



सत्यमेव जयते

TELECOM REGULATORY AUTHORITY OF INDIANew Delhi, 10th November, 2020

(www.trai.gov.in)

**Highlights of Telecom Subscription Data as on 31st August, 2020**

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1147.92	19.89	1167.81
Net Addition in August, 2020 (Million)	3.74	0.07	3.81
Monthly Growth Rate	0.33%	0.34%	0.33%
Urban Telephone Subscribers (Million)	624.93	17.86	642.79
Net Addition in August, 2020 (Million)	4.25	0.09	4.34
Monthly Growth Rate	0.69%	0.48%	0.68%
Rural Telephone Subscribers (Million)	522.99	2.02	525.01
Net Addition in August, 2020 (Million)	-0.51	-0.02	-0.53
Monthly Growth Rate	-0.10%	-0.92%	-0.10%
Overall Tele-density*(%)	84.77%	1.47%	86.23%
Urban Tele-density*(%)	134.33%	3.84%	138.17%
Rural Tele-density*(%)	58.83%	0.23%	59.06%
Share of Urban Subscribers	54.44%	89.83%	55.04%
Share of Rural Subscribers	45.56%	10.17%	44.96%
Broadband Subscribers (Million)	695.72	20.47	716.19

❖ In the month of August, 2020, 7.53 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 504.57 million at the end of July-20 to 512.10 million at the end of August-20, since implementation of MNP.

❖ Number of active wireless subscribers (on the date of peak VLR#) in August, 2020 was 957.43 million.

Note:

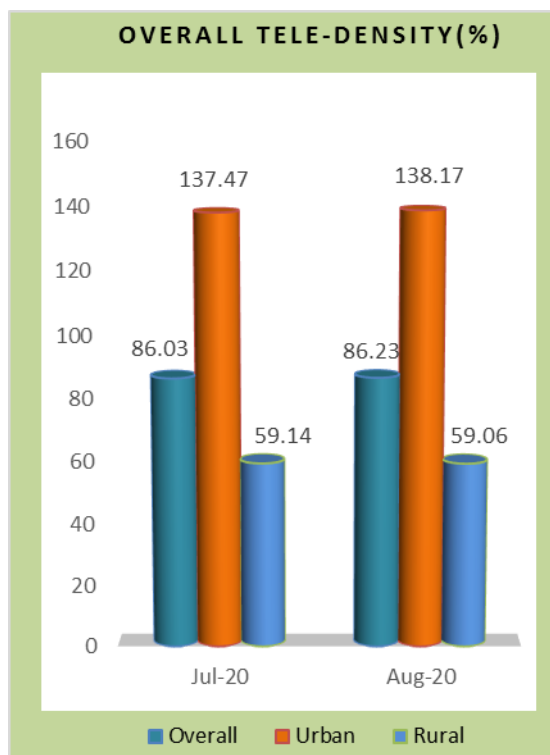
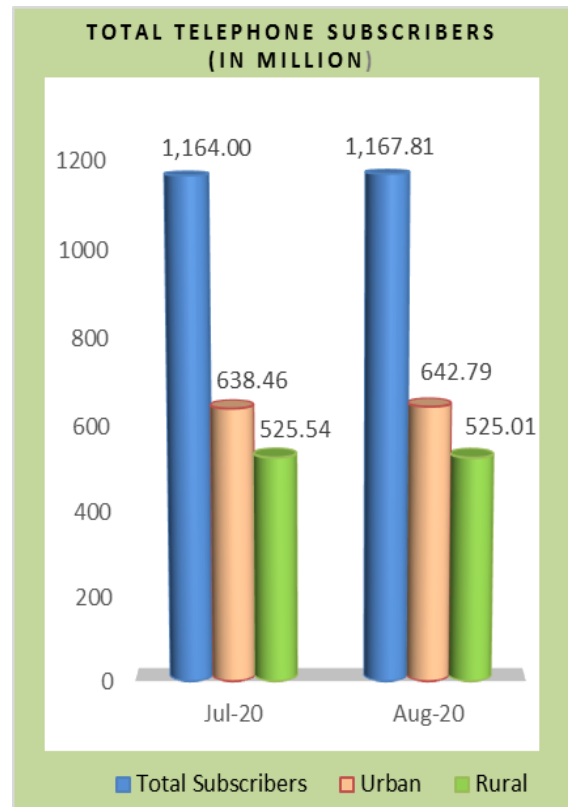
- Information in this Press Release is based on the data provided by the Service Providers

* Based on the projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 – 2036', Ministry of Health & Family Welfare.

VLR is acronym of Visitor Location Register. The dates of peak VLR for various TSPs are different in different service areas.

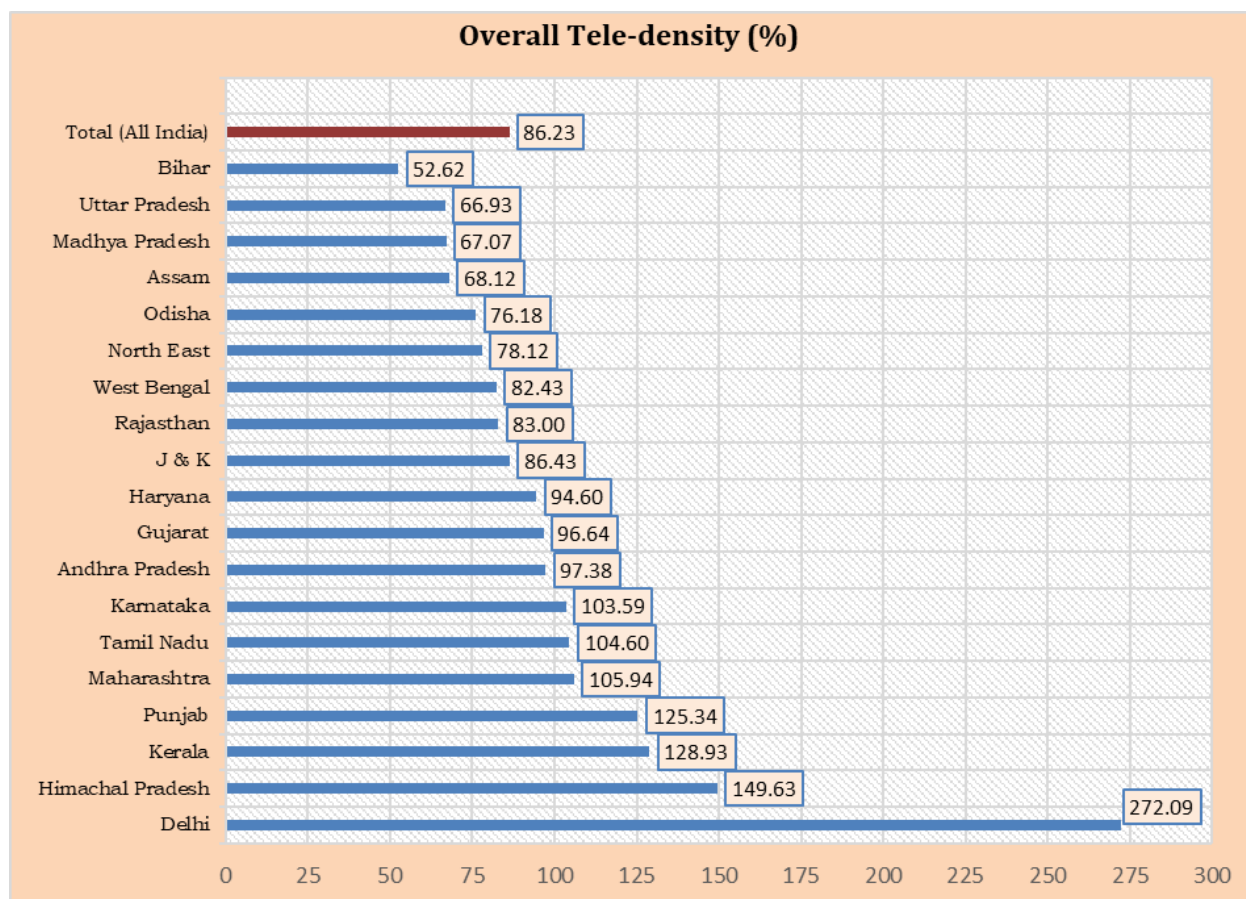
I. Total Telephone Subscribers

- The number of telephone subscribers in India increased from 1,164 million at the end of July-20 to 1,167.81 million at the end of August-20, thereby showing a monthly growth rate of 0.33%. Urban telephone subscription increased from 638.46 million at the end of July-20 to 642.79 million at the end of August-20 however, the rural subscription decreased from 525.54 million to 525.01 million during the same period. The monthly growth rates of urban and rural telephone subscription were 0.68% and -0.10% respectively during the month of August-20.



- The overall Tele-density in India increased from 86.03 at the end of July-20 to 86.23 at the end of August-20. The Urban Tele-density increased from 137.47 at the end of July-20 to 138.17 at the end of August-20. Rural Tele-density decreased from 59.14 at the end of July-20 to 59.06 at the end of August-20. The share of urban and rural subscribers in total number of telephone subscribers at the end of August-20 was 55.04% and 44.96% respectively.

Overall Tele-density (Circle/State Wise) – As on 31st August 2020



- As may be seen in the above chart, eight states have less tele-density than the all India average tele-density at the end of August-20. Delhi service area has maximum tele-density of 272.09 and the Bihar service area has minimum tele-density of 52.62 at the end of August-20.

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, Ministry of Health & Family Welfare”.
- 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, Tamil Nadu includes Chennai 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 August, 2020

Circle Category	Net additions in the month of August, 2020		Telephone Subscriber base as on 31 st August, 2020	
	Wireline segment	Wireless segment	Wireline segment	Wireless segment
Circle A	41,384	2,214,595	7,716,418	391,984,560
Circle B	14,472	-7,529	4,404,055	465,565,926
Circle C	6,234	1,008,154	837,685	175,636,269
Metro	4,681	529,262	6,929,032	114,735,823
All India	66,771	3,744,482	19,887,190	1,147,922,578

Circle Category-wise monthly and yearly Growth Rates in Telephone Subscribers in the month of August, 2020

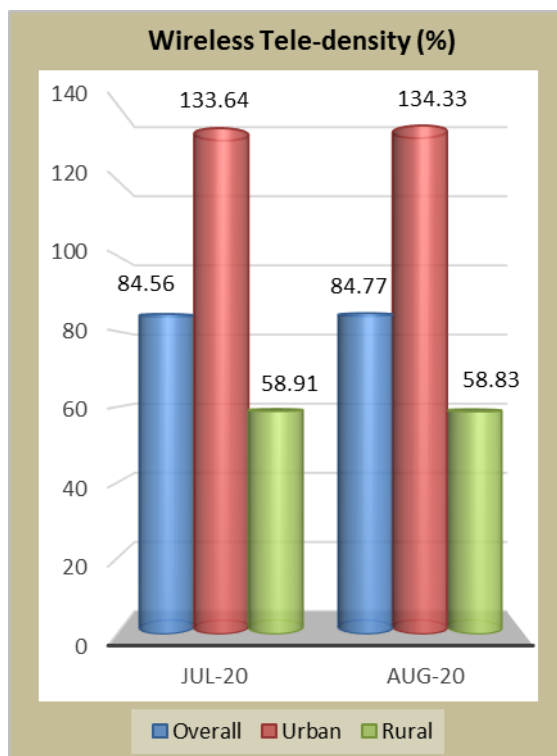
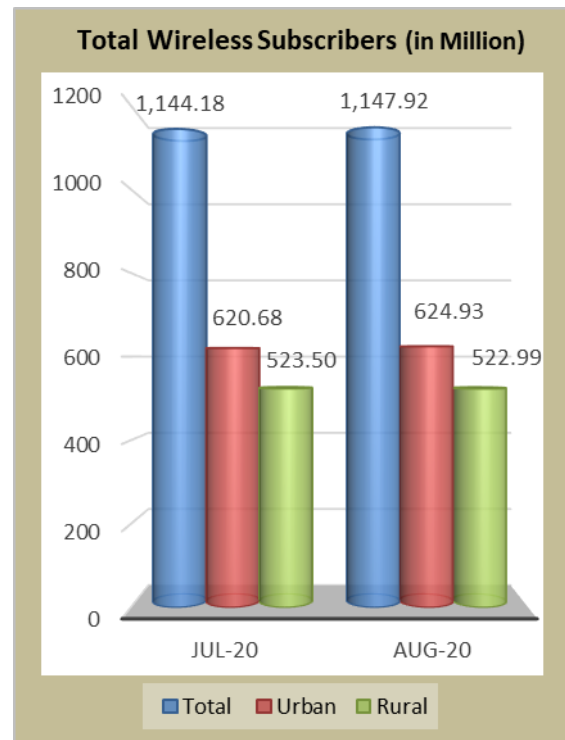
Circle Category	Monthly growth rate (%) (July-20 to August-20)		Yearly growth rate (%) (August-19 to August-20)	
	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment
Circle A	0.54%	0.57%	-4.15%	-2.25%
Circle B	0.33%	0.00%	-13.72%	-2.00%
Circle C	0.75%	0.58%	3.04%	-0.35%
Metro	0.07%	0.46%	1.15%	-3.33%
All India	0.34%	0.33%	-4.47%	-1.97%

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 Circles of all Categories showed growth rate in their subscribers during the month of August-20. However, on yearly basis circle of all categories have registered declining rate in their subscriber base.
- In Wireline segment, on monthly basis circle of all categories showed growth rate in their number of wireline subscribers during the month of August, 2020. However, on yearly basis only Circle C and Metro Circle showed growth in their number of wireline subscribers.

III. Wireless subscriber

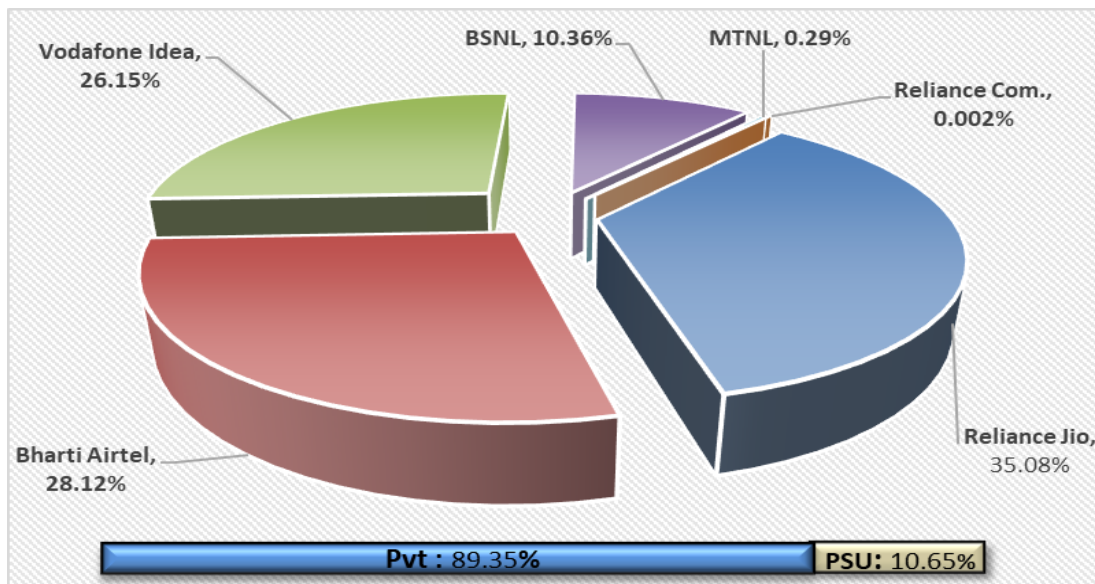
- Total wireless subscribers increased from 1,144.18 million at the end of July-20 to 1,147.92 million at the end of August-20, thereby registering a monthly growth rate of 0.33%. Wireless subscription in urban areas increased from 620.68 million at the end of July-20 to 624.93 million at the end of August-20 however, wireless subscription in rural areas decreased from 523.50 million to 522.99 during the same period. Monthly growth rates of urban and rural wireless subscription were 0.69% and -0.10% respectively.



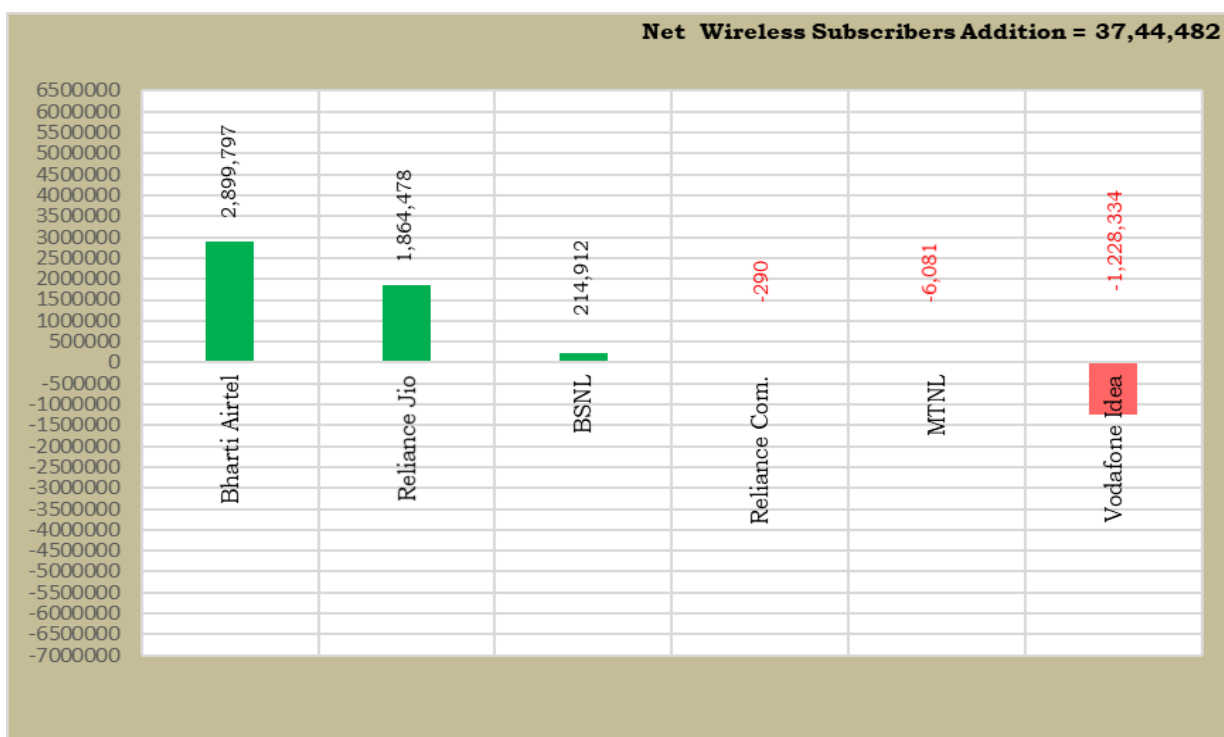
- The Wireless Tele-density in India increased from 84.56 at the end of July-20 to 84.77 at the end of August-20. The Urban Wireless Tele-density increased from 133.64 at the end of July-20 to 134.33 at the end of August-20 however, Rural Tele-density decreased from 58.91 to 58.83 during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 54.44% and 45.56% respectively at the end of August-20. Detailed statistics of wireless subscriber base is available at **Annexure-I**.

- As on 31st August, 2020, the private access service providers held 89.35% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 10.65%.
- 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 31st August, 2020



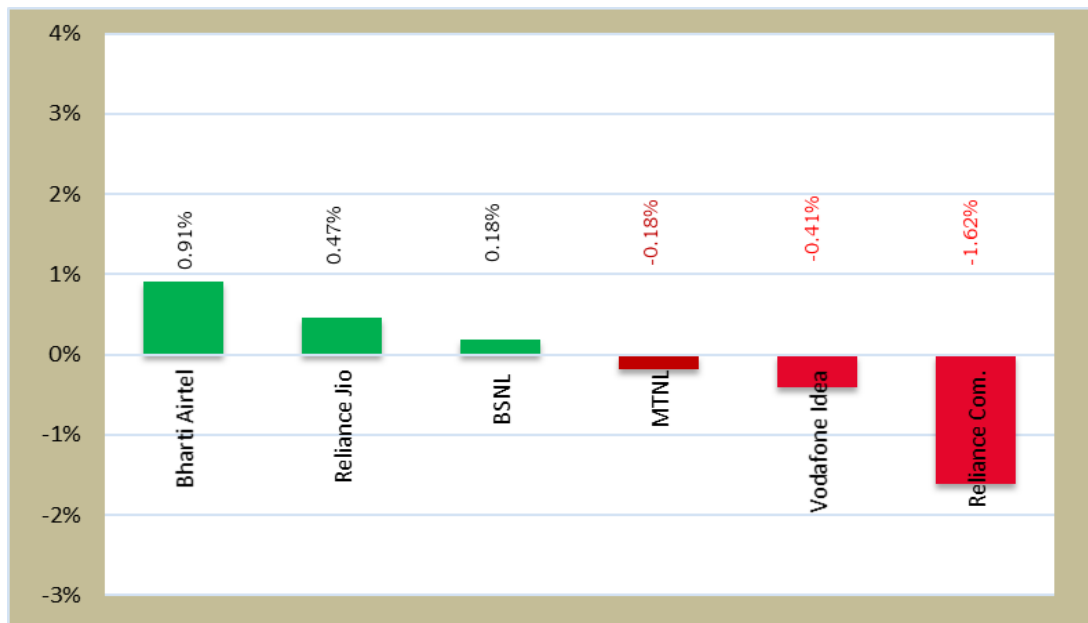
Net Additions/decline in Wireless Subscribers of Access Service Providers in the month of August 2020



- Note:** 1. M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd.
 2. 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.

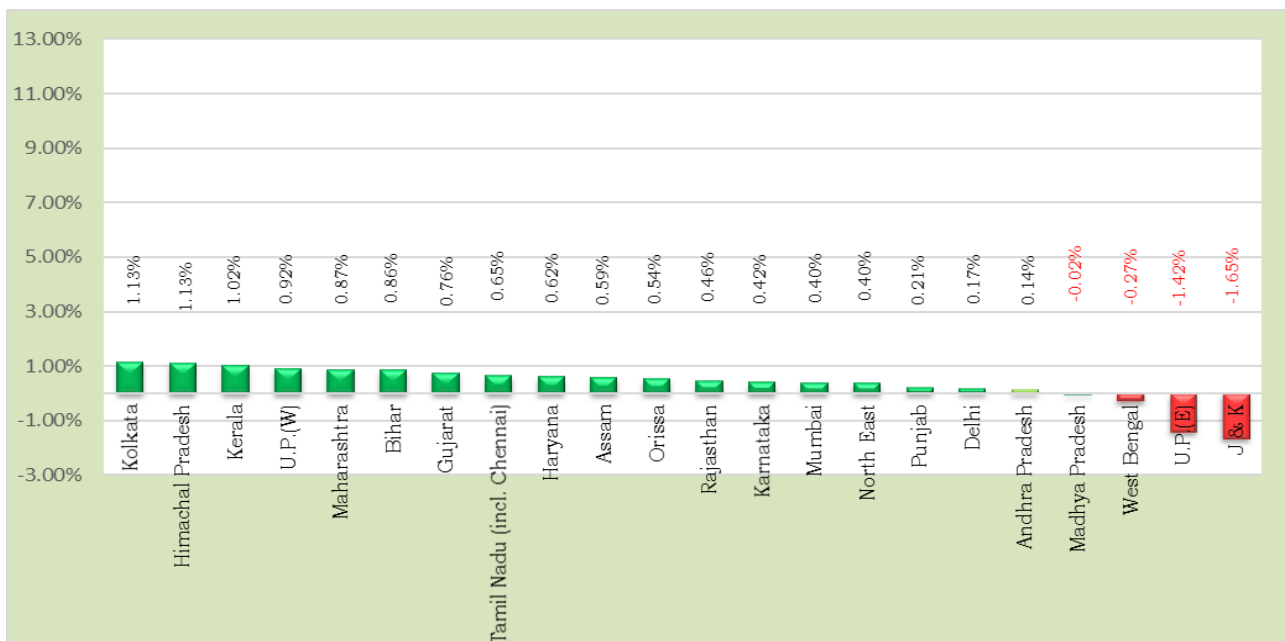
IV. Growth in Wireless Subscribers

Access Service Provider-wise Monthly Growth Rate of Wireless Subscribers in the month of August, 2020



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

Service Area-wise Monthly Growth Rate of Wireless Subscribers in the month of August, 2020

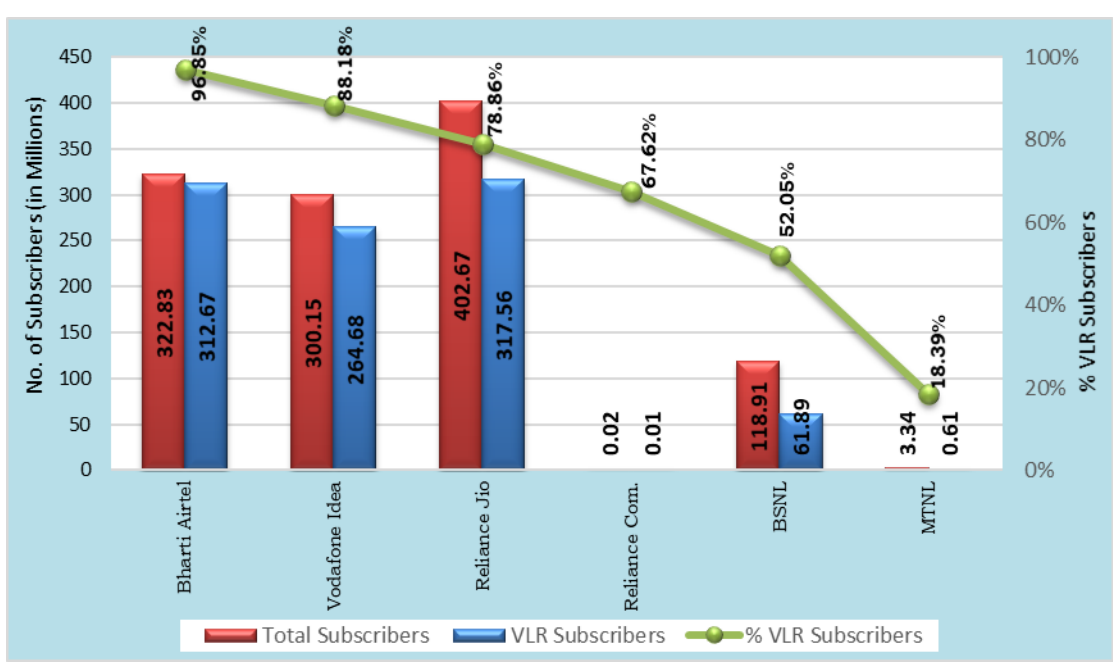


- All service areas showed growth except Madhya Pradesh, West Bengal, U.P. (E), and Jammu & Kashmir in their wireless subscribers during the month of August-20. Kolkata and Himachal Pradesh service area showed maximum growth of 1.13% in its wireless subscriber base during the month.

V. Active Wireless Subscribers (VLR Data)

- Out of the total wireless subscribers (1,147.92 million), 957.43 million wireless subscribers were active on the date of peak VLR in the month of August-20. The proportion of active wireless subscribers was approximately 83.41% 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 August-20 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 August, 2020

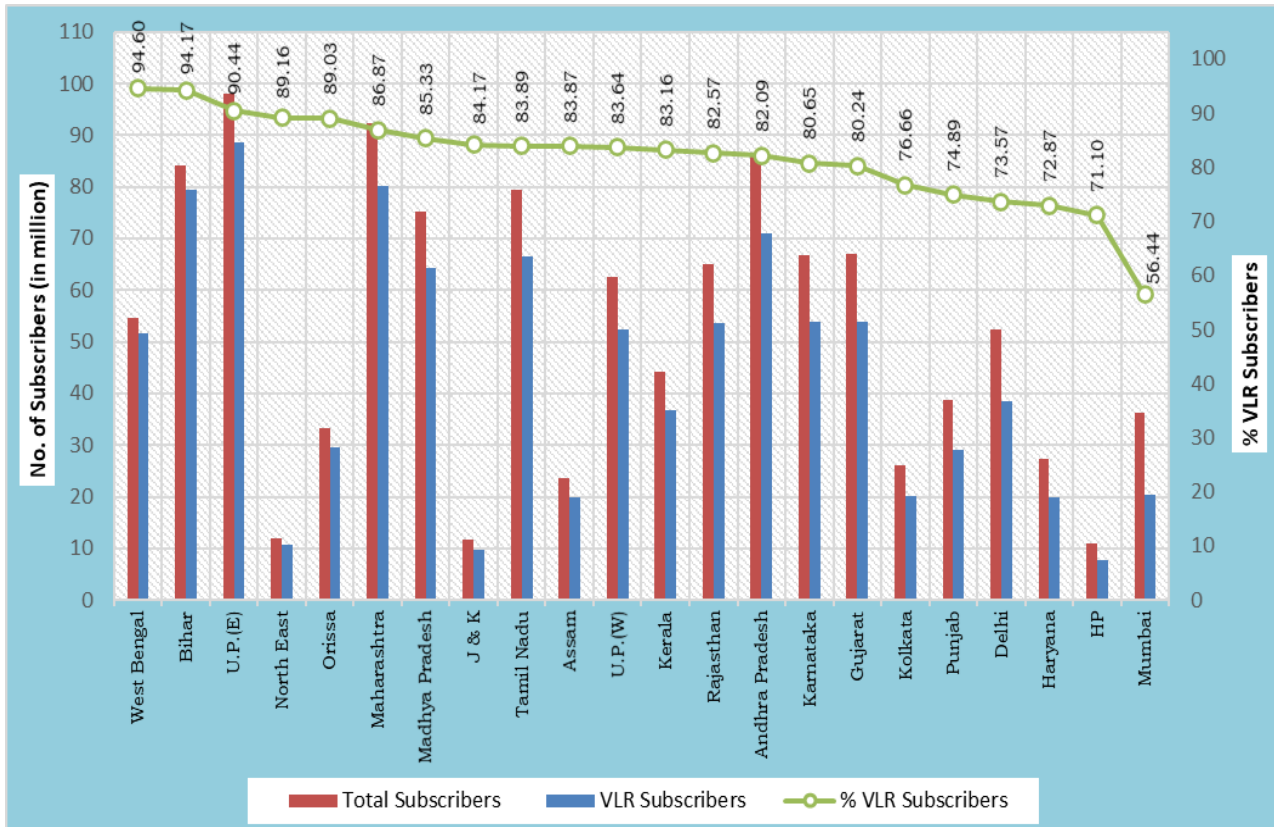


- Bharti Airtel has the maximum proportion (96.85%) of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of peak VLR in the month of August-

20 and MTNL has the minimum proportion of VLR (18.39%) of its

HLR during the same period.

Service Area wise percentage of VLR Subscribers in the month of August 2020



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 August-20, a total of 7.53 million requests were received for MNP. Out of total 7.53 million new requests, 4.07 million requests received from Zone-I and 3.46 million requests received from Zone-II. The cumulative MNP requests increased from 504.57 million at the end of July-20 to

512.10 million at the end of August-20, 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 40.48 million) followed by

Rajasthan (about 38.68 million) service area.

- In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 44.91 million) followed by Andhra Pradesh (about 42.31 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)	
	Jul-20	Aug-20		Jul-20	Aug-20
Delhi	25.63	25.94	Andhra Pradesh	41.92	42.31
Gujarat	33.79	34.33	Assam	3.80	3.84
Haryana	18.01	18.22	Bihar	21.29	21.82
Himachal Pradesh	2.46	2.50	Karnataka	44.54	44.91
Jammu & Kashmir	1.21	1.22	Kerala	13.30	13.56
Maharashtra	39.60	40.48	Kolkata	11.66	11.76
Mumbai	24.22	24.34	Madhya Pradesh	34.13	34.92
Punjab	19.34	19.57	North East	1.47	1.48
Rajasthan	38.27	38.68	Orissa	9.97	10.08
U.P.(East)	29.83	30.56	Tamil Nadu	41.38	41.83
U.P.(West)	23.92	24.52	West Bengal	24.84	25.23
Total	256.28	260.35	Total	248.29	251.75
Total (Zone-1 + Zone-2)				504.57	512.10
Net Addition (August, 2020)			7.53 million		

VII. Wireline Subscribers

- Wireline subscribers increased from 19.82 million at the end of July-20 to 19.89 million at the end of August-20. Net addition in the

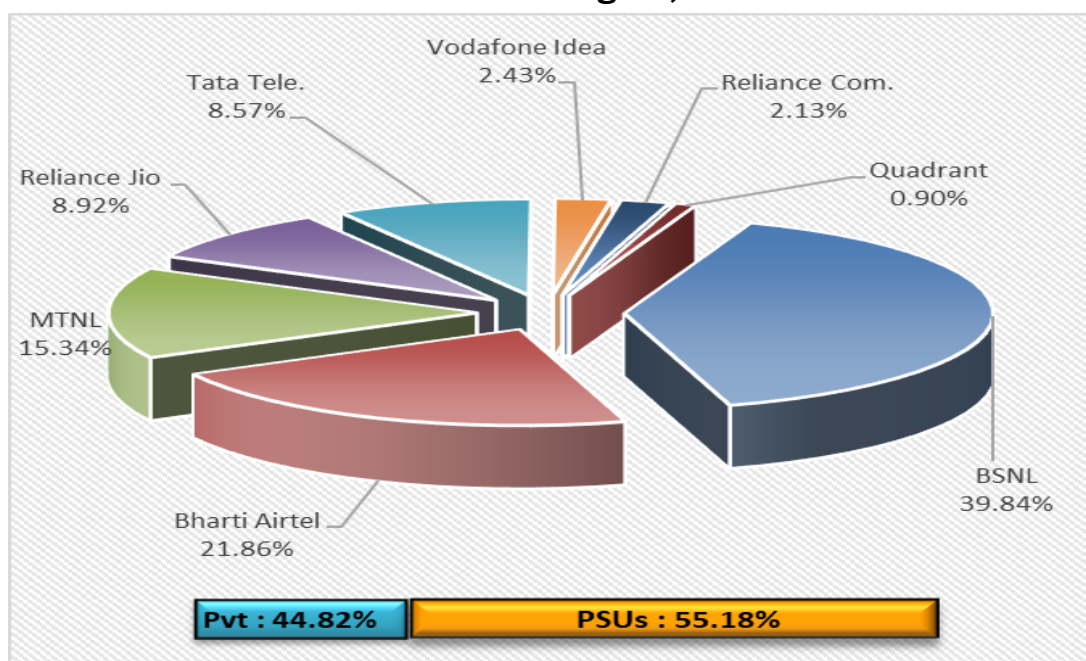
wireline subscriber base was 0.07 million with a monthly growth rate of 0.34%. The share of urban and rural subscribers in total wireline

subscribers were 89.83% and 10.17% respectively at the end of August-20.

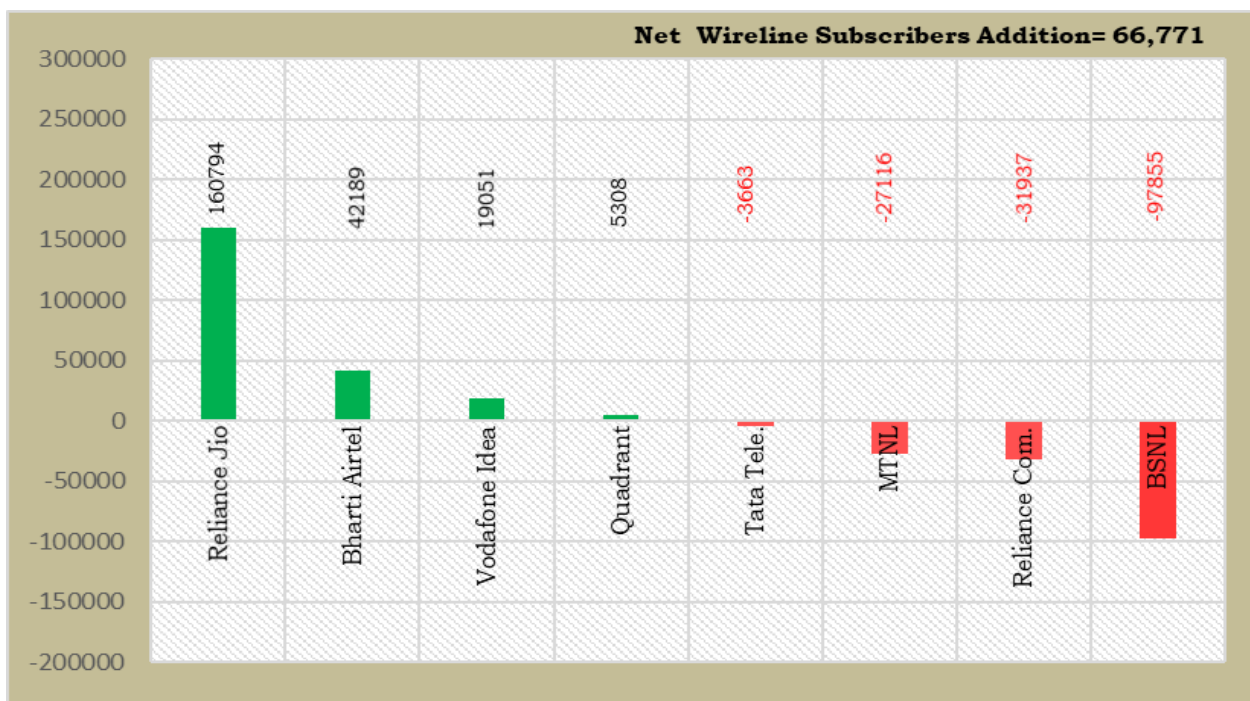
- The Overall Wireline Tele-density increased from 1.46 at the end of July-20 to 1.47 at the end of August-20. Urban and Rural Wireline Tele-density were 3.84 and 0.23 respectively during the same period.

- BSNL and MTNL, the two PSU access service providers, held 55.18% of the wireline market share as on 31st August, 2020. Detailed statistics of wireline subscriber base are available at **Annexure-III**.

Access Service Provider-wise Market Share of Wireline Subscribers as on 31st August, 2020



Access Service Provider-wise Net Additions in Wireline Subscribers during the month of August, 2020



VIII. Broadband (\geq 512 Kbps download)

- As per the reports received from 364 operators in the month of August, 2020, the number of broadband subscribers increased from 705.40 million at the end of July-20 to 716.19 million at the end of August-20 with a monthly growth rate of 1.53%. Segment-wise broadband subscribers and their monthly growth rates are as below: -

Segment-wise Broadband Subscribers and Monthly Growth Rate in the month of August, 2020

Segment	Broadband subscribers (in million)		Monthly growth rate in the month of August-20
	As on 31 st July, 2020	As on 31 st August, 2020	
Wired subscribers	20.13	20.47	1.72%
Mobile devices users (Phones and dongles)	684.64	695.08	1.53%

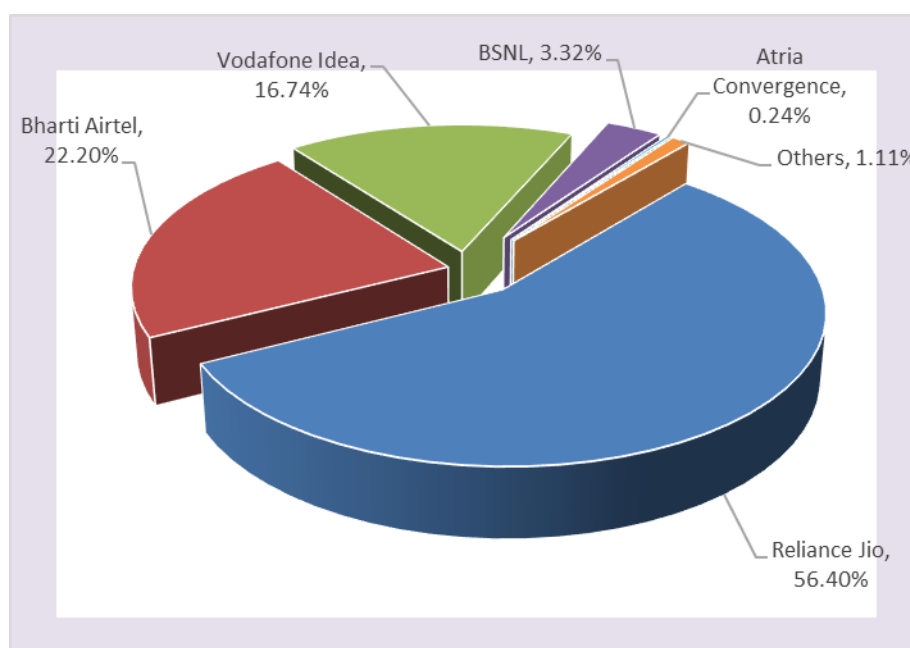
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	0.64	0.64	-0.32%
Total	705.40	716.19	1.53%

- Top five service providers constituted 98.89% market share of the total broadband subscribers at the end of August-20. These service providers were Reliance Jio Infocomm Ltd (403.92 million), Bharti Airtel (158.98 million), Vodafone Idea (119.91 million), BSNL (23.75 million) and Atria Convergence (1.70 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 31.08.2020



- As on 31st August, 2020, the top five Wired Broadband Service providers were BSNL (7.85 million), Bharti Airtel (2.53 million), Atria

Convergence Technologies (1.70 million), Reliance Jio Infocomm Ltd (1.25 million) and Hathway Cable & Datacom (1.03 million).

- As on 31st August, 2020, the top five Wireless Broadband Service

providers were Reliance Jio Infocom Ltd (402.67 million), Bharti Airtel (156.45 million), Vodafone Idea (119.91 million), BSNL (15.90 million) and Tikona Infinet Ltd. (0.31 million).

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Wireless Subscriber Base																	Annexure-I
Circle	Bharti Airtel (including Tata Tele.)		Reliance Com.		Vodafone Idea		BSNL		BSNL (VNO's)		MTNL		Reliance Jio		Total		Net Addition
	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	
Andhra Pradesh	28758029	29027558	2341	2265	16794919	16652935	9791631	9746340					31079879	31118595	86426799	86547693	120894
Assam	8320961	8387563	0		3746876	3719563	2854631	2863248					8567697	8658069	23490165	23628443	138278
Bihar	33965932	34163354	361	364	12951818	13322141	5730453	5788419					30853581	30945656	83502145	84219934	717789
Delhi	15207120	15299368	1751	1707	16156528	16070879	0				2176588	2174737	18623583	18709134	52165570	52255825	90255
Gujarat	10086878	10248688	617	627	25636836	25948792	6106818	6104391					24712462	24748289	66543611	67050787	507176
Haryana	4625751	4712177	131	131	8187141	8224705	5034319	5069776					9400570	9410796	27247912	27417585	169673
Himachal Pradesh	3239054	3243177	104	104	766921	820380	3001782	2997173					3806360	3875219	10814221	10936053	121832
J & K	5692818	5495530	0	0	566556	577507	1269147	1251246					4319217	4328384	11847738	11652667	-195071
Karnataka	28133587	28417768	1667	1674	10399133	10393238	7265504	7255253					20725379	20734690	66525270	66802623	277353
Kerala	5775421	5944643	710	709	17476433	17719606	10948307	10950711					9638284	9670481	43839155	44286150	446995
Kolkata	5864930	5877420	33	33	7305360	7386895	2217846	2270745					10484937	10631555	25873106	26166648	293542
Madhya Pradesh	13683182	13888383	763	774	23321872	22957368	6338937	6366973					31983994	32099584	75328748	75313082	-15666
Maharashtra	15815103	16198014	913	909	35208617	35108302	7061627	7017961					33301395	33860766	91387655	92185952	798297
Mumbai	9330044	9376506	2326	2157	11431084	11480536	0				1172675	1168445	14231756	14285706	36167885	36313350	145465
North East	5108808	5129676	0	0	1538975	1557000	1411278	1361613					3818245	3876455	11877306	11924744	47438
Orissa	10727899	10718118	384	386	2760992	2788672	6395337	6365207					13211928	13402045	33096540	33274428	177888
Punjab	10111557	10179972	399	404	8720112	8715164	5831493	5837299					13967189	13977119	38630750	38709958	79208
Rajasthan	20774831	21016824	408	417	12762583	12732409	6331582	6356303					24744275	24806017	64613679	64911970	298291
Tamil Nadu (incl. Chennai)	24689184	24900733	3149	3097	19155903	19269072	10869880	11034871	92174	92280			24076340	24097452	78886630	79397505	510875
U.P.(E)	31143539	31420044	743	744	27124916	25334173	11690792	11720064					29394755	29470603	99354745	97945628	-1409117
U.P.(W)	14178928	14545289	341	342	21611413	21794274	6030856	6027208					20102648	20125736	61924186	62492849	568663
West Bengal	14698464	14641012	807	814	17752767	17575810	2422897	2435122					19759345	19835946	54634280	54488704	-145576
Total	319932020	322831817	17948	17658	301377755	300149421	118605117	118819923	92174	92280	3349263	3343182	400803819	402668297	1144178096	1147922578	3744482
Net Addition		2899797		-290		-1228334		214806		106		-6081		1864478	0	3744482	
Rural Subscribers	152304920	152555230	0	0	164855848	163281312	38118586	38007851	0	0	45491	45452	168173963	169101660	523498808	522991505	-507303

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 August-20 (%) **Annexure-II**

Circle	Bharti	BSNL	Vodafone Idea	MTNL	Reliance Com.	Reliance Jio	Total
Andhra Pradesh	96.63	61.28	90.42		55.06	70.59	82.09
Assam	99.17	50.39	85.98		-	79.20	83.87
Bihar	98.17	47.23	87.99		99.47	101.19	94.17
Delhi	85.32		74.40	11.13	29.51	70.52	73.57
Gujarat	95.78	46.80	88.57		29.51	73.31	80.24
Haryana	103.48	35.33	88.37		49.62	64.23	72.87
Himachal Pradesh	102.42	36.99	86.91		32.69	67.94	71.10
J & K	99.26	57.99	78.06		-	73.40	84.17
Karnataka	92.85	53.09	86.93		87.34	70.43	80.65
Kerala	98.27	66.14	92.95		35.68	75.18	83.16
Kolkata	91.55	44.24	82.31		-	71.42	76.66
Madhya Pradesh	97.81	46.29	84.71		47.55	88.11	85.33
Maharashtra	99.55	55.31	90.63		53.58	83.44	86.87
Mumbai	63.38		65.97	31.91	138.06	46.22	56.44
North East	100.23	65.67	85.97		-	84.04	89.16
Orissa	105.32	62.22	90.24		17.36	88.50	89.03
Punjab	97.58	39.28	88.60		36.39	64.69	74.89
Rajasthan	94.27	44.38	91.45		41.01	77.88	82.57
Tamil Nadu (incl. Chennai)	95.50	70.06	90.42		73.36	73.06	83.89
U.P. (E)	105.72	36.40	94.59		26.48	92.07	90.44
U.P. (W)	102.42	40.08	88.55		10.23	77.80	83.64
West Bengal	101.87	77.53	96.70		24.32	89.47	94.60
Total	96.85	52.05	88.18	18.39	67.62	78.86	83.41

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
	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	Jul-20	Aug-20	
Andhra Pradesh	704315	695193			220748	222703	25844	24824	161461	161563			51520	54760	156753	170303	1320641	1329346	8705
Assam	91091	90548											3450	3480	18587	20400	113128	114428	1300
Bihar	139230	138261					1936	1141	7860	7837			1770	1770	29548	33849	180344	182858	2514
Delhi	0	0	1388567	1367374	1427532	1435667	61214	57694	143756	142753			73950	75420	112705	122222	3207724	3201130	-6594
Gujarat	567204	556577			102145	112069	8286	7257	81693	82068			32222	32502	160180	166530	951730	957003	5273
Haryana	158566	155113			26038	26945	1314	912	36665	36880			360	360	55561	62160	278504	282370	3866
Himachal Pradesh	88052	86422			0	0	953	690	1818	1879			30	30	2149	3310	93002	92331	-671
J & K	109156	106282			6127	7464	0	0	0	0			0	0	30375	33775	145658	147521	1863
Karnataka	818104	831794			784179	779823	91985	90162	263251	263701			81702	87092	102949	116758	2142170	2169330	27160
Kerala	1345487	1316646			60244	60245	9329	8295	19456	19620			6060	6090	24532	28238	1465108	1439134	-25974
Kolkata	374271	367308			133701	135422	32211	32106	47485	47289			11850	12030	61080	68242	660598	662397	1799
Madhya Pradesh	297946	293773			239150	243328	4241	3550	12287	12173			3585	3675	72631	80545	629840	637044	7204
Maharashtra	826534	824339			117832	122340	30554	24278	245830	244425			29953	30013	49835	54899	1300538	1300294	-244
Mumbai	0	0	1688981	1683058	367340	374590	118437	110390	520226	517255			90503	92994	270542	287218	3056029	3065505	9476
North East	85570	84381											270	270	11787	13284	97627	97935	308
Orissa	170386	168201					1588	1523	8721	9375			6060	6150	14937	17363	201692	202612	920
Punjab	285150	276932			134320	136104	8960	6617	11865	12160	173948	179256	3180	3180	53681	58005	671104	672254	1150
Rajasthan	318890	310430			59963	62122	11641	9186	11358	11559			11270	16430	56590	61503	469712	471230	1518
Tamil Nadu (incl. Chennai)	1086393	1074349			529810	528490	40545	39776	120084	119343			37325	37865	145798	160622	1959955	1960445	490
U.P.(E)	189436	187605			66143	67812	2684	1845	7585	7834			13960	13960	60386	67376	340194	346432	6238
U.P.(W)	181830	177484			30767	33104	2041	1640	4601	4615			5430	5430	108258	130724	332927	352997	20070
West Bengal	183159	181277					1478	1418	2365	2375			120	120	15072	17404	202194	202594	400
Total	8020770	7922915	3077548	3050432	4306039	4348228	455241	423304	1708367	1704704	173948	179256	464570	483621	1613936	1774730	19820419	19887190	66771
Net Addition		-97855		-27116		42189		-31937		-3663		5308		19051		160794		66771	
Rural Subscribers	1959350	1941250	0	0	0	0	782	681	43573	43346	33798	32801	0	0	4664	5235	2042167	2023313	-18854

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.