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Sent: Monday, January 10, 2022 11:59:13 PM

Subject: Response to the TRAI Consultation Paper on "Auction of Spectrum in frequency bands identified for IMT/5G"

Dear Sir,

We enclose our response to above consultation paper.

TREGARDS

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Response to the TRAI Consultation Paper on “Auction of Spectrum in frequency bands identified for IMT/5G”

1. Mobile Operators have given best service to India at economical rates and in large numbers
2. The Government as also all Indians interested to see that TSPs remain viable and profitable at any cost and under all circumstances.
3. 5G is talked of important technology for various uses.
4. Existing TSP has paid existing spectrum in auction, and hence in the interest of level playing field, there stated position is all spectrum allotment by auction, supported in some way by Supreme court also.
5. There is strong demand from TSPs and rightly so to reduce spectrum price at bare lowest level and everybody supports that including ourselves.

However,

- i) TSPs across world are exploring use cases and economic viability for deployment and operation of 5G services.
- ii) TSPs need to invest heavily in infrastructure. It is estimated that all india wide investment required may be of the order of 120 Bn USD. The present investment is about 6 Bn USD per annum. So always a question mark, as to how funds would be managed and return on investment for Bankers and/or shareholders.
- iii) Added to that would be management issues of right of way, electricity at every small cell/BTS etc. and fiberisation need of all towers.
- iv) The cost of handset to customers is also expected to be an issue when compared to existing prices.
- v) An unanswered question as to on what use the customer would be willing to pay the estimated charges for use, as Indian customer has been using services at lowest rates in the world.

YET

- vi) Big hype of technology worldwide
- vii) Govt. of India appears to be keen on 5G.
- viii) Govt keen to promote Digital India, Digital literacy and mobile empowerment.

BUT

- i) Govt. not able to offer free spectrum
- ii) TSPs demanding auction

- iii) Higher offered/reserved Spectrum prices, if not found attractive by TSPs, no body can force TSP to offer their bids. Last time about 63% spectrum remained unsold.
- iv) There would be need to solve the issue of spectrum harmonization and interference-free.
- v) Enough work to b e done to ensure harmless affect on human or other living beings.
- vi) Appropriate policy to be worked out to address the issue of IPR royalties payments, in view of multiple of IPR/SEP and absence of clarity as to how much total royalty is payable?

Suggestion:

- vii) Let us examine the views of TSPs if spectrum is allotted at ZERO, will it make commercially viable for them to invest and start services without bothering if affordable or not for customer and whether use case available or not?
- viii) Without waiting for response, let TRAI recommend rock bottom (about 5-10% of present estimates) /almost zero spectrum prices, as it is priority for Govt for Digital India and Broadband India.

AND

- ix) Industry 4.0 (broader term use for private uses) is talked as big demand and this will be internally within industry/user, so fiberisation will not be issue and small cells can be established within industry. The space/electricity etc. would be available within industry. Being captive use, there is likely no loss of business to TSP. In any case it is only TSP that would be able to install/provider service.

So, we recommend that besides giving spectrum to TSPs on administrative price or auction at rock bottom price, some small portion of spectrum be allotted to industries for 4.0 private use and they can be asked to pay some use charges fixed or variable.

Issues related to Quantum of Spectrum and Band Plan

Q.1 Whether spectrum bands in the frequency range 526-617 MHz, should be put to auction in the forthcoming auction? Kindly justify your response.

Q.2 If your answer to Q1 above is in affirmative, which band plans and duplexing configuration should be adopted in India? Kindly justify your response.

Q.3 In case your answer to Q1 is in negative, what should be the timelines for adoption of these bands for IMT? Suggestions to make these bands ready for adoption for IMT may also be made along with proper justification.

Q.4 Do you agree that 600 MHz spectrum band should be put to auction in the forthcoming auction? If yes, which band plan and duplexing configuration should be adopted in India? Kindly justify your response.

Yes Please all be offered

Q.5 to 33

NO Comments

Q 34 to 67 spectrum prices

As stated above in brief note

Issues related to Spectrum for Private Cellular Networks

Q.68 To facilitate the TSPs to meet the demand for Private Cellular Networks, whether any change(s) in the licensing/policy framework, are required to be made. If yes, what changes are required to be made? Kindly justify your response.

YES PL provide in policy. PL SEE OIUR BRIEF GIVEN ABOVE.

Q.69 To meet the demand for spectrum in globally harmonized IMT bands for private captive networks, whether the TSPs should be permitted to give access spectrum on lease to an enterprise (for localized captive use), for a specific duration and geographic location? Kindly justify your response.

This would increase cost to private networks

Q.70 In case spectrum leasing is permitted, Spectrum be allotted by Govt directly.

Q. 71: Whether some spectrum should be earmarked for localized private captive networks in India? Kindly justify your response

Yes please

Q. 72: In case it is decided to earmark some spectrum for localized private captive networks, whether some quantum of spectrum be earmarked (dedicatedly) from the spectrum frequencies earmarked for IMT services and/or spectrum frequencies earmarked for non-IMT services on location-specific basis (which can coexist with cellular-based private captive networks on shared basis)? Kindly justify your response with reasons.

YES PLEASE

Q.73: In case it is decided to earmark some quantum of spectrum for private captive networks, either on exclusive or shared basis, then

- a) **Spectrum under which band(s) (or frequency range) and quantum of spectrum be earmarked for Private Network in each band? Inputs may be provided considering both dedicated and shared spectrum (between geographically distinct users) scenarios.**
- b) **What should be the eligibility conditions for assignment of such spectrum to private entities?**
- c) **What should be the assignment methodology, tenure of assignment and its renewal, roll-out obligations?**
- d) **What should be the pricing mechanism for assignment of spectrum in the band(s) suggested for private entities for localized captive use and what factors should be considered for arriving at valuation of such spectrum?**
- e) **What should be the block size and spectrum cap for different spectrum band(s) suggested in response to point (a) above.**
- f) **What should be the broad framework for the process of**
 - (i) **Filing application(s) by enterprise at single location, enterprise at multiple locations, Group of companies.**
 - (ii) **payment of spectrum charges,**
 - (iii) **assignment of frequencies,**
 - (iv) **monitoring of spectrum utilization,**

- (v) **timeline for approvals,**
- (vi) **Any other**
- g) **Any other suggestion on the related issues may also be made with details.**

(Kindly justify your response with reasons)

These questions can be best answered by a working group within DOGT or TRAI and after consultations with private network users.

Q. 74

No comments.