

Date: 7<sup>th</sup> February, 2025

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

**Ref: Draft Telecommunication Tariff (Seventy-First Amendment) Order, 2025**

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


Dear Sir,

This refers to the comments submitted by a few stakeholders on the Draft Telecommunication Tariff (Seventy-First Amendment) Order, 2025. The Broadband India Forum (BIF) hereby submits its counter-comments for your kind consideration (Annexure 1).

We reaffirm our earlier submissions on the Draft Telecommunication Tariff (Seventy-First Amendment) Order, 2025, which also address comments raised by some stakeholders. We request that our comments and counter-comments be considered together for a holistic evaluation.

Thanking you,

Best Regards,



T.V. Ramachandran,  
President,  
Broadband India Forum.

## **BIF's Counter-Comments on the Draft Telecommunication Tariff (Seventy-First Amendment) Order, 2025**

### **Comment 1**

A few stakeholders have incorrectly argued that PM-WANI is not relevant, citing the following flawed reasons:

- 95% of user's access data via mobile broadband, making public Wi-Fi redundant.
- Mobile broadband (4G/5G) is widely available, faster, and more secure, reducing the need for PM-WANI.
- The rise in wireless broadband users (from 322M in 2016 to 927M in 2024) proves that TSPs are adequately serving consumers. The decline in public Wi-Fi usage and the failure of state-led Wi-Fi initiatives show that consumers prefer mobile data.
- PM-WANI follows an outdated PCO-like model that is no longer necessary.

They incorrectly state that PM-WANI is not necessary anymore due to the dominance of mobile broadband.

### **BIF's Counter Comments:**

The Draft Telecommunication Tariff (Seventy-First Amendment) Order, 2025 (Draft TTO) mentions that Digital India 2030 mobile and broadband policy objectives, the Bharat 6G Vision 6 sets the goal of 10 million public Wi-Fi hotspots by 2022 and 50 million 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.

**The argument that 95% of users access mobile broadband does not present a correct picture. The key concerns should be:**

- **How many Indians still lack broadband access?**
- **What has been the broadband adoption growth rate in the past few years?**

The answer to these questions lies in the tele density and number of unique internet users in India and respective trend in last two years. The comments of BIF to Draft TTO dealt with the above mentioned issues where specific data was shown. The same are not repeated here but must be referred to in light of the above mentioned comments.

In the nutshell, following picture emerges after looking into key indicators of last few years:

a. **Stagnation in Tele-density & in Internet-Density:**

India's tele-density is 84.36% in Nov 2024 and there is no increase in it in last two years (it was 84.46% in April 2023). There is a huge gap or divide between urban and rural. The urban tele-density is 131.86% while the rural is only 58.48%, where 63% of the population resides. **The tele-density includes multiple SIMs and if the same is accounted for then the unique user base will be far lower i.e 52.4% in 2024 (as per Statista).**

**A better measure for the broadband purposes will be Internet-density (i.e. Total Internet Subscribers per 100 population) which is 69.10% as on September 2024. The urban Internet-density is 112.74% and rural net-density is 44.85%. These figures are much lower than the tele-density. It also shows Urban Rural Divide of 68% in Internet, which has plateaued and remained as it is in last few years.**

This stagnation shows that the Indian telecom sector has not been able to significantly expand its reach, particularly in rural and under-penetrated areas.

Thus, despite the availability of 4G and 5G technologies, the conversion of non-users to the subscribers has remained stagnant and almost half the population is offline.

b. **Limited Subscriber Growth:**

The wireless subscribers are 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:**

While higher tariffs might contribute to revenue stability for telecom operators, they also discourage new customer acquisitions and push existing subscribers to limit usage or churn, as is evident from the net subtractions in the wireless

subscriber numbers in last few months. 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. **Network Utilization is less than optimal:**

With deployment of 5G and with little growth in data usage/sub, the utilization of existing network capacity is not optimal. In fact, the data usage per subscriber is flat at 21GB in last few quarters. The 5G deployment rate too 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.

**Thus, the 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 and it has a huge role to play to onboard large segment of population which is presently offline.**

Further, despite the deployment of 5G, challenges remain in delivering reliable and affordable broadband services everywhere—including dense urban areas, inside buildings, and in rural and remote regions. Mobile broadband has inherent limitations and cannot always guarantee minimum internet speeds, especially in high-traffic areas. Therefore, efficient complementary technologies like Fixed Broadband, including Public Wi-Fi, are essential to ensure seamless connectivity and a superior user experience.

Relying solely on mobile networks to handle broadband traffic is neither practical nor sustainable. Public Wi-Fi hotspots are essential to complement mobile broadband, support 5G, and enhance user experience by offloading high data demands—particularly heavy video content—onto Wi-Fi networks.

Without adequate FBB and Public Wi-Fi hotspots, India is struggling to meet global benchmarks in broadband performance (globally only about 1/6th of broadband traffic is on mobile). This could hinder India's aspirations for global digital leadership.

**The Critical Role of Fixed Broadband in Digital Economy and Policy Interventions**

Globally, mobile networks handle only one-fifth of the traffic compared to fixed broadband networks. Data from ITU<sup>1</sup>, extracted in the table below, indicates that in 2024, **total global fixed broadband traffic amounted to 5,966 Exabytes, significantly surpassing mobile broadband traffic, which stood at 1,279 Exabytes. Mobile broadband traffic was, therefore, only 17.6% of total broadband traffic. On a per-subscription basis, fixed broadband usage is 22**

Fixed broadband traffic	Exabytes*						Per subscription (GB)				
	2005	2006	2021	2022	2023	2024	2005	2021	2022	2023	2024
World	N/A	N/A	3,897	4,382	5,119	5,966	N/A	2,927	3,080	3,395	3,732
Mobile broadband traffic	2005	2006	2021	2022	2023	2024	2005	2021	2022	2023	2024
World	N/A	N/A	748	922	1,074	1,279	N/A	116	134	147	166

**times higher than mobile broadband.**

In India, total wireless data usage reached 56,000 petabytes per quarter (as of June and September 2024), translating to approximately 224 Exabytes annually—constituting 17.5% of global mobile broadband traffic but only **3% of global broadband traffic. This percentage would marginally improve to 5% if fixed broadband data were included, though official figures are unavailable.** A reasonable estimate, based on an assumed usage of 350GB/month per fixed broadband subscriber (as suggested in the Draft TTO), places India's annual fixed broadband traffic at 183 Exabytes. **This implies that fixed broadband contributes approximately 45% of India's total broadband traffic, highlighting the stark contrast with global trends where fixed broadband overwhelmingly dominates data consumption.**

**From an economic and policy standpoint, fixed broadband is a critical enabler of digital inclusion, economic productivity, and cost efficiency. It is vastly more cost-effective than mobile broadband, with data costs as low as ₹1-2 per GB, compared to ₹10 per GB for mobile broadband. However, despite these efficiencies, fixed broadband adoption remains low, largely due to higher retail subscription costs. Unlike mobile broadband plans, which offer limited data allowances, fixed broadband plans typically provide unlimited usage, leading to relatively higher upfront costs for consumers.**

**If India remains mobile broadband dominant only and that too to the extent of 95%, then India will certainly lag behind in broadband in terms of tele density, traffic and efficiency, which will result in continued higher tariffs for users for very limited usage. Seeing the affordability challenges, innovative schemes like PM WANI (with reasonable tariffs for PDOs in the range of retail tariffs I.e. ₹.1-2 per GB) have to be supported by all stakeholders, else the digital divide between urban-rural will not reduce, as is being witnessed from the trends of last few years.**

<sup>1</sup> \*Source: [https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ITU\\_regional\\_global\\_Key\\_ICT\\_indicator\\_aggregates\\_Nov\\_2023.xlsx](https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ITU_regional_global_Key_ICT_indicator_aggregates_Nov_2023.xlsx)

## **Policy Implications and the Role of PM WANI**

**Given the cost advantages and efficiency of fixed broadband, ensuring widespread access is essential for bridging the digital divide and driving economic growth.** One of the most effective solutions to address affordability and accessibility is PM WANI Public Wi-Fi, which leverages existing but underutilized infrastructure to:

1. Enhance affordability – by providing lower-cost internet access to underserved populations.
2. Improve network utilization – optimizing broadband infrastructure and reducing congestion on mobile networks.
3. Increase service provider revenues – creating new monetization opportunities while keeping services sustainable.
4. Strengthen economic growth – by enabling digital inclusion, boosting productivity, and supporting small enterprises.

**Policymakers have recognised the transformative potential of fixed broadband and they develop frameworks that prioritise investment in last-mile connectivity, encourage public-private partnerships, and support innovative models like PM WANI. Addressing regulatory and financial barriers to expand fixed broadband penetration is crucial for ensuring that the benefits of a digital economy reach all sections of society, fostering equitable and sustainable economic development.**

**Therefore, BIF is of the considered view that PDO tariffs must be same as and aligned with retail FTTH rates (which should be ₹1-2 per GB). Further, PDOs should only be charged for the core broadband services they consume. This strikes the right balance between affordability and industry sustainability. If tariffs to PDOs are fixed any higher than the service to the end users will become unaffordable defeating the very objective to expand broadband penetration.**

**Comment 2**

A few stakeholders have incorrectly commented that –

- Public Wi-Fi deployment has failed to attract users due to poor user experience, security concerns, and unreliable connectivity.
- The scheme has not scaled as expected and forcing TSPs to subsidize PDOs will not fix its structural issues.
- PM-WANI has failed in its original objectives, and regulatory intervention will not improve adoption.
- 45% of PM-WANI hotspots are concentrated in Delhi, contradicting the scheme's original rural focus.

**BIF's Counter Comments:**

- (i) **For the last 8 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 ₹4 lakhs to ₹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 its benefits.
- (ii) **The objections fail to account for the historical reluctance of TSPs/ISPs to support PM-WANI. Since the time, when this scheme was envisaged by TRAI, with Pilots being conducted, the TSPs have been objecting to the same. Reference can be made to all their submissions on this subject to TRAI from the beginning.**
- (iii) The artificially created barrier of ILL connectivity having extra-ordinarily high tariffs has resulted in a very anomalous situation, where on one hand the PM-WANI scheme has been made for small shopkeepers to grow their business and help generate employment and on the other hand the respective internet connectivity cost, which is the most essential input item, has been pegged at unrealistically high levels, causing stifling of both PM WANI Public WiFi service and PM WANIi Public WiFi Service Providers.
- (iv) The Explanatory Memorandum to the Draft TTO and the Explanatory Memorandum to the Draft Telecommunication Tariff (Seventieth Amendment) Order, 2024 mention 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. This fact has not been denied by the stakeholders who have opposed Draft TTO.

- (v) Thus, the concerned **TSPs and ISPs are denying internet bandwidth to PDOs and are non-transparent with regard to tariffs**, which is a major cause of non-proliferation of PM WANI scheme.
- (vi) 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. **The present status of PM WANI Public WiFi is attributable to such exorbitant rates by TSPs which has not allowed due proliferation of the same. Thus, due tariff intervention is required.**
- (vii) The PM-WANI scheme aims to provide affordable connectivity by allowing small PDOs to use FTTH connections. **The PDO Booklet<sup>2</sup> 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 ₹6000/-, which is line 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.**
- (viii) **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.**
- (ix) **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**

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<sup>2</sup> [https://pmwani.gov.in/assets/landing-page/booklets/Booklet\\_PDO\\_English.pdf](https://pmwani.gov.in/assets/landing-page/booklets/Booklet_PDO_English.pdf)



**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.**

**(x) Lastly, a comment has been made by a stakeholder that 45% of PM-WANI hotspots are concentrated in Delhi, contradicting the scheme's original rural focus. In this regard, we submit that Delhi has the highest mobile tele-density in India. If comments of a few stakeholders that PM-WANI is not necessary anymore due to the dominance of mobile broadband, then in that case Delhi should hardly have any PM WANI hotspot. This fact disapproves the reasoning that PM WANI is not required due to mobile proliferation.**

**(xi) The count of PDOs in Delhi is 125000 out of pan India total PDOs reported number of 277000, as per the information on PMWANI Central Registry Portal. Further, if these PDOs in Delhi are active, then they would, most likely, have much lower tariffs than ILL tariffs of ₹4L- ₹8L. One can safely presume that these PDOs will be working on FTTH connections and paying FTTH rates. Thus, we request that a detailed finding into type of connectivity and tariffs of such PDOs be done. If these PDOs are found working on FTTH connectivity and at rates equal to FTTH retail rate then it proves the case for PM WANI even in territory like Delhi, which has the highest tele density. If similar rates are offered in other areas, then PM WANI will certainly proliferate benefitting public and also the stakeholders. The PDOs in other areas cannot be subject to discriminatory tariffs.**

### **Comment 3**

A few stakeholders have incorrectly commented that -

- There is no justification for Tariff Regulation as there is no market failure requiring regulatory intervention.
- Tariff forbearance has historically led to the lowest data costs globally—this should not be changed.
- Government intervention should be based on detailed studies, which have not been conducted.
- No substantial evidence has been provided to justify price regulation.
- B2B Tariffs Should Be Left to Market Forces

### **BIF's Counter Comments:**

It is submitted that above comments are contrary to the facts and ground reality due to the following reasons:

- The Explanatory Memorandum to the Draft TTO and the Explanatory Memorandum to the Draft Telecommunication Tariff (Seventieth Amendment) Order, 2024 mention 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. This fact has not been denied by the stakeholders who have opposed Draft TTO. Thus, there is a demonstrated market failure in Public Wi-Fi pricing, where PDOs currently face exorbitant bandwidth charges, often ₹4-8 lakhs per year for a basic connection, making operations financially unviable.
- Further, the government has recognised this market failure. Department of Telecommunications (DoT) has acknowledged that many TSPs force PDOs to buy expensive leased-line connections instead of standard FTTH, leading to the failure of public Wi-Fi expansion.
- Lastly there is a complete lack of competition among TSPs since most areas have only two or three dominant service providers, resulting in anti-competitive pricing strategies that hinder affordable public Wi-Fi expansion.

#### **Comment 4**

A few stakeholders have incorrectly commented that -

- FTTH is not meant for commercial use or reselling as FTTH is an end-user access service, not a backhaul service for commercial resale.
- PDOs are commercial entities competing with TSPs and TSPs should not be forced to provide subsidised connectivity.
- Mandating price controls would violate Article 14 and Article 19(1)(g) of the Constitution.
- TSPs have invested billions in network expansion, and forcing them to subsidize PDOs is unfair.
- If PDOs need connectivity for commercial resale, they should use Internet Leased Line (ILL), not FTTH.
- Regulating FTTH pricing for PDOs would reduce incentives for TSPs to invest in broadband expansion.

#### **BIF's Counter Comments:**

- 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. \
- There is no distinction between an FTTH connection at home and one used by a PDO— in both cases, multiple users access it simultaneously (family members at home, customers at a PDO).
- 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.
- DoT’s Policy Allows FTTH for PDOs: Recent PM-WANI framework amendments (dated 16 September 2024) explicitly permit internet connectivity for PDOs, rejecting the claim that it should only be for personal use.
- 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.**
- 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 assumptions and some calculations given by a stakeholder on the usage and loss of revenue to the extent of Rs.19000 per month to TSP, is presumptive, incorrect and conjectural. It is based on flawed assumptions, including that data consumption will shift from mobile to public WiFi. It is not considering that common man needs

more data consumption than that he can avail under the mobile plans. The per GB revenue calculations are only presumptive and based on incorrect assumptions.

- If 50mn PM WANI hotspots are established in India, then with average revenue for internet bandwidth of ₹1000 per month, the additional revenue of TSPs will be ₹60,000 crores 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 earlier proposal (in Draft Telecommunication Tariff (Seventieth Amendment) Order, 2024) to align PDO tariffs with retail FTTH rates provided a balanced approach and the same should be applied.** 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.
- As mentioned earlier that distinction as regard to retail and commercial or access and backhaul or FTTH and internet leased line are not applicable in the given framework of PM WANI. Rather 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.
- 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.
- The Constitution does not prohibit reasonable regulations on business activities in public interest and overall nation's growth. In this case, regulated tariffs will only serve the public interest by promoting affordable internet access under PM WANI scheme, especially in remote areas where market-driven prices have proved to be unaffordable.
- **The tariff proposed in Draft Telecommunication Tariff (Seventieth Amendment) Order, 2024 is designed to address market failures and ensure affordable access to essential services like broadband.** Courts have historically upheld such regulations in cases where public welfare is a key concern.

BIF submits that TSPs and ISPs play a crucial role in enabling PM-WANI by providing the necessary broadband infrastructure. Further, the cost of fixed broadband is a

fraction of mobile broadband, making PM-WANI Public WiFi with FTTH critical for affordable connectivity.

**BIF is of the view that PDO tariffs must be same as and aligned with retail FTTH rates, as proposed in the Seventieth Amendment, which should be ₹1-2 per GB. Further, PDOs should only be charged for the core broadband services they consume. This strikes the right balance between affordability and industry sustainability. A rate twice that of retail FTTH rate for PDOs will not be fair pricing and the consequent regulatory framework will not be of any help in the proliferation public Wi-Fi hotspots, thus not addressing India's digital divide. This is both urgent and necessary for the reasons given in our submissions.**