

12<sup>th</sup> September 2020

Dear Sir/Madam,

# Comment on the Consultation Paper on Arrangements for Assignment of the Spectrum in the 600 MHz and 700 MHz Bands for the Provision of Public Mobile Services and the Related Spectrum Utilization Fee

We, Comba Telecom (HKEX: 2342), are a global supplier of infrastructure, wireless enhancement, ICT and smart solutions to mobile network operators and enterprises to enhance and extend their wireless communications networks and smart city systems.

We are pleased to provide our views and comments on the various questions raised in the consultation paper issued by the Communications Authority and the Secretary for Commerce and Economic Development on 19<sup>th</sup> August 2020 on "Arrangements for Assignment of the Spectrum in the 600 MHz and 700 MHz Bands for the Provision of Public Mobile Services and the Related Spectrum Utilization Fee" as follows:

# PROPOSED AMENMENT TO THE HONG KONG TABLE OF FREQUENCY ALLOCATIONS FOR THE 614 – 806 BAND

Question 1: Do you have any views on the proposed changes of frequency allocation to mobile service for the entire 614 - 806 MHz band?

Response 1: In view of the fact that most passive components such as the RF couplers, RF combiners, RF splitters, RF coaxial cables and so on in the existing infrastructure of the traditional indoor distributed antenna systems (DAS) or distributed communications systems (DCS) as well as the outdoor antenna systems support the lower frequency bands (e.g. as low as 698 MHz in most of the product specifications and even lower without detailed performance data) and very minimal modification is required to upgrade those infrastructure to support 5G simultaneously with the existing 2G, 3G and 4G services, we support the amendment to change the frequency allocation to mobile service for the entire 614 – 806 MHz frequency band.

# PROPOSED ARRANGEMENTS FOR ASSIGNMENT OF THE SPECTRUM IN THE 600/700 BANDs





Question 2: Do you have any views on assigning the spectrum in the 600/700 MHz bands by way of auction and allowing all interested parties to apply for participation in the auction?

Response 2: Since the spectrum available in the proposed 600/700 MHz bands is very limited compared with the other spectrum available for 5G spectrum, for example, the 3.3 GHz band, the 3.5 GHz band and the 4.9 GHz band, it will not be cost efficient for a non-incumbent mobile network operator to bid the spectrum and invest in the 5G infrastructure. Even if the non-incumbent mobile network operator successfully bid part of the spectrum in those bands, it may tend to share the spectrum and the infrastructure with one of the incumbent mobile network operators. For this reason, we believe the assignment of the frequency by way of auction is still the best practice but the participants of the auction should be limited to the incumbent mobile network operators.

Question 3: Do you have any views on the proposal that the spectrum in each of the 600 MHz and 700 MHz bands be divided into seven frequency blocks each with a bandwidth of 2 x 5 MHz?

Response 3: In general, we agree with the division of the 600 MHz and 700 MHz bands into frequency blocks each with a bandwidth of 2 x 5 MHz. However, the spectrum of 2 x 5 MHz will be too small to have a meaningful and effective 5G deployment. We suggest that the incumbent mobile network operators may together bid the spectrum and share the spectrum acquired or the successful bidders may share the spectrum they have successfully bid for with other incumbent mobile network operators who has/have not acquired the spectrum. Moreover, we suggest that the frequency block used by the Government should be vacated, if possible, to free up 9 x 5 MHz frequency block in the 700 MHz band.

Question 4: Do you have any views on the proposed spectrum cap of 30 MHz in each of the 600 MHz and 700 MHz bands to be imposed on each bidder?

Response 4: In order to be effective and efficient, a 5G network should be deployed with a relatively large contiguous bandwidth. In particular, the GSM Association recommends that 80 - 100 MHz of contiguous spectrum should be made available for the deployment of a 5G system. If a spectrum cap of 30 MHz in each of the 600 MHz



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and 700 MHz bands, it means there will be only 15 MHz contiguous bandwidth in the uplink or downlink. This may eviscerate some of the key features of 5G. On the other hand, the available spectrum in each of the 600 MHz and 700 MHz bands is indeed very limited with only 2 x 35 MHz in the 600 MHz and 2 x 45 MHz in the 700 MHz (including the 2 x 10 MHz of spectrum reserved for Government applications), a high spectrum cap is not realistic. To make a trade-off, we recommend a spectrum of 40 MHz (i.e. 20 MHz in the uplink and 20 MHz in the downlink) in each of the 600 MHz and 700 MHz bands, which is equivalent to the maximum bandwidth in LTE if the spectrum may not be shared among the incumbent mobile network operators as we suggested in Question 3. If the acquired spectrum may be shared by the incumbent mobile network operators, we suggest the cap should be set to 70 MHz (2 x 35 MHz) in each of the 600 MHz and 700 MHz bands.

Question 5: Do you have any views on the adoption of the SMRA auction format for the assignment of the spectrum in the 600/700 MHz bands?

Response 5: We have no further comment on this auction format.

#### LICENSING ARRANGEMENT

Question 6: Do you have any views on the network and service rollout obligations proposed to be imposed on the successful bidders of the spectrum in the 600/700 MHz bands and the associated performance bond proposed for guaranteeing compliance?

Response 6: With the view to encourage the effective and efficient use of the "excellent" spectrum in the 600/700 MHz bands and to promote investment in 5G, we are of the opinion that the successful bidders should be required not to rent or share all or any part of the additional spectrum to any other incumbent mobile network operators, at least, in the first five years of the validity period.

#### SPECTRUM UTILIZATION FEE

Question 7: Do you have any views on the proposal in relation to the setting and collection of SUF as specified in paragraphs 32 and 33 above?

Response 7: We have no further comment on the setting and collection of the SUF.



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We hope that the above views and comments are useful for the Communications Authority and the Secretary for Commerce and Economic Development in considering the matters raised in the consultation paper.

Yours faithfully,



### **Comba Telecom Limited**

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