a consultation paper on 18 July 2023 and are seeking views on **“Arrangements for Assignment of the Spectrum in the 6/7 GHz Band for the Provision of Public Mobile Services and the Related Spectrum Utilisation Fee”**.

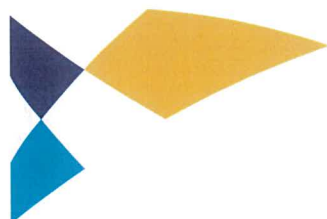
With reference to the captioned consultation paper, please find attached AsiaSat's views and comments on this issue.

Should you have any questions, please let us know.

Yours Sincerely

Rui Zhang
Senior Engineer
AsiaSat

Encl.



AsiaSat's views and comments on:
Arrangements for Assignment of the Spectrum in the 6/7 GHz Band
for the Provision of Public Mobile Services and the Related Spectrum Utilisation Fee
Consultation Paper
18 July 2023

AsiaSat, 9 August 2023

Introduction

The consultation paper published by CA and SCED on 18 July 2023 is seeking views on “Arrangements for Assignment of the Spectrum in the 6/7 GHz Band for the Provision of Public Mobile Services and the Related Spectrum Utilisation Fee”. AsiaSat would like to provide its views and comments on the proposed arrangement for the concerned spectrum assignment, in particular focusing on the impact on the satellite services in the overlapping frequency bands.

AsiaSat views and comments to the questions raised in the consultation paper

Question 1: Do you have any views on the proposed amendments to the HKTFA regarding the allocation of the 6425 – 7075 MHz band for mobile service with FS and FSS (Earth-to-space) on a co-primary basis?

Under the proposed arrangement, mobile services (including 5G services or beyond), fixed links and satellite uplinks operating in the 6425 – 7075 MHz band will be primary services (i.e. on a co-primary basis) for the band where the 6425-6725 MHz is the “extended C” unplanned uplink and 6725-7025 MHz is the “planned C” uplink for satellite uplinks, subject to the provisions of Appendix 30B of the Radio Regulations. Satellites, including those of Hong Kong satellite operators, already use the band or parts of this band and have had operational, licensed antennas, transmitting in this band.

Studies have shown that while individual transmitting stations may not cause extensive interference into receiving satellites, the aggregation of all transmitting IMT stations within the receiving beam of an FSS satellite may cause significant interference. Since the interference will be an aggregation of interference from many IMT stations, operated by many operators and from many countries, administrations of FSS networks would not be able to point to one single responsible administration if interference occurs. For this reason, it is important that limits are such that the aggregated interference is at an acceptable level and that limits are established for individual IMT stations with no option for administrations to exceed them.

Furthermore, transmitting earth stations may cause interference into receiving IMT stations. Complaints about interference could hinder operation of current and deployment of new earth stations. To avoid this, it is important that measures are in place that would enable the future development of FSS in the band. This could be achieved e.g. by requiring IMT stations to operate on a non-protected basis in respect of transmitting earth stations (much like receiving earth stations often do in respect of terrestrial services) or by IMT networks employing cognitive radio techniques where IMT stations would avoid using overlapping frequencies when in the vicinity of a transmitting earth station.

AsiaSat is of the view that an IMT identification could only be considered if

- limits are established which ensure that receiving satellite are adequately and safely protected against the aggregation of interference from all IMT stations in all countries within the coverage of the satellite beam, with no option for individual administrations to exceed these limits;
- measures are in place such that operation of current and deployment of new transmitting earth stations is not hindered by demands for protection of receiving IMT stations.

AsiaSat therefore request OFCA not to allocate the band 6425 – 7075 MHz to mobile service in Hong Kong unless the conditions above are ensured.