

**Research Unit** Press Information Bureau Government of India

# **BharatNet**

Extending Internet Access, Expanding Rural Progress

(Ministry of Communications)

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# • Q: What is the BharatNet project?

A: BharatNet is an ambitious project of the Government of India aimed at providing broadband connectivity to all Gram Panchayats (GPs) in the country. It is one of the biggest rural telecom projects in the world.

## • Q: What is the objective of the BharatNet project?

A: The primary objective is to provide unrestricted access to broadband connectivity to all the telecom service providers. This enables access providers like mobile operators, Internet Service Providers (ISPs), Cable TV operators, and content providers to launch various services such as e-health, e-education, and e-governance in rural and remote India. It aims to empower rural India, foster inclusive growth, and bridge the gap between urban and rural communities.

## • Q: How many Gram Panchayats (GPs) are targeted under BharatNet?

A: The project initially aimed to connect approximately 2.5 lakh Gram Panchayats across the country.

## • Q: What are the different phases of the BharatNet project?

**A:** The Telecom Commission approved the implementation of the project in three phases on 30.04.2016:

• Phase I: Focused on laying optical fibre cables to connect 1 lakh Gram Panchayats by utilising existing infrastructure. This phase was completed in December 2017

- Phase II(ongoing): Expanded coverage to an additional 1.5 lakh Gram Panchayats using optical fibre, radio, and satellite technologies. This phase incorporated collaborative efforts with state governments and private entities.
- Phase III(ongoing): Aims at future-proofing the network by integrating 5G technologies, increasing bandwidth capacity, and ensuring robust last-mile connectivity. This phase is ongoing. The Amended BharatNet Program (ABP) approved in August 2023 can be considered part of this evolution.
- Q: What is the Amended BharatNet Program (ABP)?

A: Approved in August 2023, the ABP is a design improvement aiming for Optical Fibre (OF) connectivity to 2.64 lakh GPs in ring topology (a network design where connected devices form a circular data channel) and OF connectivity to the remaining non-GP villages on demand. It includes features like IP-MPLS (Internet Protocol Multi-Protocol Label Switching) network with routers at Blocks and GPs, operation and maintenance for 10 years, power backup, and Remote Fibre Monitoring System (RFMS). The cost allocated is **Rs. 1,39,579 crores**.

#### • Q: What other initiatives support digital empowerment in rural India?

A: Several other initiatives complement BharatNet, including:

- **Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA):** To ensure digital literacy in rural households, with over **6.39 crore individuals trained** by March 31, 2024.
- National Broadband Mission (NBM): Launched to fast-track the expansion of digital communications infrastructure. National Broadband Mission 2.0 was launched on January 17, 2025. Key initiatives under NBM include the Centralized Right of Way (RoW) Portal GatiShakti Sanchar.

## • Q: How is BharatNet being funded?

A: BharatNet is primarily funded through the **Digital Bharat Nidhi** (**DBN**), which is a fund that replaced the Universal Service Obligation Fund (USOF). The total funding for BharatNet (Phase-I and Phase-II) approved by the Cabinet is **Rs 42,068 crores** (exclusive of GST, Octroi, and local taxes). As of 31.12.2023, a total of **Rs. 39,825 crores** have been disbursed under the BharatNet Project since its inception.

• Q: Who is executing the BharatNet project?

A: The project is being executed by a **Special Purpose Vehicle (SPV) namely Bharat Broadband Network Limited (BBNL)**, which was incorporated on 25.02.2012 under the Indian Companies Act 1956. Under the Amended BharatNet Program, **BSNL is appointed as the single Project Management Agency (PMA)** for Operation & Maintenance of the entire network.

• Q: What is the current status of BharatNet implementation?

#### A:

- As of 19<sup>th</sup> March 2025, 2,18,347GPs have been made service ready under the BharatNet project in the country.
- As of March 25, 2025, the Optical Fiber Cable (OFC) length has increased to 42.13 lakh route km.
- As of 13.01.2025, 6,92,676 Km of OFC (Optical Fiber Cable) has been laid.
- 0 12,21,014 Fibre-To-The-Home (FTTH) connections are commissioned
- 1,04,574 Wi-Fi hotspots are installed.
- Q: How is the BharatNet network utilised?

A: The network is utilised through leasing bandwidth and dark fibre, Wi-Fi to access broadband or internet services in public places, and Fibre to the Home (FTTH). Last Mile Connectivity (LMC) is provided through Wi-Fi in public places or other suitable broadband technologies, including FTTH at Government institutions such as schools, hospitals, post offices, etc.

## • Q: What are the benefits and impact of the BharatNet project?

A: BharatNet has had a transformative impact on rural India, contributing to socioeconomic development in multiple ways:

- **Digital Inclusion:** Connecting remote villages to high-speed internet, enabling access to e-governance, online education, and telemedicine.
- **Economic Opportunities:** Enabling participation in digital commerce, access to financial services, and entrepreneurial opportunities.
- Education and Healthcare: Facilitating digital classrooms and telehealth services.
- **Empowering Local Governance:** Enabling Gram Panchayats to implement e-governance projects.

#### • Q: What is the role of CSC e-Governance Services India Limited in BharatNet?

A: CSC (Common Services Centre) e-Governance Services India Limited (CSC-SPV) was assigned to provide the last mile connectivity in **GPs** through Wi-Fi Access Points and FTTH connections. **As of September 2024, 1,04,574 Wi-Fi Access Points** and **11,41 ,825 FTTH connections** have been installed in the GPs. CSC-SPV also undertook a pilot project for laying overhead optical fiber from GPs.

#### • Q: What is the collaboration between DBN and NABARD?

A: Digital Bharat Nidhi (DBN) and the National Bank for Agriculture and Rural Development (NABARD) have signed an MoU to drive rural development by providing access to digital services, digital governance, and promoting a digital economy through high-speed broadband connectivity under the BharatNet program. Key areas of collaboration include reference data sharing, digital content sharing, digital services integration, awareness and capacity building, promoting a digital economy, and inclusion of ICT infrastructure.

#### • Q: How does BharatNet relate to mobile connectivity in rural areas?

A: Alongside BharatNet, the government is also focusing on expanding mobile connectivity in rural areas. As of December 2024, around **6,25,853 villages are covered with mobile connectivity, including 6,18,968 villages having 4G mobile coverage**. The median mobile broadband speed has increased significantly. These efforts are complementary to BharatNet in bridging the digital divide.

#### REFERENCES

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