

Date: 31st January, 2025

Shri Amit Sharma
Advisor (Financial & Economic Analysis)
Telecom Regulatory Authority of India
New Delhi

Subject: BIF's Comments on the Draft Telecommunication Tariff (Seventy-First Amendment) Order, 2025 dated 15th January 2025

Dear Sir,

At the outset, we thank the Telecom Regulatory Authority of India (TRAI) for providing the opportunity to comment on the Draft Telecommunication Tariff (Seventy-First Amendment) Order, 2025.

Broadband India Forum (BIF) appreciates the Authority's continued efforts to foster the proliferation of broadband through innovative frameworks like PM-WANI, which align with India's Digital India goals and the Bharat 6G Vision of enabling 50 million public Wi-Fi hotspots by 2030.

Public Wi-Fi, especially under the PM-WANI framework, has a critical role in bridging the digital divide in India, where millions of people, particularly in rural and underserved areas, cannot afford individual FTTH connections or mobile data plans. Public Wi-Fi can provide an affordable, accessible, and inclusive means of connectivity for education, small businesses, healthcare, and e-governance. The success of PM-WANI is vital to achieve the vision of "Broadband for All" and ensuring equitable access to the digital economy for every Indian citizen.

We respectfully submit our comments below, which address the new reasoning provided in the Explanatory Memorandum (EM) in the said Draft Tariff Order for revising the tariff earlier suggested and reiterate our earlier position that tariffs for Public Data Offices (PDOs) under PM-WANI should remain at par with retail FTTH broadband tariffs.

A. **The Authority has noted in the EM that many comments in response to Draft Telecommunication Tariff (Seventieth Amendment) Order, 2024 supported the said order.** The EM mentions that many stakeholders have favoured this move of the Authority stating that this order would give a big boost to the PM-WANI Yojana both in terms of growth of number of PDOs and internet users. Further, they have stated that this would enhance consumer protection, help remove a major roadblock and enable PDOs & PDOAs to offer affordable internet services. The EM further acknowledges that while advocating for the said proposal of the Authority, it was stated by some stakeholders that the rationalisation of tariffs will directly benefit the public, especially in areas where access to quality fixed broadband is either limited or unavailable. These stakeholders also mentioned that making public Wi-Fi

more affordable, can significantly help expand internet access to the underserved communities, thereby bridging the digital divide. **We respectfully submit that that the need of PM-WANI and the rationale given by such stakeholders in their responses justifies the suggestion made by TRAI in Draft Telecommunication Tariff (Seventieth Amendment) Order, 2024 and there is no reason to deviate from it.**

B. The current EM deals with objections of a few stakeholders to the Draft Telecommunication Tariff (Seventieth Amendment) Order, 2024. Their contentions are as follows:

- **Consumer vs. B2B Tariffs:**

Consumer tariffs differ from B2B tariffs. Consumer tariffs are under forbearance and need to be reported to TRAI and published, whereas B2B tariffs (including backhaul) are governed through contracts, customised per customer, and are not required to be reported or published.

- **Categorization of PDOA-PDO:**

PDOA-PDO fall in the category of service providers, who are allowed to provide such telecommunication services through special dispensation enabling them to carry out such activities without a licence under the registration.

- **Usage Patterns and Commercial Tariffs:**

Commercial customers or backhaul services exhibit much higher consumption patterns than retail consumers. Commercial tariffs are distinct from retail tariffs across all sectors. Examples cited from electricity, cooking gas, and broadcasting services.

- **Regulatory Distortion Risks:**

Using consumer tariffs interchangeably with commercial tariffs and applying regulatory price interventions in an interchanged scenario could create inefficiencies, impact service quality for both PDOs and end-users, and lead to regulatory distortions.

There are many fallacies in the above mentioned contentions and were duly responded to by BIF in its counter comments to the Draft Telecommunication Tariff (Seventieth Amendment) Order, 2024. We respectfully submit that our response (comments and counter comments) seems to be inadvertently missed in the current EM. We earnestly request that our said responses should be considered in the current consultation.

Further, Clause 11 of the EM to the current Draft Telecommunication Tariff (Seventy First Amendment) Order, 2025 mentions that since the PDOs function as resellers of bandwidth, the tariff structure must also protect the interests of service providers by ensuring that they are fairly compensated for the additional costs incurred in supplying bandwidth to PDOs.

We respectfully submit that there are no additional costs incurred in supplying bandwidth to PDOs and the tariff structure does not justify doubling the FTTH retail rates for the PM-WANI PDO. Our comments on the above mentioned issues are as follows:

- **Mis-characterization of PDOA-PDO as B2B Service Providers:**

The categorization of PDOA-PDO as B2B service providers overlooks the unique role of PM-WANI in providing affordable, last-mile broadband access. PDOs operate within a regulated framework that explicitly distinguishes them from typical commercial customers. Aligning their tariffs with retail FTTH rates is consistent with their operational and regulatory context.

For the last 9 years some TSPs and ISPs have not assisted in Public WiFi but on the contrary have resisted it every time. This, they could do in the absence of any tariff intervention. The tariffs for internet broadband were left to market forces and such market mechanism has failed. The charges of Rs.4 lakhs to Rs. 8 lakhs per annum to provide a Public WiFi service at a small shop is a clear example of predatory pricing and this has resulted in a shortage of Public WiFi in the country, where the public which cannot afford FTTH connectivity is being deprived of the services. On the other hand, the small entrepreneurs i.e., PDOs, who entered the PM WANI scheme, have incurred losses due to exorbitant rates of internet bandwidth to them. The distinction in rates as regard to retail and PDO connectivity is not applicable in the given framework of PM WANI. Rather any such distinctions, have been wrongly imposed and practised by some TSPs and ISPs, which has resulted in stifling of the Public Wifi in India. Any such distinctions are also against the policy and decisions of the Government on the subject of PM WANI. The tariff structure as proposed in the Draft Telecommunication Tariff (Seventieth Amendment) Order, 2024 strikes the right balance and will only result in growth of much needed Public Wifi in India.

One of the key reasons of the lack of Public WiFi in India is exorbitant tariffs to PDOs, making PM-WANI completely unviable. The regulatory intervention is required in such tariffs as the market mechanisms have failed to provide PM WANI services. The situation, if not rightly addressed, will result in continuation of PM WANI being unviable, thus defeating the goal of bridging the digital divide.

- **Irrelevant Comparisons to Other Sectors:**

Comparisons to sectors like electricity, cooking gas, and broadcasting are misleading. These sectors involve fundamentally different cost structures, consumption patterns, and regulatory frameworks. Unlike these, broadband services under PM-WANI are designed to provide affordable internet access as a public utility, while ensuring interests of all the stakeholders.

- **Exaggeration of Usage Patterns:**

The claim that PDOs have significantly higher consumption patterns than retail customers lacks empirical support. As noted in the explanatory memorandum, PDOs consume 200-500 GB/month on average, well within the Fair Usage Policy (FUP) limits of most retail FTTH plans, like 3.5TB. This demonstrates that PDO usage presently aligns closely with residential usage patterns rather than commercial backhaul services.

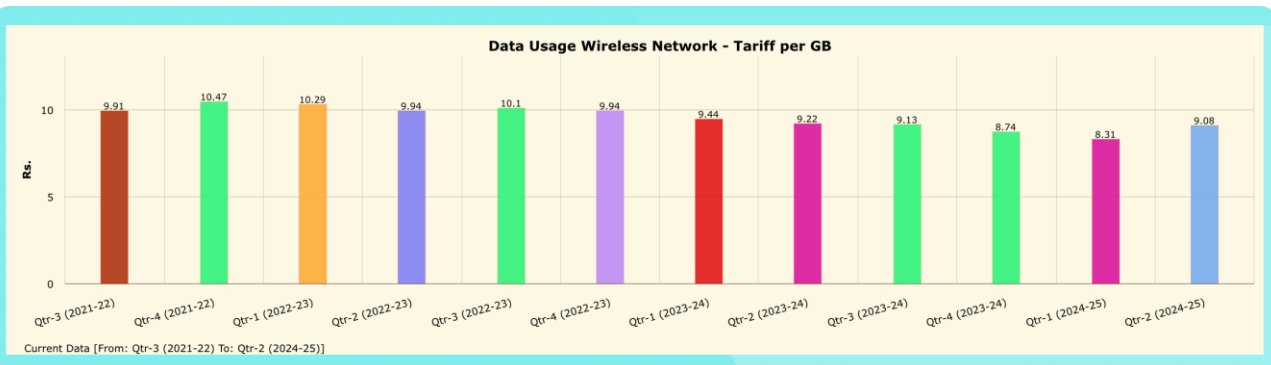
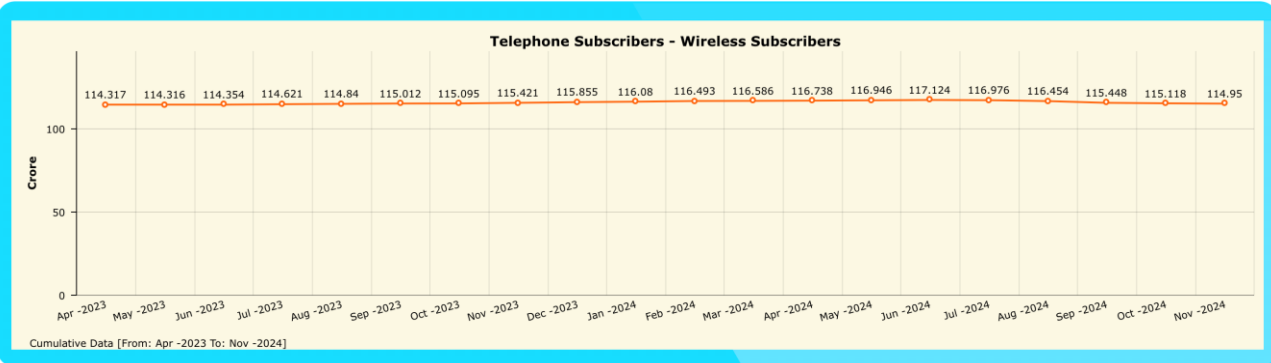
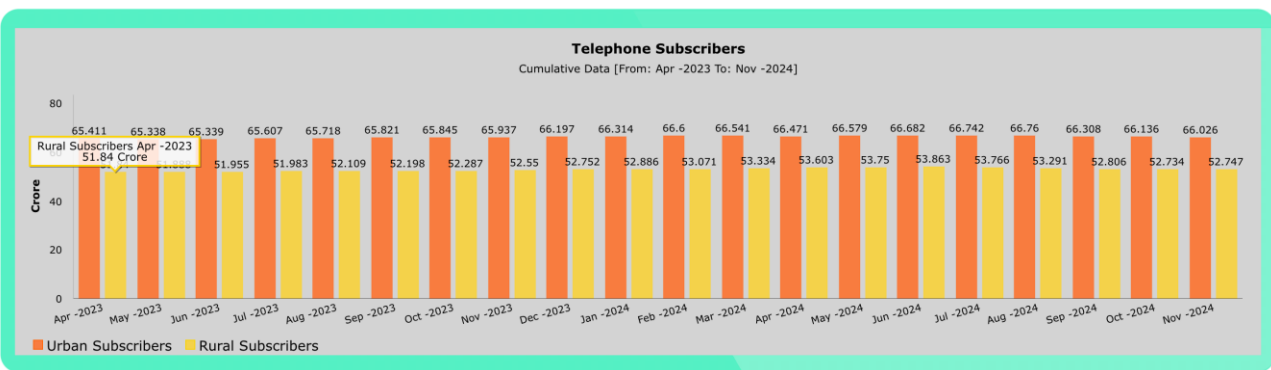
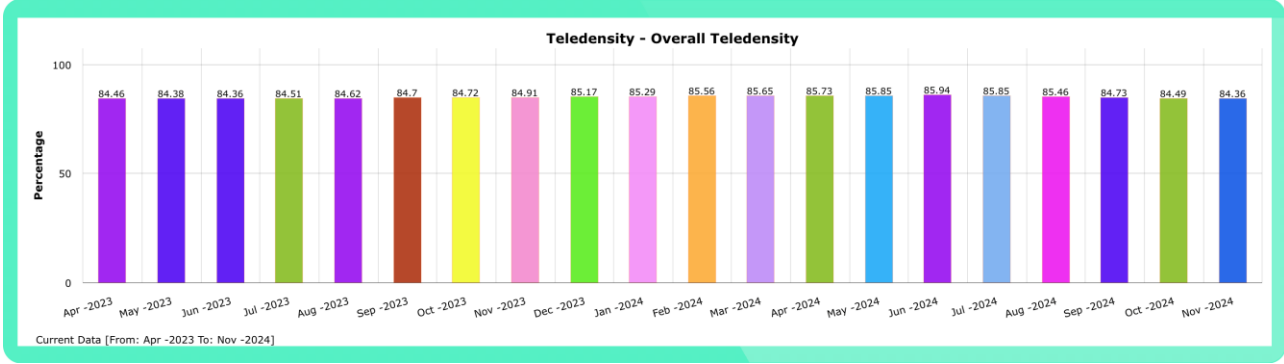
- **Neglect of Cost Efficiencies:**

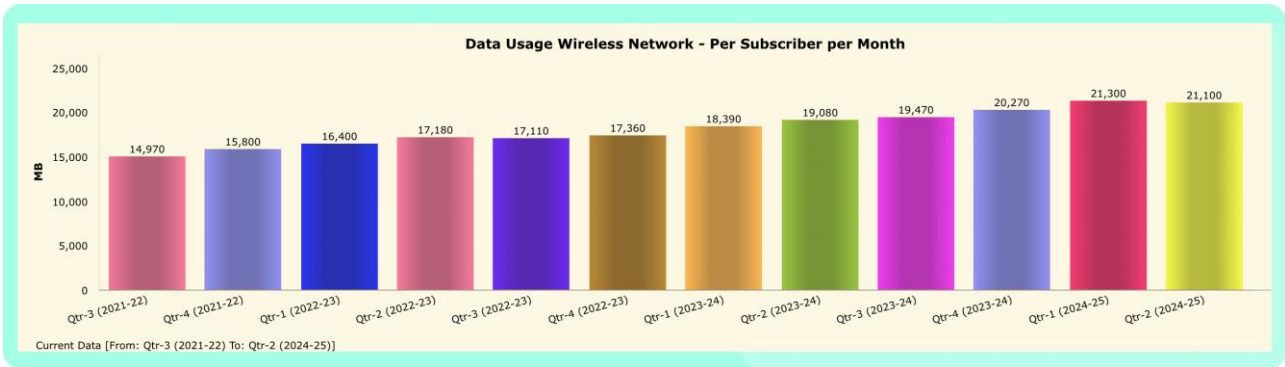
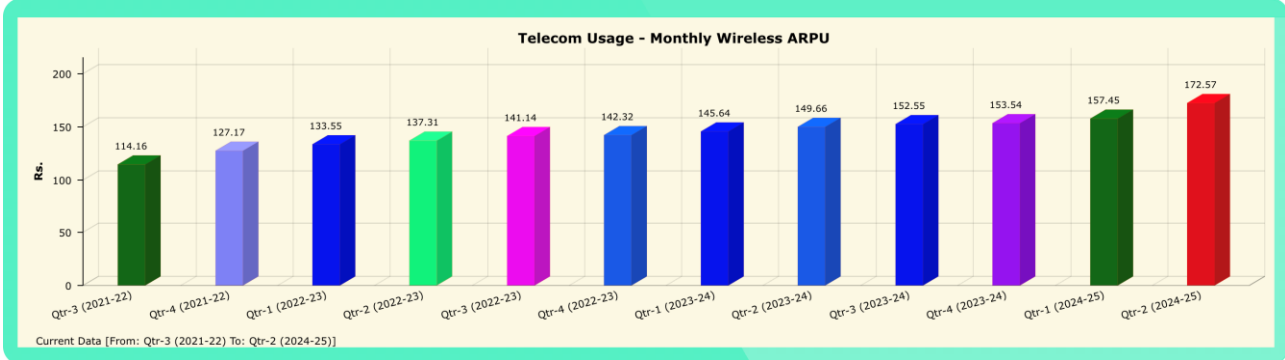
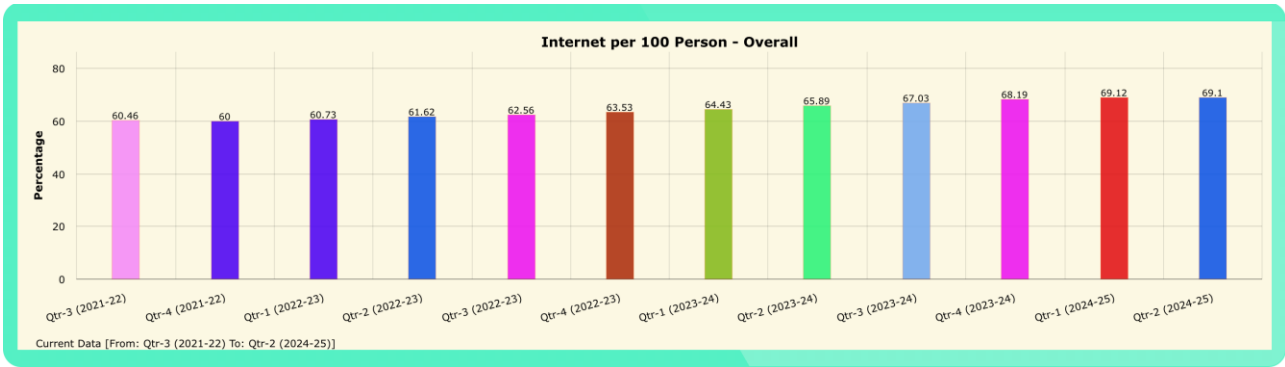
The argument that regulatory intervention in price creates inefficiencies ignores the efficiencies PM-WANI will bring to the underutilized networks. By consolidating demand and optimizing existing infrastructure, PM-WANI will reduce costs for service providers and contribute to broader broadband adoption.

As mentioned above, the regulatory intervention in price is a must in the given case of PM-WANI and any argument to the contrary will imply defeating the goal of bridging the digital divide.

In addition, cost efficiencies can only be achieved if the networks are fully and optimally utilised. This is in the interest of consumers as well as the industry. If the same is achieved, then the cost to consumers will be reasonable and they will not be subjected to tariff increases due to inefficiencies. Some stakeholders have been raising questions on desirability of PM-WANI service, in the light of current proliferation of 4G/5G services and availability of data services at cheapest rate in the world.

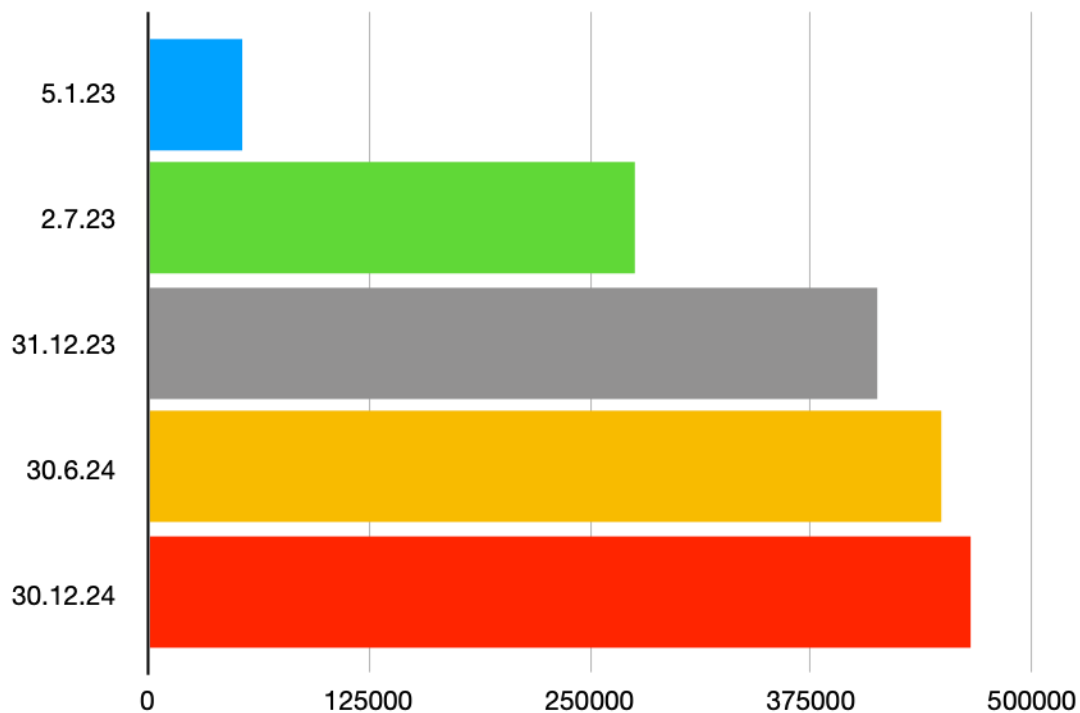
The charts below show certain KPIs, which are helpful in understanding the present state of utilisation of networks and the underlying challenges:





(The above charts are sourced from <https://dot.dashboard.nic.in/DashboardF.aspx>)

Total 5G BTS Deployed:



Source: <https://dot.gov.in/>

The observations from these Charts are as follows:

a. Stagnation in Teledensity:

The charts indicate that teledensity has shown no or minimal growth over the recent period. This stagnation suggests that the Indian telecom sector has not been able to significantly expand its reach, particularly in rural and under-penetrated areas. The tele density includes multiple SIMs and if the same is considered then the unique user base will be far lower. Despite the availability of 4G and 5G technologies, the network efficiency in converting potential users into active subscribers remains questionable.

b. Limited Subscriber Growth:

Subscriber numbers are also relatively flat, with only marginal increases year-on-year and rather decreasing in last few months. This trend is concerning, as it highlights a lack of momentum in attracting new users. It can be inferred that the industry is struggling to incentivize more people to subscribe, either due to pricing concerns, inadequate outreach in underserved regions or network performance issues.

c. Impact of Tariff Increases:

One key factor affecting these metrics could be the steady rise in tariffs. While higher tariffs might contribute to revenue stability for telecom operators, they also discourage new customer acquisitions and push existing subscribers to limit usage. This price sensitivity, especially in price-conscious markets like India, can lead to reduced network utilization. There is no flexible and affordable internet access to lower income households and they avoid recharges even if their data limits exhaust, till they get their next salary or wages.

d. Underutilized Networks:

With deployment of 5G and with little growth in data usage/sub, the charts demonstrate that the utilization of existing network capacity is not optimal. In fact the data usage per subscriber is flat at 21GB in last few quarters and 5G deployment rate has also slowed down in last year. The adoption of 5G is to the extent of 23% and in India about 72% handsets are still in 4G. This underutilization results in higher per-user costs, which are likely to be passed on to consumers as higher tariffs. Furthermore, the lack of efficiency in fully leveraging network infrastructure hinders cost-effective service delivery and reduces affordability.

e. Broadband Adoption Trends:

Broadband adoption trend appears sluggish, despite advancements in technology. This could imply that affordability and accessibility issues, influenced by tariff hikes, continue to deter widespread broadband adoption. The role of PM WANI is critical in such a situation.

Implications:

- Tariff Hikes and Consumer Behavior:

Tariff increases create a significant barrier for low-income and rural populations, exacerbating the digital divide. The affordability challenge limits new user additions and sustains the flat growth trends observed in the charts.

- Need for Regulatory and Industry Focus:

As highlighted, initiatives like PM-WANI have the potential to consolidate demand and optimize underutilized networks. Regulatory intervention to cap tariffs of PMWANI for PDOs to retail FTTH tariffs can ensure affordable access and can bridge the gap between infrastructure availability and consumer affordability.

- **Cost Efficiencies:**

Achieving full network utilization is crucial for reducing operational inefficiencies. When networks are efficiently utilized, service providers can lower costs and expand reach, benefiting both consumers and the industry.

The stagnation in tele-density and subscriber growth, coupled with flat broadband adoption, signals inefficiencies in Indian networks. These inefficiencies, driven partly by tariff increases, hinder broader accessibility and utilization. To overcome this, a dual focus on regulatory intervention and industry efforts to maximize network utilization is essential for achieving sustained growth and bridging the digital divide.

It is submitted that in the given situation, there is no incremental cost of provisioning connectivity for PDOs and doubling the retail tariff for PDOs is not justified.

- **Failure to Address Historical Resistance from TSPs/ISPs:**

The objections fail to account for the historical reluctance of TSPs/ISPs to support PM-WANI. Insisting on ILL connections at exorbitant rates has already created significant barriers to entry for PDOs. Retail tariff parity is essential to eliminate the artificial barriers and ensure the viability of the PM-WANI ecosystem. The behaviour of TSPs is a typical incumbent behaviour and the regulator has to play its role for the growth of broadband and for bridging the digital divide.

- There is no concept of leased line to PDOs under PM WANI scheme. The Explanatory Memorandum to the Draft TTO mentions that even DoT has communicated to TRAI that in the name of commercial agreement, many times TSPs/ ISPs insist on PDOs to connect public Wi-Fi Access Points using expensive Internet Leased Line instead of regular FTTH Broadband connection. Further, to address this issue DoT has made recent amendments (dated 16 October 2024) in the PM-WANI framework. We respectfully submit that such amendment in the PM-WANI framework cannot be a reason for the Draft Telecommunication Tariff (Seventy-First Amendment) Order, 2025.
- The PM-WANI scheme aims to provide affordable connectivity by allowing small PDOs to use FTTH connections. **The PDO Booklet¹ issued by DoT for prospective PDOs on <https://pmwani.gov.in/wani> i.e. PM-WANI Central Registry website, provides business model for a PDO. It mentions PM-WANI broadband cost for PDO as Rs.6000/-, which is line**

¹ https://pmwani.gov.in/assets/landing-page/booklets/Booklet_PDO_English.pdf

with the retail tariffs. Thus, the proposed tariffs in the Draft Telecommunication Tariff (Seventy-First Amendment) Order, 2025 are much higher than that assumed by DoT in the PM-WANI scheme.

- The requirement of PDO is the internet bandwidth, which is mentioned in the Union Cabinet's decision of 9 December 2020. There is no difference between the FTTH (Internet bandwidth) provided at home or to PDO. At home there are multiple users and devices, who / which authenticate through the WiFi password, to avail internet services. Similarly, at the PDO shop, the end users / devices automatically authenticate through PM WANI defined process (initial one-time authentication is through mobile number). It is submitted that a connection is same at home and at PDO shop. It cannot be said to be access in one case and backhaul in other case. The WiFi is same in both the cases and the internet access connection is given by TSP/ISP to home/shop.
- A scheme like PM-WANI, with the tariffs as mentioned in the Draft Telecommunication Tariff (Seventieth Amendment) Order, 2024, is much needed for security purposes too. PM-WANI ensures that users do their one-time KYC (mobile verification) and it allows setting up preferences for MAC-IDs for various accessing devices and payment methods. This way the security aspects as to identity of user are met. In absence of scheme like PM-WANI, the security is being compromised by multiple sharing of WiFi password of a broadband connection in places like private study centres, tuition classes, restaurants etc.
- PM-WANI is not a typical commercial service provider but a model designed to provide affordable, widespread internet access. Thus, applying FTTH retail tariffs in this specific context aligns with the goal of affordable internet proliferation. PM-WANI Scheme is unique to India and shows that innovative models addressing issues like KYC can democratise the broadband while growing the business opportunities for all the stakeholders. This is a very good example of national goal of giving impetus to innovation but can be realised if critical aspects of tariffs are addressed in a reasonable manner.

C. **We further refer to Clause 16 of the current EM; which states as follows:**

"16. It is important to highlight that Public Data Offices (PDOs) operate as bandwidth resellers, selling the bandwidth to multiple subscribers, positioning themselves as potential competitors to service providers. Given this context, when a PDO requests a retail internet or FTTH connection from a service provider, it is both logical and rational that such a connection should be offered at a price higher than what is typically charged to a regular retail customer."

We respectfully submit that this assertion contains certain fallacies, as mentioned below:

- **Misrepresentation of PDOs 'Role:**

PDOs operate as last-mile enablers under the PM-WANI framework, which is a government-led initiative to bridge the digital divide through public wifi. They are not direct competitors to TSPs/ISPs but complementary partners facilitating affordable broadband access to underserved areas.

- **Scale and Market Dynamics:**

Comparing PDOs to TSPs/ISPs that manage millions of connections is legally and economically flawed. PDOs serve localized, small-scale markets and rely entirely on the connections provided by TSPs/ISPs. Unlike TSPs, PDOs lack independent network infrastructure and regulatory authority to operate at scale, invalidating the competition argument. A PDO will not be even a nano of a fraction of a TSP in scale. Further, the main business of the PDO is completely different from that of the TSP, a PDO typically being a Kirana store or a shopkeeper.

- **Regulatory Context:**

The regulatory framework for PDOs does not equate them to licensed service providers, making it unjustifiable to subject them to higher commercial tariffs.

- **Impact on Digital Inclusion Goals:**

By positioning PDOs as competitors and imposing higher tariffs, the EM contradicts the broader objectives of Digital India and Bharat 6G Vision. The PM-WANI scheme aims to encourage small entrepreneurs to provide affordable public Wi-Fi, and higher costs would undermine this goal.

- **Contradiction in Regulatory Intent:**

If PDOs are treated as competitors and charged higher tariffs, this could deter their participation and stifle the PM-WANI ecosystem. This runs counter to TRAI's own intent to proliferate broadband access and promote inclusivity through public Wi-Fi. This also runs contrary to bias of PM-WANI scheme. The PM-WANI scheme aims to provide affordable connectivity by allowing small PDOs to use FTTH connections. The PDO Booklet² issued by DoT for prospective PDOs on <https://pmwani.gov.in/wani> i.e. PM-WANI Central Registry website, provides business model for a PDO. It mentions typical annual broadband cost for PDO as

² https://pmwani.gov.in/assets/landing-page/booklets/Booklet_PDO_English.pdf

Rs.6000/-, which is line with the retail tariffs. **Doubling the retail FTTH rates could deter small entrepreneurs from entering the PM-WANI ecosystem, undermining the very goal of democratizing internet access.**

E. Clause 18 of the EM - The explanatory memorandum suggests that service providers derive revenue from multiple retail FTTH connections distributing data across users, whereas PDOs concentrate data consumption through a single connection. We respectfully submit that this suggestion contains certain fallacies, as mentioned below:

- **Comparison with Retail FUP:** Most retail FTTH plans have Fair Usage Policy (FUP) limits upto 3.5TB as mentioned in Clause 18 of the EM. PDOs, as noted in the memorandum, consume significantly less data (200-500 GB/month on average), well within the retail limits. This undermines the argument that PDOs place disproportionate capacity demands on networks.
- **Underutilization of Capacity:** PDOs can optimize underutilized network capacities in areas where individual demand is low, effectively making better use of existing infrastructure without requiring significant incremental investment by TSPs/ISPs.
- **Correlation to FUP is not correct: The FUP of 3.5 TB in retail tariffs reflects an assurance of high data availability for consumers without significant additional costs for service providers. This FUP has been given by the service providers to the consumers as part of the tariff. This FUP inherently accommodates higher usage patterns and ensures cost efficiency. Suggesting that a single PDO consuming higher data warrants disproportionate tariffs undermines this principle. If retail usage per connection increases in the future, would the FUP threshold become irrelevant? This contradicts the logic of sustainable, scalable pricing. In light of this, we disagree with the statement made in Clause 18 of the EM as it basically is against the consumer protection regarding tariffs.**

F. Other comments:

- **PM WANI provides Revenue Consolidation to the service providers:** PDOs can consolidate revenue streams, reducing administrative and operational costs for service providers. This creates efficiencies rather than additional burdens.
- **Retail Parity Achieves Balance:** The earlier proposal to align PDO tariffs with retail FTTH rates provided a balanced approach. Service providers stand to gain significant revenue from bandwidth sales to millions of PDOs as the PM-WANI ecosystem grows, which will not happen in case higher tariffs are fixed for PDOs.

- **Synergistic Revenue Growth:** Affordable public Wi-Fi will stimulate broadband adoption and create a multiplier effect, leading to increased demand for FTTH and mobile broadband services. This long-term benefit outweighs any short-term revenue concerns. India, at present has only 0.5 million Public Wi-Fi Hotspots (including 0.2 million on PM WANI). India is way below in Public Wi-Fi density, with UK, USA, and China having 175X, 50X and 75X on Per Million Population Basis. The Policy Targets regarding Public Wi-Fi hotspots are 50mn by 2030 under Bharat 6G Vision. It is well proven that Wi-Fi is complementary to mobile services. If 50mn PM WANI hotspots are established in India, then with average revenue for internet bandwidth of Rs. 1000 per month, the additional revenue of TSPs will be Rs. 60,000 crore per year. Further, in such a situation, more and more population will get conversant with internet resulting in more mobile connections and FTTH connections, as has been the case in many other countries. This will complement to new earning opportunities and to the digital economy in a sustainable manner. The decision of Union Cabinet in 2020 specifically mentioned that **the telecom and internet service providers will also benefit due to the sale of bandwidth to PDOs. There is great merit in this statement and it is strange that business opportunity as big as PM WANI is being overlooked by concerned TSPs and ISPs. By enabling PDOs to operate, the PM-WANI scheme could lead to more widespread internet use, potentially increasing overall data usage and revenues in the long term. The PM-WANI model will introduce more players and more business opportunities which will expand the market rather than diminish it. In fact, the expansion of affordable internet through public Wi-Fi will complement FTTH growth by creating demand in areas that previously lacked broadband access. PM-WANI is intended to coexist with other broadband initiatives like FTTH and mobile and not replace them. These will operate synergistically, with public Wi-Fi serving as a bridge for underserved areas.**
- **It is reiterated that Public Wi-Fi is not a competitor but a complement to FTTH and mobile broadband services. By enabling affordable and widespread access, PM-WANI creates demand in underserved areas, eventually increasing adoption of individual connections and contributing to the digital economy.**
- **Exclusion of Bundled Costs for Apps and Devices: Retail broadband tariffs often include additional costs for value-added services like apps and set-top boxes, which PDOs neither require nor benefit from. Therefore, the justification of doubling the tariff to account for higher usage fails to account for this distinction. PDOs should only be charged for the core broadband services they consume.**

- **Ensuring Ecosystem Sustainability:** The memorandum cites the need for a sustainable tariff structure that supports both PDOs and TSPs/ISPs. However, the higher Tariffs May Stifle PDO Viability. Doubling the retail FTTH rates could deter small entrepreneurs from entering the PM-WANI ecosystem, undermining the very goal of democratizing internet access.
 - **Historical Resistance from TSPs/ISPs:** TSPs/ISPs have shown reluctance to support PM-WANI, often imposing exorbitant rates and mandating Internet Leased Lines (ILL) instead of FTTH. This new tariff ceiling risks perpetuating such practices, as it implicitly validates higher costs.
 - **It is reiterated that a scheme like PM-WANI, with the tariffs as mentioned in the Draft Telecommunication Tariff (Seventieth Amendment) Order, 2024, is much needed for security purposes too.** PM-WANI ensures that users do their one-time KYC (mobile verification) and it allows setting up preferences for MAC-IDs for various accessing devices and payment methods. This way the security aspects as to identity of user are met. In absence of scheme like PM-Wani, the security is being compromised by multiple sharing of WiFi password of a broadband connection in places like private study centres, tuition classes, restaurants etc.
- G. **Therefore, to ensure the effective proliferation of PM-WANI and address the challenges posed by the revised tariff ceiling, BIF is of the view that PDO tariffs must be same as and aligned with retail FTTH rates, as proposed in the Seventieth Amendment. Further, PDOs should only be charged for the core broadband services they consume. This strikes the right balance between affordability and service provider sustainability.**

The earlier proposal of retail parity better serves the goal of affordable broadband proliferation. We urge TRAI to reconsider its position in light of the points outlined above and ensure a framework that prioritises digital inclusion, entrepreneurial viability, and long-term growth for all stakeholders.

We remain committed to working collaboratively with TRAI and other stakeholders to achieve the shared vision of “Broadband for All.”

Thank you for considering our submission.

Yours sincerely,



T.V. Ramachandran,
President,
Broadband India Forum