

**Auction of Radio Spectrum in the 1800 MHz Band**  
**for Expansion of Public Mobile Telecommunications Services**  
**-- First Batch of Questions and Answers**

*The Telecommunications Authority (the “Authority”) has received questions in relation to the Information Memorandum published on 24 April 2009. The Authority now under paragraph F.2.1 of the Information Memorandum sets out his responses to the questions.*

*Terms not otherwise defined herein shall have the same meaning ascribed thereto in the Notice issued by the Authority on 24 April 2009 (the “Notice”), or as the case may be, in Appendix E “Glossary of Terms” of the Information Memorandum.*

**AUCTION ARRANGEMENTS AND LOGISTICS (AL)**

**AL.1**            **In paragraph D.6.48 of the Information Memorandum, it indicates that if the Bidding Stage continues for a period in excess of 10 Business Days the Authority may specify a final Round by giving an advance notice of 6 Rounds. Would the Authority provide a more transparent set of rules governing the notice of the final Round?**

Ans.            The Bidding Stage will end where there is no bidding activity (i.e. where there is a Round in which no Valid Bids, no Withdrawals and no Waivers are submitted by any of the Bidders). The Authority will specify a Round to be the final Round in exceptional circumstances if he considers the benefits of an early conclusion to the Auction outweigh the detriments. For example, the Authority may call the specified final Round if he finds that the Auction has entered into a cyclic pattern that is difficult to break without a departure from the normal process.

The Authority understands that Bidders would prefer more certainty about when a specified final Round may be called. Nevertheless, it is not common international practice to lay down rigid conditions under which a final Round shall be specified as this will unduly constrain the way in which the auctioneer may respond to any unforeseen situation that may arise during the Bidding Stage.

As indicated in the Information Memorandum, the Authority is minded not to call the specified final Round until the Bidding Stage

has continued for a period of at least 10 Business Days. If a specified final Round is considered appropriate, the Authority will give a notice to all the Bidders 6 Rounds in advance of the specified final Round. For instance, if the Authority specifies Round 106 as the final Round, a notice will be given to all Bidders before the start of Round 101.

**AL.2 In order to streamline the Bidding Stage, would the Authority consider a bidding structure where initial Rounds have larger increments that decrease as the bidding price increase to allow “fine tuning” as the bidding approaches the final price? And, if so, would the Authority provide a clear outline of the methodology?**

Ans. Without prejudice to the generality of the Authority’s power to adjust the Round Price as the Bidding Stage proceeds from Round to Round, the Authority intends in principle to set Round Price increments in an ascending order with a view to encouraging Bidders to take part in the bidding. The Authority would also like to set out the following scenarios on how adjustment to the Round Price will be made:

- (a) If one or more Valid Bids were received for a Frequency Band in the immediately preceding Round, the Round Price for that Frequency Band will be adjusted upward by no more than HK\$1 million for that Frequency Band.
- (b) If no Valid Bid was received for a Frequency Band in the immediately preceding Round but there is a Standing Highest Bid for that Frequency Band, the Round Price for that Frequency Band will be adjusted downward by no more than 50% of the difference between the Round Price in the immediately preceding Round and the Standing Highest Bid.
- (c) If no Valid Bid was received for a Frequency Band in the immediately preceding Round and there is no Standing Highest Bid for that Frequency Band, the Round Price for that Frequency Band will be adjusted downward by no more than 50% of the difference between the Round Price in the immediately preceding Round and the Minimum Fee.

**AL.3**            **Increasing the number of rounds per day would expedite the entire auction process. Would the Authority consider extending the “working hours” of the Bidding Stage to facilitate more Rounds per day? And would the Authority consider implementing more Rounds per day by, for example, setting a shorter duration for bidding, a shorter duration between rounds and extending the working hours?**

Ans.            As all Eligible Persons who may participate in this Auction have already gained experience of the bidding procedures in the spectrum auction for broadband wireless access (BWA) services, the Authority is minded to conduct eight to ten Rounds each day under normal circumstances.

For the first day of the Bidding Stage, the Authority plans to conduct eight Rounds. In that morning, each Round will last for 30 minutes, and there will be a break of 30 minutes between Rounds. In that afternoon, each Round will last for 20 minutes, and there will be a break of 20 minutes between Rounds. During the break, the Authority will process the bids, announce the result of the Round and announce the parameters of the next Round.

On each subsequent day, the Authority plans to conduct ten Rounds. Each Round will last for 20 minutes, and there will be a break of 20 minutes between Rounds.

**AL.4.**            **Referring to paragraph D.3.7 of the Information Memorandum, please explain the reasons for prohibiting any two or more of the mobile operators listed under Section D.3.4 from submitting a joint application to bid for spectrum?**

Ans.            The amount of the spectrum to be released through the Auction is rather limited. For this reason it has been decided that the Auction should be confined to bidding by incumbent mobile network operators, each of which is operating its own mobile network with the assigned spectrum in the 1800MHz Band. Successful Bidders will be assigned with the Frequency Bands under their carrier licences holding the existing assigned spectrum in 1800MHz Band. To provide for additional flexibility to the Eligible Bidders, the radio spectrum has been divided into six discrete Frequency Bands. Against such a background, the Authority does not see any

justification or valid reason for two or more existing mobile network operators to submit a joint application.

### **LICENSING (LG)**

**LG.1 Please explain why there is no service and network rollout requirement with respect to the assignment of the Frequency Bands?**

Ans. The release of the available radio spectrum in the 1800 MHz Band is intended to allow incumbent mobile network operators to expand their system capacity to cope with the increasing market demand for public mobile service. Since the mobile service and the network are already in place, it is not necessary to impose any service and network rollout requirement.

**LG.2 Are there any specific obligations pertaining to the use of the Frequency Bands?**

Ans. The Frequency Bands to be assigned through this Auction will be restricted for use in base stations located outside country parks and remote areas. Coordination with the mobile network operators who are using the same frequencies for serving the country parks and remote areas will be required to prevent harmful interference. A Successful Bidder will be assigned with the Frequency Band(s) under its existing mobile carrier licence or unified carrier licence (as the case may be) under which it is authorised to provide public mobile telecommunications services with spectrum in the 1710 – 1880 MHz band. Apart from the existing terms and conditions of the licence, the Successful Bidder is required to comply with additional licence conditions specifically relating to this Auction and the assignment of the Frequency Bands, including payment of Spectrum Utilization Fees for use of the Frequency Bands and compliance with the terms and conditions of the Notice. Please refer to Section C of the Information Memorandum for details.

### **OTHERS (OT)**

**OT.1 Referring to paragraph D.2.2 of the Information Memorandum, the minimum amount specified for the Upfront SUF has been**

**fixed at HK\$60,000 for each Frequency Band of (0.8 MHz x 2) 1.6 MHz, or HK\$37,500 per MHz.**

**In contrast, the minimum SUF that was set for the recently auctioned spectrum for BWA services was HK\$5,000,000 per MHz.**

**Although the 1800 MHz spectrum is also subject to minimum Annual SUF payment (for 12 years) whereas no such further payments need be made for the BWA spectrum, the minimum Upfront SUF for spectrum in the 1800 MHz band still looks relatively inexpensive by comparison. Please explain.**

Ans. In accordance with the Statement of the Authority of 4 July 2008 entitled "Assignment of the Available Radio Spectrum in the 900 MHz and 1800 MHz Bands", the Authority recommended to the Secretary that the Spectrum Utilization Fees payable for the use of the Frequency Bands shall consist of (a) Annual SUF and (b) Upfront SUF, the minimum amount of which shall be based on the prevailing 2G SUF formula. The Secretary accepted the recommendation and made amendments to the Regulations and prescribed the level of and the method for determining the Spectrum Utilization Fees payable for use of the Frequency Bands.

The Minimum Fee of HK\$60,000 per Frequency Band is related to the Upfront SUF only. The final amount of the Upfront SUF shall be decided by the Auction.

Apart from the Upfront SUF, a Successful Bidder shall pay the Annual SUF based on the prevailing 2G SUF formula. The Annual SUF shall be HK\$0.145 million/MHz/year from 30 September 2009 to 29 September 2011, and HK\$1.45 million/MHz/year from 30 September 2011 to 29 September 2021.

Taking the Annual SUF into consideration, the net present value of the minimum amount of the Upfront SUF plus the Annual SUF is on a par with the reserve price of HK\$5 million/MHz set for the BWA auction in January 2009.

**Office of the Telecommunications Authority  
15 May 2009**