(Press Release No.98/2023)

Information Note to the Press





TELECOM REGULATORY AUTHORITY OF INDIA

New Delhi, 27th September, 2023 (www.trai.gov.in)

Highlights of Telecom Subscription Data as on 31st July, 2023

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Broadband Subscribers (Million)	832.50	35.70	868.20
Urban Telephone Subscribers (Million)	628.55	27.92	656.47
Net Addition in July, 2023 (Million)	2.49	0.29	2.77
Monthly Growth Rate	0.40%	1.03%	0.42%
Rural Telephone Subscribers (Million)	517.69	2.69	520.38
Net Addition in July, 2023 (Million)	0.18	0.01	0.18
Monthly Growth Rate	0.03%	0.21%	0.04%
Total Telephone Subscribers (Million)	1146.25	30.61	1176.85
Net Addition in July, 2023 (Million)	2.67	0.29	2.96
Monthly Growth Rate	0.23%	0.96%	0.25%
Overall Tele-density*(%)	82.38%	2.20%	84.58%
Urban Tele-density*(%)	127.87%	5.68%	133.55%
Rural Tele-density*(%)	57.53%	0.30%	57.83%
Share of Urban Subscribers	54.84%	91.22%	55.78%
Share of Rural Subscribers	45.16%	8.78%	44.22%

- ❖ In the month of July, 2023, 11.77 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 852.99 million at the end of June-23 to 864.76 million at the end of July-23, since implementation of MNP.
- Number of active wireless subscribers (on the date of peak VLR*) in July, 2023 was 1046.41 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
- # 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 1,055 operators in July, 2023 in comparison to 1,040 Operator in June 2023, the total Broadband Subscribers increased from 861.47 million at the end of June-23 to 868.20 million at the end of July-23 with a monthly growth rate of 0.78%. Segment-wise broadband subscribers and their monthly growth rates are as below:

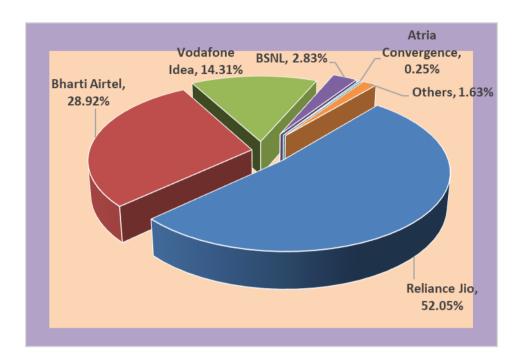
Segment-wise Broadband Subscribers and Monthly Growth Rate in the month of July, 2023

		Broadband subscribers (in million)						
Segment	As on 30th June, 2023	As on 31st July, 2023	in the month of July, 2023					
Wired subscribers	35.10	35.70	1.69%					
Mobile devices users (Phones and dongles)	825.41	831.54	0.74%					
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to- Point Radio & VSAT)	0.95	0.96	0.94%					
Total	861.47	868.20	0.78%					

• Top five service providers constituted 98.37% market share of the total broadband subscribers at the end of July-23. These service providers were Reliance Jio Infocomm Ltd 451.89 million, Bharti Airtel 251.12 million, Vodafone Idea 124.28 million, BSNL 24.55 million and Atria Convergence 2.18 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 31st July, 2023

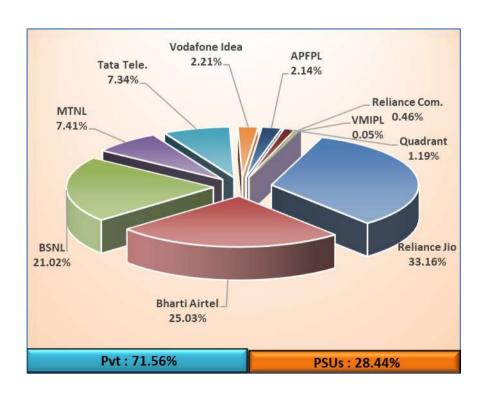


- As on 31st July, 2023, the top five <u>Wired</u> Broadband Service providers were Reliance Jio Infocomm Ltd 9.40 million, Bharti Airtel 6.71 million, BSNL 3.68 million, Atria Convergence Technologies 2.18 million and Hathway Cable & Datacom 1.12 million.
- As on 31st July, 2023, the top five <u>Wireless</u> Broadband Service providers were Reliance Jio Infocom Ltd 442.49 million, Bharti Airtel 244.41 million, Vodafone Idea 124.27 million, BSNL 20.87 million and Intech Online Pvt. Ltd. 0.24 million.

II. Wireline Subscribers

- Wireline subscribers increased from 30.31 million at the end of Jun-23 to 30.61 million at the end of July-23. Net increase in the wireline subscriber base was 0.29 million with a monthly growth rate of 0.96%. The share of urban and rural subscribers in total wireline subscribers were 91.22% and 8.78% respectively at the end of July, 2023.
- The Overall Wireline Tele-density in India increased from 2.18% at the end of Jun-23 to 2.20% at the end of July-23. Urban and Rural Wireline Teledensity were 5.68% and 0.30% respectively during the same period.
- BSNL and MTNL, the two PSU access service providers, held 28.44% of the wireline market share as on 31st July, 2023. Detailed statistics of wireline subscriber base are available at **Annexure-I**.

Access Service Provider-wise Market Share of Wireline Subscribers as on 31st July, 2023



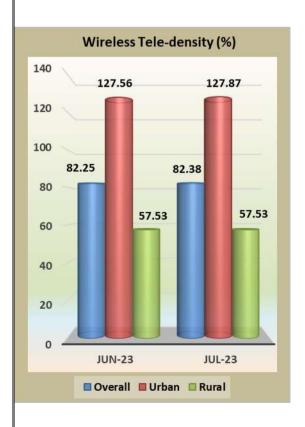
Access Service Provider-wise Net Addition/Decline in Wireline Subscribers during the month of July, 2023



III. Wireless subscriber

Total wireless subscribers increased from 1,143.58 million at the end of June-23, to 1,146.25 million at the end of July-23, thereby registering a monthly growth rate of 0.23%. Wireless subscription in urban areas increased from to 626.07 million at the end of June-23 to 628.55 million at the end of July-23 and wireless subscription in rural areas also increased from 517.51 million to 517.69 million during the same period. Monthly growth ofurban and rural wireless rate subscription 0.40% and 0.03% was respectively.

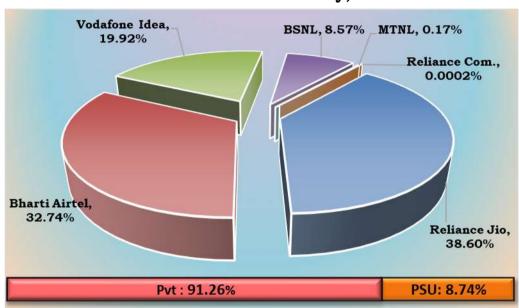




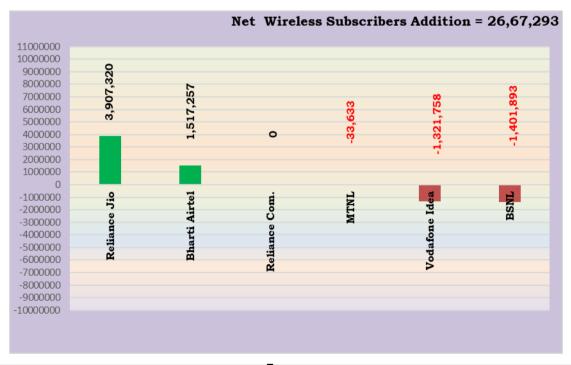
Wireless Tele-density in India The increased from 82.25% at the end of June-23 to 82.38% at the end of July-23. The Urban Wireless Tele-density increased from 127.56% at the end of June-23 to 127.87% at the end of July-23 however Rural Tele-density remained unchanged i.e. 57.53% during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 54.84% and 45.16% respectively at the end of July-23. Detailed statistics of wireless subscriber base is available at Annexure-II.

- As on 31st July, 2023, the private access service providers held 91.26% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 8.74%.
- The graphical representation of access service provider-wise market share and net additions in wireless subscriber base are given below: -

Access Service Provider-wise Market Shares in term of Wireless Subscribers as on 31st July, 2023

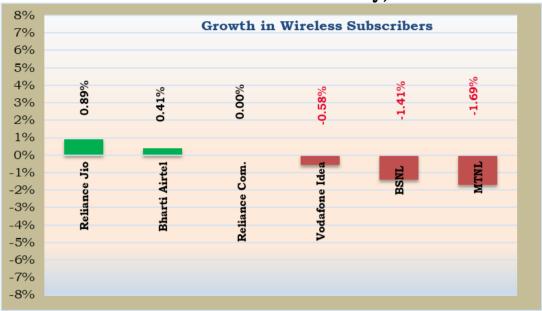


Net Addition in Wireless Subscribers of Access Service Providers in the month of July, 2023



Growth in Wireless Subscribers

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



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

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

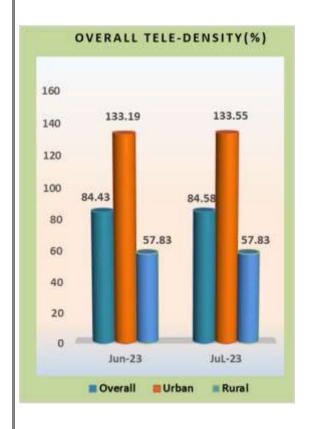


• Except, Punjab, Kolkata and Andhra Pradesh service areas, all other service areas have showed growth in their wireless subscribers during the month of July-23.

IV. Total Telephone Subscribers

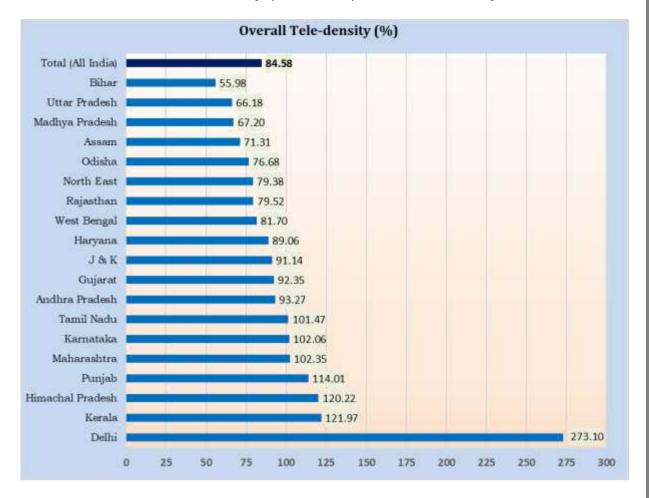
• The number of telephone subscribers in India increased from 1,173.89 million at the end of June-23 to 1,176.85 million at the end of July-23, thereby showing a monthly growth rate of 0.25%. Urban telephone subscription increased from 653.70 million at the end of June-23 to 656.47 million at the end of July-23 and the rural subscription also increased from 520.19 million to 520.38 million during the same period. The monthly of urban growth rates and rural telephone subscription were 0.42% and 0.04% respectively during the month of July-23.





• The overall Tele-density in India increased 84.43% at the end of June-23 to 84.58% at the end of July-23. The Urban Tele-density increased from 133.19% at the end of June-23 to 133.55% at the end of July-23 however Rural Tele-density remained unchanged i.e. 57.83% during the same period. The share of urban and rural subscribers in total number of telephone subscribers at the end of July-23 was 55.78% and 44.22% respectively.

Overall Tele-density (LSA Wise) - As on 31st July, 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 July-23. Delhi service area
has maximum tele-density of 273.10% and the Bihar service area has
minimum tele-density of 55.98% at the end of July-23.

Notes: -

- 1. 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%20
 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 July, 2023

Circle	Net additions of July	in the month , 2023	Telephone Subscriber base as on 31st July, 2023				
Category	Wireline segment	Wireless segment	Wireline segment	Wireless segment			
Circle A	1,07,854	9,06,192	1,20,27,177	38,40,03,464			
Circle B	1,07,681	8,32,155	76,93,883	46,47,91,339			
Circle C	42,055	8,01,007	22,38,100	18,51,77,541			
Metro	33,438	1,27,939	86,46,394	11,22,73,464			
All India	2,91,028	26,67,293	3,06,05,554	1,14,62,45,808			

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

Circle		owth rate (%) 3 to July-23)		owth rate (%) to July-23)
Category	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment
Circle A	0.90%	0.24%	22.63%	-0.64%
Circle B	1.42%	0.18%	24.33%	-1.17%
Circle C	1.92%	0.43%	33.50%	2.50%
Metro	0.39%	0.11%	8.70%	1.54%
All India	0.96%	0.23%	19.43%	-0.16%

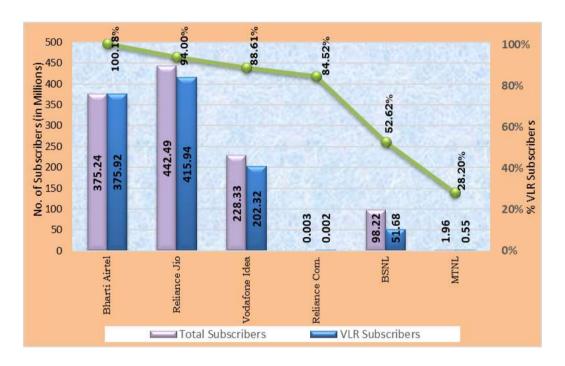
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, on monthly basis all circles have registered growth rate in their subscriber base. On yearly basis, except Circle 'A' and Circle 'B' other circles have registered growth rate in their subscriber base.
- In Wireline segment, on monthly and yearly basis, all circles have registered growth rate in their subscriber base.

VI. Active Wireless Subscribers (VLR Data)

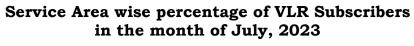
- Out of the total 1,146.25 million wireless subscribers, 1046.41 million wireless subscribers were active on the date of peak VLR in month of July-23. The the proportion of active wireless subscribers approximately was 91.29% of the total wireless subscriber base.
- The detailed statistics on proportion active of wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of July-23 is available at Annexure-III and the methodology used for reporting **VLR** subscribers is available at Annexure-IV.

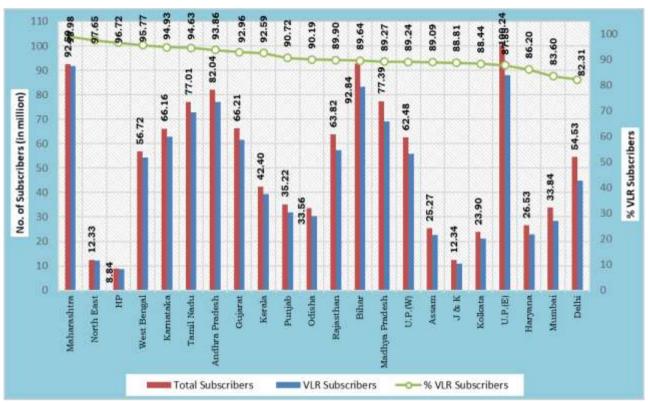
Access Service Provider-wise Percentage of VLR Subscribers in the month of July, 2023



 Bharti Airtel has the maximum proportion 100.18% of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of

the month peak VLR in of July-23 and MTNL has the minimum proportion of **VLR** 28.20% 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 July-23, a total of 11.77 million requests were received for MNP. Out of total 11.77 million new requests, 6.70 million requests received from Zone-I and 5.07 million requests received from Zone-II. The cumulative MNP requests increased from 852.99 million at the end of June-23 to 864.76 million at the end of July-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 76.81 million) followed by Maharashtra (about 71.22 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 66.06 million) followed by Karnataka (about 62.17 million).

	Service Area Wise MNP Status							
Zo	ne -1		Z	one – 2				
Service Area	Number of Requests (i		Service Area	Number of Porting Requests (in Million)				
	June-23 July-23			June-23	July-23			
Delhi	40.99	41.54	Andhra Pradesh	59.87	60.44			
Gujarat	58.05	58.88	Assam	6.04	6.13			
Haryana	27.38	27.72	Bihar	45.52	46.33			
Himachal Pradesh	3.73	3.78	Karnataka	61.57	62.17			
Jammu & Kashmir	2.01	2.05	Kerala	21.41	21.63			
Maharashtra	70.27	71.22	Kolkata	16.35	16.52			
Mumbai	30.74	30.97	Madhya Pradesh	64.99	66.06			
Punjab	29.57	29.87	North East	2.00	2.02			
Rajasthan	59.70	60.51	Odisha	15.48	15.64			
U.P.(East)	75.27	76.81	Tamil Nadu	56.81	57.35			
U.P.(West)	58.46	59.54	West Bengal	46.77	47.60			
Total	462.88	162.88 Total		401.88				
Total (Zone-1 +	Zone-2)			852.99	864.76			
Net Addition (July,	2023)			11.77	million			

Contact details in case of any clarification: -

Shri Amit Sharma, Advisor (F&EA), Telecom Regulatory Authority of India Mahanagar Doorsanchar Bhawan Jawahar Lal Nehru Marg, New Delhi – 110002.

Ph: 011-23234367

E-mail: advfea2@trai.gov.in

(V. Raghunandan) Secretary, TRAI

						Wir	eline Su	ıbscriber	Base													Aı	nnexure-I
Service Area	BSI	IL .	МΊ	rnl	Bharti	Airtel	Relian	ce Com.	Tata	Tele.	Qua	drant	Vodafo	ne Idea	Relia	nce Jio		obile & Infra t. Ltd.	API	FPL	Tot	al	Net Addition
	Jun-23	JuL-23	Jun-23	JuL-23	Jun-23	JuL-23	Jun-23	JuL-23	Jun-23	JuL-23	Jun-23	JuL-23	Jun-23	JuL-23	Jun-23	JuL-23	Jun-23	JuL-23	Jun-23	JuL-23	Jun-23	JuL-23	Audition
Andhra Pradesh	615614	613524			499185	515981	19312	19416	232553	233061			63005	63345	1162586	1186096			656424	654085	3248679	3285508	36829
Assam	104,603	103,333			23428	24501	0	0	0	0			2610	2610	165170	168408					295811	298852	3041
Bihar	165,824	165,555			85310	89064	9	9	10186	10105			2380	2380	474712	483900					738421	751013	12592
Delhi			1015628	1014608	1987573	2009295	20504	20272	210145	210064			81325	80475	900015	910878					4215190	4245592	30402
Gujarat	317980	314124			225566	229433	2725	2812	157715	157878			56946	56756	591915	601960					1352847	1362963	10116
Haryana	207686	205478			122217	132941	0	0	45490	46241			420	420	117120	119815					492933	504895	11962
Himachal Pradesh	89628	89900			5631	6034	0	0	1586	1556			90	90	54155	55208					151090	152788	1698
J & K	83621	82755			90911	93814	0	0	0	0			30	30	194433	196625					368995	373224	4229
Karnataka	539849	536691			1111447	1128735	18556	18542	394316	394791			149318	145148	862439	888783					3075925	3112690	36765
Kerala	1001964	999776			93941	95615	3447	3444	19942	19623			7130	7130	262324	269070					1388748	1394658	5910
Kolkata	193048	189581			194637	196486	4664	4633	63061	63041			14575	14995	464761	472673					934746	941409	6663
Madhya Pradesh	260750	258008			463302	470996	5	5	47732	50447			34575	33575	628688	647733					1435052	1460764	25712
Maharashtra	581214	574613			408987	419261	8915	8767	232175	229516			22662	22602	249222	250279					1503175	1505038	1863
Mumbai			1261464	1253711	564244	565300	39876	39018	615095	611094			169822	169751	812519	820519					3463020	3459393	-3627
North East	73005	69721					0	0	0	0			510	510	151119	152432					224634	222663	-1971
Odisha	169306	169309				17401	4	4	10814	10859			3930	3950	233040	238037					417094	439560	22466
Punjab	368887	368232			240097	244331	1925	1925	16270	16321	357961	363591	1980	2010	301849	310543	13199	14499			1302168	1321452	19284
Rajasthan	276340	273776			211128	216773	3522	3552	24842	24789			15075	15295	361562	367711					892469	901896	9427
Tamil Nadu	949252	945147			843269	854675	17093	16887	145907	144765			34348	34218	748828	765286					2738697	2760978	22281
U.P.(E)	121436	120287			185372	190162	26	33	11482	11370			16480	16450	468467	479704					803263	818006	14743
U.P.(W)	177423	177292			121532	124418	8	8	6942	6916			3496	3586	516175	528520					825576	840740	15164
West Bengal	178845	177394			33456	36328	70	69	2735	2746			120	120	230767	234815					445993	451472	5479
Total	6476275	6434496	2277092	2268319	7511233	7661544	140661	139396	2248988	2245183	357961	363591	680827	675446	9951866	10148995	13199	14499	656424	654085	30314526	30605554	291028
Net Addition		-41779		-8773		150311		-1265		-3805		5630		-5381		197129		1300		-2339		291028	
Rural Subscribers	1979345	1983113	34	34	0	0	362	362	10091	9635	18736	18512	0	0	184207	190359		0	487723	484023	2680498	2686038	5540

						Wirel	ess Subsc	riber Base	•							Aı	nnexure-II
Circle	Bharti (including		Reliano	e Com.	Vodafo	Vodafone Idea		BSNL		BSNL (VNO's)		MTNL		ice Jio	Total		Net
	Jun-23	Jul-23	Jun-23	Jul-23	Jun-23	Jul-23	Jun-23	Jul-23	Jun-23	Jul-23	Jun-23	Jul-23	Jun-23	Jul-23	Jun-23	Jul-23	Addition
Andhra Pradesh	32770911	32931652			11363635	11287873	7557631	6928520					30650087	30896175	82342264	82044220	-298044
Assam	11,150,514	11,189,259			1912053	1862647	3193282	3195263					8941644	9020373	25197493	25267542	70049
Bihar	40,594,914	40,707,005			8058206	8007508	5862287	5797509					37941349	38326618	92456756	92838640	381884
Delhi	17231813	17304431	23	23	16347957	16299330					1688927	1688464	19142853	19241615	54411573	54533863	122290
Gujarat	11410888	11465865	47	47	21823572	21731576	5048755	4975672					27872065	28031848	66155327	66205008	49681
Haryana	6563357	6642572	11	11	7235095	7142447	4465526	4418182					8219158	8329790	26483147	26533002	49855
Himachal Pradesh	3439537	3478313	92	92	433472	425849	1610092	1614681					3310136	3325209	8793329	8844144	50815
J & K	5917428	5958993	0	0	322864	315687	831303	836454					5148627	5225872	12220222	12337006	116784
Karnataka	31577632	31873862	589	589	6676091	6645326	5414427	5193266					22181050	22443713	65849789	66156756	306967
Kerala	8092740	8157958	113	113	14203668	14150214	9729281	9737842					10264886	10353067	42290688	42399194	108506
Kolkata	5651788	5642971	0	0	5638643	5590247	2188790	2180802					10461233	10486698	23940454	23900718	-39736
Madhya Pradesh	15482919	15585706	0	0	16809837	16615675	5172636	5126550					39662102	40057431	77127494	77385362	257868
M aharashtra	21213764	21281406	0	0	23683451	23547709	6205219	6227022					40901415	41530229	92003849	92586366	582517
Mumbai	9931749	9986070	925	925	11132998	11140887					303065	269895	12424761	12441106	33793498	33838883	45385
North East	5991059	6015633	0	0	921680	907470	1,281,663	1,275,573					4103288	4129540	12297690	12328216	30526
Odisha	11385490	11430324	29	29	1597870	1567995	6,210,662	6,204,752					14216993	14358893	33411044	33561993	150949
Punjab	12267328	12303728	106	106	6900358	6831994	4,577,542	4,477,029					11508531	11602524	35253865	35215381	-38484
Rajasthan	22717238	22822546	155	155	9857476	9771036	5,843,850	5,747,614					25338835	25480166	63757554	63821517	63963
Tamil Nadu	28043824	28250863	262	262	16299143	16274350	7,739,963	7,670,899	143,634	152,444			24519217	24662296	76746043	77011114	265071
U.P.(E)	36841650	36709961	0	0	18336134	18227215	8,735,044	8,654,501					36253665	36646396	100166493	100238073	71580
U.P.(W)	18316748	18309233	8	8	16118017	16061802	5,309,788	5,296,930					22610183	22812458	62354744	62480431	125687
West Bengal	17132063	17194260	147	147	13983917	13929542	2,499,081	2,507,058					22909991	23087372	56525199	56718379	193180
Total	373725354	375242611	2507	2507	229656137	228334379	99476822	98066119	143634	152444	1991992	1958359	438582069	442489389	1143578515	1146245808	2667293
Net Addition		1517257		0		-1321758		-1410703	31344019	8810		-33633		3907320	31344019	2667293	
Rural Subscribers	181,381,959	180,840,531	0	0	112012693	111321207	31,344,019	30,755,761	0	0	35299	35289	192739079	194738835	517513049	517691623	178574

Propor	tion of VLR	on the date	of Peak VLR in	n the mor	th of Jul-23 (9	%) Annexu	re-III
Circle	Bharti	BSNL	Vodafone Idea	MTNL	Reliance Com.	Reliance Jio	Total
Andhra Pradesh	100.47	70.40	94.99		-	91.66	93.86
Assam	97.82	41.27	94.64		-	94.05	89.09
Bihar	94.41	36.75	89.11		-	92.68	89.64
Delhi	99.37		61.22	17.80	91.30	90.49	82.31
Gujarat	111.20	42.95	92.59		110.64	94.67	92.96
Haryana	103.47	30.71	90.78		109.09	97.94	86.20
Himachal Pradesh	98.78	56.58	115.93		43.48	111.58	96.72
J & K	91.79	68.21	87.70		-	88.77	88.81
Karnataka	102.33	53.81	86.85		93.72	96.35	94.93
Kerala	99.84	83.56	93.92		127.43	93.56	92.59
Kolkata	98.37	41.81	90.54		-	91.67	88.44
Madhya Pradesh	102.21	46.84	86.45		-	90.84	89.27
Maharashtra	110.31	61.57	93.21		-	102.06	98.98
Mumbai	88.22		70.33	93.32	85.41	91.56	83.60
North East	104.40	54.99	93.70		-	101.87	97.65
Odisha	103.98	48.56	93.05		41.38	96.88	90.19
Punjab	102.72	39.59	94.26		65.09	95.64	90.72
Rajasthan	99.39	41.32	90.58		60.00	92.10	89.90
Tamil Nadu	101.45	77.78	93.90		96.18	92.64	94.63
U.P. (E)	95.86	31.99	90.13		-	91.89	87.85
U.P. (W)	101.45	36.20	92.72		100.00	89.30	89.24
West Bengal	100.58	66.27	92.43		50.34	97.42	95.77
Total	100.18	52.62	88.61	28.20	84.52	94.00	91.29

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.