



Response to Consultation Paper "Licensing Framework For Deployment of Broadband Wireless Access, 20 December 2004"

The band 3.4 - 4.2 GHz is allocated by ITU, amongst others, for downlink satellite links (usually referred to as "C-band"). The band is normally subdivided by satellite users into 3.7 - 4.2 GHz ("standard C-band") and 3.4 - 3.7 GHz ("extended C-band").

Commercial satellite applications as of today are implemented in C-band or "Ku-band" (bands around 10-15 GHz). Due to the high rain rate in portions of Asia, it is not possible to use Ku-band for links requiring high reliability and availability. For this reason, the by far most attractive band for commercial satellite applications is C-band. The band therefore is heavily used in the region.

Traditionally, standard C-band is normally brought into use first and extended C-band thereafter. Because of its heavy use, it is as of today in practice not possible to coordinate new satellite networks in standard C-band. The only remaining option to introduce new networks therefore is to move to extended C-band. As a result, it is seen that more and more networks are introduced in extended C-band. AsiaSat are currently operating in the upper parts of the extended C-band and are considering utilizing the rest in future satellites.

Due to its foreseen widespread distribution, it would seem most likely that opening up the 3.4-3.6 GHz band for BWA applications would lead to interference into satellite receivers in Hong Kong, operating in the same band. It is noted that China has allocated this band for BWA applications. However, the AsiaSat satellites have large landmass coverage at C-band, extending from New Zealand to Eastern Europe (this kind of coverage is very common among C-band satellites) and many potential applications for extended C-band.

If however, the band 3.4-3.6 GHz is allocated to BWA applications; it would not be possible to offer services in this band within Hong Kong. This would mean that it would not be possible to establish teleports or gateways in Hong Kong offering services in these bands.

Moreover, it would not be possible for Hong Kong satellite operators to reliably monitor traffic in their own transponders from their control centers in Hong Kong. Satellite operators operating out of countries where this band is protected therefore would be at an advantage.

The band 3.4 - 3.6 GHz constitutes 25% of the total available C-band capacity. Making it unusable in Hong Kong would be a handicap to users of satellite capacity in Hong Kong and would put Hong Kong based satellite operators at a major competitive disadvantage.

AsiaSat would therefore recommend that the TA introduce BWA applications in bands outside the satellite C-band downlinks.

Prepared by Asia Satellite Telecommunications Co. Ltd.
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