### (Press Release No.18/2024)

Information Note to the Press





#### TELECOM REGULATORY AUTHORITY OF INDIA

New Delhi, 8<sup>th</sup> April, 2024 (www.trai.gov.in)

## Highlights of Telecom Subscription Data as on 29th February, 2024

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Broadband Subscribers (Million)	877.31	39.46	916.77
Urban Telephone Subscribers (Million)	636.11	30.29	666.40
Net Addition in February, 2024 (Million)	2.14	0.54	2.68
Monthly Growth Rate	0.34%	1.80%	0.40%
Rural Telephone Subscribers (Million)	528.53	2.81	531.35
Net Addition in February, 2024 (Million)	1.79	0.03	1.82
Monthly Growth Rate	0.34%	1.00%	0.34%
Total Telephone Subscribers (Million)	1164.64	33.10	1197.75
Net Addition in February, 2024 (Million)	3.93	0.56	4.49
Monthly Growth Rate	0.34%	1.73%	0.38%
Overall Tele-density*(%)	83.27%	2.37%	85.64%
Urban Tele-density*(%)	128.03%	6.10%	134.13%
Rural Tele-density*(%)	58.61%	0.31%	58.92%
Share of Urban Subscribers	54.62%	91.50%	55.64%
Share of Rural Subscribers	45.38%	8.50%	44.36%

- ❖ In the month of February, 2024, 11.54 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 939.55 million at the end of January-24 to 951.09 million at the end of February-24, since implementation of MNP.
- ❖ Number of active wireless subscribers (on the date of peak VLR<sup>#</sup>) in February, 2024 was 1052.08 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 <a href="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</a>
- # 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 1,132 operators in February, 2024, in comparison to 1129 Operators in January 2024, the total Broadband Subscribers increased from 911.03 million at the end of January-24 to 916.77 million at the end of February-24 with a monthly growth rate of 0.63%. Segment-wise broadband subscribers and their monthly growth rates are as below: -

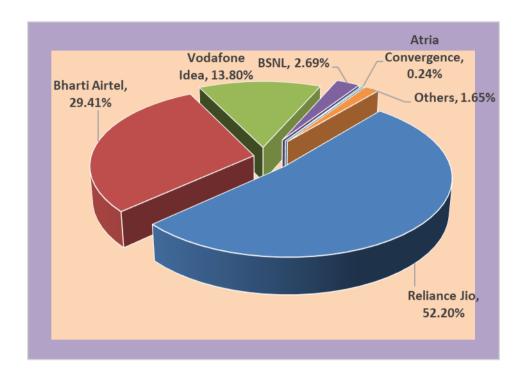
# Segment-wise Broadband Subscribers and Monthly Growth Rate in the month of February, 2024

	Broadband st	Monthly growth rate in			
Segment	As on 31st January 2024	As on 29 <sup>th</sup> February 2024	the month of February, 2024		
Wired subscribers	38.87	39.46	1.50%		
Mobile devices users (Phones and dongles)	871.29	876.44	0.59%		
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to- Point Radio & VSAT)	0.87	0.87	-0.43%		
Total	911.03	916.77	0.63%		

• Top five service providers constituted 98.35% market share of the total broadband subscribers at the end of February-24. These service providers were Reliance Jio Infocomm Ltd 478.51 million, Bharti Airtel 269.63 million, Vodafone Idea 126.56 million, BSNL 24.67 million and Atria Convergence 2.24 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 29th February, 2024

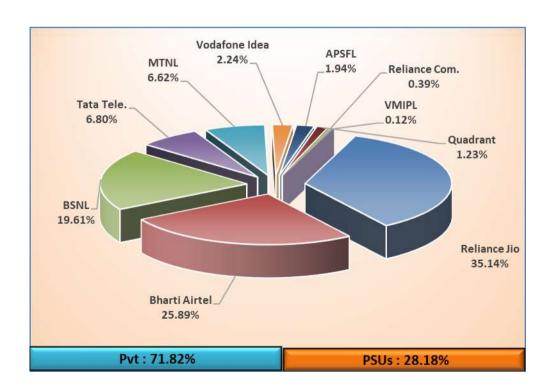


- As on 29<sup>th</sup> February, 2024, the top five <u>Wired</u> Broadband Service providers were Reliance Jio Infocomm Ltd 10.92 million, Bharti Airtel 7.61 million, BSNL 3.97 million, Atria Convergence Technologies 2.24 million and Oneott Intertainment Limited 1.26 million.
- As on 29<sup>th</sup> February, 2024, the top five <u>Wireless</u> Broadband Service providers were Reliance Jio Infocom Ltd 467.59 million, Bharti Airtel 262.03 million, Vodafone Idea 126.55 million, BSNL 20.70 million and Intech Online Pvt. Ltd. 0.24 million.

### II. Wireline Subscribers

- Wireline subscribers increased from 32.54 million at the end of January-24 to 33.10 million at the end of February-24. Net increase in the wireline subscriber base was 0.56 million with a monthly rate of growth 1.73%. The share of urban and rural subscribers in total wireline subscribers were 91.50% and 8.50% respectively at the end of February, 2024.
- The Overall Wireline Tele-density in India increased from 2.33% at the end of January-24 to 2.37% at the end of February-24. Urban and Rural Wireline Tele-density were 6.10% and 0.31% respectively during the same period.
- BSNL, MTNL and APSFL, the three PSUs access service providers, held 28.18% of the wireline market share as on 29<sup>th</sup> February, 2024. Detailed statistics of wireline subscriber base are available at **Annexure-I**.

## Access Service Provider-wise Market Share of Wireline Subscribers as on 29th February, 2024



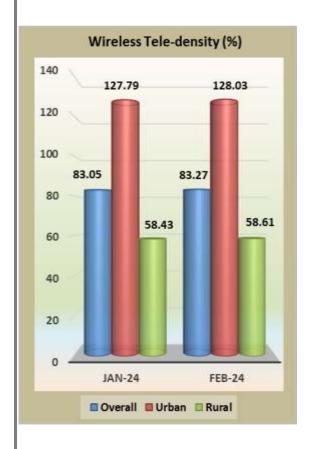
# Access Service Provider-wise Net Addition/Decline in Wireline Subscribers during the month of February, 2024



#### III. Wireless subscriber

Total wireless subscribers increased from 1.160.71 million at the end of January-24, to 1,164.64 million at the end of February-24, thereby registering a monthly growth rate of 0.34%. Wireless subscription in urban areas increased from 633.96 million at the end of Jan-24 to 636.11 million at the end of Feb-24 and wireless subscription in rural areas also increased from 526.75 million to 528.53 million during the same period. Monthly growth rate of urban and rural wireless subscription 0.34% 0.34% was and respectively.

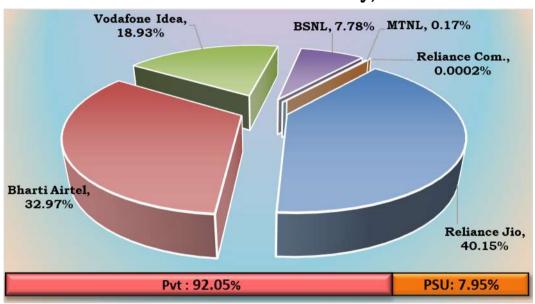




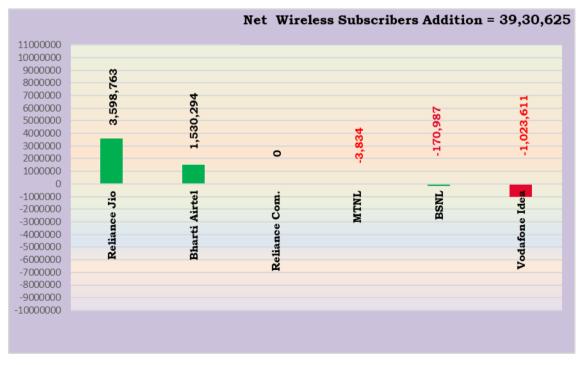
• The Wireless Tele-density in India increased from 83.05% at the end of January-24 to 83.27% at the end of February-24. The Urban Wireless Tele-density increased from 127.79% at the end of January-24 to 128.03% at the end of February-24 and Rural Tele-density also increased from 58.43% to 58.61% during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 54.62% and 45.38% respectively at the end of February-24. Detailed statistics of wireless subscriber base is available at **Annexure-II**.

- As on 29<sup>th</sup> February, 2024, the private access service providers held 92.05% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 7.95%.
- 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 29th February, 2024



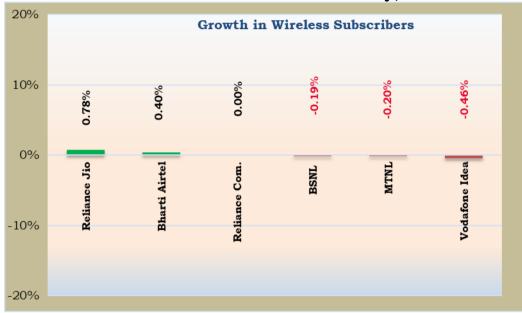
Net Addition in Wireless Subscribers of Access Service Providers in the month of February, 2024



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### **Growth in Wireless Subscribers**

Access Service Provider-wise Monthly Growth Rate of Wireless Subscribers in the month of February, 2024



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

## Service Area-wise Monthly Growth Rate of Wireless Subscribers in the month of February, 2024

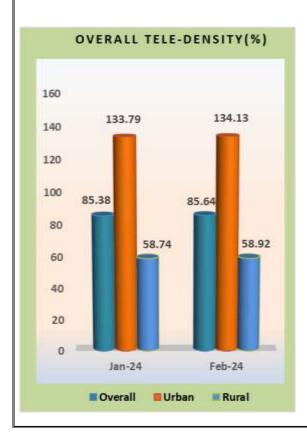


• Except Haryana, Kerala, J & K and Kolkata, all other service areas have showed growth in their wireless subscribers during the month of February-24.

## IV. Total Telephone Subscribers

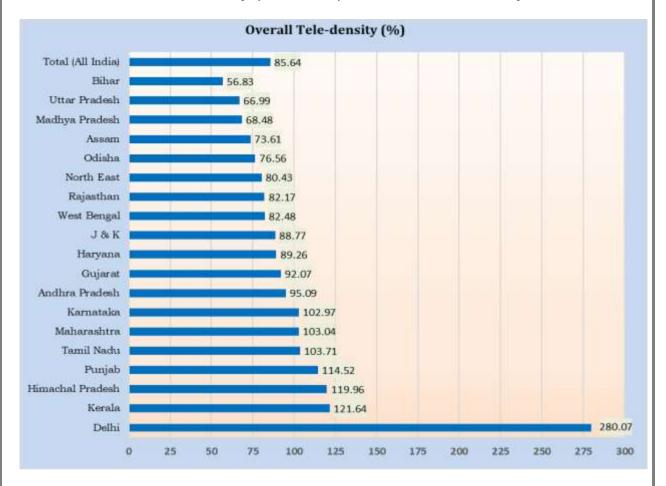
• The number of telephone subscribers in India increased from 1,193.25 million at the end of January-24 to 1,197.75 million at the end of February-24, thereby showing a monthly growth rate of 0.38%. Urban telephone subscription increased from 663.72 million at the end of January-24 to 666.40 million at the end of February-24 and the rural subscription also increased from 529.53 million to 531.35 million during the same period. The monthly growth rates of urban and rural telephone subscription were 0.40% and 0.34% respectively during the month of February-24.





• The overall Tele-density in India increased from 85.38% at the end of January-24 to 85.64% at the end of February-24. The Urban Tele-density increased from 133.79% at the end of January-24 to 134.13% at the end of February-24 and Rural Tele-density also increased from 58.74% to 58.92% during the same period. The share of urban and rural subscribers in total number of telephone subscribers at the end of February-24 were 55.64% and 44.36% respectively.

### Overall Tele-density (LSA Wise) - As on 29th February, 2024



• 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 February-24. Delhi service area has maximum tele-density of 280.07% and the Bihar service area has minimum tele-density of 56.83% at the end of January-24.

#### Notes: -

- 1. Population data/projections are available state wise only.
- 2. Tele-density figures are derived from the telephone subscriber data provided by the access service providers and the projection of population from the "Report of the Technical Group on Population Projections for India and States 2011 2036, which is available under the link <a href="https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%20">https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%20</a> 2011-2036%20-%20upload\_compressed\_0.pdf
- 3. Telephone subscriber data for Delhi, includes, apart from the data for the State of Delhi, wireless subscriber data for the areas served by the local exchanges of Ghaziabad & Noida (in Uttar Pradesh) and Gurgaon & Faridabad (in Haryana).
- 4. Data/information for West Bengal includes Kolkata, Maharashtra includes Mumbai and Uttar Pradesh includes UPE & UPW service area(s).
- 5. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatishgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura States.

## V. Category-wise Growth in subscriber base

## Circle Category-wise Net Additions in Telephone Subscribers in the month of February, 2024

Circle	Net additions of Februa	in the month ary, 2024	Telephone Subscriber base as on 29 <sup>th</sup> February, 2024				
Category	Wireline segment	Wireless segment	Wireline segment	Wireless segment			
Circle A	1,74,834	15,09,943	1,28,77,159	38,90,95,581			
Circle B	2,24,588	14,77,340	87,62,357	47,29,94,359			
Circle C	86,163	7,86,171	25,44,729	18,80,10,645			
Metro	78,500	1,57,171	89,20,078	11,45,40,950			
All India	5,64,085	39,30,625	3,31,04,323	1,16,46,41,535			

## Circle Category-wise monthly and yearly Growth Rates in Telephone Subscribers in the month of February, 2024

Circle		owth rate (%) to February-24)	Yearly growth rate (%) (February-23 to February-24					
Category	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment				
Circle A	1.38%	0.39%	20.47%	1.20%				
Circle B	2.63%	0.31%	24.06%	2.16%				
Circle C	3.50%	0.42%	24.95%	3.58%				
Metro	0.89%	0.14%	9.05%	1.40%				
All India	1.73%	0.34%	18.36%	1.99%				

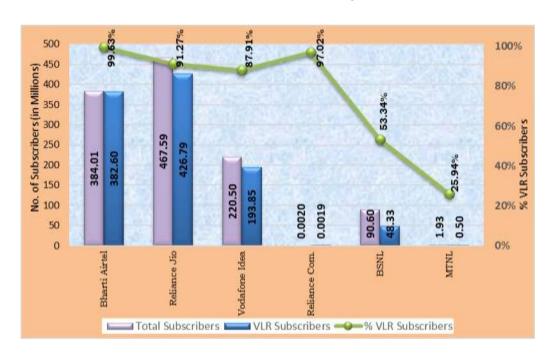
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, during the month of February, 2024, both on monthly and yearly basis all circles have registered growth rate in their subscriber.
- During the month of February, 2024, 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)

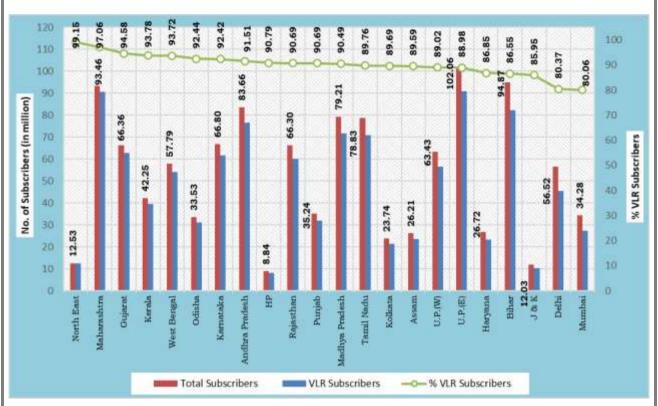
- Out of the total 1,164.64 million wireless subscribers, 1052.08 million wireless subscribers were active on the date of peak VLR in the month of February-24. The active wireless proportion of subscribers approximately was 90.33% of the total wireless subscriber base.
- The detailed statistics on proportion active of wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of February-24 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 February, 2024



 Bharti Airtel has the maximum proportion 99.63% of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of peak VLR in the month of February-24 and MTNL has the minimum proportion of VLR 25.94% of its HLR during the same period.





## 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 February-24, a total of 11.54 million requests were received for MNP. Out of total 11.54 million, new requests received from Zone-I & Zone-II were 6.54 million and 4.99 million respectively. The cumulative MNP requests increased from 939.55 million at the end of January-24 to 951.09 million at the end of February-24, 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 88.67 million) followed by Maharashtra (about 78.13 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 73.38 million) followed by Karnataka (about 66.26 million).

	Service Area Wise MNP Status							
Zo	ne-I		Zone-II					
Service Area	Number o Requests (		Service Area	Req	of Porting Juests Million)			
	Jan-24	Feb-24		Jan-24	Feb-24			
Delhi	45.13	45.70	Andhra Pradesh	64.02	64.55			
Gujarat	64.13	64.90	Assam	6.73	6.81			
Haryana	29.87	30.18	Bihar	51.50	52.32			
Himachal Pradesh	4.05	4.09	Karnataka	65.76	66.26			
Jammu & Kashmir	2.34	2.40	Kerala	23.04	23.25			
Maharashtra	77.25	78.13	Kolkata	17.58	17.74			
Mumbai	32.60	32.87	Madhya Pradesh	72.39	73.38			
Punjab	31.77	32.07	North East	2.15	2.18			
Rajasthan	64.88	65.54	Odisha	16.69	16.87			
U.P.(East)	87.07	88.67	Tamil Nadu	60.81	61.39			
U.P.(West)	66.67	67.74	West Bengal	53.13	54.04			
Total	512.30	Total	433.79	438.79				
Total (Zone-I + 2	Zone-II)			939.55	951.09			
Net Addition (Febru	ary, 2024)			11.54	4 million			

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

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(V. Raghunandan) Secretary, TRAI

	Wireline Subscriber Base								A	nnex ure-I													
Service Area	BS	NL	M	rnl	Bharti	i Airtel	Reliano	ee Com.	Tata	Tele.	Qua	drant	Vodafo	ne Idea	Relia	nce Jio		obile & Infra Ltd.	APS	SFL	То	tal	Net Addition
	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Addition
Andhra Pradesh	562446	557911			617074	627906	18507	18800	232947	242841			73435	77485	1346059	1376699			647917	643787	3498385	3545429	47044
Assam	102,491	102,543			30320	31363	0	0	0	0			2580	2550	185481	190103					320872	326559	5687
Bihar	166,830	165,353			145006	188453	9	9	11179	10958			2200	5380	534968	553183					860192	923336	63144
Delhi	0	0	995228	992455	2101498	2114202	18313	17882	205519	209750			79511	79621	969975	990503					4370044	4404413	34369
Gujarat	307384	303432			262203	266706	2893	2773	162064	164930			70716	73772	687284	710874					1492544	1522487	29943
Haryana	205957	219697			153769	165514	0	0	43160	42523			420	420	135673	144229					538979	572383	33404
Himachal Pradesh	91857	92081			8184	8386	0	0	1498	1554			90	90	60357	62101					161986	164212	2226
J & K	74557	73453			109424	111204	0	0	0	0			30	30	208152	212517					392163	397204	5041
Karnataka	549668	533640			1204348	1215831	17421	17218	405027	408697			140180	146048	964999	1018563					3281643	3339997	58354
Kerala	1089573	1088559			103359	104383	3247	3115	19724	19650			7030	7040	302592	310074					1525525	1532821	7296
Kolkata	184464	186224			202126	203277	4635	4632	61172	62942			14900	15500	515173	525540					982470	998115	15645
Madhya Pradesh	243756	240857			538621	560738	5	5	46310	51656			47710	62927	742853	774986					1619255	1691169	71914
Maharashtra	556896	556375			472582	478608	8099	8075	222162	222591			20361	20371	305023	317852					1585123	1603872	18749
Mumbai	1401	3301	1211923	1198587	595301	599030	37657	37385	596619	605851			163925	179091	882238	894305					3489064	3517550	28486
North East	71729	71257			0	0	0	0	0	0			510	510	180836	184627					253075	256394	3319
Odisha	147884	146112			45097	46780	4	4	12498	12364			3340	3540	261455	268224					470278	477024	6746
Punjab	491377	489961			267833	270952	1849	1849	16565	16385	401553	408187	1650	1590	358022	372459	24179	40279			1563028	1601662	38634
Rajasthan	266970	263336			260402	266490	3483	3373	24295	24421			12515	12145	408091	423234					975756	992999	17243
Tamil Nadu	915058	912395			898934	903397	15633	15418	135010	133018			32693	32933	847302	868213					2844630	2865374	20744
U.P.(E)	121631	123450			210552	214595	34	35	10291	10279			16700	16700	539522	555010					898730	920069	21339
U.P.(W)	183058	183946			138432	139853	8	8	6954	7040			4251	4251	604338	623341					937041	958439	21398
West Bengal	173766	179386			51756	54001	49	47	2621	2613			150	150	251113	256618					479455	492815	13360
Total	6508753	6493269	2207151	2191042	8416821	8571669	131846	130628	2215615	2250063	401553	408187	694897	742144	11291506	11633255	24179	40279	647917	643787	32540238	33104323	564085
Net Addition		-15484		-16109		154848		-1218		34448		6634		47247		341749		16100		-4130		564085	
Rural Subscribers	2039982	2059764	34	34	2444	2467	360	330	8512	8384	16499	16263	0	0	238487	249992		0	479459	476402	2785777	2813636	27859

						Wireles	s Subscri	ber Base								Annex ure-II	
Circle	Bharti Airtel (includin	g Tata Tele.)	Relianc	ee Com.	Vodafon	e Idea	BS	SNL	BSNL (	VNO's)	MTNL		Reliance Jio		Total		Net
Oncio	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Jan-24	Feb-24	Addition
Andhra Pradesh	33574662	33650768			10845127	10824137	6509947	6540254					32441781	32639853	83371517	83655012	283495
Assam	11,676,769	11,744,084			1638260	1593928	3130298	3127976					9453543	9743408	25898870	26209396	310526
Bihar	41,219,965	41,415,483			7635909	7613568	5184286	5202006					40493694	40639042	94533854	94870099	336245
Delhi	17997887	18094479	20	20	16552965	16523781					1686497	1686179	20005262	20212747	56242631	56517206	274575
Gujarat	11763034	11814734	39	39	20856409	20820623	3717156	3727863					29693099	29993690	66029737	66356949	327212
Haryana	6928123	6974944	7	7	6797157	6764967	4367449	4300321					8632256	8677058	26724992	26717297	-7695
Himachal Pradesh	3566475	3570642	90	90	402557	401167	1522917	1527016					3340307	3340150	8832346	8839065	6719
J & K	5883713	5890199	0	0	299926	296689	794052	789339					5099483	5057801	12077174	12034028	-43146
Karnataka	32016281	32076289	549	549	6499154	6482963	4226753	4177660					23837825	24062561	66580562	66800022	219460
Kerala	8514603	8543494	100	100	13657471	13587397	9281824	9169799					10918889	10944591	42372887	42245381	-127506
Kolkata	5682729	5687695	0	0	5345800	5319227	1989503	1879504					10853184	10857566	23871216	23743992	-127224
Madhya Pradesh	15982845	16082645	0	0	15699573	15627630	4740747	4709237					42300730	42789573	78723895	79209085	485190
Maharashtra	21602792	21684659	0	0	22614053	22381696	5879904	5803243					43224553	43588462	93321302	93458060	136758
Mumbai	9985385	10008950	604	604	11117377	10971786					247836	244320	12918730	13054092	34269932	34279752	9820
North East	6214956	6237691	0	0	790585	771776	1,244,179	1,243,019					4220040	4275426	12469760	12527912	58152
Odisha	11501940	11560013	24	24	1478271	1453775	5,450,059	5,447,101					14982176	15069232	33412470	33530145	117675
Punjab	12541225	12591205	99	99	6506089	6495303	4,153,406	4,070,392					12021176	12080430	35221995	35237429	15434
Rajasthan	23202594	23258253	151	151	10788187	10740550	5,658,798	5,677,538					26524805	26628291	66174535	66304783	130248
Tamil Nadu	29152903	29266114	213	213	15857377	15708535	7,485,773	7,939,281	179,740	180,341			25606514	25731054	78282520	78825538	543018
U.P.(E)	36929390	37105908	0	0	17365697	17368030	7,983,694	7,847,050					39329936	39737349	101608717	102058337	449620
U.P.(W)	18694147	18772499	5	5	15547610	15580489	4,927,032	4,921,579					23987854	24160031	63156648	63434603	277955
West Bengal	17851161	17983125	76	76	13230448	13174374	2,346,957	2,322,968					24104708	24306901	57533350	57787444	254094
Total	382483579	384013873	1977	1977	221526002	220502391	90594734	90423146	179740	180341	1934333	1930499	463990545	467589308	1160710910	1164641535	3930625
Net Addition		1530294		0		-1023611		-171588		601		-3834		3598763	0	3930625	
Rural Subscribers	186,015,401	186,633,296	0	0	107904607	107575211	28,307,328	28,205,170	0	0	35248	35241	204483720	206084713	526746304	528533631	1787327

Pro	portion of VL	R on the date	e of Peak VLR in	the mon	th of Feb-24 (%)	Annexure-I	II
Circle	Bharti	BSNL	Vodafone Idea	MTNL	Reliance Com.	Reliance Jio	Total
Andhra Pradesh	99.46	62.49	92.30		-	88.87	91.51
Assam	99.12	37.03	96.18		-	93.90	89.59
Bihar	91.47	36.72	88.32		-	87.59	86.55
Delhi	93.16		60.49	17.95	110.00	90.37	80.37
Gujarat	107.82	52.37	93.66		123.08	95.24	94.58
Haryana	106.87	27.96	91.93		171.43	95.99	86.85
Himachal Pradesh	98.02	52.46	101.89		43.33	99.27	90.79
J & K	91.64	65.69	84.04		-	82.59	85.95
Karnataka	98.30	61.20	82.98		96.72	92.56	92.42
Kerala	102.89	91.19	93.67		138.00	88.97	93.78
Kolkata	96.63	47.49	95.38		-	90.56	89.69
Madhya Pradesh	102.04	45.27	85.54		-	92.94	90.49
Maharashtra	108.84	63.19	93.37		-	97.61	97.06
Mumbai	86.42		71.35	81.05	113.58	82.48	80.06
North East	107.10	52.87	95.76		-	101.64	99.15
Odisha	105.42	50.34	98.50		50.00	97.11	92.44
Punjab	104.49	41.63	93.33		66.67	91.41	90.69
Rajasthan	100.43	42.04	93.12		58.28	91.58	90.69
Tamil Nadu	99.56	70.70	91.98		93.43	83.28	89.76
U.P. (E)	98.75	33.18	88.59		-	91.04	88.98
U.P. (W)	104.57	35.45	90.12		160.00	87.14	89.02
West Bengal	102.26	65.38	89.91		90.79	92.16	93.72
Total	99.63	53.34	87.91	25.94	97.02	91.27	90.33

**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: -

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.