

Universal Connectivity and Digital India Initiatives Reaching All Areas

(Ministry of Communications)

August 6, 2024

The Ministry of Communications has spearheaded the Universal Connectivity and Digital India initiatives, revolutionizing India's digital landscape from 2014 to 2024. These programs have dramatically improved internet accessibility and affordability across urban and rural areas, including tier-2/3 cities and villages. By April 2024, the initiatives had driven significant growth in digital access and usage, bridging the digital divide and fostering widespread connectivity. This transformation has made high-speed internet accessible to a vast majority of the population, laying a robust foundation for India's digital future. The initiatives have not only enhanced connectivity but also catalyzed innovation, e-governance, and digital entrepreneurship across the nation.

Key Achievements (as of March/April 2024)

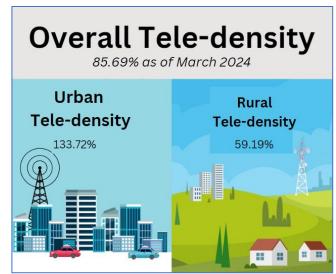
Metric	March 2014	March 2024	% increase
Broadband Definition	_	>= 2 Mbps	300%
India's Ranking in Avg Internet Download Speed	130	16	Improved by 114 ranks
Average Download Speed	4.18 Mbps	105.85 Mbps	2432.29%
Internet Subscribers (in mn)	251.59	954.40	279.34
Total Subscribers (in mn)	933	1199.28	28.54
Urban Tele-density	145.78%	133.72%	-8.27
Rural Tele-density	43.96%	59.19%	34.64%
Overall Tele-density	75.23%	85.69%	13.90%
Average Data Cost/GB	₹268.97	₹9.18	-96.58%
Average Data Consumption	0.26 GB	20.27 GB	7696%



BharatNet Project

BharatNet, one of the largest rural telecom projects in the world, aims to provide Optical Fibre Cable (OFC) connectivity to all Gram Panchayats (GPs) in India, ensuring non-discriminatory broadband access for telecom service providers. Launched in 2011 and executed by Bharat Broadband Network Limited (BBNL), the project is being implemented in three phases. It facilitates services like e-health, e-education, and e-governance in rural areas. As of July 2024, 2,13,570 GPs have been connected, 6,89,065 km of OFC laid, 10,56,968 Fibre-To-The-Home (FTTH) connections commissioned, and 104,574 Wi-Fi hotspots installed for last-mile connectivity.

- 2.13 lakh GPs made serviceready out of the targeted 2.22 lakh GPs.
- The amended BharatNet Program targets 42,000 uncovered GPs and remaining 3.84 lakh villages on a demand basis, aiming to provide 1.5 crore Rural Home Fibre connections.





USOF Schemes

The Universal Service Obligation Fund (USOF) schemes aim to provide connectivity to uncovered villages and habitations, especially in remote and difficult terrains such as hilly areas and dense forests. These schemes target a total of 35,680 uncovered villages and habitations across the country. So far, around 9,000 of these villages have been connected with 4G services, with an expenditure of approximately Rs 11,000 crore. This initiative ensures that even the most inaccessible regions gain access to modern telecommunications, bridging the digital divide and fostering inclusive growth.



Government has also taken various other initiatives in the country. These include:

! Infrastructure and Regulatory Improvements:

- ✓ Amended licensing conditions (August 2022) to facilitate mobile tower installation in border areas
- ✓ Implemented Indian Telegraph Right of Way Rules 2016 with periodic amendments for faster telecom infrastructure rollout.
- ✓ Launched Gati Shakti Sanchar Portal to expedite Right of Way (RoW) approvals, particularly in border areas.

***** Innovation and Entrepreneurship Support:

- ✓ Allocated ₹800 crore for technology-led startup and innovation schemes. Key programs include:
- 1. Technology Incubation and Development of Entrepreneurs (TIDE 2.0): The TIDE 2.0 scheme is a cornerstone initiative promoting tech entrepreneurship in India, with a focus on emerging technologies such as IoT, AI, Blockchain, and Robotics. Targeting seven pre-identified areas of societal relevance, the scheme aims to empower 51 incubators and support 2000 tech startups over a five-year period. Central to this initiative is the establishment of the MeitY Startup Hub (MSH), designed to create synergistic linkages within the innovation ecosystem. By fostering a holistic environment and facilitating necessary connections for tech startups, TIDE 2.0 is set to play a crucial role in driving technological innovation and entrepreneurship across India.
- 2. Gen-Next Support for Innovative Startups (GENESIS): GENESIS is an ambitious umbrella scheme launched by MeitY with a budget of ₹490 crore over 5 years, aimed at



discovering, supporting, and accelerating innovative startups in smaller cities and towns across India. The program focuses on fostering collaborative engagement among startups, government, and corporates to promote digitization based on the principles of inclusivity, accessibility, and affordability. With a goal to impact and consolidate over 10,000 tech startups, GENESIS seeks to create an inclusive startup ecosystem that represents the aspirations of ambitious entrepreneurs and contributes to the country's techno-socio-economic development. Launched by Prime Minister Narendra Modi in July 2022, this scheme is a significant step towards nurturing innovation and entrepreneurship beyond major urban centers.

- 3. **Domain-specific Centres of Excellence (CoEs):** MeitY has established several domain-specific Centres of Excellence (CoEs) across India to drive innovation in areas of national interest. These CoEs, created in collaboration with STPI, State Governments, industries, and VCs, serve as focal points for knowledge management and capability building in emerging technologies. A prime example is the Centre of Excellence in FinTech at STPI-Chennai, established in partnership with Intellect Design Arena Ltd. With a total budget of ₹24.45 crore, including ₹1.8 crore from MeitY, this CoE aims to support 58 startups over 5 years by providing infrastructure, resources, mentorship, and funding. The FinTech CoE creates a holistic ecosystem for startups to experiment with innovative financial products and services, leveraging partnerships with entities like NPCI, UIDAI, Yes Bank, PayPal, HSBC, IIT Chennai, and TiE Chennai to provide industry connections and expertise.
- 4. Next Generation Incubation Scheme (NGIS): The NGIS, implemented by STPI under MeitY's directive, is a forward-looking and comprehensive initiative aimed at propelling India's rise as a global Software Product Nation. Focusing on 12 tier-2 and tier-3 cities to promote widespread innovation across India, including Agartala, Bhilai, Bhopal, and Vijayawada, NGIS targets supporting 300 tech startups in the IT/ITeS/ESDM sectors. The scheme has already made significant strides, supporting 481 startups, showcasing 388 products, and facilitating the raising of ₹172 crore in funds. By concentrating on smaller cities, NGIS promotes widespread innovation and contributes to the development, production, and supply of innovative, efficient, and secure software products, including embedded software, positioning India as a key player in the global software industry.

BPO Promotion Schemes

The Government of India, through the Ministry of Electronics & IT, launched the India BPO Promotion Scheme (IBPS) and North East BPO Promotion Scheme (NEBPS) as part of the Digital India Programme. These initiatives aim to boost the IT/ITeS industry in smaller cities and towns, creating employment opportunities for youth and promoting balanced regional growth. The schemes have successfully established 246 BPO units across 27 States and Union Territories, strategically distributing operations across 104 small cities and towns. This widespread distribution not only generates local employment but also significantly contributes to the economic development of these areas, fostering a more inclusive digital ecosystem across India.

- ✓ Established 246 BPO units across 27 States/UTs
- ✓ Distributed operations in 104 small cities and towns to boost local economies

Conclusion

The Universal Connectivity and Digital India initiatives have profoundly transformed India's digital landscape, bridging the divide between urban and rural areas and making high-speed internet both accessible and affordable to a vast majority of the population. These efforts have catalyzed a digital revolution, fostering widespread access to e-governance services and nurturing a thriving ecosystem of innovation and entrepreneurship across the country. By positioning India as a rapidly growing digital economy, these initiatives have not only attracted investments but also created myriad opportunities across various sectors. The robust digital infrastructure established through these programs serves as a strong foundation for India's future, preparing the nation to harness emerging technologies and adapt to global digital trends. As India continues on this trajectory of digital transformation, with ongoing technological advancements and strategic schemes, the country is well-positioned to achieve comprehensive digital inclusion and leverage its digital capabilities for sustainable socio-economic development, heralding a new era of growth and prosperity.

References:

https://pib.gov.in/PressReleasePage.aspx?PRID=2040566

https://trai.gov.in/sites/default/files/PR No.23of2024 0.pdf

Internet subscribers 2020

Internet subscribers 2022

Internet subscribers 2021

Internet subscribers 2023

https://usof.gov.in/en/bharatnet-project

https://usof.gov.in/en/home

https://msh.meity.gov.in/schemes/tide

https://www.meity.gov.in/content/centres-excellence-coe-projects

https://www.meity.gov.in/other-initiatives

https://www.meity.gov.in/bpo-promotion-schemes

Santosh Kumar/ Sarla Meena/ Anjali Gupta