··|···|·· cisco

Cisco Submission to Hong Kong CA and SCED Concerning Arrangements for Spectrum in 900 and 1800 MHz Bands

18 May 2016

The growth of mobile networks globally has seen significant benefits to digital economies. Increasing mobile data use transforms the way consumers and businesses operate and communicate, leading to increased economic growth through increased productivity effects. Research has found that there is a positive relationship between the amount of data used by 3G connections with increases in economic growth – a report¹ by Deloitte for the GSM Association supported by Cisco found that a doubling of mobile data use leads to an increase in GDP per capita growth of 0.5 percentage points.

Cisco welcomes the Office of the Communications Authority (OFCA)'s role in managing the use of spectrum for Hong Kong that will positively guide the growth of mobile Internet, the ICT industry and the broader economy. In response to the consultation paper issued on 3 February 2016, we are writing to offer some views below as input to the plan to manage the spectrum in the 900 and 1800 MHz bands for licenses that will be expiring in 2020 and 2021.

Creating an Environment of Investment Certainty

Cisco is of the view that one key objective for Hong Kong's spectrum management policy is to create an environment of investment certainty. In other parts of the world, for instance in the United States, Canada, and Europe, regulators have created an "expectation of renewal" when license terms expire. This is to create incentives for investment, so that operators know that the capital investment that they have made in mobile networks and the telecommunications infrastructure would pay off over a period of years.

In the world of mobile, 4G technology today is relatively new and would continue to mature in the next few years. 5G technology developments are underway and it is critical that operators have confidence that they will continue to have access to spectrum so that they continue to invest in these networks and beyond. As with the case of 3G networks, there are significant economic benefits from a productivity and tax perspective for deployed 4G and 5G networks that would outweigh potential fiscal gains from fresh auctions of spectrum.

Continuity of Service

The use and reliance on mobile networks today are core to productive work in Hong Kong and other parts of the world. Any disruption of these networks would lead to significant economic consequences. It must therefore be a priority of the spectrum policy to ensure that existing networks and services are not disrupted.

¹ http://www.gsma.com/publicpolicy/wp-content/uploads/2012/11/gsma-deloitte-impact-mobile-telephony-economic-growth.pdf

Any change of existing spectrum assignments not only risks disruption but also incurs new cost through user migration plans, configuration changes and other adjustments and re-planning to transition into the new allocation plan. These costs would likely be passed on to consumers on top of possible productivity loss, and creates challenges for operators who need to plan for medium to long term infrastructure investments.

The Internet Society's Global Internet Report 2015² stated that the effects of mobile Internet on livelihoods around the globe can be life-changing. The report has identified many areas that mobile Internet has played key roles such as education, accessibility, governance, health, personal security, entertainment, the Internet of things, and smart cities. Any disruption in the continuity of service would have detrimental effects on these sectors that are increasingly dependent on mobile networks.

Spectrum Utilization Fee

The consultation paper states the view that the Spectrum Utilization Fee (SUF) should be set to reflect as close as possible the full market value so that spectrum assignees running commercial operations in a fully liberalized market would put the spectrum to the most efficient use.

In today's market, the operators have already been in business for a number of years and have a large established consumer base. Any new fees that operators have to bear for services currently being offered would very likely be passed on to consumers rather than drive new business efficiencies. New infrastructure upgrades and investments decisions are driven more directly by capacity demands and needs of their customers rather than by the amount of spectrum fees that are paid.

In determining the SUF, Cisco would encourage OFCA to set an equitable value that would not create a heavy burden on operators that would ultimately hurt consumers.

Conclusion

Cisco, as a global leader in networking and Internet technology, would welcome an opportunity for a further discussion and to work closely with OFCA to grow the mobile market in Hong Kong, so as to maximize the benefits to the economy and the residents. We believe that Cisco's vision of enabling ubiquitous connectivity for the benefit for everyone is closely aligned with the interests of governments and policy makers.

We look forward to be further engaged in the discussions. Further queries regarding this submission can be directed to Nelson Chu (<u>nelchu@cisco.com</u>).

Yours sincerely,

Baullin

Barbara Chiu Managing Director, HK & Macau Cisco Systems (HK) Ltd

² http://www.internetsociety.org/globalinternetreport/assets/download/IS_web.pdf