



**Vodafone Counter to Stakeholders Submissions to TRAI Consultation Paper dated 26 November 2015 on Valuation and Reserve Price of Spectrum in 700, 800, 900, 1800, 2100, 2300 and 2500 MHz Bands**

We have gone through the submissions of various stakeholders to the above consultation, and have the following counter comments to offer.

1. With regard to the views of some stakeholders that allotment in 800MHz spectrum should be made in blocks of 1.25MHz instead of 1.23MHz as was done earlier, we would like to submit that:
  - (a) This may be done for the forthcoming auctions, however the valuation/reserve price prescribed should reflect this change. That is to say that, in case March 2015 prices are being used as the valuation of spectrum, the price may be suitable adjusted to reflect the block size of 1.25MHz as against the earlier 1.23 MHz
  - (b) There will be no change in the existing allocations, for which the block size will remain 1.23MHz only and 4 blocks will mean 4.92MHz and not 5MHz.
2. We do not agree with the view of one stakeholder that the spectrum surrendered by it in 800MHz should not be put to auction. It is submitted that this was a voluntary action by the said TSP and upon surrender such spectrum reverts to the Government and is now available for auction.
3. We reiterate that the block size as also minimum quantum of spectrum should be kept the same for 800/900/1800/2100MHz bands as followed in the March 2015 auctions.
4. We do not agree with the views of stakeholders suggesting that 2300MHz and 2500MHz bands be auctioned in blocks of 10MHz. 20MHz is the widely adopted block size for this band; a lower block size will lead to fragmentation and sub optimal use.

With typical TDD configuration 2, only 60% of spectrum resource is used for downlink. Operators will not be able to provide users with significant improvement in user experience over that can be delivered over 3G and hence will not be encouraged to deploy in this spectrum. Further, the need for new radio and synchronisation solutions will make deployment in 10 MHz of TDD spectrum less attractive to operators.

It may also be noted that while our clear preference is for no guard bands, however, in the event that synchronization is not done, a 10MHz block will also lead to significant wastage of spectrum in guard bands.

5. We do not agree with the view that there should be separate auctions for contiguous/non-contiguous/partial and complete spectrum. With the ongoing harmonization exercise and the option to liberalize, it is our belief that contiguity as well as partial spectrum issues



should soon be resolved. We do however maintain that spectrum holdings for any operator should be made contiguous as this ensures optimal utilization of spectrum. The regulatory embargo on liberalized use of administrative allocations would continue to apply until the spectrum is liberalized.

6. We strongly disagree with stakeholders views that an intra-band cap should be done away with as all spectrum is liberalized] or that there should be a separate in band cap for sub 1GHz bands or that a separate cap of 10MHz /5MHz be prescribed for 700MHz. It is reiterated that spectrum caps have been prescribed keeping in mind the need to prevent monopolistic tendencies even as they allow service providers to benefit from economies of scale. Removing an intra-band cap would allow a service provider to create a monopoly position in a single band and would be anti-competitive. As regards a cap for sub 1GHz band, it is submitted that there is a vast difference between 700MHz and 800 or 900MHz; treating them as a single band would be like clubbing apples with oranges.
7. Similarly, we do not agree with views that 2300MHz and 2500MHz should be treated as the same band for the purpose of cap. It may be noted that even in respect of 900MHz and 1800MHz, which were 'treated as the same band for the purpose of auction, the cap is applied separately to each band. In view of the above, we strongly reiterate that each band be treated separately for the purpose of an in-band cap, which should continue to be prescribed at 50% of each band.
8. We do not agree with the view of one stakeholder that 700MHz should come with a village first rollout. As we have already submitted in our response, spectrum is a precious commodity and India already has sub optimal allocations. Barring the use of this, or any spectrum in a part of the service area will lead to a sub optimal use of spectrum. Such a suggestion will also lead to a situation, where 700MHz cannot be auctioned in the Metros, thus creating a non-level playing field amongst operators.

We also do not agree with rollout obligations in 700MHz being attached to only some spectrum blocks. The practice adopted of uniform rollout obligations applied to all spectrum blocks should be continued. It may also be noted that in the UK award of 800MHz, where a rollout was attached only to some blocks, OFCOM allowed the obligation holder to meet the obligation with alternative mobile broadband technologies if they wished to.

9. We do not agree with the views of some stakeholders that the issue of sufficient guard band or synchronisation, etc., in TDD networks should be left mutual agreement between operators. It is submitted that use of guard bands will entail significant wastage of precious spectrum and thereby a sub optimal utilization of the valuable resource. Further, as more and more operators acquire spectrum in these bands, it may/will not be possible to rely on mutual agreement for the purposes of synchronization of networks. We thus believe that regulatory oversight in this regard is desirable and will lead to better clarity in the matter. This may be reviewed from time to time by the Regulator if required.



TDD networks require both same TDD DL/UL configuration as well as frame synchronization to avoid interference. Regarding TDD configuration, we have already submitted that our preference is for Configuration 2. On synchronisation, this can be enabled through solutions such as GPS, IEEE1588V2, etc. We believe that the Authority should only mandate accuracy requirement for synchronisation and not the solution. Choice of synchronisation solution (GPS, IEEE1588V2, etc) should be left to operators.

- 10.** We note that some stakeholders have suggested that ISP category 'A' licensee should be permitted to acquire the spectrum in 2300 and 2500 MHz bands as this spectrum can be used by an ISP for providing internet services under its ISP license. It is submitted that DoT has clearly defined/classified 2300 and 2500MHz bands as 'access spectrum' and a UL with a registration for access services should be a pre-requisite for acquiring any access spectrum. We urge and re-iterate that the eligibility criteria be the same as provided for the March 2015 auctions.
- 11.** Most stakeholders are of the view that the guidelines for liberalisation of administratively allocated spectrum should be same for 800/900/1800MHz bands and that liberalisation not be made mandatory. We agree with this view. There are some stakeholders who are suggesting that all spectrum should be liberalized. We strongly disagree with this suggestion and also question the suggestion being made by service providers who do not hold any unliberalized spectrum. It is and should remain a choice for a service provider on whether it wants to liberalize its spectrum holdings as it may well want to run only 2G services on its administratively allocated spectrum and may not desire to offer advanced services. It is submitted that even the Government has offered liberalization as an option and not a mandate. We reiterated that the option /choice to liberalize must remain with the service provider.
- 12.** There are views of some stakeholders that the valuation of 700 MHz band should be derived from or be at a 25% premium to the valuation for 800MHz. It is submitted that these stakeholders are disregarding the fact that there is a vast difference in the eco-systems of the two bands and while 800MHz is globally adopted band with a well-developed eco-system, the same is not true for 700MHz, which is still at a nascent stage both in terms of the network as well as device eco-system. To ascribe to it the same or higher status as 800MHz would clearly result in an over valuation and run the risk of a failed auction.

One stakeholder has even suggested that 700MHz band be valued at 4x of 1800MHz. It may be noted that this suggestion has even been rejected by DoT, which, in its reference to the Authority has stated that the Authority's earlier [2012] recommendation that 700MHz be valued at 4x of 1800MHz does not seem to be appropriate in the present scenario. We also note in the submissions of one stakeholder that in a recent Taiwan auction, 1800MHz auction value was twice that of 700MHz.



We again re-iterate that the terms of auction for 700MHz should be set conservatively keeping in mind the nascent stage of its eco system development. Prices for new and not recently auctioned bands should be set at a conservative level and market forces should be allowed to discover the prices. Otherwise, we face the risk of spectrum remaining unsold.

- 13.** We do not agree with views of some stakeholders that the valuation of 2500 MHz should be same as that of 2300 MHz band. It is submitted that these are two clearly separate bands with differently developed eco-systems. The 2300MHz band has a better developed eco system and also slightly better propagation characteristics. We reiterate that 2500MHz should be priced at a 30% discount to the 2300MHz band.
- 14.** Some stakeholders are taking a view that the March 2015 auction prices should be taken as the reserve price for the next round of auctions. We respectfully submit that given that reserve prices have traditionally been set by the Authority at 80% of estimated valuation, such a submission tantamounts to valuing spectrum at a 25% higher premium than what the market has discovered. Such a proposition is clearly illogical and cannot be accepted. We reiterate that it is our view that the March 2015 prices should be taken as the value of spectrum and reserve price be fixed at 80% of the said valuation. In cases where spectrum remained unsold the price should be discounted by 30% for revised valuation and reserve price be fixed at 80% of the same.
- 15.** Some stakeholders have suggested indexation of earlier discovered auction prices. We do not agree with this approach as it is incorrect in principle and ought not to be adopted. It is economically illogical to presume that the price of a commodity [in this case spectrum] can only move in one direction, viz. upwards. This is very evident from the experience of 2100MHz band where the 2015 auction in Delhi, Mumbai and Andhra Pradesh did not attract any buyer interest even when the reserve price was same as the prices discovered in 2010 auction. Thus, market prices for 2100MHz spectrum in these service areas actually declined from 2010 to 2015.
- 16.** We agree with the suggestion of some stakeholders that the financial and non-financial obligations related to spectrum, including its validity, should commence from the date of allotment of spectrum and not from the date of issue of LOI. This principle is adopted by DoT in respect of rollout obligations and should be extended in respect of other aspects as well.
- 17.** We agree with the views of some stakeholders that the SUC for 2300 MHz and 2500MHz should be the same as was applied to these bands in 2010; this should be along with permitted segregation of revenues. Alternatively, it should be 1% SUC for all spectrum, as has been suggested by a few stakeholders, including us. Any other approach would lead to discriminatory treatment and non-level playing field.

New Delhi  
28 December 2015