## LC Paper No. CB(1)771/11-12(02) OFTA 電訊管理局 Public Consultation on the Assignment of the Available Radio Spectrum in the 2.5/2.6 GHz **Band for Wireless Broadband Services Legislative Council Panel on Information Technology and Broadcasting** 9 January 2012



- 1. Background
- 2. The Proposed Arrangement for Radio Spectrum Assignment
- 3. Way Forward





### 1. Background

- Mobile services in Hong Kong have continued to grow rapidly in recent years
  - In October 2011, mobile data usage reached 3,568 terabytes, or an average of 463 megabytes per 2G/3G mobile user per month
  - ☐ This represents 1.2 times and 5.8 times the mobile data usage over the same month in 2010 and 2009 respectively
- Adequate and timely supply of radio spectrum is critical to the healthy development of the mobile telecommunications industry





#### 1. Background

According to the Spectrum Release Plan for 2012 - 2014 published by the Telecommunications Authority ("TA") in December 2011, radio spectrum in the following band is available for assignment:

Frequency band	Frequency range (in MHz)	Bandwidth
2.5/2.6 GHz band	2515 – 2540 paired with 2635 – 2660	25 MHz x 2

- > The TA issued a consultation paper on 29 December 2011
  - in accordance with the requirement under sections 32G, 32H and 32I of the Telecommunications Ordinance
  - to solicit views from the industry and interested parties about the assignment of the relevant radio spectrum





# 2. The Proposed Arrangement for Radio Spectrum Assignment

- (a) Method of Assignment and Spectrum Utilization Fee
- (b) Eligibility of Bidders
- (c) Band Plan
- (d) Spectrum Cap
- (e) Network and Service Rollout Obligation





## (a) Method of Assignment and Spectrum Utilization Fee ("SUF")

- Pursuant to the Radio Spectrum Policy Framework promulgated by Government in 2007:
  - □ a market-based approach for assignment of radio spectrum with competing demand from providers of non-government services
  - □ SUF is, in principle, applicable to all non-government services
- Based on the results of recent auctions and the rapid growth of mobile data service, the TA believes that there will be competing demand for the 50 MHz spectrum available in the 2.5/2.6 GHz band

#### **Proposal:**

- The radio spectrum will be assigned by auction
- The level of SUF will be determined by auction





## (b) Eligibility of Bidders

- With a total of 50 MHz radio spectrum to be released to allow:
  - new entrant to set up an entirely new territory-wide public mobile network
  - existing mobile network operators ("MNOs") to expand their network capacity
- Adherence to time proven pro-competition and promarket policy



#### **Proposal:**

 The radio spectrum should be open for bidding by both new entrants and existing MNOs





#### (c) Band Plan

- > To cater for:
  - □ the different amount of radio spectrum that may be required by new entrants and existing MNOs
  - □ the potential technology that may be deployed for use of the spectrum



#### **Proposal:**

- To divide the available radio spectrum into five paired frequency bands
- Each frequency band has a bandwidth of 5 MHz x 2





### (d) Spectrum Cap

- Total spectrum available for auction represents only about 10% of the existing pool of assigned spectrum for mobile services
- Mobile market is extremely competitive with no regulatory barrier for existing 2G/3G MNOs to upgrade their network using the state-of-art technology



#### **Proposal:**

 There should not be any restriction on the amount of spectrum that a bidder can acquire in the proposed auction





## (e) Network and Service Rollout Obligation

➤ To prevent spectrum hoarding and to ensure the timely provision of advanced telecommunications services for the benefit of the general public



#### **Proposal:**

- Require the successful bidders to roll-out their network and service within five years from licence grant
- Require successful bidders to each lodge a performance bond to ensure compliance with the rollout obligations





### 3. Way Forward

- > A two-month consultation
- The TA will carefully consider all submissions received before deciding the way forward
- If to proceed with the auction, we will propose necessary amendments to the relevant subsidiary legislation to enable the release of the spectrum by auction, and with payment of SUF
- Auction is tentatively planned to take place in the first quarter of 2013





## ~ Thank you ~

