Information Note to the Press





#### TELECOM REGULATORY AUTHORITY OF INDIA

New Delhi, 19<sup>th</sup> July, 2019 (www.trai.gov.in)

#### Highlights of Telecom Subscription Data as on 31st May, 2019

			_
Particulars	Wireless	Wireline	<b>Total</b> (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1161.86	21.29	1183.15
Net Addition in May, 2019 (Million)	-0.44	-0.18	-0.62
Monthly Growth Rate	-0.04%	-0.85%	-0.05%
Urban Telephone Subscribers (Million)	656.27	18.39	674.66
Net Addition in May, 2019 (Million)	3.92	-0.12	3.79
Monthly Growth Rate	0.60%	-0.67%	0.57%
Rural Telephone Subscribers (Million)	505.59	2.90	508.49
Net Addition in May, 2019 (Million)	-4.36	-0.06	-4.41
Monthly Growth Rate	-0.85%	-1.98%	-0.86%
Overall Tele-density*(%)	88.31	1.62	89.92
Urban Tele-density*(%)	156.41	4.38	160.79
Rural Tele-density*(%)	56.42	0.32	56.74
Share of Urban Subscribers	56.48%	86.39%	57.02%
Share of Rural Subscribers	43.52%	13.61%	42.98%
Broadband Subscribers (Million)	563.06	18.45	581.51

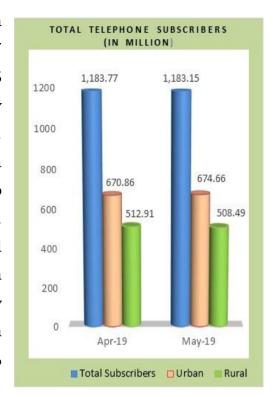
- ❖ In the month of May, 2019, 4.18 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 432.97 million at the end of Apr-19 to 437.15 million at the end of May-19, since implementation of MNP.
- Number of active wireless subscribers (on the date of peak VLR\*) in May, 2019 was 989.60 million.

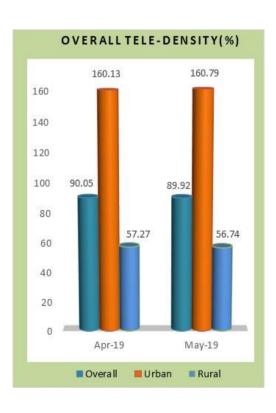
#### Note:

- 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 marginally declined from 1,183.77 million at the end of Apr-19 to 1,183.15 million at the end of May-19, thereby showing a monthly decline rate of 0.05%. The rural subscription declined from 512.91 million at the end of Apr-19 to 508.49 million at the end of May-19. However, the urban subscription increased from 670.86 million to 674.66 million during the same period. The monthly of growth rates rural and urban subscription were -0.86% and 0.57% respectively during the month of May-19.





• The overall Tele-density in India declined from 90.05 at the end of Apr-19 to 89.92 at the end of May-19. The Rural Tele-density declined from 57.27 at the end of Apr-19 to 56.74 at the end of May-19. However, Urban Tele-density marginally increased from 160.13 at the end of Apr-19 to 160.79 at the end of May-19. The share of rural and urban subscribers in total number of telephone subscribers at the end of May-19 was 42.98% and 57.02% respectively.





 Delhi service area has maximum tele-density of 240.49 at the end of May-19 and the Bihar service area has minimum tele-density of 60.15 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 May, 2019

Circle		s in the month ny, 2019	_	bscriber base as May, 2019
Category	Wireline segment	Wireless segment	Wireline segment	Wireless segment
Circle A	-132,674	-342,027	8,258,811	397,825,228
Circle B	-41,019	-919,001	5,262,312	471,584,604
Circle C	-11,047	507,587	880,859	175,268,060
Metro	1,874	314,786	6,887,165	117,181,729
All India	-182,866	-438,655	21,289,147	1,161,859,621

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

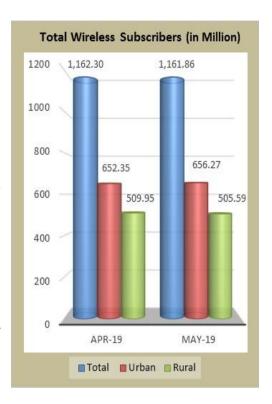
Circle	Monthly gro (Apr-19 t	wth rate (%) o May-19)		wth rate (%) to May-19)		
Category	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment		
Circle A	-1.58	-0.09	-6.89	0.89		
Circle B	-0.77 -0.19		-7.38	2.44		
Circle C	-1.24	0.29	-12.36	5.12		
Metro	0.03	0.27	-0.92	6.92		
All India	-0.85	-0.04	-5.42	2.73		

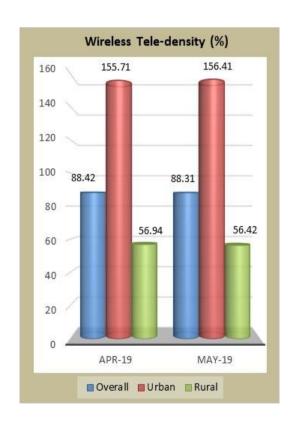
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

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

#### III. Wireless Subscribers

• Total wireless subscribers (GSM, CDMA & LTE) marginally declined from 1,162.30 million at the end of Apr-19 to 1,161.86 million at the end of May-19, thereby registering a monthly decline rate of 0.04%. Wireless subscription in rural declined from 509.95 million at the end of Apr-19 to 505.59 million at the end of May-19. However, wireless subscription in urban areas increased from 652.35 million at the end of Apr-19 to 656.27 million at the end of May-19. Monthly growth rates of and urban wireless subscription were -0.85% and 0.60% respectively.



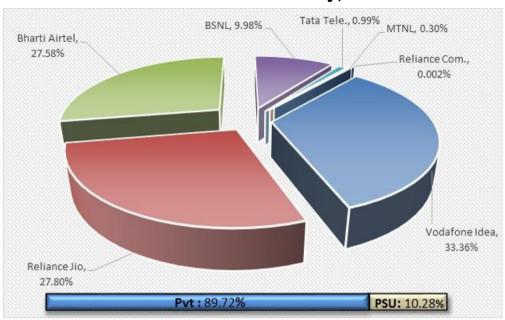


• The Wireless Tele-density in India declined from 88.42 at the end of Apr-19 to 88.31 at the end of May-19. The Rural Wireless Tele-density declined from 56.94 at the end of Apr-19 to 56.42 at the end of May-19. However, Urban Wireless Tele-density increased from 155.71 to 156.41 during the same period. The share of rural and urban wireless subscribers in total number of wireless subscribers was 43.52% and 56.48% respectively at the end of May-19. Detailed statistics of wireless subscriber base is available at **Annexure-I**.

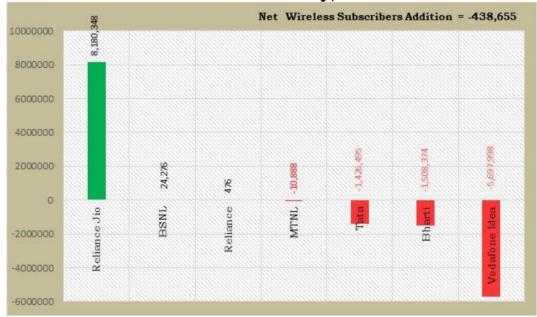
• As on 31st May, 2019, the private access service providers held 89.72% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 10.28%.

• 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 May, 2019



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



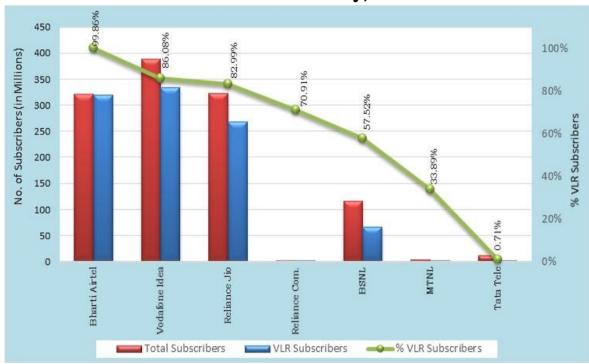
**Note:** 1. On noticing that while reporting number of subscribers, some of the TSPs were deducting inactive subscribers. A Direction was issued on 18<sup>th</sup> August 2017 to TSPs to strictly adhere to the Department of Telecommunications' methodology for reporting their number of subscribers. However, 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.

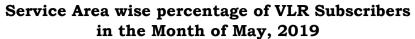
#### IV. Active Wireless Subscribers (VLR Data)

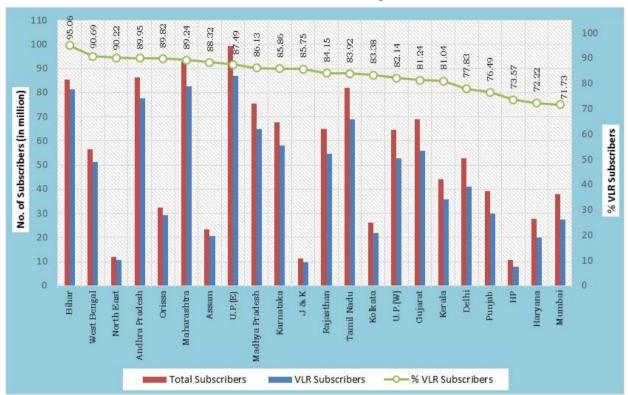
- of Out. the total wireless subscribers (1.161.86)million). 989.60 million wireless subscribers were active on the date of peak VLR in the month of May-19. The proportion of active wireless subscribers was approximately 85.17% of the total wireless subscriber base.
- The detailed statistics on proportion of active wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of May-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 May, 2019



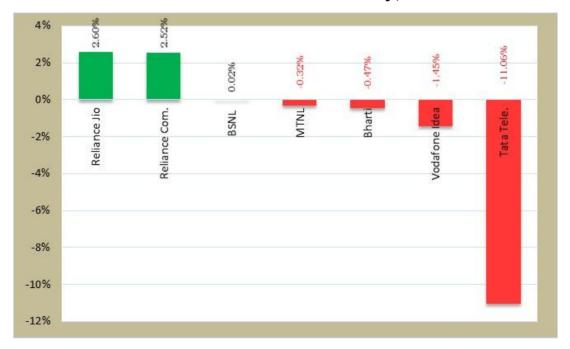
- Bharti Airtel has the maximum proportion (99.86%) of its active wireless subscribers (VLR) as
- against its total wireless subscribers (HLR) on the date of peak VLR in the month of May-19.





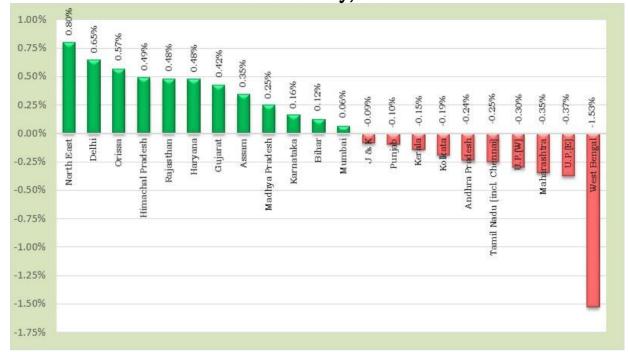
#### V. Growth in Wireless Subscribers

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



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

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



Out of the total 22 service areas,
 12 service areas showed positive growth in their wireless subscribers during the month of May, 2019. North East service

area showed maximum growth of 0.80% and West Bengal service area showed maximum decline (1.53%) in their wireless subscriber during the month.

### 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, wireless the telephone subscribers can retain their mobile numbers when they relocate from one service area to another.
- During the month of May-19, a total of 4.18 million requests were received for MNP. Out of total 4.18 million new requests, 2.29 million requests received from Zone-I and 1.89 million requests received from Zone-II. The cumulative MNP requests increased from 432.97 million at the end of Apr-19 to 437.15 million at the end of May-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 34.72 million) followed by Maharashtra (about 32.03 million) service area. In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 40.45 million) followed by Andhra Pradesh (about 36.97 million) and Tamil Nadu (about 36.89 million).

Service Area Wise MNP Status									
Zon	e -1		Zone - 2						
Service Area		of Porting sts (in ion)	Service Area	Number of Porting Requests (in Million)					
	Apr-19	May-19		Apr-19	May-19				
Delhi	22.29	22.54	Andhra Pradesh	36.66	36.97				
Gujarat	28.80	29.11	Assam	3.40	3.43				
Haryana	15.78	15.94	Bihar	17.29	17.55				
Himachal Pradesh	2.11	2.13	Karnataka	40.15	40.45				
Jammu & Kashmir	1.05	1.07	Kerala	10.45	10.58				
Maharashtra	31.59	32.03	Kolkata	10.39	10.46				
Mumbai	22.22	22.37	Madhya Pradesh	28.37	28.65				
Punjab	16.65	16.87	North East	1.33	1.34				
Rajasthan	34.47	34.72	Orissa	8.65	8.72				
U.P.(East)	23.77	24.01	Tamil Nadu	36.62	36.89				
U.P.(West)	19.18	19.41	West Bengal	21.75	21.90				
Total	217.92	220.22	Total	215.05	216.94				
Total (Zone-1 + Zon	e-2)			432.97	437.15				
Net Addition (May, 2	019)				4.18				

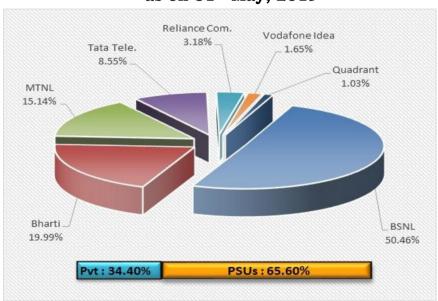
#### VII. Wireline Subscribers

• Wireline subscribers further declined from 21.47 million at the end of Apr-19 to 21.29 million at the end of May-19. Net decline in the wireline subscriber base was 0.18 million with a monthly

decline rate of 0.85%. The share of urban and rural subscribers in total wireline subscribers were 86.39% and 13.61% respectively at the end of May-19.

- The Overall Wireline Tele-density declined from 1.63 at the end of Apr-19 to 1.62 at the end of May-19. Urban and Rural Wireline Tele-density were 4.38 and 0.32 respectively during the same period.
- BSNL and MTNL, the two PSU access service providers, held 65.60% of the wireline market share as on 31st May, 2019. Detailed statistics of wireline subscriber base are available at **Annexure-III**.

Access Service Provider-wise Market Shares of Wireline Subscribers as on 31st May, 2019



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



#### VIII. Broadband (≥ 512 Kbps download)

 As per the reports received from 322 operators in the month of May 2019, the number of broadband subscribers increased from 571.95 million at the end of Apr-19 to 581.51 million at the end of May-19 with a monthly growth rate of 1.67%. Segment-wise broadband subscribers and their monthly growth rates are as below:

# Segment-wise Broadband Subscribers and Monthly Growth Rate in the month of May, 2019

	Broadband s (in mi	Monthly growth	
Segment	As on 30 <sup>th</sup> April, 2019	As on 31st May, 2019	rate in the month of May-19
Wired subscribers	18.41	18.45	0.17%
Mobile devices users (Phones and dongles)	552.25	562.52	1.86%
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to- Point Radio & VSAT)	1.28	0.54*	-57.62%*
Total	571.95	581.51	1.67%

<sup>\*</sup>Major variation shown in fixed wireless subscribers due to removal of occasional hotspot users from Wi-Fi subscribers by M/s BSNL (as reported) in the month of May, 2019.

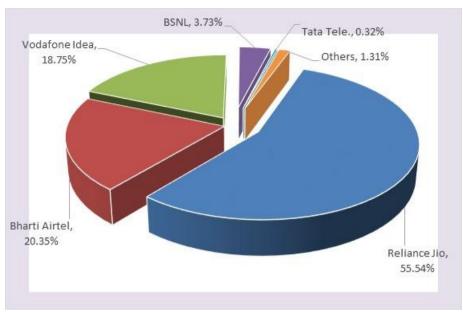
• Top five service providers constituted 98.69% market share of the total broadband subscribers at the end of May-19. These service providers were Reliance Jio

Infocomm Ltd (322.99 million), Bharti Airtel (118.34 million), Vodafone Idea (109.01 million), BSNL (21.67 million) and Tata Teleservices (1.87 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 31.05.2019



- As on 31<sup>st</sup> May, 2019, the top five Wired Broadband Service providers were BSNL (9.09 million), Bharti Airtel (2.39 million), Atria Convergence Technologies (1.44 million), Hathway Cable & Datacom (0.83 million) and MTNL (0.75 million).
- As on 31st May, 2019, the top five Broadband Service Wireless providers were Reliance Jio Infocomm Ltd (322.99 million), Bharti Airtel (115.95)million), Vodafone Idea (108.99 million), BSNL (12.57 million) and Tata Teleservices (1.49 million).

Contact details in case of any clarification:

#### Shri S. K. Mishra, Pr. Advisor (F&EA),

Telecom Regulatory Authority of India Mahanagar Doorsanchar Bhawan Jawahar Lal Nehru Marg,

New Delhi – 110002, Ph: 011-23221856

Fax: 011-23235249 E-mail: <a href="mailto:skmishra.trai@nic.in">skmishra.trai@nic.in</a> Authorized to issue:

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

				ļ	Wireless S	Subscrib	er Base											Annexu	ıre-I
	Bharti .	Airtel	Relianc	ce Com.	ce Com. Vodafone Idea Tata Teleservices BSNL			NL	BSNL (VNO's)			MTNL Relian		ice Jio	Total		Net		
Circle	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Addition
Andhra Pradesh	27914445	27714365	1972	2045	22161387	21538117	1227200	1113693	10118284	10090124					25171351	25924717	86594639	86383061	-211578
Assam	8201974	8228147			6046923	5847108		, <u> </u>	2582631	2603739					6481873	6715313	23313401	23394307	80906
Bihar	36721898	36704417	7 200	204	20781172	20401067	184616	160956	4633007	4690284					23086893	23557154	85407786	85514082	106296
Delhi	15581569	15501614	1 2607	2604	19107339	19084424	20	20		·			2210039	2207109	15579974	16025999	52481548	52821770	340222
Gujarat	10821678	10795246	527	542	31284128	31094343	519111	447972	6009622	6029818					20049640	20608506	68684706	68976427	291721
Haryana	3896359	3884290	178	179	10487533	10496204	587728	536647	4981533	4927066					7666193	7906729	27619524	27751115	131591
Himachal Pradesh	3361382	3345519	72	72	1361751	1338986	1656	964	2834960	2850927					2918781	2993689	10478602	10530157	51555
J & K	5478133	5501488	1		1165415	1164945		1	1249063	1174065					3457077	3499149	11349688	11339647	-10041
Karnataka	26645100	26535307	7 1661	1667	14417806	14303981	2294198	2079570	7211769	7213922					16976241	17523697	67546775	67658144	111369
Kerala	5228877	5204715	422	452	20369326	20181134	195602	167426	10902439	10907078					7405656	7577299	44102322	44038104	-64218
Kolkata	6059090	6039082	2 34	34	9060302	8925949	791070	697901	1606178	1613991					8813745	9003329	26330419	26280286	-50133
Madhya Pradesh	14498545	14389328	3 770	780	29179554	28871781	1294597	1148975	6231475	6443731					23944406	24481522	75149347	75336117	186770
Maharashtra	15003149	14839639	771	808	45804705	45064239	1007033	880679	7125266	7184116					24086190	24733559	93027114	92703040	-324074
Mumbai	8964447	8925469	4655	4654	15170441	15053353	508301	450416					1239014	1231056	12168118	12414725	38054976	38079673	2469
North East	5197244	5203314			2346612	2333501		I	1447884	1445788					2872294	2976541	11864034	11959144	95110
Orissa	12052339	12054684	164	257	4729841	4655611	321789	273934	5759960	5747843					9482869	9798394	32346962	32530723	18376
Punjab	10015114	9964909	237	255	10949382	10979406	632993	571145	5471567	5436068					12164398	12243425	39233691	39195208	-38483
Rajasthan	21659845	21568720	382	390	16680859	16479114	64226	50294	6031050	6036695					20262327	20875207	64698689	65010420	31173
Tamil Nadu (incl. Chennai)	25016389	24826496	2875	2910	24113829	23883853	996952	878291	12092199	12122159	81890	104041			20009887	20286806	82314021	82104556	-20946
U.P.(E)	30270286	30136237	7 761	768	34184906	33683802	1254004	1101249	11804646	11627544					22128624	22720001	99643227	99269601	-37362
U.P.(W)	12539643	12458412	2 62	62	29006671	28511989	1004709	906062	5933682	5849878					16182369	16746156	64667136	64472559	-19457
West Bengal	16764226	16561960	532	675	24844989	23663966	15662	8778	1865947	1900451				 	13898313	14375650	57389669	56511480	-87818
Total	321891732	320383358	18882	19358	393254871	387556873	12901467	11474972	115893162	115895287	81890	104041	3449053	3438165	314807219	322987567	1162298276	1161859621	-43865
Net Addition	,	-1508374		476		-5697998		-1426495	<u> </u>	2125	「 <u> </u>	22151		-10888		8180348	0	-438655	 
Rural Subscribers	146311827	143151329	0	0	205210477	200304689	1553076	1393578	36640185	36673588	0	0	46190	46129	120187631	124024266	509949386	505593579	-43558

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

Proportion of	Proportion of VLR on the date of Peak VLR in the month of May-19 (%)								
Circle	Bharti	BSNL	Vodafone Idea	MTNL	Reliance Com.	Reliance Jio	Tata Tele.	Total	
Andhra Pradesh	104.91	66.42	97.19		68.85	80.94	0.85	89.95	
Assam	99.41	58.61	76.92			96.19		88.32	
Bihar	96.39	61.64	94.85		52.45	100.48	0.03	95.06	
Delhi	87.10		80.94	26.27	98.12	72.25	-	77.83	
Gujarat	96.34	49.79	88.30		37.45	73.65	0.01	81.24	
Haryana	115.85	37.41	81.33		49.72	65.23	0.52	72.22	
Himachal Pradesh	96.39	43.26	81.56		58.33	73.39	-	73.57	
J & K	95.29	69.86	74.95		-	79.67		85.75	
Karnataka	102.34	61.66	86.05		98.62	80.86	0.47	85.86	
Kerala	100.10	65.11	89.69		45.58	69.51	5.97	81.04	
Kolkata	100.68	58.10	84.67		94.12	81.15	4.32	83.38	
Madhya Pradesh	104.12	52.16	84.78		53.72	90.14	0.19	86.13	
Maharashtra	103.82	55.29	90.74		71.78	90.77	0.34	89.24	
Mumbai	80.45		69.17	47.56	73.53	73.56	-	71.73	
North East	98.12	76.30	75.79		-	94.48		90.22	
Orissa	97.51	75.18	84.38		25.68	94.05	0.24	89.82	
Punjab	104.67	47.95	79.23		38.82	67.32	0.10	76.49	
Rajasthan	96.90	48.09	86.29		45.38	79.93	0.54	84.15	
<b>Tamil Nadu</b> (incl. Chennai)	96.61	69.79	88.08		69.48	75.61	0.82	83.92	
U.P. (E)	107.53	43.02	85.22		50.00	91.24	0.35	87.49	
U.P. (W)	110.06	45.72	81.69		61.29	79.30	0.13	82.14	
West Bengal	97.37	91.85	84.64		34.52	92.84	1.57	90.69	
Total	99.86	57.52	86.08	33.89	70.91	82.99	0.71	85.17	

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	her Rase	<b>.</b>						Annexure	-III	
											_						
Service Area	BS	NL	МТ	NL	Bharti	Airtel	Reliano	nce Com. Tat		Tele.	Quad	lrant	Vodafone Idea		Total		Net
	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Apr-19	May-19	Addition
Andhra Pradesh	929792	904091			203118	209347	46096	43647	172516	172679			59640	59670	1411162	1389434	-21728
Assam	109943	108515											2940	2940	112883	111455	-1428
Bihar	211802	208772					3192	3184	8409	8476			1740	1800	225143	222232	-2911
Delhi			1477034	1471685	1467120	1483397	113333	109546	154607	156851			55630	57150	3267724	3278629	10905
Gujarat	943710	882568			92120	93777	18284	17499	88362	88073			28841	29040	1171317	1110957	-60360
Haryana	206246	203350			23268	23420	2576	2270	34910	35618			210	210	267210	264868	-2342
Himachal Pradesh	108653	106942					2751	2810	1855	1831			60	30	113319	111613	-1706
J & K	102985	101465													102985	101465	-1520
Karnataka	1003824	987511			687156	694705	126259	118466	270204	270580			46737	51117	2134180	2122379	-11801
Kerala	1776179	1766137			61642	62211	16654	15280	18849	18774			3630	3720	1876954	1866122	-10832
Kolkata	474913	467369			130290	131505	39024	38077	53047	52934			8900	10930	706174	700815	-5359
Madhya Pradesh	648103	645734			243764	244661	9995	9708	14205	14271			1080	1110	917147	915484	-1663
Maharashtra	1064015	1044829			96170	98871	46291	44431	276485	270599			23154	23241	1506115	1481971	-24144
Mumbai			1757249	1752113	372867	379134	167767	163151	557517	557555			55993	55768	2911393	2907721	-3672
North East	103253	102591											270	270	103523	102861	-662
Orissa	220573	218168					2465	2265	8705	8490			2310	2310	234053	231233	-2820
Punjab	387436	379139			133490	136015	11355	10734	12306	12264	220534	219353	1590	1620	766711	759125	-7586
Rajasthan	434553	428428			55776	56725	20214	19486	11561	11683			11760	12330	533864	528652	-5212
Tamil Nadu (incl. Chennai)	1405130	1390337			554556	553410	68122	65804	120523	123599			20380	20920	2168711	2154070	-14641
U.P.(E)	341373	331316			65452	64600	6009	5692	8365	8440			12110	12200	433309	422248	-11061
U.P.(W)	261505	257702			24022	24180	3294	3089	4780	4888			4260	4350	297861	294209	-3652
West Bengal	206095	207445					1686	1613	2374	2426			120	120	210275	211604	1329
Total	10940083	10742409	3234283	3223798	4210811	4255958	705367	676752	1819580	1820031	220534	219353	341355	350846	21472013	21289147	-182866
Net Addition		-197674		-10485		45147		-28615		451		-1181		9491		-182866	
Rural Subscribers	2861339	2804486	0	0	0	0	1409	1349	48987	47976	44992	44298	0	0	2956727	2898109	-58618

#### 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
	Stock in hand/in Distribution Channels
c.	(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.