Information Note to the Press





#### TELECOM REGULATORY AUTHORITY OF INDIA

New Delhi, 24th June, 2019 (www.trai.gov.in)

#### Highlights of Telecom Subscription Data as on 30th April, 2019

Particulars	Wireless	Wireline	<b>Total</b> (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1162.30	21.47	1183.77
Net Addition in April, 2019 (Million)	0.49	-0.22	0.26
Monthly Growth Rate	0.04%	-1.03%	0.02%
Urban Telephone Subscribers (Million)	652.35	18.52	670.86
Net Addition in April, 2019 (Million)	1.86	-0.16	1.71
Monthly Growth Rate	0.29%	-0.84%	0.25%
Rural Telephone Subscribers (Million)	509.95	2.96	512.91
Net Addition in April, 2019 (Million)	-1.38	-0.07	-1.44
Monthly Growth Rate	-0.27%	-2.25%	-0.28%
Overall Tele-density*(%)	88.42	1.63	90.05
Urban Tele-density*(%)	155.71	4.42	160.13
Rural Tele-density*(%)	56.94	0.33	57.27
Share of Urban Subscribers	56.13%	86.23%	56.67%
Share of Rural Subscribers	43.87%	13.77%	43.33%
Broadband Subscribers (Million)	553.54	18.41	571.95

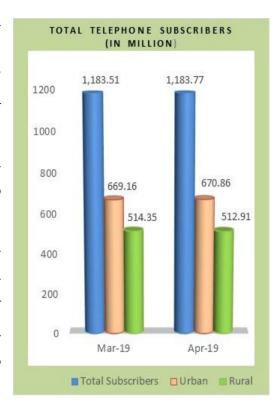
- ❖ In the month of April, 2019, 4.57 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 428.40 million at the end of Mar-19 to 432.97 million at the end of Apr-19, since implementation of MNP.
- Number of active wireless subscribers (on the date of peak VLR\*) in April, 2019 was 999.68 million.

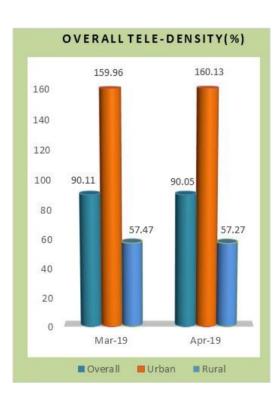
#### Note:

- Information in this Press Release is based on the data provided by the Service Providers
- \* Based on the population projections from Census data published by the Office of Registrar General & Census Commissioner of India.
- # 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

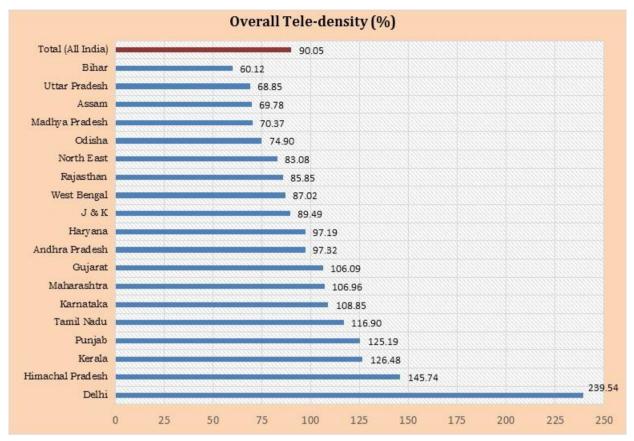
• The number of telephone subscribers in India slightly increased from 1,183.51 million at the end of Mar-19 to 1,183.77 million at the end of Apr-19, thereby showing a monthly growth rate of 0.02%. The urban subscription increased from 669.16 million at the end of Mar-19 to 670.86 million at the end of Apr-19, however the rural subscription declined from 514.35 million to 512.91 million during the same period. The monthly of growth rates urban and rural subscription were 0.25% and -0.28% respectively during the month of Apr-19.





overall Tele-density in India slightly declined from 90.11 at the end of Mar-19 to 90.05 at the end of Apr-19. The Urban Tele-density increased from 159.96 at the end of Mar-19 to 160.13 at the end of Apr-19, however Rural Tele-density declined from 57.47 at the end of Mar-19 to 57.27 at the end of Apr-19. The share of urban and rural subscribers in total number of telephone subscribers at the end of Apr-19 was 56.67% 43.33% and respectively.





 Delhi service area has maximum tele-density of 239.54 at the end of Apr-19 and the Bihar service area has minimum tele-density of 60.12 during the same period.

#### 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 projections of population published by the Office of the Registrar General & Census Commissioner, India.
- 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, Tamil Nadu includes Chennai 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.

### II. Category-wise Growth in subscriber base

Circle Category-wise Net Additions in Telephone Subscribers in the month of April, 2019

Circle		s in the month ril, 2019	Telephone Subscriber base on 30 <sup>th</sup> April, 2019				
Category	Wireline segment			Wireless segment			
Circle A	-153,665	-1,497,571	8,391,485	398,167,255			
Circle B	-59,638	1,427,753	5,303,331	472,503,605			
Circle C	-8,681	178,408	891,906	174,760,473			
Metro	-2,339	378,117	6,885,291	116,866,943			
All India	-224,323	486,707	21,472,013	1,162,298,276			

# Circle Category-wise monthly and yearly Growth Rates in Telephone Subscribers in the month of April, 2019

Circle	Monthly gro (Mar-19 t	wth rate (%) to Apr-19)		wth rate (%) to Apr-19)		
Category	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment		
Circle A	-1.80	-0.37	-5.98	0.88		
Circle B	-1.11	0.30	-7.40	3.39		
Circle C	-0.96	0.10	-13.38	6.16		
Metro	-0.03	0.32	-1.06	7.45		
All India	-1.03	0.04	-5.17	3.31		

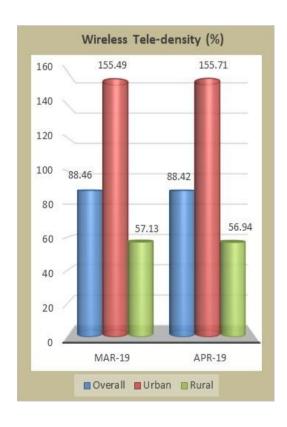
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, Circles of Category 'A' showed monthly decline in their subscribers in Apr-19. All other categories showed monthly growth in their subscriber base during the month. However, on yearly basis, Circles in all Categories showed positive growth in their wireless subscribers during the month.
- In Wireline segment, Circles of all Categories showed decline rate in their subscribers on monthly basis as well as on yearly basis during the month of Apr-19.

#### III. Wireless Subscribers

• Total wireless subscribers (GSM, CDMA & LTE) increased from 1,161.81 million at the end of Mar-19 to 1,162.30 million at the end of Apr-19, thereby registering a monthly growth rate of 0.04%. The Wireless subscription in urban areas increased from 650.49 million at the end of Mar-19 to 652.35 million at the end of Apr-19, however in rural area, it declined from 511.32 million to 509.95 million during the month. The monthly growth of urban and rural wireless subscription were 0.29% and -0.27% respectively.

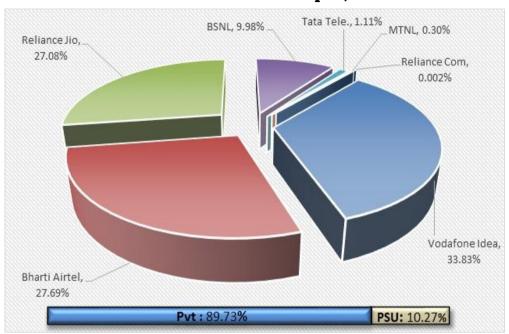




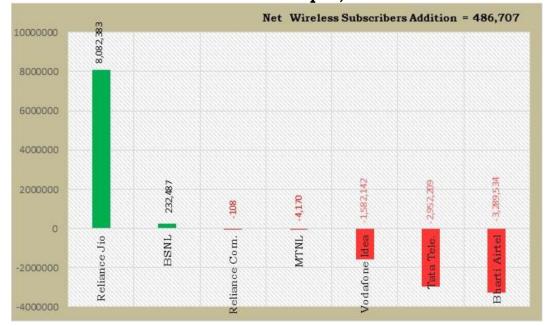
- The Wireless Tele-density in India slightly declined from 88.46 at the end of Mar-19 to 88.42 at the end of Apr-19. The Urban Wireless Tele-density increased from 155.49 at the end of Mar-19 to 155.71 at the end of Apr-19, however Rural Wireless Tele-density declined from 57.13 to 56.94 during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 56.13% and 43.87% respectively at the end of Apr-19. Detailed statistics of wireless subscriber base is available at **Annexure-I**.
- As on 30<sup>th</sup> April, 2019, the private access service providers held 89.73% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 10.27%.

• 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 April, 2019



Net Additions in Wireless Subscribers of Access Service Providers in the month of April, 2019



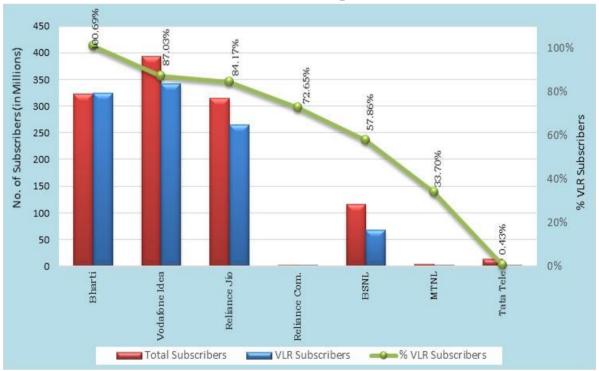
**Note:** 1. On noticing that while reporting number of subscribers, some of the TSPs were deducting inactive subscribers. A Direction was issued on 18th August 2017 to TSPs to strictly adhere to the Department of Telecommunications' methodology for reporting their number of subscribers. However, some of the Telecom Service Providers are yet to comply with the Direction.

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 number of BSNL.

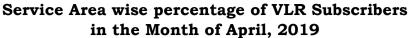
## IV. Active Wireless Subscribers (VLR Data)

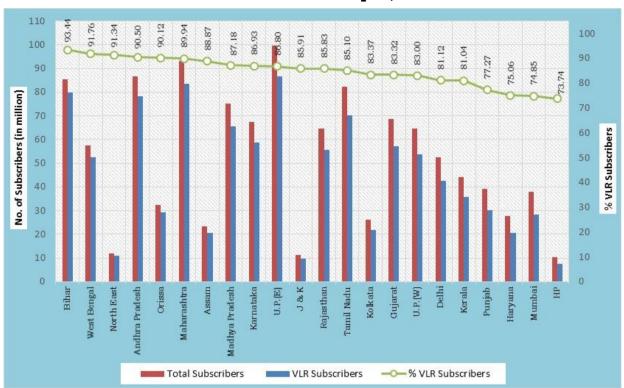
- of • Out the total wireless subscribers (1.162.30)million), 999.68 million wireless subscribers were active on the date of peak VLR in the month of Apr-19. The proportion of active wireless subscribers approximately was 86.01% of the total wireless subscriber base.
- The detailed statistics on proportion of active wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of Apr-19 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 April, 2019



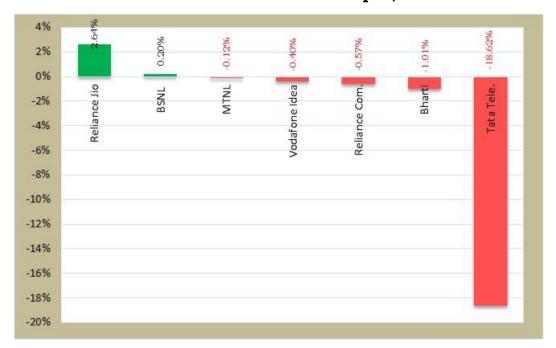
- Bharti Airtel has the maximum proportion (100.69%) of its active wireless subscribers (VLR) as
- against its total wireless subscribers (HLR) on the date of peak VLR in the month of Apr-19.





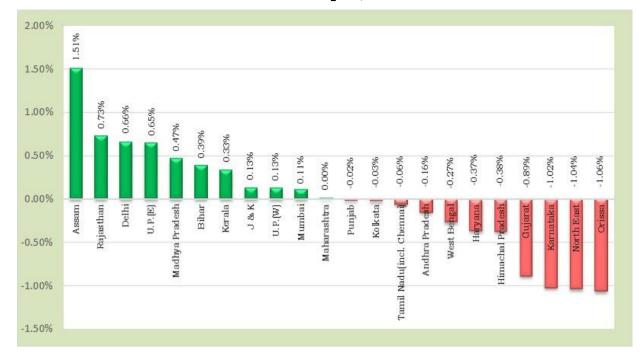
#### V. Growth in Wireless Subscribers

# Access Service Provider-wise Monthly Growth Rate of Wireless Subscribers in the month of April, 2019



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

# Service Area-wise Monthly Growth Rate of Wireless Subscribers in the month of April, 2019



• Out of the total 22 service areas, 11 service areas showed positive growth in their wireless subscribers during the month of April, 2019. Assam service area showed maximum growth of 1.51% and Orissa service area showed maximum decline (1.06%) in their wireless subscriber during the month.

## VI. Mobile Number Portability (MNP)

• Intra-service area Mobile portability (MNP) was implemented first in Haryana service area w.e.f. 25.11.2010 and in the rest of the w.e.f. 20.01.2011. country Inter-Service **MNP** has 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.

number• During the month of Apr-19, a total emented of 4.57 million requests were received as w.e.f. for MNP. Out of total 4.57 million of the new requests, 2.54 million requests Interreceived from Zone-I and 2.03 million been requests received from Zone-II. The y w.e.f. cumulative MNP requests increased wireless from 428.40 million at the end of Mar-19 to 432.97 million at the end relocate of Apr-19, since the implementation of MNP.

• In MNP Zone-I (Northern and Western India), the highest number of requests till date have been received in Rajasthan (about 34.47 million) followed by Maharashtra (about 31.59 million) service area. In MNP Zone-II

(Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 40.15 million) followed by Andhra Pradesh (about 36.66 million) and Tamil Nadu (about 36.62 million).

Service Area Wise MNP Status										
Zon	e -1		Zone - 2							
Service Area	Number o Reque Mill	sts (in	Service Area	Number of Porting Requests (in Million)						
	Mar-19	Apr-19		Mar-19	Apr-19					
Delhi	22.02	22.29	Andhra Pradesh	36.32	36.66					
Gujarat	28.43	28.80	Assam	3.37	3.40					
Haryana	15.60	15.78	Bihar	17.05	17.29					
Himachal Pradesh	2.08	2.11	Karnataka	39.83	40.15					
Jammu & Kashmir	1.04	1.05	Kerala	10.33	10.45					
Maharashtra	31.13	31.59	Kolkata	10.31	10.39					
Mumbai	22.04	22.22	Madhya Pradesh	28.06	28.37					
Punjab	16.43	16.65	North East	1.32	1.33					
Rajasthan	34.20	34.47	Orissa	8.55	8.65					
U.P.(East)	23.49	23.77	Tamil Nadu	36.30	36.62					
U.P.(West)	18.93	19.18	West Bengal	21.57	21.75					
Total 215.39		217.92	Total	213.02	215.05					
Total (Zone-1 + Zon	e-2)			428.40	432.97					
Net Addition (April, 2	2019)	_			4.57					

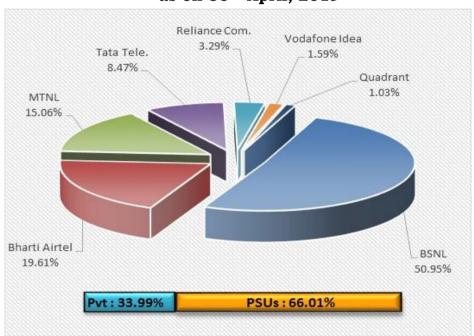
#### VII. Wireline Subscribers

• Wireline subscribers further declined from 21.70 million at the end of Mar-19 to 21.47 million at the end of Apr-19. Net decline in the wireline subscriber base was 0.23 million with a monthly

decline rate of 1.03%. The share of urban and rural subscribers in total wireline subscribers were 86.23% and 13.77% respectively at the end of Apr-19.

- The Overall Wireline Tele-density declined from 1.65 at the end of Mar-19 to 1.63 at the end of Apr-19. Urban and Rural Wireline Tele-density were 4.42 and 0.33 respectively during the same period.
- BSNL and MTNL, the two PSU access service providers, held 66.01% of the wireline market share as on 30th April, 2019. Detailed statistics of wireline subscriber base are available at **Annexure-III**.

Access Service Provider-wise Market Shares of Wireline Subscribers as on 30th April, 2019



Access Service Provider-wise Net Additions/declines in Wireline Subscribers during the month of April, 2019



## VIII. Broadband (≥ 512 Kbps download)

 As per the reports received from 317 operators in the month of April 2019, the number of broadband subscribers increased from 563.31 million at the end of Mar-19 to 571.95 million at the end of Apr-19 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 April, 2019

	Broadband s	Monthly growth	
Segment	As on 31st March, 2019	As on 30 <sup>th</sup> April, 2019	rate in the month of Apr-19
Wired subscribers	18.42	18.41	-0.04%
Mobile devices users (Phones and dongles)	544.37	552.25	1.45%
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to- Point Radio & VSAT)	0.52	1.28*	147.22%*
Total	563.31	571.95	1.53%

<sup>\*</sup>Major variation shown in fixed wireless subscribers due to major increase in Wi-Fi subscribers of M/s BSNL (as reported) in the month of April, 2019.

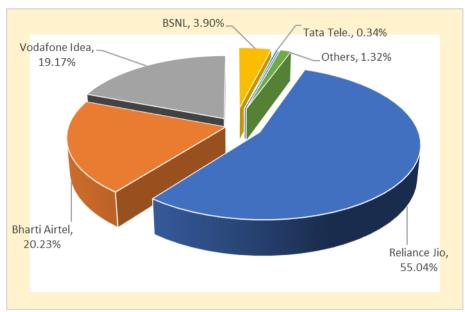
• Top five service providers constituted 98.68% market share of the total broadband subscribers at the end of Apr-19. These service providers were Reliance Jio

Infocomm Ltd (314.81 million), Bharti Airtel (115.71 million), Vodafone Idea (109.66 million), BSNL (22.29 million) and Tata Tele. Group (1.94 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 30.04.2019



- As on 30<sup>th</sup> April, 2019, the top five Wired Broadband Service providers were **BSNL** (9.15)Bharti million), Airtel (2.38)million), Atria Convergence **Technologies** (1.43)million), Hathway Cable & Datacom (0.82 million) and MTNL (0.75 million).
- As on 30<sup>th</sup> April, 2019, the top five Wireless Broadband Service providers were Reliance Jio Infocomm Ltd (314.81 million), Bharti Airtel (113.33 million), Vodafone Idea (109.64 million), BSNL (12.39 million) and Tata Teleservices (1.54 million).

Contact details in case of any clarification:

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(S. K. Mishra) Pr. Advisor (F&EA)

			1	<b></b> '	Wireless	Subscribe	er Base					т						Annexu	re-I
0.1	Bharti	Airtel	Relian	ice Com.	. Vodafon	ne Idea	Tata Tele	eservices	BSI	NL	BSNL	(VNO's)	MT	NL	Relian	ice Jio	Tot	Total	
Circle	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Addition
Andhra Pradesh	28220681	27914445	5 1923	1972	2 22283084	22161387	1484357	1227200	10171597	10118284					24568739	25171351	86730381	86594639	-135742
Assam	8188605	8201974			5993877	6046923	$_{\scriptscriptstyle \parallel}$		2560859	2582631	1			$\overline{1}$	6223002	6481873	22966343	23313401	347058
Bihar	36979492	36721898	3 192	2 200	20887026	20781172	246948	184616	4566337	4633007					22399889	23086893	85079884	85407786	327902
Delhi	15644514	15581569	2623	3 2607	18983299	19107339	20	20		1			2213046	2210039	15294371	15579974	52137873	52481548	343675
Gujarat	11527108	10821678	3 490	527	31642967	31284128	687200	519111	5958786	6009622					19482308	20049640	69298859	68684706	-614153
Haryana	3937921	3896359	167	7 178	10605018	10487533	707059	587728	4928753	4981533					7541842	7666193	27720760	27619524	-101236
Himachal Pradesh	3395637	3361382	2 72	2 72	1409059	1361751	2774	1656	2822517	2834960					2888273	2918781	10518332	10478602	-39730
J & K	5462946	5478133		'	1242344	1165415			1242060	1249063	'				3387436	3457077	11334786	11349688	14902
Karnataka	26776908	26645100	1761	1661	14931069	14417806	2751604	2294198	7197784	7211769					16584577	16976241	68243703	67546775	-696928
Kerala	5249759	5228877	7 379	422	20249640	20369326	252872	195602	10890618	10902439					7313052	7405656	43956320	44102322	146002
Kolkata	6150183	6059090	34	1 34	9085628	9060302	921787	791070	1571580	1606178	/'				8608156	8813745	26337368	26330419	-6949
Madhya Pradesh	14820329	14498545	727	7 770	29061279	29179554	1621001	1294597	6181330	6231475	1				23113410	23944406	74798076	75149347	351271
Maharashtra	15217675	15003149	728	3 771	45872515	45804705	1311424	1007033	7204097	7125266					23418625	24086190	93025064	93027114	2050
Mumbai	8966426	8964447	7 5070	4655	15224742	15170441	658572	508301					1240177	1239014	11918598	12168118	38013585	38054976	4139
North East	5192375	5197244			2375119	2346612	,		1601944	1447884					2818913	2872294	11988351	11864034	-124317
Orissa	12178352	12052339	138	3 164	5161435	4729841	427153	321789	5747860	5759960					9179431	9482869	32694369	32346962	-347407
Punjab	10087180	10015114	1 219	237	10916410	10949382	756145	632993	5452464	5471567					12028763	12164398	39241181	39233691	-7490
Rajasthan	21816582	21659845	347	7 382	16662225	16680859	90625	64226	5907492	6031050	1				19754424	20262327	64231695	64698689	466994
Tamil Nadu (incl. Chennai)	25206041	25016389	2829	2875	24207464	24113829	1189091	996952	12051558	12092199	77989	81890			19631847	20009887	82366819	82314021	-52798
U.P.(E)	30403507	30270286	732	761	33836712	34184906	1529282	1254004	11844571	11804646	·['				21384985	22128624	98999789	99643227	643438
U.P.(W)	12722363	12539643	62	2 62	28936225	29006671	1189200	1004709	5942389	5933682	'				15795454	16182369	64585693	64667136	81443
West Bengal	17036682	16764226	5 497	7 532	25269876	24844989	26562	15662	1819980	1865947	'		<u>[</u>		13388741	13898313	57542338	57389669	-152669
Total	325181266	321891732	18990	18882	394837013	393254871	15853676	12901467	115664576	115893162	77989	81890	3453223	3449053	306724836	314807219	1161811569	1162298276	486707
Net Addition		-3289534		-108		-1582142		-2952209	,I	228586	<u> </u>	3901		-4170		8082383	0	486707	
Rural Subscribers	149144364	146311827	0	0	207146349	205210477	2077600	1553076	36589621	36640185	5 0	0	46253	46190	116320687	120187631	511324874	509949386	-137548

Note: Virtual Network Operator (VNO) of BSNL has reported its subscriber number from the month of October, 2018.

Proportion of	roportion of VLR on the date of Peak VLR in the month of Apr-19 (%)									
Circle	Bharti	BSNL	Vodafone Idea	MTNL	Reliance Com.	Reliance Jio	Tata Tele.	Total		
Andhra Pradesh	105.72	66.49	96.18		71.30	82.65	0.82	90.50		
Assam	99.93	59.99	76.87			97.58		88.87		
Bihar	96.42	62.22	92.06		54.00	96.96	0.03	93.44		
Delhi	90.25		84.99	25.89	97.89	75.10	-	81.12		
Gujarat	101.14	50.55	90.19		38.33	74.94	0.01	83.32		
Haryana	118.56	36.82	87.13		49.44	67.02	0.51	75.06		
Himachal Pradesh	96.34	42.59	82.20		59.72	74.07	-	73.74		
J & K	96.02	65.94	79.78		-	79.15		85.91		
Karnataka	102.51	61.68	90.19		98.86	82.10	0.47	86.93		
Kerala	98.92	64.89	89.84		48.58	69.96	5.54	81.04		
Kolkata	104.22	58.11	85.13		97.06	79.30	0.00	83.37		
Madhya Pradesh	105.31	54.36	85.20		54.55	91.87	0.23	87.18		
Maharashtra	105.35	57.90	91.06		75.10	91.42	0.32	89.94		
Mumbai	79.56		74.39	47.62	73.53	77.85	-	74.85		
North East	97.06	83.04	77.57		-	96.42		91.34		
Orissa	99.62	73.76	87.89		39.63	92.13	0.40	90.12		
Punjab	102.21	47.57	81.21		41.35	70.56	0.08	77.27		
Rajasthan	98.49	48.10	87.38		46.60	82.54	0.47	85.83		
<b>Tamil Nadu</b> (incl. Chennai)	97.64	71.26	88.91		70.37	77.43	0.88	85.10		
U.P. (E)	107.14	42.58	84.19		50.33	91.51	0.20	86.80		
U.P. (W)	110.49	45.51	82.27		59.68	81.89	0.16	83.00		
West Bengal	98.71	91.84	84.97		43.61	95.58	0.86	91.76		
Total	100.69	57.86	87.03	33.70	72.65	84.17	0.43	86.01		

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	Cubani	hor Poss							Annexure	<b>.</b> TTT	
	•					wirenne	Subscri	per base							Annexure	÷-111	
Service Area	BS	NL	МТ	NL	Bharti	Airtel	Reliano	e Com.	Tata	Tele.	Quad	lrant	Vodafo	ne Idea	Total		Net
betvice mea	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Mar-19	Apr-19	Addition
Andhra Pradesh	960344	929792			199419	203118	47011	46096	173298	172516			59790	59640	1439862	1411162	-28700
Assam	111518	109943											2850	2940	114368	112883	-1485
Bihar	215515	211802					3234	3192	8369	8409			1740	1740	228858	225143	-3715
Delhi			1481900	1477034	1443935	1467120	119290	113333	155756	154607			55670	55630	3256551	3267724	11173
Gujarat	1009423	943710			91049	92120	19608	18284	87465	88362			27803	28841	1235348	1171317	-64031
Haryana	209003	206246			23203	23268	2701	2576	35083	34910			210	210	270200	267210	-2990
Himachal Pradesh	110078	108653					2795	2751	1789	1855			60	60	114722	113319	-1403
J & K	102447	102985													102447	102985	538
Karnataka	1021570	1003824			683367	687156	132910	126259	272238	270204			44497	46737	2154582	2134180	-20402
Kerala	1783570	1776179			61265	61642	16836	16654	18915	18849			3450	3630	1884036	1876954	-7082
Kolkata	479590	474913			129470	130290	39406	39024	53116	53047			8900	8900	710482	706174	-4308
Madhya Pradesh	650594	648103			243345	243764	10478	9995	14571	14205			1050	1080	920038	917147	-2891
Maharashtra	1084062	1064015			94489	96170	46613	46291	278280	276485			20274	23154	1523718	1506115	-17603
Mumbai			1761740	1757249	370665	372867	173263	167767	559627	557517			55302	55993	2920597	2911393	-9204
North East	103881	103253											270	270	104151	103523	-628
Orissa	223052	220573					2490	2465	8219	8705			2280	2310	236041	234053	-1988
Punjab	394359	387436			132046	133490	11361	11355	12326	12306	221854	220534	1680	1590	773626	766711	-6915
Rajasthan	439056	434553			55275	55776	20589	20214	11455	11561			10030	11760	536405	533864	-2541
Tamil Nadu (incl. Chennai)	1423913	1405130			556766	554556	70448	68122	120153	120523			20360	20380	2191640	2168711	-22929
U.P.(E)	357470	341373			66160	65452	6327	6009	8233	8365			12020	12110	450210	433309	-16901
U.P.(W)	265817	261505			23671	24022	3381	3294	4820	4780			4170	4260	301859	297861	-3998
West Bengal	222417	206095					1688	1686	2370	2374			120	120	226595	210275	-16320
Total	11167679	10940083	3243640	3234283	4174125	4210811	730429	705367	1826083	1819580	221854	220534	332526	341355	21696336	21472013	-224323
Net Addition		-227596		-9357		36686		-25062		-6503		-1320		8829		-224323	
Rural Subscribers	2928367	2861339	0	0	0	0	1444	1409	49280	48987	45572	44992	0	0	3024663	2956727	-67936

## 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.