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Date: 9-Nov-2005

By Fax & by Mail

Attention: Telecommunications Engineer (R21) 3
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Total pages: 3 (include this page)

Subject: APT Satellite (APT)'s Comments on second Consultation Paper
"Licensing Framework For Deployment of Broadband Wireless
Access"

Our Ref. : APT-PO-CX-20051109-1

Dear Sir,

Regarding the second consultation paper, we would like to submit a paper to present our comments for your review.

With best regards,

Chen Xun
Assistant President
APT Satellite Company Ltd

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APT Satellite (APT)'s Comments on Second Consultation Paper

8 Nov 2005

Subject

Consultation paper "ANALYSIS OF COMMENTS RECEIVED, PRELIMINARY CONCLUSIONS AND FURTHER CONSULTATION"

Comments

1. APT understands and respects TA's intention of implementation of BWA service in Hong Kong, but APT believes that spectrum policy on the reallocation of 3.5GHz should be reviewed and more tests should be carried out, since the spectrum policy will affect Telecommunications industry including all telecom carriers and satellite operators, as well as future BWA licensees.

As a licensed FSS satellite operator, APT has invested heavily on satellites and ground facilities working in 3.5GHz band, we are of the opinion that a clear road map should be developed before the respective license is issued and more consultations would be performed by OFTA.

2. APT appreciates that the Licensing Framework requirements state in point 18, "for BWA stations established in the vicinity of the existing TTC&M stations, they must be designed in such a way that they do not cause harmful interference to the existing TTC&M stations", APT recommends that it should be a **compulsory requirement** for the licensees and protection should be complete and sufficient.

The definition of "**harmful interference**" should be specified and well defined in the licensing paper, a certain value of interference level monitored at the concerned TTC&M earth station should be set as a threshold value. If the licensees' networks produce harmful interferences over the threshold, it will be considered as "harmful interference" and the licensee should take special measures to mitigate this interference down to below the threshold. This value should be empirically determined through a joint test between the BWA operator, satellite operator and TA.

Because of the existing TTC&M earth stations operating in this band in Tai Po, the BWA licensees have to take special measures to avoid causing interference to them. Owing to lack of studies on how much the interference will be, OFTA should consider to require compulsorily the BWA licensee to wipe out Tai Po, HKCU and Ma On Shan areas from its service coverage map for the purpose of protecting Tai Po earth stations. We do not see a worst case analysis in the consultation papers in this regard.

3. According to Licensing Framework, while the spectrum allocation for BWA may be for fixed service initially, the capability to support mobile services may emerge in the near future. APT believes the requirement of protection could be met for fixed service but it becomes complicated while mobile service is implemented. Therefore we request OFTA to consider this matter consistently for both fixed and mobile services, the test should be conducted to demonstrate the interference caused by BWA mobile service.
4. As raised by other satellite operators and satellite service users, BWA operation in 3.5G may also cause interference to 3.6GHz-4.2GHz FSS band service, due to saturation of the LNB or out of band emission, and APT has collected empirical evidences in other country such as Australia. APT also joined the discussion with OFTA and other concerned operator and user, we understand there is a test to be conducted and further study is needed.