



सत्यमेव जयते

**TELECOM REGULATORY AUTHORITY OF INDIA**New Delhi, 18<sup>th</sup> October, 2019

(www.traai.gov.in)

**Highlights of Telecom Subscription Data as on 31<sup>st</sup> August, 2019**

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
<b>Total Telephone Subscribers</b> (Million)	<b>1171.00</b>	<b>20.82</b>	<b>1191.81</b>
Net Addition in August, 2019 (Million)	2.68	-0.15	2.54
Monthly Growth Rate	0.23%	-0.70%	0.21%
<b>Urban Telephone Subscribers</b> (Million)	<b>662.74</b>	<b>18.05</b>	<b>680.80</b>
Net Addition in August, 2019 (Million)	2.88	-0.10	2.78
Monthly Growth Rate	0.44%	-0.56%	0.41%
<b>Rural Telephone Subscribers</b> (Million)	<b>508.25</b>	<b>2.76</b>	<b>511.02</b>
Net Addition in August, 2019 (Million)	-0.19	-0.05	-0.24
Monthly Growth Rate	-0.04%	-1.63%	-0.05%
<b>Overall Tele-density*(%)</b>	<b>88.77</b>	<b>1.58</b>	<b>90.34</b>
Urban Tele-density*(%)	157.25	4.28	161.54
Rural Tele-density*(%)	56.61	0.31	56.92
Share of Urban Subscribers	56.60%	86.73%	57.12%
Share of Rural Subscribers	43.40%	13.27%	42.88%
<b>Broadband Subscribers</b> (Million)	<b>597.11</b>	<b>18.32</b>	<b>615.43</b>

❖ In the month of August, 2019, 4.86 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 447.41 million at the end of Jul-19 to 452.26 million at the end of Aug-19, since implementation of MNP.

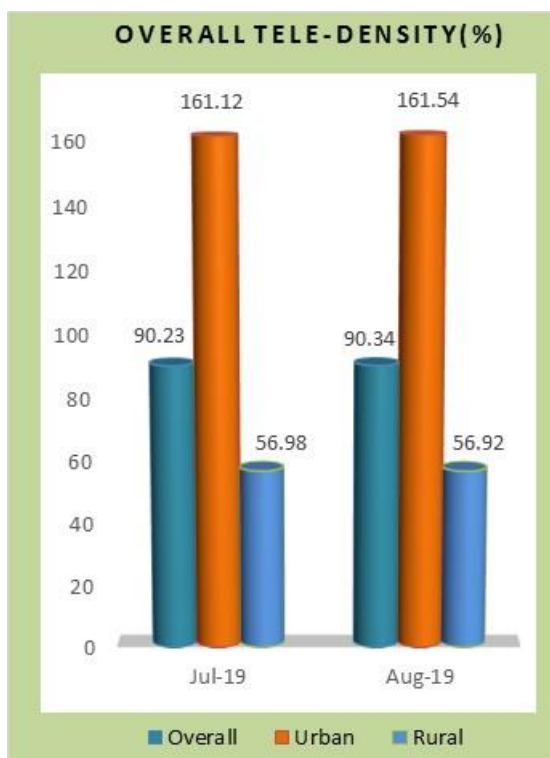
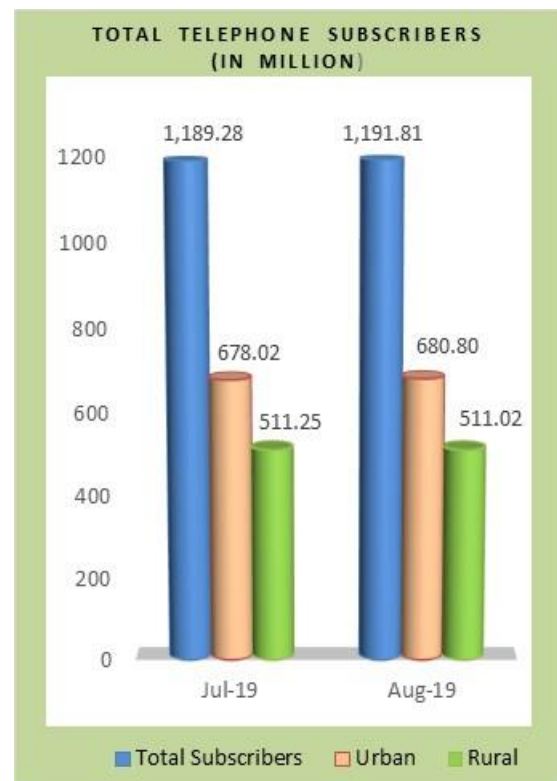
❖ Number of active wireless subscribers (on the date of peak VLR#) in August, 2019 was 970.23 million.

**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.

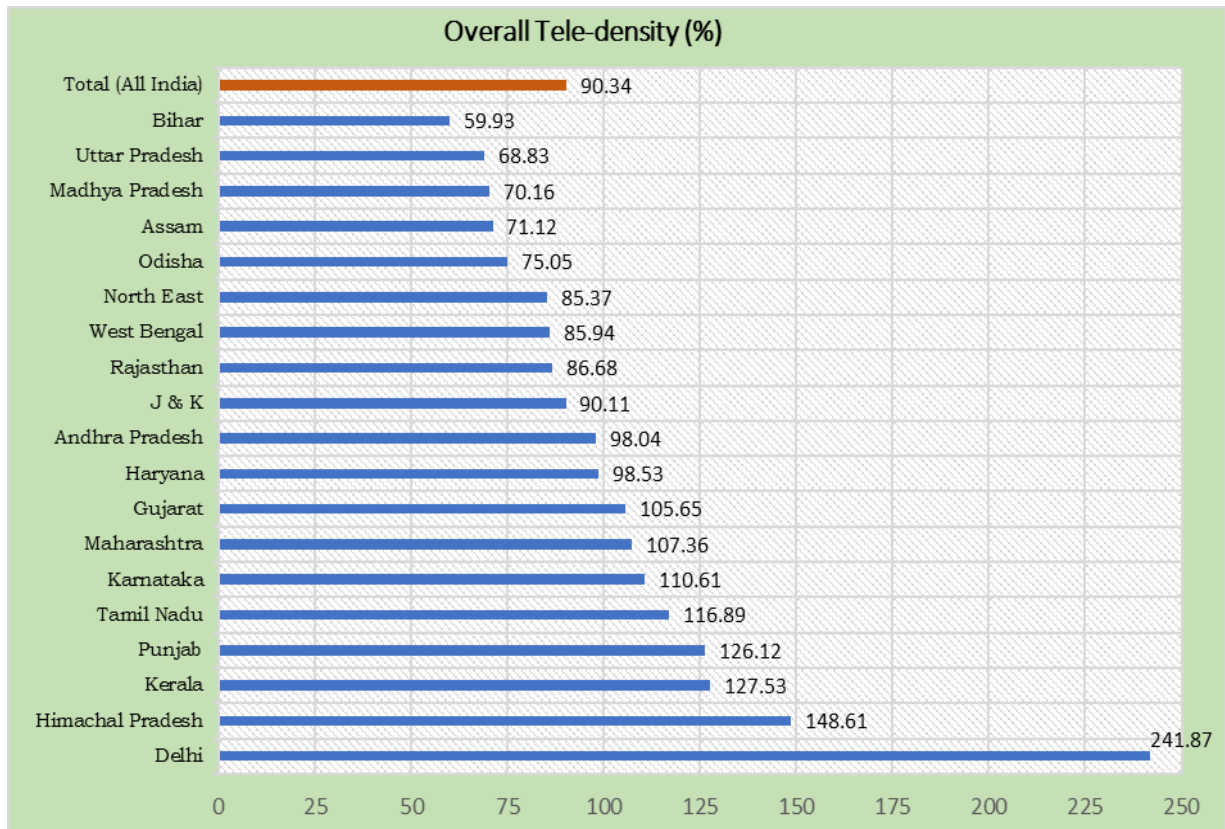
## I. Total Telephone Subscribers

- The number of telephone subscribers in India increased from 1,189.28 million at the end of Jul-19 to 1,191.81 million at the end of Aug-19, thereby showing a monthly growth rate of 0.21%. The Urban subscription increased from 678.02 million at the end of Jul-19 to 680.80 million at the end of Aug-19, however the rural subscription declined from 511.25 million to 511.02 million during the same period. The monthly growth rates of urban and rural subscription were 0.41% and -0.05% respectively during the month of Aug-19.



- The overall Tele-density in India increased from 90.23 at the end of Jul-19 to 90.34 at the end of Aug-19. The Urban Tele-density increased from 161.12 at the end of Jul-19 to 161.54 at the end of Aug-19. However, Rural Tele-density declined from 56.98 at the end of Jul-19 to 56.92 at the end of Aug-19. The share of rural and urban subscribers in total number of telephone subscribers at the end of Aug-19 was 57.12% and 42.88% respectively.

## Overall Tele-density (Circle/State Wise) – As on 31<sup>st</sup> August, 2019



- As may be seen in the above chart, nine states have less tele-density than the all India average tele-density at the end of Aug-19. Delhi service area has maximum tele-density of 241.87 and the Bihar service area has minimum tele-density of 59.93 at the end of August, 2019.

### 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 projections of population published by the Office of the Registrar General & Census Commissioner, India.
- 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 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 August, 2019

Circle Category	Net additions in the month of August, 2019		Telephone Subscriber base as on 31 <sup>st</sup> August, 2019	
	Wireline segment	Wireless segment	Wireline segment	Wireless segment
Circle A	-75,338	968,974	8,050,613	401,016,160
Circle B	-48,112	1,356,048	5,104,213	475,048,305
Circle C	-9,011	-324,318	812,966	176,248,497
Metro	-14,348	682,940	6,850,117	118,683,507
<b>All India</b>	<b>-146,809</b>	<b>2,683,644</b>	<b>20,817,909</b>	<b>1,170,996,469</b>

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

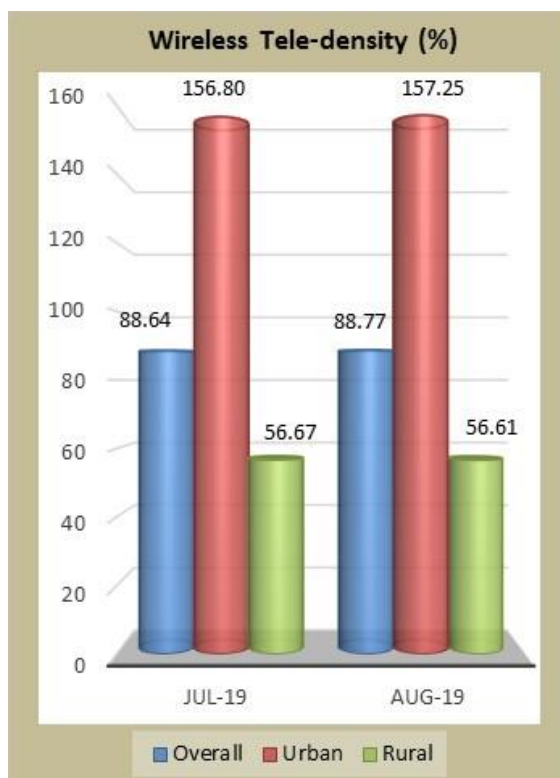
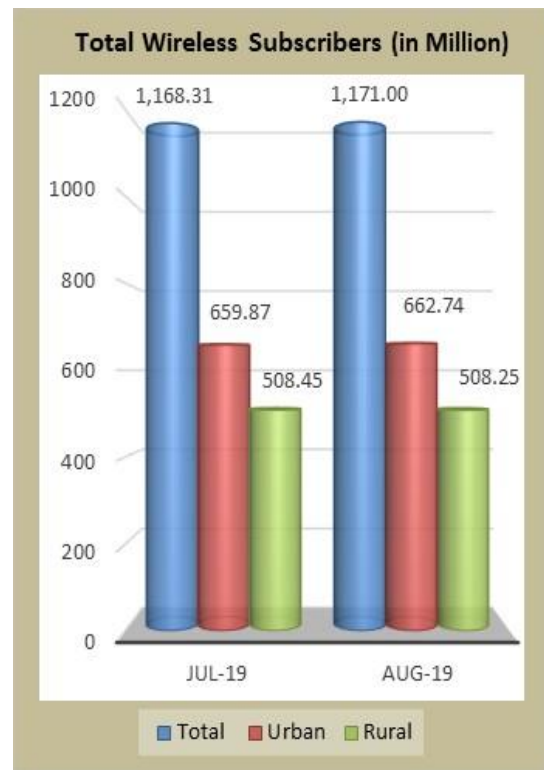
Circle Category	Monthly growth rate (%) (Jul-19 to Aug-19)		Yearly growth rate (%) (Aug-18 to Aug-19)	
	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment
Circle A	-0.93	0.24	-7.75	-0.19
Circle B	-0.93	0.29	-8.41	-0.01
Circle C	-1.10	-0.18	-16.25	0.19
Metro	-0.21	0.58	-0.96	3.99
<b>All India</b>	<b>-0.70</b>	<b>0.23</b>	<b>-6.17</b>	<b>0.35</b>

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 all Categories except Category 'C' showed monthly growth in their subscribers during the month of Aug-19. However, on yearly basis, Circles in Category 'A' and 'B' showed net decline in their wireless subscribers during the month.
- In Wireline segment, Circles in all Categories showed monthly as well as yearly decline rate in their subscribers during the month of Aug-19.

### III. Wireless Subscribers

- Total wireless subscribers (GSM, CDMA & LTE) increased from 1,168.31 million at the end of Jul-19 to 1,171.00 million at the end of Aug-19, thereby registering a monthly growth rate of 0.23%. Wireless subscription in urban areas increased from 659.87 million at the end of Jul-19 to 662.74 million at the end of Aug-19, however wireless subscription in rural areas declined from 508.45 million at the end of Jul-19 to 508.25 million at the end of Aug-19. Monthly growth rates of urban and rural wireless subscription were 0.44% and -0.04% respectively.

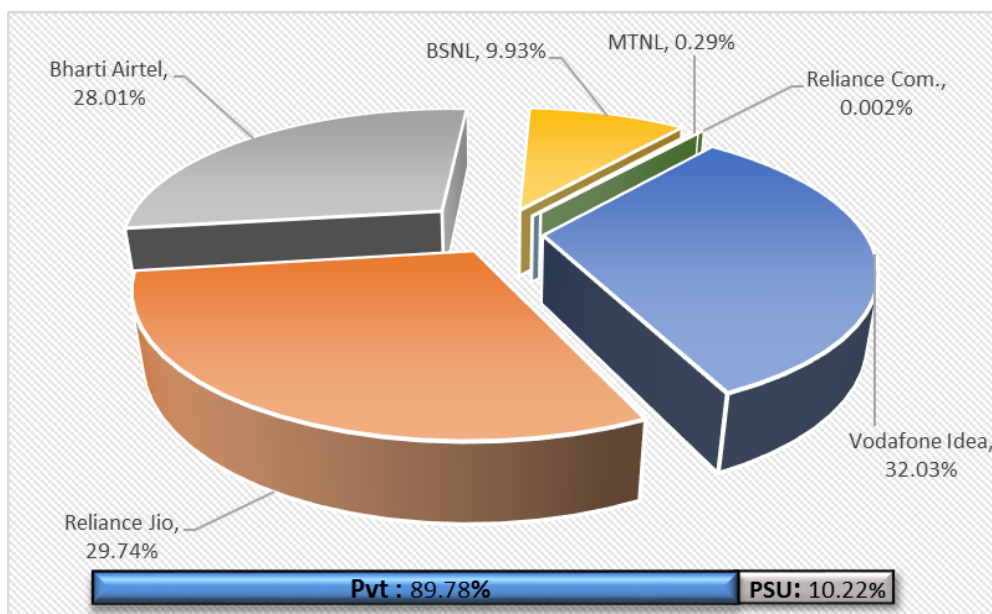


- The Wireless Tele-density in India increased from 88.64 at the end of Jul-19 to 88.77 at the end of Aug-19. The Urban Wireless Tele-density increased from 156.80 at the end of Jul-19 to 157.25 at the end of Aug-19. However, Rural Wireless Tele-density declined from 56.67 to 56.61 during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 56.60% and 43.40% respectively at the end of Aug-19. Detailed statistics of wireless subscriber base is available at

#### **Annexure-I.**

- As on 31<sup>st</sup> August, 2019, the private access service providers held 89.78% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 10.22%. 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 31<sup>st</sup> August, 2019**



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

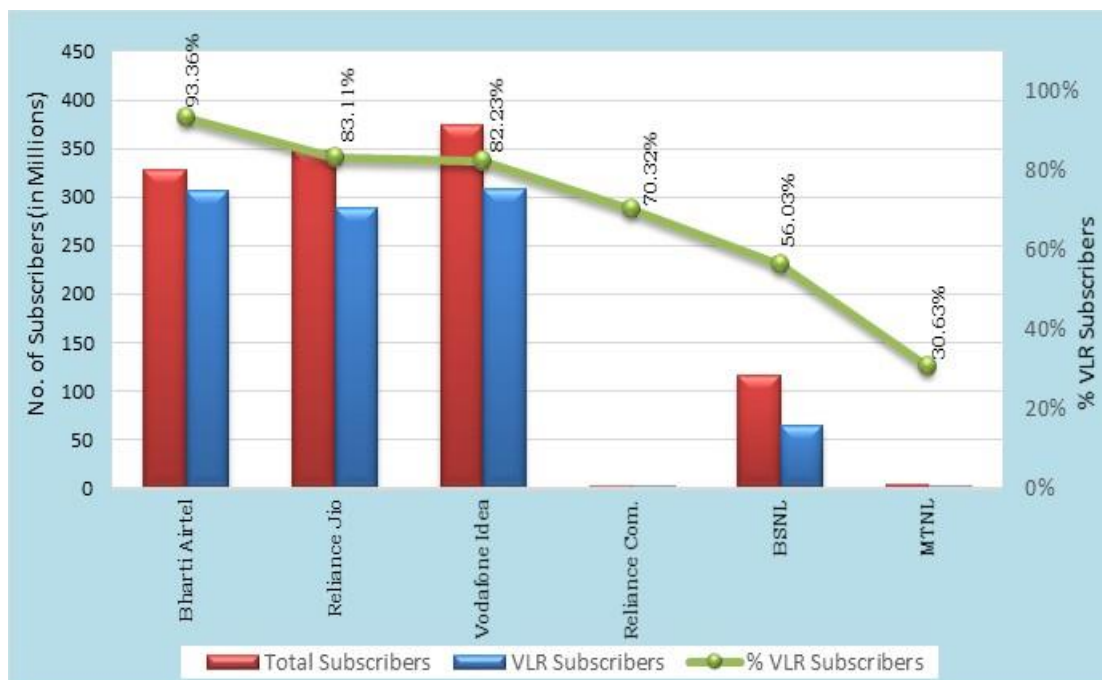


- Note:**
- M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd. However, DoT has not yet approved merger of them.
  - Virtual Network Operator (VNO) of BSNL has started reporting of its subscribers from the month of October, 2018 and the same has been included in the subscriber base of BSNL.

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

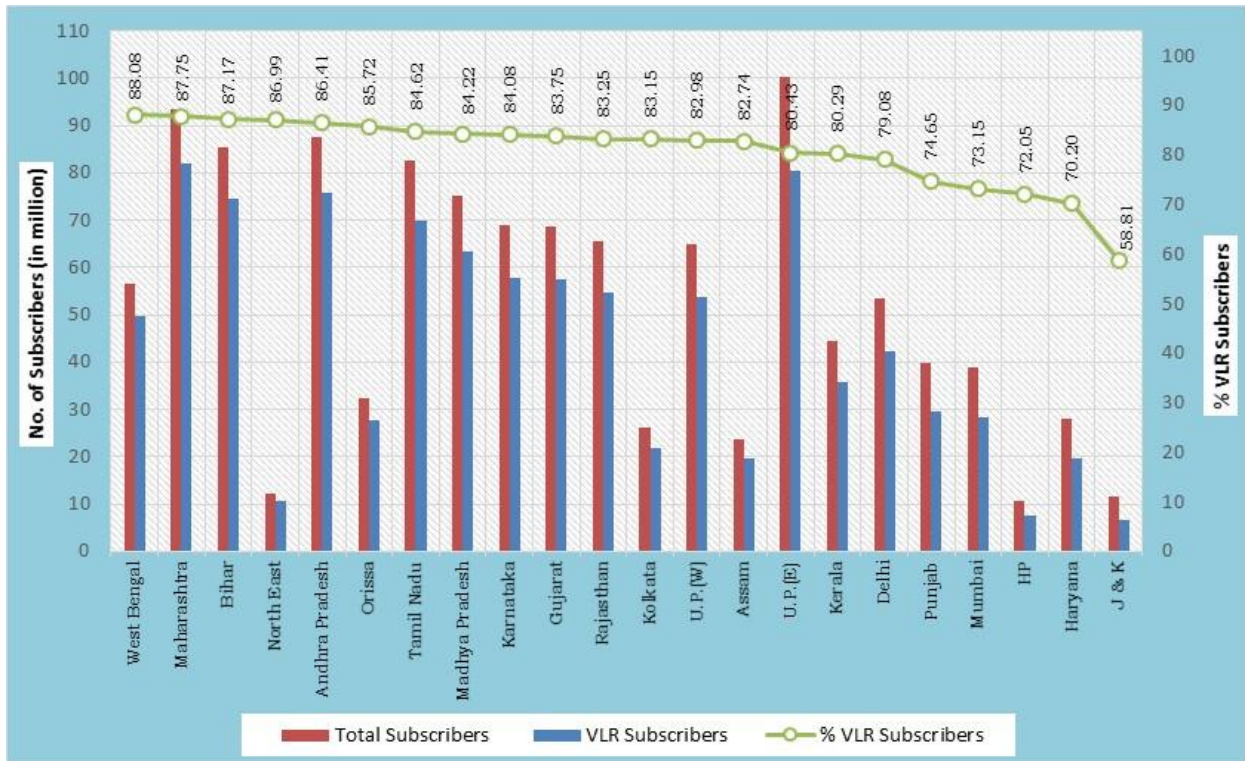
- Out of the total wireless subscribers (1,171.00 million), 970.23 million wireless subscribers were active on the date of peak VLR in the month of Aug-19. The proportion of active wireless subscribers was approximately 82.85% of the total wireless subscriber base.
- The detailed statistics on proportion of active wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of Aug-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 August, 2019**



- Bharti Airtel has the maximum proportion (93.36%) of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of peak VLR in the month of Aug-19.

### Service Area wise percentage of VLR Subscribers in the Month of August, 2019



### V. Growth in Wireless Subscribers

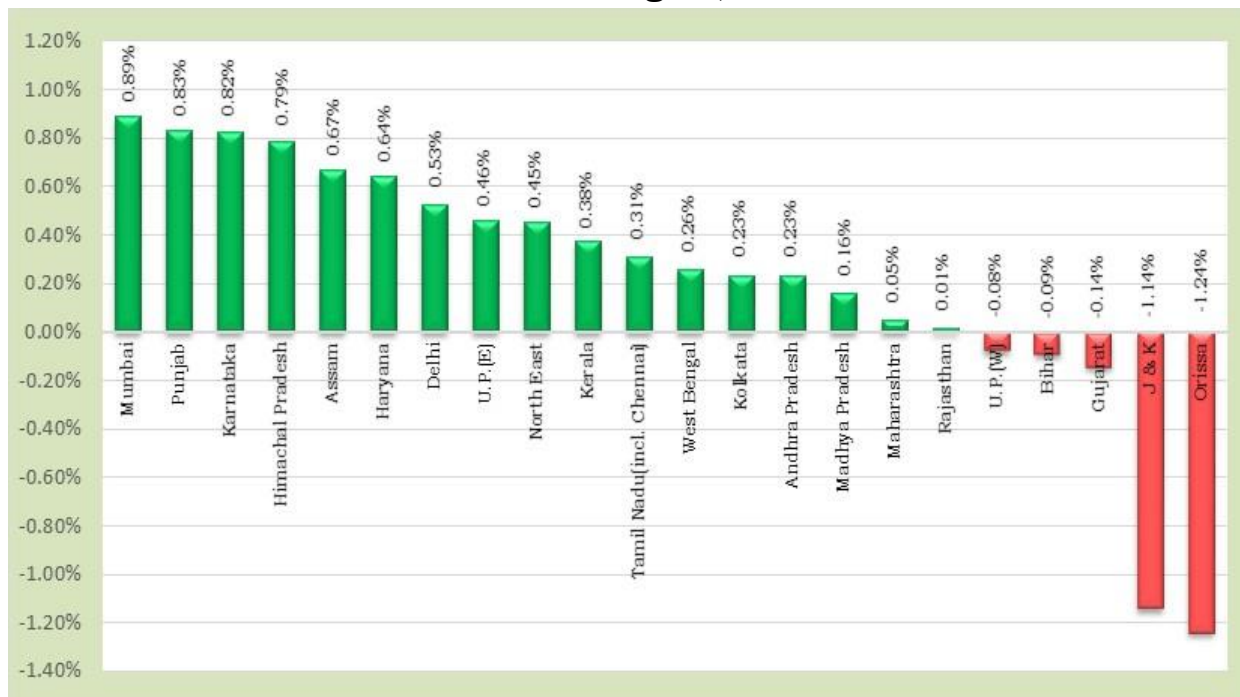
#### Access Service Provider-wise Monthly Growth Rate of Wireless Subscribers in the month of August, 2019



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



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



- Out of the total 22 service areas, five service areas showed negative growth in their wireless subscribers during the month of August, 2019. Mumbai service

area showed maximum growth of 0.89% and Orissa service area showed maximum decline (1.24%) 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, the wireless telephone subscribers can retain their mobile numbers when they relocate from one service area to another.

- During the month of Aug-19, a total of 4.86 million requests were received for MNP. Out of total 4.86 million new requests, 2.69 million requests received from Zone-I and 2.17 million requests received from Zone-II. The cumulative MNP requests increased from 447.41 million at the end of Jul-19 to 452.26 million at the end of Aug-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 35.51 million) followed by Maharashtra (about 33.60 million) service area. In MNP Zone-II

(Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 41.73 million) followed by Andhra Pradesh (about 38.20 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-19	Aug-19		Jul-19	Aug-19
Delhi	23.03	23.28	Andhra Pradesh	37.84	38.20
Gujarat	29.78	30.14	Assam	3.48	3.51
Haryana	16.26	16.43	Bihar	18.05	18.30
Himachal Pradesh	2.18	2.21	Karnataka	41.44	41.73
Jammu & Kashmir	1.11	1.11	Kerala	10.96	11.15
Maharashtra	33.04	33.60	Kolkata	10.76	10.83
Mumbai	22.71	22.89	Madhya Pradesh	29.47	29.86
Punjab	17.24	17.46	North East	1.36	1.37
Rajasthan	35.24	35.51	Orissa	9.00	9.09
U.P.(East)	24.63	24.96	Tamil Nadu	37.67	37.98
U.P.(West)	19.93	20.24	West Bengal	22.24	22.41
<b>Total</b>	<b>225.14</b>	<b>227.83</b>	<b>Total</b>	<b>222.27</b>	<b>224.44</b>
<b>Total (Zone-1 + Zone-2)</b>				<b>447.41</b>	<b>452.26</b>
<b>Net Addition (August, 2019)</b>			<b>4.86</b>		

## VII. Wireline Subscribers

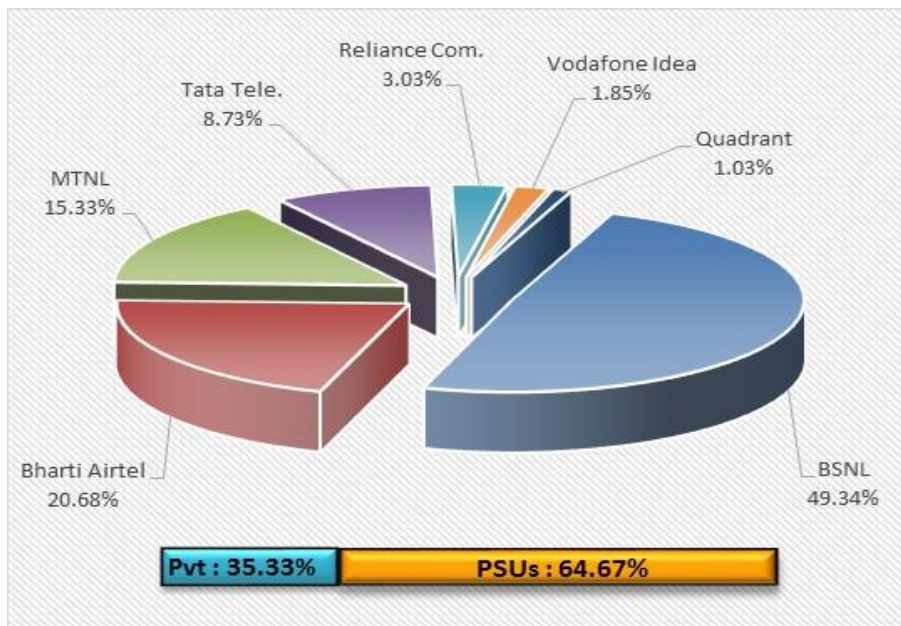
- Wireline subscribers further declined from 20.96 million at the end of Jul-19 to 20.82 million at the end of Aug-19. Net decline in the wireline subscriber base was 0.15 million with a monthly

decline rate of 0.70%. The share of urban and rural subscribers in total wireline subscribers were 86.73% and 13.27% respectively at the end of Aug-19.

- The Overall Wireline Tele-density declined from 1.59 at the end of Jul-19 to 1.58 at the end of Aug-19. Urban and Rural Wireline Tele-density were 4.28 and 0.31 respectively during the same period.

- BSNL and MTNL, the two PSU access service providers, held 64.67% of the wireline market share as on 31<sup>st</sup> August, 2019. Detailed statistics of wireline subscriber base are available at **Annexure-III.**

**Access Service Provider-wise Market Shares of Wireline Subscribers as on 31<sup>st</sup> August, 2019**



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



### VIII. Broadband ( $\geq$ 512 Kbps download)

- As per the reports received from 326 operators in the month of August, 2019, the number of broadband subscribers increased from 604.12 million at the end of Jul-19 to 615.43 million at the end of Aug-19 with a monthly growth rate of 1.87%. 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, 2019

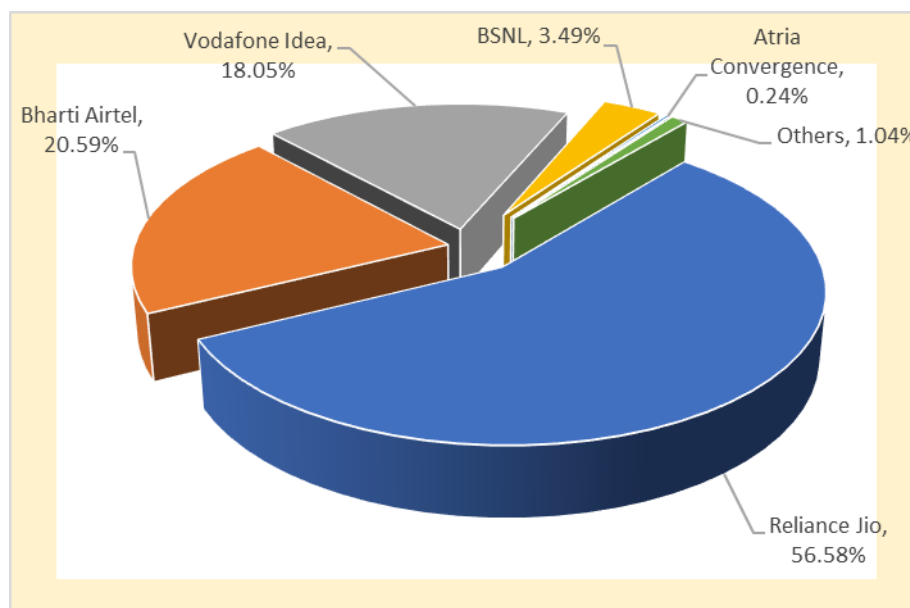
Segment	Broadband subscribers (in million)		Monthly growth rate in the month of Aug-19
	As on 31 <sup>st</sup> July, 2019	As on 31 <sup>st</sup> August, 2019	
Wired subscribers	18.52	18.32	-1.08%
Mobile devices users (Phones and dongles)	585.05	596.55	1.97%
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	0.55	0.56	2.32%
<b>Total</b>	<b>604.12</b>	<b>615.43</b>	<b>1.87%</b>

- Top five service providers constituted 98.96% market share of the total broadband subscribers at the end of Aug-19. These service providers were Reliance Jio Infocomm Ltd (348.24 million), Bharti Airtel (126.70 million), Vodafone Idea (111.11 million), BSNL (21.50 million) and Atria Convergence (1.47 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 31.08.2019**



- As on 31<sup>st</sup> August, 2019, the top five Wired Broadband Service providers were BSNL (8.79 million), Bharti Airtel (2.41 million), Atria Convergence Technologies (1.47 million), Hathway Cable & Datacom (0.85 million) and You Broadband (0.75 million).
- As on 31<sup>st</sup> August, 2019, the top five Wireless Broadband Service providers were Reliance Jio Infocomm Ltd (348.24 million), Bharti Airtel (124.30 million), Vodafone Idea (111.09 million), BSNL (12.70 million) and MTNL (0.21 million).

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Authorized to issue:

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

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-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	
Andhra Pradesh	28819821	28840680	2060	2025	21345464	20955346	10075956	10022706					27074628	27701016	87317929	87521773	203844
Assam	8327828	8326321			5663147	5506387	2552782	2666132					7148423	7352014	23692180	23850854	158674
Bihar	36568810	36274615	229	229	19238015	18596047	4837277	4902021					24910635	25700781	85554966	85473693	-81273
Delhi	15426329	15393347	2260	2112	19065315	18970433					2202615	2199663	16571642	16982656	53268161	53548211	280050
Gujarat	11047857	10969061	584	586	30365913	29881572	6049371	6057587					21350850	21806920	68814575	68715726	-98849
Haryana	4259707	4326992	182	182	10342007	10221920	4977904	4990218					8375544	8595645	27955344	28134957	179613
Himachal Pradesh	3347009	3396854	72	72	1248951	1184493	2890712	2906987					3149088	3231319	10635832	10719725	83893
J & K	5620579	5544309			1124763	1066838	1206629	1206558					3642510	3644442	11594481	11462147	-132334
Karnataka	28410654	28461282	1609	1602	14047662	14031675	7257083	7289454					18594624	19089683	68311632	68873696	562064
Kerala	5367259	5426019	498	499	20155387	20052585	10919476	10921734					7994970	8204538	44437590	44605375	167785
Kolkata	6494422	6433288	34	34	8705084	8605971	1664788	1701416					9399016	9584024	26263344	26324733	61389
Madhya Pradesh	15092709	14965977	850	874	28007021	27669039	6404824	6383864					25629060	26234023	75134464	75253777	119313
Maharashtra	15622797	15507101	856	869	44277040	43555960	7152795	7189291					26280060	27128209	93333548	93381430	47882
Mumbai	9410475	9597124	3945	3928	14950899	14877618					1206091	1202342	12897652	13129551	38469062	38810563	341501
North East	5258804	5243637			2285848	2264824	1468229	1481148					3170522	3249018	12183403	12238627	55224
Orissa	12210338	12092017	305	305	4472686	4361235	5715289	5189358					10513335	10860536	32911953	32503451	-408502
Punjab	10266681	10282091	296	296	11027742	11168934	5483368	5528790					12595197	12719827	39373284	39699938	326654
Rajasthan	21487144	21383961	411	446	16057949	15690080	6065131	6078097					22008449	22475937	65619084	65628521	9437
Tamil Nadu (incl. Chennai)	25376254	25357822	2834	2886	23353520	23188693	12202304	12204940	107332	85950			21227258	21683244	82269502	82523535	254033
U.P.(E)	30630083	30628872	812	812	33236041	32954435	11671692	11606982					24159850	24964522	99698478	100155623	457145
U.P.(W)	12999576	13172935	62	62	28366191	27916543	5887283	5873538					17745706	17985718	64998818	64948796	-50022
West Bengal	16468233	16327929	725	742	22683789	22342886	1966528	2033280					15355920	15916481	56475195	56621318	146123
<b>Total</b>	<b>328513369</b>	<b>327952234</b>	<b>18624</b>	<b>18561</b>	<b>380020434</b>	<b>375063514</b>	<b>116449421</b>	<b>116234101</b>	<b>107332</b>	<b>85950</b>	<b>3408706</b>	<b>3402005</b>	<b>339794939</b>	<b>348240104</b>	<b>1168312825</b>	<b>1170996469</b>	<b>2683644</b>
<b>Net Addition</b>		<b>-561135</b>		<b>-63</b>		<b>-4956920</b>		<b>-215320</b>		<b>-21382</b>		<b>-6701</b>		<b>8445165</b>	0	2683644	
<b>Rural Subscribers</b>	139409966	138465834	0	0	198416194	193666630	36934191	36661082	0	0	46035	45973	133639395	139413216	508445781	508252735	-193046

**Note:** 1. The subscribers of M/s Bharti Airtel includes subscribers of M/s Tata Teleservices Ltd. However, DoT has not yet approved the merger of them.  
2. Virtual Network Operator (VNO) of BSNL has reported its subscriber number from the month of October, 2018.

<b>Proportion of VLR on the date of Peak VLR in the month of Aug-19 (%)</b>							<b>Annexure-II</b>
<b>Circle</b>	<b>Bharti</b>	<b>BSNL</b>	<b>Vodafone Idea</b>	<b>M TNL</b>	<b>Reliance Com.</b>	<b>Reliance Jio</b>	<b>Total</b>
<b>Andhra Pradesh</b>	99.70	65.85	84.52		66.57	81.44	<b>86.41</b>
<b>Assam</b>	95.18	56.21	73.25			85.39	<b>82.74</b>
<b>Bihar</b>	92.87	57.22	72.58		40.17	95.38	<b>87.17</b>
<b>Delhi</b>	86.98		81.96	21.29	96.78	76.18	<b>79.08</b>
<b>Gujarat</b>	93.85	50.19	87.75		32.25	82.53	<b>83.75</b>
<b>Haryana</b>	99.24	37.13	79.48		40.11	63.74	<b>70.20</b>
<b>Himachal Pradesh</b>	93.73	41.57	84.42		50.00	72.15	<b>72.05</b>
<b>J &amp; K</b>	40.18	66.83	71.68		-	80.71	<b>58.81</b>
<b>Karnataka</b>	94.12	59.90	82.76		96.00	79.31	<b>84.08</b>
<b>Kerala</b>	97.54	64.68	87.83		37.27	71.23	<b>80.29</b>
<b>Kolkata</b>	92.09	59.89	84.65		-	79.94	<b>83.15</b>
<b>Madhya Pradesh</b>	93.92	50.64	80.83		43.82	90.42	<b>84.22</b>
<b>Maharashtra</b>	96.36	53.46	88.32		60.87	91.00	<b>87.75</b>
<b>Mumbai</b>	75.00		70.16	47.71	-	77.51	<b>73.15</b>
<b>North East</b>	96.69	73.76	71.82		-	87.94	<b>86.99</b>
<b>Orissa</b>	92.16	79.74	78.94		19.02	84.14	<b>85.72</b>
<b>Punjab</b>	96.72	42.98	74.73		27.70	70.50	<b>74.65</b>
<b>Rajasthan</b>	96.58	46.66	83.00		35.87	80.63	<b>83.25</b>
<b>Tamil Nadu (incl. Chennai)</b>	93.64	69.49	87.57		81.60	79.47	<b>84.62</b>
<b>U.P. (E)</b>	95.23	39.51	76.45		43.97	86.57	<b>80.43</b>
<b>U.P. (W)</b>	99.95	43.38	83.61		-	82.49	<b>82.98</b>
<b>West Bengal</b>	93.94	84.73	82.51		29.51	90.31	<b>88.08</b>
<b>Total</b>	<b>93.36</b>	<b>56.03</b>	<b>82.23</b>	<b>30.63</b>	<b>70.32</b>	<b>83.11</b>	<b>82.85</b>

Wireline Subscriber Base																Annexure-III	
Service Area	BSNL		MTNL		Bharti Airtel		Reliance Com.		Tata Tele.		Quadrant		Vodafone Idea		Total		Net Addition
	Jul-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	Jul-19	Aug-19	
Andhra Pradesh	871268	850992			212265	212344	39806	39418	174058	175263			61130	61250	1358527	1339267	-19260
Assam	104384	102654											3030	3360	107414	106014	-1400
Bihar	167630	163778					2643	2635	8396	8388			1980	2010	180649	176811	-3838
Delhi			1461217	1456036	1500205	1501653	103294	92246	155294	156614			60190	63945	3280200	3270494	-9706
Gujarat	862943	857768			97781	98043	16001	15502	87665	87975			30660	31005	1095050	1090293	-4757
Haryana	197769	195285			23251	22989	2160	2130	36909	37678			240	270	260329	258352	-1977
Himachal Pradesh	104094	102773					1676	1616	1780	1782			60	60	107610	106231	-1379
J & K	101706	102779													101706	102779	1073
Karnataka	968952	960232			706830	709968	112728	111758	273059	274440			51307	53647	2112876	2110045	-2831
Kerala	1740081	1728213			61927	61752	13922	13715	18948	19115			4110	4320	1838988	1827115	-11873
Kolkata	446093	439477			133727	133082	36835	36680	53705	53210			11290	11560	681650	674009	-7641
Madhya Pradesh	640629	637791			243509	243395	7835	6968	14399	14628			1170	1170	907542	903952	-3590
Maharashtra	1004915	986500			102225	103483	42091	42401	268695	264829			23990	25743	1441916	1422956	-18960
Mumbai			1742310	1736279	386497	384647	165441	165953	551199	551055			57168	67680	2902615	2905614	2999
North East	99004	98062											240	240	99244	98302	-942
Orissa	209793	207297					2075	2079	8146	8053			5340	5400	225354	222829	-2525
Punjab	364626	357182			137954	137644	10408	10362	12414	12282	216852	214421	1770	1800	744024	733691	-10333
Rajasthan	412952	405574			57673	58064	17662	17512	11507	11556			12480	12720	512274	505426	-6848
Tamil Nadu (incl. Chennai)	1357712	1329601			550079	548685	62663	61661	124698	125225			22430	22880	2117582	2088052	-29530
U.P.(E)	318756	314473			64858	64610	4882	4928	8317	8404			12320	12350	409133	404765	-4368
U.P.(W)	249489	245172			24289	24207	2625	2622	4987	4678			4470	4500	285860	281179	-4681
West Bengal	189969	185479					1562	1624	2524	2510			120	120	194175	189733	-4442
<b>Total</b>	<b>10412765</b>	<b>10271082</b>	<b>3203527</b>	<b>3192315</b>	<b>4303070</b>	<b>4304566</b>	<b>646309</b>	<b>631810</b>	<b>1816700</b>	<b>1817685</b>	<b>216852</b>	<b>214421</b>	<b>365495</b>	<b>386030</b>	<b>20964718</b>	<b>20817909</b>	<b>-146809</b>
<b>Net Addition</b>		<b>-141683</b>		<b>-11212</b>		<b>1496</b>		<b>-14499</b>		<b>985</b>		<b>-2431</b>		<b>20535</b>		<b>-146809</b>	
<b>Rural Subscribers</b>	2717264	2672747	0	0	0	0	1310	1280	47638	46970	42740	42090	0	0	2808952	2763087	-45865



## 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:-

<b>1</b>	<b>Total IMSI's in HLR (A)</b>
<b>2</b>	<b>Less: (B = a + b + c + d + e)</b>
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
<b>3</b>	<b>Subscribers Base (A-B)</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.