

**GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS
DEPARTMENT OF TELECOMMUNICATIONS**

**LOK SABHA
UNSTARRED QUESTION NO. 3558
TO BE ANSWERED ON 8TH AUGUST, 2018**

MARKET SHARE OF BSNL AND MTNL

†3558. SHRI HARINARAYAN RAJBHAR:
DR. KARAN SINGH YADAV:

Will the Minister of COMMUNICATIONS be pleased to state:

- (a) the details of increase in number of mobile users in the country during each of the last three years and the current year State/UT-wise including Uttar Pradesh and telecom company-wise;
- (b) whether Bharat Sanchar Nigam Limited (BSNL) and Mahanagar Telephone Nigam Limited (MTNL) have been incurring losses and in comparison to Private Telecom operators, their share in market is quite less during the said period and if so, the details thereof and the reasons therefor;
- (c) the market share of the telecom companies including BSNL and MTNL during the said period State/UT-wise;
- (d) the measures taken by the Government to promote competition among BSNL, MTNL and these private telecom operators;
- (e) whether the entry of a private sector telecom company in the telecom sector has accentuated the possibility of more losses to BSNL and MTNL and if so, the details thereof, State/UT-wise; and
- (f) whether the Government proposes to further strengthen the network of public sector telecom companies across the country and if so, the details thereof and if not, the reasons therefor?

ANSWER

**THE MINISTER OF STATE (IC) OF THE MINISTRY OF COMMUNICATIONS &
MINISTER OF STATE IN THE MINISTRY OF RAILWAYS
(SHRI MANOJ SINHA)**

(a) The service Area wise and the company-wise details of increase in number of mobile telephone connections in the country during each of the last three years and the current year are given at **Annexure - I and II** respectively.

(b) The details of losses incurred by Mahanagar Telephone Nigam Limited (MTNL) and Bharat Sanchar Nigam Limited (BSNL) during the last three years are as under:

(Rs. in crore)

Financial year	MTNL	BSNL
2015-16	2006	4859
2016-17	2971	4786
2017-18	2971	4785*

* financial figures of BSNL for 2017-18 are provisional and unaudited

Major reasons for losses to BSNL and MTNL are as follows:

- One time upfront cost of spectrum for 3G and BWA (Broadband Wireless Access) required to be paid in 2010 for the amount of Rs.11097.97 crores by MTNL and Rs 18500.38 crores by BSNL which has eroded their reserves. MTNL had to take loan to meet this expenditure. This has created financial stress on both PSUs.
- Both the Public Sector Undertakings (PSUs) are also burdened with salary payments of the legacy DOT (Department of Telecommunications) employees, who are now working as absorbed employees in these PSUs.
- The market dynamics have changed in last 5 to 6 years in telecom sector because of the entry of more number of operators, which have garnered major market share and put a lot of pressure on the revenues of these PSUs.
- Both the PSUs could not invest timely in upgradation of their infrastructure.
- BSNL is providing telecom services in non-profitable areas like remote and hilly regions in various states e.g. Himachal Pradesh, Uttarakhand, Jammu & Kashmir, North East, Chhattisgarh, Andaman & Nicobar Islands and Lakshdweep Islands.
- Both the PSUs have to follow the prescribed guidelines and procedures which sometimes leads to inherent delays in taking decisions.
- MTNL is providing its services only in Delhi and Mumbai Service Areas unlike other major Telecom Service Providers (TSPs).

(c) Service area wise market share of the telecom companies including BSNL and MTNL during the last three years and the current year are placed at **Annexure III to VI**.

(d) to (f) It is a fact that entry of a new operator in the market has resulted in intense competition among all operators, with the existing operators also offering voice and data service at competitive rates. The resultant fall in tariff has an impact on the revenue of some of the telecom operators including BSNL and MTNL. However, both the PSUs are taking all steps to remain competitive. The details of measures taken by the PSUs for strengthening network and benefiting consumers are given at **Annexure-VII**.

Service area wise increase in mobile telephone connections (in million) during the last three years and current year (April-May 2018)

Sr.No.	Service Area	2015-16	2016-17	2017-18	April-May 2018*
1	Andhra Pradesh	2.70	10.29	0.82	-1.18
2	Assam	1.41	3.28	3.54	-4.78
3	Bihar	5.20	10.10	4.04	-5.90
4	Gujarat	3.70	9.57	0.08	-1.14
5	Haryana	1.25	1.79	-1.46	3.09
6	Himachal Pradesh	1.03	1.54	2.02	-2.54
7	Jammu & Kashmir	0.50	2.09	1.82	-2.95

Source: DoT

*As Aircel has filed for bankruptcy, its subscription data for April and May, 2018 is not available and therefore taken as zero.

13	Odisha	1.19	5.23	0.08	-2.95
14	Punjab	1.12	4.22	2.17	-0.17
15	Rajasthan	4.89	7.27	-2.12	-4.22
16	Tamil Nadu	1.03	7.91	6.44	-15.88
17	Uttar Pradesh (East)	8.84	12.32	-0.37	-4.39
18	Uttar Pradesh (West)	5.58	9.08	-3.28	0.59
19	West Bengal	2.43	8.75	0.62	-2.59
20	Kolkata	2.47	4.29	-0.50	-3.13
21	Delhi	1.06	6.11	0.91	-5.32
22	Mumbai	1.13	4.78	-0.06	-1.60
	Total	64.57	136.48	18.40	-57.96

Operator wise increase in mobile telephone connections (in million)during the last three years and current year (April-May 2018).

Telecom Operators	2015-16	2016-17	2017-18	April-May 2018*
Bharti Airtel Limited	25.22	22.41	30.54	40.36
RelianceTelecom LTD +Reliance Communications Ltd.	-7.06	-18.91	-83.32	-0.11
Rjio	0.00	108.68	77.88	18.98
Vodafone Essar	14.14	11.12	13.63	-0.24
TATA Teleservices Ltd	-6.22	-11.10	-17.81	-3.56
Idea mobile Communication	17.27	20.29	15.84	3.02
Aircel	5.69	3.81	-11.98	-78.92
QuardrantTeleventures Ltd	0.43	-3.16	0.00	0.00
Sistema Shyam Teleservices Ltd.	-1.17	-2.78	-4.91	0.00
Telewings (Telenor)	6.84	-1.96	-12.51	-37.98
Videocon	-0.57	-6.56	0.00	0.00
BSNL	10.00	14.58	11.09	0.52
MTNL	0.01	0.07	-0.07	-0.02
Totalincrease	64.57	136.48	18.40	-57.96

Source: DoT

* As Aircel has filed for bankruptcy, its subscription data for April and May,2018 is not available and therefore taken as zero.

Service area wisemarket share (in %) of telecom operators as on 31.03.2016.

Sr. No.	Service area	Airtel	TATA Teleservices Ltd.	Quadrant Tele-ventures Ltd.	Aircel	Reliance	Vodafone Essar	Telenor	Idea	Videocon	Sistema Shyam Tele-services Ltd.	BSNL	MTNL
1	Andhra Pradesh	31.08	6.71	0.00	3.57	7.45	9.22	7.44	20.15	0.00	0.00	14.39	0.00
2	Assam	31.75	0.00	0.00	27.29	7.15	19.50	0.00	6.28	0.00	0.00	8.03	0.00
3	Bihar	37.98	2.27	0.00	9.44	6.01	12.69	11.77	14.94	0.01	0.00	4.88	0.00
4	Gujarat	13.51	4.66	0.00	0.03	9.42	30.40	13.98	18.98	1.18	0.32	7.51	0.00
5	Haryana	12.51	11.95	0.00	0.01	8.31	23.18	0.00	19.65	9.53	0.00	14.86	0.00
6	Himachal Pradesh	30.27	0.80	0.00	12.06	19.36	7.91	0.00	8.84	0.00	0.00	20.76	0.00
7	Jammu & Kashmir	33.58	0.00	0.00	25.59	9.35	10.68	0.00	6.40	0.00	0.00	14.40	0.00
8	Karnataka	33.76	11.76	0.00	4.87	9.50	12.08	0.00	13.23	0.00	1.83	12.97	0.00
9	Kerala	12.21	4.35	0.00	0.80	6.08	20.47	0.00	28.40	0.00	0.97	26.72	0.00
10	Madhya Pradesh	19.32	7.16	0.00	0.03	18.21	10.32	0.00	31.95	5.29	0.00	7.72	0.00
11	Maharashtra	15.69	7.97	0.00	3.03	6.61	21.49	9.48	27.14	0.00	0.00	8.58	0.00
12	North East	34.85	0.00	0.00	27.98	3.35	13.67	0.00	4.50	0.00	0.00	15.65	0.00
13	Odisha	35.12	7.69	0.00	15.75	6.40	14.01	0.00	5.93	0.00	0.00	15.10	0.00
14	Punjab	24.76	8.26	10.42	3.23	5.10	15.59	0.00	19.71	0.00	0.00	12.93	0.00
15	Rajasthan	31.90	2.49	0.00	10.58	11.01	19.98	0.00	12.81	0.00	3.56	7.66	0.00
16	Tamil Nadu	21.13	5.84	0.00	25.71	8.28	18.50	0.00	6.98	0.00	0.89	12.67	0.00
17	Uttar Pradesh (East)	22.55	4.42	0.00	7.44	10.12	20.49	13.27	11.68	0.01	0.00	10.02	0.00
18	Uttar Pradesh (West)	14.40	6.00	0.00	1.17	10.40	19.94	14.80	24.97	0.02	0.26	8.03	0.00
19	West Bengal	29.45	0.91	0.00	9.66	6.59	35.13	0.00	11.03	0.00	3.00	4.24	0.00
20	Kolkata	18.45	10.89	0.00	15.74	18.23	20.76	0.00	8.27	0.00	2.06	5.60	0.00
21	Delhi	24.66	4.61	0.00	12.55	16.41	19.97	0.00	12.16	0.00	1.83	0.00	7.80
22	Mumbai	17.60	11.02	0.00	8.21	17.26	24.86	0.00	12.06	0.00	0.00	0.00	8.99
	Total	24.06	5.84	0.32	8.22	9.78	18.69	4.95	16.53	0.62	0.73	9.59	0.67

Source: DoT

Annexure-IV

Service area wise market share (in %) of telecom operators as on 31.03.2017.

Sr.No.	Service area	Airtel	TATA Teleservices Ltd.	Quadrant Televentures Ltd.	Aircel	Reliance	Vodafone	Telenor	Idea	Sistema Shyam Teleservices Ltd.	Reliance Jio	BSNL	MTNL
1	Andhra Pradesh	30.06	4.51	0.00	3.02	4.25	8.04	6.12	20.31	0.00	10.82	12.86	0.00
2	Assam	29.30	0.00	0.00	26.49	5.12	18.31	0.00	6.14	0.00	6.97	7.68	0.00
3	Bihar	36.47	1.59	0.00	8.90	3.76	11.46	10.71	14.92	0.00	7.07	5.12	0.00
4	Gujarat	12.65	3.50	0.00	0.02	7.53	27.40	11.58	17.98	0.18	11.00	8.15	0.00
5	Haryana	13.91	9.63	0.00	0.01	5.84	23.81	0.00	20.18	0.00	10.88	15.75	0.00
6	Himachal Pradesh	28.14	0.45	0.00	10.61	14.58	6.87	0.00	7.68	0.00	9.84	21.84	0.00
7	Jammu & Kashmir	30.10	0.00	0.00	24.85	7.25	8.26	0.00	5.77	0.00	10.39	13.38	0.00
8	Karnataka	32.02	9.04	0.00	4.82	7.48	10.95	0.00	13.39	1.01	9.72	11.57	0.00
9	Kerala	11.17	3.14	0.00	0.90	3.37	18.59	0.00	26.68	0.57	8.66	26.91	0.00
10	Madhya Pradesh	20.20	5.96	0.00	0.03	13.08	9.65	0.00	34.04	0.00	8.65	8.38	0.00
11	Maharashtra	15.14	5.73	0.00	2.81	4.18	20.21	8.04	27.65	0.00	7.98	8.27	0.00
12	North East	33.39	0.00	0.00	25.85	2.04	12.75	0.00	5.03	0.00	6.84	14.10	0.00
13	Odisha	33.26	5.27	0.00	13.39	6.17	13.11	0.00	6.00	0.00	7.45	15.35	0.00
14	Punjab	24.43	6.21	0.71	3.07	4.60	14.76	0.00	19.10	0.00	13.25	13.87	0.00
15	Rajasthan	31.00	1.58	0.00	9.81	8.28	18.07	0.00	12.32	1.99	7.89	9.05	0.00
16	Tamil Nadu	20.63	4.37	0.00	23.27	6.00	17.74	0.00	6.72	0.52	8.81	11.95	0.00
17	Uttar Pradesh (East)	22.42	3.13	0.00	6.61	7.75	19.59	11.21	11.71	0.00	6.57	11.00	0.00
18	Uttar Pradesh (West)	13.39	4.31	0.00	1.30	8.13	18.45	12.14	24.43	0.14	8.59	9.11	0.00
19	West Bengal	27.70	0.58	0.00	8.80	5.87	34.58	0.00	10.87	1.76	6.03	3.80	0.00
20	Kolkata	17.06	8.27	0.00	14.62	13.77	18.98	0.00	8.76	1.25	12.09	5.20	0.00
21	Delhi	22.80	2.78	0.00	12.16	10.24	19.07	0.00	11.46	0.95	13.59	0.00	6.94
22	Mumbai	17.19	8.07	0.00	7.32	12.77	22.86	0.00	11.04	0.00	12.77	0.00	7.98
	Total	23.22	4.25	0.02	7.61	7.09	17.51	4.23	16.35	0.42	9.09	9.63	0.59

Source: DoT

Service area wise market share (in %) of telecom operators as on 31.03.2018

Sr.No.	Service area	Airtel	TATA Teleservices Ltd.	Quadrant Televentures Ltd.	Aircel	Reliance	Vodafone	Telenor	Idea	Reliance Jio	BSNL	MTNL
1	Andhra Pradesh	31.51	3.29	0.00	2.61	0.07	7.37	4.29	20.34	17.70	12.82	0.00
2	Assam	30.58	0.00	0.00	22.77	0.00	16.55	0.00	5.47	13.83	10.79	0.00
3	Bihar	36.34	0.77	0.00	8.21	0.01	11.59	7.95	15.96	13.90	5.27	0.00
4	Gujarat	13.36	2.30	0.00	0.00	0.04	28.42	8.55	19.90	18.03	9.38	0.00
5	Haryana	16.85	5.69	0.00	0.00	0.01	27.03	0.00	22.45	8.21	19.75	0.00
6	Himachal Pradesh	28.00	0.16	0.00	0.00	0.03	4.69	0.00	7.80	37.92	21.39	0.00
7	Jammu & Kashmir	34.78	0.00	0.00	24.91	0.00	6.46	0.00	5.07	16.40	12.36	0.00
8	Karnataka	36.80	6.98	0.00	3.91	0.25	11.26	0.00	13.78	14.98	12.03	0.00
9	Kerala	11.31	1.56	0.00	0.53	0.06	18.04	0.00	27.81	12.51	28.18	0.00
10	Madhya Pradesh	21.80	4.14	0.00	0.00	0.10	9.15	0.00	39.15	16.25	9.40	0.00
11	Maharashtra	15.26	3.75	0.00	0.00	0.07	21.41	5.01	31.82	14.00	8.69	0.00
12	North East	35.09	0.00	0.00	23.91	0.00	12.54	0.00	3.93	12.02	12.51	0.00
13	Odisha	35.74	2.88	0.00	11.36	0.01	13.10	0.00	5.74	14.76	16.41	0.00
14	Punjab	25.62	3.29	0.63	2.06	0.03	12.61	0.00	19.67	21.19	14.91	0.00
15	Rajasthan	34.31	0.58	0.00	9.29	0.05	18.54	0.00	12.56	15.42	9.24	0.00
16	Tamil Nadu	25.13	2.42	0.00	19.84	0.10	20.62	0.00	6.21	12.76	12.91	0.00
17	Uttar Pradesh (East)	25.00	1.98	0.00	5.90	0.01	22.72	8.90	12.05	11.76	11.69	0.00
18	Uttar Pradesh (West)	14.88	2.88	0.00	0.00	0.01	19.61	10.62	27.48	14.97	9.55	0.00
19	West Bengal	29.82	0.18	0.00	7.47	0.00	36.49	0.00	10.55	12.10	3.39	0.00
20	Kolkata	21.34	5.58	0.00	13.91	0.17	22.40	0.00	9.61	20.15	6.83	0.00
21	Delhi	26.52	2.09	0.00	11.25	0.36	21.43	0.00	12.84	18.86	0.00	6.65
22	Mumbai	21.01	6.17	0.00	5.88	0.60	25.05	0.00	11.89	21.58	0.00	7.81
	Total	25.43	2.73	0.02	6.51	0.09	18.40	3.13	17.43	15.40	10.29	0.57

Source: DoT

Service area wise market share (in %) of telecom operators as on 31.05.2018

Sr.No.	Service area	Airtel	TATA Teleservices Ltd.	Quadrant Televentures Ltd.	Aircel*	Reliance	Vodafone	Idea	Reliance Jio	BSNL	MTNL
1	Andhra Pradesh	36.06	3.09	0.00	0.00	0.07	7.25	20.92	19.64	12.97	0.00
2	Assam	40.35	0.00	0.00	0.00	0.00	21.20	7.15	19.71	11.60	0.00
3	Bihar	47.09	0.73	0.00	0.00	0.01	12.31	17.08	16.89	5.89	0.00
4	Gujarat	20.16	2.01	0.00	0.00	0.04	28.45	20.26	19.82	9.26	0.00
5	Haryana	15.15	4.58	0.00	0.00	0.01	23.40	19.81	19.20	17.84	0.00
6	Himachal Pradesh	35.92	0.16	0.00	0.00	0.03	5.32	10.04	21.19	27.33	0.00
7	Jammu & Kashmir	48.31	0.00	0.00	0.00	0.00	7.95	6.59	22.75	14.39	0.00
8	Karnataka	38.71	6.37	0.00	0.00	0.24	11.60	14.24	16.61	12.22	0.00
9	Kerala	11.46	1.20	0.00	0.00	0.05	17.99	27.99	13.08	28.22	0.00
10	Madhya Pradesh	21.63	3.59	0.00	0.00	0.02	8.44	38.90	18.05	9.38	0.00
11	Maharashtra	19.29	3.33	0.00	0.00	0.07	21.11	32.03	15.65	8.52	0.00
12	North East	46.28	0.00	0.00	0.00	0.00	15.85	5.08	16.66	16.13	0.00
13	Odisha	39.96	2.79	0.00	0.00	0.01	14.19	6.77	18.15	18.14	0.00
14	Punjab	26.06	3.04	0.62	0.00	0.03	12.43	19.91	22.81	15.08	0.00
15	Rajasthan	37.69	0.50	0.00	0.00	0.04	20.14	13.49	18.23	9.90	0.00
16	Tamil Nadu	31.65	2.53	0.00	0.00	0.12	25.45	7.76	16.62	15.87	0.00
17	Uttar Pradesh (East)	34.84	1.96	0.00	0.00	0.01	23.90	13.21	13.91	12.16	0.00
18	Uttar Pradesh (West)	24.77	2.65	0.00	0.00	0.01	19.15	27.54	16.34	9.54	0.00
19	West Bengal	31.78	0.15	0.00	0.00	0.00	38.53	11.60	14.49	3.44	0.00
20	Kolkata	24.93	5.70	0.00	0.00	0.17	25.46	11.43	24.28	8.04	0.00
21	Delhi	30.19	1.82	0.00	0.00	0.32	23.57	14.29	22.55	0.00	7.26
22	Mumbai	22.52	5.90	0.00	0.00	0.60	26.36	12.56	23.95	0.00	8.10
	Total	30.21	2.56	0.02	0.00	0.08	19.31	18.57	17.82	10.84	0.59

Source: DoT

* As Aircel has filed for bankruptcy, its subscription data for April and May, 2018 is not available and therefore taken as zero.

INITIATIVES TAKEN BY BSNL**Augmentation of GSM Mobile network capacity-**

BSNL is enhancing 2G and 3G coverage through:

- Replacement of old equipment having high operational cost & AMC.
- Addition of 3G capacity for increasing 3G footprints.
- Introduction of 4G services.
- The project is presently envisaged to provide about 20035 2G BTSs, 22517, 3G Node Bs and 10000 4G E-Node Bs.

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

- Phase I: Total capacity of 1 million line IMS equipment has been commissioned in Phase -I class-5 based New Generation Network (NGN). Implementation of phase-II, 3 Million (core& access) equipment is in progress. These equipments are against replacement of TDM based NT switches (Non-CDOT).
- NIT for access equipment of C-DOT MAX NG has been floated for up gradation of CDOT-MAX Switches (1974 no's) to CDOTMAX NG. PO has been issued to L1 & L2 bidders. Supply of access equipment completed and installation under progress. 2 Core sites have been commissioned by CDOT under Phase-I. Phase-II PO for core equipment of C-DOT MAX NGN placed on M/s C-DOT. All core sites have been commissioned.
- A Tender for 2.4 million NGN core, 5 million POTS & 2 million ADSL2+ports has been finalized.

Roll-out of Wi-Fi Service: BSNL has so far installed and radiated 22071 Wi-Fi Hotspots under various Wi Fi Hotspots projects.

Execution of Government projects: BSNL is executing following Government projects

- Laying of O.F. Cable under Network for Spectrum (NFS) for Defence project.
- Laying of O.F. Cable to connect Gram Panchayats under National Optical Fiber Network (NOFN)
- Installation of Mobile Towers in Left Wing Extremism (LWE) areas.
- Implementation of North-East GSM Project to Provide GSM Coverage in uncovered villages of Arunachal Pradesh and two Districts of Assam.

Customer Centric Initiatives

- Unlimited free night calling from landline to any network between 2230 Hrs to 0600 Hrs in India by BSNL to its landline customers.
- BSNL introduced unlimited free calling during day & night on all Sundays on PAN India (except HP Circle).
- BSNL has introduced Virtual landline Connection under plan "ÄSEEM" in which customer can get a Virtual Landline number & get diverted all the calls received on that number to a mobile number of his/her choice. This plan can also be provided in TNF areas. The tariff plan is applicable w.e.f. 01.09.2017.
- BSNL has introduced Replacement of Instrument Free of cost for existing customers, who has paid last six months bill for Landline/Combo connection with total amount of Rs.3600/- or above & having Landline for last three years.

- BSNL Landline may be booked through facebook/Twitter. One month Fixed Monthly Charge on landline booked through facebook/Twitter is being waived off. The scheme is applicable for one year w.e.f. 30.10.2017.
- BSNL has introduced new STV plan “BSNL CHAUKKA” “444’ Unlimited data (Speed reduced to 80 Kbps after 4GB/day) offer under prepaid mobile service.
- BSNL has introduced new plan “BSNL SIXER” “666” Unlimited data (Speed reduced to 80 Kbps after 2GB/day) & Unlimited free voice (Local/STD) for 60 days any net in HPLMN under prepaid mobile service.
- BSNL has introduced the New plan is of rupees 429/ only which is giving Free voice (Local /STD) on any network and 90 GB data @ 1GB per day) for 81 days on PAN India basis (except Kerala Circle).
- BSNL has introduced the New plan is of rupees 1099 Unlimited data without speed restriction + unlimited voice (Home/National Roaming)+ free 100 SMS/day+ free PRVT for 84 days

INITIATIVES TAKEN BY MTNL

MTNL has planned several initiatives / projects to improve its network capabilities and provide better quality of service to its customers. Some of the initiatives are as under:

Landline network:

- Refurbishing of 20% Pillars and DPs every year, is planned in phased manner. 2662 Pillar and 52907 DP have been refurbished by MTNL last year as on 31.03.2018
- To improve copper pair quality, 81,492 mtr existing Drop wires have been replaced with twisted drop wires or thermo sleeves have been put at open joints at DPs by MTNL this year, as on 31.03.2018.

Broadband network:

- To give boost to customer experience, Download Speed of Broadband subscribers is being upgraded upto 8 Mbps progressively without any additional cost depending upon feasibility and line parameters.
- Tariff re-balancing of Broadband service has been done for giving more competitive and attractive tariff package to the customers.
- Societies / Areas where OFC / FTTH is already available, BB Subscribers are being migrated to FTTH free of cost and work has been started.
- To improve QOS and speed of Broadband service, DSLAMs are being redeployed near customer premise. In 2017, 47 DSLAMs in Delhi and 22 in Mumbai have been redeployed thereby reducing copper length and enhancing the quality of Broadband service.
- Proactive Monitoring of Broadband Faults through Radius attempt.
- On line tool (IPTESTER) used for monitoring on real time basis of the BTS/Node-B, Broadband Equipment and FTTH Customers.
- Trainings have been organized for line staff to improve their skills for greater overall customer satisfaction.

FTTx Network:

- FTTH (FibreTo The Home) revenue share policy was modified to make it more flexible to attract new partners with enhanced revenue share to encourage partners to rollout more connections; Partners in Delhi and Mumbai have already started operations. Active monitoring is being done to ensure to achieve the envisaged targets of the policy. Regular

advisories are being issued to field units. In the year 2017-18, total 922 connections have been provisioned by FTTx partners in Mumbai while 1180 connections were provisioned in Delhi.

Mobile Network:

MTNL has undertaken the task of improving the Wireless Network in Delhi and Mumbai so as to improve the downlink speed to 21.1 Mbps & uplink speed of 5.76 Mbps which is presently of 3.6 Mbps & 384 Kbps respectively with following major projects:

- **Expansion of GSM / 3G RF network in MTNL Delhi:** MTNL is in the process of expansion of 3G mobile network by adding 1080 nos. of 3G sites, 800 nos. of hybrid microwave to meet the backhaul capacity and Data handling capacity to 10 Gbps.
- **Upgradation / replacement of 3G RF network in MTNL Delhi:** MTNL is upgrading the existing 3G network (720 Node-Bs) and 754 nos. of existing 8Mbps Microwave Hops to 400 Mbps capacity to improve network capabilities and provide better speed.
- **3G Network Up-gradation in Mumbai:** MTNL is upgrading the existing 3G network (720 Node-Bs) and 497 nos. of existing 8Mbps Microwave Hops to 400 Mbps capacity to improve network capabilities and provide better speed.
