<u>Auction of Radio Spectrum</u> <u>in the 6/7 GHz Band</u> <u>for the Provision of Public Mobile Services</u> - <u>Questions and Answers</u>

The Communications Authority (the "Authority") has received questions in relation to the Information Memorandum ("IM") published on 19 July 2024 for the Auction of Radio Spectrum in the 6/7 GHz Band. The Authority hereby sets out under paragraph F.2.1 of the IM its responses to the questions.

Terms not otherwise defined herein shall have the same meaning ascribed thereto in the Notice issued by the Authority on 19 July 2024 for the Auction, or as the case may be, in Annex E "Glossary of Terms" of the IM.

AUCTION ARRANGEMENTS AND LOGISTICS (AL)

- AL.1 Will the Authority accept any Letter of Credit for payment of Deposit or Letter of Credit / Performance Bond to guarantee payment of Spectrum Utilisation Fees ("SUF") issued by any banking institutions in Hong Kong?
- Ans. The Authority only accepts a letter of credit for payment of the Deposit and a letter of credit or a performance bond to guarantee payment of SUFs issued by a "Qualifying Bank" as defined in the Information Memorandum.

"Qualifying Bank" means an institution holding a full banking licence under the Banking Ordinance (Cap. 155) which long term issuer rating is, or is higher than -

- (a) one or more of the following
 - (i) Moody's A2;
 - (ii) Standard & Poor's A;
 - (iii) Fitch Ratings' A; or
- (b) a rating of a body other than a body listed in subparagraph(a) which, in the opinion of the Authority, is equivalent to one or more of the ratings in that subparagraph.

The Bidder must duly check and make sure that the bank it engages is a "Qualifying Bank" when it submits the relevant documents to the Authority. It is required that the bank should use the templates provided in the IM when preparing the letter of credit or performance bond, as appropriate.

- AL.2 Whether it is necessary to have two Authorised Representatives, both are directors of the Bidder to sign the Application Form. Is it possible a director plus any one of the Chief Financial Officer, Chief Technical Officer, Chief Operating Officer or authorised person who is not a director can sign the Application Form as long as they are actively operating and/or managing the business of the Bidder?
- Ans. The two Authorised Representatives who are to sign the Application Form must be the directors of the Bidder regardless of whether they also hold any other principal officer title. Such requirement is stated clearly in the Application Form and the Bidder Compliance Certificate. Any additional papers submitted as part of the Application Form must also be signed by these two Authorised Representatives.
- AL.3 Are there any penalties associated with bidding for fewer Eligibility Points ("EPs") in the first Round than the number of EPs attributed to a Bidder (i.e. bids for less than it is entitled to). Will the Authority forfeit an amount by way of Penalty from that Bidder's Deposit for the unused EPs?
- Ans. For the first Round, the number of EPs attributed to each Bidder will be determined by the amount of its Deposit as shown herein below.

Deposit	EPs to be attributed to
	Bidders
HK\$40 million	1
HK\$80 million	2
HK\$120 million	3
HK\$160 million	4
HK\$200 million	5
HK\$240 million	6
HK\$280 million	7

Bidder is not required to use all the EPs attributed to it at the beginning of the first Round. However, a Bidder who reduces its Activity Level in the first Round will have fewer EPs in the immediately following Round and thereafter. No Penalty is applicable in such case.

Nevertheless, in the first Round, each Bidder must submit to the Authority a Valid Bid for at least one Frequency Block. If a Bidder fails to submit a Valid Bid for at least one Frequency Block in the first Round, the Authority will disqualify that Bidder from the Auction and forfeit an amount (up to the full amount of that Bidder's Deposit) by way of Penalty from that Bidder's Deposit where the Deposit is in cash or make a claim under the Letter of Credit to the extent of the relevant amount where the Deposit is a Letter of Credit.

- AL.4 Under the following scenarios, will a Bidder have the flexibility to choose the Frequency Blocks at either end of Lower or Upper Band, rather than solely be assigned by the Authority the Frequency Block from descending order starting from Frequency Block A20 in the Upper Band?
 (a) where there is only one Qualified Bidder;
 (b) where there is only one Bidder at the end of Quantity Phase;
 - (c) for the Bidder with the highest Assignment Priority.
- Ans. No. According to Annex B of the IM, the arrangements of frequency assignment in the above scenarios will be as follows
 - (a) where there is only one Qualified Bidder, that Qualified Bidder must submit a Frequency Block Acquisition Form to indicate the number of Frequency Blocks it wishes to acquire in descending order starting from Frequency Block A20 (subject to the Spectrum Cap and the amount of the Deposit it submitted at the Application Stage);
 - (b) where there is only one Bidder at the end of the Quantity Phase, the Bidder will be assigned the Frequency Blocks it has successfully bid for at the Quantity Phase from the highest frequency range of Frequency Block A20;

- (c) the Bidder who places the highest Valid Bid amount at the Assignment Phase with the highest Assignment Priority will be assigned under the Provisional Assignment Plan specific and contiguous Frequency Blocks in descending order starting from Frequency Block A20 in accordance with the general principles of assignment. Alternatively, all Bidders may agree among themselves an Alternative Assignment Plan and make a joint submission with full justifications for consideration by OFCA.
- AL.5 After receipt of the Provisional Assignment Plan from OFCA, how much time and in what manner will the Bidders be required submit their preferred assignment plan for the Authority's consideration?
- Ans. The amount of time allowed for response will be specified by the Authority when the Provisional Assignment Plan is issued. Without prejudice to the discretion of the Authority, Bidders will be required to submit their comment or agree amongst themselves an Alternative Assignment Plan with joint submission by using the specific forms by the Authority within a reasonable time to be specified by the Authority. Templates of those specific forms will be distributed to the Qualified Bidders before the training/mock auction.
- AL.6 With reference to the worked examples in Annex D of the IM, why is a Bidder with higher assignment priority not assigned its 6 blocks in a contiguous manner but instead is assigned noncontiguous blocks resulting in more bidders having more noncontiguous spectrum assigned in Scenarios 4 and 5?
- Ans. The worked examples (including Scenarios 4 and 5) illustrate certain hypothetical scenarios about how the Authority would assign the contiguous frequency blocks of spectrum to the Bidders as far as it is practicable to follow the general principles that promote efficient use of radio spectrum and maximise spectral efficiency. Under Scenarios 4 and 5, the Provisional Assignment Plans as determined pursuant to the general principles of assignment provides that the Bidder who has submitted the highest Valid Bid at the Assignment Stage be assigned with 6 contiguous blocks of spectrum, whereas all other Bidders who have similarly

successfully bid for 6 blocks will still be assigned with 5 contiguous blocks of spectrum, i.e. 100 MHz which is the maximum allowable channel bandwidth for 5G NR in the 6/7 GHz Band. Such particular assignment outcome is in fact the result of the specific circumstances as illustrated under the Scenarios.

Alternatively, all Bidders may agree among themselves an Alternative Assignment Plan by using the specific form to be provided by OFCA.

LICENSING (LG)

- LG.1 The spectrum in the 6/7 GHz Band will be assigned on or before 31 March 2025. Will the Authority postpone the assignment date of the 6/7 GHz Band due to the market availability of equipment supply?
- Ans. As already mentioned in the joint statement promulgated by the Authority and the Secretary for Commerce and Economic Development on 1 March 2024 ("Joint Statement"), the Authority recognises the needs to align with global trends and the Mainland's plans for using the 6/7 GHz Band to promote 5G and further develop 6G technology. Therefore, the Authority considers it appropriate to assign 400 MHz of spectrum in the 6/7 GHz Band, sooner rather than later, by the end of Q1 2025 to meet the growing demand for mid-band spectrum for mobile technologies.
- LG.2 Considering that the mid-band spectrum of 6/7 GHz Band is better suited to serve the densely populated area or indoor environment/hotspots instead of wide-area mobile coverage, will the Authority consider lower the network and service rollout requirement of a minimum coverage of 50% of Hong Kong population or extend the timeframe beyond 5 years?
- Ans. As mentioned in the Joint Statement, the imposition of network and service rollout obligations on spectrum assignees have long been adopted for spectrum assignments in order to ensure efficient use of the spectrum and prevent spectrum hoarding. The Authority considers that there is no overriding reason to deviate from this practice for assignment of spectrum in the 6/7 GHz Band. Having considered that the 6/7 GHz Band can enable further development

of 5G networks and services with coverage, speed and capacity due to its radio frequency characteristics, the Authority foresees that the 6/7 GHz Band will not only be deployed in indoor environments or hotspots, but will also be suitable for outdoor environments to provide full network coverage with speed and capacity enhancement. Therefore, the Authority considers it appropriate to require each successful bidder of spectrum in the 6/7 GHz Band to roll out its network and service to provide a minimum coverage of 50% of the population of Hong Kong by using the spectrum assigned within five years from the date of spectrum assignment.

Office of the Communications Authority 28 August 2024