

**TELECOM REGULATORY AUTHORITY OF INDIA**New Delhi, 22nd November, 2021

(www.trai.gov.in)

Highlights of Telecom Subscription Data as on 30th September, 2021

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1166.02	23.13	1189.15
Net Addition in September, 2021 (Million)	-20.70	0.27	-20.43
Monthly Growth Rate	-1.74%	1.19%	-1.69%
Urban Telephone Subscribers (Million)	637.89	21.20	659.09
Net Addition in September, 2021 (Million)	-12.50	0.29	-12.21
Monthly Growth Rate	-1.92%	1.38%	-1.82%
Rural Telephone Subscribers (Million)	528.13	1.93	530.06
Net Addition in September, 2021 (Million)	-8.20	-0.02	-8.22
Monthly Growth Rate	-1.53%	-0.88%	-1.53%
Overall Tele-density* (%)	85.20%	1.69%	86.89%
Urban Tele-density* (%)	134.26%	4.46%	138.72%
Rural Tele-density* (%)	59.11%	0.22%	59.33%
Share of Urban Subscribers	54.71%	91.66%	55.43%
Share of Rural Subscribers	45.29%	8.34%	44.57%
Broadband Subscribers (Million)	770.49	24.39	794.88

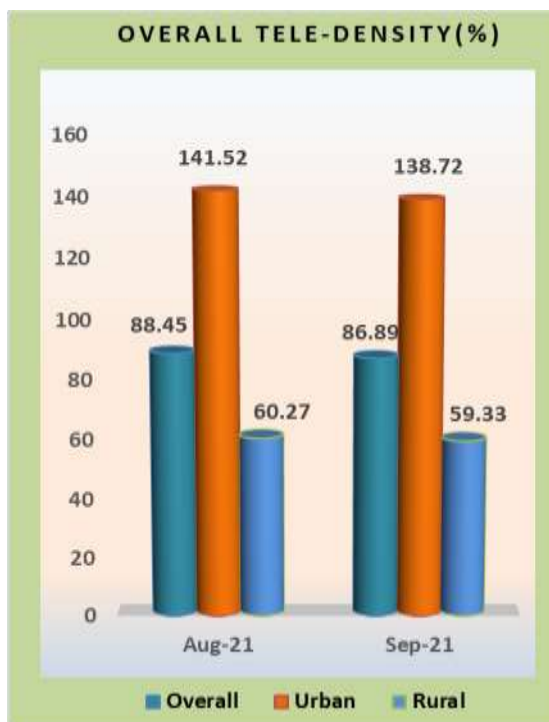
- ❖ In the month of September, 2021, 10.10 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 628.15 million at the end of August-21 to 638.25 million at the end of September-21, since implementation of MNP.
- ❖ Number of active wireless subscribers (on the date of peak VLR#) in September, 2021 was 995.67 million.

Note:

- Information in this Press Release is based on the data provided by the Service Providers
- * Based on the projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 – 2036', which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
- # VLR is acronym of Visitor Location Register. The dates of peak VLR for various TSPs are different in different service areas.

I. Total Telephone Subscribers

- The number of telephone subscribers in India decreased from 1,209.58 million at the end of August-21 to 1,189.15 million at the end of September-21, thereby showing a monthly decline rate of 1.69%. Urban telephone subscription decreased from 671.31 million at the end of August-21 to 659.09 million at the end of September-21 and the rural subscription decreased from 538.28 million to 530.06 million during the same period. The monthly decline rates of urban and rural telephone subscription were 1.82% and 1.53% respectively during the month of September-21.



- The overall Tele-density in India decreased from 88.45% at the end of August-21 to 86.89% at the end of September-21. The Urban Tele-density decreased from 141.52% at the end of August-21 to 138.72% at the end of September-21 and Rural Tele-density also decreased from 60.27% to 59.33% during the same period. The share of urban and rural subscribers in total number of telephone subscribers at the end of September-21 was 55.43% and 44.57% respectively.

Overall Tele-density (LSA Wise) – As on 30th September, 2021



- As may be seen in the above chart, nine LSA have less tele-density than the all India average tele-density at the end of September-21. Delhi service area has maximum tele-density of 269.76% and the Bihar service area has minimum tele-density of 53.59% at the end of September-21.

Notes: -

- Population data/projections are available state wise only.
- Tele-density figures are derived from the telephone subscriber data provided by the access service providers and the projection of population from the "Report of the Technical Group on Population Projections for India and States 2011 – 2036, which is available under the link https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf
- Telephone subscriber data for Delhi, includes, apart from the data for the State of Delhi, wireless subscriber data for the areas served by the local exchanges of Ghaziabad & Noida (in Uttar Pradesh) and Gurgaon & Faridabad (in Haryana).
- Data/information for West Bengal includes Kolkata, Maharashtra includes Mumbai and Uttar Pradesh includes UPE & UPW service area(s).
- Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatisgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura States.

II. Category-wise Growth in subscriber base

Circle Category-wise Net Additions in Telephone Subscribers in the month of September 2021

Circle Category	Net additions in the month of September, 2021		Telephone Subscriber base as on 30 th September, 2021	
	Wireline segment	Wireless segment	Wireline segment	Wireless segment
Circle A	57,138	-60,56,491	88,21,772	39,72,95,525
Circle B	109,570	-54,97,477	52,95,988	47,72,64,529
Circle C	45,412	-35,78,390	13,48,167	17,91,56,923
Metro	60,176	-55,70,682	76,65,595	11,23,04,174
All India	2,72,296	-2,07,03,040	2,31,31,522	1,16,60,21,151

Circle Category-wise monthly and yearly Growth Rates in Telephone Subscribers in the month of September 2021

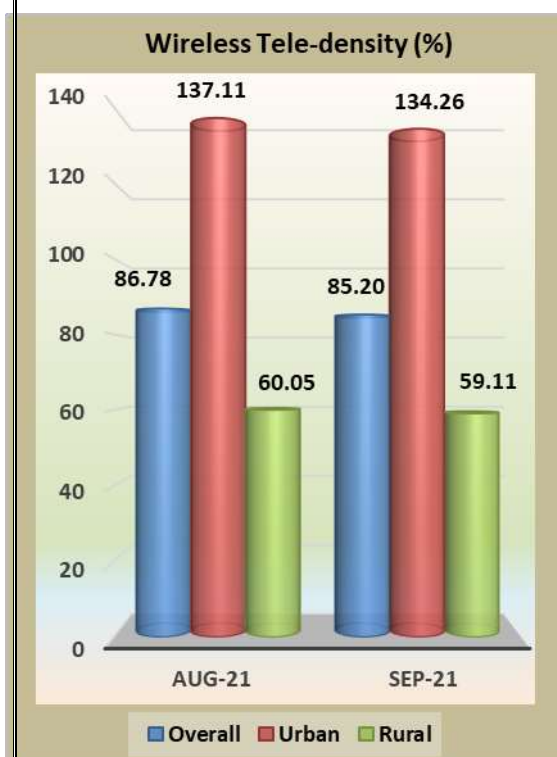
Circle Category	Monthly growth rate (%) (August-21 to September-21)		Yearly growth rate (%) (September-20 to September-21)	
	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment
Circle A	0.65%	-1.50%	13.38%	1.32%
Circle B	2.11%	-1.14%	19.60%	2.46%
Circle C	3.49%	-1.96%	58.16%	1.87%
Metro	0.79%	-4.73%	9.26%	-2.18%
All India	1.19%	-1.74%	15.21%	1.52%

Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, on monthly basis all circles have registered decline rate in their subscriber base during the month of September, 2021. On yearly basis, except circle 'Metro', all circles have registered growth rate in their subscriber base.
- In Wireline segment, both on monthly and yearly basis, Circles of all categories have registered growth rate in their subscriber base.

III. Wireless subscriber

• Total wireless subscribers decreased from 1,186.72 million at the end of August-21 to 1,166.02 million at the end of September-21, thereby registering a monthly decline rate of 1.74%. Wireless subscription in urban areas decreased from 650.39 million at the end of August-21 to 637.89 million at the end of September-21 and wireless subscription in rural areas also decreased from 536.33 million to 528.13 million during the same period. Monthly decline rates of urban and rural wireless subscription were -1.92% and -1.53% respectively.

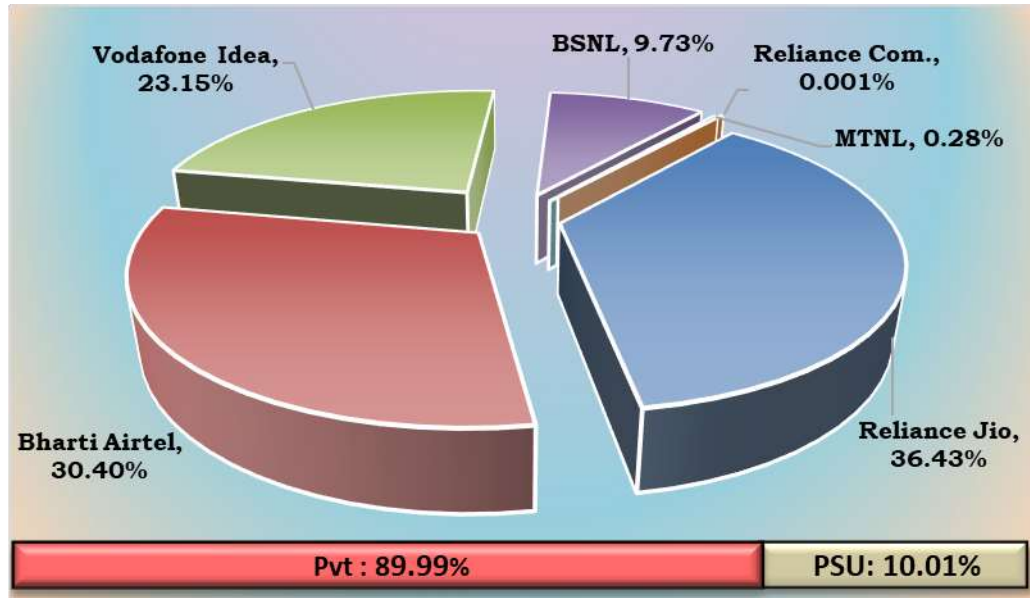


• The Wireless Tele-density in India decreased from 86.78% at the end of August-21 to 85.20% at the end of September-21. The Urban Wireless Tele-density decreased from 137.11% at the end of August-21 to 134.26% at the end of September-21 and Rural Tele-density also decreased from 60.05% to 59.11% during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 54.71% and 45.29% respectively at the end of September-21. Detailed statistics of

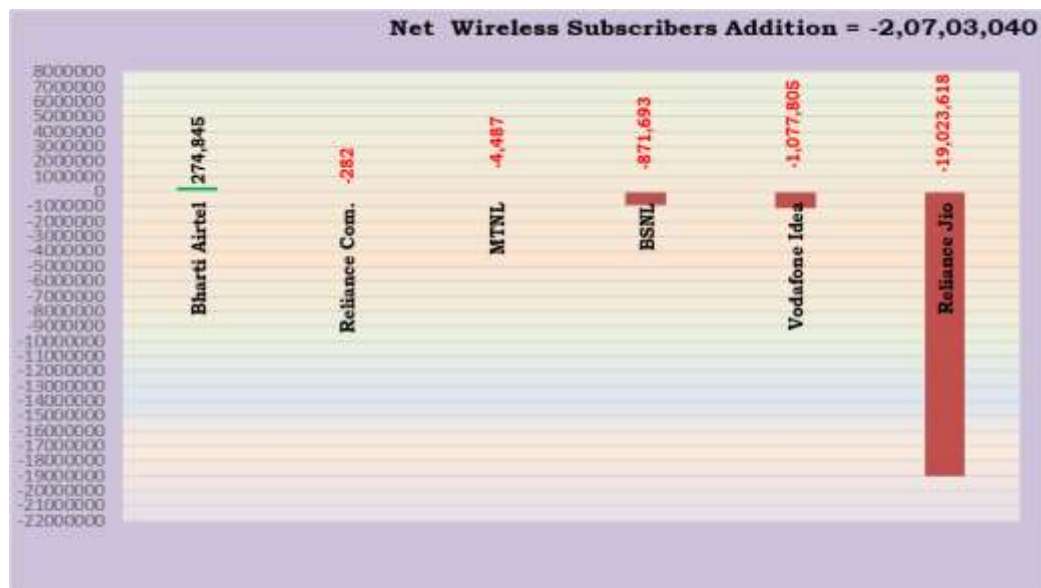
wireless subscriber base is available at **Annexure-I**.

- As on 30th September, 2021, the private access service providers held 89.99% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 10.01%.
- The graphical representation of access service provider-wise market share and net additions in wireless subscriber base are given below: -

Access Service Provider-wise Market Shares in term of Wireless Subscribers as on 30th September, 2021



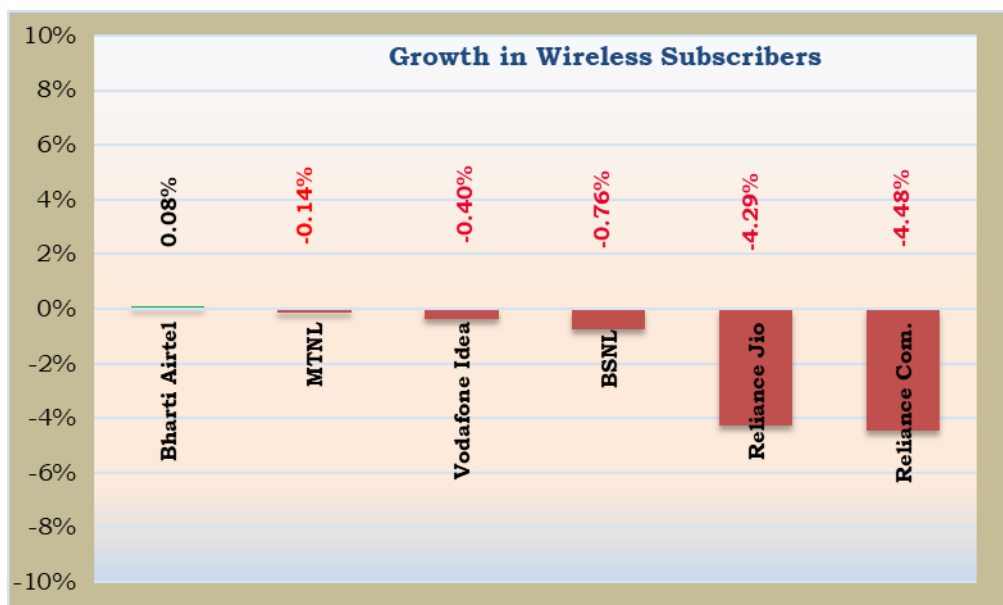
Net Addition/decline in Wireless Subscribers of Access Service Providers in the month of September, 2021



- Note:**
- M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd.
 - Virtual Network Operator (VNO) of BSNL has started reporting of its subscribers from the month of October, 2018 and the same has been included in the subscriber base of BSNL.

IV. Growth in Wireless Subscribers

Access Service Provider-wise Monthly Growth Rate of Wireless Subscribers in the month of September, 2021



Note: BSNL includes its Virtual Network Operator (VNO).

Service Area-wise Monthly Growth Rate of Wireless Subscribers in the month of September, 2021

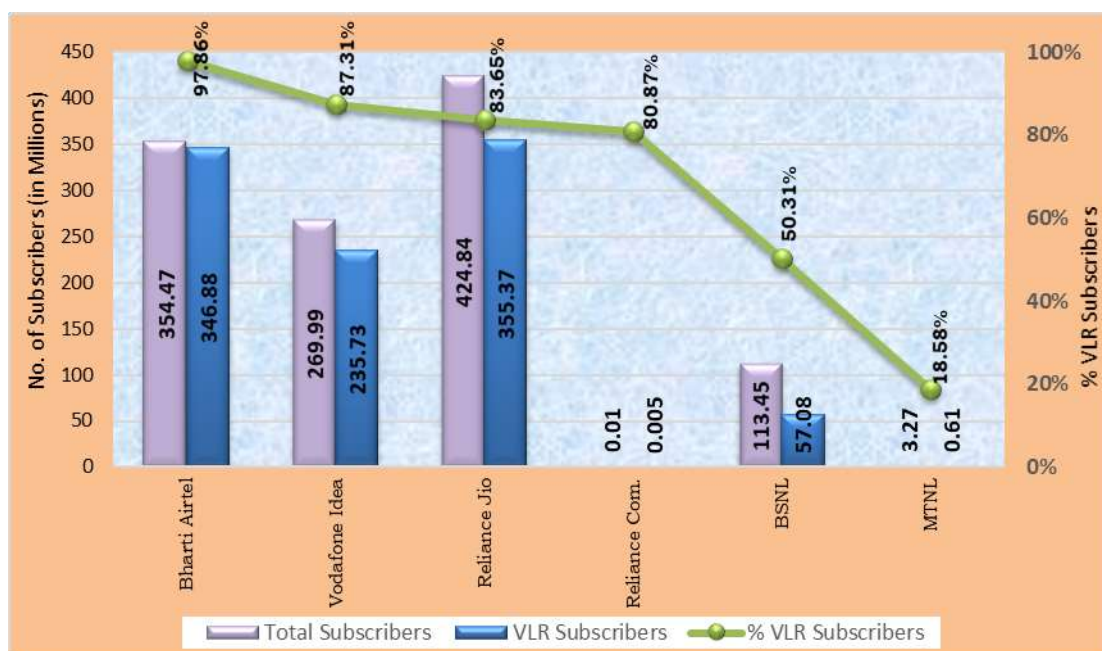


- All service areas have showed decline in their wireless subscribers during the month of September-21.

V. Active Wireless Subscribers (VLR Data)

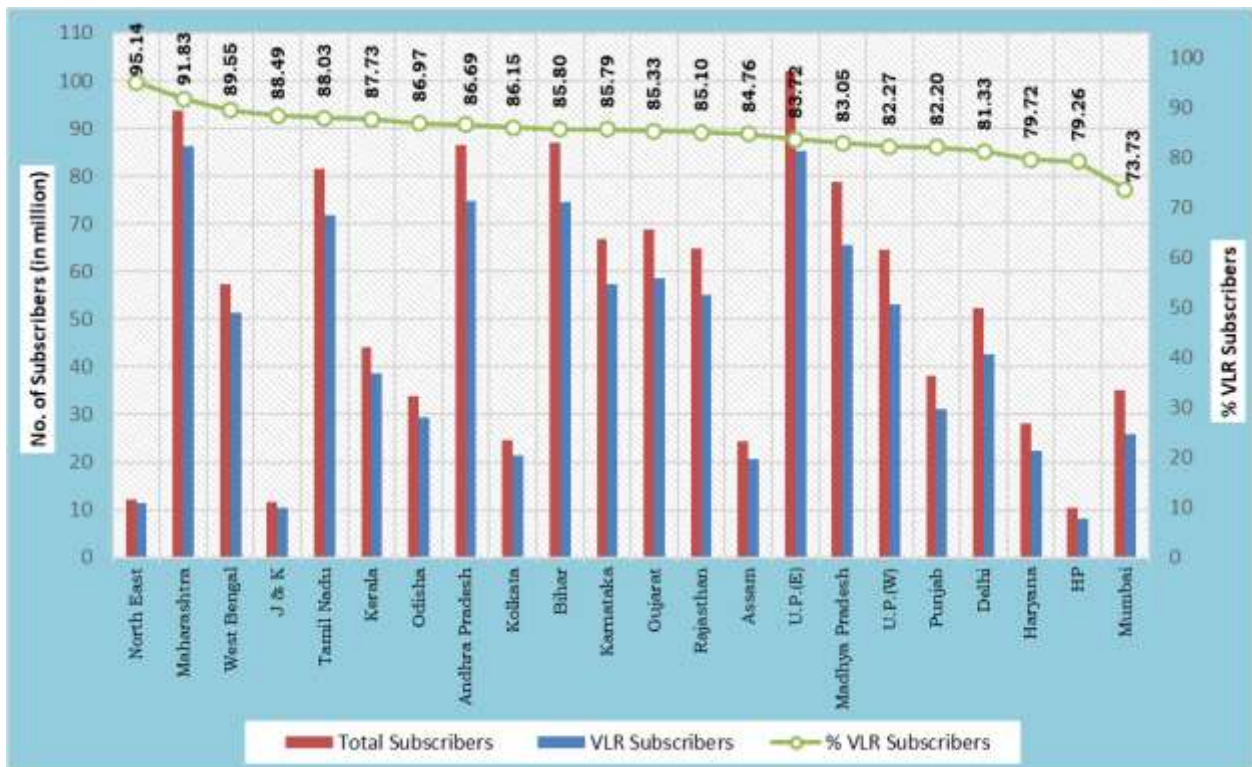
- Out of the total wireless subscribers (1,166.02 million), 995.67 million wireless subscribers were active on the date of peak VLR in the month of September-21. The proportion of active wireless subscribers was approximately 85.39% of the total wireless subscriber base.
- The detailed statistics on proportion of active wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of September-21 is available at **Annexure-II** and the methodology used for reporting VLR subscribers is available at **Annexure-IV**.

Access Service Provider-wise Percentage of VLR Subscribers in the month of September, 2021



- Bharti Airtel has the maximum proportion (97.86%) of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of peak VLR in the month of September-21 and MTNL has the minimum proportion of VLR (18.58%) of its HLR during the same period.

Service Area wise percentage of VLR Subscribers in the month of September, 2021



VI. Mobile Number Portability (MNP)

- Intra-service area Mobile number portability (MNP) was implemented first in Haryana service area w.e.f. 25.11.2010 and in the rest of the country w.e.f. 20.01.2011. Inter-Service Area MNP has been implemented in the country w.e.f. 03.07.2015. Now, the wireless telephone subscribers can retain their mobile numbers when they relocate from one service area to another.
- During the month of September-21, a total of 10.10 million requests were received for MNP. Out of total 10.10 million new requests, 6 million requests received from Zone-I and 4.09 million requests received from Zone-II. The cumulative MNP requests increased from 628.15 million at the end of August-21 to 638.25 million at the end of September-21, since the implementation of MNP.
- In MNP Zone-I (Northern and Western India), the highest number of requests till date have been received in Maharashtra (about 52.69 million) followed by Uttar Pradesh-East (about 46.24 million) service area.

- In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 50.55 million) followed by Andhra Pradesh (about 48.69 million).

Service Area Wise MNP Status					
Zone - 1			Zone - 2		
Service Area	Number of Porting Requests (in Million)		Service Area	Number of Porting Requests (in Million)	
	August-21	September-21		August-21	September-21
Delhi	30.64	31.09	Andhra Pradesh	48.23	48.69
Gujarat	42.43	43.15	Assam	4.37	4.43
Haryana	21.06	21.31	Bihar	30.29	31.02
Himachal Pradesh	2.89	2.93	Karnataka	50.13	50.55
Jammu & Kashmir	1.39	1.40	Kerala	16.67	16.94
Maharashtra	51.76	52.69	Kolkata	13.18	13.31
Mumbai	26.29	26.46	Madhya Pradesh	45.38	46.24
Punjab	23.54	23.83	North East	1.63	1.64
Rajasthan	45.43	46.07	Odisha	12.20	12.37
U.P.(East)	44.84	46.24	Tamil Nadu	46.93	47.31
U.P.(West)	36.00	37.10	West Bengal	32.88	33.49
Total	326.27	332.27	Total	301.88	305.98
Total (Zone-1 + Zone-2)				628.15	638.25
Net Addition (September, 2021)			10.10 million		

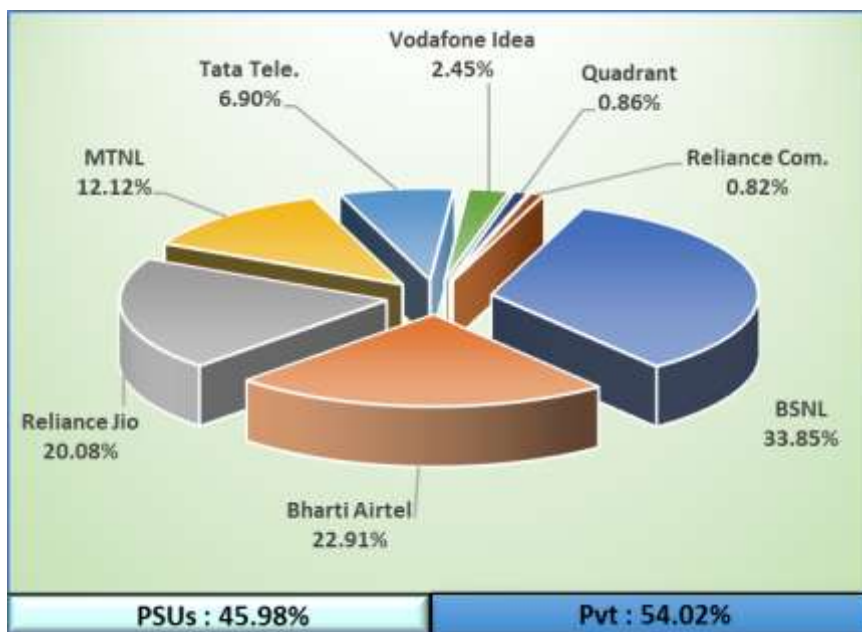
VII. Wireline Subscribers

- Wireline subscribers increased from 22.86 million at the end of August-21 to 23.13 million at the end of September-21. Net increase in the wireline subscriber base was 0.27 million with a monthly growth rate of 1.19%. The share of urban and rural subscribers in total wireline subscribers were 91.66% and 8.34% respectively at the end of September, 2021.
- The Overall Wireline Tele-density in India, increased from 1.67% at the end of August-21 to 1.69% at the end of September-21. Urban and Rural Wireline Tele-density were 4.46% and 0.22% respectively during the same period.

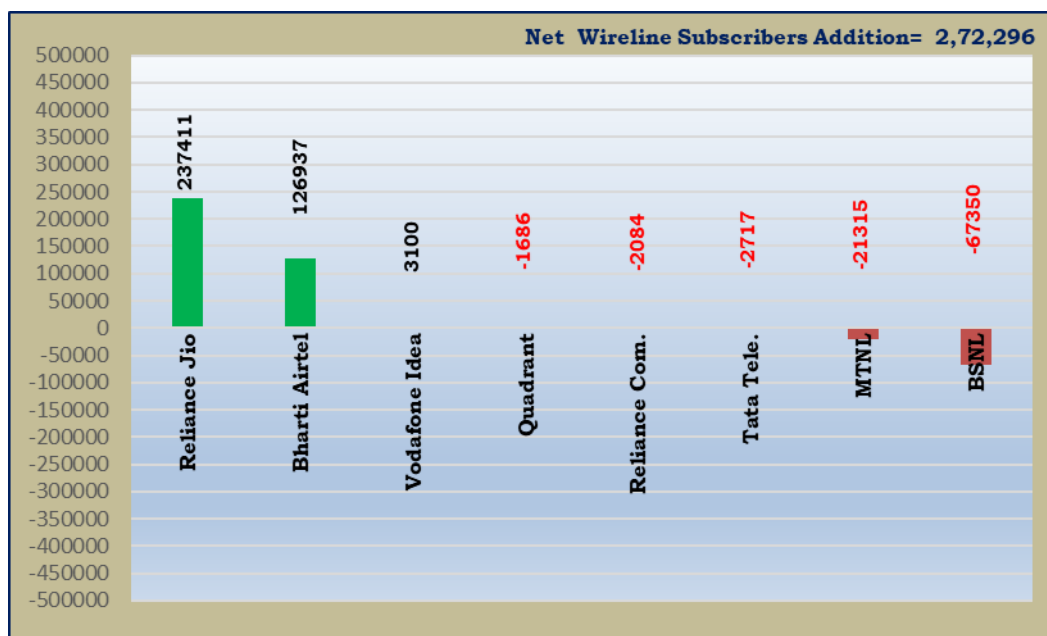
- BSNL and MTNL, the two PSU access service providers, held 45.98% of the wireline market share as on 30th September, 2021.

Detailed statistics of wireline subscriber base are available at **Annexure-III**.

Access Service Provider-wise Market Share of Wireline Subscribers as on 30th September, 2021



Access Service Provider-wise Net Addition/Decline in Wireline Subscribers during the month of September, 2021



VIII. Broadband (\geq 512 Kbps download)

- As per the information received from 522 operators in September 2021 in comparison to 499 Operator in August 2021, the total Broadband Subscribers decreased from 813.47 million at the end of August-21 to 794.88 million at the end of September-21 with a monthly decline rate of 2.29%. Segment-wise broadband subscribers and their monthly growth rates are as below: -

Segment-wise Broadband Subscribers and Monthly Growth Rate in the month of September, 2021

Segment	Broadband subscribers (in million)		Monthly growth rate in the month of September-21
	As on 31 st August, 2021	As on 30 th September, 2021	
Wired subscribers	24.29	24.39	0.41%
Mobile devices users (Phones and dongles)	787.94	769.22*	-2.38%
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	1.24	1.28	2.75%
Total	813.47	794.88	-2.29%

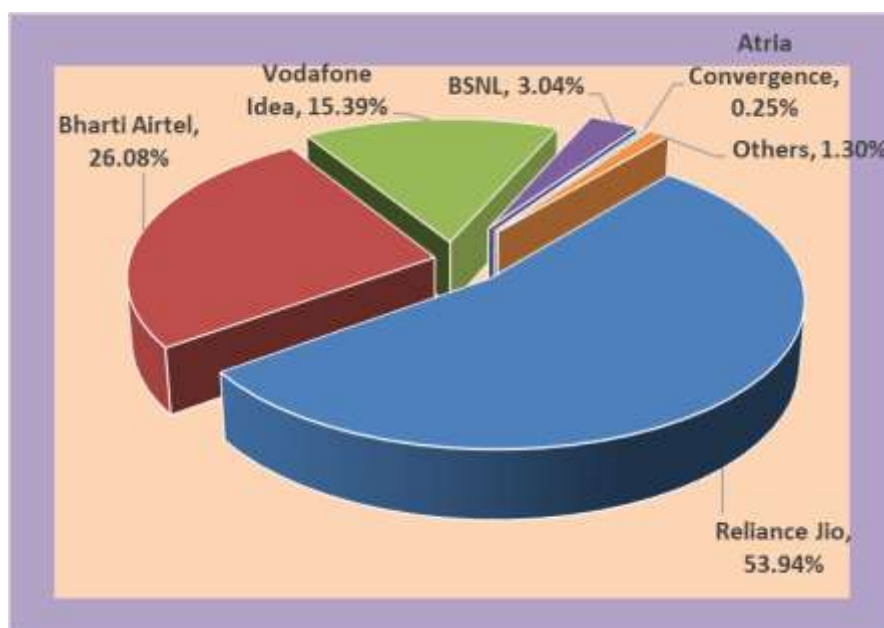
*Reliance Jio Infocomm Limited & Vodafone Idea Limited have reported significant reduction in their subscriber base.

- Top five service providers constituted 98.70% market share of the total broadband subscribers at the end of September-21. These service providers were Reliance Jio Infocomm Ltd (428.78 million), Bharti Airtel (207.30 million), Vodafone Idea (122.37 million), BSNL (24.15 million) and Atria Convergence (1.96 million).

Note: Some wireless service providers exclude incidental data users from their subscriber base, based on minimum usage decided by them.

- The graphical representation of the service provider-wise market share of broadband services is given below: -

**Service Provider-wise Market Share of Broadband
(wired + wireless) Services as on 30th September 2021**



- As on 30th September, 2021, the top five Wired Broadband Service providers were BSNL (5.05 million), Reliance Jio Infocomm Ltd (3.94 million), Bharti Airtel (3.85 million), Atria Convergence Technologies (1.96 million) and Hathway Cable & Datacom (1.08 million).

As on 30th September, 2021, the top five Wireless Broadband Service providers were Reliance Jio Infocomm Ltd (424.84 million), Bharti Airtel (203.45 million), Vodafone Idea (122.36 million), BSNL (19.10 million) and Tikona Infinet Ltd. (0.30 million).

Contact details in case of any clarification: -

Shri Amit Sharma, Advisor (F&EA),
Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhawan
Jawahar Lal Nehru Marg,
New Delhi – 110002,
Ph: 011-23234367 Fax: 011-23235249
E-mail: advfea2@traf.gov.in

**(V. Raghunandan)
Secretary, TRAI**

Wireless Subscriber Base																Annexure-I	
Circle	Bharti Airtel (including Tata)		Reliance Com.		Vodafone Idea		BSNL		BSNL (VNO's)		MTNL		Reliance Jio		Total		Net Addition
	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	
Andhra Pradesh	31186566	31193079			14897868	14768586	9040658	9043969					32509911	31390404	87635003	86396038	-1238965
Assam	9563472	9,666,469			2942512	2896364	3085783	3097802					9647154	8692859	25238921	24353494	-885427
Bihar	36455259	36,289,924			11076397	10973747	5592809	5543665					34082403	34130700	87206868	86938036	-268832
Delhi	15797812	15829346	348	327	15803961	15812011					2156829	2155755	20370041	18605915	54128991	52403354	-1725637
Gujarat	11967790	11842855	167	167	24454206	24305580	5669105	5676308					27961726	26862748	70052994	68687658	-1365336
Haryana	5652243	5685403	57	49	8052386	8027162	4974750	4950543					9605082	9344716	28284518	28007873	-276645
Himachal Pradesh	3314396	3327816	93	93	612917	605149	2693275	2700415					4337880	3759318	10958561	10392791	-565770
J & K	5487137	5513460	0	0	469335	454075	1285096	1306794					4703972	4417890	11945540	11692219	-253321
Karnataka	30109015	30292369	1241	1209	8570817	8531587	7040501	7059485					22137644	20946637	67859218	66831287	-1027931
Kerala	7253904	7379352	337	307	16506993	16550717	10740162	10714520					10988173	9463239	45489569	44108135	-1381434
Kolkata	5613894	5553511	23	23	6477190	6457356	2328786	2332993					11703505	10351062	26123398	24694945	-1428453
Madhya Pradesh	15540168	15459137	0	0	20896193	20787588	6065226	6007209					36738811	36605321	79240398	78859255	-381143
Maharashtra	20019125	20110593	0	0	29797552	29368881	6614804	6576590					38410784	37765173	94842265	93821237	-1021028
Mumbai	9455415	9469184	2208	2124	11521563	11579610					1117381	1113968	15525900	13040989	37622467	35205875	-2416592
North East	5389862	5437472	0	0	1287316	1268515	1358947	1353900					4455087	3969330	12491212	12029217	-461995
Odisha	11074630	10990316	152	150	2086594	2069538	6387974	6344305					15344861	14346857	34894211	33751166	-1143045
Punjab	11438251	11480248	243	222	8781165	8864450	5345093	5388005					13739361	12244618	39304113	37977543	-1326570
Rajasthan	21681220	21589292	233	222	11650429	11626794	5972642	6033689					26168784	25442295	65473308	64692292	-781016
Tamil Nadu	27349057	27595251	481	468	18469158	18421575	10685173	9887738	52947	53,618			26405720	25600655	82962536	81559305	-1403231
U.P.(E)	36600020	36561974	0	0	20915562	20781191	11138641	11132440					33838226	33392337	102492449	101867942	-624507
U.P.(W)	17899301	17902978	174	146	19325518	19343161	5696082	5676052					21923694	21534971	64844769	64457308	-387461
West Bengal	15342610	15295963	538	506	16472500	16496690	2554709	2571430					23262525	22929592	57632882	57294181	-338701
Total	354191147	354465992	6295	6013	271068132	269990327	114270216	113397852	52947	53618	3274210	3269723	443861244	424837626	1186724191	1166021151	-20703040
Net Addition		274845		-282		-1077805		-872364		671		-4487		-19023618	0	-20703040	
Rural Subscribers	170770426	169,995,277	0	0	137959223	137214917	36674991	36,583,166	0	0	45078	45055	190881907	184291767	536331625	528130182	-8201443

Note: 1. The subscribers of M/s Bharti Airtel includes subscribers of M/s Tata Teleservices Ltd.
2. Virtual Network Operator (VNO) of BSNL has reported its subscriber number from the month of October, 2018.

Proportion of VLR on the date of Peak VLR in the month of September-21 (%)							Annexure-II
Circle	Bharti	BSNL	Vodafone Idea	MTNL	Reliance Com.	Reliance Jio	Total
Andhra Pradesh	100.53	58.23	88.53		-	80.28	86.69
Assam	96.54	45.04	87.09		-	85.05	84.76
Bihar	92.80	43.48	82.45		-	86.30	85.80
Delhi	98.57		73.32	11.61	140.37	81.55	81.33
Gujarat	101.60	45.98	90.94		88.62	81.40	85.33
Haryana	110.74	32.95	90.66		104.08	76.22	79.72
Himachal Pradesh	105.33	38.37	104.94		31.18	81.41	79.26
J & K	97.69	54.17	86.67		-	87.35	88.49
Karnataka	95.85	48.08	84.30		109.35	84.55	85.79
Kerala	102.04	69.07	93.25		68.08	88.04	87.73
Kolkata	99.08	42.19	88.50		65.22	87.66	86.15
Madhya Pradesh	94.14	42.51	82.37		-	85.41	83.05
Maharashtra	103.38	57.17	94.67		-	89.51	91.83
Mumbai	84.77		71.79	32.07	51.27	70.99	73.73
North East	104.50	63.56	87.96		-	95.37	95.14
Odisha	99.21	56.85	90.30		26.67	90.43	86.97
Punjab	105.77	41.39	84.30		50.45	76.53	82.20
Rajasthan	98.11	44.52	89.98		59.01	81.44	85.10
Tamil Nadu	96.75	69.90	93.76		230.56	81.56	88.03
U.P. (E)	95.44	33.63	85.61		-	86.40	83.72
U.P. (W)	101.00	37.84	82.52		13.70	78.19	82.27
West Bengal	95.84	66.15	94.33		31.42	84.53	89.55
Total	97.86	50.31	87.31	18.58	80.87	83.65	85.39

Note: Peak VLR figures in some circles of some of the service providers are more than their HLR figures due to a large number of inroamers.

Wireline Subscriber Base																	Annexure-III		
Service Area	BSNL		MTNL		Bharti Airtel		Reliance Com.		Tata Tele.		Quadrant		Vodafone Idea		Reliance Jio		Total		Net Addition
	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	Aug-21	Sep-21	
Andhra Pradesh	698874	689207			301952	309830	20937	20879	155578	155394			60915	61415	499310	525501	1737566	1762226	24660
Assam	104,043	103,859											3450	3450	68442	72561	175935	179870	3935
Bihar	181,329	180,193					20	20	7887	7804			1770	1770	166071	178590	357077	368377	11300
Delhi			1304742	1300197	1639979	1671190	30972	30932	137500	136965			93329	93659	455230	476030	3661752	3708973	47221
Gujarat	464275	457252			133296	135718	3859	3697	77885	77684			44797	45017	295094	306146	1019206	1025514	6308
Haryana	180162	182657			37141	37733	0	0	35036	35433			360	360	51034	53861	303733	310044	6311
Himachal Pradesh	89745	89944			0	0	0	0	1620	1620			30	30	20267	22017	111662	113611	1949
J & K	108249	108505			18494	30018	0	0	0	0			0	0	105450	110386	232193	248909	16716
Karnataka	884811	873892			818411	824939	24486	24527	243281	242814			98602	98712	348001	364046	2417592	2428930	11338
Kerala	1118157	1087505			71767	72949	5314	5105	18289	18681			8780	8780	104293	111820	1326600	1304840	-21760
Kolkata	456061	452866			159157	161358	7220	6915	46250	46187			15300	15330	188146	199605	872134	882261	10127
Madhya Pradesh	301596	299002			308918	318194	5	5	10930	11059			2765	2765	252270	269926	876484	900951	24467
Maharashtra	780476	772380			195328	201921	11606	11154	218301	216790			28853	29653	125150	132163	1359714	1364061	4347
Mumbai			1520887	1504117	436685	442634	57704	57145	479823	479353			112475	112805	463959	478307	3071533	3074361	2828
North East	82871	83339											330	330	55526	59906	138727	143575	4848
Odisha	196034	196630					6	6	8477	8381			6570	6570	76074	82238	287161	293825	6664
Punjab	260335	263568			168903	171608	1722	1706	12719	12887	200596	198910	2265	2265	123081	128710	769621	779654	10033
Rajasthan	300591	307576			97996	117361	4142	4130	12099	12080			13190	13320	160063	168146	588081	622613	34532
Tamil Nadu	1073624	1054202			616360	627786	24406	24094	118008	117917			37975	38565	360183	378477	2230556	2241041	10485
U.P.(E)	185182	191367			99512	103756	21	21	8060	7944			23580	23610	194183	206944	510538	533642	23104
U.P.(W)	203329	206738			69072	72913	7	7	4269	4279			7320	7350	203445	217293	487442	508580	21138
West Bengal	228585	230297					12	12	2424	2447			120	120	92778	102788	323919	335664	11745
Total	7898329	7830979	2825629	2804314	5172971	5299908	192439	190355	1598436	1595719	200596	198910	562776	565876	4408050	4645461	22859226	23131522	272296
Net Addition		-67350		-21315		126937		-2084		-2717		-1686		3100		237411		272296	
Rural Subscribers	1841444	1822729	0	0	0	0	180	180	38756	38499	25216	24874	0	0	40348	42593	1945944	1928875	-17069

Note: - BSNL-FTTH Voice-connections have also been incorporated from the month of May 2021

VLR Subscribers in the Wireless Segment

Home Location Register (HLR) is a central database that contains details of each mobile phone subscriber that is authorized to use the GSM core network. The HLRs store details of every SIM card issued by the service provider. Each SIM has a unique identifier called an International Mobile Subscriber Identity (IMSI), which is the primary key to each HLR record. The HLR data is stored for as long as a subscriber remains with the service provider. HLR also manages the mobility of subscribers by means of updating their position in administrative areas. It sends the subscriber data to a Visitor Location Register (VLR).

Subscriber numbers reported by the service providers is the difference between the numbers of IMSI registered in service provider's HLR and sum of other figures as given below: -

1	Total IMSI's in HLR (A)
2	Less: (B = a + b + c + d + e)
a.	Test/Service Cards
b.	Employees
c.	Stock in hand/in Distribution Channels (Active Card)
d.	Subscriber Retention period expired
e.	Service suspended pending disconnection
3	Subscribers Base (A-B)

Visitor Location Register (VLR) is a temporary database of the subscribers who have roamed into the particular area, which it serves. Each base station in the network is served by exactly one VLR; hence a subscriber cannot be present in more than one VLR at a time.

If subscriber is in active stage i.e. he is able to send/receive calls/SMSs he is available both in HLR and VLR. However, it may be possible that the subscriber is registered in HLR but not in VLR due to the reason that he is either switched-off or moved out of coverage area, not reachable etc. In such circumstances he will be available in HLR but not in VLR. This causes difference between subscriber number reported by the service providers based on HLR and numbers available in VLR.

The VLR subscriber data calculated here is based on active subscribers in VLR on the date of Peak subscriber number in VLR of the particular month for which the data is being collected. This data is to be taken from the switches having the purge time of not more than 72 hours.