

Auction of Radio Spectrum in the 850 MHz, 900 MHz and 2 GHz Bands
for Provision of Public Mobile Telecommunications Services
- Second Batch of Questions and Answers

The Telecommunications Authority (the “Authority”) has received further question in relation to the Information Memorandum published on 10 December 2010. The Authority now under paragraph F.2.1 of the Information Memorandum sets out his responses to the question.

Terms not otherwise defined herein shall have the same meaning ascribed thereto in the Notice issued by the Authority on 10 December 2010 (the “Notice”), or as the case may be, in Annex I “Glossary of Terms” of the Information Memorandum.

LICENSING (LG)

LG.3 As specified in HKTA1033, modern EGSM base stations (Rx) operate in frequency range of 880 MHz – 915 MHz. There is a 2.5 MHz overlap between Frequency Band A (Base Tx) and the modern EGSM band (Base Rx) resulting in a potential interference from the network using Frequency Band A to the network using Frequency Band B. EGSM base stations currently deployed by incumbent mobile operators may also be affected as well. How does the Authority propose to deal with this interference issue?

Ans. For the general purpose of network planning and control of interference between the services which will operate in Frequency Band A and Frequency Band B, please refer to the reply given to LG.1 of the first batch of questions and answers published on 6 January 2011.

The range of operating frequencies as set out in the HKTA performance specifications, such as HKTA1033 (for GSM/EGSM mobile and portable equipment), HKTA 1020 (for GSM/EGSM base station equipment) and HKTA 1043 (for W-CDMA), is the working frequency range for the purpose of certification for the equipment under concern. It is not meant to be the frequency range that mobile network operators (“MNOs”) are permitted to use in their networks.

The Authority made it clear in his statement “Licensing of Spectrum in the 850 MHz Band to Enable the Provision of CDMA2000 Service” dated 27 April 2007 that the EGSM band in Hong Kong would be limited to the Frequency Band B only i.e. the lower band

edge would be 885 MHz. This position was reconfirmed in his statement “Assignment of the Available Radio Spectrum in the 850 MHz, 900 MHz and 2 GHz Bands” dated 31 March 2010. As indicated in the reply given in LG.1, all MNOs are strictly required to use their own frequency assignments only.

The Successful Bidder of Frequency Band B is expected to adopt the necessary measures to protect its base stations from any possible in-band blocking signals or spurious emissions generated by the transmitting base stations operating in Frequency Band A or other sources. The same applies to the incumbent MNOs if they have deployed standard EGSM base stations that conform to HKTA 1020. The Authority understands that most incumbent MNOs have already installed the appropriate filters at their GSM/EGSM base stations.

Office of the Telecommunications Authority
18 January 2011