# CSL's Submission to the Panel on Information Technology and Broadcasting of the Legislative Council

## Frequency Spectrum in the 1.9-2.2GHz Band upon Expiry of the Existing Frequency Assignments for 3G Mobile Services

#### Introduction

CSL Limited ("CSL") is an incumbent 3G mobile network operator and welcomes the opportunity to attend this panel meeting to express our view on this important subject, particularly the Government's proposed Option 3 which will cause harm to the consumers of Hong Kong.

CSL strongly objects to the views and conclusions expressed by OFCA in its second consultation paper <sup>1</sup> and, in particular, OFCA's support for Option 3 should be adopted for further consultation. CSL remains unequivocal in its support for Option 1 and its rejection of Option 3.

#### Precedents of Licence Renewal

CSL has to emphasize that not only are there international precedents such as in United Kingdom, Australia, New Zealand and Canada, etc. that supports Option 1 i.e., a "Right of First Refusal" approach (allowing the existing licensees to retain all existing spectrum upon their licence expiry), OFCA's predecessor, OFTA had also made a decision to renew the 2G license (GSM and PCS licences) to the incumbent 2G operators in 2004 with no auction. The renewal of 2G licences was made on a public policy basis that the licensees had made efficient use of the spectrum and there was a need to ensure service continuity to consumers. OFCA also highlighted the importance of a stable investment environment and the need to avoid service interruptions, confusion and inconvenience to the public.

CSL maintains that the public policy considerations as mentioned above for the 2G licences are equally relevant today where incumbent 3G licenses would have the right of first refusal to renew all of their current 3G spectrum. These same considerations are just as important in the current market environment in which

<sup>&</sup>lt;sup>1</sup> OFCA proposed three options in the first consultation:

Option 1: offering the right of first refusal to the incumbent 3G operators

Option 2: re-auctioning all the 3G spectrum

<sup>•</sup> Option 3: offering the right of first refusal of 2/3 of the existing 3G spectrum and re-auctioning the remaining 1/3.

there is a significant growth in mobile data usage with the proliferation of smartphones and tablets each year and consumer relies heavily on mobile services in their daily life and businesses. CSL and other 3G operators have diligently rolled out the 3G services and continues to invest in the 3G network to provide a best in class 3G services in Hong Kong. There is no doubt that the 3G operators have provided satisfactory voice and data services to consumers in Hong Kong. Last but not the least, CSL and all the other 3G operators have efficiently used spectrum and invested a lot of time and money to introduce innovative services which have made Hong Kong telecommunications a "global standard". Hence, the proposed adoption of Option 3 is entirely at odds and inconsistent with the local and international precedents.

#### Option 3 – adverse effects on consumers, investment and competition

### Service continuity

OFCA has mistakenly concluded that a 'compromise position' in Option 3, by virtue of its hybrid design, 'seems to mitigate to a substantial extent the public policy concerns identified under Option 2'. This is simply not the case. All the problems inherent in Option 2 are also inherent in Option 3. A compromise hybrid option will simply not favour the consumers of Hong Kong.

CSL does not agree that OFCA's assessment that the loss of one-third of an incumbent operator's 2.1GHz spectrum would result in a 'mere' 18% reduction in data download speed. In any event, it is difficult to envisage why a telecommunications regulator could accept degradation of service quality to affect the market of Hong Kong and consumers' interests. Further, OFCA's assessment is too simplistic: it does not accurately reflect the adverse impacts Option 3 will have on the incumbent operator's network and the consumers' enjoyment of mobile services.

By way of a useful analogy, cutting one-third of an incumbent's spectrum capacity is akin to blocking one lane in a three-lane tunnel. Each incumbent 3G operator would therefore need to squeeze its existing subscriber base into its remaining two-third of their spectrum. The result would lead to service congestion and degradation, for example, dropped calls, slower speed, no service, etc. resulting in the provision of inferior voice and data services to customers. During busy periods in the Mass Transit Railway (MTR), for example, 3G customers will find it extremely difficult to make phone calls and to access the Internet, for example, by streaming, let alone downloading. These problems will

not be isolated to the MTR but also to shopping malls and tunnels, etc.; the entire mobile usage by consumers will be degraded from a superior mobile service quality to an inferior mobile service.

OFCA also assumes that such loss of network capacity can be mitigated by the migration of customers, forced or otherwise, on the incumbent's 4G network. This assumption is erroneous. Under the forced migration from 3G to 4G, which means customers will be left with no choice but to force to move from 3G to 4G. Has OFCA taken into account the additional burden that will add to some of the consumers in Hong Kong? Can all consumers in Hong Kong afford to purchase or are willing to purchase a 4G capable handset which is more expensive and incurs an additional and unnecessary cost to continue receiving a mobile service?

With the rapid growth in mobile data traffic, if a new entrant wins the re-auctioned spectrum, it is not possible that the new entrant can provide 3G services immediately. It will take years for the new entrant to build the infrastructure to meet the high demand. Not only then will the customers of the incumbent operators suffer as a result of reduced capacity in the incumbent's networks, but customers of the new operator will also suffer as capacity is built slowly. Meanwhile, much of the new operator's spectrum will be under-utilised during this period. Ultimately, consumers would suffer and it will affect the image of Hong Kong.

#### <u>Investment</u>

The incumbent 3G operators have invested billions of dollars in their networks and services based on their licence grants, which represents a substantial and reasonable reliance on the Government's past actions, for example, 2G licence renewal. The inconsistency of decision by OFCA in 2G and this current 3G spectrum renewal and lack of certainty inherent in Option 3 will make it difficult for licensees to invest in their networks. Without the right of first refusal, they will be forced to engage in massive write-offs of the significant investment. This will also put future investment at risk in Hong Kong.

#### Competition

There is clearly no problem with the level of competition in the Hong Kong mobile market by any assessment. Even if new entry to the market could stimulate further competition in a hyper-competitive environment in Hong Kong, it is difficult to see where the new benefits would come from. Any gain beyond existing

competition would be marginal which is likely to be out-weighted by the disruption costs arising from a loss of one-third of spectrum. A better and more sensible course of action to promote effective competition is to release more spectrum and implement a regulatory regime that facilitates spectrum trading.

#### **Option 1 best meets OFCA Policy Objectives**

To conclude, it is clear that Option 1 is the option that will best preserve consumer service continuity and, with its associated regulatory certainty, best encourages continued efficient investment and innovation in Hong Kong mobile market. In the event that the incumbent 3G licensees are not granted a right of first refusal, it will result in service degradation, interruptions, confusion and general inconvenience to the public.

**Submitted by CSL Limited**