

## **CAG Recommendations on Improvement of BharatNet Services.**

### **1. Streamline Planning, its approval and System Integration**

- i. Detailed Project Reports should be based on comprehensive ground surveys, ensuring accurate cost projections and reducing revisions.
- ii. Department of Telecommunications and Digital Communication Commission establish a fast-track approval mechanism with strategies that factor location -specific challenges.
- iii. Better coordination is needed between the Department of Telecommunications (DoT), BSNL and State governments to address bottlenecks.
- iv. Fast-track GIS mapping completion for all Gram Panchayats (GPs) to streamline maintenance and network upgrades.
- v. Ensure effective rollout of Fibre Fault Localisation System (FFLS)/Remote Fibre Monitoring Systems (RFMS) and integrate these systems with a centralized Network Operations Centre (NOC).
- vi. Ensure integration of GIS, FFLS/RFMS and Network Management System (NMS) for automated fault localization and route optimization.
- vii. Ensure that Wi-Fi Access Points are operational and properly maintained to enhance utilisation.

**2. Improve Financial Oversight :** Implement a performance-linked disbursement model similar to the private-led approach, ensuring payments are strictly tied to project milestones and service availability.

### **3. Accelerate Network Completion and utilisation**

- i. Ensure integration of state and central NOCs by implementing consolidated monitoring frameworks.

- ii. Prioritize completion of acceptance testing across all GPs before declaring project milestones as achieved.
- iii. Consider launching a targeted awareness and marketing campaigns to promote BharatNet services to rural users, MSMEs, public agencies, and local businesses.
- iv. Consider introducing targeted incentives to promote anchor tenancy by key government departments such as health, education and agriculture. Additionally, tiered pricing models for first-time users, with subsidized rates for priority sectors like agriculture and education may be considered to encourage utilisation and enhance financial sustainability.
- v. Ensure that all GPs are operational and properly maintained to enhance utilisation.

#### **4. Enhance Service Quality :**

- i. Deploy dedicated maintenance teams in each State with strict Service Level Agreements (SLAs) to ensure high uptime.
- ii. Implement predictive maintenance and AI-based fault detection systems to reduce downtime and optimize network operation.
- iii. Deploy real-time dashboards to monitor data usage, uptime and service quality at the GP level and link partner incentives to key performance metrics such as uptime (above 95 per cent), bandwidth utilisation, and customer satisfaction.

#### **5. Strengthen Long-Term Sustainability**

- i. Develop a self-sustaining revenue model, including monetization of dark fibre and leasing of excess network capacity to telecom providers.
- ii. Explore BOOT (Build-Own-Operate-Transfer) or DBOM (Design-Build-Operate-Maintain) model for ABP to ensure long-term sustainability and attract private sector participation and Viability Gap Funding (VGF) linked to clearly defined service-level milestones.

## **6. Align Implementation Strategy with Digital Inclusion Goals :**

ABP should move beyond mere infrastructure deployment and focus equally on community awareness, and Service delivery at the last mile by engaging non-telecom partners (NGOs, SHGs, CSCs), thereby addressing the persistent issue of underutilisation and ensuring that the socio-economic benefits envisioned under BharatNet are fully realized.

## **7. Strengthen Governance and Institutional Design for ABP:**

- i. The executing agency (BSNL) for ABP should be supported by a specialized division with independent leadership, separate financials, adequate institutional capacity and clearly defined performance KPIs to ensure focused implementation and operational efficiency. Governance should be strengthened through the oversight by independent directors.
- ii. The legacy concerns raised by Telecom Regulatory Authority of India (TRAI), such as conflict of interest, lack of competitive neutrality and distraction from BSNL's core telecom mandate need to be proactively addressed by legally separating BharatNet's infrastructure and service provision functions within BSNL.
- iii. Ensure PPP based training programs in collaboration with Gram Panchayats and local bodies, supported by certification modules covering fibre maintenance, RFMS operation, and fault localization. Encourage trained local youth and entrepreneurs to take up O&M roles under the BharatNet Udyami Model through performance-linked contracts, fostering employment, accountability and high-quality service delivery.

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