

RJIL/TRAI/2023-24/225

7<sup>th</sup> November 2023

To,

**Shri Akhilesh Kumar Trivedi,  
Advisor (Networks, Spectrum and Licensing),**

**Telecom Regulatory Authority of India**

Mahanagar Doorsanchar Bhawan

Jawaharlal Nehru Marg, New Delhi - 110002

**Subject: RJIL's comments on TRAI's Consultation Paper on "Review of Terms and Conditions of PMRTS and CMRTS Licenses"**

Dear Sir,

Please find enclosed the comments of Reliance Jio Infocomm Limited (RJIL) on the Consultation Paper dated 29.08.2023 on "**Review of Terms and Conditions of PMRTS and CMRTS Licenses**".

Thanking you,

Yours Sincerely,

For **Reliance Jio Infocomm Limited**

**Kapoor Singh Guliani**

Authorized Signatory

**Enclosure:** As above

**Reliance Jio Infocomm Limited's Comments on TRAI's  
Consultation Paper on "Review of Terms and Conditions of PMRTS and CMRTS Licenses"**

1. Reliance Jio Infocomm Limited (RJIL) thanks the Authority for giving an opportunity to offer comments on the Consultation Paper on '**Review of Terms and Conditions of PMRTS and CMRTS Licenses**'.
2. At the outset, we submit that these are mission critical mobile radio trunking services (MRTS) used by various critical infrastructure stakeholders and should be offered only under the provisions of Unified License Authorization. While the PMRTS services have been included in the Unified License, the inclusion of CMRTS service is still pending and should be recommended to be carried out as soon as possible. **We further submit that scope of service for both the services is well defined and there is no need to change the same.**
3. However, the current mode of administrative allocation of the spectrum for these services is not optimum and should be revised and made consistent with Hon'ble Supreme Court Judgement in 2G case. We reiterate our submissions to previous consultation papers and submit that the allocation criteria for any spectrum usable for providing communication services in the country will have to comply with the Hon'ble Supreme Court Judgement on allocation of spectrum in landmark 2G case in CWP 423 of 2010 dated 2<sup>nd</sup> February 2012. We are not extracting and reproducing the relevant extracts here for the sake of brevity.
4. The next important exercise in this aspect is the valuation of spectrum, which is the most critical aspect of any auction. The valuation should be just right to ensure sufficient competition in auction, while also ensuring suitable minimum guarantee revenue to the Government. For valuation of spectrum for PMRTS and CMRTS services, the Authority already has a benchmark value in the form of auction determined price (ADP) of spectrum in 800 MHz, one of the bands identified for these services.
5. Regarding the spectrum in 300 MHz and 400 MHz bands, in absence of the past auction prices, the most relevant criterion should be technical efficiency-based approximation that can be derived from nearest auctioned bands viz. 700 MHz and 800 MHz.
6. We further submit that the valuation of spectrum bands for PMRTS and CMRTS services should be based on combined analysis of **comparative spectral efficiency, existing use cases, the population expected to be covered, revenue potential, existing revenue data under administrative assignment and international benchmarking.**
7. We reiterate our previous submissions that the Authority should delink the spectrum valuation from maximization of one- time spectrum auction proceeds. The objective of the

auction should be alienation of scarce natural resource i.e. spectrum in most transparent, non-discriminatory manner at market price by allowing operators to use it optimally and efficiently as per their network and business plans to deliver services at affordable rates.

8. Another critical factor in increasing the competitive intensity and to discover true market value of the spectrum would be optimum reserve price. We submit that 70% of valuation as reserve price is too steep and not conducive of wider participation in auction. **Besides obviating the possibility of true market price discovery, it also acts as a deterrent for new entrants. Therefore, we request the Authority to reduce the reserve price to 50 % of the spectrum valuation.**
9. We submit that the optimum reserve price will help in discovery of true market price and will be beneficial in longer run as it will increase spectrum uptake, reduce the wastages due to unsold spectrum, maximize the overall return instead of maximizing the unit price and will also help in meeting proliferation goals while at the same time increasing the overall license fee proceeds.
10. The PMRTS and CMRTS licensees have raised various valid issues in their representations to the Government and Authority. **The benefits of Ease of Doing Business (EODB) measures by the Government should be implemented equally for all licensees unless there are some special concerns with a specific authorization.** Thus, the EODB measures implemented regarding Wireless Operating License (WOL), relocation of Radio equipment, import of radio equipment etc. should also be made applicable for PMRTS licensees, subject to service area, spectrum allocation and scope of service-related restrictions.
11. While we support the continuous migration to better technologies to optimize the service offerings, we do not support coercive migration of technology and request that an incentive-based approach should be followed in these cases.
12. Regarding, the issue of license fee and AGR calculations, we understand that the reforms are required for all Authorizations under Unified License. While implementing the **Union Cabinet decision to exclude Non telecom revenue on prospective basis from the definition of AGR, the DoT, has instead followed Authority's recommendations of 2015 on AGR Definition, which were taken prior to the much wider scope of the Cabinet decision and need to be reviewed. Therefore, it is important to recast the AGR definition, much beyond the license amendment dated 25<sup>th</sup> October 2021 to implement the Cabinet decision.**
13. In order to ensure implementation of the Cabinet decision in true letter and spirit, to avoid interpretation issues and associated legal disputes in the future, following points need to be clarified:

- i. **Revenue from Operations other than ‘Licensed telecom activities’ to be excluded to arrive at ApGR:** DoT has allowed reduction of revenue from operations other than “telecom activities” from Gross Revenue (GR) to arrive at Applicable Gross Revenue (ApGR). Since DOT has not defined telecom activities it is quite possible that many revenue streams which are ancillary or incidental to telecom services will also be included in Adjusted Gross Revenue (AGR). Hence, to avoid any confusion in interpretation, it is imperative that it is clearly mentioned that revenue from operations other than ‘licensed telecom activities’ shall be excluded from Gross Revenue (GR) to arrive at ApGR.
- ii. for the purpose of arriving at ApGR, **the following items of other income in addition to the existing list should be excluded from the GR:**
  - a. Capital Receipts
  - b. Scrap sale, notice pay recovery
  - c. Sale of Goods and Services for which license under Section 4 of ITA is not required, such as sale proceeds of handsets or any other terminal equipment.
  - d. Notional Income including free Air Time
  - e. Other Comprehensive Income as mandated under IND-AS (known as below the line etc.)
  - f. Reimbursement of expenses etc.
  - g. Recovery from vendors on account of deficiency of service
  - h. Credits provided by opex. / capex. Vendors
  - i. Interest on direct tax / indirect tax refunds
  - j. Management Support Charges/ Manpower Cross-Charge
- iii. **Uniform provisions for exclusions from ApGR to arrive at AGR:** In the notified amendment to the AGR definition, the exclusion from ApGR to arrive at AGR need to be made uniform for Access Services – as being provided for all other authorisations in the following manner.

AGR - Existing Provision	AGR - Proposed Provision
a. PSTN/PLMN/GMPCS related call charges (Access Charges) paid to other eligible / entitled Telecommunication service providers within India	a. Charges of pass through nature paid to other telecom service provider(s) to whose network, the licensee’s network is interconnected Alternatively a. PSTN/PLMN/GMPCS related charges paid to other eligible / entitled Telecommunication service providers within India

14. Another issue raised by CMRTS licensee on right to representation before any coercive action is taken by the DoT, is an authorization agnostic issue and this right should be available for all UL holders.

### Conclusions

1. CMRTS services should be brought under Unified license as a new authorization. PMRTS and CMRTS services are mission critical services and should be governed under Unified License only.
2. Auction derived market price-based mechanism should remain the only mode for alienating the Right to use Spectrum for communication services.
3. EODB measures should be equally available to all authorizations under UL.
4. There should be no coercive migration of technology.
5. There is a persistent need to fully implement Cabinet decision on AGR reforms.

### Issue wise response:

**Q1. Whether there is a need to review the terms and conditions of PMRTS License and PMRTS Authorization under Unified License? Kindly provide a detailed response with justifications.**

**And**

**Q2. In case it is decided to review the terms and conditions of PMRTS License and PMRTS Authorization under Unified License, in what manner should the following conditions be amended?**

- (a) Scope of the license
- (b) Roll out obligation
- (c) Technical conditions
- (d) Network interconnection
- (e) Security conditions
- (f) Any other (please specify).

**Kindly provide a detailed response with justifications**

### RJIL Response:

We submit that there is no need for review in the terms and conditions of PMRTS License and PMRTS Authorization under Unified License. The scope of service is well defined and serves the purpose for offering two-way mobile radio communications in a Closed User Group (CUG).

**Q3. Whether PMRTS providers should be permitted Internet connectivity with static IP addresses? Kindly provide a detailed response with justification.**

**RJIL Response:**

1. We submit that under the License terms and conditions, interconnection in two PMRTS licensees is strictly prohibited, therefore the purpose of this requirement is unclear. However, in case this requirement emanates from the PMRTS licensee's need for interconnecting their own BTS in a service area, then permission for Internet connectivity with static IP addresses should be considered, however, only to the extent that it does not violate the existing scope of service of the authorization.
2. Accordingly, we submit that as far as there is no infringement on the license restrictions and there is no artificial extension of the scope of license, new technologies should be encouraged and PMRTS licensees should be permitted for Internet connectivity with a static address to improve the service for their own CUG customers.

**Q4. Whether there is a need to review the extant provisions relating to service area for PMRTS Authorization under Unified License? If yes, whether it would be appropriate to grant PMRTS Authorization for three different categories with service area as (a) National Area; (b) Telecom circle/ Metro Area; and (c) Secondary Switching Area (SSA)? Kindly provide a detailed response with justification.**

**RJIL Response:**

1. We submit that the extant provisions relating to service area for PMRTS Authorization under Unified License is sufficient and the authorization should continue to be offered on Telecom Circle/Metro area basis only. This is a local CUG based service with limited national players besides the integrated service providers, therefore, no need is seen for changing the service area related provisions.
2. However, in case the Authority feels the need for a national level license, it can be incorporated, otherwise, the national license area option can be taken up alongside the complete unification of Unified License, as and when taken up by the Authority.

**Q5. Whether there is a need to review the extant provisions relating to the authorized area for use of a particular frequency spectrum to PMRTS providers? If yes, in what manner should these provisions be amended? Kindly provide a detailed response with justification.**

**RJIL Response:**

1. We do not agree with PMRTS providers demand for permitting the frequency spectrum assigned to them for use in a city, to be used at any location within the Telecom Circle basis an intimation to the Government. This will be a violation of the spectrum assignment terms.
2. At present the spectrum has been assigned in an administrative manner for PMRTS authorization and all the related conditions of the assignment and its usage should remain unaltered, as long as the spectrum assignment is not done on auction driven market price.
3. **We understand the requirement and the need to provide a consistent and ubiquitous service in the LSA, however, for the same the licensees should seek LSA level assignment through auction process.**

**Q6. Whether there is a need to review the mechanism of shifting the fixed station from one location to another location within the authorized area for use of a particular frequency spectrum? If yes, what should be the terms and conditions for such permission? Kindly provide a detailed response with justification.**

**RJIL Response:**

Shifting of base stations, subject to compliance with the spectrum assignment boundaries should be permitted post an intimation to DoT, as an EODB measure.

**Q7. Whether there is a need to permit PMRTS providers to shift a few frequency carriers out of a pool of frequency carriers, assigned to an existing Fixed Station, to a new Fixed Station located within the authorized area for use of the pool of frequency carriers? If yes, in what manner the challenges arising out of such partial shifting of frequency carriers may be mitigated? Kindly provide a detailed response with justification.**

**RJIL Response:**

No, there should be no dilution of spectrum assignment conditions, in any scenario. The Authority should formulate an auction-based mechanism for assigning spectrum available for use across the LSA.

**Q8. Whether there is a need to review the requirement of obtaining Wireless Operating License (WOL) by PMRTS providers? Kindly provide a detailed response with justification.**

And

Q9. Whether there is a need to review the provisions related to sale, lease and rent of the radio terminals of PMRTS? Kindly provide a detailed response with justification.

And

Q10. In case your response to the Q9 is in the affirmative, what kind of changes will be required in PMRTS licenses and Dealer Possession License (DPL) and guidelines? Kindly provide a detailed response with justification.

And

Q11. Whether there is a need to review the provisions related to import of the radio terminals of PMRTS? Kindly provide a detailed response with justification.

And

Q12. Whether there is a need to review the provisions related to replacement of unserviceable network elements of PMRTS? Kindly provide a detailed response with justification.

**RJIL Response:**

1. We submit that EODB measures taken up by the Government in telecommunication sector should be equally available to the PMRTS authorization, subject to restrictions related to scope of service.
2. There is no requirements of either any specific restrictions or relaxations for PMRTS authorization holders related to equipment and Wireless Operating License (WOL). The requirement for WOL can be removed for PMRTS authorization holders, as has been done for Access services.
3. With regards to the provisions for import of radio equipment, we submit that Authority may seek more information from DoT on reason for not permitting the import of import radio terminals under Open General Licence (OGL) without requiring any permission from DoT, as this may have security related considerations.

**Q13. Whether there is need to review the recommendation No 4.5 (mentioned below) of the TRAI's Recommendations on 'Method of allocation of spectrum for Public Mobile Radio Trunking Service (PMRTS) including auction, as a transparent mechanism' dated 20.07.2018, which are under consideration of DoT?**

**"4.5 The Authority recommends that-**

**(a) Carrier size for assignment to PMRTS licensee (both for analog or digital) shall be 6.25 KHz and multiples thereof.**

**(b) Carriers (frequency pairs) of 25 KHz already assigned to the service providers should be allowed to be retained by the service providers.**



(c) Additional assignment of carriers for the existing analogue system shall continue @ carrier size of 25 KHz (counted as 4 carriers of 6.25 KHz each).

(d) Assignment in new cities/ service areas shall be made for digital systems only.

(e) Initially for each city, twelve carriers (frequency pairs) of carrier size 6.25 KHz in metro licensed service area and eight carriers (frequency pairs) in non-metro license service area shall be assigned for PMRTS (Digital system) depending on the availability.”

Kindly provide a detailed response with justification.

**RJIL Response:**

1. Yes, there is an urgent requirement to review these recommendations, as these are contrary to the established legal position on assignment of spectrum for any telecom network. We submit that Hon’ble Supreme court has been unequivocal in its judgement that all assignment of spectrum for commercial networks should be through auction, and it is no different for PMRTS licensees.
2. We reiterate our well-established position that the spectrum allocation for any non-public use by a non-public entity should necessarily through auction-based mechanism. This is the only legally tenable mode for assigning spectrum. Thus, the aforementioned recommendations should be suitably modified to include that the assignment of spectrum will be only through auction. Further, as the license area of this authorization is already changed to LSA, the spectrum assignment should also be LSA basis. This will also address the licensee’s demand of using the spectrum anywhere in LSA.

**Q14. Whether there is a need to mandate PMRTS providers to migrate to spectrally efficient digital technologies in a time-bound manner? If yes, what should be the time frame for mandatory migration to spectrally efficient digital technologies? Kindly provide a detailed response with justification.**

And

**Q15. In case your response to Q14 is negative, what measures should be taken to nudge and encourage PMRTS providers to migrate to spectrally efficient digital technologies? Kindly provide a detailed response with justification.**

And

**Q23. Whether there is a need to mandate CMRTS licensees to migrate to spectrally efficient digital technologies in a time-bound manner? If yes, what should be the time frame for mandatory migration to spectrally efficient digital technologies? Kindly provide a detailed response with justification.**

And

**Q24. In case your response to Q23 is in the negative, what provisions should be made to nudge and encourage CMRTS licensees to spectrally efficient digital technologies? Kindly provide a detailed response with justification.**

**RJIL Response:**

1. We agree with the Authority's view that new digital technologies are the way to go in the land mobile systems. Not only will these technologies help accommodate more users within the current spectrum resources, but the voice quality will also improve. This has also been substantiated by the ITU-R Report M.2014-3 (11/2016) on 'Digital land mobile systems for dispatch traffic'.
2. Notwithstanding the same, we submit that the technology migration should be market driven and not mandated and accordingly we request the Authority to instead incentivize the licensees to move to digital technologies.

**Q16. Whether it is possible to deliver the PMRTS/ CMRTS, which are mission-critical in nature, using 4G/ 5G Network Slicing or any other technology? If yes, in what manner should the delivery of PMRTS/ CMRTS using 4G/ 5G network slicing be enabled in the license? What should be safeguards to ensure that the quality-of-service for cellular networks is not adversely impacted? Kindly provide a detailed response with justification.**

**RJIL Response:**

1. Network slicing is a pathbreaking 5G technology that does not adversely affect the generally available internet for customers, while dedicating defined network resources for services with assured 5Qi. The Authority has already recognized the role of Network slicing in its white paper on Enabling 5G in India dated 22<sup>nd</sup> February 2019

*Network slicing for supporting the new business domains: Network slicing permit business customers to enjoy connectivity and data processing tailored to the specific business requirements that adhere to a Service Level Agreement (SLA) agreed with the operator. The customizable network capabilities include data speed, quality of service, latency, reliability, security, services and charging...*

2. Network slicing has also been discussed by TRAI in its recommendations on Auction of Spectrum in frequency bands identified for IMT/5G dated 11<sup>th</sup> April 2022 and is a major 5G use case.

3. Therefore, we submit that leveraging Network slicing use cases should be permitted for PMRTS/CMRTS services. However, these use cases should be market driven and the Authority should ensure that there are no restrictions on leveraging network slicing for delivering mission critical PMRTS/ CMRTS, services.

**Q17. Whether there is a need to review the terms and conditions of PMRTS Authorization under Unified License (VNO)? Kindly provide a detailed response with justification.**

**Q18. In case it is decided to review the terms and conditions of PMRTS authorization under Unified License (VNO), in what manner should the following existing provisions be amended?**

- (a) Service area**
- (b) Scope of the license**
- (c) Network interconnection**
- (d) Any other (Please Specify).**

**Kindly provide a detailed response with justification.**

**RJIL Response:**

We submit that there is no need for review in the terms and conditions of PMRTS License and PMRTS Authorization under Unified License (VNO). As mentioned above, the scope of service is well defined and serves the purpose for offering two-way mobile radio communications in a Closed User Group (CUG).

**Q19. Whether there is any other issue relevant for review of terms and conditions of the PMRTS License, PMRTS Authorization under Unified License, and PMRTS authorization under Unified License (VNO)? Kindly provide a detailed response with justifications.**

**RJIL Response:** None

**Q20. Whether there is a need to review the terms and conditions of CMRTS license? Kindly provide a detailed response with justifications.**

**And**

**Q21. What should be the eligibility conditions for obtaining CMRTS license? Further, what should be the application processing fee for CMRTS license? Kindly provide a detailed response with justification.**

**And**

**Q22. In case it is decided to review the terms and conditions of CMRTS license, in what manner should the following terms and conditions be amended?**

- (a) Service area**
- (b) Period of validity**

- (c) Scope of the license
- (d) Technical conditions
- (e) Channel assignment and loading
- (f) Operating conditions
- (g) Conditions relating to suspension, revocation or termination of license.
- (h) Any other (please specify).

Kindly provide a detailed response with justifications.

And

**Q25. Whether there is any other issue relevant for review of terms and conditions of the CMRTS License? Kindly provide a detailed response with justifications.**

**RJIL Response:**

1. We submit that there is no need for review in the terms and conditions of CMRTS License. However, as done with others separate communication licensees, this license should also be made part of Unified License.
2. There is no reason for keeping this important communication services that is used by Airports, Metro Rail Corridors, City Police, Fire Services, Atomic Research Centres, Steel Plants, Mines, Thermal Power Stations, Refineries, NHAI Projects, Prisons & Correctional Services Department, Energy Plants etc, should not be kept out of Unified License.
3. Further, regarding CMRTS licensee's request for a right of representation to licensees, prior to invoking any revoke /termination / suspension of license is a valid requirement and should be available to all Unified Licensees.

**Q26. Is there a need to review the license fee prescribed for PMRTS/CMRTS? Please justify your answer. If yes, please suggest detailed methodology for arriving at the license fees for PMRTS/CMRTS with justification.**

**RJIL Response:**

1. No. We agree with DoT's Views that there is no need to review the license fee specifically for CMRTS/PMRTS.
2. **However, we submit that in view of the high regulatory levies and taxes burden on the telecom sector, there is an urgent need to review the license fee and other regulatory levies for all Unified Licensees, especially Access services authorization holders, who are carrying the maximum burden of regulatory levies.**

3. We also agree with DoT's view that licensees like Gujarat Metro Rail Corporation (GMRC) cannot be equated with services like Police, Fire & Govt. Security and it should be treated like any other licensee with regards to regulatory levies like License fee, Spectrum Charges etc., as per the terms and conditions of License Agreement and no special favours should be culled out in violation of license terms and conditions.

**Q27. Whether there is a need to review the allocation of spectrum for PMRTS? If yes, what changes should be made in the allocation of spectrum for PMRTS in the National Frequency Allocation Plan? Kindly provide a detailed response with justifications.**

**And**

**Q28. What should be the method of assignment of spectrum for PMRTS?**

**(a) Auction; or**

**(b) Administrative**

**In the case of auction, what should be the methodology for auction of spectrum? Kindly provide a detailed justification.**

**RJIL Response:**

We reiterate our submissions that in compliance with the Hon'ble Supreme Court Judgement on allocation of spectrum in landmark 2G case in CWP 423 of 2010 dated 2nd February 2012, auction should be sole allocation criteria for any spectrum usable for providing communication services in the country. We submit that under the established legal position, besides auction of spectrum there is no scope for any other assignment methodology such as administrative assignment of spectrum. We are not extracting and reproducing the relevant extracts for the sake of brevity, as the same have already been submitted to the Authority.

**Q29. In case it is decided to auction the frequency spectrum allocated to PMRTS, -**

**(a) What should be the eligibility conditions for participating in auction?**

**RJIL Response:**

We submit that there is no need to alter the eligibility criteria to participate in the auction barring the inclusions related to PMRTS/CMRTS Authorization. We request the Authority to continue with the following eligibility criteria to participate in the auction under the previous NIA, as detailed below:

- (i) Any licensee that holds a UASL/ UL with authorization for Access Services/ PMRTS/CMRTS for that LSA/national; or

(ii) Any licensee that fulfils the eligibility criteria for obtaining a Unified License with authorization for Access Services/ PMRTS/CMRTS for that LSA/national, and gives an undertaking to obtain a Unified License with authorization for Access Services; or

(iii) Any entity that gives an undertaking to obtain a Unified License with authorization for Access Services/ PMRTS/CMRTS for that LSA/national through a New Entrant Nominee as per the DoT guidelines/ license conditions can bid for spectrum in the various bands, subject to other provisions of the NIA.

**(b) Whether the entire available spectrum in the frequency bands identified for PMRTS in National Frequency Allocation Plan (NFAP) should be put to auction?**

**RJIL Response:**

We are of firm opinion that in all spectrum auctions, entire spectrum available for use, should be put to auction. Therefore, we submit that entire available spectrum from the spectrum identified for the service under NFAP should be put to auction.

**(c) What should be the block size of spectrum, and minimum bid quantity in terms of number of blocks?**

**RJIL Response:**

As noted by the Authority, the spectrum bands for the services have already been identified in the NFAP. Further, we understand that although the current assignment is majorly basis the block size of 25 KHz frequency channels (paired), but under the new and efficient digital technologies, better spectral efficiency is possible due to the systematic utilization of 12.5 KHz/ 6.25 KHz channel spacing in place of 25 KHz in analogue systems. Therefore, we submit that the block size can be kept at 6.25 KHz, with minimum bid quantity being 2 blocks.

**(d) What should be the spectrum cap for each authorized area for use of spectrum?**

**RJIL Response:**

We do not support in-band spectrum cap and there is no need to implement such caps. However, an overall spectrum cap of 35% of all available spectrum may be implemented.

**(e) What should be the roll-out obligations associated with the assignment of spectrum?  
What should be the penalties upon non-conforming the roll-out obligations?**

**RJIL Response:**

The successful bidder should be required to roll-out these mission critical services in 50% cities of LSA within 3 years of assignment of spectrum.

**(f) What should be the period of assignment of spectrum?**

**RJIL Response:**

In line with other spectrum bands assigned through auction, the period of assignment of spectrum should be 20 years.

**(g) What should be the minimum period beyond which the spectrum acquired through auction may be permitted to be surrendered?**

**(h) What should be the process and associated terms and conditions for permitting surrender of spectrum through auction?**

**Kindly provide a detailed response with justification in respect of each of the above.**

**RJIL Response:**

DoT issued 'Guidelines for surrender of Access spectrum by Access Service Providers' dated 15.06.2022 should be applicable for this spectrum as well and the licensees should be permitted to surrender the spectrum only after 10 years. Similarly remaining conditions will be applicable.

**Q30. In case auction methodology is to be followed for assignment of spectrum:**

**(a) Whether the value of frequencies assigned to the PMRTS providers be derived by relating it to the value or auction determined prices of other IMT/5G bands by using technical efficiency factor? If yes, with which spectrum band, should these frequencies be related and what efficiency factor or formula should be used? Please justify your suggestions.**

**(b) Given the city wise allocation and the potential difference in financial/market parameters of PMRTS with respect to access services, should the valuation of frequency spectrum for these services derived on the basis of IMT/5G prices be adjusted in order to account for the said distinctions? Please explain the adjustment methodology in detail.**

**(c) Apart from the above approaches, which other valuation approaches can be adopted for valuation of spectrum assigned to PMRTS providers? Kindly support your suggestions with detailed methodologies, assumptions, and other relevant factors.**

**RJIL Response:**

1. Over the years, the most relevant factor in a valuation exercise has been the auction discovered prices (ADP) of spectrum with similar propagation characteristics for a completely new spectrum bands being put to auction. Thus, auction determined price of spectrum in 800 MHz band would be a relevant parameter.
2. However, the spectrum valuation of new bands to be put to auction should not be solely based on past auctions prices but should also consider the relative cost of laying a network with new spectrum, and cost for comprehensive coverage; interference loss in the chosen band plan and above all the international benchmarks and best practices.
3. We submit that most of the spectrum valuation methodologies used by the Authority in past exercises remain relevant, however, these methodologies need to be updated and more importantly the outcome of these methodologies should be rationalized with other relevant contingent factors like network costs, revenue growth potential, among others.
4. The criteria like city wise allocation of the spectrum would not be relevant as the spectrum will be auctioned on LSA basis, as per authorization. This will also be in line with PMRTS operator's requirement of being permitted to use the spectrum anywhere in the LSA. Nevertheless, considering the limited utility of spectrum in rural areas, suitable discounting factors should be considered in the valuation exercise.

**(d) Is it appropriate to take the reserve price as 70% of the valuation of spectrum? If not, what should be the ratio adopted between the reserve price for the auction and valuation of spectrum and why?**

**RJIL Response:**

We have already submitted in previous auction of spectrum related exercises, that the reserve price of 50% is more optimum to arrive at market price, as this encourages more participation in the auction and leads to competitive elasticity. Therefore, we submit that the reserve price should be kept at 50% of valuation.



(e) What should be the payment terms and conditions relating to upfront payment, moratorium period, number of instalments to recover deferred payments, rate of discount etc.?

Please support your answer with detailed justification.

**RJIL Response:**

We do not find any justification for altering the payments terms for auctioned spectrum for a specific authorization and accordingly submit that the current payment conditions for new bands put to auction should be applicable for this spectrum as well.

**Q31. Whether there are any other issues/ suggestions relevant to the subject? If yes, the same may kindly be furnished with proper justification.**

**RJIL Response:** No.