

From
Brijendra K Syngal
Former CMD VSNL

To
Shri Nripendra Misra
Chairman, TRAI
Mahanagar Doorsanchar Bhawan
Jawahar Lal Nehru Marg
New Delhi-110 002

Comments for consideration of TRAI on the issue of Allocation and Pricing for 2.3-2.4 GHz, 2.5-2.69 GHz and 3.3-3.6 GHz Bands for 3G/Broad Band Wireless Access (BWA) services Consultation Paper

Summary

The TRAI Consultation Paper on **Allocation and Pricing** of 2.3-2.4 GHz, 2.5-2.69 GHz and 3.3-3.6 GHz bands has sought stakeholder and industry comments in view of the recent developments at the International Telecommunications Union designating the 2 GHz band generically as International Mobile Technology (IMT) Band, taking the long term evolution (LTE) of the 3G and BWA services in view. The concerned issues are that of

- Eligibility to bid
- Technology neutrality
- Minimum/Maximum bandwidth for auction,
- Entry fee and pricing, and
- Spectrum Auction and Trading

Eligibility to bid

Broadly, any existing UASL licensee, existing ISP licensee and prospective UASL and ISP licensees should be eligible and be able to bid for the indicated spectrum. The invitation to bid for these bands and what is on offer must be given wide publicity for participation. Keeping any aspirant out could result in trading at a later day much to the detriment of the industry as is seemingly the case in the 2G space.

Let the competition be created upfront to invite as many players in as possible, than for a mess to be created a later stage. The first come first served (FCFS) principle must be dispensed with; because of inherent interpretations it has been subjected to and has led to nothing but litigations and delays.

In addition, in view of the recent TRAI recommendations on infrastructure sharing which includes both active and passive, there is no logic to keep any player out of the bidding for any of the spectrum. The argument that new players would be unable to roll out quickly in view of the entrenched position of the existing players is seriously flawed in view of the recent infrastructure sharing recommendation, where everything other than spectrum is shareable.

Technology Neutrality

It may be stated that these bands can be used for 3G as well as BWA services. This makes it valuable to both UAS licensees and ISPs for providing access. The thin dividing line being that UASL can provide voice, where as ISPs cannot; or can they! ISPs can also use these bands for voice under the garb of VoIP etc. especially in light of the new TRAI move of initiating consultation on the internet telephony issue. With technological advances and blurring of the modes of how the voice can be carried, it would be prudent to address the issue in the beginning rather than later. It may be noted that UAS licensees are paying a substantially higher entry fee as compared to ISPs. This leaves the option of backdoor entry for ISPs into voice at a much lower entry fee at some stage. Any step resulting in back door entries must be addressed in the initial stages itself.

This calls for a technology-neutrality approach for the allocation of spectrum in these bands, with a level playing field to be created in terms of Entry and license fees. Also, technology neutrality should allow an operator to offer whatever service it wishes to in these frequencies. Newer technologies may be able to permit voice services with better efficiencies in 2G in these frequencies. Since, technology is evolving extremely fast, imposing any regulatory or licensing barriers are going to be counter productive. It may thus be prudent to allow winners/lessees of these frequencies to offer unified services and may be asked to procure a UAS license at the existing price of the license.

While espousing the cause of technology neutrality, it may be prudent to mention that interference and pairings of spectrum must be kept in view for FDD and TDD. For example the 2.3-2.4 GHz and 2.57-2.62 GHz bands, which are unpaired, could be used for TDD.

Minimum/Maximum Bandwidth for auction

On the issue of Bandwidth for allocation, it is suggested that let there be minimum of 5MHz slot with a condition that a service provider can bid for a max of 3 slots of 5MHz in view of some of emerging applications requiring up to 15 MHz of bandwidth. No one must be allowed to bid for more than 15MHz to begin with in steps of 5MHz contiguous steps.

Entry fee and pricing

Thus to create a level playing field, ambiguity in entry fee and license fee for various types of applications for these frequencies needs to be done away with. Let the spectrum be auctioned in tranche of 5MHz up to a maximum of 15 MHz, clearly with technology neutrality keeping in view aspects of interference and pairing of bands.

The Rupees 1653 Crore entry fee for acquisition of UASL/CMTS license in this case may not be relevant, because those licenses came bundled with spectrum, whereas in this case the spectrum is being auctioned separately. Therefore, the entry fee should be to keep non-serious players out of the bidding and should be such to attract serious players to be part of a serious process.

The recommendations by the authority and policy formulated will carry much weight and credence if the real availability of the quantum of spectrum and the time frame in which the spectrum is available in the designated bands is known upfront. Such an action will maximize returns for the government, resulting in speeding up of re-farming activity from the current occupiers of this real estate. One can certainly derive some wisdom from the present stalemate in 2G where the licensees having paid the entry fee are yet to get spectrum allocation.

Spectrum Auction and Trading

Let all spectrums be auctioned in an e-ascending manner. It is pointless defining up front different methodologies for different bands i.e., one round or two rounds etc. Let us first see and establish the interest, spectrum availability and time frame of availability, creating an interest amongst the intending service providers. The number of prospective should be the guiding principle for the number of rounds of the bidding not vice-versa.

Moreover, excess spectrum trading might be allowed after initial roll-out obligation period without any approval. However, a spectrum transfer charge must be levied upon trading of spectrum by exchequer. Introduction of spectrum trading could result in sensible bids because of a possibility of acquiring spectrum at some later stage at market and utility driven pricing. The government can gain from spectrum transfer charge as and when the spectrum changes hands.

Comments on the issues are attached

Brijendra K Syngal
Sr Principal

Comments on issues

Q1. What should be the revised reserve price for the spectrum in 3.3.-3.6 GHz band?

Ans. As emphasized above, technology neutrality and the principle of level playing field need to be maintained for these bands, which can be used interchangeably between voice and data services. This implies that the frequency can be acquired for data services and used for voice services. Hence, it is advisable to have a reserve price for these frequencies equal to that of 3G so that no misuse of the frequencies happens.

Q2. 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?

Ans. In today's world the eligibility is determined by entrepreneurial skills, ability to raise money and the market place. Infrastructure being made shareable, places existing and new players at par. Therefore, placing any artificial barriers may not be the way to go. Any entity that meets the criteria laid out by DoT for acquiring a license for a service provision or bouquets of services should be allowed to bid and acquire a license by paying applicable entry fee.

As elaborated above, the entry fee should be reasonable for serious players to participate, and a deterrent to keep non-serious players away from participation in the auction; players bid for the spectrum in the auction and plus pay for the usage of these frequencies applicable spectrum charges. Let there be stiff roll out obligations to prevent hoarders. The UAS license entry fee may not be logical in this case because the spectrum is being bid separately and does not come bundled with license.

Q3. In the 2.3-2.4 GHz band, the maximum amount of spectrum which a licensee can bid for?

Ans. Service providers should be allowed to bid for a maximum of 3 slots of 5MHz in contiguous steps in view of few emerging applications requiring up to 15 MHz of bandwidth.

Q4. In the 2.3-2.4 GHz band, the size of the spectrum blocks for the bidding?

Ans. Spectrum should be allocated as per assessed usage requirement. It may be prudent to allocate it in multiples of blocks of 5MHz. Since this is most likely to be unpaired band ideally suited for TDD applications, let the maximum bandwidth be also kept at 15 MHz only.

Q5. 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?

Ans. According to international best practices 2.5-2.57 and 2.62-2.69 are used as paired bands for FDD mode and 2.57-2.62 is used as unpaired band for TDD mode. To avoid any future conflict between technologies, it will be advisable to follow the tried and tested best practice of FDD in paired bands and TDD in unpaired bands.

Q6. In case the present available spectrum is allocated for BWA technologies using unpaired spectrum, then, it will be feasible in future, from technical and economic angle, to re-farm the allocated spectrum in the 2.6 GHz band in line with the global practices?

Ans. It will be advisable to follow global practices since inception to avoid chaos at later stages.

Q7. 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?

Ans. Availability of spectrum should be made known before the auction. Let there be an assurance of re-farming and vacation of the band in a time bound manner by the existing users. Let there be a penalty clause imposed on the user for delays in vacating the band. One can make a conceptual suggestion, but the modalities and exact numbers should be specified by the regulator.

Q8. 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?

Ans. The reserve price for auction of spectrum in these bands should be equal to the reserve price for 3G as these bands can be used for voice and data services interchangeably, especially in view of the Technology neutral approach.

Q9. 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?

Ans. Maximum limit on cumulative holding of spectrum should be allowed subject to usage requirement. Hoarding of more than required spectrum should not be allowed. This maximum limit should be capped at 15MHz for an operator/bidder. Spectrum allocation is to be done as a continuous block instead of fragmented allocation.