



**Hong Kong Internet Service Providers Association's**

**Response to Third Consultation Paper on**

**PROVIDING RADIO SPECTRUM FOR  
BROADBAND WIRELESS ACCESS SERVICES**

**Issued by the Office of Telecommunications Authority of HKSAR**

11<sup>th</sup> July 2007

The Executive Council of Hong Kong Internet Service Providers Association generally agrees with most of the views of the TA concerning the aspects of the mechanism of assignment of radio spectrum for BWA services as set out in the consultation paper.

However, speaking purely in terms of public interest, the Executive Council of HKISPA has the following comments.

**Potential Supply of Spectrum**

The consultation paper put forward the framework of providing seventeen (17) 5-Mhz frequency bands in the 2.3-Ghz range for auction, whereas each bidder may potentially be assigned up to six 5-Mhz bands. That would allow at least three successful bidders.

However, BWA is a fast evolving technology which, with its future technology enhancement, may require lower spectrum width for full-mobility and territory-wide coverage. The proposed usage right of the assigned frequency band would last for 15 years. That would create wastage of spectrum if, hypothetically, the proposed bandwidth may become technically feasible to accommodate more than three full-featured BWA operators in the future.

Although provisions could be enacted for successful bidders to further utilize the excess spectrum if better technology becomes available, for example, to sub-lease the excess

spectrum to other operators. However, it may lack commercial incentive to do so. Some BWA bidders may have direct or indirect vested interest in other competing services like fixed network and 2G/3G services. This may lead to the incentive of frequency hoarding. We could benchmark the licensing of CDMA in Hong Kong as an example. CDMA, theoretically, could accommodate more mobile users than GSM with the same spectrum resource. It, however, has never flourished to a larger scale in the domestic market.

In this connection, HKISPA advocates that the design of the auction for the BWA spectrum should not only measure the total Spectrum Utilization Fee receivable by the administration. It should also incorporate the number of operators as a parameter for maximizing the public interest. The more number of operators, the less likely an oligopoly be formed, and the less likely that some forms of monopoly be formed by the means of merger and acquisition.

The design of the auction should allow different forms of intended utilization of the BWA technology by different service providers. For example, BWA may be initially intended to be used solely to replace the fixed network by one operator where only 10-Mhz of frequency is already sufficient for such purpose. Meanwhile, another operator could be planning for a full-scale territory-wide mobile service of the BWA and may need the range of 30-Mhz. The auction design should accommodate such various purposes rather than only focusing on full-featured services. Furthermore, in the event of a small number of bidders in the auction, HKISPA advocates that the auction design should provide reserve mechanisms to allow complete or partial assignment of spectrum to the initial bidders, as well as reservation of bandwidth to allow future issuance of BWA operator licenses.

In line with the view of the consultation paper, auction winners, no matter they are allocated with the maximum 30-Mhz bandwidth or not, should have full freedom in choosing how to utilize that resource by deploying the latest available technology as long as relevant technical standards are conformed with.

### **Spectrum Utilization Fee Payment Method**

The HKISPA does not agree with the TA's view that the payment for the Spectrum Utilization Fee (or SUF) must be in the form of an upfront lump-sum.

It could be argued that, if the project looks lucrative, it is indifferent for any forms of financial payment including upfront payment, phased payment or royalty payment as financing could be arranged through financial institutions. However, such financial arrangements are more easily accessible by conglomerates with businesses in, for example,

real estates. The provision of BWA service is a business that requires creativity rather than financial strength. However, the requirement of an upfront lump-sum payment of the SUF, as suggested by TA, shall favour financial strength rather than creativity. A further biasing element comes into play in the particular circumstances of Hong Kong, where the provision of BWA requires the installation of equipments at buildings and real estates.

Therefore, HKISPA advocates that payment of the SUF should be more flexible, either in the form of upfront, phased payment or by royalty.

### **Open Network Access**

The HKISPA does not agree with the TA that ex ante (i.e. Regulation before the event) obligation should not be imposed on BWA licensees.

The current 2G and 3G licenses require that the operators open at least 30% of their network capacity for access by non-affiliated Mobile Virtual Network Operators or content providers. The HKISPA advocates that the same requirement should be imposed on BWA licenses to allow access by non-Affiliated operators, including Internet Service Providers and Content Providers.

It might be argued that such measures will unnecessarily interfere with the free market. However, no evidence is found at all that this 30% requirement on the 2G and 3G licenses has worked against the efficient use of public radio resources. On the contrary, it has been proven that Mobile Virtual Network Operators has built many innovative services that provide much convenience to consumers. Therefore, HKISPA strongly advocates that the same requirement should be imposed on BWA licensees.

York Mok  
Chairman  
Hong Kong Internet Service Providers Association  
Email: [exco@hkispa.org.hk](mailto:exco@hkispa.org.hk)