



3 Hong Kong calls for transparent and long-term spectrum policy to expedite launch of 5G mobile services and Hong Kong's development as a world-class smart city

Hong Kong, 14 June 2018 - 3 Hong Kong, the mobile communications division of Hutchison Telecommunications Hong Kong Holdings Limited (HTHKH, stock code: 215), submitted a response to the government's consultation paper dated 2 May 2018 on "Arrangements for Assignment of the Spectrum in the 3.4 - 3.6 GHz Band for the Provision of Public Mobile Services and the Related Spectrum Utilisation Fee". Key points of the submission are:

1) Concerns over 5G restriction zones

3 Hong Kong welcomes the Communications Authority's (CA) decision to re-allocate the 3.4-3.6 GHz band from fixed satellite services to public mobile service. However, 3 Hong Kong is concerned about the proposal of setting up large scale 5G restriction zones, which are estimated to cover more than one million population. As well as having a negative impact on 5G mobile communications, the zones will adversely affect the deployment of machine-to-machine connectivity which is an essential enabler of any smart city.

The CA is asked to seriously consider three mitigating measures proposed jointly by 3 Hong Kong and other mobile operators. These include the permanent solution of relocating the Telemetry, Tracking & Control (TT&C) Station from Tai Po Industrial Estate to a remote area in Hong Kong in order to prevent significant negative impact on densely-populated areas in the restriction zones. Other measures suggested include adding shielding covers to TT&C stations and optimising the radiation scope of mobile base station antennae. In this regard, 3 Hong Kong is ready to offer assistance in technical studies and trials in order to ascertain more feasible options.

The 3.5 GHz band could not be completely substituted by the 26 GHz and 28 GHz bands. The higher bands at 26 GHz and 28 GHz are known to be unsuitable for high-mobility applications and buildings penetration. 3 Hong Kong foresees that coverage indoors and throughout main roads and highways will be seriously impaired if only 26 GHz and 28 GHz bands are to be deployed to accommodate 5G services in the restriction zones.

Cliff Woo, Chief Executive Officer of Hutchison Telecommunications (Hong Kong) Holdings Limited, said: "It is critical that the government takes the lead in negotiating with various stakeholders. It is necessary to conclude on the most effective and feasible solutions that will minimise the negative impact of restriction zones to safeguard the public interest, as well as enabling Hong Kong's development as a smart city. We believe relocating the TT&C stations offers the ultimate long term solution."

2) Maintaining a level playing field

Given the limited spectrum available for auction, 3 Hong Kong considers that it would be inappropriate to allow a spectrum cap at 100 MHz (proposed in the current consultation paper) as this may lead to the possible scenario of only two successful licensees dominating the 5G mobile markets. 3 Hong Kong's suggestion is made in the interests of maintaining a level playing field in order to promote healthy competition among multiple players in Hong Kong's telecoms market.

3) Setting a reasonable reserve price

In 3 Hong Kong's considered opinion, the reserve price should be set at minimal level to encourage 5G infrastructure investment. Reference can be made to the recent 5G auctions (3.4 GHz) in the United Kingdom and other jurisdictions, where reasonable reserve prices have been set.

In addition to key points carried by its submission paper, 3 Hong Kong also urges the government to adopt a transparent and long-term spectrum policy. A 10-year - rather than three-year - spectrum supply plan would facilitate effective future investment planning for the benefits of customers and economy. It is suggested that the government should accelerate the process of releasing more frequency bands, such as from the 700 MHz and 4.8 GHz spectrum bands, preferably at the same time so that the network operators can develop its long term plan for 5G investment.

Given the demand for a huge number of 5G access points and base stations, 3 Hong Kong expects the site placement design for 5G to be very different from the previous generation of mobile technologies. Hence, for the purpose of efficient deployment of 5G services, 3 Hong Kong suggests the government takes a proactive role in coordinating with various of its departments to facilitate mobile operator access to government premises, street furniture and new public development project sites for cell-site installation.

Given the new social roles of mobile services in public safety and security nowadays, 3 Hong Kong strongly recommends public mobile services, similar to fixed-line offerings, be given public utility status and come complete with a statutory right of access to enter buildings, shopping malls, MTR premises and road tunnels for the installation of 5G equipment.

3 Hong Kong also calls for a longer licensing period because 5G and subsequent generations of technology require formidable investment. A longer licensing period of over 20 years would enable mobile operators to plan for long-term network infrastructure investment - all to the benefit of the market and Hong Kong's standing as a centre of technological excellence.

- Ends -

About 3 Hong Kong

3 Hong Kong is a leading mobile communications service provider and the only local operator to own blocks of spectrum across the 900MHz, 1800MHz, 2100MHz, 2300MHz and 2600MHz bands. 3 Hong Kong offers cutting-edge data, voice and roaming services under the "3" brand via far-reaching advanced 4G LTE, 3G and 2G networks. 3 Hong Kong also works with renowned partners to offer a wealth of innovative mobile devices and value-

added services, while providing high-speed Wi-Fi at 3 Hong Kong's hotspots to serve Hong Kong's major areas. 3 Hong Kong is the mobile division of Hutchison Telecommunications Hong Kong Holdings Limited (stock code: 215), a group member of CK Hutchison Holdings (stock code: 1).

For more information on 3 Hong Kong, please visit www.three.com.hk.

For more information on HTHKH, visit www.hthkh.com.

For more information, please contact:

3 Hong Kong
Corporate Affairs
2128 3611