

**COMMENTS ON CONSULTATIVE PAPER**  
**Licensing Framework for deployment of Broadband Wireless Access**  
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**THE MARKET ENVIRONMENT**

Hong Kong, a 1,100 km<sup>2</sup> territory, is undoubtedly one of the most crowded places in the world for carriers to operate telecommunications services.

On the positive side, the open environment has offered quite a number of niche and innovative services that in turn generated tremendous value to end users. Charges for fixed telephony, mobile and broadband services are amongst the lowest in the world. And all these can be easily reflected in the high penetration rate of all telecommunications services in Hong Kong.

The other side of the coin opens a fierce competitive environment for telecommunications services providers, and their respective investors. In order to maintain sensible return on investment, carriers have little choice but to trade price with quality of services in general. Nine out of the Top Ten Consumer Complaints recorded by Next Magazine in 2004 were related to telecommunications services. Not to mention the high unemployment rate recorded in the industry.

There are 5 active Fixed Telecommunications Network Services (FTNS) providers and 6 active mobile network operators in Hong Kong. These make a total of 11 telecommunications services providers in Hong Kong. Not to mention some other inactive licensees and smaller international traffic carriers. Other than 4 operators which belong to 2 holding parents, all the rest have different shareholders.

All the above imply that while Fixed Mobile Convergence (FMC) seems to be easy to implement in other countries, Hong Kong will face difficulty with over 10 corporations licensed to provide telecommunications services of different nature.

*The boundary between fixed and mobile services providers has to continue to exist for a while.*

## **THE FIXED LINE MARKET**

There are 5 active FTNS providers in Hong Kong and some FTNS licensees already started offering VoIP as an alternate mean to provide wireline telephony.

Although statistics might have reflected that the incumbent operator has less than 70% of the fixed line market share, its broadband penetration, riding on its full territory copper coverage, is still the market leader. Nevertheless, practical limitations (such as the lack of underground ducts and in-building cabling facilities) prevent cable and DSL technologies from reaching certain potential customers, as rightly indicated in OFTA's consultative paper.

For Competitive Local Exchange Carriers (CLECs), "last mile" solution has always been an issue. There will be gradual withdrawal of mandatory Type II interconnection until 30 June 2008 where the entire mandatory Type II interconnection will be withdrawn. CLECs, whether need to perform disruptive road digging for laying of cables, or to rent interconnection from available FTNS providers, are bound to increase their operation costs.

*For both incumbent and competitive fixed line carriers, BWA provides a possible alternative for speedy rollout of a broadband network, a speedy rollout of voice telephony at the same. Once nomadic WiMAX applications are available, fixed carriers will be able to generate new types of services to attract more users and raise ARPUs.*

*OFTA's view on using the 3.5 GHz band as the most appropriate licensed band for BWA deployment is also agreed. The standard adopted by the WiMAX Forum that rides on the implementation of IEEE 802.16-2004 should be adopted.*

## **LICENSING AND ASSIGNMENT OF SPECTRUM**

In whatever technology operators adopt for their BWA, there bound to have evolution to a point of handoff and roaming capabilities very similar to services offered by mobile operators. Then FMC takes place and it is something not desirable in the near time frame.

With the above, the scope of license should be defined very carefully and comprehensively such that full mobility is beyond the scope.

*Spectrum is a scare resource. From Hong Kong's history of open competition, OFTA should be clear on the definition of active FTNS licensees and who are not. BWA license should be awarded to active FTNS players only.*

As indicated early, Hong Kong is already a fiercely competitive marketplace for carriers and respective investors. Hence if the principle philosophy of OFTA is to promote coverage and therefore usage of broadband services, it should apply all means to encourage investment on BWA. And one mean is to reduce the initial costs of implementing BWA.

*Spectrum is a scare resource. But at the same, it is also a free resource. OFTA should consider giving out the spectrum to active FTNS operators instead of using it as a revenue generator. The idea is to tie existing FTNS license with BWA license without having the need to pay extra licensing fee.*

In order for active operators to penetrate broadband networks through BWA, CAPEX has already required to be made on the infrastructure. Any licensing fees can only increase their costs operations and consequently placed these companies and their investors in another round of embarrassment circle.

In the event of worrying that FTNS operators have less incentive to use the radio frequency in the most efficient way, OFTA can impose an automatic surrender mechanism when certain increasing broadband network coverage is not deployed within a certain period of time.

## **ABOUT ALCATEL**

Alcatel is active in the WiMAX Forum and all standardization bodies. This participation demonstrates commitment and support to WiMAX. Alcatel has also allied with Intel, the world biggest driver of nomadic terminal technology, to ensure the company is the first to market with its own mobile WiMAX-certified product (802.16e).

Alcatel is the global #1 provider of wireline broadband access and of LMDS solutions for enterprises and backhauling. As such, wireless broadband access falls naturally into its competence.