



# 2024-25 — ANNUAL REPORT



OCTOBER 2025







**BROADBAND INDIA FORUM**

"Think Tank for Digital Transformation"



# Contents

Message from Hon'ble Minister of Electronics and Information Technology.....	7
Message from Hon'ble Minister of State for Communications .....	9
Message from Chairman, TRAI .....	11
Message from Secretary, MeitY .....	13
Message from Secretary, DoT .....	15
Message from Secretary, MIB.....	17
Message from Chairman, IN-SPACe .....	19
From the President's Desk .....	20
Policy Advocacy Initiatives.....	34
Timeline of Events .....	40
BIF in Media .....	52
Advocacy Through Articles.....	48
Digital Growth: Stats & Insights .....	50
Members.....	63
Office Bearers .....	65
Advisors & Mentors.....	66
BIF Directorate.....	67
BIF Committees .....	68
Partnerships & Engagements .....	69
BIF Publications .....	70





अश्विनी वैष्णव  
Ashwini Vaishnaw



रेल, सूचना और प्रसारण एवं इलेक्ट्रॉनिकी  
और सूचना प्रौद्योगिकी मंत्री  
भारत सरकार  
Minister of Railways, Information & Broadcasting  
and Electronics & Information Technology  
Government of India



### MESSAGE

I congratulate the Broadband India Forum (BIF) for completing ten years of dedicated service to India's digital transformation. Over the past decade, BIF's work has been anchored in the shared national vision of Digital and Viksit Bharat. It has played an impactful role in shaping informed dialogue across government, industry, and civil society.

India today stands at the intersection of two massive transformations. We are building one of the world's largest digital economies, powered by the Digital India Programme, the IndiaAI Mission, and the expanding network of high-speed connectivity. India is also witnessing the rise of a vibrant orange economy. The creators, storytellers, educators, and innovators are using digital platforms to express, inform, and inspire.

Both the Ministry of Electronics and Information Technology and the Ministry of Information and Broadcasting continue to drive initiatives that ensure this digital growth remains secure, trusted, and inclusive. The focus is on high-performance compute infrastructure, open-source platforms, and unleashing creative innovation for all Indians.

This will build the foundation for India's leadership in the increasing AI-driven world, as well as the nation's aspirations to become a global hub for digital storytelling. The WAVES Summit 2025 captured how the fusion of technology and creativity will power India's new growth chapter. A world where compute power, data, and innovation capacity are available to startups, researchers, and all citizens.

I am confident that BIF's continued engagement will help to shape India's governance strategy for these critical sectors, spanning platform regulation, content governance and responsible AI innovation. I wish BIF all the best.

  
(Ashwini Vaishnaw)

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डॉ. पेम्मासानी चंद्र शेखर  
Dr. Pemmasani Chandra Sekhar



राज्य मंत्री  
संचार एवं ग्रामीण विकास मंत्रालय  
भारत सरकार  
Minister of State for Communications  
and Rural Development  
Government of India

### MESSAGE

It gives me great pleasure to convey my heartiest congratulations to Broadband India Forum (BIF) on their celebrating ten years of operations and also to extend my greetings on the occasion of their Annual General Meeting and release of the Annual Report for 2025.

India today stands at the cusp of a transformative digital era. With the rapid deployment of 5G, upcoming 6G research, and the integration of emerging technologies such as Artificial Intelligence, Cloud, and IoT, our nation is poised to unlock unprecedented opportunities for growth, innovation, and social empowerment. Equally important is the expansion of digital connectivity to rural and remote areas, ensuring that the benefits of technology reach every citizen and contribute to the vision of *Viksit Bharat*.

Through the last year, the Ministry of Communications has achieved much having focused on expanding 5G and broadband services, enhancing telecom infrastructure, promoting AI and quantum technologies, implementing new quality of service regulations, and improving user-friendly digital platforms like SaralSanchar for licensing and user information. Major initiatives include the National Broadband Mission (NBM) 2.0 launched on January 17, 2025 for rural connectivity and bridging the digital divide; the launch of the Chakshu portal to combat spam and fraud, and significant participation in international bodies like the ITU to shape global standards for AI and digital infrastructure.

I commend BIF for its consistent efforts in fostering constructive dialogue between industry, government, and academia, and for contributing valuable thought leadership towards shaping policies that support innovation, inclusion, and sustainable digital infrastructure. I am also glad to note their continuous contribution and support to the Government's as well as Industry's efforts towards enabling the unconnected through efficient, affordable and technology neutral broadband.

As we move forward, I look forward to BIF continuing to play a pivotal role in India's digital journey, strengthening collaboration across sectors and helping build a secure, inclusive, and future-ready digital economy.

I extend my best wishes for the success of the Forum and its members in the years ahead.

(Dr. Pemmasani Chandra Sekhar)

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अनिल कुमार लाहोटी  
Anil Kumar Lahoti



सत्यमेव जयते

अध्यक्ष  
भारतीय दूरसंचार विनियामक प्राधिकरण  
Chairman  
TELECOM REGULATORY AUTHORITY OF INDIA

**Message**



My heartfelt congratulations to the Broadband India Forum for completing ten years and its continued dedication and meaningful contributions to India's broadband ecosystem. Over the past decade, BIF has established itself as a valued policy-forum and think-tank that works across technologies and service to support the proliferation of high-quality broadband across the country. Its inclusive engagement of all stakeholders, technology providers, telecom operators, service providers, satellite operators, value-added services, MSOs, academia and start-ups is commendable.

In the regulatory landscape overseen by TRAI, rapid advancements in digital infrastructure, spectrum allocation, network deployment and service quality indicate a critical inflection point for the country's broadband agenda. For instance, the importance of embedding digital connectivity infrastructure (DCI) akin to water and electricity in built-environment planning was recently highlighted by TRAI. Against this background, the role of BIF in providing informed inputs, bridging industry and policy, and helping align industry capabilities with national objectives is highly valuable.

Looking ahead to 2025-26, as India accelerates its journey toward a fully connected, resilient digital society under the "Digital India" mission, the contributions of BIF in policy discourse assumes even greater importance. I am confident that BIF will continue to play a constructive role in promoting regulatory and standards frameworks that enable affordable, ubiquitous and high-speed broadband access, and will maintain its proactive approach in driving meaningful consultations and discussions, contributing to the ongoing expansion and improvement of broadband in India.

On behalf of TRAI, let me reaffirm our commitment to ongoing engagement with BIF and its members. TRAI remains dedicated to providing accessible, affordable, and reliable communication services that drive inclusive growth in the telecom sector. Together, we can aspire to build a broadband landscape that empowers every citizen, business and institution in India — accelerating growth, inclusion and competitiveness in a digitally connected era. I convey my best wishes to the BIF, its esteemed leadership, and dedicated members for continued success in the year to come.

  
(Anil Kumar Lahoti)

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एस. कृष्णन, आई.ए.एस.  
सचिव  
S. Krishnan, I.A.S.  
Secretary



सत्यमेव जयते

इलेक्ट्रॉनिकी और सूचना प्रौद्योगिकी मंत्रालय  
भारत सरकार  
Ministry of Electronics &  
Information Technology (MeitY)  
Government of India

## MESSAGE

I am delighted to note that the Broadband India Forum (BIF) is completing 10 years of its establishment and will shortly be holding its Annual General Meeting and releasing its Annual Report. Over the past decade, BIF has made remarkable progress in translating its vision of "Broadband for All" into tangible outcomes, while consistently raising the bar for collaborative, evidence-based policy advocacy in India's digital and connectivity ecosystem.

Over the years, India's digital landscape has been evolving at an unprecedented pace, with emerging technologies such as cloud computing, artificial intelligence, and advanced analytics serving as powerful enablers of economic growth, innovation, and citizen empowerment. BIF has played a pivotal role in supporting this national mission through informed research, stakeholder dialogues, and technical policy inputs. Its contributions through White Papers, Consultation Papers, and Digital Dialogues have been instrumental in shaping critical areas such as digital infrastructure for Viksit Bharat, cybersecurity, data protection frameworks, digital competition policy, and the evolving data centre and cloud ecosystem. Its constructive participation in the India Internet Governance Forum since 2021 has further reinforced its position as a trusted partner in strengthening India's digital governance framework.

Notably, BIF's proactive inputs to MeitY's Sub-Committee on AI Governance Guidelines released earlier this year, its Working Paper on Responsible AI Innovation, and its advocacy for ethical, trustworthy, and human-centric AI principles reflect its consistent alignment with both national priorities and global best practices. As the nation now looks ahead to the IndiaAI Impact Summit 2026, this dialogue assumes special importance. The Summit will serve as a platform to convene policymakers, industry leaders, startups, and academia to operationalise the vision of the IndiaAI Mission, with a focus on enabling equitable access to compute, datasets, and AI tools, and driving impactful use cases across sectors such as healthcare, agriculture, education, and governance not only in India but for the Global South.

I look forward to continued collaboration between MeitY and BIF in the years ahead as we jointly advance towards a truly Digital and Viksit Bharat, where the benefits of technology and AI innovation empower every citizen and enterprise across the country.

  
(S. Krishnan)

Place: New Delhi  
Date: 16<sup>th</sup> October, 2025



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डॉ. नीरज मिश्र, भा.प्र.से.  
सचिव  
**DR. NEERAJ MITTAL, IAS**  
Secretary



भारत सरकार  
संचार मंत्रालय  
दूरसंचार विभाग  
Government of India  
Ministry of Communications  
Department of Telecommunications



### **MESSAGE**

I am happy to know that Broadband India Forum is holding its 10<sup>th</sup> Annual General Body Meeting (AGM) in New Delhi and on this occasion, the Annual report for the year FY 2024-25 is being released.

Broadband has become a part of the daily life of citizens across the globe including in India. Recognizing its transformative impact, "Broadband for all" is a priority area of the Ministry of Communications. The Government has been consistently working towards this goal through a range of strategic initiatives.

Notification of various Rules under Telecom Act 2023, roll out of indigenous 4G and LEO/MEO based Satcom technologies would facilitate proliferation of broadband and bridging digital divide in India.

The Ministry remains firmly committed to fostering technological advancement, research and development, contribution of India in 6G patents and supporting the sustainable growth of the telecom sector.

I also take this opportunity to congratulate the Broadband India Forum on completing 10 years and its constructive engagement on key policy matters from NDCP 2018 to the current NTP 2025. BIF has brought focused attention to pressing issues impacting broadband expansion and the telecom industry at large. Your efforts are both commendable and essential as we work together to achieve a digitally inclusive India.

On behalf of the Department of Telecommunications, I wish BIF continued success in the years to come. May you keep inspiring progress, enabling access and driving India's digital future.

Date: 6.11.2025

Place: New Delhi

  
(Neeraj Mittal)

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संजय जाजू, भा.प्र.से.  
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**SANJAY JAJU, I.A.S.**  
Secretary



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सूचना एवं प्रसारण मंत्रालय  
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21<sup>st</sup> October, 2025

### MESSAGE

It gives me great pleasure to join in celebrating the tenth anniversary of the Broadband India Forum (BIF). Over the past decade, BIF has evolved from a policy forum focused on broadband connectivity into a truly multidisciplinary platform that brings together communications, broadcasting, technology, and creativity the foundational pillars of India's contemporary media and entertainment landscape.

2. India's media, entertainment, and digital content ecosystem stands at a pivotal moment, ready to realise its full potential as a global creative powerhouse. Projected to cross USD 70 billion by FY 2027, this vibrant digital and orange economy spans OTT platforms, short-form creators, digital newsrooms, ed-tech innovators, gaming, and immersive experience developers. Indian platforms and creators are emerging as the nation's cultural ambassadors, carrying our languages, values, and aspirations to audiences worldwide. Further, the advent of AI is not simply automating workflows – it is enhancing creative capacities, enabling faster post-production, intelligent dubbing, adaptive storytelling, and hyper-localized content delivery. The WAVES Summit 2025 showcased how India is approaching AI in the content industry with both ambition and talent, innovating and shaping India's next growth frontier.

3. Equally noteworthy is BIF's early recognition of the transformative role that emerging technologies, particularly Artificial Intelligence. As AI reshapes storytelling, learning, journalism, design, and entertainment, BIF's work on Responsible AI Innovation provides a valuable foundation for guiding ethical, transparent, and inclusive adoption across the media, entertainment, and education sectors. This is aligned with the government's sustained efforts to build safeguards to curb misinformation, protect creators, and sustain trust in digital media.

4. As India's digital narrative expands from ensuring broadband access to enabling cultural access, institutions like BIF will continue to play a vital role in empowering creators, educators, and innovators across the country. I warmly congratulate BIF on a decade of impactful contribution and extend my best wishes for its continued success in advancing India's digital and creative frontiers.

  
(Sanjay Jaju)

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**डॉ. पवन कुमार गोयनका**  
**Dr. Pawan Kumar Goenka**



**अध्यक्ष, इन-स्पेस**  
**Chairman, IN-SPACe**

### **Message**



I am pleased to extend my best wishes to Broadband India Forum on its 10<sup>th</sup> anniversary. BIF has made significant contribution to the Space and Satellite Communication policy landscape. I am quite confident and hopeful that they shall continue to add value to the growth of the Space sector to help facilitate affordable and ubiquitous Satellite Communications to every nook and corner of the country.

Globally these are very exciting times for the Space sector. We are entering a new era – with declining launch costs and satellite build costs, downstream applications like GSaaS and SaaS picking up and very high bandwidth capability generated by NGSOs and GSOs satellites - the space sector is truly taking off for newer orbits.

The global space economy is projected to become a Trillion-dollar economy soon. Satellite communications is the second-largest revenue driver after satellite navigation. India's satellite communication services market estimated to be \$4.2 billion in 2023, aims to grow to \$14.8 billion by 2033. Satellite technology is crucial for India's digital economy and offers ubiquitous coverage, high bandwidth, and low latency.

Rural internet penetration is around 46%, compared to ~100% in urban areas. This digital divide leaves much of rural India without broadband, and many areas still lack reliable cellular and fibre connectivity.

There has to be a collective effort to bridge this digital divide. The SATCOM industry, which is working hand in hand with the Telecom industry, should aspire to make India the most connected country in the world.

India has a huge opportunity to multiply connectivity and bridge the digital divide through satellite communications, particularly through Modern Satcom. The new Space Policy through the IN-SPACe's NGP (Norms, Guidelines and Procedures) will further enable both Indian/Global private sector participation & provide a level-playing field for private sector in the Space industry.

There is a lot of progressive work going on in different aspects and domains related to enhancement of the nation's digital connectivity and strengthening the digital economy. I'm sure BIF is already playing and will continue to play an active part in most of these areas, especially in satellite connectivity. On the 10<sup>th</sup> anniversary, I wish BIF all the best in their endeavours!

October 23, 2025

**(Dr. Pawan Goenka)**



**भारतीय राष्ट्रीय अंतरिक्ष संवर्धन एवं प्राधिकरण केंद्र मुख्यालय, बोपल, अहमदाबाद-380058**  
**Indian National Space Promotion and Authorization Centre Headquarter, Bopal Ahmedabad -380058**  
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## From the President's Desk



### Dear Stakeholders,

There have been many exciting developments in India's broadband and digital ecosystem in FY 2024-2025. BIF has been privileged to contribute to a number of these developments through research, advocacy and stakeholder consultations. We are optimistic that the coming year will bring more such advancements and look forward to everyone's support in navigating the policy and regulatory maze as we steadily march towards attaining Viksit Bharat's ambition in the sphere of digital growth and prosperity.

We sincerely thank the Government, regulatory bodies, our members across startups, academia, and industry, as well as our Principal Advisors, for their continued support. Their collaboration has been vital in empowering BIF to actively support the advancement of the sector and contribute to India's digital transformation journey.

## I. Past Year in Perspective

### 1. Telecom Policy and Regulatory Milestones

The government followed through on its telecom reforms by drafting a suite of **Telecommunications Rules, 2025** under the new Telecom Act, 2023.

- **Streamlining Licensing to Authorisations:** Building on TRAI's recommendations on service authorisation from last year and network authorisation earlier this year, the DoT came out with draft rules under the Telecommunications Act 2023 for authorisation, overhauling the licensing regime. **Draft rules were issued for Main Service Authorisations, Miscellaneous Service Authorisations, Network Service Authorisations, and Captive Service Authorisations in September-October 2025**, outlining how various telecom services would be governed under the Authorisation regime. In tandem, **the Draft Migration Rules, Restructuring & Merger & Acquisition Rules, and User Identification Rules** have been released to smoothly transition existing licensees to the new authorisation regime, give directions on mergers and restructuring amongst licensees or authorised entities, and ensure proper biometric based mechanisms for identification and verification of telecom users in the new regime.

BIF contributed inputs during TRAI's consultation stage and is continuing to engage on these draft rules, supporting simplification and ease-of-doing-business in telecom, while urging that new obligations (especially for emerging technologies and for players not providing services to the end consumers) remain light-touch and facilitative.

- **Other Rules under the New Telecom Rules:** Several other rules were released and notified, covering critical areas:
  - a. **Telecommunications (Digital Bharat Nidhi) Rules, 2024** – setting out the framework for a universal service obligation fund, now revised as Digital Bharat Nidhi.
  - b. **Telecommunications (Right of Way) Rules, 2024** – proposing reforms to streamline permissions for deploying infrastructure, a longstanding bottleneck in broadband rollout.
  - c. **Telecommunications (Cyber Security) Rules, 2024** – focusing on security across networks and services to enhance trust in telecommunications.
  - d. **Telecommunications (Procedures and Safeguards for Lawful Interception of Messages) Rules, 2024** – interception guidelines updated with procedural safeguards.



- e. **Telecommunications (Standards, Conformity Assessment and Certification) Rules, 2024** – aiming to ensure telecom equipment meets technical benchmarks and standards.
- f. **Telecommunications (Temporary Suspension of Services) Rules, 2024** – laying down clearer guidelines on service shutdowns.
- g. **Telecommunications (Critical Communication Infrastructure and Services) Rules, 2024** – focusing on resilience and continuity in essential telecom infrastructure.
- h. **Telecommunications (Assignment of Spectrum through Auction) Rules, 2025.**
- **Amendments to the Telecom Cybersecurity Rules:** The DoT also notified amendments to the Telecom Cyber Security Rules in October 2025, introducing a new entity called a “*Telecom Identifier User Entities (TIUEs)*”, not envisaged under the Telecommunications Act, 2023. This expands certain security obligations beyond traditional telecom licensees to other entities that use telecom resources viz. phone numbers (for instance, OTT communication apps, ). While the intent to curb fraud and misuse of telecom resources is understandable, BIF at the time of consultations on the Draft Amendments had flagged concerns that the Rules may overreach the regulatory scope of the Telecom Act to entities which have not originally been intended to be part of the Parent Act.

## 2. National Telecommunication Policy

India's NDCP 2018 set the vision of broadband for all, with strategies across six key areas (including connectivity, spectrum, satcom, innovation, inclusion, security, and cloud services). This year, attention turned to formulating the **Draft National Telecom Policy 2025**, themed around

a “**Digitally Inclusive Viksit Bharat**”. The Draft NDCP 2025 (circulated by NTIPRIT earlier for consultation, and thereafter, by DoT) doubles down on **universal connectivity, 5G/6G readiness, digital skilling, and service quality**. BIF has been involved from the early drafting stages – attending consultations and offering suggestions and we urged the government to consider evaluating the achievements and failures of NDCP 2018, in order to identify the reasons for backlog in target achievement. We emphasized **expanding public Wi-Fi networks (like PM-WANI)** and enhancing **digital infrastructure such as in-building connectivity**, importance of FTTX and deep penetration of fiber besides focus on subsea cables and data centers. BIF also highlighted and supported the enablers required to boost CNPNs (Private 5G Networks) in the new Draft Policy.

### 3. Enabling Enterprise Connectivity

Earlier this year, DoT carried out a demand survey to assess the demand for direct spectrum for the enterprises for CNPNs ( Private 5G Networks ). As per DoT the demand for direct spectrum was lukewarm.

DoT is now moving to formally recognize CNPNs under the new Captive Service Authorisation rules. However, it remains to be seen how direct allocation of spectrum to enterprises will be carried out in practice and at scale.

### 4. Satellite Communications: Navigating Hurdles

The satellite broadband sector in India made significant strides. Multiple satcom operators (global and Indian) moved closer to launching services, bringing the promise of high-speed internet to remote and rural areas. On the policy front, TRAI conducted a consultation and in May 2025 released recommendations on “Terms and Conditions for Assignment of Spectrum for Satellite- Based Services.” TRAI recommended imposition of spectrum usage fees as 4% percentage of AGR for all users and an additional fee of Rs. 500 per user per annum for urban users.

Some incumbent terrestrial operators raised concerns, arguing that not auctioning satcom spectrum could give satellite players an undue advantage and also rehashed arguments of the need for a level-playing field on the treatment of satcom services. BIF strongly rebutted these “level playing field” allegations. We continue to believe that satellite broadband serves fundamentally different markets and use-cases (remote coverage, low-density areas, inflight/maritime connectivity) and does not directly compete with cellular services. DoT's framework on the assignment and pricing of satcom spectrum are awaited.

Under the **Draft Main Service Authorization** Telecom Rules, satellite services (like GMPCS – Global Mobile Personal Communications by Satellite & Commercial VSAT CUG ) are being integrated as an access service





authorization. However, this is not in line with TRAI's Recommendations on Main Telecom Service Authorisation. BIF in its submissions emphasised that **satellite-based services are not merely a network or system**, and hence, must be recognised as a distinct category of telecommunication services in accordance with the intent and structure of the Telecommunications Act, 2023 and all extant Policies followed both in India and globally as well.

Additionally, **a new separate authorisation is proposed for standalone Satellite Earth Station Gateways** with spectrum to be assigned for feeder link under the Draft Network Authorisation Telecom Rules, thereby making it easier for companies to establish ground stations in India

#### 5. Unlocking New Spectrum for Modern Wi-Fi (Delicensing of Lower 6 GHz Band)

In a landmark move, the Government issued a draft gazette notification on 16 May 2025 to delicense the lower 6 GHz band (5925 – 6425 MHz) for Wi-Fi and related technologies. BIF provided feedback on ensuring the final rules are clear, industry-friendly, and supports a plethora of high bandwidth intensive applications using low and very low power.

While this decision to delicense the lower 6GHz took a long time, it is a critical milestone which, if realized, will be pivotal in enabling the delivery of high-speed and good quality broadband, especially indoors. However, the DoT is yet to issue the final gazette notification despite 6 months having elapsed. BIF has been a vocal proponent of opening the entire 6 GHz band for delicensed use for Wi-Fi and other applications like many other developed economies. Through intensive research-based studies, BIF has shown that delicensing the entire 6 GHz band can add enormous economic value (in education, healthcare, smart cities, etc.) and help meet exploding data demand cost-effectively.

We will continue to engage with DoT/TRAI to **advocate opening up of the entire 1100 MHz (5925–7025 MHz)** in line with global best practices in major developed economies.

#### 6. Improving In-Building Connectivity through Digital Connectivity Rating Framework

Recognizing that a huge portion of mobile data usage happens **indoors (70-80%)**, India took a unique step to encourage better in-building digital infrastructure to boost QoS of Digital Connectivity, **TRAI notified the "Rating**



of Properties for Digital Connectivity” Framework in October 2024 to rate buildings on their digital readiness. Under this framework, independent authorised/registered Digital Connectivity Rating Agencies (DCRAs) will assess buildings on parameters like fiber-optic backbone, indoor mobile signal strength, Wi-Fi coverage, and overall broadband speeds. A building can then proudly display a connectivity star-rating, akin to green building ratings. BIF supports this initiative as it incentivizes builders and property owners to behave like neutral hosts and invest in digital infrastructure and continuous upgrading of facilities like telecom ducts, common antenna systems (DAS), and FTTX, thereby fostering better competition and improving QoE for consumers. Over time, this will lead to a new market differentiation with well-rated “digital buildings” attracting tenants and buyers, thereby making high-quality digital connectivity a norm in homes and offices. Till date, eight agencies have already been registered as DCRAs, and the process of building robust, reliable and neutral in building infrastructure is finally kicking in, with a neutral third-party rating system. This is the first Rating system for Buildings being done of its kind anywhere in the world. The Concept Note is also being taken to ITU for being accepted as a global standard for rating of digital connectivity in buildings.

## 7. Advanced Telecommunication Infrastructure Provisions in National Building Code 2025

BIF played a pivotal role in the drafting of Chapter 6 (Information Technology) for the National Building Code 2025 as part of the Bureau of Indian Standards (BIS) committee, draft of which was released for public consultation with our inputs incorporated. We advocated for the mandatory adoption of fire-resistant optical fiber cables, secure Public Wi-Fi networks, and modern in-building solutions such as Distributed Antenna Systems (DAS) and Radio Access Networks (RAN) to be included in the NBC.

## 8. Public Wi-Fi (PM-WANI) – Reforming for Growth

The PM-WANI scheme saw few supportive regulatory interventions this year. To ensure PDOs can acquire backhaul bandwidth at affordable rates, TRAI introduced a **special tariff framework for PDOs to acquire bandwidth for providing Wi-Fi services**. TRAI through its 71st Telecom Tariff Order capped the wholesale tariffs charged to PDOs at no more than twice the retail tariff for a corresponding FTTH broadband plan of up to 200 Mbps. Though BIF had requested TRAI to make it equal to FTTH rates but nevertheless supported this move which takes into account prevailing market scenario, current levels of adoption of PM-WANI services, as well as potential future growth. By aligning with these considerations, the framework aims to facilitate the orderly, sustainable, and inclusive growth of the public Wi-Fi ecosystem under the PM-WANI initiative.



Another development is that **PM-WANI finds a place in the new licensing schema which had been so recommended by TRAI last year**. The **Draft Miscellaneous Telecommunication Services Authorization** explicitly covers **PM-WANI service providers**. This is basically a *formal recognition* of the PM-WANI framework within the Telecom Act regime and may enhance the confidence of the PDOs and app providers under this framework. BIF has urged that any formal authorisation for PM-WANI should remain true to the spirit of the Government initiative, which is “public Wi-Fi by the people, for the people” with minimal regulatory intervention.

## 9. National Data Centre Policy Revived

The Draft National Data Centre Policy which has been dormant since 2020, got a fresh impetus this year. The Ministry of Electronics & IT (MeitY) held stakeholder pre-consultations in August 2025 to shape a comprehensive National Data Centre Policy. A Draft Policy will soon be circulated. As per the discussions with MeitY, it is likely that the Draft Policy would focus on bringing major incentives, notably, up to a 20-year tax holiday for data centre operators along with measures to simplify land acquisition, power supply, and connectivity for new data centre parks, and single window clearance. This push comes as India’s Data Centre requirement is increasing and global investors are keen on the Indian market. With BIF having set up a dedicated **Data Centre Committee**, we lent our voice in support of **sustainable and business-friendly measures**, such as renewable energy use, captive connectivity, and rationalizing tariffs for electricity. The Data Center Policy, once finalized, would unleash significant investment and ensure that the infrastructure underpinning our digital economy is robust and home-grown.

## 10. DPDP Act: Implementation Awaited

The focus this year has been on operationalizing the **Digital Personal Data Protection (DPDP) Act, 2023**. In early 2025, MeitY released Draft DPDP Rules for public comment, detailing how consent, data handling, user rights, and penalties would work under the Act. BIF participated actively in the consultations held during March–April this year. We provided feedback on ensuring the rules are clear, industry-friendly, and uphold consumer trust.

One specific aspect that BIF focused on is the treatment of data belonging to persons with disabilities. BIF, in its submission, recommended that the Rules provide safeguards to ensure that PwDs are not denied services or access to their data due to any ambiguity in the framework under the Act. The aim should be to **empower and include PwDs**, not inadvertently exclude them.

We expect the notification of rules in the near future, which will kickstart the compliance timelines under the Act.

## 11. Responsible AI Governance

Artificial Intelligence has been a hot policy topic worldwide, and India is no exception. BIF has been an active participant in this domain. This year, we released our Special Task Force on AI's report titled "Responsible AI Innovation" on the occasion of the World Telecommunication and Information Society Day held on

14 May, 2025. The Report explores how India can look at AI governance in a way that enables adoption and use of AI for the benefit of the society.

We have engaged with policy bodies to advocate a risk-based, proportionate approach to AI governance. At the India Internet Governance Forum (IIGF) 2024, BIF hosted a panel discussion on 'Responsible AI Innovation in India'. Experts from government, industry and academia deliberated on issues like AI transparency, bias mitigation, data protection, and accountability. The discussions reinforced our belief that industry best practices, combined with thoughtful government frameworks, can make AI a boon for India's development with minimal downsides.

With AI in the spotlight and the AI Impact Summit 2026 being planned for February 2026, the government is also mulling a broader AI governance framework. BIF contributed inputs towards MeitY Sub-Committee's Draft Report on AI Governance Guidelines released in January 2025. Most recently in August 2025, **RBIFREE-AI** committee released its report on framework for responsible and ethical enablement of Artificial Intelligence. The **Competition Commission of India (CCI)** also added its weight to AI policy via a **Market Study on AI and Competition**, released in October 2025. This extensive report studies how AI is being used across sectors, what new competition issues might arise (like algorithmic collusion or data monopolies), and how regulators should





respond. It encouraged companies to adopt ethical AI charters and self-audits to prevent anti-competitive behaviour. TEC (Department of Telecommunications) is also working **on developing a standard for assessment and rating of AI systems** including fairness and robustness involving bias risk assessment. BIF has participated and contributed towards development of this standard.

We anticipate that in the coming months, there could be more such reports to ensure responsible AI use in critical sectors (finance, healthcare, etc.) and alignment with global standards. We intend to **bring industry perspectives to the table**, ensuring that any framework protects citizens and builds trust in AI without hampering innovation or adding excessive compliance costs on startups.

## 12. Legal Intervention – *ANI v. Open AI* case

In a first-of-its-kind legal case in India, news agency ANI filed a lawsuit against OpenAI in late 2024, alleging that ChatGPT was trained on ANI's copyrighted news content without permission. This case has wide implications for AI development, essentially testing how copyright law applies to text and data mining for AI training. Sensing the significance, BIF decided to intervene in the case by filing an application to assist the Delhi High Court. **Our aim is to present a balanced perspective that represents India's digital innovation interests.** We have argued that using publicly available information to train AI models, in a non-expressive, transformative manner, can be seen as an innovative fair practice as long as it doesn't substitute the original works.

BIF seeks to bring forth that India's tech economy stands to benefit greatly from AI, and we need clarity that

balances IPR protection with AI innovation. The case is ongoing, and regardless of the outcome, it has sparked a necessary conversation in policy circles about updating our laws for the AI age.

## 13. Charting New Frontiers, Anticipating Priorities

In a year that placed infrastructure and resilience at the heart of India's digital ambitions, BIF moved swiftly to spotlight two critical but under-addressed pillars of connectivity — subsea cables and mission-critical communications. Recognising these as emerging national priorities, **BIF took the lead in convening India's first-ever international conferences on both themes**, drawing global participation and policy attention.

The **International Conference on Subsea Cable Systems** (March 2025), co-hosted with the Global Digital Inclusion Partnership, highlighted investment gaps, redundancy needs, and the urgency of expanding CLS and cable repair infrastructure in the context of the evolving geo-political situation. The Government's subsequent recognition of **submarine cables as "Critical Telecommunication Infrastructure"** under the Telecom Act 2023 reflects this rising priority.

Later in August, BIF held the **1<sup>st</sup> International Conference on Critical Communications** in partnership with The Critical Communications Association (TCCA), focusing on Public Protection and Disaster Relief (PPDR), emergency networks, and resilient connectivity. These landmark initiatives reaffirm BIF's ability to anticipate policy inflection points and commitment to translate these into meaningful industry-government dialogue.





## Looking Forward ....

The developments highlighted above underscore an important fact: India's digital and broadband ecosystem is on an accelerated growth path, supported by progressive policies and a collaborative approach among stakeholders. Over the past year, we have seen foundational telecom reforms, concrete steps to improve digital connectivity with a view to promote ease of doing business, and thoughtful beginnings in governing new frontiers like AI and data privacy.

## II. Summary of the key highlights of BIF's activities and achievements since the last AGM held in October 2024, for quick reference:

- ❖ **25 October 2024:** BIF released a research paper on "Digital Infrastructure: Investing in the Future for a Viksit Bharat" on 25<sup>th</sup> October 2024 in New Delhi. The Chief Guest, Shri Deb Kumar Chakrabarty, Director General, National Communications Academy (Former NTIPRIT), DoT, released the study report.
- ❖ **1 December 2024:** BIF organized a webinar on 'Cybersecurity for the Common Man.' The session featured Ms. Amrita Choudhury, Director, CCAOI, and Mr. Alok Gupta, Founder & CEO, Pyramid Cyber Security & Forensics.
- ❖ **25 March 2025:** BIF in association with Global Digital Inclusion Partnership hosted India's First Ever International Conference on Subsea Cable Systems. Shri Anil Kumar Lahoti, Chairman, TRAI was the Chief Guest, and Shri. Robert J. Ravi, CMD, BSNL was the Guest of Honour of the Inaugural session. The event saw participation from leading industry members such as Meta, Lightstorm, Bharti Airtel, NEC, and several others.
- ❖ **14 May 2025:** BIF organized its annual Celebration of World Telecommunication and Information Society Day (WTISD) 2025. The theme for the WTISD Celebration was in line with the WTISD 2025 Theme: "Gender Equality in Digital Transformation". On this occasion, BIF also released its Working Paper on Responsible AI by Shri Atul K. Chaudhary, Secretary, TRAI. The Working White Paper on Responsible AI prepared by BIF's Special Taskforce on AI (STaFAI) underscored our commitment to contribute to the AI governance framework.
- ❖ **24 June 2025:** BIF organized its Annual Celebration of World Wi-Fi Day 2025 with Shri. Jyotiraditya Scindia, Hon'ble Minister of Communications gracing the occasion as the Chief Guest along

with Dr. R.S. Sharma, Former Chairman, TRAI, Former CEO- NHA & Former Non-executive Chairperson, ONDC; Mr. Osama Manzar, Founder & Director, Digital Empowerment Forum; Smt. Aruna Sundararajan (IAS ret'd.), Chairperson, BIF. The theme for the Wi-Fi Day Celebration was “Transforming India, Innovating for the World” in line with the India Mobile Congress theme.

- ❖ **22 August 2025:** BIF organised the First International Critical Communications Conference International in New Delhi in collaboration with The Critical Communications Association. Shri Anil Kumar Lahoti, Chairperson, TRAI was the Chief Guest which also saw a galaxy of international and national speakers and experts from the field of Mission Critical Communications, Disaster Management & PPDR . The Conference was a resounding success and showcased the importance & role of critical communications while ensuring a robust and resilient digital infrastructure across the country.
- ❖ **9 September 2025:** BIF hosted its Digital Dialogue on “Cyber Security Challenges in Telecom Sector” & Release of Paper on “Broadband Internet Security”. BIF’s Paper on “Broadband Internet Security” was released by Shri Mehul R Joshi, DDG (SA), DoT

### III. Other Key Events & Engagements: BIF also co-hosted, as well as participated in a number of events during the period, as follows (September 2024 till October 2025):

- ❖ **27 September 2024:** BIF co-organised the Broadband India Summit with Bharat Exhibitions, bringing together key stakeholders from government, industry, and academia to discuss strategies for accelerating broadband proliferation across the country. The event featured an inaugural address by Mr. T. V. Ramachandran, President, BIF, and a vote of thanks by Brig. Anil Tandan, DG, BIF.
- ❖ **14 November 2024:** BIF co-organised the 10th Edition of the Data Centre India 2024 Annual Conference in collaboration with Bharat Exhibitions. The conference served as a prominent platform for discussion on the evolving data centre ecosystem, digital infrastructure growth, and policy frameworks supporting India’s digital transformation.
- ❖ **15-16 November 2024:** The 8th Community Network Exchange (CNX) – an annual gathering of diverse stakeholders was held in Hyderabad, with the

theme as “Building Communities for Right to Access and Access to Right”. It focused on addressing the challenges of network deployment in rural and remote areas and the subsequent digital divide. At CNX, Broadband India Forum (BIF) and the Digital Empowerment Foundation (DEF) jointly hosted a panel discussion on the topic “Digital by Design in Indian Legislation: Implications for Meaningful Connectivity for Persons with Disabilities”.

- ❖ **6 December 2024:** Bharat Defence Summit 2024 – Broadband India Forum (BIF) extended its support to Bharat Exhibitions (BE) for the successful conduct of the Summit, which focused on advancing indigenous defence technologies and strengthening public–private collaboration in the defence sector. BIF’s participation underscored its







commitment to promoting secure, high-technology communication systems for national defence and strategic applications.

- ❖ **9-10 December 2024:** 4th edition of India IIGF 2024 at Bharat Mandapam organised on the theme “Innovating Internet Governance for India and 5 subthemes. There were 2 Main panels, 4 High Level Panels, 13 Workshops and 2 Community Engagement – Showcase Sessions.

**BIF contributed actively in the organisation of the Conference and also organised 2 workshop sessions on:**

- ICT for Empowering Accessibility/Inclusion: The Impact of Digital Integration on the Lives of Persons with Disabilities (PwDs).
  - Responsible AI Innovation.
- ❖ **12 December 2024:** BIF partnered with Primus Partners and the India SME Forum to organize the event on Leveraging Online Ads for India where it released a report on “Unpacking the Impact of Online Ads on MSMEs and Startups – A Multistakeholder Perspective.” The discussions highlighted the critical role of digital advertising in enabling growth, innovation, and market access for MSMEs and startups. Ms. Mira Swaminathan represented BIF and moderated one of the panel discussions at the event.
  - ❖ **12 April 2025:** BIF partnered with Bharat Exhibitions for the 2nd Bharat Digital Healthcare Summit 2025, held in New Delhi. The Summit served as a platform

for multi-stakeholder discussions on leveraging digital technologies to enhance India’s healthcare delivery system.

- ❖ **14 May 2025:** BIF partnered with Bharat Exhibitions for the 3rd edition of Bharat 6G 2025 International Conference & Exhibition held in New Delhi. Brig. Anil Tandan delivered the Vote of Thanks during the Inaugural session of this event.
- ❖ **17-19 June 2025:** BIF participated in Critical Communications World Conference (CCW 2025) in Brussels, which was organised by TCCA. BIF put up a booth/kiosk in the TCCA Partners ‘Village which attracted lot of visitors and keen enthusiasts from both industry and Government about the Indian Broadband and the Critical Communications market, as a precursor to the First International Critical Communications event that was scheduled to be held on August 22nd, 2025 in Delhi. BIF was represented by Mr. Debashish Bhattacharya, Sr. DDG who also made a presentation on the Indian Critical Comms market to the global audience.
- ❖ **17 July 2025:** BIF partnered with Bharat Exhibitions for the 3rd edition of the Broadband India Summit 2025 held in New Delhi. Brig. Anil Tandan delivered the Vote of Thanks during the Inaugural Session of the event.
- ❖ **28 August 2025:** BIF partnered with Bharat Exhibitions for the 3rd Safe City and Intelligent Mobility India 2025 Conference & Exhibition, held in New Delhi. Brig. Anil Tandan delivery the Vote of Thanks during the inaugural session of the event.

- ❖ **23 September 2025:** BIF partnered with Bharat Exhibitions for the Bharat Digital Infra Summit 2025, held in New Delhi. Brig. Anil Tandan delivered the industry address during the inaugural session. A White Paper authored by Mr. Sundeep Kathuria, Advisor, BIF entitled “**Digital Infrastructure for Viksit Bharat @ 2047 – A Roadmap for Inclusive Growth**” was released during the event.

#### **IV. BIF was also invited to important meetings organised by TRAI, DoT, MoHUA, MeitY, DoS, MoF and MIB:**

1. Mr TV Ramachandran, BIF is a member of the Stakeholders Advisory Committee (SAC) for Internet Service Providers (ISPs) & Infrastructure Providers (IPs) constituted by the Hon'ble Minister of Communications (MoC), Department of Telecommunications, Ministry of Communications and participated in all the meetings held so far.
2. BIF participated in the workshop on “Building a culture of Data Protection: Implementing the DPDP Act effectively” to explore the implications of the DPDP Act and to discuss practical strategies for ensuring compliance organised by the National e-Governance Division (NeGD) under the Ministry of Electronics & Information Technology (MeitY) in October 2024.
3. BIF participated in the various meetings held under the chairpersonship of Additional Secretary (T) to discuss the comments and finalisation of the draft rules under the Telecommunication Act 2023. Many of the recommendations were included in the final Rules promulgated.
4. BIF has participated and contributed in the meetings of the Working Groups of NFAP-2022 Review/ Revision Committee.
5. BIF has participated and contributed to the meeting of NWP 4C organised by WPC, DoT, NWP-5D and NWP-3 organised by the relevant authorities and NWP-5C Meeting on Spectrum assignment/allocation & IF issues in the ‘ E band. BIF has participated and contributed to the meeting of NWP 4C organised by WPC, DoT, NWP-5D and NWP-3 organised by the relevant authorities and NWP-5C Meeting on Spectrum assignment/allocation & IF issues in the ‘ E band.
6. BIF was invited to discussion on Cigarette and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply, and Distribution) Amendment, 2024 (Draft COTPA Amendment Rules, 2024), issued by the Ministry of Health & Family Welfare (MOHFW) on 13 September 2024 where we advocated for measures that address public health concerns without harming user experience, impacting creative freedom and stifling industry growth.
7. BIF has given its nominations to the ITU-D National Working Study Groups for the Study Period 2025-2028.
8. BIF participated in the meeting of NSG-6 and NSG 4 for the ITU-R Study Circle for the cycle 2024-2027.
9. Brig. Anil Tandan, DG participated in the IT Ministers Meeting held under the chairmanship of MoC at the WTSA 2024 and gave BIF views on how to increase the broadband penetration.







10. Brig. Anil Tandan, DG and Mr. Debashish Bhattacharya, Sr. DDG, BIF attended the International 6G Symposium organised by Bharat6GAlliance in October 2024.
11. Brig. Anil Tandan, DG and Ms. Mira Swaminathan Director-Policy Advocacy and Communications attended and spoke at two stakeholder consultations organised by the Ministry of Electronics and Information Technology on the Digital Personal Data Protection Rules, 2025. One consultation, organised in Jan 2025, was chaired by Hon'ble Union Minister of Electronics and Technology, Shri Ashwini Vaishnaw; and the second, closed-door consultation was organised in Feb was chaired by Hon'ble Union Minister of State of MeitY, Shri Jitin Prasada.
12. BIF participated in the Launch of NBM 2.0 by Hon'ble Minister of Communications.
13. BIF participated in the Fifth Meeting of the Panel for Information And Communication Enabled Installations, CED 46:P21 of BIS in January 2025.

14. BIF participated in the MATCOF meeting for merging ERs for Base Station for Cellular Network (upto 4G) and Base Station for Cellular Network for 5G in January 2025.
15. BIF participated in the Industry meet on MTCTE product grouping organised by NCCS, DoT, Bangalore in February 2025.
16. BIF participated in 10th Spectrum WG meet organised by Bharat 6G Alliance in March 2025.
17. BIF participated in the Telecommunications (Assignment of Spectrum through Auction) Rules, 2025 convened by the Jt. Secy, DoT in April 2025.
18. BIF actively participated in the Open House Discussion(OHD)on the Draft Telecommunication Tariff (71st Amendment) Order, 2025 in April 2025.
19. BIF participated in the Stakeholder Consultation on the 3rd AI Readiness Assessment Methodology (RAM) in India organized by Meity-UNESCO-IKIGAI held in Hyderabad in April 2025.
20. BIF Team led by the DG met with the Chairman, TRAI and TRAI team and presented a BIF proposal for a multi-sourced, near-real-time system of QoS measurement in India in April 2025.
21. BIF participated in the Stakeholder Consultation conducted by TEC on their Draft Standard on "Robustness Assessment and Rating of Artificial Intelligence Systems in Telecom Networks" in May 2025.
22. BIF participated in the Stakeholder Consultation on Draft National Telecom Policy 2025 convened by Joint Secretary (Telecom) in May 2025.
23. BIF participated in the Stakeholder Consultation on Telecom Skilling Initiatives of Department of Telecommunications (DoT) convened by Secretary (Telecom) in May 2025.
24. BIF participated in the stakeholder consultation organised by Bureau of Indian Standards to discuss the Draft Indian Standard on 'E-commerce Principles and Guidelines for Self-Governance' in April and June 2025.
25. BIF team made a one-on-one presentation to TRAI team on its ongoing Consultation Paper on Digital Inclusion in the Era of Emerging Technologies in June 2025.
26. BIF participated in the Sixth Meeting of the Panel for Information and Communication Enabled Installations, CED 46:P21 organized by Bureau of Indian Standards on 3 June & 26 June 2025.

27. BIF participated in several meetings on D2M technology convened by Prasar Bharati in July 2025.
28. BIF participated in NCCS Stakeholder Consultation on Draft ITSAR for Open RAN (O-RAN) of 5G: O-RU, O-DU, OCU in August 2025.
29. BIF participated in the industry consultation convened by Jt. Secy, MeitY on the Draft National Data Centre Policy in August 2025.
30. BIF participated in the stakeholder consultation called by MeitY and made a presentation on the issues emerging from the Draft Telecom Cyber Security (Amendment) Rules 2025 in August 2025.
31. Mr. Debashish Bhattacharya, Sr. DDG, was part of the Indian delegation for the 2nd Meeting of the APT Conference Preparatory Group for WRC-27, held from 28 July to 1st August 2025 at Pattaya, Thailand.
32. BIF participated in the meeting of Working Group for the preparation of Technical Report on “Interworking and Integration of 5G/6G with Non-Terrestrial Networks (NTN)” held in September 2025.
33. BIF attended Manufacturer’s Forum Meeting on Wi-Fi over WoMw AP/STA for FWA Services in IMT Band in September 2025.

## **V. BIF’s Senior Leadership team has been invited by the Government and various industry forums to participate as Speakers:**

1. Ms. Mira Swaminathan, Director – Policy Advocacy & Communications was a speaker at ElecTech 2024: AI, Disinformation, and the Future of Electoral Integrity organized by the Dialogue. She spoke on the panel titled “AI and Content Moderation for Informed Democracy” on 7 October 2024.
2. BIF’s Senior Leadership Team consisting of Brig. Anil Tandan, DG and Mr Debashish Bhattacharya, Mr Atul Jain Director, and Mr Amul Madan were members of the Indian delegation for the WTSA 2024 on 15 -24 October 2024.
3. BIF was invited to a workshop organised by Koan Advisory on “Exploring Indian Perspectives on Cloud Sovereignty” on 18 October 2024.
4. Ms. Mira Swaminathan, Director – Policy Advocacy & Communications participated in the World

Summit Award Congress - Hyderabad where it made a Presentation on BIF’s work on Digital Inclusivity and Accessibility, and also participated in a Panel Discussion on Digital Inclusivity and Accessibility on 09 April 2025.

5. Mr. Debashish Bhattacharya, Sr. DDG participated in USIBC hosted U.S. - India ICT Interim Working Group Meeting held on 23 April 2025.
6. Brig. Anil Tandan, DG, delivered a lecture at Institute of Engineers on Broadband Resilience on 25 April 2025.
7. Mr. Atul Jain, Director – Technology & Standards spoke at the Conference on OFC Networks in India hosted by Tele.net in New Delhi on 22 May 2025.
8. Brig. Anil Tandan, DG participated and delivered a talk on Fibre Based Fixed Broadband for Digital Inclusivity at the ISPAI event held on 27 May 2025.
9. Brig. Anil Tandan, DG spoke on the “Digital Infrastructure for Bharat: Bridging the Digital Divide” at the Inaugural Session of the Telecom Leadership Forum Awards 2025 organised by Voice & Data on 30 May 2025.
10. Mr. Debashish Bhattacharya, Sr. DDG spoke at a roundtable discussion on Peering in India at ISOC’s Global Peering Roadshow – India Edition hosted by ISOC in partnership with MediaNama on 6 June 2025.
11. Mr. Debashish Bhattacharya, Sr. DDG attended and made a presentation at the Critical Communications World Summit, Brussels Expo at Brussels, Belgium from 17 to 19 June 2025.
12. Mr. Debashish Bhattacharya, Sr. DDG, was invited to the Bharat 6G Alliance Review Meeting Chaired by the Hon’ble MoC in Bangalore on 10 July 2025.
13. Ms. Mira Swaminathan, Director – Policy Advocacy & Communications conducted a session during Inclusive ICT workshop for girls with disabilities in Kathmandu, Nepal, organised by the International Telecommunication Union (ITU) and the Nepal Telecommunications Authority (NTA) on 10 July 2025.
14. Brig. Anil Tandan, DG participated as a speaker in Wavelength – Submarine Cable Forum held in New Delhi on 16 July 2025.
15. Ms. Shubhika Saluja, Dy. Director- Policy Advocacy & Communications was a Panellist for the DEF technical session on “Governing Digital Disability Inclusion” at the Gender and Inclusion

Conference 2025 held in Hyderabad on 8 August 2025.

16. Mr. T.V. Ramachandran spoke at a panel on “Connecting the unconnected” at International Institute of Communications India Forum held in New Delhi on 27 August 2025.
17. Brig. Anil Tandan, DG made a presentation on Critical Communication during the technical session on “Technology for Risk Reduction – for a Safer Nation” at the NDMA 21st Foundation Day celebration in New Delhi on 26 September 2025.
18. Mr. Atul Jain, Director – Technology & Standards, BIF made a presentation on “Positioning India as a Global Data Center Powerhouse: Strategic Policy Initiatives” at the 8<sup>th</sup> Annual Data Centres in India Conference organized by India Infrastructure Publishing Pvt. Ltd. in New Delhi on 15 October 2025.

## VI. Research Reports & Publications:

A number of interesting White Papers and Reports were published by BIF during the period, as follows:

- A paper on “Digital Infrastructure: Investing in the Future for a Viksit Bharat” was released in association with The Quantum Hub.
- A Report on “ICT for Empowering Accessibility/ Inclusion: The Impact of Digital Integration on the Lives of Persons with Disabilities (PwDs)” jointly prepared by BIF-DEF-CDPP was released at IIGF 2024.
- A Policy Brief on “Data Protection for Persons with Disabilities: Gaps, Challenges, and the Way Forward” was published in association with Digital Empowerment Foundation and Centre for Development Policy & Practice.
- A Report on “Unpacking the Impact of Online Ads on MSMEs and Startups – A Multistakeholder Perspective” was released in collaboration with Primus Partners.
- A Working White Paper on Responsible AI Innovation was launched as part of the event held to celebrate the WTISD Day.
- A Paper on “Broadband Internet Security” was released during the Digital Dialogue on Cyber Security Challenges in Telecom Sector.
- BIF’s White Paper entitled ‘Digital Infrastructure for Viksit Bharat: A 2047 Roadmap for Inclusive Growth’ was released at the Bharat Digital Infra Summit 2025.

## VII. Members, Advisors, and Directorate:

- New members who joined the BIF family:
  - a. **Patrons:** Airtel, Jio, TCL, Whatsapp
  - b. **Startups, Academia & Professionals:** The Dialogue, Immunity Networks, Laraon
  - c. **Altius** – Redesignation of erstwhile members Crest Digitel and ATC on merger
- Shri G.K. Agarwal, Former Wireless Advisor to the Govt. of India WPC wing Department of Telecommunications has joined as Honorary Principal Advisor on 7 May 2025.
- Mr. Arun Mukarji, Sr. Director – Operations re- joined BIF Directorate in August 2025.
- Ms. Ashika V, Director– Policy Advocacy & Communications joined BIF Directorate in September 2025.
- Mr. Sundeep Kathuria, Sr. DDG moved on from Directorate but is supporting BIF as a Consultant.
- Ms. Mira Swaminathan, Director – Policy Advocacy and Communications moved on from BIF in July 2025.
- Mrs. Neema Sunil Kumar, Director – Projects and Committees moved on from BIF in March 2025.
- Mrs. Seema Santosh, Dy. Director – Coordination moved on due to some personal and health concerns.

## VIII. Committee Updates:

- Broadcasting Committee has been constituted under the Chairmanship of Mr. Rahul Vatts, Airtel and Co-Chairman, Mr. K. Aravamudhan, JioStar and the first meeting of the same was held on 1 July 2025.
- Data Centre Committee has been constituted under the Chairmanship of Mr. Sundeep Aurora, Microsoft and Co-Chair: Mr. Saurabh Singh, AWS.
- Mr. Kulin Sanghvi, Apple accepted the position as Chairman, Device Ecosystems Committee and Mr. Rajeev Aggarwal, Samsung as Co-Chair.
- Mr. Gopa Kumar Krishna, RANext (Space World Group) accepted the position as Chairman, FTTX & IBS Committee.



## IX. New Projects & Partnerships:

- BIF signed an MoU with Advertising Standards Council of India to collaborate on matters of research and activities on emerging areas of advertising.
- BIF signed an MoU with Primus Partners for collaboration on MoU to partner as Knowledge Partner for the Research Study & Launch Event on “Unpacking the Impact of Online Ads on MSMEs and Startups-A Multistakeholder Perspective”.

## X. Articles and Interactions for Advocacy and Creating Awareness:

A wide range of authored articles and interaction-based news features were published in leading mainstream and trade media outlets during FY 2024–25. These pieces addressed key issues and critical aspects of India’s broadband and digital ecosystem. The objective of these articles has been to promote the vision of ubiquitous, affordable, and accessible broadband services across the country in a technology-neutral, service-neutral, and inclusive manner. These efforts further strengthened BIF’s positioning and credibility as a leading think tank with a knowledgeable, unbiased, and forward-looking approach toward technology and its benefits for citizens. Please refer to the Articles & Interviews section for details

## XI. Public Relations:

Glances of the nature of media coverage received throughout the FY is provided in the BIF in Media section.

## XII. Social Media:

BIF effectively leveraged its digital and social media platforms to enhance engagement with members and stakeholders. The Forum’s online presence grew steadily, with increasing traction and followership. Regular updates on BIF’s initiatives and events were shared through these channels, strengthening its outreach and visibility.

## XIII. Accounts:

Necessary extracts of the Society’s Audited Statement of Accounts for the Financial Year 2024–2025 have been circulated to all Members prior to the Annual General Meeting.

I wish to place on record my sincere appreciation to the Chairperson for her leadership, and to all Members, Advisors, and Associates of BIF for their continued support and active engagement. I also extend my gratitude to the Executive Council and Office Bearers for their guidance, commitment, and valuable contributions to the Forum’s initiatives and achievements during the year.

Special acknowledgment is due to the BIF Directorate, a small yet highly dedicated and dynamic team, for their professionalism and tireless efforts in advancing the objectives of the Forum.

I convey my best wishes to the Forum and its Members for continued success and reaffirm my commitment to extending full support and participation in all future activities of the Society.

**T.V. Ramachandran,**  
*President*





# POLICY ADVOCACY INITIATIVES

**FY 2024-25**

## 1. Spectrum Policy

- ▶ Made several submissions to the Hon'ble Minister of Communications, Members of DCC, and Members of Committee of Secretaries on making the entire 6 GHz spectrum band as license-exempt.
- ▶ Provided comments on Meeting of WG-3 of NFAP 2025 (8 Jan 2025) — Proposals for consideration and minutes of the final meeting for 6 GHz bands.
- ▶ Submitted a dissent note to Chair, B6GA and DG, Bharat 6G Alliance on the Final Report on Spectrum Roadmap for 6G in India highlighting the need to earmark 6 GHz spectrum for Wi-Fi.
- ▶ BIF issued a PR highlighting its strong and firm opposition to false narratives being spread on the issue of the level playing field between terrestrial and satcom services in relation to the issue of allocation/assignment of Satellite Spectrum and was subsequently shared with the members also. This was well covered by the media.
- ▶ Wrote to Secretary (T) requesting classification of citizen-safety mobile satellite services as a separate category in NFAP 2024.



## 2. Telecom Rules including Standards Procedures and Regulatory Matters

- ▶ Wrote to Hon'ble MoC requesting the Government to facilitate industry-wide consultation on Draft Rules under the Telecom Act before notification.
- ▶ BIF actively contributed inputs and participated in stakeholder consultations on the following Draft Rules:
  - a. Draft Telecommunications (Digital Bharat Nidhi) Rules, 2024
  - b. Draft Telecommunications (Right of Way) Rules, 2024
  - c. Draft Telecommunications (Cyber Security) Rules, 2024
  - d. Draft Telecommunications (Procedures and Safeguards for Lawful Interception of Messages) Rules, 2024
  - e. Draft Telecommunications (Standards, Conformity Assessment and Certification) Rules, 2024
  - f. Draft Telecommunications (Temporary Suspension of Services) Rules, 2024
  - g. Draft Telecommunications (Critical Communication Infrastructure and Services) Rules, 2024
- ▶ Made detailed submissions contributing towards the preparation of the Draft National Telecom Policy 2025 to the National Communications Academy-Telecom (erstwhile NTIPRIT). BIF also contributed inputs during the pre-consultation stage of the Draft Policy before DoT and participated in closed-door stakeholder consultations headed by Joint Secy on the Draft National Telecom Policy 2025. BIF also made submissions during the public-consultation stage.
- ▶ Wrote to TEC requesting waiver of MTCTE for ICT products.
- ▶ Meeting with Member (Services), DCC was organised on 9th October, 2024 with members of the Network Manufacturing Committee viz. Cisco, Ericsson & Nokia on the COMSEC issue. Also attended subsequent meetings pertaining to COMSEC issue at DoT HQ.
- ▶ Wrote to DoT regarding TRAI Recommendations on Roaming Restriction using Embedded SIM for M2M Communications (21 March 2024).
- ▶ Submitted a response on Draft Indian Telecom Security Assurance Requirements (ITSAR) for Wi-Fi CPEs and IP Routers (Version 2.0.0).
- ▶ Submitted a response to Draft DoT PPP-MII Order dated 11 Sept 2024.
- ▶ Submitted a note on Exposure Control Limits for Mobile Tower EMF Radiation.
- ▶ Made contributions towards finalising the ICT chapter of BIS Standard CED 46: P21/A-2.5 as part of new National Building Code 2025
- ▶ Made submissions seeking government's guidance & intervention on the matter of quality of service (QoS) and the role played by handsets.



### 3. Submissions to Stakeholder Advisory Committee for Internet Service Providers

- ▶ BIF actively participated in all nine meetings of the Standing Advisory Committee (SAC) chaired by the Hon'ble Minister of Communications, contributing on key policy issues. In its submissions, BIF strongly advocated for:
  - ⦿ Concerns related to RoW;
  - ⦿ Delicensing of the 6 GHz spectrum band to enable next-generation Wi-Fi capabilities;
  - ⦿ Proliferation of Public Wi-Fi;
  - ⦿ Problems of the cascading license fee burden on ISPs.
- ▶ Made substantial submissions for revision of minimum speed of wireline Broadband from 2 Mbps to 50 Mbps in near term and 100 Mbps in longer term.
- ▶ Advocated for the need for proliferation of subsea cables and diversification of CLSs in India.
- ▶ Made a presentation about crowdsourced measurement of QoS for telecom services.
- ▶ Made significant contributions advocating for simplified portal-based and light touch authorisation requirements for IXPs.



### 4. Digital Infrastructure

- ▶ Submitted a background note on the importance of subsea cables and CLS to the Hon'ble Minister of Communications.
- ▶ Wrote to Secretary (T) on the role of subsea cables in building a robust internet backbone and the need for an enabling policy framework.
- ▶ Wrote to Secretary (T) on the need for incentivisation of rural fixed-line broadband connections by waiving license fee for a few years.
- ▶ Wrote to DoT on the need to enhance fixed broadband accessibility and empower small ISPs.
- ▶ Submitted a note on Cloud Services and Data Centre Power & Sustainability Concerns to Additional Secretary (MeitY) following the Dec 2024 meeting.
- ▶ Submitted recommendations to DoT on Internet Infrastructure Backbone, Public Wi-Fi & Digital Divide.





## 5. PM-WANI and Public Wi-Fi

- ▶ Contributed extensively towards the TRAI consultations on the Draft Telecommunication Tariff Orders in relation to the cost of internet bandwidth for PDOs under the PM-WANI framework.
- ▶ Submitted a justification for nationwide implementation of PM-WANI and requested examination of PDO connectivity and tariffs in Delhi.

## 6. AI in Networks and Emerging Technologies

- ▶ Submitted comments on Draft TEC Standard for Assessing and Rating Robustness of AI Systems in telecom networks and digital infrastructure.
- ▶ Submitted inputs to TEC on Draft Study Paper on Opportunities for AI in Communication Networks.



## 7. Direct-to-Mobile Technology

- ▶ Made a submission to Secretary (MeitY) on Direct-to-Mobile (D2M) Technology highlighting the merits of all alternate technologies for D2M service.
- ▶ BIF actively contributed to the TEC report on D2M in March-April 2024.



## 8. Internet Applications, Platform Regulation and Content Governance

- ▶ Submitted comments on Draft Quality Control Order on Online Consumer Reviews (Department of Consumer Affairs).
- ▶ Wrote to DoCA and MeitY on Draft Guidelines for Prevention and Regulation of Unsolicited Business Communication, 2024.
- ▶ Submitted a letter to Secretary (Telecom) responding to media articles on OTT regulation, clarifying that OTTs should not be subject to telecom-style regulation or revenue-sharing obligations.
- ▶ Submitted inputs on Committee Report on Draft Digital Competition Law.
- ▶ Submitted comments to CCI on the Draft Amendments to the Competition Commission of India (Manner of Recovery of Monetary Penalty) Regulations, 2011.
- ▶ Wrote to MIB supporting the joint submission by IAMAI, IBDF, IDMIF & DPCGC on Draft COTPA Amendment Rules.
- ▶ Submitted a Research Note on Deepfakes to MeitY's Committee on Deepfakes.
- ▶ Submitted comments on Digital Personal Data Protection Rules 2025 and participated in stakeholder consultations led by the Hon'ble Ministers for Electronics and Information Technology, as well as Hon'ble Minister of State for Electronics and Information Technology, in January and February 2025.
- ▶ Submitted comments on MeitY's Draft Sub-Committee Report on AI Governance Guidelines Development.
- ▶ Submitted comments on BIS's Draft Indian Standard on 'E-Commerce Principles and Guidelines for Self-Governance'.





## 9. Legal Interventions

- ▶ Impleaded and successfully saw through to the conclusion of the Misleading Advertisements case before the Hon'ble Supreme Court — a major outcome for industry.
- ▶ Filed an intervention in the ongoing ANI v. OpenAI matter concerning the issue of copyright infringement arising from AI training. The case is still in progress.

## 10. General Policy and Fiscal Matters

- ▶ Submitted recommendations for the 100-Day Plan of the new Government to relevant Ministries and Departments.
- ▶ Submitted recommendations for Union Budget 2024-25 to the Ministry of Finance.
- ▶ Made detailed submissions on TRAI consultation papers relating to Telecom Service and Telecom Network Authorisations besides Broadcasting Services and Ground Based Broadcasting Services.
- ▶ Made a submission on ARR and Tariff Determination to the Jharkhand Electricity Regulatory Commission.



# TIMELINE OF EVENTS

## (APR 2024 – MAR 2025)

### MAY 2024

**13<sup>th</sup> May 2024:** Broadband India Forum (BIF) organized a conference on **“A Robust Digital Infrastructure for Bharat: The Path to Achieving Multi-Gigabit to Every Household by 2030.”** The event featured Dr. R.S. Sharma, Former CEO, National Health Authority, and Former Chairman, TRAI, as the Chief Guest, and Shri Neeraj Kumar, ITS, Mission Director, National Broadband Mission (DoT), as the Guest of Honour. The event highlighted the critical need for expanded fibre and digital infrastructure to meet India's growing broadband demands.



**15<sup>th</sup> May 2024:** BIF co-organized with Bharat Exhibitions the 2nd edition of the **Bharat 6G 2024 International Conference & Exhibition** on 15th May 2024 at Hotel Le-Meridien, New Delhi. The conference was graced by Chief Guest Shri S. Krishnan, Secretary, Ministry of Electronics & Information Technology, Government of India. The event emphasized India's roadmap for 6G leadership and next-generation connectivity.



**15<sup>th</sup> May 2024:** **The World Telecommunication and Information Society Day (WTISD) 2024** celebration, hosted by Broadband India Forum (BIF) and Bharat Exhibitions on 15th May 2024 at Hotel Le Meridien, New Delhi, was inaugurated by Chief Guest, Shri Anil Kumar Lahoti, Chairman, TRAI. Special Guests of Honour included Shri Manish Sinha, Member (Finance), Digital Communications Commission, DoT. The celebration highlighted the importance of international collaboration for sustainable digital innovation.





**15<sup>th</sup> May 2024:** BIF supported and attended the ITU Opening Ceremony of Girls in ICT Day India 2024 celebrations with participants joining on-site and online from all across India.





**27<sup>th</sup> – 31<sup>st</sup> May 2024:** BIF supported the 3GPP CT WG Meetings hosted by TSDSI in Hyderabad.



## JUNE 2024

**20<sup>th</sup> June 2024:** Broadband India Forum (BIF) celebrated **World Wi-Fi Day 2024** on 20th June at The LaLiT, New Delhi, showcasing next-generation technologies such as Wi-Fi 6E, Wi-Fi 7, and immersive AR/VR/XR applications. The event was inaugurated by Prof. Abhay Karandikar, Secretary, Department of Science & Technology, as the Chief Guest, with Shri A. Robert Jerard Ravi, DDG (S.R-I), DoT; Shri S.K. Marwaha, Scientist G & Group Coordinator, MeitY; and Shri Sanjeev Kumar Sharma, DDG & OSD to Member (Technology), DoT, as Guests of Honour. The programme highlighted the vital role of Public Wi-Fi in driving digital inclusion and strengthening India's next-generation connectivity ecosystem.





## JULY 2024

**2<sup>nd</sup> July 2024:** BIF organised a virtual workshop conducted by Telecom Sector Skill Council to create awareness on National Apprenticeship Promotion Scheme (NAPS).



**16<sup>th</sup> July 2024:** Broadband India Forum (BIF) organized **The Digital Dialogues on “Cyber Security Considerations in Mobile and Wi-Fi”**, with Mr. Abhishek Singh, Additional Secretary, Ministry of Electronics and Information Technology, as Chief Guest. The event highlighted key cybersecurity challenges and strategies for mobile and Wi-Fi networks in India.





## AUGUST 2024

**6<sup>th</sup> August 2024:** Broadband India Forum (BIF) organized a CXO Round Table Discussion on the theme **‘Decadal Vision for Satcom’** at The LaLit, New Delhi.

**7<sup>th</sup> August 2024:** Broadband India Forum (BIF) organized the 9th edition of its annual flagship summit **India SatCom 2024** on 7<sup>th</sup> August at The LaLit, New Delhi, under the theme **“Liberalized Satcom – The Beginning of a New Era”**. The Chief Guest, Shri Anil Kumar Lahoti, Chairman, TRAI, addressed the inaugural session, joined by Special Guests of Honour Ms. Madhu Arora, Member (Technology), DoT, and Shri V.J. Christopher, Wireless Advisor, WPC, DoT. The event emphasized the transformative role of Satcom in bridging India’s digital divide, fostering innovation, and attracting investments, with projections for the sector to grow to USD 25 billion by 2028.



## SEPTEMBER 2024

**18<sup>th</sup> September 2024:** Broadband India Forum (BIF) launched its report **“India’s Mobile Manufacturing Ecosystem: Challenges and Opportunities”** on 18<sup>th</sup> September 2024 in New Delhi. The Chief Guest, Shri S. Krishnan, Secretary, MeitY, released the Report. Prepared with strategic inputs from BIF’s Device Ecosystem Committee, the study provides an in-depth analysis of India’s mobile manufacturing journey, highlighting challenges, opportunities, and policy pathways to strengthen India’s position as a global manufacturing hub.





**27<sup>th</sup> September 2024:** Broadband India Forum (BIF), in association with Bharat Exhibitions, co-organized the 2nd edition of the Broadband India Summit 2024 on 27th September 2024 at The LaLit, New Delhi. The Chief Guest for the event was Shri Niraj Verma, IAS, Administrator (Digital Bharat Nidhi), DoT, Ministry of Communications, and the Guest of Honour was Shri A. Robert J. Ravi, Chairman & Managing Director, BSNL. The Summit focused on advancing India's broadband ecosystem and strengthening the nation's digital infrastructure to support inclusive and sustainable connectivity.







## OCTOBER 2024

**25<sup>th</sup> October 2024:** AGM (2023-2024) of IPTV Society (BIF)



**25<sup>th</sup> October 2024:** Broadband India Forum (BIF) released a research paper titled ***“Digital Infrastructure: Investing in the Future for a Viksit Bharat”*** on 25th October 2024 in New Delhi. The Chief Guest, Shri Deb Kumar Chakrabarty, Director General, National Communications Academy (Former NTIPRIT), Department of Telecommunications (DoT), released the study report. Special addresses were also delivered by Shri Rajesh Kumar Soni, DDG (CS), Department of Telecommunications, Ministry of Communications, Government of India. The report, prepared by The Quantum Hub for one of BIF’s Specialist Committees, emphasises the pivotal role of resilient digital infrastructure in enabling widespread, reliable, and sustainable internet access for all—a cornerstone of inclusive digital growth in India.





## NOVEMBER 2024

**7<sup>th</sup> November 2024:** BIF was represented by Mr. Debashish Bhattacharya, Senior DDG, who spoke at the **ITU-APT Foundation of India's 4<sup>th</sup> Spectrum Management Conference 2024** in the session on "Framework for Planning of the 6 GHz Band – What Are the Right Choices for India?"



**14<sup>th</sup> November 2024:** BIF co-organized with Bharat Exhibitions the **10<sup>th</sup> Annual Cloud & Data Centre India 2024 Conference** on 14<sup>th</sup> November 2024 at The LaLit, New Delhi. The Special Guest of Honour, Shri Arvind Kumar, Director General, Software Technology Parks of India (STPI), and Guest of Honour, Shri Atul Sinha, DDG (BTU), Department of Telecommunications, addressed the gathering. The conference focused on India's growing data centre ecosystem, emphasizing cloud innovation, AI integration, and the country's potential to become a global digital infrastructure hub.





**15<sup>th</sup> – 16<sup>th</sup> November 2024:** BIF was represented by Ms. Mira Swaminathan, then Director – Policy Advocacy and Communications, at **the Community Network Xchange (CNX)** held on 15–16 November at T-Hub, Hyderabad, where she participated in a panel discussion on “Digital by Design in Indian Legislation: Implications for Meaningful Connectivity for Persons with Disabilities.”





## DECEMBER 2024

**1<sup>st</sup> December 2024:** Broadband India Forum (BIF) organized a webinar on **‘Cybersecurity for the Common Man.’** The session featured Ms. Amrita Choudhury, Director, CCAOI, and Mr. Alok Gupta, Founder & CEO, Pyramid Cyber Security & Forensics, who made an excellent presentation on the important topic ‘Need of the Hour: Cyber Safety of Senior Citizens.’



**9<sup>th</sup> – 10<sup>th</sup> December 2024:** Broadband India Forum (BIF) actively participated in the Fourth Edition of the **India Internet Governance Forum (IIGF) 2024**, themed *“Innovating Internet Governance for India,”* held on 9–10 December 2024 at Bharat Mandapam, Pragati Maidan, New Delhi. The inaugural session was graced by Shri Jitin Prasada, Hon'ble Minister of State for Commerce & Industry and Electronics & Information Technology. Shri S. Krishnan, Secretary, MeitY, delivered the Special Address, while Shri Sushil Pal, Joint Secretary, MeitY, gave the introductory remarks. On Day 1, BIF released its report titled *“ICT for Empowering Accessibility/Inclusion: The Impact of Digital Integration on the Lives of Persons with Disabilities,”* in collaboration with the **Digital Empowerment Foundation** and the **Centre for Development Policy and Practice**. On Day 2, BIF hosted a panel discussion on *“Responsible AI Innovation in India.”*







**12<sup>th</sup> December 2024:** BIF partnered with Primus Partners and India SME Forum for an event on Leveraging Online Ads for India – “Unpacking the impact of online ads on MSMEs and Startups – A Multistakeholder perspective”. Ms. Mira Swaminathan, then Director – Policy Advocacy also moderated one of the panel discussions in the event.



## FEBRUARY 2025

**19<sup>th</sup> – 20<sup>th</sup> February 2025:** BIF was represented by Ms. Mira Swaminathan, then Director – Policy Advocacy and Communications, at the Fourth Edition of the **IEEE Standards Association (IEEE SA) InDIITA Forum**, held on February 19–20, 2025. She participated in a panel discussion on “DIITA by Design – Focusing on Last Mile Connectivity.” The event was organized in collaboration with CDAC Bangalore.





# MARCH 2025

**25<sup>th</sup> March 2025: Broadband India Forum (BIF)**, in association with the **Global Digital Inclusion Partnership (GDIP)**, organized **India's first-ever International Subsea Cable Systems Conference** on 25th March 2025 in New Delhi. The Chief Guest, Shri Anil Kumar Lahoti, Chairman, TRAI, and Guest of Honour, Shri A. Robert J. Ravi, CMD, BSNL, addressed the event. The conference emphasized the vital role of subsea cables in strengthening India's digital infrastructure and highlighted strategies to enhance capacity, resilience, and connectivity for India's emergence as a global digital hub.





# BIF IN MEDIA

## APR 2024 – MAR 2025





**BROADBAND BYTES**  
BROADCASTING

TV RANJITH KARANJAN

## UNLEASHING INDIA'S BROADCASTING POWER

Despite challenges, India's TV broadcasting sector holds promise. Can the new policy turbocharge and reshape the television media and entertainment landscape?



India is a hub of potential for growth in television broadcasting. Despite the challenges the industry has encountered and some setbacks, the industry has managed to stay resilient. The new policy is a game-changer for the industry, offering a host of opportunities. The policy is a game-changer for the industry, offering a host of opportunities. The policy is a game-changer for the industry, offering a host of opportunities.

**MEDIAWIRE**

## Broadband India Forum Warns Against Internet Exchange Points Could Harm Investments



The Broadband India Forum (BIF) has issued a warning that the proposed Internet Exchange (IX) points could harm investments in the country's digital infrastructure. The forum, which is a multi-stakeholder organization, has expressed concerns that the IX points could lead to a fragmented and inefficient network, which would deter investors and hinder the growth of the digital economy.

**COMMUNICATIONS TODAY**

## Building enhanced resilience and sustainability into the Indian internet system - The critical role of DPs, IPv6 and blockchains



Resilience is the inherent property of a system that, in a hostile or uncertain environment, is able to withstand or recover from adverse conditions, which may be a result of a natural disaster, a cyber attack, or a human error. In the context of the Indian internet system, resilience is a critical factor for ensuring the continuity of services and the security of data. The article discusses the role of Domain Providers (DPs), IPv6, and blockchains in building resilience and sustainability into the Indian internet system.

**Satecom**

## BIF opposes Jio demand for Satecom spectrum consultation paper revision

Without naming Jio, the Broadband India Forum (BIF) has issued a statement opposing the demand for a revision of the spectrum consultation paper. The BIF argues that the current paper is comprehensive and meets the requirements of the industry. It also mentions that the BIF has been in regular communication with the government and has provided its views on the matter.

**Telecom**

## BIF, TCCA team up to advance critical communications in India

The Broadband India Forum (BIF) and the Telecom Critical Communications Association (TCCA) have announced a partnership to advance critical communications in India. The partnership will focus on areas such as policy advocacy, regulatory affairs, knowledge sharing, and joint research. The BIF and TCCA aim to work together to ensure that critical communications services are reliable and secure.



**BROADBAND BYTES**  
DATA CONNECTIVITY

TV RANJITH KARANJAN

## BRIDGING THE DIGITAL DIVIDE WITH SKYWARD SOLUTIONS

India's Vision Bharat vision hinges on high-quality broadband access for all, with Satcom bridging the digital divide and driving inclusive growth.



The article discusses the challenges of bridging the digital divide in India and how satellite communication (Satcom) can play a crucial role in providing broadband access to remote and underserved areas. It highlights the importance of Satcom in achieving the goals of the Digital India campaign.

**BROADBAND BYTES**  
BROADCASTING

## Battle between Airtel, Reliance Jio, Vodafone-Idea and WhatsApp, Google and other OTT platforms intensifies as...

The Broadband India Forum (BIF) has issued a statement regarding the intensifying battle between telecom operators and Over-the-Top (OTT) platforms. The BIF argues that the current regulatory framework is not conducive to a level playing field and calls for a comprehensive review of the policies governing OTT services.



**PM-WANI: A sleeping lion**

The article discusses the potential of the Prime Minister's Wi-Fi Access Network Interface (PM-WANI) scheme. It highlights the challenges faced by the scheme and the need for better implementation and support to realize its full potential. The article also mentions the importance of PM-WANI in providing affordable and accessible internet access to citizens.

**BROADBAND BYTES**  
DATA CONNECTIVITY

TV RANJITH KARANJAN

## FIXED BROADBAND: THE UNMATCHED BACKBONE OF A DIGITAL ECONOMY

In a mobile-first world, FBB still delivers unmatched quality and greater capacity at lower cost, making it indispensable for India's digital growth ambitions.



The article emphasizes the importance of Fixed Broadband (FBB) as the backbone of a digital economy. It argues that FBB provides the high-speed and high-capacity connectivity required for various digital applications and services. The article also mentions the need for government support to promote FBB adoption.

## Satellites Aren't Earthbound

The article discusses the latest developments in satellite technology and its applications. It mentions the launch of new satellites and the growing use of satellites in various fields such as communication, navigation, and earth observation. The article also highlights the challenges and opportunities associated with satellite technology.



**businessline**

## Empower seniors digitally

It's vital for well-being, full participation in society

The article discusses the importance of digital literacy for seniors. It mentions the various initiatives and programs aimed at empowering seniors with digital skills. The article also highlights the benefits of digital literacy for seniors, such as improved communication and access to services.









# Subsea cable players seek easier norms, incentives

## Repairing cables, Customs duty among key hurdles for developers

Business Standard

**D**evelopers of subsea cable systems, such as India's first submarine cable system, are seeking easier norms and incentives to develop and maintain the system. The system is expected to be operational by 2025.



### WISH LIST

- Easier norms for repair and maintenance
- Easier norms for customs duty
- Easier norms for incentives

Developers of subsea cable systems, such as India's first submarine cable system, are seeking easier norms and incentives to develop and maintain the system. The system is expected to be operational by 2025.

Coverage of 1st International Subsea Cable Systems Conference in India - March 25th 2025

# To ATTRACT MORE INVESTMENTS Cos Seek Sops for Submarine Cable Infra

**Our Bureau**

New Delhi: Technology and telecom companies are seeking government incentives such as lower taxes, easier norms for repair and maintenance, and customs duty exemptions to attract more investments in subsea cable infrastructure.



India wants to emerge as a leading subsea cable infrastructure hub. The country is seeking government incentives such as lower taxes, easier norms for repair and maintenance, and customs duty exemptions to attract more investments in subsea cable infrastructure.

The Indian market—the fastest growing in the Asia-Pacific region—is expected to reach \$78 billion by 2030.

# BIF hosts its first international subsea cable systems conference

ANI | Updated: Mar 25, 2025 20:48 IST

New Delhi [India], March 25 (ANI): Broadband India Forum on Tuesday hosted the first-ever International Subsea Cable Systems Conference in New Delhi, bringing together international and national experts on subsea cables to discuss the impact of subsea cables ecosystem in India's burgeoning digital economy.

# VOICE & DATA

## Spectrum tug-of-war: Telecom vs tech in the 6 GHz battle

The government's reluctance to 5G spectrum allocation between capacity, but the backing of the 6 GHz band spectrum remains the top priority.

However, the 6 GHz band is not particularly thick. This is largely because of the 5 GHz band is deemed crucial for global technology firms to operate 5G networks, smart devices such as Amazon's Alexa range of speakers connected appliances such as Samsung's smart refrigerators, and more.

Most of the reformed spectrum will come from the Ministry of Defence and ISRO—which are two of the biggest users of airwaves in India.

# businessline

## Securing subsea cables

This is meant to protect vital data transmissions



It is well known that data usage is growing exponentially in India. While data consumption on mobile is about 20 GB per subscriber per month, that on the fixed broadband is at least 100 GB (this level will increase by international standards).

# Subsea Cable Cos Seek Decongestion of Mumbai Landing Spot

Himanshi Lohchab

Mumbai: The subsea cable industry has called on the government to decongest the landing station at Versova in Mumbai, where 15 out of 17 international cables are landed in a 4 km stretch, as India prepares to study infrastructure to cater to the surging growth in demand for data.

# The Telegraph online

## Meta to boost digital backbone with massive investment in subsea cable project

Spending of the first international subsea cable systems conference organised by Broadband India Forum at New Delhi, South Korea, and India has the opportunity to boost the use of the global digital infrastructure leaders in the coming years.



# ADVOCACY THROUGH ARTICLES

**Apr 2024 – Mar 2025**

## **APRIL 2024**

- On a Hi-Fibre, Wi-Fi Diet - The Economic Times
- Deepfakes: A deep threat to society - Financial Express
- Looking beyond SMS - The Hindu Business Line
- The Evolving Skyscape - Voice&Data

## **MAY 2024**

- Bolstering Investor Confidence through Strategic Satellite Communication Initiatives in India - Communications Today
- Wrong Signal to 6GHz Spectrum - Financial Express
- Seamless Communication - The Hindu Business Line
- Unleashing India's Broadcasting Power - Voice&Data

## **JULY 2024**

- Wiring India for sustained digital success - Communications Today

## **AUGUST 2024**

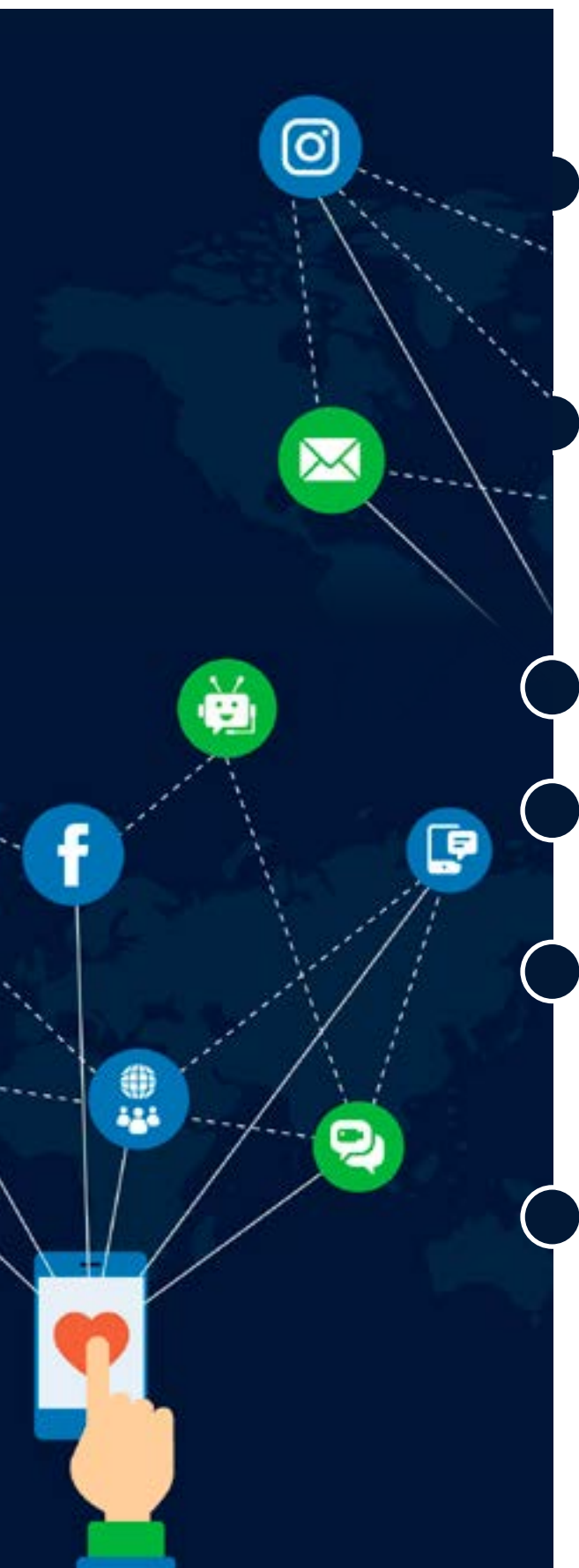
- OTT streams flow differently - Financial Express
- Bridging the digital divide with skyward solutions - Voice&Data

## **SEPTEMBER 2024**

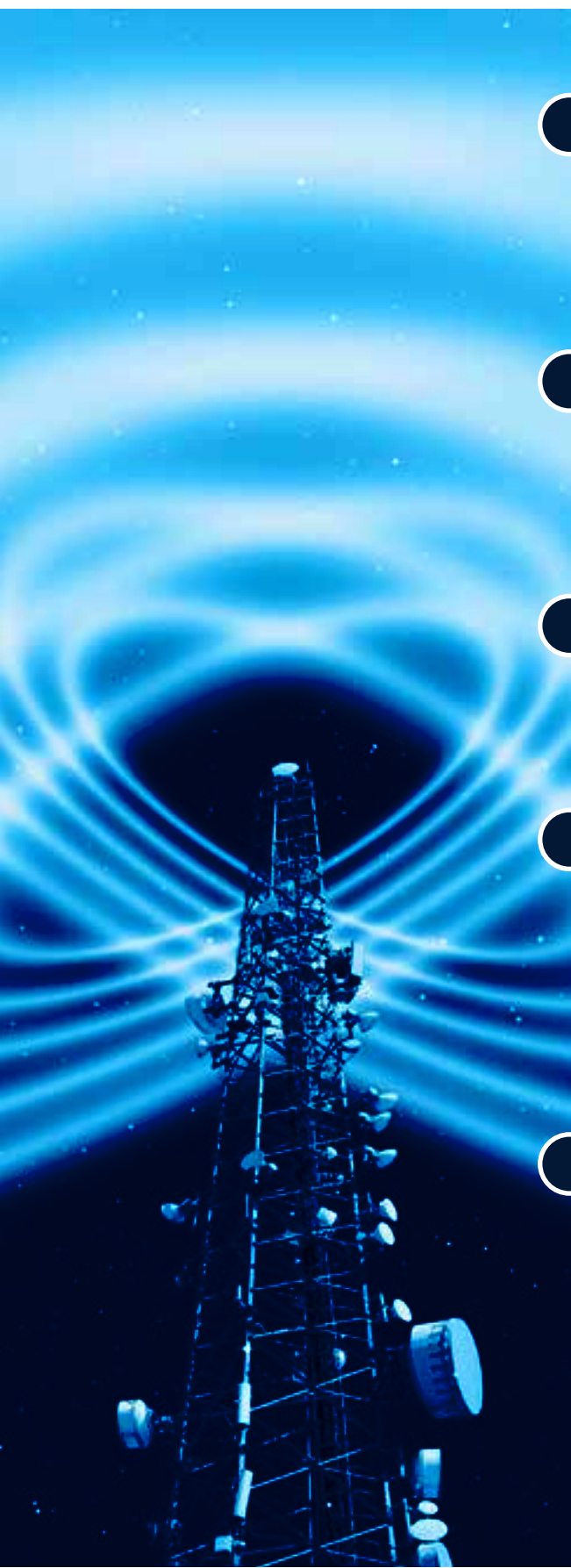
- A WAITING GAME LIKE GODOT - Voice&Data
- Building enhanced resilience and sustainability into the Indian Internet System – The critical role of IXPs, IPv6 and blockchains - Communications Today (Co-authored with Dr Devesh Tyagi, CEO, NIXI)

## **OCTOBER 2024**

- PM-WANI: A Sleeping Lion - Financial Express
- Satellites Aren't Earthly - The Economic Times
- Fixed Broadband: The unmatched backbone of a digital economy - Voice & Data







## NOVEMBER 2024

- Empower Seniors Digitally - The Hindu Business Line
- Authorising change from 1885 Telegraph to modern day telecom – TRAI's blueprint for India's 'Future-ready telecom sector' - Communications Today
- Sailing India into the world's digital tides - Voice&Data

## DECEMBER 2024

- BSNL's rise from the ashes: A tale of revival and resolve - Voice&Data
- India's digital divide: Bridging what, and for whom? - The Hindu Business Line (Co-authored with Mr. KV Seshasayee, Honorary Principal Advisor, BIF)

## JANUARY 2025

- Overcoming barriers to digital transformation - Communications Today (Co-authored with Mr. KV Seshasayee, Honorary Principal Advisor, BIF)
- Securing the future of messaging - The Financial Express

## FEBRUARY 2025

- A solution in search of a problem - Voice&Data
- Securing subsea cables - The Hindu Business Line
- Delicensed 6GHz: A missed opportunity - Financial Express
- Clicking through barriers, empowering persons with disabilities - Authored by Ms. Arpita Kanjilal, Head of Research and Communications Division, DEF and Ms. Mira Swaminathan then Director – Policy Advocacy and Communications, BIF in The Hindu

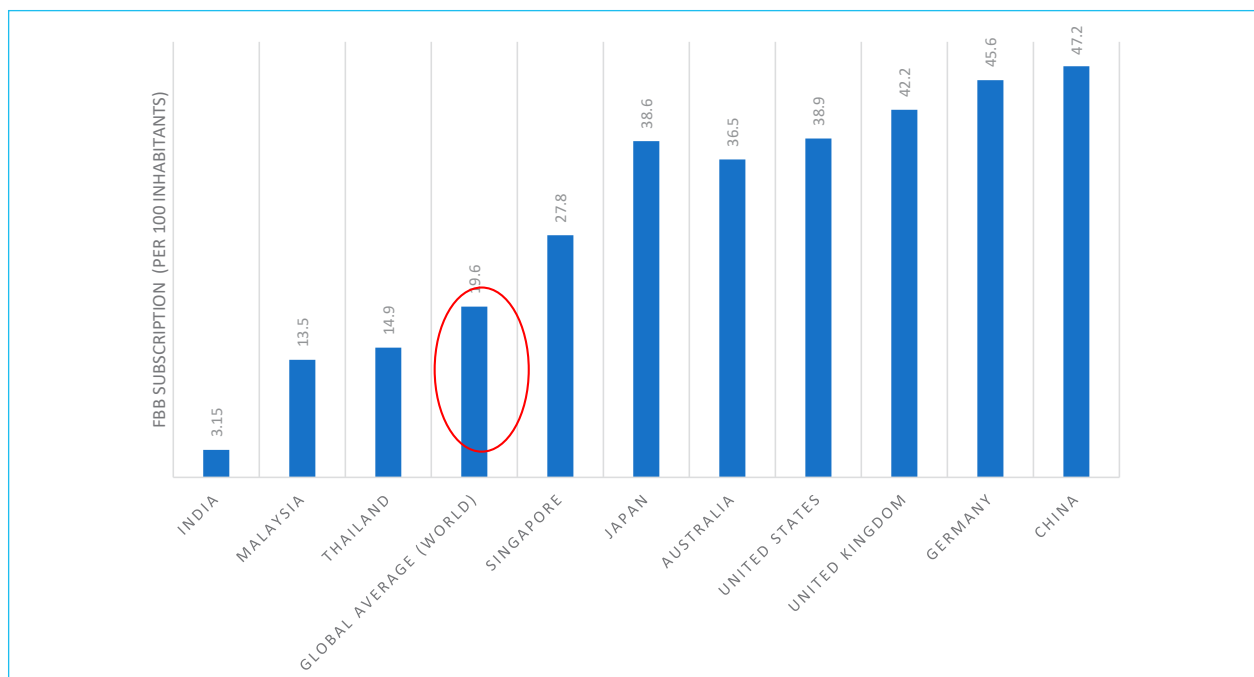
## MARCH 2025

- Why struggle with SMS' shortcomings? The future of secure and intelligent messaging in India - Communications Today
- Earthly Mobile Gets Skyrocketed - The Economic Times
- Laying the Bricks of India's Digital Treasure Chest - Voice&Data
- Starlink can generate positive spin-offs - Hindu Business Line
- A Transformative Journey: Untold stories of Indian telecom - Tele.net



# DIGITAL GROWTH: Stats & Insights

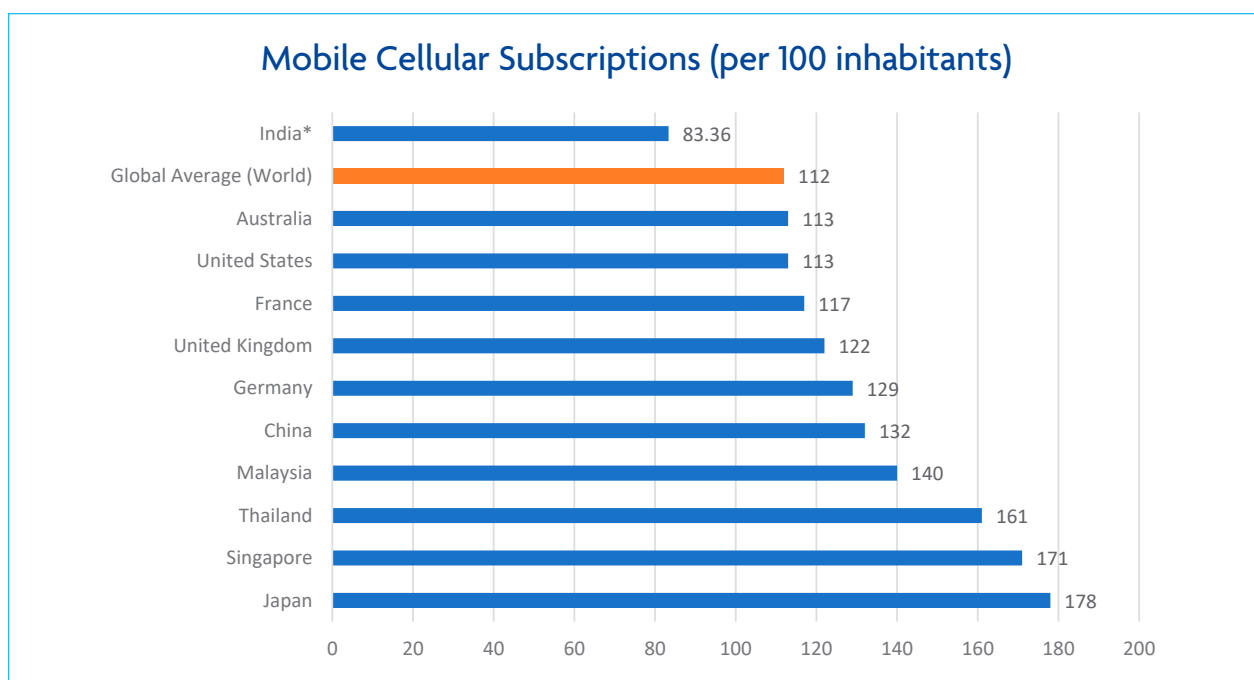
## 1. Fixed Broadband Penetration: India and the world



**Source:** International Telecommunication Union (ITU), *Measuring Digital Development: ICT DataHub – Fixed Broadband Subscriptions per 100 Inhabitants*, 2024.

**India FBB ≈ 1/6 of Global Average | 1/15 of Best Practices**

## 2. Mobile Cellular Subscriptions: India and the world

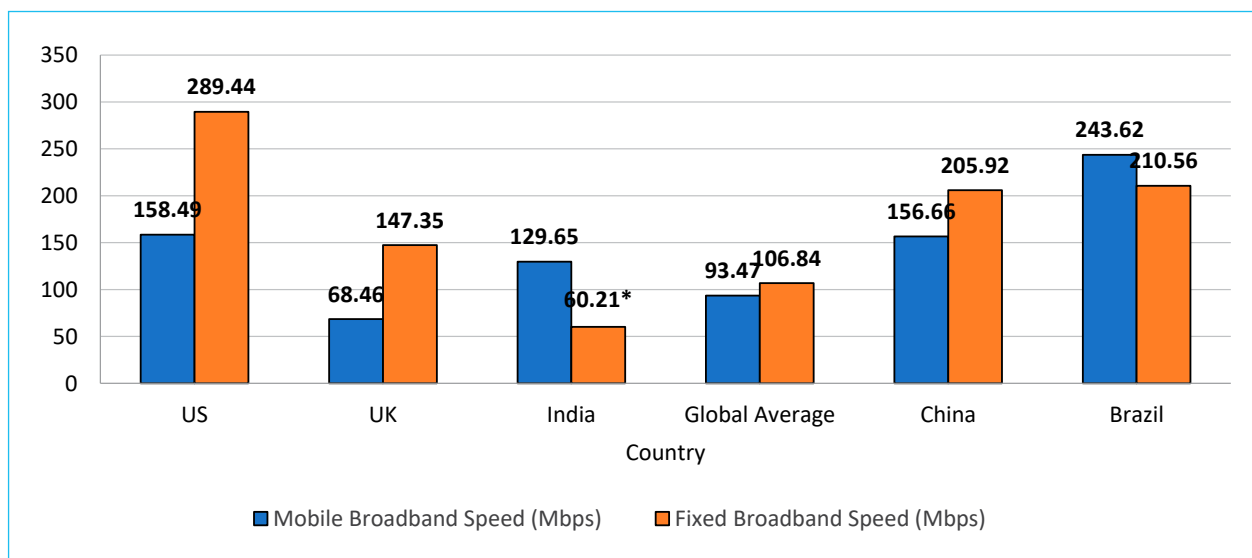


**Source:** International Telecommunication Union (ITU), *Measuring Digital Development: ICT DataHub – Mobile-cellular Subscriptions (per 100 Inhabitants)*, 2024.

\*TRAI Subscription report 27 Oct 2025 PIB release

**India's mobile density rising fast — approaching global connectivity levels.**

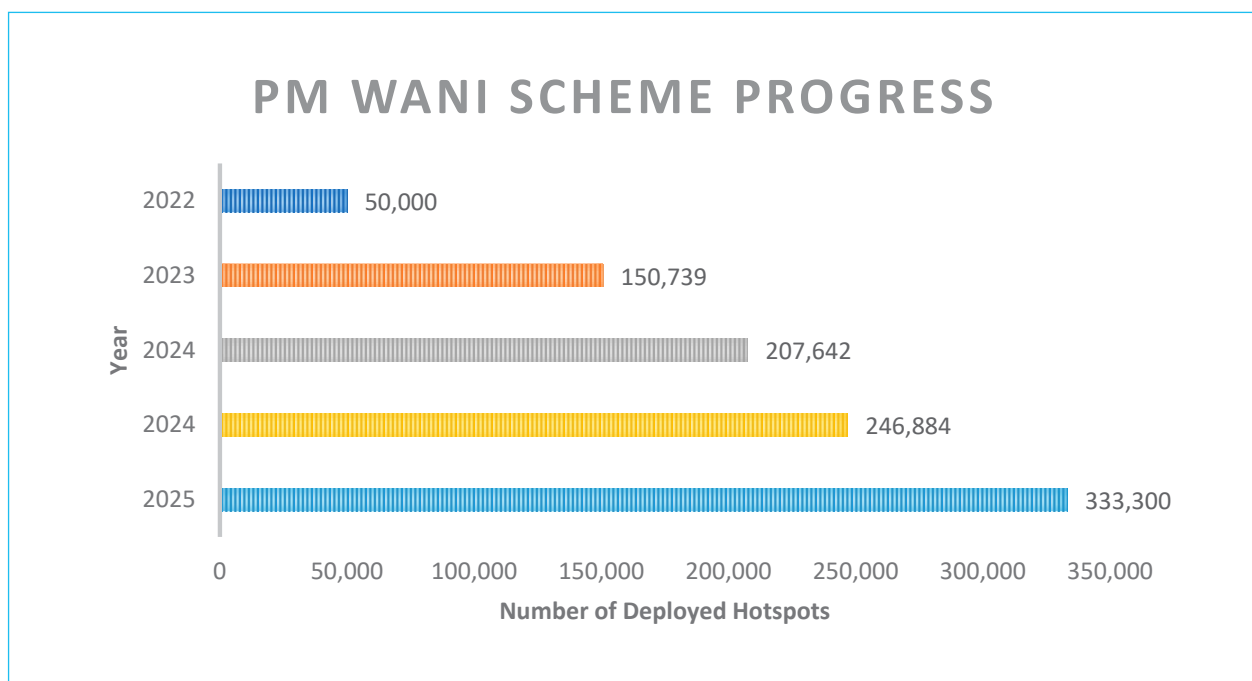
### 3. Fixed Broadband Speed and Mobile Broadband Speed (Median)- India vs Global



**Source:** Ookla Speedtest Global Index, Median Country Speeds September 2025

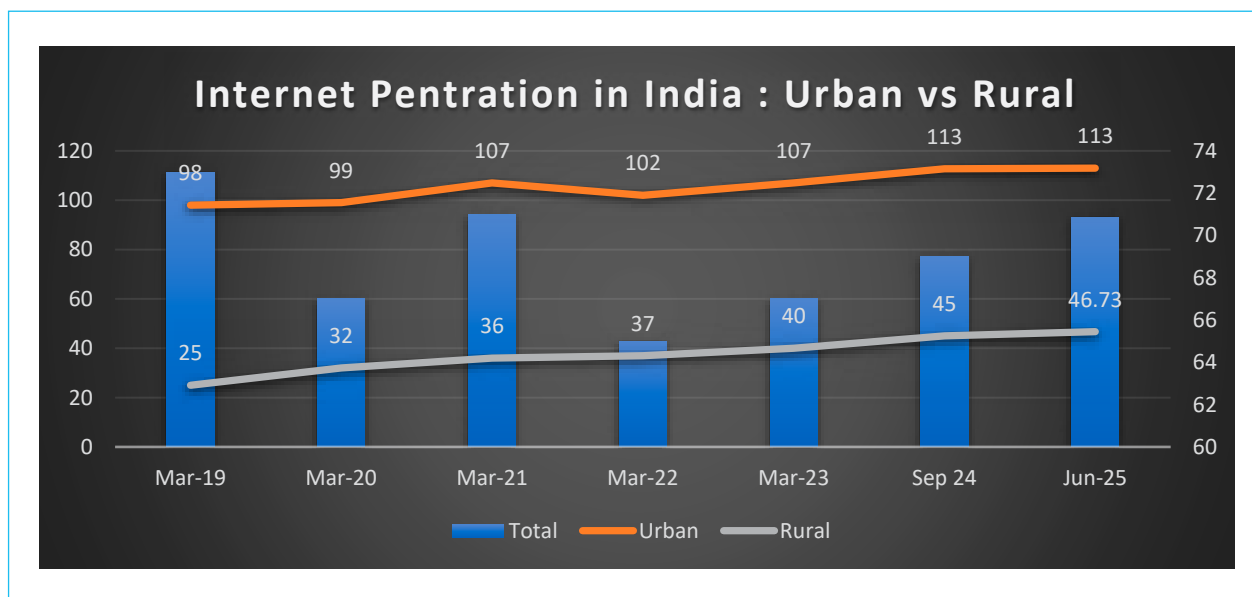
**Note:** In India majority of customers have 30-40 Mbps speed plans and this is the probable reason of lower speed in FBB in India. There is no such speed cap in case of mobiles.

### 4. Proliferation of Wi-Fi under PM WANI Scheme



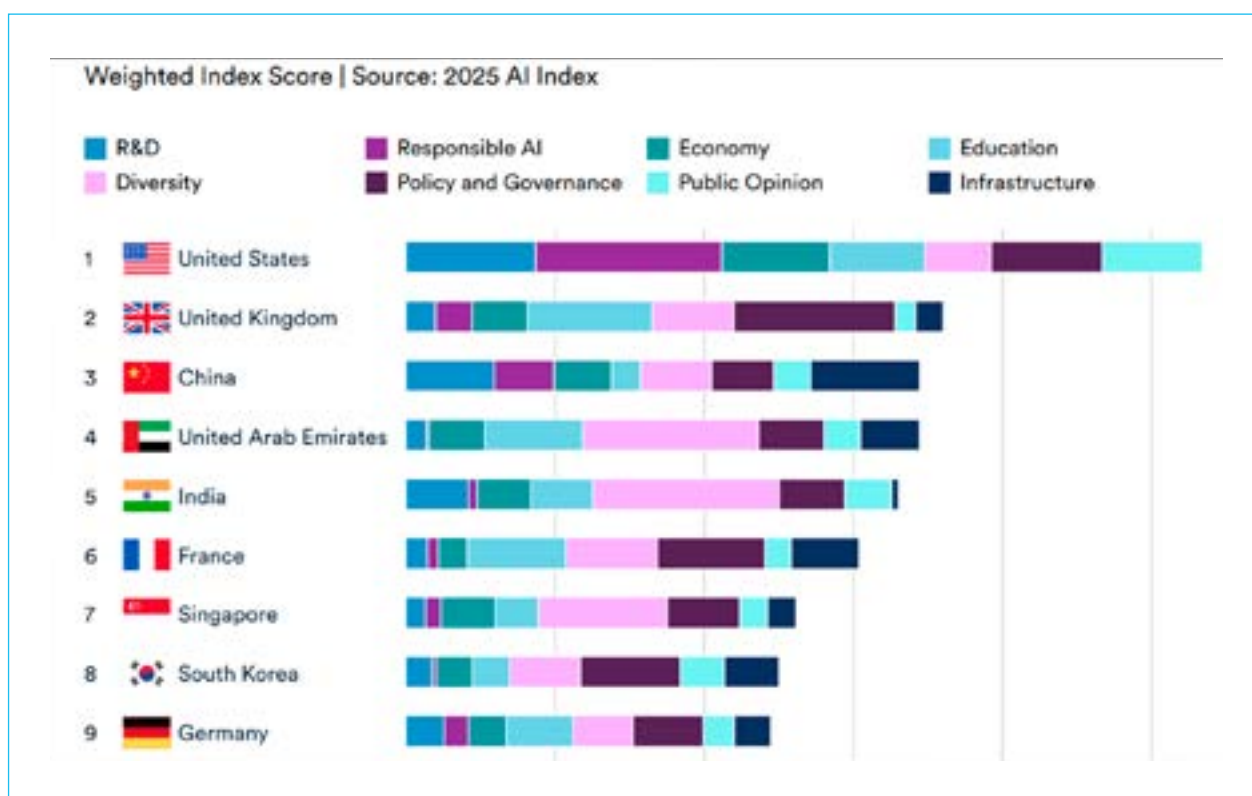
**Source:** PM Wani Central Registry

## 5. Internet penetration -Urban Rural India



Source: TRAI Quarterly performance indicator report

## 6. 2025 AI Index



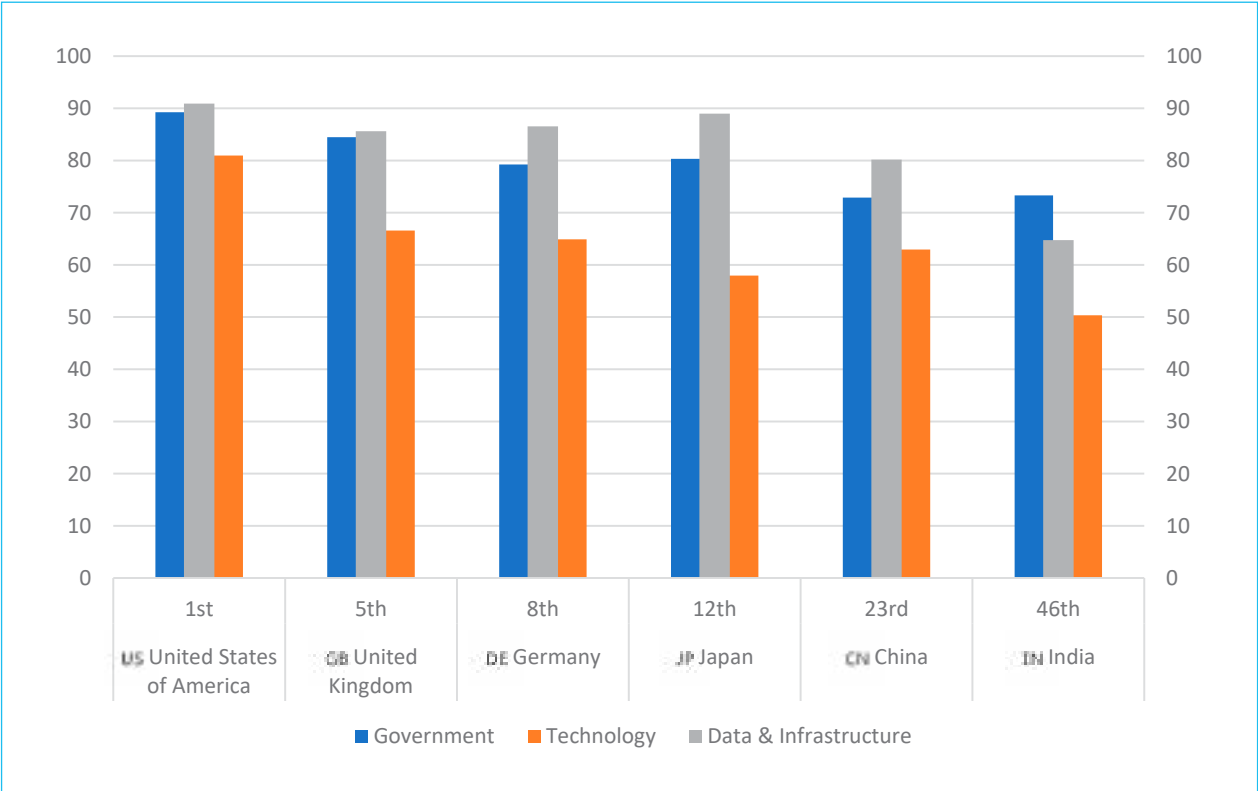
Source: Stanford Institute for Human-Centered Artificial Intelligence (HAI).

\*"Weighted Index Score," AI Index Report 2025.

Available at: <https://hai.stanford.edu/ai-index/2025-ai-index-report>

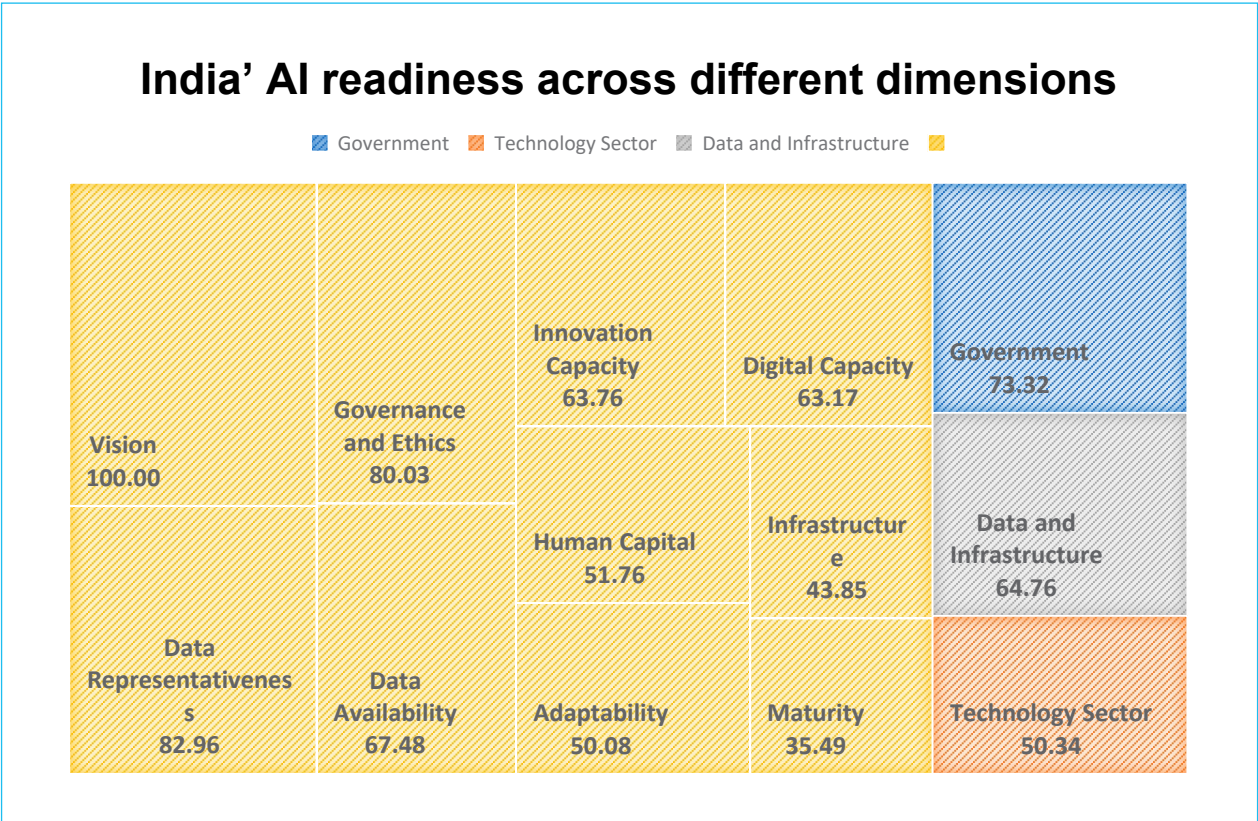


## 7. Government AI Readiness Index 2024



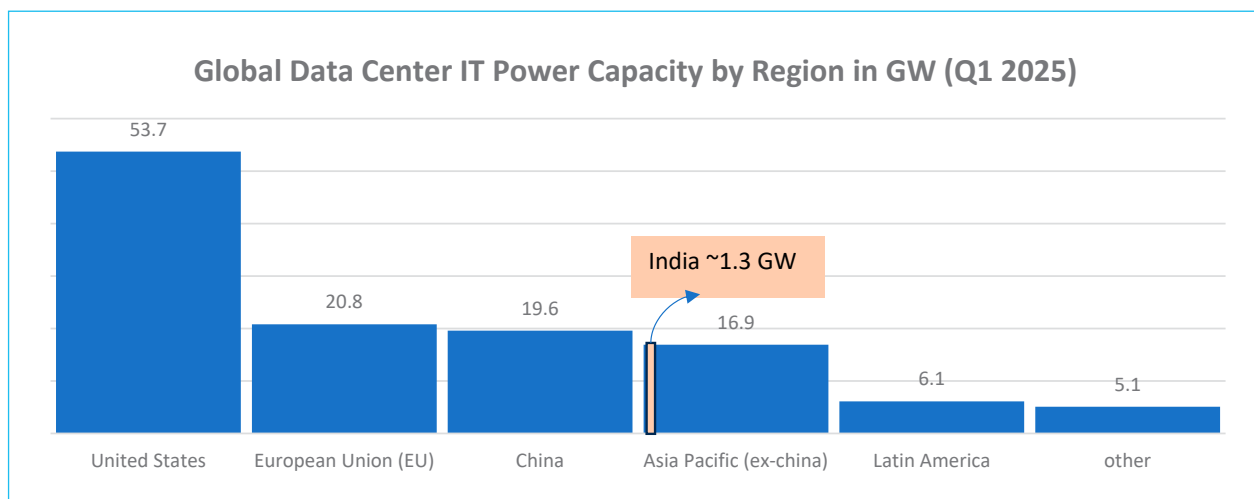
Source: Government AI Readiness Index 2024, Oxford Insights

Methodology: The index measures 10 dimensions across three pillars (Pillar 1: Government, Pillar 2: Technology Sector, Pillar 3: Data & Infrastructure)



Source: Government AI Readiness Index 2024, Oxford Insights

## 8. Data Centres: India and the World



**Source:** Synergy Research Group

Note: Global data center capacity reached 122.2 gigawatts (GW) of IT power capacity as of Q1 2025, according to.



# MEMBERS

(As on March 31, 2025)

## PATRON MEMBERS



## PSU MEMBERS



## CORPORATE MEMBERS



## ACADEMIA & RESEARCH INSTITUTIONS



## STARTUP & PROFESSIONAL MEMBERS





# OUR TEAM

# OFFICE BEARERS

(As on March 31, 2025)



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Department of Telecommunications,  
Ministry of Communications & Chairperson,  
Digital Communications Commission (DCC),  
Chairperson, BIF



**TV Ramachandran**

Founder & CEO of advisory@  
TVR, President, BIF



**Shivnath Thukral**

Vice President, BIF



**Rajiv Aggarwal**

Vice President, BIF



**SN Gupta**

Treasurer, BIF



**Parag Kar**

Founder Vice President, BIF



**Ashwani Rana**

Founder Vice President, BIF

# ADVISORS & MENTORS

(As on March 31, 2025)



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Alok Gupta



Amrita Choudhury



Arun Seth



Dr Archana Goyal Gulati



Dr. B.M. Baveja



C.S. Rao



J. V. Ramamurthy



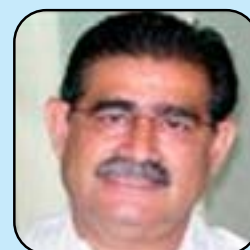
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Prof. Rekha Jain



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(As on March 31, 2025)



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Sundeep Kathuria



Atul Jain



Mira Swaminathan



Anand Gupta



Rajiv Kumar Markan



Neema Sunil Kumar



Shubhika Saluja



Seema Santosh



Swapnil Shukla



Mohit Kumar

# BIF COMMITTEES

(As on March 31, 2025)

Accessibility &  
Inclusion (PwD)

AI & IoT

Broadband  
Infrastructure

Cross Sectoral  
Digi Infra

Cyber Security

Device Ecosystems

FTTX & IBS

ICAG (Internet  
Content, Applications  
& Governance)

Internet Exchange

Manufacturing –  
Network

New Technologies

Rural Digital  
Initiatives

Satcom

Spectrum &  
Regulatory Framework

Startup & MSME

Wi-Fi

Working Group on  
Academia & Standards

# PARTNERSHIPS & ENGAGEMENTS

(As on March 31, 2025)



Supported by







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(As on March 31, 2025)

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"Think Tank for Digital Transformation"

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