

Regulatory Considerations for Development of the Wireless Broadband Market in Hong Kong

Gracie SW Foo
Deputy Director-General
Office of the Telecommunications Authority

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Broadband Wireless Access

- Broadband Wireless Access (BWA) is a subject of consultation with the industry since end 2004.
- The Government aims to facilitate the introduction of BWA service to the local market in 2006, subject to the industry demand and market need.

Regulatory Approach (1)

CONSULTATIVE

- First Consultation Paper on Licensing Framework for Deployment Broadband Wireless Access issued on 20 December 2004
- Date for close of submission extended from February 2005 to mid-March 2005, in response to industry request
- Aims to conduct a second round of consultation on the proposed licensing framework and allocation method

Regulatory Approach (2)

TECHNOLOGY NEUTRAL

- No specification of Frequency Division Duplex or Time Division Duplex in the spectrum allocated for BWA, for flexible deployment by network operators
- Let network operators holding the BWA spectrum decide the technology to be adopted, so long as it meets the stipulated band plan and emission limit

Regulatory Approach (3)

FLEXIBLE SPECTRUM USAGE

- Licensed band for provision of public services, on a coordinated and protected basis
- Unlicensed band for private use by individual or corporation, on an uncoordinated and sharing basis (similar to Wi-Fi)

Regulatory Approach (4)

MARKET-DRIVEN (I)

- Let the market decide spectrum assignment to those bidders with the best business case through an auction process



Regulatory Approach (5)

MARKET DRIVEN (II)

- BWA may serve as alternative access for last mile
- Competitive network operators may deploy it
 - As a new customer access solution; or
 - For replacing existing unbundled local loop before full withdrawal of its mandatory status by 2008
- Inclination towards defining a clear timeframe for future use of BWA for mobile service – the proposal in the first consultation is to leave it open and subject to future approval with extra spectrum utilisation fee payment

Spectrum Allocation

Frequency band for BWA in Hong Kong

- 3.4 – 3.6 GHz will be allocated to BWA on a primary basis
- FSS remains in the same band on a secondary basis, i.e. provided they do not interfere with, or require protection from, BWA installations

Fixed-Mobile Convergence: BWA

- BWA is envisaged as a realisation of fixed-mobile convergence
- Licence type for BWA: to take into account the “nomadic” service nature, while fitting in the regulatory framework for carriers



Existing Situations in Hong Kong (1)

- Open licensing regime for both the fixed and mobile market, except that entry to the mobile market is constrained by the availability of spectrum
- Distinct regulatory frameworks for the mobile carriers and fixed carriers

Existing Situations in Hong Kong (2)

- Mobile penetration approaches 120% of population, and overtook fixed penetration in 1999
- Six operators offering 2G services and 3 operators offering 3G services; the fourth 3G operator is expected to launch service shortly
- Five active fixed carriers, four of them offering triple play services
- Broadband internet penetration exceeds 60% of households, using various technologies including DSL, cable modem, FTTB, FTTH and powerline carrier

Existing Regulatory Framework for Fixed and Mobile Carriers (1)

- Different licences for fixed and mobile carriers
- Current licensing regime requires an operator to take out two licences if it operates both fixed and mobile services



Existing Regulatory Framework for Fixed and Mobile Carriers (2)

- Interconnection

- Fixed / Fixed

- symmetrical normal termination charges for normal calls
 - symmetrical origination charges if calling party accesses value-added services of the called network

- Fixed / Mobile

- mobile party pays (MPP) i.e. mobile carriers pay fixed carriers for both directions

Existing Regulatory Framework for Fixed and Mobile Carriers (3)

- Existing numbering plan: use of the leading digit to indicate service information
 - Fixed service, leading digit is “2” or “3”
 - Mobile service, leading digit is “6” and “9”
- Number portability
 - Fixed number portability is in place since 1995
 - Mobile number portability is in place since 1999
 - But there is no inter-modal portability

Different Licensing Rights and Obligations for Fixed / Mobile Carriers – Access Rights (1)

Fixed carriers

- Statutory right to access the common parts of buildings free of charge in order to provide services to customers residing in those buildings
- Statutory rights to access and make use of the common telecom/broadcasting equipment room and other facilities (such as risers and conduits) free of charge

Different Licensing Rights and Obligations for Fixed / Mobile Carriers – Access Rights (2)

Mobile carriers

- The regulator may authorize mobile carriers to install their equipment in any land in order that they may provide service to the public, subject to public interest test and proof of lack of viable alternative
- The regulator may specify in the authorization an interim fee to be paid by the mobile carrier to the landlord. But both parties may seek arbitration.

Fixed Mobile Convergence Review

- We will consult the stakeholders on
 - the overall strategy to take forward the review
 - the scope of the review. Critical issues will include the need and the cost/benefits of
 - a unified licensing regime
 - harmonization of the interconnection regime
 - inter-modal number portability
 - the timing to implement the converged regulatory framework

Thank You

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