

**International Institute of Communications (IIC)**  
**Hong Kong Chapter Seminar on**  
**Mobile Spectrum - Policy and Strategic Dimensions**  
**9 April 2013, Hong Kong, China**

*Speech by Miss Eliza Lee*  
*Director-General of Communications*

Andrea, Alasdair, Distinguished Guests, Ladies and Gentlemen,

It gives me great pleasure to be here with you today on the re-launch of the IIC Hong Kong Chapter.

2. IIC is a renowned worldwide organization devoted to the study of global and regional communications, media and technology policy issues. I am delighted that IIC has decided to re-launch its Hong Kong Chapter. I use the word “re-launch”, as IIC actually held its 39<sup>th</sup> Annual Conference in Hong Kong in November 2008, the event being co-hosted by the former Broadcasting Authority and the Office of the Telecommunications Authority. The IIC Asia Chapter, with bases in Hong Kong and Singapore, was launched right after. The Asia Chapter has now been split and the Hong Kong Chapter is re-launched tonight on a standalone basis. I have no doubt that with the re-launch, the forum would be rejuvenated into an active platform for various stakeholders of to come together and discuss matters that would affect not only the ICT industry in Hong Kong, but also the industry on the regional as well as global basis.

3. The theme of this evening seminar is “Mobile Spectrum - Policy and Strategic Dimensions”. As we all bear witness, smartphones and tablets have fast replaced the traditional voice-oriented mobile phones, and become an essential part of our daily lives. The resulting upsurge in mobile data usage is nothing short of spectacular. For example in Hong Kong, with a population of 7 million, we have over 9 million 3G or 4G mobile subscribers, and that translates into a penetration rate of 130%, with a mobile data usage of some 7,600 terabytes a month. The monthly mobile data usage has increased by 86% year-on-year.

The thirst for mobile data inevitably leads to a huge demand for radio spectrum for the provision of high-speed mobile broadband services. Let me share with you our experience in managing 4G spectrum and the development of 4G services in Hong Kong.

### *Spectrum Policy*

4. Radio spectrum is a scarce public resource. Radio spectrum needs to be managed effectively to enable our industry to respond timely to the fast technological advancements and dynamic market developments for the benefit of the community. To this end, the Hong Kong Government promulgated the “Spectrum Policy Framework” in 2007, setting out the guiding principles in radio spectrum management in Hong Kong.

5. The framework stipulates that a market-based approach, such as auction, will be used for assigning spectrum wherever there are likely to be competing demands from providers of non-Government services. If there are overriding public policy reasons requiring a departure from this guiding principle, the relevant public policy reasons will be explained and published for reasons of good administration and transparency. Such a market-based approach ensures that radio spectrum would be assigned to operators which value it the most and are able to put it to the most efficient use.

6. Under the framework, we publish, and update annually on a rolling basis, a spectrum release plan on the potential supply of radio spectrum through an open bidding process in the following three years.

### *Auction of 4G Spectrum*

7. To support the rapid development of mobile broadband services, we have been mindful of the need to make available to the market the appropriate radio spectrum in a timely manner. Spectrum for the provision of broadband wireless access services was first released to the market in January 2009. At that time, a total of 90 megahertz of spectrum in the 2.5/2.6 GHz band was auctioned off through an Internet-based software platform, using the Simultaneous Multi-Round

Ascending (SMRA) format.<sup>1</sup> The bidding was open to all interested parties, existing mobile operators and new entrants alike. The auction has fetched for the Hong Kong community a spectrum utilization fee of US\$197 million, or an average of US 2.2 million per megahertz. Since 2009, we have conducted five more spectrum auctions and released a total of 270 megahertz of radio spectrum to the market.<sup>2</sup>

#### *4G Services in Hong Kong*

8. While under our technology-neutral approach, mobile operators are free to adopt any open and widely recognized technology, the four successful bidders for the 2.5/2.6 GHz spectrum in 2009 have decided to deploy the Long-Term Evolution (LTE) technology for provision of their 4G services, enabling customers to enjoy peak data download speed of 100 megabit per second. In November 2010, one of the successful bidders announced the launch of its LTE network in Hong Kong, and offered 4G services in May 2011. The others followed suit and subsequently launched their 4G services in 2012. Although one mobile operator did not acquire any spectrum in the 2.5/2.6 GHz band in 2009, it has also offered 4G services by re-farming its spectrum in the 1800 MHz band. The successful bidders have also re-farmed their spectrum in 1800 MHz band for the provision of 4G services. All the five mobile operators in Hong Kong are now offering 4G LTE services to our community.

9. Hong Kong has one of the most competitive mobile markets in the world, with five mobile operators serving a population of 7 million.

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<sup>1</sup> Under the SMRA format, all the available frequency bands will be auctioned simultaneously over multiple rounds with prices changing on each frequency band independently.

<sup>2</sup> The six auctions included:

(a) the release of 90 MHz of spectrum in the 2.5/2.6 GHz band in January 2009, at a total fee of US\$197.4 million;

(b) the release of 9.6 MHz of spectrum in the 1800 MHz band in June 2009, at a total fee of US\$24.2 million;

(c) the release of 8 MHz of spectrum in the 678-686 MHz band in June 2010 (for broadcast-type mobile TV services), at a total fee of US\$22.5 million;

(d) the release of 20 MHz of spectrum in the 850, 900 MHz band in March 2011, at a total fee of US\$250.9 million;

(e) the release of 90 MHz of spectrum in the 2.3 GHz band in February 2012, at a total fee of US\$60.4 million; and

(f) the release of 50 MHz of spectrum in the 2.5/2.6 GHz band in March 2013, at a total fee of US\$197.9 million.

Under the highly competitive environment, mobile operators are offering a wide spectrum of mobile services to customers at affordable prices. For example, the monthly charges of 4G services are about the same as those of 3G services, ranging from less than US\$13 for a monthly plan with 500 megabyte data usage, to around US\$25 for a monthly plan with an unlimited data usage. Some of the promotional offers come with even more attractive prices. For instance, the market is offering a monthly service plan at as low as US\$21 for an unlimited data usage bundled with handset. Standalone service plans or plans bundled with different devices such as smartphone, tablet and USB dongle are also widely available. There are ample choices of service plans with different features which should be able to cater for different consumer needs in the market.

#### *Latest Auction in March 2013*

10. Customer demand for high-speed mobile broadband services has continued to be buoyant. Last month, we just successfully auctioned off another 50 megahertz of spectrum in the 2.5/2.6 GHz band. The average spectrum utilization fee as determined by the auction, at around US\$4 million per MHz, was about 80% higher than that obtained in the 2009 auction. This reflects the increasing value of radio spectrum as a scarce public resource, which is the major driving force behind the continual growth of our mobile broadband services. Despite the higher level of spectrum utilization fee, given the vibrant competition in our mobile market, we are confident that consumers will continue to enjoy quality mobile services with a wide range of choices at affordable prices.

#### *Concluding Remarks*

11. Ladies and gentlemen, you have heard of Hong Kong's spectrum management policy and our experience in developing 4G services. I am sure you are all most eager now to hear from our distinguished speakers tonight on their views and experiences in "Mobile Spectrum - Policy and Strategic Dimensions". I have no doubt that you would find the seminar most fruitful and worthwhile. Thank You.