To: Office of the Communications Authority 29/F Wu Chung House 213 Queen's Road East Wanchai, Hong Kong (Attention: Principal Regulatory Affairs Manager (R13))

Background

Hong Kong Science & Technology Parks Corporation (HKSTP) connects stakeholders in business enterprises, research and development community, the Government and education institutes to build the city's largest R&D base and translate pioneering research results into cutting-edge marketable products and solutions. One of our objective is to enable Hong Kong Science Park (HKSP) as the living laboratory to carry out live experiments and facilitate innovations in HK.

It is our focus to support Smart City related application developments including IOT, smart mobility, and communication technologies such as 5G are our key area of interests. In July last year, HKSTP set up a collaborative laboratory with ASTRI – the Smart City Innovation Centre (SCIC) focusing on a 5G Application Testbed and a Machine-to-Machine platform to enable park companies and the industry to carry out 5G and IoT related development, trials and PoC.

Due to the protection of TT&C stations, Hong Kong Science Park (HKSP) is located within the restricted zone of the 3.5GHz Band, and can only be covered by the new spectrum 26/28 GHz bands. Without the 3.5GHz coverage, this would hinder 5G trial or production deployment by park companies.

Furthermore the significant overall 5G implementation cost in the restricted zone could make operators less interested to invest on 5G coverage, hence it would have serious impact to the innovation development of park companies, incubates and the Research & Development Centres (e.g., ASTRI, LSCM, NAMI) located in the Hong Kong Science Park.

Opportunity that HK Science Park bring to HK

In HKSP, park companies such as ASTRI, COMBA, Huawei, Sierra Wireless, Rohde & Schwarz and various smaller communication vendors as well as application developers are playing an important role in driving the Smart city developments. The emerging next generation mobile network is a backbone of the innovation ecosystem that HKSTP is building, and 5G full coverage in the Science Park is essential for the entire ecosystem.

HKSTP's opinion to 5G mid-band

HKSTP is willing to support OFCA to investigate how to implement 3.5GHz mid-band 5G in the restricted zone. We are pleased to share a few suggestions:

1. Science Park, due to our proximity to Taipo teleport, is an ideal test bed to conduct well controlled 3.5GHz mid-band trial. HKSTP recommends OFCA to setup a special trial zone in the Science Park to carry out the required tests.

- 2. Leverage on our SCIC resources and the relationship with park companies and the industry, HKSTP recommends the formation of a 5G engineering task force (i) to carry out real live test in HK Science Park, (ii) to investigate the degree of mid-band interference to existing satellite antenna, and (iii) to develop the technical solutions to avoid or eliminate interference.
- 3. We hope OFCA could lead this 5G engineering task force. HKSTP can provide the necessary support to the task force to conduct trials in the HKSP.

Thank you for your kind attention. Please contact Ir. Peter Yeung (<u>peter.yeung@hkstp.org</u>) or Mr. Katson Yeung (<u>katson.yeung@hkstp.org</u>) if any query.

Regards, Ir Peter Yeung Head of Electronics & ICT Cluster, Smart City Platform Hong Kong Science & Technology Parks Corporation Tel: +852-2629-6688 Email: <u>peter.yeung@hkstp.org</u>