

RJIL's network and is severely hampering their services and requested to direct the concerned TSPs to provide requisite number of additional POIs to remove congestion.

TRAI has taken several steps to ensure adequacy of POIs like holding meetings with the TSPs, issue of Show Cause Notices, Direction, and Recommendations etc.

In the meeting with CMD (Chairman and Managing Director)/CEO (Chief Executive Officer) of the TSPs held on 08.11.2016, the Government has directed the TSPs to resolve the issues within the existing regulatory framework.

BSNL network in Samastipur

†1188. SHRI RAM NATH THAKUR: Will the Minister of COMMUNICATIONS be pleased to state:

(a) whether it is a fact that Government has formulated several schemes to improve the communication system and whether any improvement has been noticed in the services of BSNL so far, if so, the details thereof; and

(b) how Government is planning to improve the BSNL network in Samastipur district of Bihar, which is often out of order, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF COMMUNICATIONS (SHRI MANOJ SINHA): (a) Bharat Sanchar Nigam Limited (BSNL) is providing telecom services in its licensed service areas and is meeting benchmarks of most of the QoS parameters prescribed by Telecom Regulatory Authority of India (TRAI) in respect of Landline/Broadband service, whereas meeting benchmarks of all the TRAI's QoS parameters for Mobile service.

To improve the communication system in the country BSNL has taken following steps:—

A. Augmentation of GSM Mobile network capacity:

Phase VIII: Formulation of next GSM expansion project:—

(a) Phase VIII.1: Induction and integration of Wi-Fi Hotspot/LTE (4G) with existing GSM /UMTS network.

(b) Phase VIII.2: Strengthening of Data Network

Under this the following work is in progress:

- IPfication of Node Bs has increased to 83%, and a clear road map has been chalked out for remaining 17% and is being worked out accordingly.

† Original notice of the question was received in Hindi.

- GGSN (Gateway GPRS Support Node) capacity has been doubled in South Zone and capacity addition in the entire data chain has been optimized in all zones.
 - Link strengthening/media strengthening between Circles and Nodals.- Media redundancies has been built in all crucial routes and media strengthening and capacity addition has been done wherever required.
 - HSPA+(High Speed Packet Access) addition in ZTE West Zone Node Bs has been completed.
- (c) Phase VIII.3: Focus on active sharing of GSM Network through Intra Circle Roaming (ICR) arrangement. BSNL has signed ICR agreement with M/s Aircel, M/s Reliance Jio and M/s Vodafone.
- (d) Phase VIII.4: Focus on enhancing 2G and 3G GSM coverage.

With regard to (a) and (d) above, a GSM expansion project under name Phase VIII.4 has been initiated for the following:

- Replacement of old equipment having high operational cost and AMC.
- Addition of 3G capacity for increasing 3G footprints.

B. Replacement of legacy Wireline exchanges by Next Generation Network (NGN) Switches—

- Phase I: Total capacity of 1 million line equipment has been commissioned
- Phase II:
 - (i) Purchase Orders for 3 million lines under Phase II NGN Core & Access equipment has been issued and supply of equipment is in progress.
 - (ii) Total Line-Media-Gateways (LMGs) migrated is 190.
 - (iii) Total capacity migrated is 2,68,776 lines and working lines migrated are 1,58,869 lines.
- CDOT MAX NGN (Centre for Development of Telematics – New Generation Network Main Automatic Exchange) Project: NIT (New Infrared Technology) for CDOT MAX NG Access equipment has been floated for upgradation of CDOT-MAX switches (1974 nos.) to CDOT MAX-NG. Purchase Order (PO) has been issued to L1 and L2 bidders. Phase II PO for core equipment of C-DOT Max NGN placed on M/s C-DOT.
- A tender for 2.4 million NGN Core, 5 million POTS and 2 million Asymmetric Digital Subscriber Lines (ADSL) 2+ ports has been opened on 29.07.2016 and tender evaluation is under process.

This upgradation is expected to reduce operational issues related to maintenance of wire-line network by making the core network concentrated and will also enable delivery of various value added services, such as personalized ring back tone (PRBT), Instant Messaging, etc. to the customers.

C. Improvement in Broadband Network:

- (i) Augmentation of Broadband network for meeting data growth. BSNL is in the process of procurement of MPLS-IP (Multi Protocol Label Switching) based Next Generation Packet Aggregation Network (MNG-PAN). PO for the same has been placed on 01.06.2016.
- (ii) Setup of Network Monitoring System for Wire-line, Wireless and Broadband Network— PO for the procurement and implementation of Broadband Network Management System covering BB P2.2, Multiplay and FTTH Networks has been placed on 03.10.2016.
- (iii) Roll out of Wi-Fi service: BSNL has planned to install 40,000 Hotspots in the coming years. PO for procurement and deployment of Wi-Fi Hotspots and associated Core and Access Networks has been placed on 17.10.2016.

D. Improvement in Transmission Network:

- (i) Next Generation—Optical Transport Network (NG-OTN): Implementation of Super Express Highway Transport Network (2x100 Gbps line Capacity) by deployment of high capacity Optical Transport Network in 47 cities covering State capitals and major cities is in progress.
- (ii) IP/MPLS Network Expansion: IP/MPLS Network have been expanded to 205 cities during the 1st and 2nd quarters of 2016-17 by Installation and commissioning of 232 new managed Next Generation IP/MPLS Edge Routers and capacity augmentation in existing Core routers have also been completed.
- (iii) Converge Packet Access Network (CPAN): CPAN has been planned comprising of 23000 MPLS-IP switches of different configuration/capacity to transform BSNL access network to all IP network.
- (iv) Launching of Inmarsat Services: Inmarsat Satellite Gateway in India is likely to be commissioned by 31.12.2016.

E. BSNL-ECR CoNe (Enhanced Capacity and Resilience of Core Network):

With a need to enhance the capacity and resilience of the BSNL long distance transmission core network, a major project called ECR-CoNe has been planned for implementation during 2015-16 and 2016-17 with an estimated cost of approx. 1000

crores. This will result in Higher Data Speed Broad Band Services/Leasing of high capacity Bandwidth to telecom operators/Internet Service Providers, Resilient Protected bandwidth upto 10 Gbps. The major projects under this are:—

- Expansion of Provider Edge Network of BSNL: Out of planned 232 PE Routers, BSNL has commissioned 228 PE Routers along with their integration with Core Routers.
- A super express highway of 200 GBPS bandwidth is planned with Next Generation-Optical Transport Network (NG-OTN) to be deployed in 47 cities. The deployment plan is to cover 24 cities in Phase-I and 23 cities in Phase II. Phase I is completed and Purchase Order for Phase-II has been issued on 21.09.2016.

F. Customer Centric Initiatives

- BSNL has focused on customer care services by installing exclusive call centers for GSM services, Wire-line and Broadband services.
- Minimum 512 Kbps broadband speed upgraded to 2 Mbps.

(b) BSNL has planned following project/scheme to improve the communication network in Samastipur district of Bihar during the current financial year:—

Project/Scheme	BTS (in Nos.)
New GSM BTSs (Base Transceiver Stations) under Ph-VII Plus	8
Replacing Old technology BTSs with New Technology (ZTE) under Ph-VII Plus	11
New Digital Subscriber Line Access Multiplexer (DSLAMs) for Broadband	5
C-DOT MAX NG Exchanges for Wireline	3

Delay in implementation of BharatNet

1189. PROF. M.V. RAJEEV GOWDA: Will the Minister of COMMUNICATIONS be pleased to state:

- (a) the number of Gram Panchayats that have been covered under the BharatNet so far;
- (b) whether there has been a delay in the implementation of BharatNet; and
- (c) if so, the reasons therefor, and the measures taken to overcome the issue?

THE MINISTER OF STATE OF THE MINISTRY OF COMMUNICATIONS (SHRI MANOJ SINHA): (a) National Optical Fibre Network (NOFN), now renamed as BharatNet, is planned to create network infrastructure for providing Broadband