



7 September 2017

Miss Agnes Wong  
Director-General of Communications

Mr L H Ting  
Senior Telecommunications Engineer (Spectrum Planning) 1

Office of the Communications Authority  
[spenq@ofca.gov.hk](mailto:spenq@ofca.gov.hk)

Dear Agnes and L H,

## Proposed Change in the Allocation of the 3.4 – 3.7 GHz Band from Fixed Satellite Service to Mobile Service

Hong Kong has been one of the most successful mobile communications markets in the world. To stay competitive, we need the government to expedite the implementation of 5G in Hong Kong, where additional new spectrum for 5G service is one of the key elements to address.

The Innovation and Technology Bureau has recently published the Smart City Blueprint Consultancy Report and is conducting public engagement until the end of September. The report highlights the importance of making available radio spectrum to underpin the development of 5G services as part of the smart city infrastructure. It recommends the government to allow certain venues to be a testbed for 5G technology and anticipates an increase of about 10-20 times more small cell mobile radio station to deploy 5G.



Since the ITU World Radiocommunication Conference 2015 identified 3.5GHz C-band and 700 MHz band for mobile communications use, other jurisdictions have been re-farming the 3.5GHz band for the earliest availability of 5G services. Mobile network operators in Japan and South Korea are ready to provide 5G services in the 2018 Winter Olympic Games and the 2020 Summer Olympics, while 17 leading operators and vendors in EU would commit to cooperate on multi-country 5G trials from 2017 and to deploy a commercial network in at least one city per EU country by 2020. China vows to take lead in defining 5G standards as they have decided to test pre-5G technologies at the 3.5 GHz band. A Chinese telecom equipment manufacturer has submitted and received approval for partial 5G standards by the ITU – and they expect to launch 5G services in 2020.

The proposed change in the allocation of the 3.4 – 3.7 GHz band from FSS to mobile service is a welcoming development as it opens up more spectrum for mobile service. While other regions have been positively developing their 5G policy, regulatory and spectrum environments, Hong Kong needs to catch up and stay pace with latest developments in advanced mobile applications such as VR/AR, smart transport systems, AI and IoT.

It is important that the CA takes the public's expectation of quality mobile service and timely 5G development into account and focuses on keeping Hong Kong's digital economy competitive as one of the main aims of Hong Kong's spectrum policy.

### Ensuring a seamless transition

CA should expedite the transition by liaising with other licensees occupying the bandwidth to be vacated. It is suggested that CA examines the impact of your proposed changes, notify the affected parties and offer assistance needed in re-provisioning and re-tuning systems at the earliest.



### **More spectrum for mobile service**

In LegCo, I repeatedly expressed the urgency to the government to plan and re-farm spectrums so that MNOs can launch 5G services in Hong Kong as soon as possible.

With limited spectrum availability and delayed spectrum planning, no new spectrum had been made available for mobile services from 2013-2019. The Government's plan to make available further frequency spectrums the 3.5GHz c-band is welcoming, and we hope to see an expedited allocation of the 700MHz, the 26 GHz and 28 GHz bands for mobile communications use. The slow progress of vacating and re-assigning spectrum bands and allocation of high-frequency bands for 5G could impede Hong Kong's development of next generation services and telecommunication services and should be avoided at all cost.

China is testing the 4.8 - 5.0 GHz band for 5G services and the EU considers the 3.4 - 3.8 GHz band for the introduction of 5G services. CA can examine the possibility of allocating more high-frequency bandwidth for 5G development with reference to these developments.

### **Transparent and holistic spectrum policy**

The Government's usual approach to auction off spectrums to the highest bidder with hundreds of millions of dollars would mean consumers end up footing a larger bill and such allocation approach has limited the public's access to quality mobile communication services. I suggest that revenue generated from spectrum fees be put to more beneficial use for the public such as turning into a fund for investing in improving public telecom infrastructure needed in remote areas.

The lack of predictability for spectrum release has made it difficult for the industry to plan investment for years ahead. CA should outline a long-term spectrum release plan with the objective of releasing more high-frequency spectrum with a focus to



using public resources efficiently and creating an innovative and competitive economy.

I hope the government can publish a clear spectrum supply roadmap as soon as possible, review the allocation approach, enhance the efficiency in assigning spectrum bands such as allowing spectrum trading, all in all, to incentivize MNOs to invest in technological infrastructure and better consumer services.



Charles Mok  
Legislative Councillor (Information Technology)