#### Press Information Bureau Govt. Of India \*\*\*\*

#### **TELECOM REGULATORY AUTHORITY OF INDIA**

New Delhi, 21st November, 2024

Highlights of Telecom Subscription Data	as on 30	<sup>th</sup> Septem	ber, 2024
Particulars	Wireless	Wireline	<b>Total</b> (Wireless+ Wireline)
Broadband Subscribers (Million)	900.77	43.63	944.40
Urban Telephone Subscribers (Million)	628.12	34.03	662.15
Net Addition in September, 2024 (Million)	-5.09	0.66	-4.43
Monthly Growth Rate	-0.80%	1.98%	-0.66%
Rural Telephone Subscribers (Million)	525.60	2.90	528.51
Net Addition in September, 2024 (Million)	-5.02	0.04	-4.98
Monthly Growth Rate	-0.95%	1.33%	-0.93%
Total Telephone Subscribers (Million)	1153.72	36.93	1190.66
Net Addition in September, 2024 (Million)	-10.11	0.70	-9.41
Monthly Growth Rate	-0.87%	1.93%	-0.78%
Overall Tele-density*(%)	82.07%	2.63%	<b>84.69</b> %
Urban Tele-density*(%)	125.08%	6.78%	131.86%
Rural Tele-density*(%)	58.16%	0.32%	58.48%
Share of Urban Subscribers	54.44%	92.14%	55.61%
Share of Rural Subscribers	45.56%	7.86%	44.39%

- In the month of September, 2024, 13.32 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 1025.78 million at the end of August-24 to 1039.11 million at the end of September-24, since implementation of MNP.
- Number of active wireless subscribers (on the date of peak VLR<sup>#</sup>) in September, 2024 was 1059.97 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 <u>https://main.mohfw.gov.in/sites/default/files/Population%20Projection%20Report%202011-2036%20-</u> %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 1167 operators in September, 2024, in comparison to 1219 Operators in August 2024, the total Broadband Subscribers decreased from 949.21 million at the end of August-24 to 944.40 million at the end of September-24 with a monthly decline rate of 0.51%. Segment-wise broadband subscribers and their monthly growth rates are as below: -

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

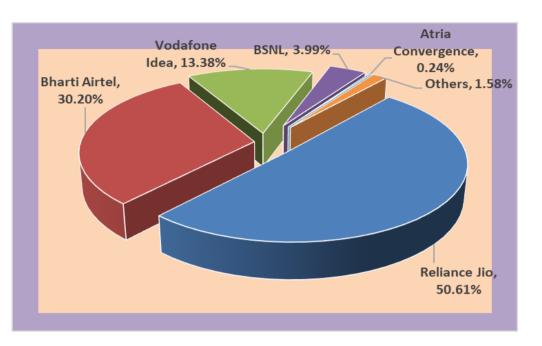
	Broadband s (in mi		Monthly growth rate in		
Segment	As on 31 <sup>st</sup> August 2024	As on 30 <sup>th</sup> September 2024	the month of September, 2024		
Wired subscribers	42.84	43.63	1.83%		
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to- Point Radio & VSAT)	0.91	0.99	9.01%		
Mobile devices users (Phones and dongles)	905.46	899.79	-0.63%		
Total	949.21	944.40	-0.51%		

## As on 30<sup>th</sup> September, 2024, top five Broadband (Wired+Wireless) Service providers

S.N.	Name of the Service Provider	Subscriber base (In million)
1.	Reliance Jio Infocomm Ltd	477.94
2.	Bharti Airtel Ltd.	285.17
3.	Vodafone Idea Ltd.	126.36
4.	Bharat Sanchar Nigam Ltd.	37.73
5.	Atria Convergence Technologies Limited	2.27
	et Share of Top Five Vs Total Broadband d+Wireless)	98.42%

• The graphical representation of the service provider-wise market share of broadband services is given below: -

# Service Provider-wise Market Share of Broadband (wired + wireless) Services as on 30<sup>th</sup> September, 2024



## As on 30<sup>th</sup> September, 2024, top five <u>Wired</u> Broadband Service providers

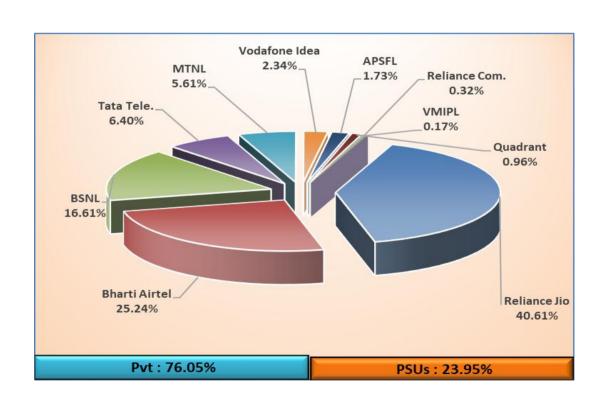
S.N.	Name of the Service Provider	Subscriber base (In million)						
1.	Reliance Jio Infocomm Ltd	14.16						
2.	Bharti Airtel Ltd.	8.48						
3.	Bharat Sanchar Nigam Ltd.	4.23						
4.	Atria Convergence Technologies Limited	2.27						
5.	Kerala Vision Broadband Ltd.	1.22						
Market	Market Share of Top Five Vs Total Wired Broadband 69.61%							

### As on 30<sup>th</sup> September, 2024, top five <u>Wireless</u> Broadband Service providers

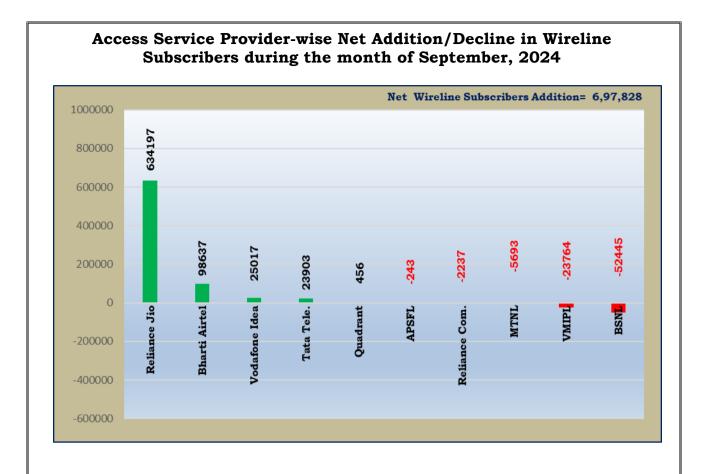
S.N.	Name of the Service Provider	Subscriber base (In million)
1.	Reliance Jio Infocomm Ltd.	463.78
2.	Bharti Airtel Ltd.	276.68
3.	Vodafone Idea Ltd.	126.35
4.	Bharat Sanchar Nigam Ltd.	33.50
5.	Intech Online Pvt. Ltd.	0.25
Marke	t Share of Top Five Vs Total Wireless Broadband	99.98%

## **II. Wireline Subscribers**

- Wireline subscribers increased from 36.23 million at the end of August-24 to 36.93 million at the end of September-24. Net increase in the wireline subscriber base was 0.70 million with a monthly rate of growth 1.93%. The share of urban and rural subscribers in total wireline subscribers were 92.14% and 7.86% respectively at the end of September, 2024.
- The Overall Wireline Tele-density in India increased from 2.58% at the end of August-24 to 2.63% at the end of September-24. Urban and Rural Wireline Tele-density were 6.78% and 0.32% respectively during the same period.
- BSNL, MTNL and APSFL, the three PSUs access service providers, held 23.95% of the wireline market share as on 30<sup>th</sup> September, 2024. Detailed statistics of wireline subscriber base are available at **Annexure-I**.

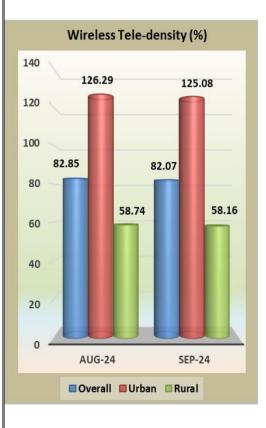


#### Access Service Provider-wise Market Share of Wireline Subscribers as on 30<sup>th</sup> September, 2024



#### **III.** Wireless subscriber

Total wireless subscribers decreased from 1,163.83 million at the end of August-24, to 1,153.72 million at the end of September-24, thereby registering а monthly decline rate of 0.87%. Wireless subscription in urban areas decreased from 633.21 million at the end of August-24 to 628.12 million at the end of September-24, and wireless subscription in rural areas also decreased from 530.63 million to 525.60 million during the same period. Monthly decline rate of urban and rural wireless subscription was 0.80% and 0.95% respectively.



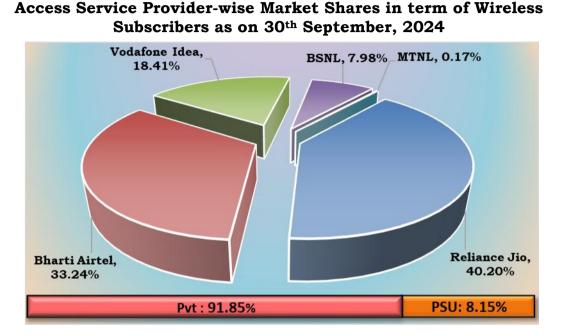


The Wireless Tele-density in India decreased from 82.85% at the end of August-24 to 82.07% at the end of September-24. The Urban Wireless Tele-density decreased from 126.29% at the end of August-24 to 125.08% at the end of September-24 and Rural Tele-density also decreased from 58.74% to 58.16% during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers 54.44% 45.56% was and respectively at the end of September-24. Detailed statistics of wireless subscriber base is available at **Annexure-II**.

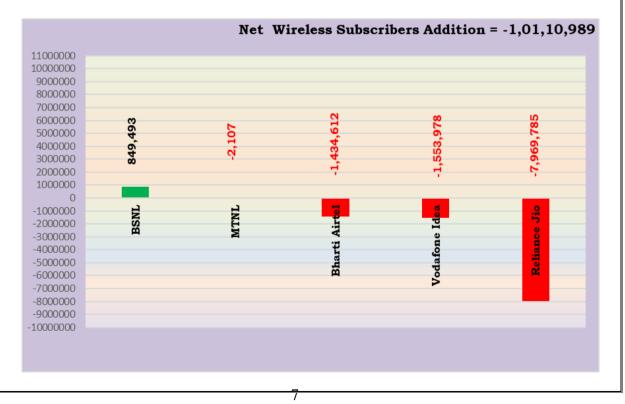
б

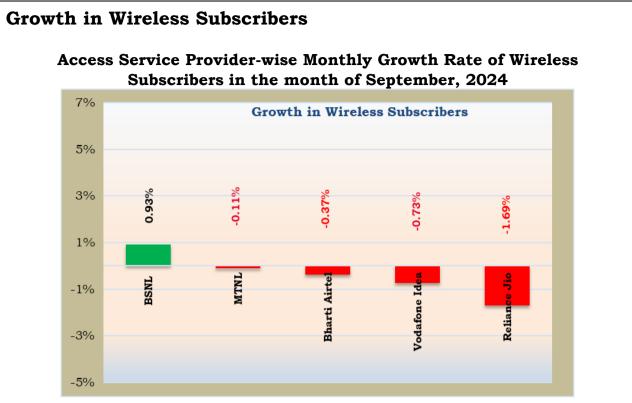
• As on 30<sup>th</sup> September, 2024, the private access service providers held 91.85% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 8.15%.

• The graphical representation of access service provider-wise market share and net additions in wireless subscriber base are given below: -

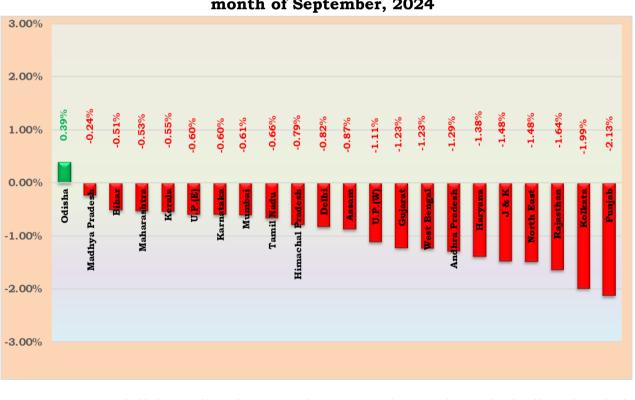


Net Addition in Wireless Subscribers of Access Service Providers in the month of September, 2024





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

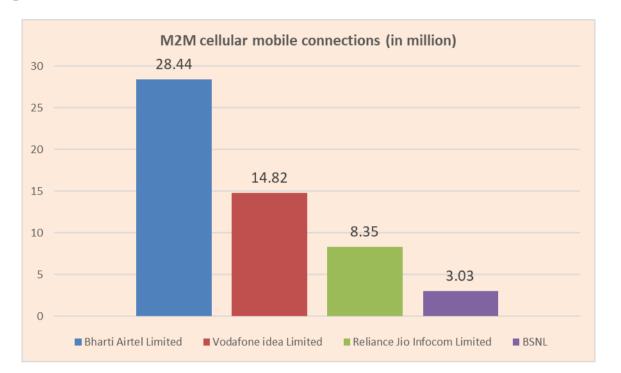


Service Area-wise Monthly Growth Rate of Wireless Subscribers in the month of September, 2024

• Except Odisha, all other service areas have showed decline in their wireless subscribers during the month of September-24.

# M2M cellular mobile connections

Number of M2M cellular mobile connections increased from 54.07 million at the end of August, 24, to 54.64 million at the end of September, 24.

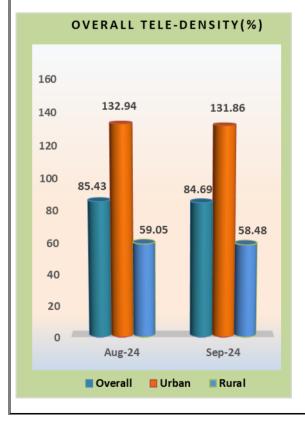


Bharti Airtel Limited has the highest number of M2M cellular mobile connections 28.44 million with a market share of 52.06% followed by Vodafone idea Limited, Reliance Jio Infocom Limited and BSNL with market share of 27.12%, 15.29% and 5.54% respectively.

#### **IV. Total Telephone Subscribers**

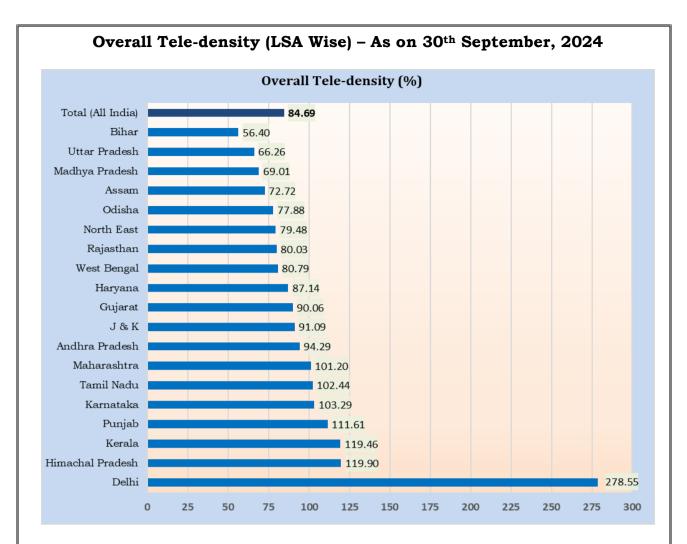
• The number of total telephone subscribers in India decreased from 1,200.07 million at the end of Aug-24 to 1,190.66 million at the end of Sep-24, thereby showing a monthly decline rate of 0.78%. Urban telephone subscription decreased from 666.58 million at the end of Aug-24 to 662.15 million at the end of Sep-24 and the rural subscription also decreased from 533.49 million to 528.51 million during the same period. The monthly decline rates of urban and rural telephone subscription were 0.66% and 0.93% respectively during the month of September-24.





• The overall Tele-density India in decreased from 85.43% at the end of Aug-24 to 84.69% at the end of Sep-24. The Tele-density Urban decreased from 132.94% at the end of Aug-24 to 131.86% at the end of Sep-24 and Rural Teledensity also decreased from 59.05% to 58.48% during the same period. The share of urban and rural subscribers in total number of telephone subscribers at the end of September-24 were 55.61% and 44.39% respectively.

10



 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 September-24. Delhi service area has maximum tele-density of 278.55% and the Bihar service area has minimum tele-density of 56.40% at the end of September-24.

#### Notes: -

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.

<sup>1.</sup> Population data/projections are available state wise only.

<sup>2.</sup> 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

<sup>3.</sup> 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).

<sup>4.</sup> Data/information for West Bengal includes Kolkata, Maharashtra includes Mumbai and Uttar Pradesh includes UPE & UPW service area(s).

# V. Category-wise Growth in subscriber base

	month of September, 2024											
Circle		in the month ber, 2024	Telephone Subscriber base as on 30 <sup>th</sup> September, 2024									
Category	Wireline segment	Wireless segment	Wireline segment	Wireless segment								
Circle A	235716	-3299831	14291158	384351569								
Circle B	268820	-4648166	10189922	467986114								
Circle C	82620	-1024718	3065148	188316161								
Metro	110672	-1138274	9386055	113069971								
All India	697828	-10110989	36932283	1153723815								

# Circle Category-wise Net Additions in Telephone Subscribers in the

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

Circle		owth rate (%) o September-24)	Yearly growth rate (%) (September-23 to September-24					
Category	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment				
Circle A	1.68%	-0.85%	18.28%	-0.14%				
Circle B	2.71%	-0.98%	29.53%	0.29%				
Circle C	2.77%	-0.54%	33.60%	1.62%				
Metro	1.19%	-1.00%	7.45%	-0.20%				
All India	<b>1.93</b> %	- <b>0.87</b> %	19.22%	0.31%				

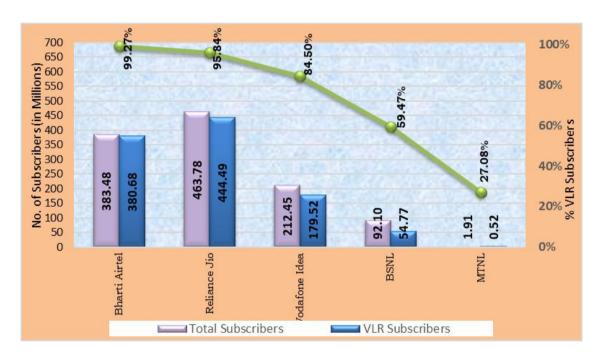
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, during the month of September, 2024, on monthly basis all circles have registered decline rate in their subscriber base. On yearly basis except Circe 'A' and Circle 'Metro', all other circles have registered growth rate in their subscriber base.
- In Wireline segment, during the month of September, 2024, both on monthly and yearly basis, all circles have registered growth rate in their subscriber base.

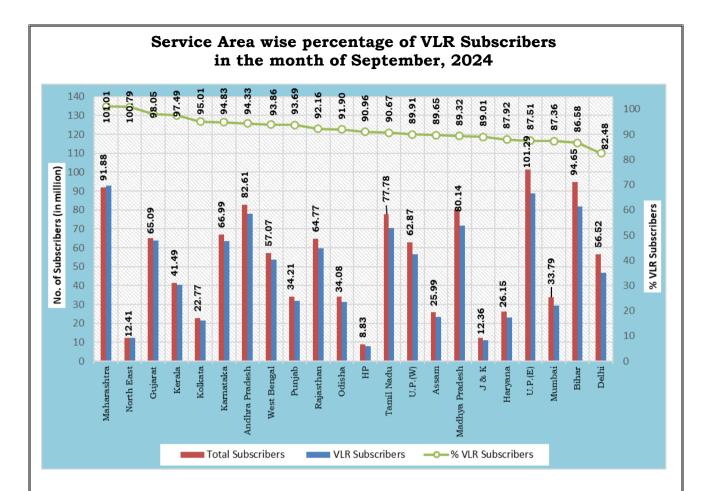
## VI. Active Wireless Subscribers (VLR Data)

- Out of the total 1,153.72 million wireless subscribers. 1059.97 million wireless subscribers were active on the date of peak VLR in the month of September-24. The of active wireless proportion subscribers approximately was 91.87% of wireless the total 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 September-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 September, 2024



 Bharti Airtel Limited has the maximum proportion 99.27% of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of peak VLR in the month of September-24 and MTNL has the minimum proportion of VLR 27.08% 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 September-24, a total of 13.32 million requests were received for MNP. Out of total 13.32 million, new requests received from Zone-I & Zone-II were 7.48 million and 5.84 million respectively. The cumulative MNP requests increased from 1025.78 million at the end of August-24 to 1039.11 million at the end of September-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 100.56 million) followed by Maharashtra (about 84.93 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 81.06 million) followed by Karnataka (about 70.24 million).

	Service Area Wise MNP Status								
Z	one-I			Zone–II					
Service Area	Number o Requests (	<b>-</b>	Service Area	Number of Porting Requests (in Million)					
	Aug-24	Sep-24		Aug-24	Sep-24				
Delhi	49.08	49.68	Andhra Pradesh	68.18	68.86				
Gujarat	69.80	70.73	Assam	7.48	7.58				
Haryana	32.42	32.83	Bihar	57.81	58.83				
Himachal Pradesh	4.37	4.42	Karnataka	69.67	70.24				
Jammu & Kashmir	2.79	2.85	Kerala	24.63	24.88				
Maharashtra	83.95	84.93	Kolkata	18.86	19.06				
Mumbai	34.35	34.61	Madhya Pradesh	79.85	81.06				
Punjab	34.03	34.39	North East	2.37	2.40				
Rajasthan	69.75	70.49	Odisha	18.05	18.26				
U.P.(East)	98.73	100.56	Tamil Nadu	65.11	65.71				
U.P.(West)	74.83	76.07	West Bengal	59.68	60.66				
Total	554.09 561.57		Total	471.69	477.53				
Total (Zone-I +	Zone-II)			1,025.78	1,039.11				
Net Addition (Septer	mber, 2024)			13.32 n	nillion				

## Contact details in case of any clarification: -

Shri Amit Sharma, Advisor (F&EA), Telecom Regulatory Authority of India World Trade Centre, Tower-F, Nauroji Nagar, New Delhi – 110029 Ph: 011-20907772 E-mail: <u>advfea2@trai.gov.in</u>

(Atul Kumar Chaudhary) Secretary, TRAI

Wireline Subscriber Base									Annexure-															
Service Area	BS	NL	MI	INL	Bharti	Airtel	Relian	ce Com.	Tata	Tele.	Qua	drant	Voda	fone Idea	Relia	nce Jio		obile & Infra t. Ltd.	APS	APSFL		tal	Net Additio	
	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Additio	
Andhra Pradesh	511532	506357			690330	723908	17286	17170	248049	234891			105965	103875	1692414	1749696			638449	638206	3904025	3974103	70078	
Assam	71,026	70,728			38703	39859	0	0	0	0			2490	2490	242782	255301					355001	368378	1337	
Bihar	152,183	152,536			272313	258670	9	9	11753	11747			5460	5580	721152	764161					1162870	1192703	2983	
Delhi	0	0	980472	978856	2206303	2236608	15605	15388	223985	227897			85116	85658	1131512	1168499					4642993	4712906	69913	
Gujarat	289036	285282			294149	292293	2763	2644	187807	188433			117866	125691	865931	909464					1757552	1803807	46255	
Haryana	219498	222078			202937	183998	0	0	40980	41343			450	450	211071	230058					674936	677927	2991	
Himachal Pradesh	89528	89903			11060	12941	0	0	1415	1411			90	90	81415	85325					183508	189670	6162	
J & K	64403	63224			122970	123864	0	0	0	0			30	30	254754	265160					442157	452278	10121	
Karnataka	506689	504471			1245009	1257367	16086	15958	445557	464580			161275	161675	1174721	1218227					3549337	3622278	7294	
Kerala	1063873	1069418			112110	114885	2925	2752	17907	17629			6950	6920	377753	392144					1581518	1603748	22230	
Kolkata	183329	181589			209085	209332	4232	3637	64645	64624			15440	15430	604853	622894					1081584	1097506	15922	
Madhya Pradesh	232466	230307			548954	555411	5	5	46904	47797			63735	74805	988352	1029004					1880416	1937329	56913	
Maharashtra	500733	493343			529393	536297	7519	7351	223629	222847			20316	20381	497313	543588					1778903	1823807	44904	
Mumbai	3560	3800	1098161	1094084	623338	627589	34780	34532	617550	624490			180059	184594	993358	1006554					3550806	3575643	24837	
North East	61045	60258			0	0	0	0	0	0			510	510	220326	228400					281881	289168	7287	
Odisha	136122	135024			64712	62017	4	4	12445	16196			3700	3700	340128	356010					557111	572951	15840	
Punjab	512710	515841			307533	314952	1844	1842	15539	15437	355282	355738	1560	1560	521432	557717	87860	64096			1803760	1827183	23423	
Rajasthan	244483	242958			293067	303966	3267	3085	23935	24184			12125	14145	561441	593117					1138318	1181455	43137	
Tamil Nadu	887155	852627			958206	962649	13621	13340	135069	137201			34735	35115	1036839	1066231					3065625	3067163	1538	
U.P.(E)	105060	106322			238636	243390	31	27	12345	12749			17620	17770	722701	768135					1096393	1148393	52000	
U.P.(W)	160729	159535			190718	193474	8	8	6981	6943			4111	4151	783413	824699					1145960	1188810	42850	
West Bengal	191043	188157			64266	68959	26	22	2573	2572			150	150	341743	365217					599801	625077	25276	
Total	6186203	6133758	2078633	2072940	9223792	9322429	120011	117774	2339068	2362971	355282	355738	839753	864770	14365404	14999601	87860	64096	638449	638206	36234455	36932283	69782	
Net Addition		-52445		-5693		98637		-2237		23903		456		25017		634197		-23764		-243		697828		
Rural Subscribers	1960965	1978188	29	29	2603	2586	325	300	6700	6562	58101	60212	0	0	363515	382542		0	472452	472273	2864690	2902692	38002	

						Wireless	Subscrib	er Base									Annexure-
Circle	Bharti Airtel (includi	ng Tata Tele.)	Relia	ance Com.	Vodafon	e Idea	BS	NL	BSNL (	VNO's)	МТ	INL	Reliar	ice Jio	То	tal	Net Additio
	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	Aug-24	Sep-24	
Andhra Pradesh	33,802,351	33,608,237	0	0	10457668	10,317,179	6,855,104	6,748,163					32570216	31,933,802	83685339	82607381	-10779
Assam	11,863,283	11,754,115	0	0	1485672	1,471,300	2,993,033	2,963,211					9872296	9,796,756	26214284	25985382	-2289
Bihar	40,599,123	40,272,539	0	0	7564756	7,521,467	5,849,336	6,022,905					41122293	40,831,802	95135508	94648713	-4867
Delhi	18,330,214	18,343,793	0	0	16753908	16,744,837					1684274	1,684,335	20218058	19,743,455	56986454	56516420	-4700
Gujarat	11,966,970	12,046,106	0	0	20219824	20,108,619	3,130,938	3,262,611					30579662	29,672,226	65897394	65089562	-8078
Haryana	7,060,416	7,041,795	0	0	6646717	6,599,715	4,115,406	4,090,143					8693206	8,417,076	26515745	26148729	-3670
Himachal Pradesh	3,572,415	3,543,951	0	0	386325	384,694	1,625,405	1,648,951					3320829	3,257,181	8904974	8834777	-701
J & K	6,112,285	6,101,622	0	0	277240	270,706	895,434	918,356					5255606	5,064,598	12540565	12355282	-1852
Karnataka	32,236,966	32,032,297	0	0	6344325	6,398,356	4,511,626	4,505,377					24298893	24,050,978	67391810	66987008	-4048
Kerala	8,761,014	8,765,522	0	0	13303055	13,240,071	8,678,415	8,705,813					10974715	10,777,151	41717199	41488557	-2286
Kolkata	5,538,557	5,446,548	0	0	5161501	5,124,382	1,615,508	1,520,952					10912480	10,674,262	23228046	22766144	-4619
Madhya Pradesh	16,223,521	16,194,135	0	0	15025854	14,826,930	5,028,617	5,103,966					44053945	44,011,162	80331937	80136193	-1957
Maharashtra	22,213,479	22,167,747	0	0	21603100	21,454,681	5,643,171	5,755,259					42912627	42,505,258	92372377	91882945	-4894
Mumbai	10,081,363	10,037,605	0	0	10700024	10,719,976					224744	222,576	12987614	12,807,250	33993745	33787407	-2063
North East	6,237,710	6,220,020	0	0	693923	686,784	1,284,846	1,288,485					4381906	4,216,092	12598385	12411381	-1870
Odisha	11,482,170	11,713,511	0	0	1404314	1,405,342	5,452,811	5,514,987					15607868	15,446,786	33947163	34080626	1334
Punjab	12,418,200	12,343,209	0	0	6317007	6,266,553	4,088,583	4,149,718					12131893	11,452,678	34955683	34212158	-7435
Rajasthan	23,140,674	23,013,606	0	0	10025018	9,785,029	5,589,613	5,607,144					27092955	26,359,937	65848260	64765716	-10825
Tamil Nadu	29,795,754	29,721,923	0	0	15229938	15,145,802	7,734,172	7,823,388	204,460	204,747			25340156	24,888,813	78304480	77784673	-5198
U.P.(E)	36,548,722	36,304,870	0	0	16641443	16,517,501	8,223,052	8,297,577					40490160	40,173,383	101903377	101293331	-6100
U.P.(W)	18,822,073	18,783,592	0	0	15186440	14,998,895	5,140,253	5,286,252					24431436	23,803,581	63580202	62872320	-7078
West Bengal	18,109,835	18,025,740	0	0	12580449	12,465,704	2,590,529	2,681,800					24501064	23,895,866	57781877	57069110	-7127
Total	384917095	383482483	0	0	214008501	212454523	91045852	91895058	204460	204747	1909018	1906911	471749878	463780093	1163834804	1153723815	-1011098
Net Addition		-1434612		0		-1553978		849206		287		-2107		-7969785	0	-10110989	
Rural Subscribers	187,699,484	186,783,045	0	0	104500898	103242308	29,480,282	29,869,698	0	0	35201	35203	208910259	205672937	530626124	525603191	-502293

Circle	Bharti	BSNL	Vodafone Idea	MTNL	Reliance Com.	Reliance Jio	<b>Total</b>
Andhra Pradesh	99.72	70.90	91.02		-	94.68	94.33
Assam	99.16	25.77	92.07		-	97.19	89.65
Bihar	89.51	38.37	80.75		-	91.87	86.58
Delhi	96.87		56.08	20.28	-	96.82	82.48
Gujarat	110.12	60.20	90.37		-	102.51	98.05
Haryana	100.73	35.90	91.74		-	99.48	87.92
Himachal Pradesh	97.21	54.84	100.54		-	101.32	90.96
J & K	92.44	64.01	83.60		-	89.69	89.01
Karnataka	99.94	67.41	77.88		-	97.67	94.83
Kerala	102.39	99.81	94.01		-	95.91	97.49
Kolkata	99.16	83.28	87.49		-	98.17	95.01
Madhya Pradesh	99.84	45.71	81.55		-	93.13	89.32
Maharashtra	107.30	80.64	91.22		-	105.43	101.01
Mumbai	100.12		72.17	78.52	-	90.24	87.36
North East	106.28	55.16	94.73		-	107.62	100.79
Odisha	102.91	48.98	90.80		-	98.98	91.90
Punjab	102.25	54.83	91.85		-	99.56	93.69
Rajasthan	99.84	46.64	87.42		-	96.91	92.16
Famil Nadu	99.59	76.08	89.47		-	85.46	90.67
U.P. (E)	95.78	40.80	83.97		-	91.14	87.51
U.P. (W)	102.60	43.34	85.07		-	93.30	89.91
West Bengal	99.56	72.12	86.14		-	96.02	93.86
Fotal	99.27	59.47	84.50	27.08	-	95.84	91.87

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
c.	Stock in hand/in Distribution Channels (Active Card)
d.	Subscriber Retention period expired
e.	Service suspended pending disconnection
3	Subscribers Base (A-B)

**Visitor Location Register** (VLR) is a temporary database of the subscribers who have roamed into the particular area, which it serves. Each base station in the network is served by exactly one VLR; hence a subscriber cannot be present in more than one VLR at a time.

If subscriber is in active stage i.e. he is able to send/receive calls/SMSs he is available both in HLR and VLR. However, it may be possible that the subscriber is registered in HLR but not in VLR due to the reason that he is either switched-off or moved out of coverage area, not reachable etc. In such circumstances he will be available in HLR but not in VLR. This causes difference between subscriber number reported by the service providers based on HLR and numbers available in VLR.

The VLR subscriber data calculated here is based on active subscribers in VLR on the date of Peak subscriber number in VLR of the particular month for which the data is being collected. This data is to be taken from the switches having the purge time of not more than 72 hours.

SB/DP/ARJ