

**Aircel Response to the Consultation Paper On Allocation and Pricing for 2.3-2.4 GHz, 2.5-2.69 GHz & 3.3-3.6 GHz bands**

1. What should be the revised reserve price for the spectrum in 3.3.-3.6 GHz band?

The various options available are as below:

- *The reserve price of this spectrum remains as recommended earlier.*
- *The reserve price for the spectrum is made equal to 50% of the reserve price recommended for the 3G spectrum.*
- *The reserve price is made equal to the price recommended for the 3G spectrum*

**Aircel Response: Aircel recommends that reserve price for spectrum remains the same.**

*As per DOT Guidelines for 3G & BWA services issued on 12-11-2007*

- *BWA services will be permitted in 2.5GHz band and other service Providers will be considered for spectrum allotment in 2.3 GHz and 3.3 - 3.4 GHZ band.*
- *Subsequently the WPC issued order on 9-1-2008 stating to shift the operations from 2.5GHz to 3.3 GHz band*
- *“For this purpose, wireless users /operators who have already been assigned frequencies in 2.5 GHZ and 3.3 -3.4 GHZ bands, have to apply for shifting of these BTS which are presently working in 2.5 GHZ band for consideration in 3.3 -3.4 GHZ Band.*
- *ITU has recognized WIMAX technology as the new IMT2000 standard, IMT2000 family of standards has now four different access technologies, FDMA, TDMA, CDMA and OFDMA. This is recognized in the 3.4-3.6 GHz band only, **so we recommend that this India specific band of 3.3-3.4 must be left as it is and existing services to end users be not disrupted.***
- *The current frequency frequency band of 3.3 to 3.4 GHZ should remain. Many operators including Aircel have invested heavily into this band by deploying equipment and have many customers using the services in this band.*
- *Therefore 3.4 to 3.6 GHZ band should be made available for existing users as well as other Service providers for future usage.*
- ***Reserve Price and method of allocation in the band 3.4 -3.6 GHZ recommended earlier should not be modified.***
- *Existing method of spectrum charges should be reviewed for 3.3 to 3.4 GHZ band as WPC is overcharging spectrum charges for point to multi-point MMDS*

*As per Ministry of Communications & IT corrigendum letter No. R-11014/2003-LR dated 06/05/2003, regarding Royalty charges for grant of license under provision of Indian Telegraph Act 1885.*

*Distance upto 5Kms fall under circuit Category -I*

*For Circuit Category -I Annual Royalty charges is Rs. 1200/- for 24 Hrs of operation.*

*Accordingly, calculation for Royalty charges for FDD mode upto 5Kms radius & 6MHz bandwidth in 3.3GHz is as follows:*

$$MCW = 1200 \times 2 \times 60 = \text{Rs. } 1,44,000 \text{ per BTS per annum.}$$

*Whereas WPC is charging Rs 2,88,000 per BTS per annum, which falls in category II (distance more than 5 KM and upto 25 KM). All applications filed with WPC on spectrum allocations are for service area of 5 KM radius only by Aircel.*

## **2. What should be the eligibility conditions for bidding for spectrum in the bands of 2.3-2.4 GHz and 2.5-2.69 GHz?**

*Aircel Response: Existing operators in 2.5-2.69 GHz should be given first priority. The government should honour the spirit of wireless operating License.*

*For 2.3 to 2.4 GHz band, UASL and ISP both should be considered for eligibility for allocation.*

## **3. In the 2.3-2.4 GHz band, the maximum amount of spectrum which a licensee can bid for?**

*Aircel Response: As per the WiMAX forum profiles for 802.16e, certification profiles exist for 5 & 10 MHz, so the minimum amount of spectrum allotted should be 30 MHz, however if insufficient spectrum is available, 15 MHz can be made available for a Tri-Sector deployment initially.*

## **4. In the 2.3-2.4 GHz band, the size of the spectrum blocks for the bidding?**

*Aircel Response: A Contiguous block of 15 MHz must be made available to all operators; this will result in the efficient utilization of the 5 MHz channel width in a Tri-Sector deployment.*

## **5. In view of limited availability of spectrum in this band and possible conflict between the technologies using FDD and TDD modes, how the spectrum in 2.6 GHz band be allocated?**

*Aircel Response: We recommend that the 2.5-2.69 GHz band be allotted at the earliest opportunity to allow the service providers to start personal broadband services using Mobile WiMAX™ technology. We recommend that TDD be the preferred mode of spectrum allotment in this band, this is In-line with the WiMAX Forum's Mobile WiMAX profiles using 3 x 5 = 15 MHz contiguous TDD chunk of spectrum.*

## **6. In case the present available spectrum is allocated for BWA technologies using unpaired spectrum, then, will it be feasible in future, from technical and economic angle, to reform the allocated spectrum in the 2.6 GHz band in line with the global practices?**

*Aircel Response: Yes it would be in Line with the global practices, ITU-R has already recognized this band in TDD mode as a broadband spectrum.*

**7. Unlike a number of other countries, a major portion of spectrum in the 2.6 GHz band is yet to be got vacated by WPC. What measures can be taken to accelerate the process of vacation so that the Indian telecom sector is not at a disadvantage in relation to other countries?**

**Aircel Response:** *As per the National Frequency Allocation Plan (NFAP), INSAT system is presently using 2535-2655 MHz for Radio Networking, Cyclone Warning dissemination system, Meteorological data dissemination & Satellite time & frequency dissemination application. These applications can be shifted to a different band or a small portion of this spectrum be allotted for this purpose.*

*This is a very important band for the penetration of broadband services of our country and the “time to market” for all operators is very less using WiMAX technologies and millions of broadband subscribers in Metros as well as Towns and villages across India will be benefited if this band is cleared for BWA operations.*

**8. What should be their reserve price for the purpose of auction for the spectrum in 2.3-2.4 GHz and 2.5-2.69 GHz?**

**Aircel Response:** *One should note that the Deployment model, plan and business models of Mobile WiMAX is completely different to 3G, WiMAX would offer simple connectivity services to millions of subscribers and must not be compared to the value added services or additional features of other technologies, we recommend that the Price must reflect the business potential of that particular regions or cities with expected number of subscribers and user density.*

**9. Is there a need for putting a maximum limit on the cumulative holding of spectrum acquired in these bands by a licensee and what should be that limit?**

**Aircel Response:** *we recommend that this decision should be reviewed after efficient use of spectrum allotted by each operator.*