(Press Release No.06/2021)

Information Note to the Press





TELECOM REGULATORY AUTHORITY OF INDIA

New Delhi, 18th February, 2021 (www.trai.gov.in)

Highlights of Telecom Subscription Data as on 31st December, 2020

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1153.77	20.05	1173.83
Net Addition in December, 2020 (Million)	-1.42	-0.02	-1.44
Monthly Growth Rate	-0.12%	-0.09%	-0.12%
Urban Telephone Subscribers (Million)	629.67	18.24	647.91
Net Addition in December, 2020 (Million)	-0.73	0.04	-0.69
Monthly Growth Rate	-0.12%	0.22%	-0.11%
Rural Telephone Subscribers (Million)	524.11	1.81	525.92
Net Addition in December, 2020 (Million)	-0.69	-0.06	-0.75
Monthly Growth Rate	-0.13%	-3.06%	-0.14%
Overall Tele-density*(%)	84.90%	1.48%	86.38%
Urban Tele-density*(%)	134.44%	3.89%	138.34%
Rural Tele-density*(%)	58.85%	0.20%	59.05%
Share of Urban Subscribers	54.57%	90.95%	55.20%
Share of Rural Subscribers	45.43%	9.05%	44.80%
Broadband Subscribers (Million)	725.12	22.29	747.41

- ❖ In the month of December, 2020, 8.20 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 536.41 million at the end of November-20 to 544.61 million at the end of December-20, since implementation of MNP.
- Number of active wireless subscribers (on the date of peak VLR*) in December, 2020 was 975.43 million.

Note:

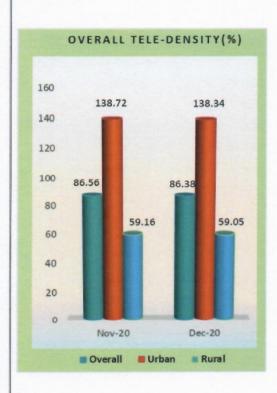
- Information in this Press Release is based on the data provided by the Service Providers
- * Based on the projection of population from the 'Report of the Technical Group on Population Projections for India and States 2011 2036', Ministry of Health & Family Welfare.
- # VLR is acronym of Visitor Location 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 decreased from 1,175.27 million at the end of November-20 to 1,173.83 million at the end of December-20, thereby showing a monthly decline rate of 0.12%. Urban telephone subscription decreased from 648.60 million at the end of November-20 to 647.91 million at the end of December-20 and the rural subscription also decreased from 526.67 million to 525.92 million during the same period. The monthly decline rates of urban and rural telephone subscription were 0.11% and 0.14% respectively during the month of December-20.

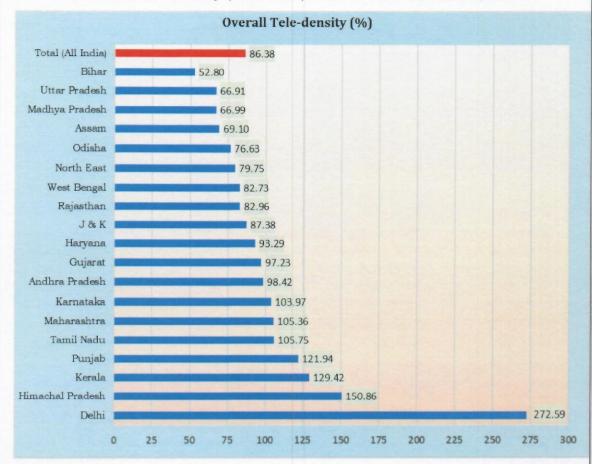




• The overall Tele-density in India decreased from 86.56 at the end of November-20 to 86.38 at the end of December-20. The Urban Tele-density decreased from 138.72 at the end of November-20 to 138.34 at the end of December-20 and Rural Tele-density also decreased from 59.16 to 59.05 during the same period. The share of urban and rural subscribers in total number of telephone subscribers at the end of December-20 was 55.20% and 44.80% respectively.



Overall Tele-density (LSA Wise) - As on 31st December, 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 December-20. Delhi service area has maximum tele-density of 272.59 and the Bihar service area has minimum tele-density of 52.80 at the end of December-20.

Notes:

- 1. Population data/projections are available state wise only.
- 2. 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".
- 3. 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).
- 4. Data/information for West Bengal includes Kolkata, Maharashtra includes Mumbai and Uttar Pradesh includes UPE & UPW service area(s).
- 5. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatishgarh, 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.

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II. Category-wise Growth in subscriber base

Circle Category-wise Net Additions in Telephone Subscribers in the month of December 2020

Circle		in the month ber, 2020	Telephone Subscriber base as on 31st December, 2020				
Category	Wireline segment	Wireless segment	Wireline segment	Wireless segment			
Circle A	-91,351	550,077	7,706,695	396,364,522			
Circle B	39,778	-1,983,665	4,458,620	466,135,756			
Circle C	21,130	851,881	892,661	177,523,036			
Metro	12,885	-839,661	6,994,186	113,751,224			
All India	-17,558	-1,421,368	20,052,162	1,153,774,538			

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

Circle		owth rate (%) to December-20)	Yearly growth rate (%) (December-19 to December-20)				
Category	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment			
Circle A	-1.17%	0.14%	-5.23%	0.02%			
Circle B	0.90%	-0.42%	-11.22%	0.36%			
Circle C	2.42%	0.48%	6.34%	2.04%			
Metro	0.18%	-0.73%	-0.24%	-2.52%			
All India	-0.09%	-0.12%	-4.53%	0.20%			

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

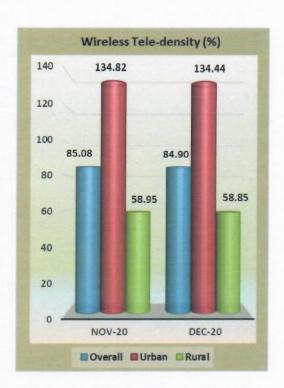
- As can be seen in the above tables, in wireless segment, on monthly basis only Circle-A and Circle-C showed growth rate in their subscribers during the month of December-20. On yearly basis except circle Metro, circle of all categories have registered growth rate in their subscriber base.
- In Wireline segment, on monthly basis except Circle-A, circle of all categories showed growth rate in their number of wireline subscribers during the month of December, 2020. However, on yearly basis only Circle C have registered growth rate in its subscriber base.



III. Wireless subscriber

•Total wireless subscribers decreased from 1,155.20 million at the end of November-20 to 1,153.77 million at the end of December-20, thereby registering a monthly decline rate of 0.12%. Wireless subscription in urban areas decreased from 630.40 million at the end of November-20 to 629.67 million at the end of December-20 and wireless subscription in rural areas also decreased from 524.80 million to 524.11 million during the same period. Monthly decline rates of urban and rural wireless subscription were 0.12% and 0.13% respectively.





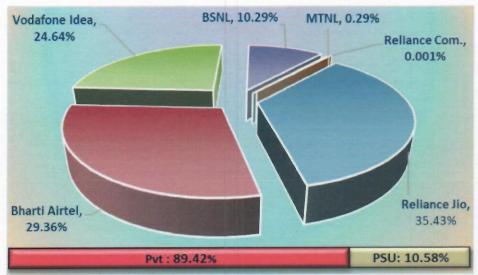
• The Wireless Tele-density in India decreased from 85.08 at the end of November-20 to 84.90 at the end of December-20. The Urban Wireless Tele-density decreased from 134.82 at the end of November-20 to 134.44 at the end of December-20 and Rural Tele-density also decreased from 58.95 to 58.85 during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 54.57% and 45.43% respectively at the end of December-20. Detailed statistics of

wireless subscriber base is available at Annexure-I.

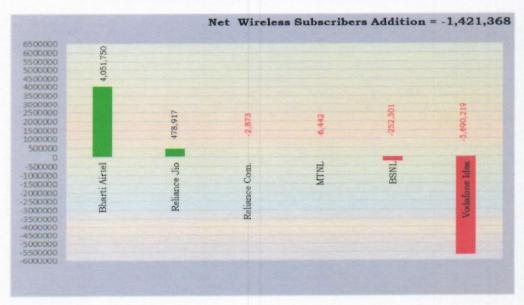
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- As on 31st December, 2020, the private access service providers held 89.42% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 10.58%.
- The graphical representation of 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 December, 2020



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



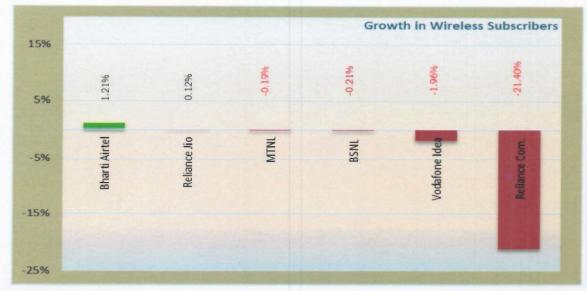
Note: 1. M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd.

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.

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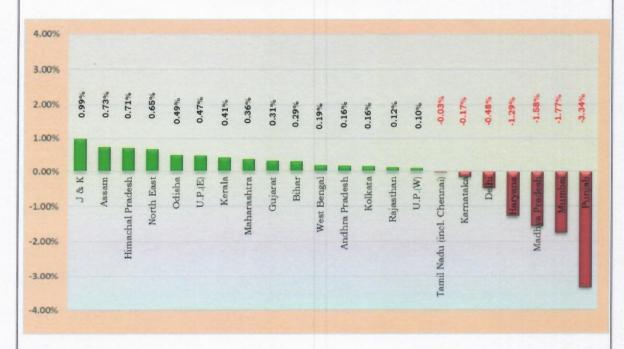
IV. Growth in Wireless Subscribers

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



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

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



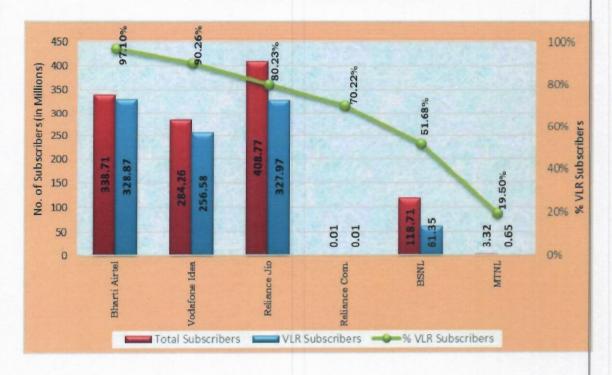
 All service areas except Tamil Nadu, Karnataka, Delhi, Haryana, Madhya Pradesh, Mumbai and Punjab showed growth in their wireless subscribers during the month of December-20. Jammu & Kashmir service area showed maximum growth of 0.99% in its wireless subscriber base during the month.

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V. Active Wireless Subscribers (VLR Data)

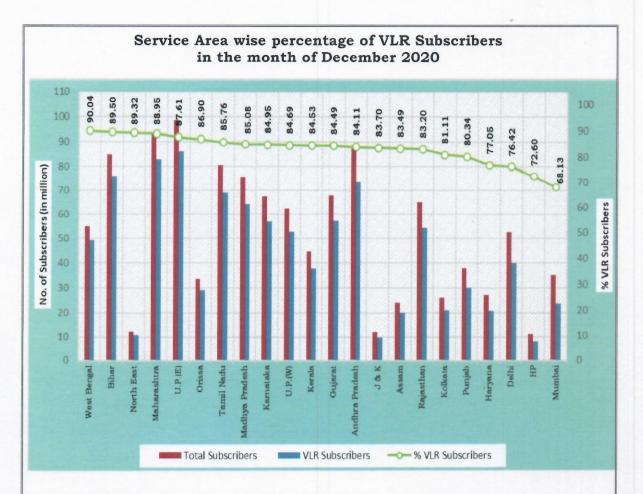
- of the total Out wireless subscribers (1,153.77)million), 975.43 million wireless subscribers were active on the date of peak VLR in the month of December-20. The proportion of active wireless subscribers approximately was 84.54% of the total wireless subscriber base.
- The detailed statistics on proportion of active wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of December-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 December 2020



 Bharti Airtel has the maximum proportion (97.10%) of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of peak VLR in the month of December-20 and MTNL has the minimum proportion of VLR (19.50%) of its HLR during the same period.





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-MNP has Service Area 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 Dec-20, a total of 8.20 million requests were received for MNP. Out of total 8.20
- million new requests, 4.73 million requests received from Zone-I and 3.47 million requests received from Zone-II. The cumulative MNP requests increased from 536.41 million at the end of November-20 to 544.61 million at the end of December-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 44.15 million) followed by



Rajasthan (about 40.37 million) service area.

• In MNP Zone-II (Southern and Eastern India), the highest

number of requests till date have been received in Karnataka (about 46.63 million) followed by Andhra Pradesh (about 44.20 million).

Service Area Wise MNP Status										
Zo	ne -1		Zone – 2							
Service Area	Number o Requests (Service Area	Number of Porting Requests (in Million)						
	Nov-20 Dec-20			Nov-20	Dec-20					
Delhi	26.95	27.28	Andhra Pradesh	43.72	44.20					
Gujarat	36.11	36.64	Assam	3.97	4.00					
Haryana	18.80	19.03	Bihar	23.44	23.90					
Himachal Pradesh	2.58	2.62	Karnataka	46.21	46.63					
Jammu & Kashmir	1.26	1.27	Kerala	14.44	14.67					
Maharashtra	43.27	44.15	Kolkata	12.08	12.18					
Mumbai	24.80	24.95	Madhya Pradesh	37.25	37.92					
Punjab	20.29	21.00	North East	1.51	1.52					
Rajasthan	39.96	40.37	Orissa	10.45	10.63					
U.P.(East)	33.04	33.82	Tamil Nadu	43.20	43.65					
U.P.(West)	26.57 27.24		West Bengal	26.51	26.93					
Total	273.63	278.37	Total	262.78	266.24					
Total (Zone-1 +	Zone-2)			536.41	544.61					
Net Addition (Decen	nber 2020)		8.20 mi	llion						

VII. Wireline Subscribers

• Wireline subscribers decreased from 20.07 million at the end of November-20 to 20.05 million at the end of December-20. Net decrease in the wireline subscriber base was 0.02 million with a monthly decline rate of 0.09%. The share of urban and rural subscribers in total wireline

subscribers were 90.95% and 9.05% respectively at the end of December-20.

 The Overall Wireline Tele-density in December-20 remained same i.e.
 1.48 as it was in the month of November-20. Urban and Rural Wireline Tele-density were 3.89

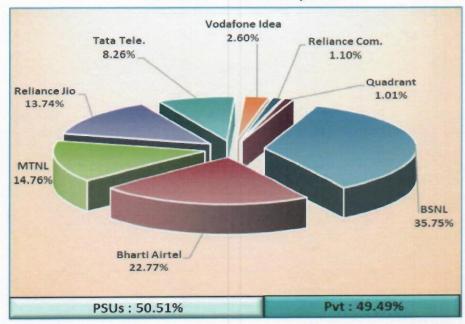


and 0.20 respectively during the same period.

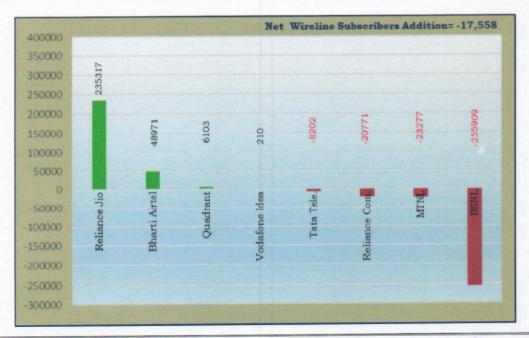
o BSNL and MTNL, the two PSU access service providers, held

50.51% of the wireline market share as on 31st December 2020. Detailed statistics of wireline subscriber base are available at **Annexure-III**.

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



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





VIII. Broadband (≥ 512 Kbps download)

 As per the reports received from 375 operators in the month of December, 2020, the number of broadband subscribers increased from 742.06 million at the end of November-20 to 747.41 million at the end of December-20 with a monthly growth rate of 0.72%. Segment-wise broadband subscribers and their monthly growth rates are as below: -

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

	Broadband s	Monthly growth rate in			
Segment	As on 30 th November, 2020	As on 31st December, 2020	the month of December-20		
Wired subscribers	21.89	22.29	1.86%		
Mobile devices users (Phones and dongles)	719.53	724.46	0.69%		
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to- Point Radio & VSAT)	0.65	0.65	0.88%		
Total	742.06	747.41	0.72%		

• Top five service providers constituted 98.84% market share of the total broadband subscribers at the end of December-20. These service providers were Reliance Jio

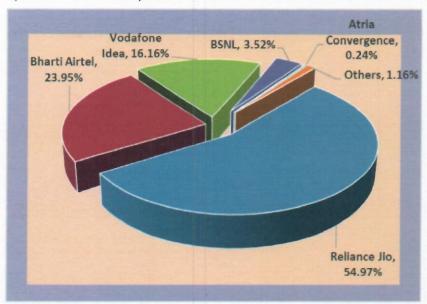
Infocomm Ltd (410.84 million), Bharti Airtel (179 million), Vodafone Idea (120.77 million), BSNL (26.32 million) and Atria Convergence (1.78 million).

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 31st December 2020



- As on 31st December, 2020, the top five <u>Wired</u> Broadband Service providers were BSNL (7.70 million),
 Bharti Airtel (2.81 million),
 Reliance Jio Infocomm Ltd (2.07 million),
 Atria Convergence
 Technologies (1.78 million) and
 Hathway Cable & Datacom (1.05 million).
- As on 31st December, 2020, the top five Wireless Broadband Service providers were Reliance Jio (408.77)Infocom Ltd million), (176.19)Bharti Airtel million), Vodafone Idea (120.77 million), BSNL (18.62 million) and Tikona Infinet Ltd. (0.31 million).

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(S. K. Gupta) Secretary, TRAI

					Wireless	Subscribe	er Base									A	nnexure-I
Circle	Bharti (including	i Airtel Tata Tele.)	Relian	ce Com.	Vodafo	ne Idea	BSNL		BSNL (VNO's)		MTNL		Relian	ice Jio	То	tal	Net
0.11010	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Addition
Andhra Pradesh	30073806	30433618	1436	1177	16436017	16142823	9676241	9670536					31286574	31369643	87474074	87617797	143723
Assam	8747100	8881995			3430062	3354187	2935442	2959676					8759386	8851010	23871990	24046868	174878
Bihar	34897258	35117840	281	190	12488789	12378262	5929468	5946966					31332648	31448264	84648444	84891522	243078
Delhi	15729071	15847702	628	513	16040962	15602750					2170862	2169449	18905074	18974028	52846597	52594442	-252155
Gujarat	11188822	11444492	405	271	25183976	25021411	6111937	5891420					25089441	25426122	67574581	67783716	209135
Haryana	4956421	5079438	118	89	8023115	8052103	5061105	5094145					9448436	8907509	27489195	27133284	-355911
Himachal Pradesh	3295139	3327293	102	97	721869	711847	3004030	3010300					3954642	4004237	10975782	11053774	77992
J & K	5507879	5548416	0	0	512775	524869	1262324	1264351					4403683	4464159	11686661	11801795	115134
Karnataka	29327910	29491199	2281	1938	9888696	9583667	7257169	7257790					20866923	20894958	67342979	67229552	-113427
Kerala	6325416	6487239	647	489	17314379	17317452	10958555	10960864					9897544	9911644	44496541	44677688	181147
Kolkata	5945649	5904209	29	28	7043506	6957077	2406445	2448590					10730269	10857344	26125898	26167248	41350
Madhya Pradesh	14499776	14711874	758	518	23017716	21372271	6310134	6271291					32888083	33150116	76716467	75506070	-1210397
Maharashtra	17360473	17904801	687	463	33502000	32852288	6900110	6933418					35167879	35578402	92931149	93269372	338223
Mumbai	9699623	9856523	1176	952	10237068	9330964					1153213	1148184	14527310	14652911	35618390	34989534	-628856
North East	5272620	5312862	0	0	1495482	1467590	1366299	1366913					4001265	4067072	12135666	12214437	78771
Odisha	10854304	10858137	371	219	2617883	2536251	6372565	6414057					13507489	13705976	33352612	33514640	162028
Punjab	10503476	10666819	390	353	8642184	8711158	5834048	5855940					14049174	12490810	39029272	37725080	-1304192
Rajasthan	21432450	21562650	384	332	12315910	12229571	6358278	6364204					24979315	25004662	65086337	65161419	75082
Tamil Nadu (incl. Chennai)	25741209	26051251	1513	1248	19171519	19066507	11203679	10922980	93045	93874			24280697	24328225	80491662	80464085	-27577
U.P.(E)	32919322	33434345	713	431	23715285	23421596	11644315	11644758					29849410	30092918	98129045	98594048	465003
U.P.(W)	15460246	15801717	311	270	20685091	20332967	5878650	5883811					20340296	20410003	62364594	62428768	64174
West Bengal	14918447	14983747	1197	976	17461202	17287656	2398253	2453707				_	20028871	20183313	54807970	54909399	101429
Total	334656417	338708167	13427	10554	289945486	284255267	118869047	118615717	93045	93874	3324075	3317633	408294409	408773326	1155195906	1153774538	-1421368
Net Addition		4051750		-2873		-5690219		-253330		829		-6442		478917	0	-1421368	
Rural Subscribers	158915458	160396435	0	0	155684298	152978813	37904498	37887371	0	0	45371	45342	172247386	172798627	524797011	524106588	-690423

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 o	Proportion of VLR on the date of Peak VLR in the month of December-20 (%) Annexure-II											
Circle	Bharti	BSNL	Vodafone Idea	MTNL	Reliance Com.	Reliance Jio	Total					
Andhra Pradesh	96.55	59.69	90.32		99.58	76.38	84.11					
Assam	98.04	48.26	88.88		-	78.64	83.49					
Bihar	94.97	47.72	87.75		97.66	91.98	89.50					
Delhi	88.40		77.20	11.75	58.30	73.16	76.42					
Gujarat	98.68	47.61	92.27		58.30	78.99	84.49					
Haryana	107.34	35.73	90.58		70.79	71.18	77.05					
Himachal Pradesh	100.73	35.76	105.37		32.99	71.10	72.60					
J & K	96.46	56.56	82.97		-	75.62	83.70					
Karnataka	94.18	51.31	88.94		74.97	81.77	84.95					
Kerala	100.51	65.51	94.39		49.28	77.88	84.53					
Kolkata	92.89	44.12	85.83		-	80.02	81.11					
Madhya Pradesh	95.85	45.50	86.61		69.11	86.80	85.08					
Maharashtra	103.50	57.44	92.87		98.92	84.15	88.95					
Mumbai	74.18		88.97	34.16	95.69	53.46	68.13					
North East	100.54	65.07	86.99		-	83.64	89.32					
Orissa	102.86	61.03	91.05		29.68	85.60	86.90					
Punjab	102.40	40.03	89.34		39.66	74.14	80.34					
Rajasthan	94.20	45.07	92.84		49.10	78.71	83.20					
Tamil Nadu	96.15	67.17	93.56		96.23	76.95	85.76					
U.P. (E)	102.15	36.39	92.28		44.32	87.65	87.61					
U.P. (W)	106.63	43.12	89.25		12.22	75.14	84.69					
West Bengal	96.44	76.72	92.89		20.08	84.47	90.04					
Total	97.10	51.68	90.26	19.50	70.22	80.23	84.54					

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	Subscri	ber Base									Annexure	e-III	
	BS	NL	мт	NL	Bharti	Airtel	Relian	Reliance Com. Tata		Tele.	Quad	lrant	Vodafo	ne Idea	Reliance Jio		Total		Net
Service Area	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Nov-20	Dec-20	Addition
Andhra Pradesh	639750	606606			242458	246692	23964	21834	155162	153579			62370	62310	256725	286558	1380429	1377579	-2850
Assam	85726	84922											3450	3450	33231	37495	122407	125867	3460
Bihar	134050	132134					19	19	7416	7421			1830	1830	61642	71741	204957	213145	8188
Delhi	0		1344543	1337088	1484421	1494955	40245	36827	142826	142655			77515	76847	200821	219994	3290371	3308366	17995
Gujarat	524113	512515			115177	116751	4089	3734	81545	81225			34547	33437	204529	214473	964000	962135	-1865
Haryana	141593	136906			28735	28229	3	13	36837	36637			330	330	92543	105429	300041	307544	7503
Himachal Pradesh	81131	79352			0	0	3	3	1838	1747			30	30	6959	8143	89961	89275	-686
J & K	95714	92451			0	0	0	0	0	0			0	0	57451	65858	153165	158309	5144
Karnataka	792957	780432			799961	803607	28846	27087	260499	260894			104422	103002	187781	203107	2174466	2178129	3663
Kerala	1168981	1145302			63749	64547	5662	5438	19262	19128			6090	6120	50455	58634	1314199	1299169	-15030
Kolkata	342966	338083			140235	140369	8043	7330	47033	46980			13280	13740	112266	119138	663823	665640	1817
Madhya Pradesh	278813	273161			257484	260190	5	5	11700	11692			3585	3585	131316	144815	682903	693448	10545
Maharashtra	849237	769408			134502	141296	12704	11732	234051	231376			29203	29353	76503	82652	1336200	1265817	-70383
Mumbai	0		1638825	1623003	381091	383653	84532	75997	499608	494995			93583	95971	329468	346561	3027107	3020180	-6927
North East	74363	73283											270	270	23116	26189	97749	99742	1993
Odisha	157117	155552					6	6	8255	8115			6210	6210	31704	36440	203292	206323	3031
Punjab	250991	242734			141731	142858	2497	2228	12455	12870	196812	202915	3270	3240	79303	84121	687059	690966	3907
Rajasthan	276685	266161			68184	71438	5065	4715	11523	11590			16460	16490	88407	96716	466324	467110	786
Tamil Nadu (incl. Chennai)	991348	948714			548637	554373	26519	24465	119795	120947			39755	39955	216897	234581	1942951	1923035	-19916
U.P.(E)	177400	173983			73476	74102	27	25	7760	7540			20020	20020	100405	111337	379088	387007	7919
U.P.(W)	161016	156018			37618	43370	8	8	4502	4480			4980	5220	142884	159845	351008	368941	17933
West Bengal	200681	201006					13	13	2328	2322			120	120	35078	40974	238220	244435	6215
Total	7424632	7168723	2983368	2960091	4517459	4566430	242250	221479	1664395	1656193	196812	202915	521320	521530	2519484	2754801	20069720	20052162	-17558
Net Addition		-255909		-23277		48971		-20771		-8202		6103		210		235317		-17558	
Rural Subscribers	1787238	1727402	0	0	0	0	0	0	41536	41070	30339	29502	0	0	12928	16790	1872041	1814764	-57277

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.