VIL/P&O/TRAI/AK/2025/120
November 17, 2025

Advisor (Networks, Spectrum and Licensing)
Telecom Regulatory Authority of India,
4th, 5th, 6th & 7th Floor, Tower-F,
World Trade Centre, Nauroji Nagar,
New Delhi – 110029

Kind Attn: Shri Akhilesh Kumar Trivedi

Subject: Counter comments on the TRAI's Consultation Paper on "The Auction of Radio Frequency Spectrum in the Frequency Bands Identified for International Mobile Telecommunications (IMT)" issued on 30.09.2025.

Dear Sir,

This is in reference to the TRAI's consultation Paper on "The Auction of Radio Frequency Spectrum in the Frequency Bands Identified for International Mobile Telecommunications (IMT)" issued on 30.09.2025.

In furtherance to the comments submitted by us vide our letter no. VIL/P&O/TRAI/AK/2025/108 dated 04.11.2025, kindly find enclosed herewith counter-comments from Vodafone Idea Limited on the above-said consultation paper.

We hope our submission will merit Authority's kind consideration.

Thanking you,

Yours sincerely,

For **Vodafone Idea Limited**

AMBIKA KHURANA
Digitally signed by AMBIKA KHURANA
Date: 2025.11.17 15:48:33 +05'30'

Ambika Khurana
Chief Regulatory and Corporate Affairs Officer

Enclosed: As stated above

VIL Counter Comments to the TRAI Consultation Paper on "Auction of Radio Frequency Spectrum in the Frequency Bands Identified for International Mobile Telecommunications (IMT)"

This is with reference to the TRAI Consultation Paper on "Auction of Radio Frequency Spectrum in the Frequency Bands Identified for International Mobile Telecommunications (IMT)" dated 30.09.2025 and the comments from various stakeholders on this paper, as uploaded on TRAI's website.

Vodafone Idea Limited (VIL) has submitted comments to the questions raised in the above-said consultation paper. Further, we have also gone through the comments of various stakeholders on the above-said consultation paper and would like to submit our counter-comments for Authority's kind consideration, as given below:

1. Retaining of the existing Eligibility conditions for IMT spectrum Auction

a. In the comments, VIL has urged to retain the existing eligibility conditions for participation in the IMT spectrum auction for the existing bands viz. 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300 MHz, and 26 GHz. Many other stakeholders also support the same view and have mentioned in their comments that:

> *"1. ------ submits that the eligibility criteria and associated eligibility conditions for participation in the forthcoming auction for the existing bands viz. 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300 MHz, and 26 GHz should remain consistent with those specified in the Notice Inviting Applications (NIA) for auctions held in 2024 and thereafter.*
>
> *2. It is noteworthy to mention that introduction of new spectrum bands should not serve as a basis for altering established eligibility conditions. The eligibility framework outlined in NIA 2024 is appropriately flexible, permitting non-licensees to participate in the auction provided they furnish an undertaking to procure the requisite license. This approach ensures an open yet controlled bidding environment."*

Also, another stakeholder has submitted that:

> *"The eligibility conditions should remain same for all access bands and only access service providers should be allowed to bid for this access spectrum.*

We submit that the eligibility criteria as defied in the NIA 2024 gives sufficient flexibility to all service providers desirous of offering communication services to Indian customers and should remain unaltered even with inclusion of new bands."

b. However, one of the stakeholders has submitted as below:

"(i) Some spectrum should be 'carved out' or reserved for new market entrants [smaller players viz. startups and others] who are seeking different categories of spectrum (for IoT/M2M, Smart Cities, enterprise connectivity and enterprise use case, etc) which would lower entry barriers and encourage indigenous IoT solutions.

(ii) There should be a separate 'auction' which should be exclusively for smaller players & startups with reduced or 'lighter' eligibility criteria (lower Turnover, lower Reserve Price, Permit spectrum to be given at town/district level, reduced rollout obligations, etc). This would ensure increase in number of players and also more competition and also guarantee access spectrum for these startups and other smaller players.

(iii) This would ensure more competition and, in this manner, some new entrants may enter the market and thereby result in some additional spectrum being purchased."

c. **In our view, there is no need to review the eligibility conditions or for any having any spectrum reservation or for any separate auction, for different categories of spectrum.** Any applicant who desires to acquire spectrum for establishing such telecommunication network, should do so only under access services authorization.

d. Carving out or reserving spectrum or the wild ideas of having separate auctions, would lead to huge consequences of spectrum fragmentation, non-transparency in spectrum auctions, back-door entry, discrimination etc. It would also be in violation of the Hon'ble Supreme Court Judgment on transparent auctions as a mechanism to allocate spectrum.

e. **Therefore, we submit that the eligibility criteria and associated eligibility conditions for participation in the forthcoming IMT spectrum auction, should remain as it was during the 2024 spectrum auction and the IMT spectrum should be assigned only to access authorisation holders only.**

2. Frequency of spectrum Auction valuation exercise

a. In VIL's response, we have stated that the spectrum valuation exercise should be undertaken once every three years, as recommended by the Authority in its recommendations dated 11.04.2022. This has been supported by many stakeholders too.

b. While many stakeholders have supported three-year spectrum valuation exercise however, one of the stakeholders has proposed to carry out an annual spectrum valuation exercise – comments of said stakeholder is reproduced below:

> *"Therefore, ... submits that that the spectrum valuation exercise should be undertaken afresh every year. An annual spectrum valuation exercise would allow the Authority to maintain relevance, transparency, and responsiveness to evolving market conditions, ensuring that the reserve prices and auction processes remain fair, sustainable, and conducive to continued investment and innovation in the Indian telecom sector."*

c. In this regard, we submit that we do not support the above comment and it is not correct to say that annual spectrum valuation exercise would allow Authority to maintain relevance, transparency and responsiveness.

d. Infact, any such annual exercise would be operational challenging, lead to delays and counter-productive to responding to the market.

e. In general, if the process and time taken for each of the activity involved is considered i.e. activity related to DoT's reference to TRAI, building consultation paper, examining comments, counter-comments, conducting OHD, doing valuation, giving recommendations, back-reference and its response, acceptance by Government, NIA and auction process etc.; the activities may take well more than a year at times. Thus, annual exercise may mean overlapping of activities as well as a circuitous loop, which will jeopardise the independence of each event.

f. **Therefore, VIL once again recommend that the spectrum valuation exercise should be undertaken once every three years, as recommended by the Authority in its recommendations dated 11.04.2022.**

3. Spectrum cap/ceiling

a. As mentioned in VIL's comments, we have strongly recommended in our comments that a spectrum cap of 35% is most appropriate and also provided inputs on the bands/group of bands where it should apply, jointly as well as separately. On Spectrum

cap, one of the stakeholders has also supported spectrum cap to be reduced to 35%, extract of comments given below:

> *"..... affirms the need to review and revise the spectrum caps for the forthcoming auction across the existing bands viz. 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300 MHz and 26 GHz bands. Specifically, we strongly recommend reducing the existing spectrum cap of 40% to 35% per service provider...*
>
> *By setting the cap at 35% for the Sub-GHz band, the Government can ensure equitable spectrum distribution, preventing any single operator from accumulating an excessive share of this crucial coverage layer. This reduction will promote wider access and foster a competitive environment by broadening choice and availability among all market participants."*

b. Another stakeholder has suggested for removal of the spectrum cap, and has proposed a completely different band wise grouping in case spectrum cap is to be retained, extract of the comment given below:

> *"Therefore, ... reiterates its submissions that the spectrum caps should be completely abolished. Without prejudice to the above, if spectrum caps are retained, they should be applied only to bands with similar technical and propagation characteristics. Arbitrary aggregation of dissimilar bands distorts competition and undermines the policy intent of fairness."*

c. We strongly disagree with the above comment of abolishing of spectrum cap or for said aggregation of bands. It is unfair on part of the said stakeholder to claim that spectrum caps are distorting competition whereas the only purpose they are serving is maintaining competition and avoiding monopoly through unnecessary accumulation of spectrum by one or two TSPs. Infact, to support competition as well as to maintain equitable access to spectrum between minimum 3 private players (as well as leaving room for a new entrant, if any), the spectrum cap has to come down to 35% from existing 40%.

d. **We reiterate our comments that as and when spectrum is put up for auction, a spectrum cap of 35% is most appropriate, and following spectrum caps are recommended to ensure equitable access for all market players:**

S. No.	Spectrum Bands	Spectrum Cap
1	<1 GHz bands	Combined cap of 35%
2	600 + 700 MHz (If 600 MHz being auctioned)	Combined cap of 35%
3	1800 MHz + 2100 MHz + 2300 MHz + 2500 MHz bands	Combined cap of 35%
4	3300 MHz	Cap of 35%
5	26 GHz	Cap of 35%
6	Upper 6 GHz	Cap of 100 MHz at this stage (with 400 MHz availability). 35 % cap once total 700 MHz is available.

e. **Therefore, we strongly recommend that a spectrum cap of 35% as explained in table above, is adopted and recommended by TRAI, thereby balancing both the objectives of providing bidding activity as well as equitable availability of spectrum for all TSPs in present market structure.**

4. Spectrum from 6425-6725 MHz and 7025-7125 MHz in upper 6 GHz

a. VIL in its comments has strongly recommended that the spectrum in range from 6425 MHz to 7125 MHz should be identified and reserved solely for the IMT services, irrespective of the auction timelines.

b. While many stakeholders have supported that the spectrum in entire 6 GHz band should be brought for IMT, they have unequivocally supported bringing spectrum 6425 MHz to 7125 MHz in IMT domain. However, one of the stakeholders has suggesting delicensing of the 300 MHz in their comments – extract of which is given below:

> *"Due to fragmented availability of IMT spectrum in chunks of 300MHz and 100Mhz respectively and lack of contiguity between the 6425-6725 MHz band at one end and 7025-7125MHz at the other end, this cannot be properly or optimally utilised for IMT. Also 300MHz in this band is insufficient to take care of the needs of 4 operators. Hence in the overall interest of the consumers, the 300MHz in this band should be delicensed"*

c. **In our view, above suggestion is irrational as well as devoid of any merit or logic. Globally, the ecosystem for this band is emerging and will support entire 6 GHz band. This is the only upcoming IMT band for supporting 5G advanced/6G services.**

d. **The DoT reference also clearly mentions that rest 300 MHz in between 6425 MHz-7125 MHz, would be vacated and made available by 2030.** Extract of DoT reference given below:

> *"3. Further, it may be noted that out of the total 700 MHz spectrum in the 6 GHz frequency band (6425-7125 MHz), only 400 MHz spectrum in two fragmented chunks at 6425-6725 MHz (300 MHz) and 7025-7125 MHz (100 MHz) are immediately available for auction and the remaining 300 MHz in the frequency band 6725-7025 MHz will be available by December 2030."*

e. **Considering above, we strongly urge that the spectrum in range from 6425 MHz to 7125 MHz (including the 300 MHz which would come up by 2030) should be solely for the IMT services and no part of it should be delicensed.**

5. Reserve Price as a ratio to Valuation

a. Many of the stakeholders have recommended that the ratio of Reserve price for the auction of spectrum should be 50% of the valuation of the spectrum.

b. Comments of some stakeholders are mentioned as below:

> *"Keeping in view the muted or lukewarm demand which was reflected in terms of participation during the previous auction (June 2024) when Government failed to sell most of the spectrum, it is recommended that the Reserve Price be kept at 50%."*

c. Another stakeholder has suggested as below:

> *"------ submits that the reserve price for all spectrum bands (800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300 MHz, 26 GHz, 6425–6725 MHz, 7025–7125 MHz, and 600 MHz) should be set at no more than 50% of the valuation of the spectrum band. This is essential to ensure that the auction results in vibrant, market-driven price discovery and to avoid the risk of unsold spectrum due to overly high entry prices."*

d. Another stakeholder has also mentioned as below:

"Consequently, we submit that the reserve price formula needs to be revisited, and the reserve price should be kept at 50% of the valuation of the spectrum. This will enable free play of competitive market forces and help discover the real market value of spectrum. No need to add that we do not agree to proposal of keeping last discovered auction price as reserve price in next auction."

e. We support this ratio of reserve price to valuation, to ensure auctions are made more participative with a reasonable reserve price, allowing competitive market forces to drive the outcomes. In addition, reducing the reserve price to 50% would help in the below ways:
   i. Lesser reserve price will result in more bidding, which will result in more spectrum purchase & lesser unsold spectrum and thus, more revenue for the Government as well as market price determination.
   ii. Efficient allocation of spectrum at reasonable prices helps to provide better service quality and efficient use of national resources.
   iii. With more spectrum with TSPs, customers get better Quality of Service (QoS).
   iv. If the spectrum is cheaper, the TSPs would be able to invest more on the telecom infrastructure and network roll out.
   v. Reducing the reserve price to 50% provides fiscal breathing room, hence ensuring long-term financial health.

f. **Hence, we strongly recommend that the reserve price should be 50% of the valuation of the spectrum.**

6. Payment methodology

a. One of the stakeholders has recommended that no upfront payment should be required, and TSPs should be allowed payment in annual installments post a 6-year moratorium, spread over remaining 14-year spectrum duration period.

"Therefore, ... recommends that no upfront payment should be required. Operators should be allowed to make payments in the form of annual installments only (post a 6- year moratorium), spread over the remaining 14-year spectrum duration period. Needless to say, a TSP should always have the flexibility to pay the upfront amount or any number of annual installments at any time of its choosing."

b. **In this regard, we submit that we support the above suggestion as it provides choice to the TSPs to prioritize investment into rolling out network over initial payments**

into spectrum. Therefore, we request the Authority to recommend the above payment option as well.

7. **Interference Issues between 850 MHz and 900 MHz Bands:**

a. One of the stakeholders has recommended that there is an inter system interference issue between 850 MHz and 900 MHz, in its comments to the consultation paper, extract of which is given as below:

> *"i. The India 800 MHz band (subset of 3GPP Band 5 range) operates in the uplink range of 824–844 MHz and downlink range of 869–889 MHz, while the adjacent India 900 MHz band (subset of 3GPP Band 8 range) operates in uplink frequencies from 890.1– 915.1 MHz and downlink frequencies from 935–960 MHz. The close spectral adjacency of these bands, coupled with deployment by different TSPs, presents a significant risk of inter-system interference, particularly in uplink and downlink transmissions occurring in contiguous frequency blocks.*
>
> *ii. Currently, the Indian regulatory framework lacks explicit, comprehensive guidelines to address interference mitigation in scenarios involving adjacent-band deployments. To date, only limited, case-specific field trials have been conducted, which are insufficient to standardize interference management nationwide.*
>
> *iii. Although 3GPP specifications establish spurious emission and out-of-band emission limits for coexistence of adjacent bands, these standards primarily reference globally recognized bands and do not explicitly mandate their application to India-specific band definitions, which represent subsets of the 3GPP bands. Moreover, while 3GPP defines base station emission limits when multiple technologies (e.g., GSM 900 MHz, DCS 1800, PCS 1900, GSM 850, CDMA 850, UTRA FDD/TDD, and E-UTRA) coexist, there is currently no explicit enforcement or regulatory mandate requiring Indian operators and equipment vendors to comply with these limits.*
>
> *iv. To safeguard network stability and ensure interference-free operation, it is imperative that the DoT and the WPC Wing:*
>
> ▪ *Develop and enforce clear technical guidelines and emission coordination protocols for operators deploying services in the 850 MHz and 900 MHz bands.*

▪ *Mandate strict adherence to internationally accepted spurious emission limits as prescribed by 3GPP, tailored appropriately to Indian band specifications.*

▪ *Implement a coordinated framework for interference mitigation that includes regular monitoring, reporting, and resolution mechanisms. This regulatory clarity will enable operators to optimize network performance, enhance quality of service, and reduce customer complaints related to interference.*

3. In summary, to effectively address the dynamic spectrum requirements of the Indian telecom industry and ensure sustained growth and innovation, Airtel submits that it is crucial to:

a. ----------

Establish explicit regulatory frameworks to mitigate interference risks between adjacent 850 MHz and 900 MHz band deployments, enforcing 3GPP-compliant emission standards."

b. In our view, the issue rising due to adjacency of downlink of 850 MHz band and Uplink of 900 MHz poses a significant risk of inter-system interference particularly impacting the UL of 900 MHz spectrum band. This has the potential to saturate the receivers of the radio deployed in 900 MHz.

c. We support the above views of the stakeholder and strongly recommend that comprehensive guidelines are required in the regulatory framework to address the mitigation of such scenarios involving inter-Band inter-system interference, for which TRAI should make recommendations basis this consultation. Field trials being conducted to test the Interference are insufficient to conclude the Interference in such scenarios.

xx ---------- End of Document ---------- xx