

# SCED and CA announce arrangements for releasing 5G spectrum in various frequency bands

The Secretary for Commerce and Economic Development (SCED) and the Communications Authority (CA) announced today (December 13) their decisions after public consultations to assign the first batch of 4 100 MHz of spectrum that can be used for the fifth generation mobile (5G) services in April next year at the earliest for deployment by the operators. The authorities also promulgated their decisions to auction a total of 380 MHz of spectrum in the 3.5 GHz band, 3.3 GHz band and 4.9 GHz band by batches in mid-2019, as well as the arrangements for the related spectrum utilisation fee (SUF).

"Starting from April 2019, a total of about 4 500 MHz of spectrum will be made available to the market for 5G services, representing more than eight times the existing amount of 552 MHz of spectrum being used for 2G, 3G and 4G services in Hong Kong," the spokesman for the CA said.

The 4 100 MHz of spectrum in the 26 GHz and 28 GHz bands will be the first batch of spectrum available for use for the provision of 5G services, starting from April 2019. Due to the ample supply, the spectrum in these two frequency bands will be assigned administratively. Among them, 3 700 MHz of spectrum will be assigned for the provision of large scale public mobile services across the territory. Applications for assignment of the spectrum will be invited before the end of 2018. The remaining 400 MHz of spectrum will be set aside for the provision of localised innovative 5G services to specific groups of users on a geographically sharing basis and applications for assignment will be invited in the second quarter of 2019.

Given the likely competing demands for spectrum in the 3.5 GHz band (with 200 MHz of spectrum), 3.3 GHz band (with 100 MHz of spectrum) and 4.9 GHz band (with 80 MHz of spectrum), they will be assigned by way of auctions. Subject to enactment of the necessary legislative amendments, the CA aims to conduct three separate auctions for these frequency bands starting from July/August 2019.

"The 3.5 GHz band will be used by both the existing satellite services and the new mobile services. The Office of the Communications Authority (OFCA) has been co-ordinating with the relevant network operators to enable controlled deployment of spectrum in the 3.5 GHz band within the restriction zone where the Tai Po satellite earth stations are located. The co-ordination work is expected to be completed by the first quarter of 2019, and the conditions of use will be set out in the information memorandum for the auction. The OFCA will administer a subsidy scheme, funded by successful bidders in the auction for the 3.5 GHz band, to support the upgrading of about 1 600 existing satellite master antenna television systems in Hong Kong," the spokesman for the CA said.

As for the SUF, a spokesman for the Commerce and Economic Development Bureau said, "Since the CA will administratively assign the spectrum in the 26 GHz and 28 GHz bands, the SCED has decided not to charge any SUF if less than 75 per cent of the spectrum in these frequency bands has been occupied. The SUF will be charged only if the frequency bands become congested i.e. 75 per cent or more occupied, and are anticipated to become more congested in the future – \$21,600 per MHz per annum for spectrum to be assigned for the provision of large-scale public mobile services, and \$1,080 per MHz per annum for the spectrum to be assigned on geographically sharing basis."

For spectrum in the 3.3 GHz, 3.5 GHz and 4.9 GHz bands, the SUF will be determined by auction. The auction reserve prices will be set by SCED nearer the time. To enable greater financial flexibility for spectrum assignees, the SCED will allow spectrum assignees the choice of either paying the SUF by lump sum payment upfront or by annual instalments.

The assignment arrangements of the above spectrum are summarised in the table at Annex. For details about the respective decisions made by SCED and the CA, please refer to the three Joint Statements issued today, which are available at:

For the 26 GHz and 28 GHz bands:

[www.cedb.gov.hk/ccib/eng/paper/pdf/joint\\_statement\\_26\\_28GHz\\_2018en.pdf](http://www.cedb.gov.hk/ccib/eng/paper/pdf/joint_statement_26_28GHz_2018en.pdf)

[www.coms-auth.hk/filemanager/statement/en/upload/480/joint\\_statement\\_st\\_052018.pdf](http://www.coms-auth.hk/filemanager/statement/en/upload/480/joint_statement_st_052018.pdf)

For the 3.5 GHz band:

[www.cedb.gov.hk/ccib/eng/paper/pdf/joint\\_statement\\_3.4\\_3.6GHz\\_2018en.pdf](http://www.cedb.gov.hk/ccib/eng/paper/pdf/joint_statement_3.4_3.6GHz_2018en.pdf)

[www.coms-auth.hk/filemanager/statement/en/upload/481/joint\\_statement\\_st\\_062018.pdf](http://www.coms-auth.hk/filemanager/statement/en/upload/481/joint_statement_st_062018.pdf)

For the 3.3 GHz and 4.9 GHz bands:

[www.cedb.gov.hk/ccib/eng/paper/pdf/joint\\_statement\\_3.3\\_4.9GHz\\_2018en.pdf](http://www.cedb.gov.hk/ccib/eng/paper/pdf/joint_statement_3.3_4.9GHz_2018en.pdf)

[www.coms-auth.hk/filemanager/statement/en/upload/482/joint\\_statement\\_st\\_072018.pdf](http://www.coms-auth.hk/filemanager/statement/en/upload/482/joint_statement_st_072018.pdf)