



Akshantula Ramesh &lt;ramesh.al.tra@gmail.com&gt;

---

**Fwd: Trai Consultation Paper 10/2017 on Spectrum Issues**

---

**S. T. Abbas, Advisor , NSL -II TRAI** <advmn@tra.gov.in>

Mon, Nov 13, 2017 at 10:08 AM

To: S T Abbas Abbas &lt;stabbasdot@gmail.com&gt;, jaipal singh tomar &lt;tra.jams@gmail.com&gt;, sonia madan &lt;soniatrai@gmail.com&gt;, ramesh &lt;ramesh.al.tra@gmail.com&gt;

----- Original Message -----

From: "**B. K. Syngal**" <syngal@duaconsulting.com>

Date: Nov 11, 2017 7:09:22 PM

Subject: Trai Consultation Paper 10/2017 on Spectrum Issues

To: [advmn@tra.gov.in](mailto:advmn@tra.gov.in)

Dear Shri Abbas

Please find our inputs on the above Consultation Paper 10/2017 on Spectrum Pricing etc. we hope that authority will take into account our inputs in the consultative process on this important subject. Best regards, Syngal

*Brijendra K  
Syngal  
Sr Principal  
Dua Consulting  
301-303  
Tolstoy House  
15 Tolstoy  
Marg  
New Delhi-110  
001 (India)  
Tel: <span style='mso-spacerun:yes'> +91-11-23359347-49  
Fax: <span style='mso-spacerun:yes'> +91-11-23738450  
Mobile: +91-9873256666  
Email: <a href="mailto:syngal@duaconsulting.com">syngal@duaconsulting.com  
<a href="http://www.duaconsulting.com">www.duaconsulting.com*

---

Internet E-mail Confidentiality and Disclaimer: Privileged and confidential information may be contained in this message and attachments, if any. If you are not the intended recipient to whom this message is addressed, or the person responsible for delivery of this message to the intended recipient, you may not copy, print, store or deliver this message to anyone or use this information in any manner whatsoever. In such a case, please destroy this message immediately and kindly notify the sender by reply e-mail. General views, opinions, and conclusions expressed and/or information circulated by the sender not relating to the official business of this Firm shall be understood as neither given nor endorsed by the Firm.



---

**TRAI CONsULTQuestionnaire10-2017.docx**  
19K

We would like to summarise the issues in 5 Broad Categories, they are:

- 1 Timing of Auction
- 2 Echo System Availability to optimise utility of spectrum
- 3 Block size
- 4 Capping or no Capping
- 5 Reserve Price, valuation of Spectrum

In addition, what is being lost sight of in this auction or round of pricing of spectrum are services for which, though, not huge chunks are needed, but do require some dispensation or guidance in their pricing by DOT. Should TRAI suggest those bands to be identified and parked for these services as per International standards and our own National Frequency Plan Allocation? The services are:

M2M, IOT, Captive Usage like Metro Networks, PMRTS, Public Utility Services like gathering of Metered Data for Electricity, Water etc,

How to value Satellite Spectrum, to avoid Devas like Situations, and

Finally, e-ascending auction is fine once a considered reserve price is fixed, but never resort to reverse or negative auction in the case of either no bids or less than optimum bids. The reverse auction has a cascading avalanche effect, leaving the holder of assets look ridiculous. The best is just pull the spectrum out of the bidding. These are national assets. If industry has no respect and playing smart the owner must be smarter to say ok guys not available now. Industry has had it good for far too long to dictate. Their attitude that they know the best has to be curtailed. .

Q.1 (a) In your opinion when should the next access spectrum auction be held?

Only after assessment of a robust echo system and receptability by industry for assets put for auction. Let there be no repeat of 700 MHz auction. In open house the industry was for 700 MHz auction, but somersaulted at the time of auction.

(b) If the spectrum auction is held now, should the entire spectrum be put to auction or should it be done in phased manner i.e. auction for some of the bands be held now and for other bands later based on development of eco system etc? Please give your response band wise and justify it.

Let there be visibility of the total spectrum which is available

Assess the echo system as well market potential, auction only where there is immediate potential in next year or two

Let Industry not complain of artificial scarcity, nor should owner flood the market if there is no demand.

Q.2 Do you agree that in the upcoming auction, block sizes and minimum quantity for bidding in 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz and 2500 MHz bands, be kept same as in the last auction? If not, what should be the band-wise block sizes? Please justify your response.

Block size, is both echo system and technology related. Therefore minimum block size should be such that it is harmonised, and that minimum size could be used as building block concept.

Q.3 What should be optimal block sizes and minimum quantity for bidding in (a) 3300-3400 MHz and (b) 3400-3600 MHz bands, keeping in mind both the possibilities i.e. frequency arrangement could be FDD or TDD? Please justify your response.

Block size, is both echo system and technology related. Therefore minimum block size should be such that it is harmonised, and that minimum size could be used as building block concept.

Q.4 Do you think that the roll-out conditions for 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz and 2500 MHz stipulated in the last auctions held in October 2016 are appropriate? If no, what changes should be made in the roll out obligations for these bands?

Q.5 Should there be any rollout obligations in 3300-3400 MHz and 3400-3600 MHz bands? If yes, what should these be? Please justify your response.

Q4 & 5 are combined.

There is charge anyway for spectrum based on the either entry fee or spectrum cost. However, it should not appear that there is spectrum squatting. By implementing a mix of a deterrent penalty, and implementable spectrum trading and sharing, a specific roll out obligation may not be necessary.

Q.6 Is there a need to prescribe spectrum cap in bands 3300-3400 MHz and 3400-3600 MHz? What spectrum cap provisions should be kept for 3300-3400

MHz and 3400-3600 MHz spectrum bands? Should these bands be treated as same or separate bands for the purpose of calculation of spectrum cap?

The cap should be such that the availability of total spectrum must be available for at least 5 players. No one player should be able to walk away with the bulk of spectrum.

Q.7 Whether the prices revealed of various spectrum bands in the October 2016 auction can be taken as the value of spectrum in the respective band for the forthcoming auction in the individual LSA? If yes, would it be appropriate to index it for the time gap since the auction held in October 2016. If indexation is to be done then at what rate?

Q.8 If the answer to above question is negative then, whether as per the practice adopted by TRAI in the previous valuation exercise, 55 the valuation for respective spectrum bands be estimated on the basis of various valuation approaches/methodologies (Referred in Annexure 3.3) including those bands (in a LSA) for which no bids were received or spectrum was not offered for auction?

Q.9 Whether the value of 700 MHz spectrum should be derived by relating it to value of other bands by using technical efficiency factor? If yes, with which spectrum band this band be related and what efficiency factor or formula should be used? Please justify your views with supporting documents.

Q.10 Else, what valuation approach should be adopted for the valuation of 700 MHz spectrum band? Please support your valuation approach with detailed methodology and related assumptions.

Q. 7, 8,9,10 on valuation are combined. Main objective of RF Spectrum Management, including Pricing, Valuation etc., should be to maximise the benefits to nation / public, rather than maximising the government revenues. This aspect can be achieved by fair and transparent mechanism of auction. Perhaps based on the price discovery of the auction and industry take up a spectrum charge could be re-visited on some sort of revenue neutrality principle ie, let the government the owner of the asset not profit in perpetuity by god performance of the industry. Let there be mechanism in real time to recalibrate annual charges. Spectrum management functions and processes, including Pricing, etc., should be simple for the users as well as the spectrum management organisation, and government as custodians of a national asset. ;

Q.11 Whether the value of October 2016 auction determined prices be used as one possible valuation for 2300 MHz spectrum for the current valuation exercise? If yes, would it be appropriate to index it for the time gap since the auction held in October 2016? Please justify your response with supporting documents/ report(s), if any.

Q.12 Whether the value of the 2300 MHz spectrum should be derived by relating it to the value of any other spectrum band by using technical efficiency factor? If yes, which band and what rate of efficiency factor should be used? If no, then which alternative method should be used for its valuation? Please justify your response with rationale and supporting documents.

Q.13 Whether the valuation of the 2500 MHz spectrum should be equal to value of similarly placed spectrum band? If no, then which alternative method should be used for its valuation? Please justify your response with rationale and supporting documents /report(s)/ detailed methodology, if any.

Q.14 Whether the valuation of the 3300-3400 MHz spectrum bands and 3400-3600 MHz spectrum bands should be derived from value of any other spectrum band by using technical efficiency factor? If yes, what rate of efficiency factor should be used? If no, then which alternative method should be used for its valuation? Please justify your response with rationale and supporting documents.

Q.15 Is there any other valuation approach than discussed above or any international auction experience/ approach that could be used for arriving at the valuation of spectrum for 700/800/900/1800/2100/2300/2500/3300-3400/3400-3600 56 MHz bands? Please support your suggestions with detailed methodology and related assumptions.

Qs. 11, 12,13,14,15 combined It must be reiterated that spectrum is a national resource and an asset. The government or nation is selling the asset for at least 20 years for exploitation by the industry. The exploitation is both for public, nation and economic development. Keeping all that in view, any starting valuation has to be such that it is reasonable based on some sound economic principles for example how much is the spectrum cost in the ultimate analysis of tariff to the consumer. It must be understood that Total spectrum cost circa year 2000 was 7000 Crore, which created an industry at the time of renewal of licenses at some 2, 00,000 Crore. Wireless telecomm is growth industry, it will grow. Industry should be able to pay up front cost and share their profits as

they go along. Keeping all that in mind and an e-auction, let there be a fair valuation, leave the rest to market forces. The final price will find its fair, transparent and safe level. Let there be one value across nation.

Q.16 Whether value arrived at by using any single valuation approach for particular spectrum band should be taken as the appropriate value of that band? If yes, please suggest which single approach/ method should be used. Please justify your response.

Same observations as above

Q.17 In case your response to Q16 is negative, will it be appropriate to take the average valuation (simple mean) of the valuations obtained through the different approaches attempted for valuation of a particular spectrum band, as adopted by the Authority since September 2013 recommendations? Please justify your response.

Without sounding frivolous, Root Mean Square would be my answer per MHz.

Q.18 Is it appropriate to recommend Reserve price as 80% of the value? If not, then what should be the ratio adopted between the reserve price for the auction and the valuation of the spectrum in different spectrum bands and why?

Q.19 Whether the realized / auction determined prices achieved in the October 2016 auction for various spectrum bands can be taken as the reserve price in respective spectrum bands for the forthcoming auction? If yes, would it be appropriate to index it for the time gap since the auction held in October 2016? If yes, then at which rate the indexation should be done?

Qs. 18, 19 combined Ultimately whatever price one decides based on a valuation, the end goal has to be allocation of the national resource in a fair, transparent and equitable manner with no ambiguities like the 2010 auction where spectrum priced for data got used for full voice exploitation by a back door mechanism and lesser spectrum charge. Such loop holes distort markets, confuse consumers and harm nation.

Finally, 1 No reverse auction if spectrum not picked up, just recall. Reverse auction is a disastrous approach.

2 Visibility of spectrum availability for timely development of echo system.

3 Complete harmonisation with best international practices,

4 M2M, IOT, Captive Usage like Metro Networks, PMRTS, Public Utility Services like gathering of Metered Data for Electricity, Water etc, and

5 Finally, How to value Satellite Spectrum, to avoid Devas like Situations

.