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Dear Sir

**“Providing Radio Spectrum for Broadband Wireless Access: Third Consultation Paper”**

The WiMAX Forum<sup>1</sup> welcomes the opportunity to provide its views and comments on this Paper and commends the TA for its thorough considerations.

The WiMAX Forum is an industry-led, non-profit corporation formed to promote and certify the compatibility and interoperability of broadband wireless products using the IEEE 802.16 and ETSI HiperMAN wireless MAN specifications. The WiMAX Forum's goal is to accelerate the introduction of these devices into the marketplace. WiMAX Forum Certified™ products will be fully interoperable and support Metropolitan Broadband Fixed, Portable and Mobile Applications. For more information about the WiMAX Forum and its activities, please visit [www.WiMAXForum.org](http://www.WiMAXForum.org). WiMAX Forum™ and WiMAX Forum Certified™ are registered trademarks of the WiMAX Forum™.

The WiMAX Forum respectfully submits the comments in Annex 1 with regard to the consultation document identified above.

Yours sincerely

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## **ANNEX 1 - Response to questions raised 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?**

The WiMAX Forum has developed 802.16(e) based profiles for 2.3 GHz and is establishing the relevant certification processes at this time. Hence the Forum strongly supports the allocation of this band for BWA and furthermore suggests that this allocation be done in a technology neutral manner.

To allow Hong Kong consumers to have timely access the benefits of mobile WiMAX and to maximize the opportunities for Hong Kong businesses, the Forum believes that the spectrum should be released as early as possible

### **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?**

The WiMAX Forum recommends that the band be made available as soon as possible and in a technology neutral manner to meet the demand for spectrum for wireless.

### **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?**

Lower frequency bands that align with international usage are preferred for mobile BWA technologies. While the WiMAX Forum has focused on bands > 2GHz, discussions on bands < 1GHz show that WiMAX can offer efficient broadband solutions in rural areas and in areas with poor telecommunications infrastructure.

Bands in the 3-4GHz range have proven suitable for various types of BWA deployment.

Overall, the preferred frequency bands should be those covered by current and planned WiMAX Forum profiles as in the Regulator Outreach part of the WiMAX Forum website.

The Forum recommends that 30 MHz be allocated to each operator so they have the capacity to deliver true broadband services and to meet medium term requirements.

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

The 5 MHz raster employed is consistent with WiMAX certification profiles for this band. The Forum recommend that licensees be given the flexibility to use

equipment bandwidths that are greater than 5 MHz (e.g. 10 MHz) within a licensee's assigned spectrum block.

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

Spectrum for TDD usage should be allocated in contiguous blocks of 30 MHz of spectrum. This will ensure true wireless broadband services can be delivered in high traffic areas such as Hong Kong.

**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?**

In other countries regulators have or are discussing guard bands of only 5 MHz. The WiMAX Forum understands that Hong Kong has a very demanding radio environment but strongly encourages the TA to review the need for the proposed 10 MHz guard band.

The Forum agrees that the entire 85 MHz, or 90 MHz if a smaller guard band is possible, be allocated.

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

The Forum recommends that the band 2500 MHz to 2690 MHz be arranged in 5 MHz lots and made available to licensees on a technology neutral basis.

**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?**

The Forum strongly supports the TA's preliminary view which is consistent with the Forum's normal recommendation of technology, service and application neutral allocations of BWA spectrum.

**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?**

The Forum strongly supports this view.

**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?**

The Forum supports this view.

**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?**

No comment

**Question (12): Do you agree with the proposed frequency assignment method as stated above?**

No comment

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

No comment

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

No comment

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

No comment

**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?**

No comment

**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?**

No comment

**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?**

See comments above in relation to Question (6).