

# **SMARTONE MOBILE COMMUNICATIONS LIMITED**

## **SUBMISSION TO CONSULTATION PAPER “PROVIDING RADIO SPECTRUM FOR BROADBAND WIRELESS ACCESS”**

### **1. INTRODUCTION**

1.1 SmarTone Mobile Communications Limited (“SmarTone-Vodafone”) welcomes the opportunity to present its views on the Consultation Paper “*Providing Radio Spectrum for Broadband Wireless Access*” (“Consultation Paper”) issued by the Telecommunications Authority (“TA”) on 11 May 2007.

1.2 Among the various issues raised in the Consultation Paper, SmarTone-Vodafone considers two issues are of higher importance and therefore the below sections will address these issues first.

### **2. UNCERTAINTIES IN REGULATORY REGIME WILL REDUCE THE VALUE OF BWA SPECTRUM**

2.1 At the outset, we would like to state our position that we do not object to the TA’s proposal to make available spectrum for the provision of BWA services. In fact, we are positively looking at the business opportunity of deploying BWA spectrum in our network. BWA spectrum is a valuable public resource which should be put to its most optimum use so as to generate the maximum benefits to the public. In our view, a timely release of BWA spectrum to the market will benefit the public provided that the underlying regulatory regime in relation to BWA services is well in place before the bidding.

#### **Caution in BWA investment due to regulatory uncertainties**

2.2 We agree that a market-led approach should be adopted for the bidding of BWA spectrum because it should be a business decision to be made by investors. However, whether investors can make a sound bidding decision would depend on whether there are sufficient information available for them to make a business case forecast. Uncertainties in the regulatory regime will keep the investors on a cautious stance when formulating business case, leading to a more conservative approach in their bidding strategies. This

would adversely affect the auction price of the BWA spectrum which should be a concern to the government as well as the public.

### **Uncertainties in the FMC regime**

2.3 In the TA's Statement "*Deregulation for Fixed-Mobile Convergence*" ("FMC") dated 27 April 2007, the TA has made a number of decisions on the regulatory regime for FMC. However, there are three major areas which require further studies or actions to be taken by the TA:

- Fixed Mobile Interconnection Charge ("FMIC") – While the TA has decided to withdraw the prevailing regulatory guidance on FMIC subject to a 2-year transition period, the TA has refused to issue a replacement regulatory guidance, which would result in regulatory uncertainty as pointed out in the FMC consultancy report commissioned by the TA.
- Unified Carrier Licence ("UCL") – We urge the TA to commence issuing the UCL as soon as possible so that network operators can offer any telecommunications service, be it fixed or mobile, under a single licence in a converged environment. It is important for investors to know exactly what are their rights and obligations under their licence. However, the licence conditions including the licence fee of the UCL has yet to be finalized as they are subject to a regulation to be made by the Secretary for Commerce, Industry and Technology concerning the creation of the UCL and further consultation with the industry.
- Fixed Mobile Number Portability ("FMNP") – While it is generally agreed that FMNP will promote more competition in the home telephone market and allow customers to have more choice of services, the TA has decided that market research on consumer demand and cost/benefits for FMNP should be conducted before deciding whether to introduce FMNP. Furthermore, whether FMC services should use new or existing number range is yet to be decided.

2.4 We would like to stress that all of the above are critical factors to the business case of any potential bidders of the BWA spectrum. These factors not only affect the costs of providing BWA services, but also the revenue forecast of the services. If the TA invites bidders to bid for the BWA spectrum without first clarifying the above issues, there would be too much uncertainties for the bidders to make informed decision on their business forecast. In such circumstances, investors would devise their business case based on the worst-case scenario, resulting in a lower than optimal value of the BWA spectrum. We would therefore request that policy decisions on the above issues should be

made before the bidding of the BWA spectrum so as to remove the regulatory uncertainties.

### **3. LEVEL PLAYING FIELD FOR ALL PLAYERS IN THE MARKET**

3.1 We would also like to take this opportunity to urge the TA to provide a level playing field by removing the Open Network Access (“ONA”) obligation altogether from both new and existing licensees. The current proposal in the BWA consultation paper as well as the TA’s decision in the licensing of spectrum for the provision of CDMA2000 service are not to impose the ONA obligation in the new licensees. Furthermore, the fixed carrier licensees do not have the ONA obligations. It follows that the existing 2G and 3G licensees is the only group of licensees that are subject to the ONA obligations. An adverse impact of such a differential treatment is that competition among the fixed, mobile and BWA licensees in a converged market will be distorted because of the inconsistency in the ONA obligations. The existing 2G and 3G licensees are disadvantaged by these additional regulations as they are obligated to make reservation in their network capacity for potential MVNO and the commercial terms for the network capacity is subject to TA’s determination if the parties cannot reach agreement. All these will limit the flexibility of the 2G and 3G licensees and impose higher compliance cost on them. It is the duty of the regulator to maintain a level playing field so that all players in the market can compete effectively and fairly among themselves.

### **4. RESPONSES TO SPECIFIC QUESTIONS IN THE CONSULTATION PAPER**

*Question (1): Do you agree that the 2.3 GHz band be allocated for BWA services? If agreed, when the spectrum should be made available?*

4.1 We have reservation on the timing of releasing 2.3 GHz for BWA services. It is because the coordination with the Mainland authorities on the interference problem between the two territories is still outstanding. Such uncertainty will inevitably affect the bidding price of the frequencies to be released. We consider it is inappropriate for the TA to release part of the spectrum in this band for bidding and leave aside the interference issue. Such a short-term approach would not only cause uncertainty in the spectrum usability but also would affect the value of the spectrum. The TA should resolve the interference issue with the Mainland authorities before conducting the bidding for this band.

4.2 Furthermore, according to the Spectrum Release Plan dated 26 April 2007, we notice that this band needs relocation of existing users by early 2008. Thus the progress of relocation of existing users is another uncertainty to the availability of this band.

*Question (2): Do you agree that the opening up of the 2.5 GHz band for BWA should be considered at a later stage? If agreed, when and how much of the bandwidth should be made available to the market?*

4.3 We opine that it is pre-mature to consider the allocation of the 2.5GHz band for BWA service. According to paragraph 18 of the Consultation Paper, there are uncertainties on the coming decision of WRC-07 on the way forward for the allocation of 2.5GHz band and competing demands for the usage of 2.5GHz. We therefore suggest the TA to have separate consultation on the usage of the 2.5 GHz after the decision of WRC-07.

*Question (3): Do you have any preferred frequency bands for BWA services? How much spectrum do you need initially and for future expansion (number of blocks, spectrum width of each block, in which bands) and when the spectrum should be made available to the market?*

4.4 The frequency bands available for BWA services should be complied with international standard and with compatible consumer devices commercially available in the market. The spectrum should be made available at once when all the outstanding regulatory issues as stated in sections 2, 3 and 4 above are resolved.

*Question (4): Do you agree with the proposed frequency allocation plan given in Annex 1? If not, what is your proposal?*

4.5 We have reservation of the potential usage of Block 1,2, 19 and 20 with regards to the interference issue as mentioned in the Consultation Paper. Furthermore, the relocation of existing users in the 2.3 GHz band as mentioned above will create an additional uncertainty on the applicability of the proposed frequency allocation plan.

4.6 Furthermore, as according to CCS WG paper no. 7/2007 paragraph 10, the current proposed frequency allocation plan is not in line with the fixed WiMax profile as specified in IEEE 802.16-2004. Thus we are in doubt about the applicability and interoperability of the proposed allocation plan.

*Question (5): Do you agree that a BWA licensee should be assigned no more than six 5 MHz blocks of the BWA spectrum?*

4.7 The current Consultation Paper lacks any detailed analysis or justification of why six 5 MHz blocks should be assigned. There should be a study on spectrum efficiency by comparing different technologies before making a decision on the maximum level of frequency block to be assigned.

*Question (6): If the result of the coordination with the Mainland authorities confirms that 85 MHz bandwidth in the 2.3 GHz band can be made available, do you agree that the TA should make available all the 85 MHz bandwidth for BWA service? If not, what is your proposal with reasons?*

4.8 The amount of the bandwidth release is not subject to the spectrum availability but also a wide variety of factors including the demand of the bandwidth, the expected value of the bandwidth and the spectrum policy, etc. For instance, if the expected demand of the spectrum is less than the spectrum available for bidding, then releasing all the spectrum for bidding at one time will result in a low bidding price. Thus, we disagree with the proposal of releasing all the 85MHz bandwidth without a detailed analysis of all the relevant factors that would affect the bidding result.

*Question (7): Do you have any views on the frequency allocation plan for the 2.5 GHz band?*

4.9 Please refer our response to Question (2) above.

*Question (8): Do you have any comment on the TA's preliminary view that no restrictions should be imposed on the types of applications and services that may be provided using the BWA spectrum?*

4.10 We think that it is neither practical nor necessary to impose any restrictions on the types of applications and service that may be provided under the BWA spectrum in a converged market environment.

4.11 The boundary between fixed and mobile services is blurring. We are given to understand that the BWA technology can provide a fully-fledged mobile service in the future. If restriction on service and applications is imposed now (i.e., such as restricting the service to non-mobile service as proposed in the 2<sup>nd</sup> Consultation Paper), and then later on such restriction may be lifted in view of the technological development, the auction price today will not fully reflect the value of the BWA spectrum. Any administrative or licensing arrangement to limit the applications or services that could be

provided using the BWA spectrum will adversely affect the value of the spectrum, which should be a concern to the regulator and the public.

*Question (9): Do you have any further comments on the preliminary view of the TA that he should not prescribe any particular standard or technology for the BWA deployment?*

4.12 We agree that the TA should maintain technology neutral and therefore should not prescribe any particular standard or technology for the BWA deployment.

*Question (10): Do you have any further comments on the TA's preliminary view that assignment of the frequency blocks for BWA services should be made on a territory-wide basis?*

4.13 Similar to above, we consider that any restriction on the geographical location on the BWA deployment is neither practical nor necessary or else the spectrum value will be unnecessarily restrained. Further, given Hong Kong's geographical size and condensed nature, it is doubtful whether any geographical restriction is meaningful.

*Question (11): Do you have any further comments on the TA's preliminary view that BWA licensees will be required, under the licence, to roll out the services within 24 months from the date when the licence is issued and that performance bond will also be required?*

4.14 We support that BWA licensees should be subject to rollout obligation and performance bond requirement, as similar requirements have been imposed on other licensees. This will also ensure that the benefits of BWA spectrum will be passed on to consumers in a timely manner.

*Question (12): Do you agree with the proposed frequency assignment method (i.e., by a hybrid selection method including a simple pre-qualification and an auction)?*

4.15 We have no objection to the proposed frequency assignment method as it is in line with the 3G spectrum assignment method. We do not agree that the BWA spectrum should be allocated through beauty contest as some proposed. Auction is the general preferred method for spectrum with competing demand as stated in the Radio Spectrum Policy Framework. Since BWA spectrum is a valuable public resource with competing demand, the market-based method should be adopted so as to assign the spectrum to the highest value user.

*Question (13): Do you have any further comments on the TA's preliminary view that an up-front lump sum payment basis should be adopted for SUF, the amount of which will be determined through an open auction?*

4.16 The proposed up-front lump sum SUF payment is considered by the TA as "more straight forward, easier and less expensive to administer" as compared to deferred payment which is the prevailing SUF payment method for 2G and 3G licensees. While SmarTone-Vodafone in principle has no objection to the TA's view, it is considered that there are a number of issues that the TA should take into consideration when devising the auction details.

4.17 First, when devising the reserve price of the auction, consideration should not only be given to similar auction results in other countries but also the previous auction for spectrum for similar services or applications in Hong Kong.

4.18 Second, whether and how an open auction could prevent collusion among bidders or manipulation of bidding result should be carefully considered. It should be noted that for the same reason, the 3G bidding in 2001 is not by open auction but in the form of "dark room".

*Question (14): Do you agree that BWA licensees should not be subject to an ex ante ONA requirement?*

4.19 As mentioned above, we have no objection to the proposal that the BWA licensees should not be subject to the ONA requirement provided that the same requirement is removed from the existing 2G and 3G licensees so as to maintain a level playing field among competing operators in the industry.

*Question (15): Do you consider that FMC services should be allocated with new number ranges?*

4.20 We have reservations about the allocation of new number ranges to FMC services in light of the efficiency of number usage. Currently, the number usage in Hong Kong has already been assigned in a fragmental manner. Because of historical reasons, numbers are split up into different ranges for mobile services, fixed services, paging services, personal number services and VoIP services. We question the rationale to further split up the numbers for FMC services which indeed are a mixture of fixed and mobile services. Also, consideration should be given to the potential number portability problem for porting a FMC number to fixed-only service or mobile-only service.

*Question (16): Do you agree that numbers with prefixes “2” and “3” should be allocated to fixed/“limited mobility” BWA services while numbers with prefixes “6” and “9” should be allocated to “full mobility” BWA services?*

4.21 This may be the current allocation available for BWA services. However, this option cannot reflect the true service nature required by fixed mobile convergence which user demands a single number no matter the access method is fixed or mobile. We therefore strongly recommend the TA to implement FMNP portability and the mixed use of fixed and mobile numbers which will improve number usage efficiency in Hong Kong.

*Question (17): Do you agree that BWA licensees should be subject to the requirement of facilitating both ONP and MNP, including the FMNP to be introduced in the future?*

4.22 SmarTone-Vodafone agrees that BWA licensees should be subject to the requirement of facilitating ONP, MNP and FMNP.

*Question (18): Do you agree that BWA licensees should be subject to the requirement of denial of service to suspected stolen apparatus?*

4.23 SmarTone-Vodafone agrees that BWA licensees should be subject to the requirement of denial of service to suspected stolen apparatus.

*Question (19): Do you agree with the proposed approach as stated in paragraph 58 (of the Consultation Paper) to resolve adjacent channel interference issues?*

*Question (20): Do you agree with the proposed guard bands for the 2.3 GHz band? Do you agree with the arrangement for the spectrum holder at the lower edge of 2.3 GHz band to use the spectrum 2.300 – 2.305 GHz as stated in paragraph 60?*

4.24 We have reservation of the potential usage of Block 1,2, 19 and 20 with regards to the interference issue as mentioned in the Consultation Paper. Furthermore, we also urge the government to resolve the potential cross-border interference issue with the Mainland authorities as soon as possible and announce the resolution to the market before conducting any bidding of the 2.3 GHz band.