

**TELECOM REGULATORY AUTHORITY OF INDIA**New Delhi, 3<sup>rd</sup> January, 2024

(www.trai.gov.in)

**Highlights of Telecom Subscription Data as on 31<sup>st</sup> October, 2023**

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
<b>Broadband Subscribers</b> (Million)	<b>850.92</b>	<b>37.35</b>	<b>888.27</b>
<b>Urban Telephone Subscribers</b> (Million)	<b>630.36</b>	<b>28.63</b>	<b>658.99</b>
Net Addition in October, 2023 (Million)	0.20	0.33	0.52
Monthly Growth Rate	0.03%	1.16%	0.08%
<b>Rural Telephone Subscribers</b> (Million)	<b>520.62</b>	<b>2.70</b>	<b>523.32</b>
Net Addition in October, 2023 (Million)	0.64	0.02	0.66
Monthly Growth Rate	0.12%	0.81%	0.13%
<b>Total Telephone Subscribers</b> (Million)	<b>1150.98</b>	<b>31.33</b>	<b>1182.31</b>
Net Addition in October, 2023 (Million)	0.83	0.35	1.18
Monthly Growth Rate	0.07%	1.13%	0.10%
<b>Overall Tele-density*(%)</b>	<b>82.54%</b>	<b>2.25%</b>	<b>84.79%</b>
Urban Tele-density*(%)	127.65%	5.80%	133.45%
Rural Tele-density*(%)	57.81%	0.30%	58.11%
Share of Urban Subscribers	54.77%	91.38%	55.74%
Share of Rural Subscribers	45.23%	8.62%	44.26%

- ❖ In the month of October, 2023, 12.72 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 890.08 million at the end of September-23 to 902.80 million at the end of October-23, since implementation of MNP.
- ❖ Number of active wireless subscribers (on the date of peak VLR#) in October, 2023 was 1045.46 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', which is available under the link [https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload\\_compressed\\_0.pdf](https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf)
- # VLR is acronym of Visitor Location Register. The dates of peak VLR for various TSPs are different in different service areas.

## I. Broadband Subscriber

- As per the information received from 1,115 operators in October, 2023 in comparison to 1,108 Operator in September 2023, the total Broadband Subscribers increased from 885 million at the end of September-23 to 888.27 million at the end of October-23 with a monthly growth rate of 0.37%. Segment-wise broadband subscribers and their monthly growth rates are as below: -

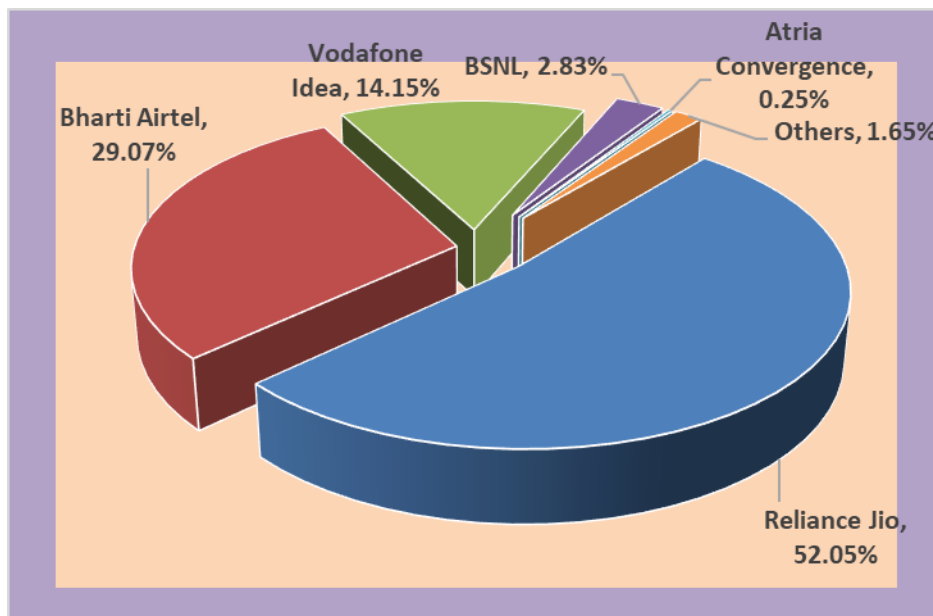
### Segment-wise Broadband Subscribers and Monthly Growth Rate in the month of October, 2023

Segment	Broadband subscribers (in million)		Monthly growth rate in the month of October, 2023
	As on 30 <sup>th</sup> September 2023	As on 31 <sup>st</sup> October 2023	
Wired subscribers	36.87	37.35	1.32%
Mobile devices users (Phones and dongles)	847.17	849.97	0.33%
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	0.97	0.95	-1.24%
<b>Total</b>	<b>885</b>	<b>888.27</b>	<b>0.37%</b>

- Top five service providers constituted 98.35% market share of the total broadband subscribers at the end of October-23. These service providers were Reliance Jio Infocomm Ltd 462.34 million, Bharti Airtel 258.26 million, Vodafone Idea 125.68 million, BSNL 25.09 million and Atria Convergence 2.21 million.

- 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<sup>st</sup> October, 2023**

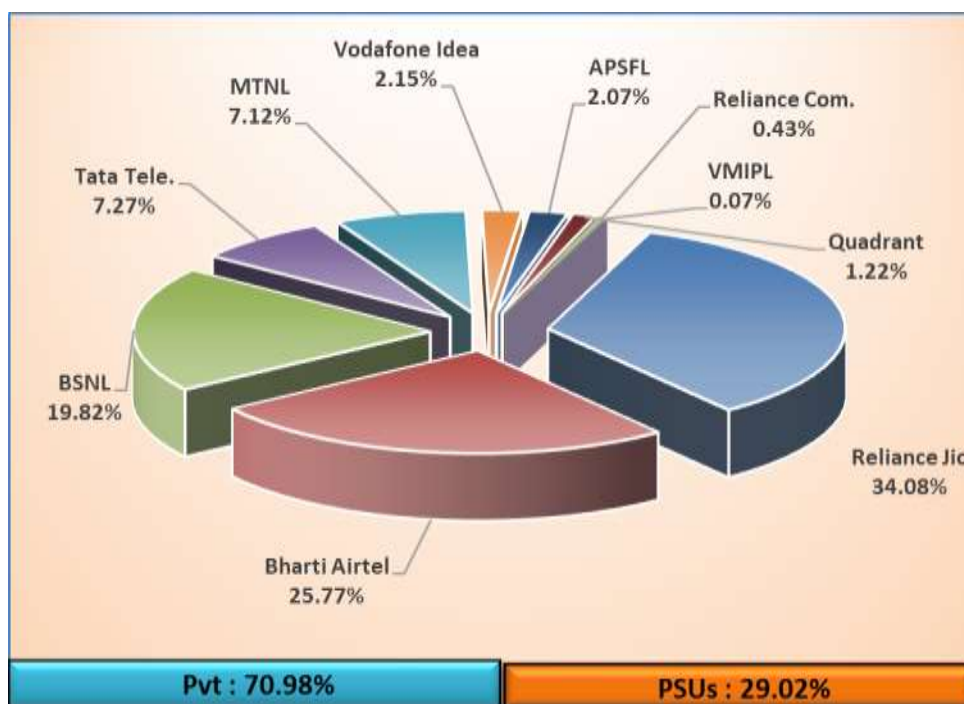


- As on 31<sup>st</sup> October, 2023, the top five Wired Broadband Service providers were Reliance Jio Infocomm Ltd 9.97 million, Bharti Airtel 7.17 million, BSNL 3.75 million, Atria Convergence Technologies 2.21 million and Oneott Entertainment Limited 1.13 million.
- As on 31<sup>st</sup> October, 2023, the top five Wireless Broadband Service providers were Reliance Jio Infocomm Ltd 452.37 million, Bharti Airtel 251.09 million, Vodafone Idea 125.67 million, BSNL 21.35 million and Intech Online Pvt. Ltd. 0.24 million.

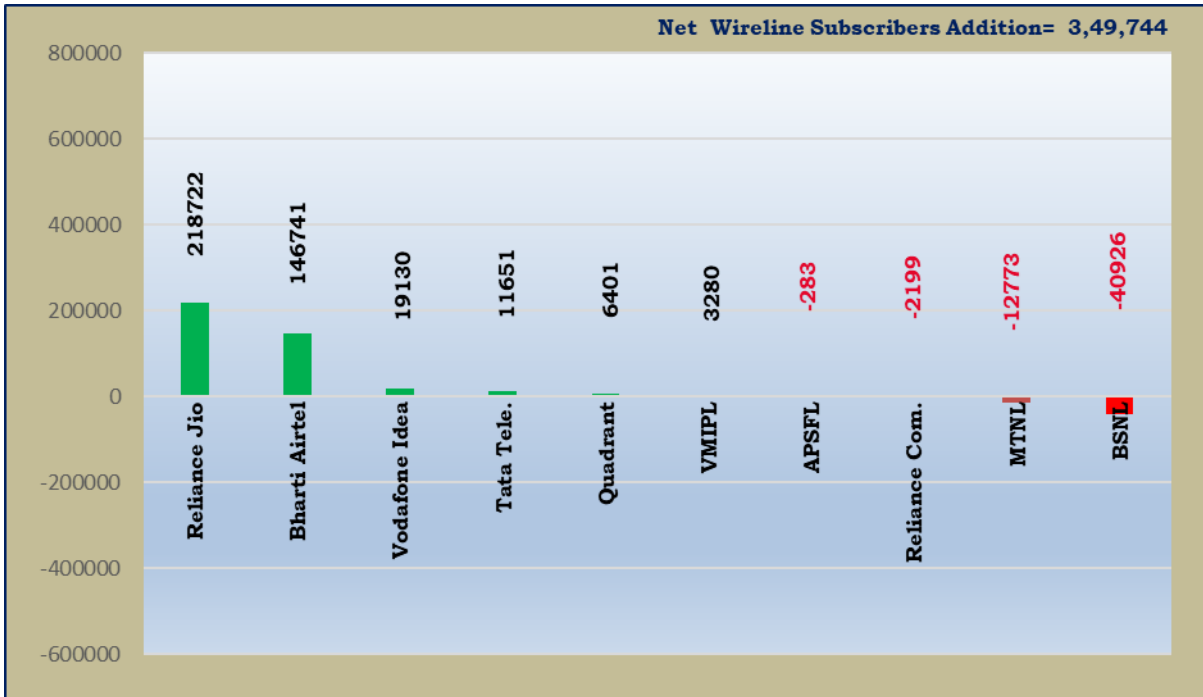
## II. Wireline Subscribers

- Wireline subscribers increased from 30.98 million at the end of September-23 to 31.33 million at the end of October-23. Net increase in the wireline subscriber base was 0.35 million with a monthly rate of growth 1.13%. The share of urban and rural subscribers in total wireline subscribers were 91.38% and 8.62% respectively at the end of October, 2023.
- The Overall Wireline Tele-density in India increased from 2.22% at the end of September-23 to 2.25% at the end of October-23. Urban and Rural Wireline Tele-density were 5.80% and 0.30% respectively during the same period.
- BSNL, MTNL and APSFL, the three PSUs access service providers, held 29.02% of the wireline market share as on 31<sup>st</sup> October, 2023. Detailed statistics of wireline subscriber base are available at **Annexure-I**.

### Access Service Provider-wise Market Share of Wireline Subscribers as on 31<sup>st</sup> October, 2023



### Access Service Provider-wise Net Addition/Decline in Wireline Subscribers during the month of October, 2023



### III. Wireless subscriber

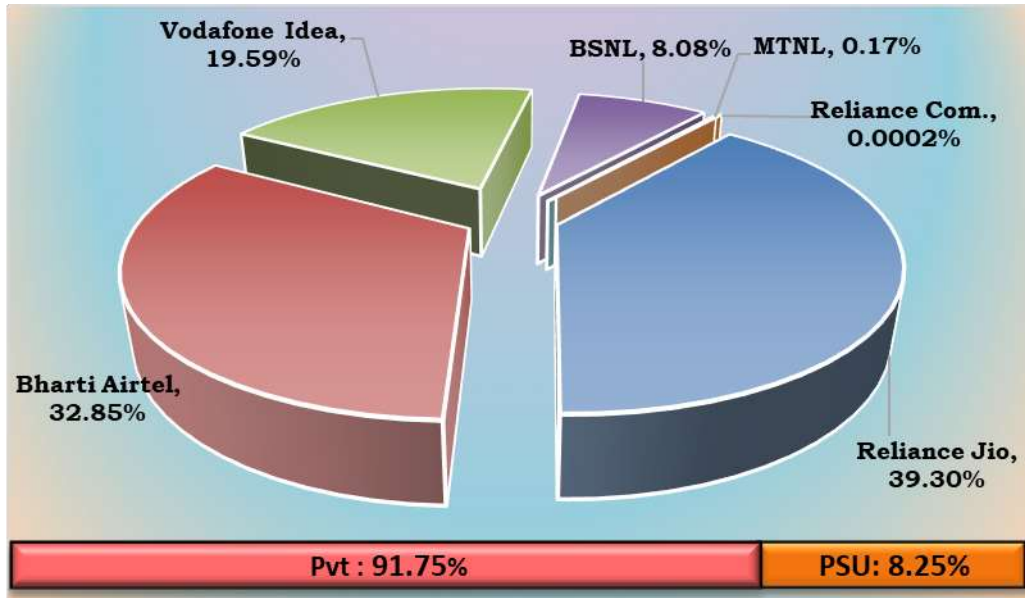
• Total wireless subscribers increased from 1,150.15 million at the end of September-23, to 1,150.98 million at the end of October-23, thereby registering a monthly growth rate of 0.07%. Wireless subscription in urban areas increased from 630.17 million at the end of September-23 to 630.36 million at the end of October-23 and wireless subscription in rural areas also increased from 519.99 million to 520.62 million during the same period. Monthly growth rate of urban and rural wireless subscription was 0.03% and 0.12% respectively.



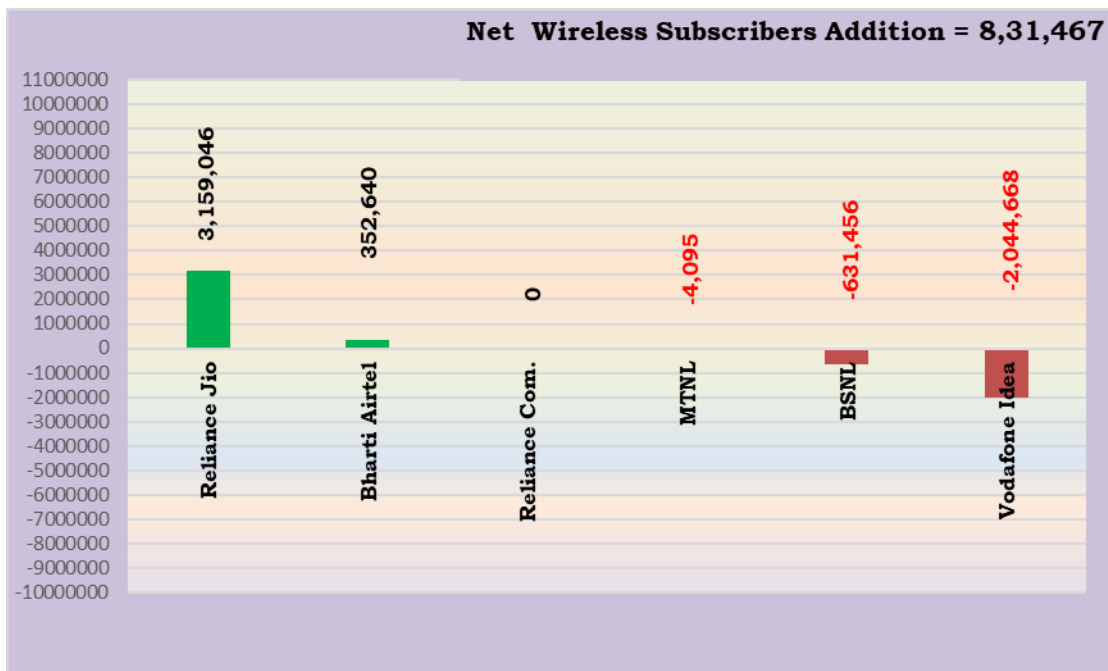
• There is no change in the Wireless Tele-density in India and remained same i.e. 82.54% at the end of October-23 and September-23. The Urban Wireless Tele-density decreased from 127.81% at the end of September-23 to 127.65% at the end of October-23 however Rural Tele-density increased from 57.75% to 57.81% during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 54.77% and 45.23% respectively at the end of October-23. Detailed statistics of wireless subscriber base is available at **Annexure-II**.

- As on 31<sup>st</sup> October, 2023, the private access service providers held 91.75% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 8.25%.
- 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> October, 2023**

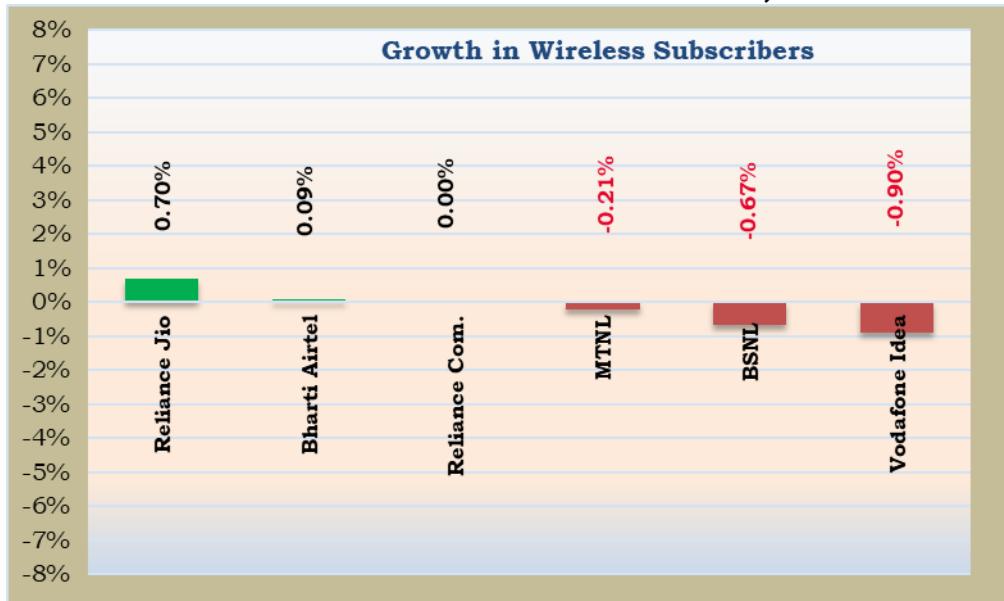


**Net Addition in Wireless Subscribers of Access Service Providers in the month of October, 2023**



## Growth in Wireless Subscribers

### Access Service Provider-wise Monthly Growth Rate of Wireless Subscribers in the month of October, 2023



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

### Service Area-wise Monthly Growth Rate of Wireless Subscribers in the month of October, 2023



- Except, U.P.(E), North East, J&K, Punjab, Kerala, Gujarat, Kolkata and Himachal Pradesh, all other service areas have showed growth in their wireless subscribers during the month of October-23.



#### IV. Total Telephone Subscribers

- The number of telephone subscribers in India increased from 1,181.13 million at the end of September-23 to 1,182.31 million at the end of October-23, thereby showing a monthly growth rate of 0.10%. Urban telephone subscription increased from 658.46 million at the end of September-23 to 658.99 million at the end of October-23 and the rural subscription also increased from 522.66 million to 523.32 million during the same period. The monthly growth rates of urban and rural telephone subscription were 0.08% and 0.13% respectively during the month of October-23.



- The overall Tele-density in India increased from 84.76% at the end of September-23 to 84.79% at the end of October-23. The Urban Tele-density decreased from 133.54% at the end of September-23 to 133.45% at the end of October-23 however Rural Tele-density increased from 58.05% to 58.11% during the same period. The share of urban and rural subscribers in total number of telephone subscribers at the end of October-23 was 55.74% and 44.26% respectively.

## Overall Tele-density (LSA Wise) – As on 31<sup>st</sup> October, 2023



- As may be seen in the above chart, eight LSA have less tele-density than the all India average tele-density at the end of October-23. Delhi service area has maximum tele-density of 276.79% and the Bihar service area has minimum tele-density of 55.96% at the end of October-23.

### Notes: -

- Population data/projections are available state wise only.
- Tele-density figures are derived from the telephone subscriber data provided by the access service providers and the projection of population from the "Report of the Technical Group on Population Projections for India and States 2011 - 2036, which is available under the link [https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload\\_compressed\\_0.pdf](https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-%20upload_compressed_0.pdf)
- 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 and Uttar Pradesh includes UPE & UPW service area(s).
- Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhathishgarh, 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.

## V. Category-wise Growth in subscriber base

### Circle Category-wise Net Additions in Telephone Subscribers in the month of October, 2023

Circle Category	Net additions in the month of October, 2023		Telephone Subscriber base as on 31 <sup>st</sup> October, 2023	
	Wireline segment	Wireless segment	Wireline segment	Wireless segment
Circle A	1,54,633	77,565	1,22,37,099	38,49,68,217
Circle B	1,26,666	3,55,618	79,93,296	46,70,06,254
Circle C	37,116	2,48,849	23,31,336	18,55,59,598
Metro	31,329	1,49,435	87,66,366	11,34,48,096
<b>All India</b>	<b>3,49,744</b>	<b>8,31,467</b>	<b>3,13,28,097</b>	<b>1,15,09,82,165</b>

### Circle Category-wise monthly and yearly Growth Rates in Telephone Subscribers in the month of October, 2023

Circle Category	Monthly growth rate (%) (September-23 to October-23)		Yearly growth rate (%) (October-22 to October-23)	
	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment
Circle A	1.28%	0.02%	19.54%	0.23%
Circle B	1.61%	0.08%	21.37%	0.25%
Circle C	1.62%	0.13%	25.41%	1.58%
Metro	0.36%	0.13%	7.72%	2.16%
<b>All India</b>	<b>1.13%</b>	<b>0.07%</b>	<b>16.81%</b>	<b>0.64%</b>

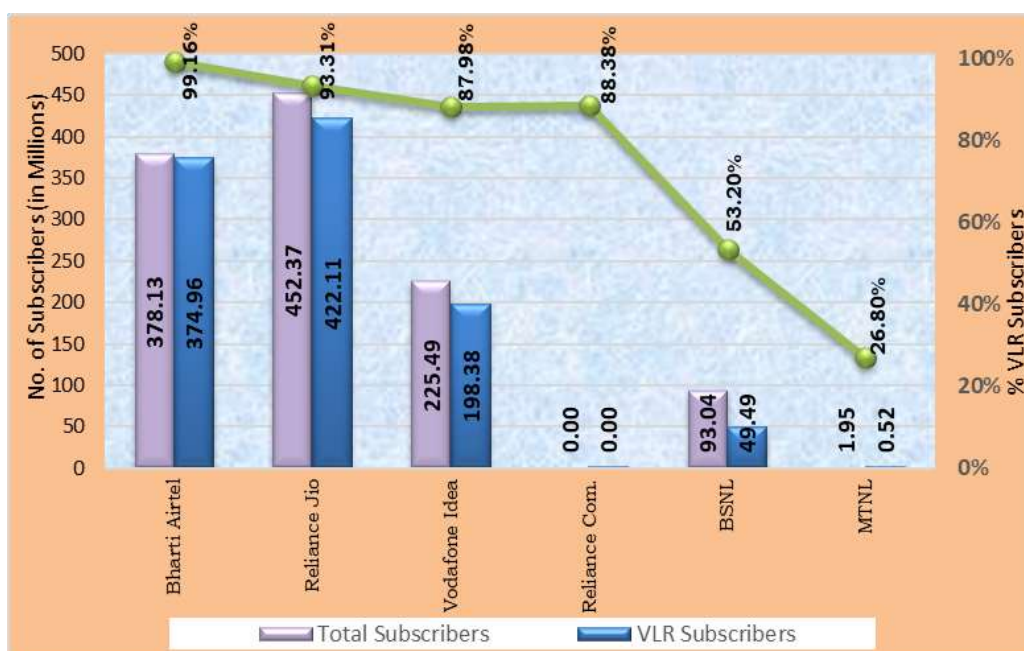
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, both on monthly and yearly basis all circles have registered growth rate in their subscriber.
- In Wireline segment, both on monthly and yearly basis, all circles have registered growth rate in their subscriber base.

## VI. Active Wireless Subscribers (VLR Data)

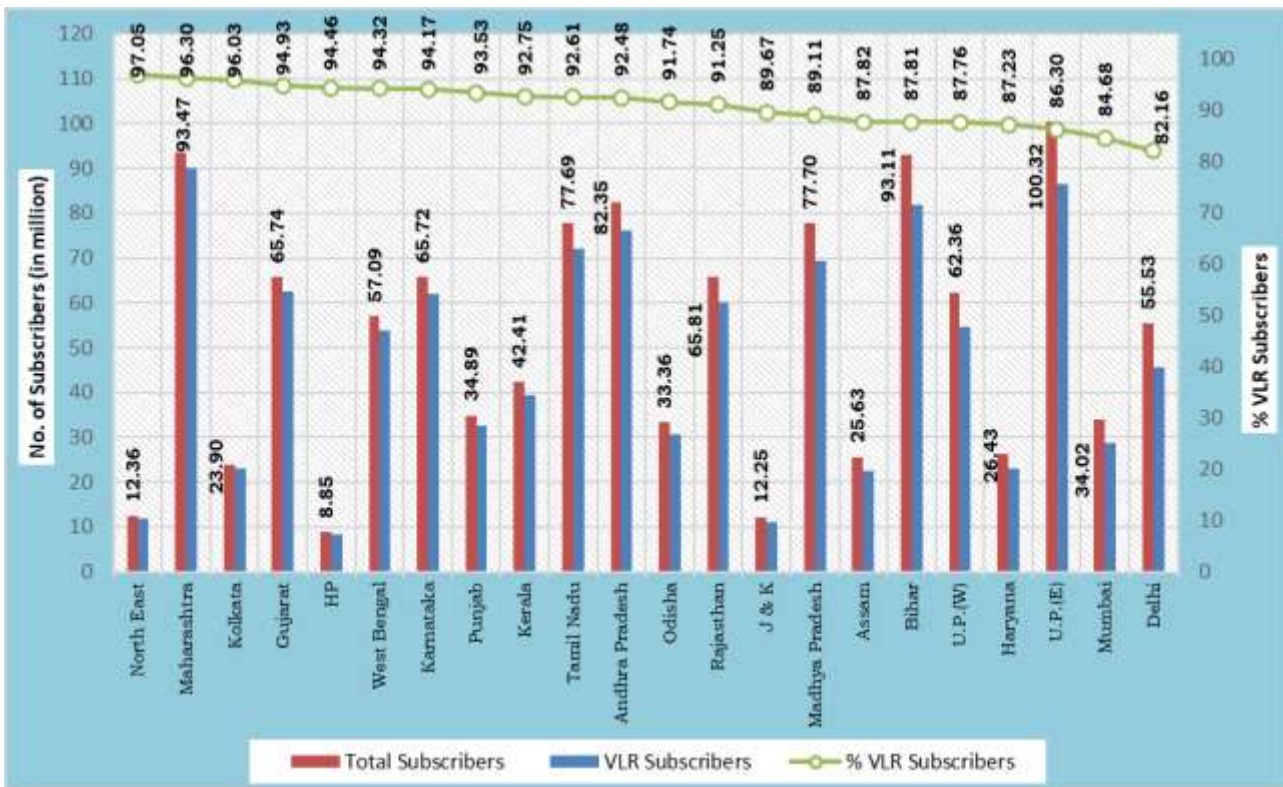
- Out of the total 1,150.98 million wireless subscribers, 1045.46 million wireless subscribers were active on the date of peak VLR in the month of October-23. The proportion of active wireless subscribers was approximately 90.83% of the total wireless subscriber base.
- The detailed statistics on proportion of active wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of October-23 is available at **Annexure-III** 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 October, 2023**



- Bharti Airtel has the maximum proportion 99.16% of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of peak VLR in the month of October-23 and MTNL has the minimum proportion of VLR 26.80% of its HLR during the same period.

### Service Area wise percentage of VLR Subscribers in the month of October, 2023



### VII. 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 October-23, a total of 12.72 million requests were received for MNP. Out of total 12.72 million new requests, 7.38 million requests received from Zone-I and 5.34 million requests received from Zone-II. The cumulative MNP requests increased from 890.08 million at the end of September-23 to 902.80 million at the end of October-23, since the implementation of MNP.



- In MNP Zone-I (Northern and Western India), the highest number of requests till date have been received in Uttar Pradesh-East (about 82.08 million) followed by Maharashtra (about 74.32 million) service area.
- In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Madhya Pradesh (about 69.23 million) followed by Karnataka (about 64.03 million).

<b>Service Area Wise MNP Status</b>					
<b>Zone - 1</b>			<b>Zone - 2</b>		
<b>Service Area</b>	<b>Number of Porting Requests (in Million)</b>		<b>Service Area</b>	<b>Number of Porting Requests (in Million)</b>	
	<b>Sep-23</b>	<b>Oct-23</b>		<b>Sep-23</b>	<b>Oct-23</b>
Delhi	42.72	43.36	Andhra Pradesh	61.63	62.23
Gujarat	60.71	61.62	Assam	6.34	6.44
Haryana	28.43	28.80	Bihar	48.06	48.96
Himachal Pradesh	3.88	3.92	Karnataka	63.41	64.03
Jammu & Kashmir	2.14	2.18	Kerala	22.09	22.33
Maharashtra	73.30	74.32	Kolkata	16.90	17.06
Mumbai	31.52	31.80	Madhya Pradesh	68.21	69.23
Punjab	30.53	30.86	North East	2.07	2.09
Rajasthan	62.01	62.75	Odisha	16.00	16.19
U.P.(East)	80.29	82.08	Tamil Nadu	58.48	59.05
U.P.(West)	61.98	63.19	West Bengal	49.40	50.33
<b>Total</b>	<b>477.49</b>	<b>484.87</b>	<b>Total</b>	<b>412.59</b>	<b>417.93</b>
<b>Total (Zone-1 + Zone-2)</b>				<b>890.08</b>	<b>902.80</b>
<b>Net Addition (October, 2023)</b>			<b>12.72 million</b>		

**Contact details in case of any clarification: -**

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**(V. Raghunandan)**  
**Secretary, TRAI**

**Wireline Subscriber Base**

**Annexure-I**

Service Area	BSNL		MTNL		Bharti Airtel		Reliance Com.		Tata Tele.		Quadrant		Vodafone Idea		Reliance Jio		V-CON Mobile & Infra Pvt. Ltd.		APSFL		Total		Net Addition
	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	
Andhra Pradesh	538627	533620			548140	574004	19330	19215	238476	237946			60365	64615	1224712	1259518			650291	650008	<b>3279941</b>	<b>3338926</b>	<b>58985</b>
Assam	102,314	101,923			26497	27477	0	0	0	0			2610	2610	173159	175395					<b>304580</b>	<b>307405</b>	<b>2825</b>
Bihar	163,988	163,059			95801	99122	9	9	10196	11220			2380	2380	497866	505507					<b>770240</b>	<b>781297</b>	<b>11057</b>
Delhi			1007942	1003018	2050747	2069651	19856	18759	211662	210674			78660	78355	938468	936497					<b>4307335</b>	<b>4316954</b>	<b>9619</b>
Gujarat	288865	292265			237380	243467	2872	2902	159596	165430			55916	62566	625954	638831					<b>1370583</b>	<b>1405461</b>	<b>34878</b>
Haryana	200238	195687			140842	144379	0	0	44917	44806			420	420	124748	127265					<b>511165</b>	<b>512557</b>	<b>1392</b>
Himachal Pradesh	89392	88668			7041	7405	0	0	1483	1458			90	90	56343	57286					<b>154349</b>	<b>154907</b>	<b>558</b>
J & K	79011	77873			99374	101882	0	0	0	0			30	30	199610	201069					<b>378025</b>	<b>380854</b>	<b>2829</b>
Karnataka	530227	527527			1147739	1152933	17386	17319	416301	418962			133068	136188	888416	930195					<b>3133137</b>	<b>3183124</b>	<b>49987</b>
Kerala	994280	989466			98179	99514	3293	3264	19773	19718			6880	6880	279712	285953					<b>1402117</b>	<b>1404795</b>	<b>2678</b>
Kolkata	182566	182243			200076	203351	4617	4583	64199	64904			15055	15070	483330	490011					<b>949843</b>	<b>960162</b>	<b>10319</b>
Madhya Pradesh	238493	245380			490042	505681	5	5	53612	57584			39540	45280	675638	694866					<b>1497330</b>	<b>1548796</b>	<b>51466</b>
Maharashtra	557923	538695			445156	452434	8292	8107	225824	225936			20971	20671	258812	267377					<b>1516978</b>	<b>1513220</b>	<b>-3758</b>
Mumbai			1236917	1229068	578479	586427	38549	38013	606007	607143			166891	166401	851016	862198					<b>3477859</b>	<b>3489250</b>	<b>11391</b>
North East	70254	70857				0	0	0	0	0			510	510	163285	168912					<b>234049</b>	<b>240279</b>	<b>6230</b>
Odisha	166603	162253			26615	38753	4	4	10749	12174			3660	3630	245346	249780					<b>452977</b>	<b>466594</b>	<b>13617</b>
Punjab	369842	371526			253432	257018	1893	1893	16673	16557	374924	381325	1830	1800	324507	332493	17549	20829			<b>1360650</b>	<b>1383441</b>	<b>22791</b>
Rajasthan	269507	268171			232891	241819	3492	3523	24284	24078			12425	12635	375989	382703					<b>918588</b>	<b>932929</b>	<b>14341</b>
Tamil Nadu	931048	922912			875356	886521	16146	15949	141276	138388			33733	33983	784268	798615					<b>2781827</b>	<b>2796368</b>	<b>14541</b>
U.P.(E)	119422	119744			198853	202701	37	38	10970	10787			16600	16620	495555	506012					<b>841437</b>	<b>855902</b>	<b>14465</b>
U.P.(W)	177738	177400			130892	133363	8	8	6836	6886			3601	3631	550996	563650					<b>870071</b>	<b>884938</b>	<b>14867</b>
West Bengal	179355	179498			44199	46570	69	68	2784	2618			150	150	238715	241034					<b>465272</b>	<b>469938</b>	<b>4666</b>
<b>Total</b>	<b>6249693</b>	<b>6208767</b>	<b>2244859</b>	<b>2232086</b>	<b>7927731</b>	<b>8074472</b>	<b>135858</b>	<b>133659</b>	<b>2265618</b>	<b>2277269</b>	<b>374924</b>	<b>381325</b>	<b>655385</b>	<b>674515</b>	<b>10456445</b>	<b>10675167</b>	<b>17549</b>	<b>20829</b>	<b>650291</b>	<b>650008</b>	<b>30978353</b>	<b>31328097</b>	<b>349744</b>
<b>Net Addition</b>		<b>-40926</b>		<b>-12773</b>		<b>146741</b>		<b>-2199</b>		<b>11651</b>		<b>6401</b>		<b>19130</b>		<b>218722</b>		<b>3280</b>		<b>-283</b>		<b>349744</b>	
<b>Rural Subscribers</b>	1967184	1974626	34	34	2915	2962	361	361	9017	9097	17664	17246	0	0	200773	215504		0	481215	481006	<b>2679163</b>	<b>2700836</b>	<b>21673</b>

**Wireless Subscriber Base**

**Annexure-II**

Circle	Bharti Airtel (including Tata Tele.)		Reliance Com.		Vodafone Idea		BSNL		BSNL (VNO's)		MTNL		Reliance Jio		Total		Net Addition
	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	Sep-23	Oct-23	
Andhra Pradesh	33157725	33228319			11007032	10910051	6631388	6528946					31377637	31679570	<b>82173782</b>	<b>82346886</b>	173104
Assam	11,475,925	11,540,572			1803134	1773143	3192009	3186369					9041371	9127459	<b>25512439</b>	<b>25627543</b>	115104
Bihar	40,649,017	40,673,476			7840736	7760256	5397055	5407684					39157555	39268897	<b>93044363</b>	<b>93110313</b>	65950
Delhi	17633421	17733883	23	23	16583934	16502307					1688013	1687496	19487598	19604655	<b>55392989</b>	<b>55528364</b>	135375
Gujarat	11575256	11507371	43	43	21512053	21198361	4416610	4409497					28524098	28629180	<b>66028060</b>	<b>65744452</b>	-283608
Haryana	6710871	6762479	11	11	6979837	6920434	4212788	4249899					8435967	8494178	<b>26339474</b>	<b>26427001</b>	87527
Himachal Pradesh	3564011	3555543	92	92	412534	408440	1603113	1541724					3334263	3347771	<b>8914013</b>	<b>8853570</b>	-60443
J & K	5933139	5929524	0	0	308207	304916	826820	819143					5195889	5193883	<b>12264055</b>	<b>12247466</b>	-16589
Karnataka	31719386	31673762	574	574	6586621	6608091	4410678	4324722					22939501	23112566	<b>65656760</b>	<b>65719715</b>	62955
Kerala	8353158	8359487	113	113	14028432	13826281	9652694	9569307					10540914	10650206	<b>42575311</b>	<b>42405394</b>	-169917
Kolkata	5687333	5685327	0	0	5566595	5422060	2189565	2162466					10586050	10631482	<b>24029543</b>	<b>23901335</b>	-128208
Madhya Pradesh	15736984	15749108	0	0	16249668	16056589	4983465	4931282					40652254	40964490	<b>77622371</b>	<b>77701469</b>	79098
Maharashtra	21314679	21285075	0	0	23360391	23253124	6143342	6002034					42548318	42931328	<b>93366730</b>	<b>93471561</b>	104831
Mumbai	9999773	9930689	877	877	11147788	11210893					263470	259892	12464221	12616046	<b>33876129</b>	<b>34018397</b>	142268
North East	6114788	6122437	0	0	866774	846756	1,263,328	1,254,836					4123251	4139823	<b>12368141</b>	<b>12363852</b>	-4289
Odisha	11428063	11422859	29	29	1536700	1524537	5,757,087	5,735,155					14485859	14674274	<b>33207738</b>	<b>33356854</b>	149116
Punjab	12398186	12439668	106	106	6719723	6595841	4,138,828	4,046,789					11750685	11804802	<b>35007528</b>	<b>34887206</b>	-120322
Rajasthan	22971737	23007123	155	155	11261139	11339450	5,677,644	5,698,869					25617046	25760356	<b>65527721</b>	<b>65805953</b>	278232
Tamil Nadu	28716722	28773048	238	238	16220684	16102580	7,579,750	7,543,617	165,045	170,419			24982881	25095701	<b>77665320</b>	<b>77685603</b>	20283
U.P.(E)	36872197	36809888	0	0	17911800	17646785	8,096,415	8,128,335					37462411	37737625	<b>100342823</b>	<b>100322633</b>	-20190
U.P.(W)	18300702	18363549	8	8	15896482	15749526	4,957,432	4,946,897					23159191	23302582	<b>62313815</b>	<b>62362562</b>	48747
West Bengal	17467498	17580024	115	115	13734392	13529567	2,376,102	2,381,712					23343486	23602618	<b>56921593</b>	<b>57094036</b>	172443
<b>Total</b>	<b>377780571</b>	<b>378133211</b>	<b>2384</b>	<b>2384</b>	<b>227534656</b>	<b>225489988</b>	<b>93506113</b>	<b>92869283</b>	<b>165045</b>	<b>170419</b>	<b>1951483</b>	<b>1947388</b>	<b>449210446</b>	<b>452369492</b>	<b>1150150698</b>	<b>1150982165</b>	<b>831467</b>
<b>Net Addition</b>		<b>352640</b>		<b>0</b>		<b>-2044668</b>		<b>-636830</b>	<b>3.1E+07</b>	<b>5374</b>		<b>-4095</b>		<b>3159046</b>	31344019	<b>831467</b>	
<b>Rural Subscribers</b>	182,137,019	182,609,294	0	0	110645391	109647922	29,308,434	29,146,142	0	0	35280	35269	197859318	199182599	<b>519985442</b>	<b>520621226</b>	<b>635784</b>



<b>Proportion of VLR on the date of Peak VLR in the month of Oct-23 (%)</b>							<b>Annexure-III</b>
<b>Circle</b>	<b>Bharti</b>	<b>BSNL</b>	<b>Vodafone Idea</b>	<b>MTNL</b>	<b>Reliance Com.</b>	<b>Reliance Jio</b>	<b>Total</b>
<b>Andhra Pradesh</b>	99.76	65.37	95.03		-	89.55	<b>92.48</b>
<b>Assam</b>	95.04	40.28	92.36		-	94.40	<b>87.82</b>
<b>Bihar</b>	90.96	34.32	84.41		-	92.60	<b>87.81</b>
<b>Delhi</b>	96.91		62.05	17.48	100.00	91.31	<b>82.16</b>
<b>Gujarat</b>	113.99	45.36	93.21		120.93	96.17	<b>94.93</b>
<b>Haryana</b>	104.45	29.52	92.39		109.09	98.19	<b>87.23</b>
<b>Himachal Pradesh</b>	97.65	56.28	109.17		43.48	106.87	<b>94.46</b>
<b>J &amp; K</b>	90.60	68.04	87.43		-	92.15	<b>89.67</b>
<b>Karnataka</b>	100.56	62.37	85.04		99.65	93.98	<b>94.17</b>
<b>Kerala</b>	101.69	85.16	94.45		127.43	90.35	<b>92.75</b>
<b>Kolkata</b>	97.08	42.22	98.98		-	104.90	<b>96.03</b>
<b>Madhya Pradesh</b>	101.68	45.36	84.93		-	91.19	<b>89.11</b>
<b>Maharashtra</b>	112.12	62.46	91.86		-	95.59	<b>96.30</b>
<b>Mumbai</b>	90.66		70.75	87.34	87.69	92.30	<b>84.68</b>
<b>North East</b>	102.03	54.54	94.25		-	103.15	<b>97.05</b>
<b>Odisha</b>	106.65	49.72	92.81		41.38	96.45	<b>91.74</b>
<b>Punjab</b>	103.91	41.46	93.94		65.09	100.20	<b>93.53</b>
<b>Rajasthan</b>	99.93	44.05	92.00		60.00	93.62	<b>91.25</b>
<b>Tamil Nadu</b>	99.03	77.20	93.45		100.42	89.44	<b>92.61</b>
<b>U.P. (E)</b>	93.70	32.13	86.24		-	90.76	<b>86.30</b>
<b>U.P. (W)</b>	100.16	36.37	89.24		100.00	87.90	<b>87.76</b>
<b>West Bengal</b>	97.58	65.97	93.00		64.35	95.51	<b>94.32</b>
<b>Total</b>	<b>99.16</b>	<b>53.20</b>	<b>87.98</b>	<b>26.80</b>	<b>88.38</b>	<b>93.31</b>	<b>90.83</b>

**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.

## 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.