

**Consultation Paper on Valuation and Reserve Price of Spectrum: 2100 MHz Band
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- 1. In the auction for 2100 MHz spectrum held in 2010, certain rollout obligations were mandated for the successful bidders. Stakeholders are requested to suggest if any changes are required or whether the same roll-out obligations should be mandated in the forthcoming auction, along with justification.**

The conditions mentioned in roll-out obligation are sufficient to provide a reasonable level of service to a wide cross-section of customers. The authorities need to be more meticulous about the TSTP (Test schedule – Test Procedure) for testing roll-out obligations. The absence of test schedules makes the entire process go haywire. The TSPs have already expressed concern over how the delay hampers the 3G roll out. DoT needs to come up with unambiguous list of SDCAs (Short Distance Charging Areas) for the LSAs where such lists are not available.

- 2. Whether a bidder should be allowed to bid for more than one block of spectrum, in case a sufficient quantum of spectrum (more than one block in LSA) is put to auction?**

In case of availability of sufficient quantum of spectrum the bidders can be allowed to bid for more than one block of spectrum subject to their not exceeding spectrum caps.

- 3. Whether the spectrum caps (of 50% of total spectrum in a band/25% of total spectrum assigned across bands) prescribed in recently held auctions in the 800/900/1800 MHz bands should also be prescribed for the upcoming auctions in the 2100 MHz band?**

The motive of imposing spectrum cap is to propagate competition in the auction process. The authority should prescribe the spectrum cap for the upcoming auctions in the 2100 MHz bands. The spectrum cap should be uniform across all the frequency bands.

¹ All the views expressed are personal

- 4. In case only one block of 5 MHz of spectrum in 2100 MHz is available in an LSA, should only those TSPs be allowed to participate who do not have 2100 MHz spectrum in that LSA at present?**

Please refer Q 3.

- 5. Should the indexed value of May 2010 auction determined prices of 2100 MHz spectrum be used as one possible valuation for 2100 MHz spectrum in the forthcoming auction? If not, why not? And, if yes, what rate should be adopted for the indexation?**

As considerable time has elapsed since the last auction, we recommend that a fresh valuation must be conducted. Indexation of 2010 auction prices could be one of the methods. The methods available for indexing the spectrum valuation are Income Tax Cost Inflation Index (CII), the Average SBI (Prime Lending Rate) PLR, and the Weighted Average Cost of Capital (WACC). Although, WACC is a widely used practice across various industries it has certain inherent limitations. Various components involved in deriving WACC may give an error prone result due to underlying assumptions that do not match reality and distort the value derived. Moreover, there are various ways of calculating components of WACC which may not necessarily match the calculations done by stakeholders. CII or PLR can be used to compute the indexed value.

- 6. Should the value of the 2100 MHz spectrum be derived on the basis of the value of the 1800 MHz spectrum using the technical efficiency factor (0.83) as discussed in Chapter III?**

The valuation of GSM based only on the technical efficiency factor is not alright. The key factors that influence the valuation of any band are availability of spectrum, contiguous blocks availability, propagation characteristics and technology to be deployed. A Delphi approach could be used to assess valuation price.

- 7. Should the value of spectrum in the 2100 MHz band be estimated on the basis of the producer surplus model outlined in Chapter III? Please provide your views on the assumptions made. Please support your response with justification, calculations and relevant data along with the results.**

No. In producer surplus method, spectrum value is based on the savings that can arise from spectrum for additional capacity and/or coverage purposes. Technical value alone is not sufficient to estimate the spectrum valuation. Commercial value is equally important for correct spectrum valuation.

- 8. Should the value of spectrum in the 2100 MHz band be estimated on the basis of the growth in data usage outlined in Chapter III? Please provide your views on the assumptions made. Please support your response with justification, calculations and relevant data along with the results.**

No comments.

- 9. Would it be appropriate to value the 2100 MHz spectrum as the simple mean of the values arrived from different valuation approaches as discussed in Chapter III? If no, please suggest with justification which single approach should be adopted to value the 2100 MHz spectrum?**

TRAI must consider the weighted average of values derived from all the methods to arrive at the final spectrum valuation as there is no evidence that one single method is more reliable than the other.

- 10. What should be the ratio adopted between the reserve price for the auction and the valuation of the spectrum of 2100 MHz band?**

No comments.