

IIC International Regulators Forum
Session 4 - Creating a Strong Backbone to Support
National Broadband Requirements

Speech by Miss Eliza Lee
Director General of Communications, Hong Kong

Fabio, Keng Thai, Dr. Juwah, Distinguished Guests, Ladies and Gentlemen,

I feel privileged to be here today to share with you our approach and experience in facilitating the extensive rollout of broadband infrastructure across Hong Kong.

2. I hope many of you here have been to Hong Kong before. We are a small and dynamic city. Small, as we only have an area of 1100 Km square, but it is home to some 7 million people. Just imagine a city of that size could actually accommodate in our telecommunications market 18 local fixed carriers and five mobile carriers. We have 2 million plus of residential household subscribers to our fixed broadband services, with a penetration rate of 87%. 86% and 76% of our residential households have a choice of at least two and three self built fixed broadband networks respectively. We have 15.8 million mobile service subscribers - that translates to a penetration rate of exceeding 220%. 9 million mobile broadband subscribers, with a penetration rate of 127%, consume some 5800

terabytes of data per month.

3. I am sure you would agree that these results are impressive by all counts. You may wonder how do such achievements of Hong Kong come about. What is the Government's role in our telecommunications infrastructure development? Do we subsidize our telecommunications industry at all? Let me explain.

Market-driven Approach

4. Under the guiding principles of *"Market Leads, Government Facilitates"* and *"Big Market, Small Government"*, investment in the Hong Kong economy is spearheaded by the private sector and the role of the Government is to provide a facilitating environment for the market to operate effectively.

5. With the full liberalization of the telecommunications market nearly a decade ago, the same macro-economic policy applies to the development of broadband infrastructure in Hong Kong. Our Government has not provided any direct investment or any forms of subsidy to finance the rollout of broadband infrastructure in Hong Kong. Under the pro-market approach, the investment decision on the development of broadband infrastructure is solely based on the commercial considerations of the private sector, and this confers the highest degree of autonomy and flexibility for business

operations.

6. Over the past decade, there has been no shortage of private sector investment in broadband infrastructure in Hong Kong. Under our full liberalisation policy, we do not set any limit on the number of telecommunications licences to be issued in Hong Kong. Currently, there are 18 local fixed carriers and 5 mobile carriers in Hong Kong. In a tiny place like Hong Kong, you can imagine the intensity of facility-based competition in our market.

7 In Hong Kong, the Government's intervention serves as the last resort to ensure the effective operation of the market mechanism. Yet, we keep in view of the latest market situations and consider whether the existing regulations should be adjusted or lifted altogether to keep in pace with the rapid market developments. For example, while unbundling of the local loop is still an essential regulatory tool in some jurisdictions, we have already fully withdrawn the unbundling requirement for copper local loop at the telephone exchange level four years ago. Furthermore, in Hong Kong, fibre local loop has never been subject to any mandatory unbundling requirement. Paradoxically as it may seem, this light-handed regulatory approach successfully encourages continuous investment and rollout in fibre-based infrastructure in Hong Kong.

Measures to Facilitate Broadband Rollout

8. Although the Government does not spend a single dollar from the public coffer to finance the rollout of broadband infrastructure in Hong Kong, our Government has been making every endeavour to facilitate the sustainable development of broadband infrastructure by the industry. Here are some examples:

- First, with a view to arousing public awareness of the importance of fibre-based access facilities, we launched a voluntary registration scheme for residential buildings connected by FTTH or FTTB two years ago. We are now collaborating with the industry to proceed with the second stage by including commercial, industrial and government buildings into the registration scheme.
- Second, to support the rapid development of mobile broadband services, the Government has been mindful of the need to make available timely to the market the appropriate radio spectrum. Since 2009, we have conducted five spectrum auctions and released a total of 220 megahertz of radio spectrum in the market. Indeed, it is our plan to continue to auction off available spectrum, and in this context, 50 megahertz of spectrum in the 2.5 and 2.6 GHz band will be released to the market early next year through the market mechanism. With the necessary radio spectrum and as driven by the strong market demand, all mobile carriers in Hong Kong have

launched mobile broadband services using LTE technology. As an ancillary measure, we will continue to allow mobile carriers to use hill-top sites and deploy government facilities (such as lamp posts, footbridges and flyovers) for installing base stations to extend their mobile broadband coverage.

- Third, to make it simpler and quicker for interested parties to land submarine cable systems in Hong Kong, OFCA offers a single-point-of-contact service to prospective applicants and liaise with relevant government departments and organisations with a view to expediting the vetting process of the applications.

Outcomes Achieved

9. So far, our market-driven approach together with our facilitating measures have achieved the objective of furthering broadband infrastructure development. Just to illustrate:

- According to the “Global Information Technology Report” issued by the World Economic Forum this year, Hong Kong has an international Internet bandwidth of around 780 kilobits per second per Internet user and we were ranked the first among 142 economies under surveyed.

- According to the International Broadband Data Report released by the FCC in this August, the average weighted download speed in Hong Kong was 31 megabits per second and we were ranked the second among the 38 economies under comparison.
- The World Competitiveness Yearbook 2012 released by the International Institute for Management Development (IMD) has ranked Hong Kong not only the most competitive economy in the world, but also the number one in the performance of technological infrastructure.
- The global ranking published by the FTTH Council in this February showed that Hong Kong ranked third among all economies that have deployed FTTH or FTTB, with the household penetration rate at 45%.

10. Intensive facility-based competition in the broadband market offers Hong Kong consumers a great variety of choices of broadband service providers. Thanks to the intense market competition, fixed broadband services using various technologies with speed up to 1 gigabit per second are available to consumers in Hong Kong at very affordable prices, which could be as low as US\$25 per month. 4G mobile broadband services with unlimited usage cost as low as US\$24 per month.

Next Generation Networks

11. However, there is no room for complacency. We remain vigilant about the challenges ahead, in particular new challenges to be brought about by the next generation networks, NGNs, to the existing regulatory framework. In Hong Kong, a few carriers have already launched their NGNs while others are in the process of migrating their existing networks to NGNs.

12. With the advent of NGN, we have to ask ourselves - What kind of NGN interconnection architecture will be the most appropriate for Hong Kong? How to ensure interoperability among NGNs? How to facilitate next generation access in Hong Kong? In face of these challenging questions, we commissioned a consultancy study last year with a view to identifying the necessary changes to our regulatory framework so that it will keep in pace with the challenges and opportunities in the NGN era.

13. Our NGN working group and advisory committees are now deliberating on the issues raised in the study. Our role is to facilitate the industry to discuss and reach consensus. We are confident and convinced that the market mechanism is capable of responding to consumer demands, technological advancements as well as innovations in the highly competitive telecommunications sector. We will also continue to act as a facilitator and ensure that welfare of our consumers is safeguarded and effective market

competition is sustained.

Concluding Remarks

14. In conclusion, we are committed to our light-handed and market-driven approach in facilitating broadband development in Hong Kong. Our full liberalisation policy has brought us vibrant facility-based competition and almost ubiquitous broadband coverage. Looking ahead, our broadband infrastructure will continue to underpin innovation in our ICT sector, address the ever increasing needs of our users and uphold our position as a major communications hub for the region. Thank you.

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