

**TELECOM REGULATORY AUTHORITY OF INDIA**New Delhi, 15th September, 2022

(www.trai.gov.in)

Highlights of Telecom Subscription Data as on 31st July, 2022

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1148.03	25.63	1173.66
Net Addition in July, 2022 (Million)	0.64	0.06	0.70
Monthly Growth Rate	0.06%	0.24%	0.06%
Urban Telephone Subscribers (Million)	626.74	23.66	650.40
Net Addition in July, 2022 (Million)	1.25	0.06	1.31
Monthly Growth Rate	0.20%	0.25%	0.20%
Rural Telephone Subscribers (Million)	521.29	1.97	523.26
Net Addition in July, 2022 (Million)	-0.61	0.002	-0.61
Monthly Growth Rate	-0.12%	0.11%	-0.12%
Overall Tele-density*(%)	83.25%	1.86%	85.11%
Urban Tele-density*(%)	129.88%	4.90%	134.78%
Rural Tele-density*(%)	58.15%	0.22%	58.37%
Share of Urban Subscribers	54.59%	92.31%	55.42%
Share of Rural Subscribers	45.41%	7.69%	44.58%
Broadband Subscribers (Million)	777.95	29.47	807.42

- ❖ In the month of July, 2022, 10.23 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 714.56 million at the end of June-22 to 724.79 million at the end of July-22, since implementation of MNP.
- ❖ Number of active wireless subscribers (on the date of peak VLR#) in July, 2022 was 1013.18 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. Total Telephone Subscribers

- The number of telephone subscribers in India increased from 1,172.96 million at the end of June-22 to 1,173.66 million at the end of July-22, thereby showing a monthly growth rate of 0.06%. Urban telephone subscription increased from 649.09 million at the end of June-22 to 650.40 million at the end of July-22 however, the rural subscription decreased from 523.87 million to 523.26 million during the same period. The monthly growth rates of urban and rural telephone subscription were 0.20% and -0.12% respectively during the month of July-22.



- The overall Tele-density in India decreased 85.13% at the end of Jun-22 to 85.11% at the end of July-22. The Urban Tele-density increased from 134.72% at the end of Jun-22 to 134.78% at the end of July-22 however, Rural Tele-density decreased from 58.46% to 58.37% during the same period. The share of urban and rural subscribers in total number of telephone subscribers at the end of July-22 was 55.42% and 44.58% respectively.

Overall Tele-density (LSA Wise) – As on 31st July, 2022



- 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-22. Delhi service area has maximum tele-density of 267.94% and the Bihar service area has minimum tele-density of 54.69% at the end of July-22.

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
- 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 Chhatisgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura States.

II. Category-wise Growth in subscriber base

Circle Category-wise Net Additions in Telephone Subscribers in the month of July 2022

Circle Category	Net additions in the month of July, 2022		Telephone Subscriber base as on 31st July, 2022	
	Wireline segment	Wireless segment	Wireline segment	Wireless segment
Circle A	35,590	-6,05,924	98,07,808	38,64,89,304
Circle B	4,778	3,62,102	61,88,033	47,02,97,495
Circle C	20,290	12,97,666	16,76,508	18,06,68,723
Metro	820	-4,14,537	79,54,131	11,05,74,336
All India	61,478	6,39,307	2,56,26,480	1,14,80,29,858

Circle Category-wise monthly and yearly Growth Rates in Telephone Subscribers in the month of July 2022

Circle Category	Monthly growth rate (%) (June-22 to July-22)		Yearly growth rate (%) (July-21 to July-22)	
	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment
Circle A	0.36%	-0.16%	13.29%	-4.21%
Circle B	0.08%	0.08%	20.17%	-2.52%
Circle C	1.23%	0.72%	32.62%	-1.25%
Metro	0.01%	-0.37%	5.45%	-6.26%
All India	0.24%	0.06%	13.32%	-3.27%

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 except Circle 'A' and 'Metro', all circles have registered growth rate in their subscriber base. On yearly basis, all circles have registered decline rate in their subscriber base.
- In Wireline segment both on monthly and yearly basis, all circles have registered growth rate in their subscriber base.

III. Wireless subscriber

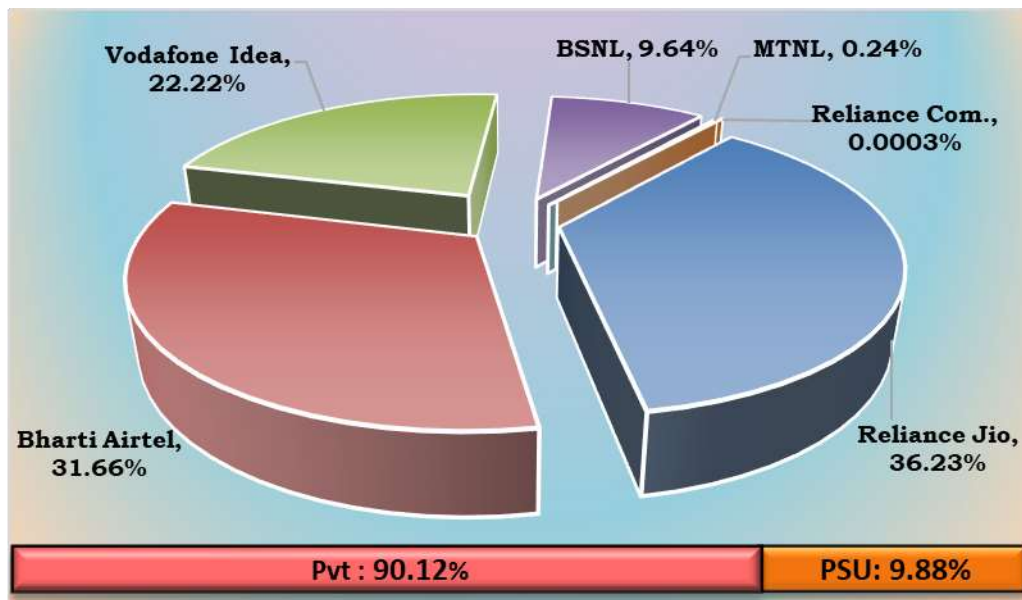
• Total wireless subscribers increased from 1,147.39 million at the end of June-22, to 1,148.03 million at the end of July-22, thereby registering a monthly growth rate of 0.06%. Wireless subscription in urban areas increased from 625.49 million at the end of June-22 to 626.74 million at the end of July-22 however, wireless subscription in rural areas decreased from 521.90 million to 521.29 million during the same period. Monthly growth rates of urban and rural wireless subscription were 0.20% and -0.12% respectively.



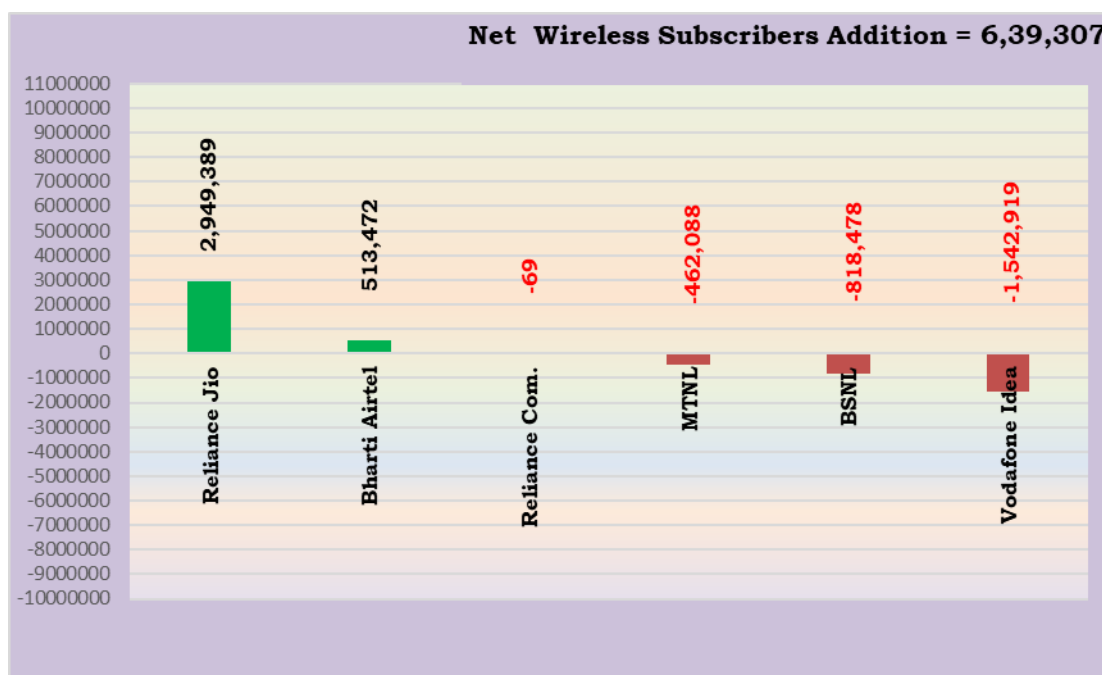
• The Wireless Tele-density in India decreased from 83.27% at the end of June-22 to 83.25% at the end of July-22. The Urban Wireless Tele-density increased from 129.82% at the end of June-22 to 129.88% at the end of Jul-22, however Rural Tele-density decreased from 58.24% to 58.15% during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 54.59% and 45.41% respectively at the end of Jul-22. Detailed statistics of wireless subscriber base is available at **Annexure-I**.

- As on 31st July, 2022, the private access service providers held 90.12% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 9.88%.
- 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, 2022

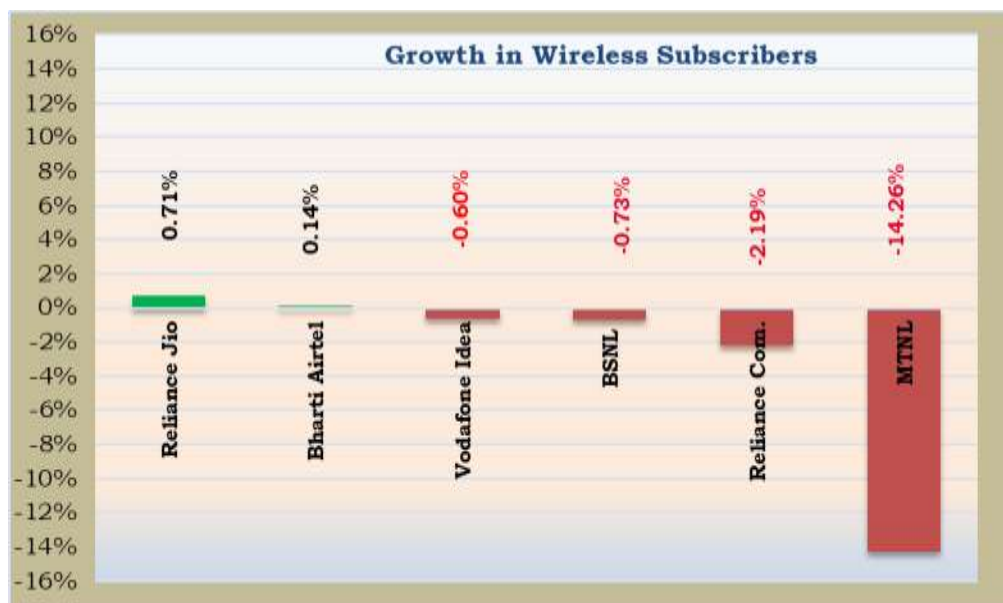


Net Addition in Wireless Subscribers of Access Service Providers in the month of July, 2022



Growth in Wireless Subscribers

Access Service Provider-wise Monthly Growth Rate of Wireless Subscribers in the month of July, 2022



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

Service Area-wise Monthly Growth Rate of Wireless Subscribers in the month of July, 2022

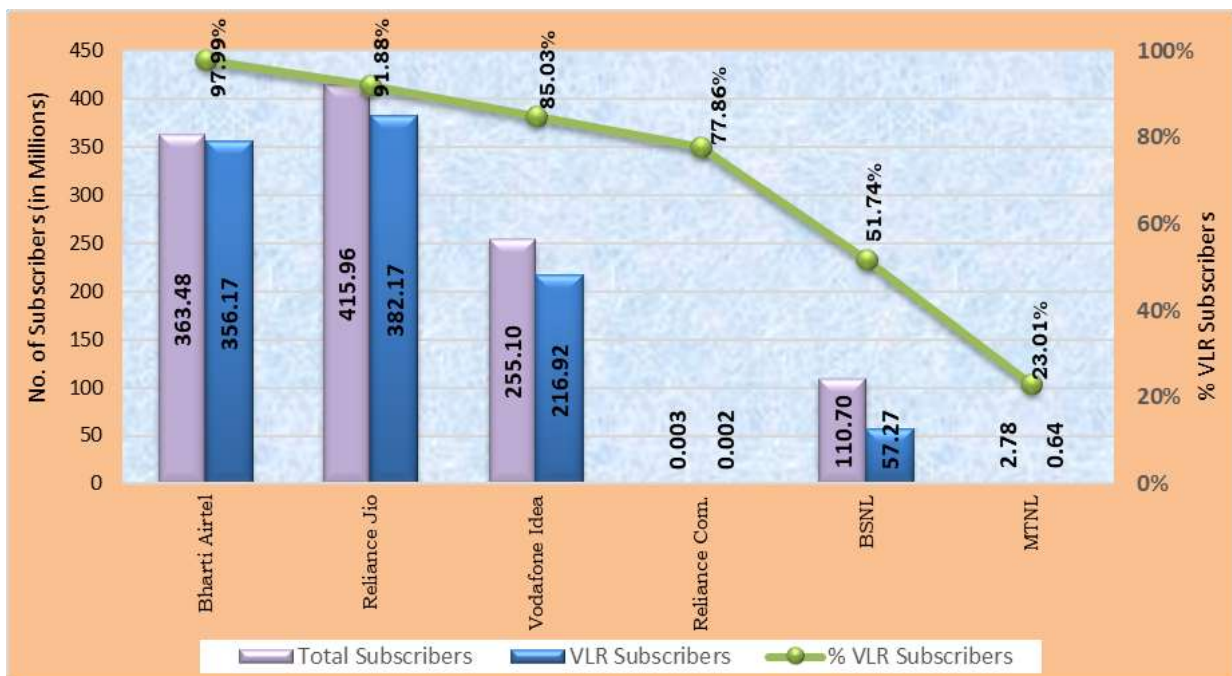


- Except Andhra Pradesh, Kerala, U.P.(E), Gujarat, Mumbai, Delhi, Tamil Nadu and Haryana service areas, all other service areas have showed growth rate in their wireless subscribers during the month of July-22.

IV. Active Wireless Subscribers (VLR Data)

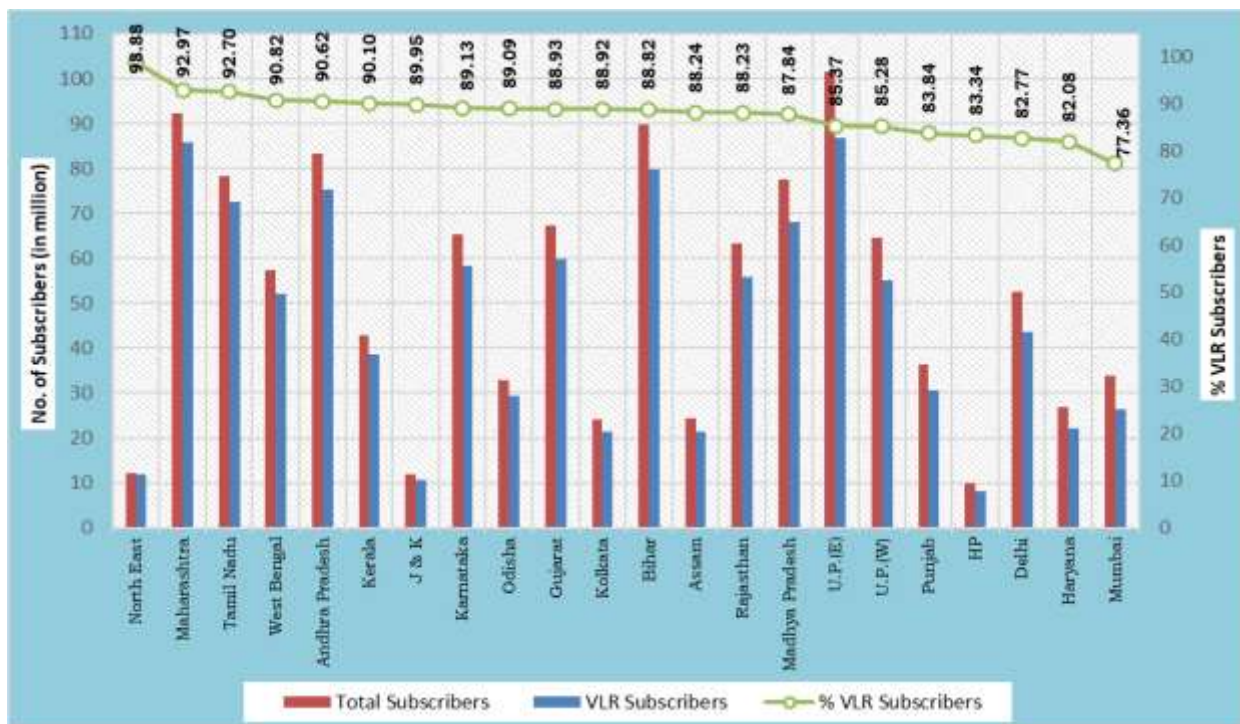
- Out of the total 1,148.03 million wireless subscribers, 1013.18 million wireless subscribers were active on the date of peak VLR in the month of July-22. The proportion of active wireless subscribers was approximately 88.25% of the total wireless subscriber base.
- The detailed statistics on proportion of active wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of July-22 is available at **Annexure-II** and the methodology used for reporting VLR subscribers is available at **Annexure-IV**.

Access Service Provider-wise Percentage of VLR Subscribers in the month of July, 2022



- Bharti Airtel has the maximum proportion 97.99% of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of peak VLR in the month of July-22 and MTNL has the minimum proportion of VLR 23.01% of its HLR during the same period.

Service Area wise percentage of VLR Subscribers in the month of July, 2022



VI. Mobile Number Portability (MNP)

- Intra-service area Mobile number portability (MNP) was implemented first in Haryana service area w.e.f. 25.11.2010 and in the rest of the country w.e.f. 20.01.2011. Inter-Service Area MNP has been implemented in the country w.e.f. 03.07.2015. Now, the wireless telephone subscribers can retain their mobile numbers when they relocate from one service area to another.
- During the month of July-22, a total of 10.23 million requests were received for MNP. Out of total 10.23 million new requests, 5.99 million requests received from Zone-I and 4.24 million requests received from Zone-II. The cumulative MNP requests increased from 714.56 million at the end of June-22 to 724.79 million at the end of July-22, since the implementation of MNP.
- In MNP Zone-I (Northern and Western India), the highest number of requests till date have been received in Maharashtra (about 59.72 million) followed by Uttar Pradesh-East (about 57.69 million) service area.

- In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 55.11 million) followed by Madhya Pradesh (about 53.60 million).

Service Area Wise MNP Status					
Zone - 1			Zone - 2		
Service Area	Number of Porting Requests (in Million)		Service Area	Number of Porting Requests (in Million)	
	Jun-22	July-22		Jun-22	July-22
Delhi	34.40	34.85	Andhra Pradesh	52.83	53.35
Gujarat	48.24	49.03	Assam	5.14	5.21
Haryana	23.62	23.88	Bihar	36.33	37.01
Himachal Pradesh	3.22	3.26	Karnataka	54.52	55.11
Jammu & Kashmir	1.63	1.66	Kerala	18.98	19.18
Maharashtra	58.87	59.72	Kolkata	14.47	14.60
Mumbai	27.87	28.06	Madhya Pradesh	52.70	53.60
Punjab	25.95	26.23	North East	1.77	1.79
Rajasthan	51.05	51.76	Odisha	13.61	13.73
U.P.(East)	56.32	57.69	Tamil Nadu	50.79	51.22
U.P.(West)	44.22	45.23	West Bengal	38.02	38.61
Total	375.38	381.38	Total	339.18	343.42
Total (Zone-1 + Zone-2)				714.56	724.79
Net Addition (July, 2022)			10.23 million		

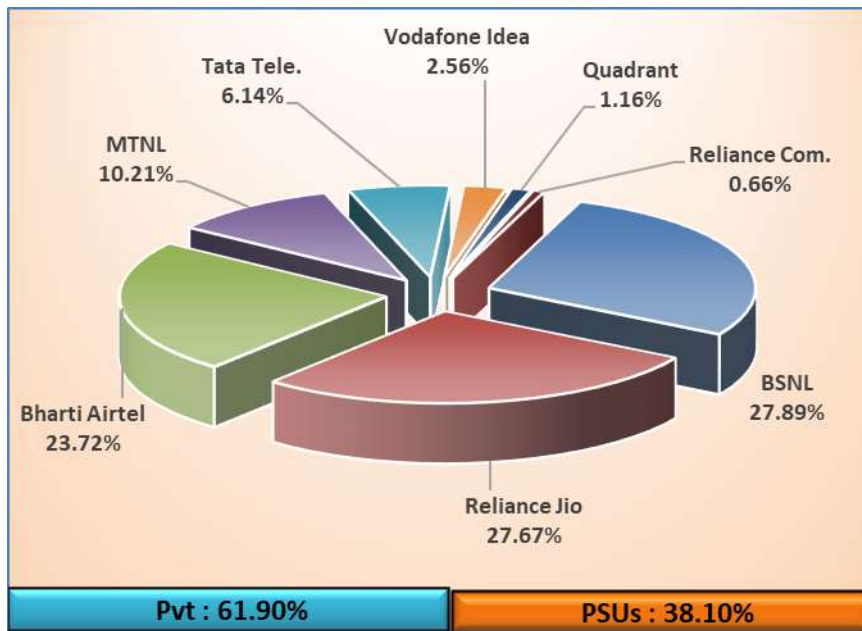
VII. Wireline Subscribers

- Wireline subscribers increased from 25.57 million at the end of June-22 to 25.63 million at the end of July-22. Net increase in the wireline subscriber base was 0.06 million with a monthly growth rate of 0.24%. The share of urban and rural subscribers in total wireline subscribers were 92.31% and 7.69% respectively at the end of July, 2022.
- The Overall Wireline Tele-density in India at the end of July-22 remained same i.e. 1.86% which was at the end of June-22. Urban and Rural Wireline Tele-density were 4.90% and 0.22% respectively during the same period.

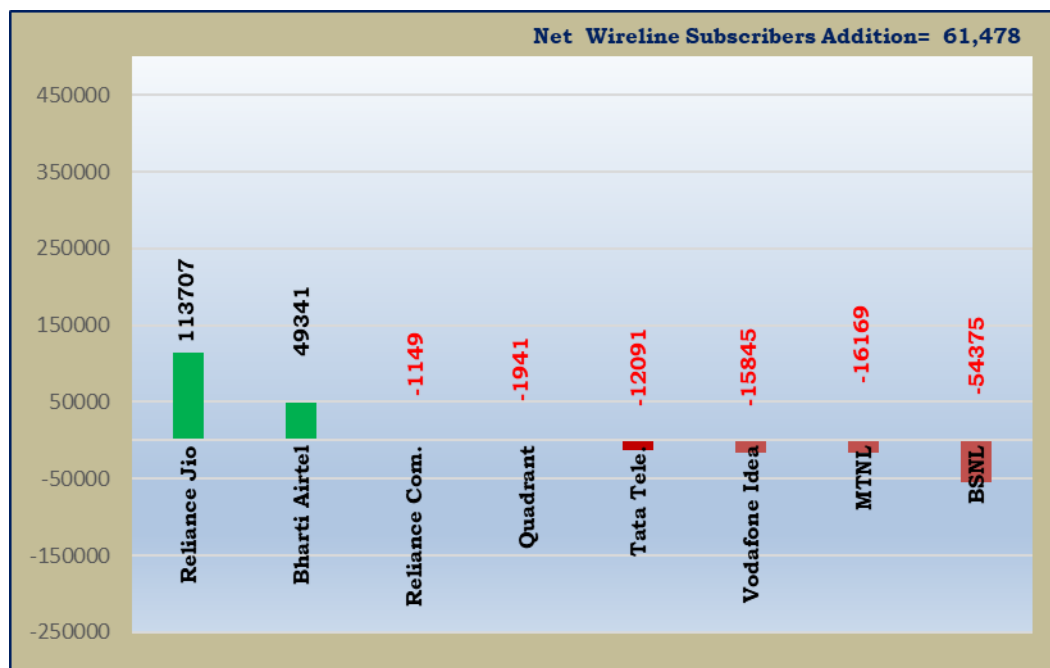
- BSNL and MTNL, the two PSU access service providers, held 38.10% of the wireline market share as on 31st July, 2022.

Detailed statistics of wireline subscriber base are available at **Annexure-III.**

Access Service Provider-wise Market Share of Wireline Subscribers as on 31st July, 2022



Access Service Provider-wise Net Addition/Decline in Wireline Subscribers during the month of July, 2022



VIII. Broadband Subscriber

- As per the information received from 694 operators in July, 2022 in comparison to 666 Operator in June 2022, the total Broadband Subscribers increased from 800.94 million at the end of June-22 to 807.42 million at the end of July-22 with a monthly growth rate of 0.81%. 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, 2022

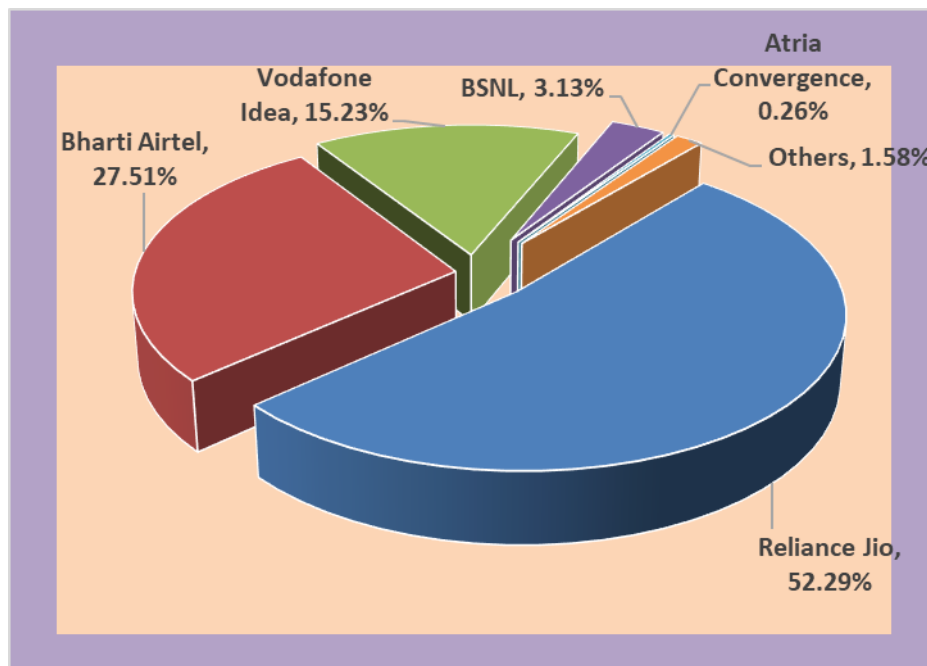
Segment	Broadband subscribers (in million)		Monthly growth rate in the month of July, 2022
	As on 30 th June, 2022	As on 31 st July, 2022	
Wired subscribers	28.71	29.47	2.66%
Mobile devices users (Phones and dongles)	771.13	776.81	0.74%
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	1.10	1.14	3.23%
Total	800.94	807.42	0.81%

- Top five service providers constituted 98.42% market share of the total broadband subscribers at the end of July-22. These service providers were Reliance Jio Infocomm Ltd (422.23 million), Bharti Airtel (222.12 million), Vodafone Idea (122.98 million), BSNL (25.25 million) and Atria Convergence (2.13 million).

Note: Some wireless service providers exclude incidental data users from their subscriber base, based on minimum usage decided by them.

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

**Service Provider-wise Market Share of Broadband
(wired + wireless) Services as on 31st July, 2022**



- As on 31st July, 2022, the top five Wired Broadband Service providers were Reliance Jio Infocomm Ltd (6.27 million), Bharti Airtel (4.99 million), BSNL (3.85 million), Atria Convergence Technologies (2.13 million) and Hathway Cable & Datacom (1.13 million).

As on 31st July, 2022, the top five Wireless Broadband Service providers were Reliance Jio Infocom Ltd (415.96 million), Bharti Airtel (217.13 million), Vodafone Idea (122.97 million), BSNL (21.39 million) and Intech Online Pvt. Ltd. (0.22 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 Fax: 011-23235249
E-mail: advfea2@traigov.in

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

Wireless Subscriber Base

Annexure-I

Circle	Bharti Airtel (including Tata Tele.)		Reliance Com.		Vodafone Idea		BSNL		BSNL (VNO's)		MTNL		Reliance Jio		Total		Net Addition
	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	
Andhra Pradesh	31538725	31662370			13356859	13003669	9012485	8975581					29304929	29515342	83212998	83156962	-56036
Assam	10,201,674	10,267,397			2410870	2364854	3250243	3267601					8246878	8410618	24109665	24310470	200805
Bihar	38,301,968	38,816,333			10101469	10128738	5587868	5627609					34958257	35111834	88949562	89684514	734952
Delhi	16258221	16304284	202	200	16425147	16444876					2151291	1692461	18169458	18175459	53004319	52617280	-387039
Gujarat	11622248	11503148	64	61	23835491	23746631	5510968	5429139					26404219	26583026	67372990	67262005	-110985
Haryana	6202510	6240683	18	13	7796890	7800804	4731997	4674849					8392903	8102509	27124318	26818858	-305460
Himachal Pradesh	3323745	3320505	92	92	539042	535351	2722613	2699499					3195547	3249709	9781039	9805156	24117
J & K	5792073	5835259	0	0	416947	427464	827217	830837					4714476	4820174	11750713	11913734	163021
Karnataka	30777403	30818598	615	610	7473709	7520391	6759194	6706785					20198583	20352298	65209504	65398682	189178
Kerala	7798383	7827365	157	152	15278510	15120953	10319550	10291573					9485240	9591904	42881840	42831947	-49893
Kolkata	5703819	5707578	0	0	6080093	6061242	2158452	2174826					9869978	10075670	23812342	24019316	206974
Madhya Pradesh	15281659	15341652	0	0	19544985	19404464	5818909	5737343					36620014	37020701	77265567	77504160	238593
Maharashtra	20429513	20441867	0	0	27756584	27466723	6618575	6469963					37530857	37999072	92335529	92377625	42096
Mumbai	9525925	9372923	1214	1203	11702577	11597665					1088510	1085252	11853986	11880697	34172212	33937740	-234472
North East	5733657	5744822	0	0	1076669	1062224	1410265	1,404,098					3749449	3824552	11970040	12035696	65656
Odisha	11181653	11214048	36	34	1727691	1705100	6296889	6,303,809					13603769	13696162	32810038	32919153	109115
Punjab	12000312	11993803	115	114	8345197	8302554	5184123	5,153,397					10821536	10925686	36351283	36375554	24271
Rajasthan	22005978	22039493	169	161	10891351	10835672	6441357	6,426,475					23792866	23995947	63131721	63297748	166027
Tamil Nadu	27100431	27138932	291	277	17654593	17638986	9851076	9,610,858	68,601	69,583			24289215	23835394	78964207	78294030	-670177
U.P.(E)	37292054	36775541	0	0	20159319	20069503	10800275	10,717,989					33468171	34020610	101719819	101583643	-136176
U.P.(W)	18661342	18775362	9	8	18406223	18303435	5790363	5,763,968					21619720	21800647	64477657	64643420	165763
West Bengal	16235000	16339802	172	160	15665406	15561404	2361967	2,368,727					22720643	22972072	56983188	57242165	258977
Total	362968293	363481765	3154	3085	256645622	255102703	111454386	110634926	68601	69583	3239801	2777713	413010694	415960083	1147390551	1148029858	639307
Net Addition		513472		-69		-1542919		-819460		982		-462088		2949389	0	639307	
Rural Subscribers	176,326,108	175,208,104	0	0	128897108	127925974	35,813,110	35,652,731	0	0	44962	35373	180819545	182464490	521900833	521286672	-614161

- Note:** 1. The subscribers of M/s Bharti Airtel includes subscribers of M/s Tata Teleservices Ltd.
 2. Virtual Network Operator (VNO) of BSNL has reported its subscriber number from the month of October, 2018.

Proportion of VLR on the date of Peak VLR in the month of July-22 (%)							Annexure-II
Circle	Bharti	BSNL	Vodafone Idea	MTNL	Reliance Com.	Reliance Jio	Total
Andhra Pradesh	98.12	62.23	90.90		-	91.08	90.62
Assam	98.06	42.34	90.01		-	93.58	88.24
Bihar	93.10	47.14	78.27		-	93.80	88.82
Delhi	99.47		66.06	18.15	95.00	88.93	82.77
Gujarat	104.09	46.05	89.53		104.92	90.60	88.93
Haryana	102.99	34.46	85.09		100.00	90.56	82.08
Himachal Pradesh	102.63	38.59	104.40		43.48	97.32	83.34
J & K	92.42	78.88	78.81		-	89.87	89.95
Karnataka	96.13	49.16	87.65		93.77	92.27	89.13
Kerala	103.56	72.49	92.79		101.97	93.78	90.10
Kolkata	93.14	45.99	88.11		-	96.29	88.92
Madhya Pradesh	97.84	47.27	82.04		-	93.03	87.84
Maharashtra	104.81	62.48	85.70		-	97.05	92.97
Mumbai	89.50		69.40	30.59	68.58	79.81	77.36
North East	106.00	57.48	92.16		-	105.26	98.88
Odisha	98.67	54.35	95.26		38.24	96.47	89.09
Punjab	100.29	41.88	82.78		66.67	86.38	83.84
Rajasthan	98.64	42.59	89.77		63.35	90.19	88.23
Tamil Nadu	101.52	70.09	92.65		98.19	91.89	92.70
U.P. (E)	95.91	31.90	85.67		-	90.63	85.37
U.P. (W)	98.02	38.69	85.42		87.50	86.52	85.28
West Bengal	94.59	74.74	87.05		45.63	92.35	90.82
Total	97.99	51.74	85.03	23.01	77.86	91.88	88.25

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.

Wireline Subscriber Base																	Annexure-III		
Service Area	BSNL		MTNL		Bharti Airtel		Reliance Com.		Tata Tele.		Quadrant		Vodafone Idea		Reliance Jio		Total		Net Addition
	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	Jun-22	July-22	
Andhra Pradesh	679728	678186			365092	367718	20731	20814	156504	155653			72645	71985	794850	815166	2089550	2109522	19972
Assam	106,288	106,553			12084	12122	0	0	0	0			2820	2760	114293	117131	235485	238566	3081
Bihar	162,445	161,015			0	0	9	9	8356	8312			1890	1890	302238	313553	474938	484779	9841
Delhi	0	0	1261711	1259702	1768807	1787467	27935	28077	138150	138750			83245	80500	689195	701322	3969043	3995818	26775
Gujarat	373194	366935			160722	162226	2552	2549	76609	76397			51766	47666	428969	425750	1093812	1081523	-12289
Haryana	185121	184779			62763	61897	0	0	31996	31676			330	360	77350	80454	357560	359166	1606
Himachal Pradesh	87779	88025			2261	1787	0	0	1563	1561			30	30	36523	38060	128156	129463	1307
J & K	96398	94895			47619	46507	0	0	0	0			30	30	153130	154877	297177	296309	-868
Karnataka	873995	871239			939345	953479	21608	21106	234558	227408			131482	126992	574699	606852	2775687	2807076	31389
Kerala	1030782	1022512			80870	81692	4273	4229	18899	18856			6990	6960	171776	177572	1313590	1311821	-1769
Kolkata	220248	218304			170958	172826	6161	5983	46538	47010			13525	14095	318002	323460	775432	781678	6246
Madhya Pradesh	272623	267551			368034	374060	5	5	12345	12086			23405	25365	441441	430743	1117853	1109810	-8043
Maharashtra	674857	662159			305339	305167	10111	10106	210639	209014			25663	25893	187492	183055	1414101	1395394	-18707
Mumbai	0	0	1369823	1355663	481375	486075	49154	48715	478692	476651			178216	171291	651576	638240	3208836	3176635	-32201
North East	80733	78790			0	0	0	0	0	0			330	330	98831	102932	179894	182052	2158
Odisha	181004	179284			0	0	4	4	8192	8133			3430	3530	147938	154388	340568	345339	4771
Punjab	310451	308444			190841	193053	2413	2323	14149	14130	298440	296499	2010	2010	191182	197861	1009486	1014320	4834
Rajasthan	286579	287560			148818	157827	3639	3666	12877	13033			15180	15270	266364	261296	733457	738652	5195
Tamil Nadu	1004844	999878			690972	699543	20830	20690	120398	119816			37765	37920	524259	536446	2399068	2414293	15225
U.P.(E)	143780	142154			131779	122755	20	20	8320	8255			16720	16750	309635	319587	610254	609521	-733
U.P.(W)	191436	189560			100935	91754	10	10	4802	4758			3716	3716	338209	348810	639108	638608	-500
West Bengal	240220	240307			0	0	13	13	2634	2631			120	120	158960	163064	401947	406135	4188
Total	7202505	7148130	2631534	2615365	6028614	6077955	169468	168319	1586221	1574130	298440	296499	671308	655463	6976912	7090619	25565002	25626480	61478
Net Addition		-54375		-16169		49341		-1149		-12091		-1941		-15845		113707		61478	
Rural Subscribers	1786531	1785082	0	35	0	0	388	388	32876	32594	21443	21337	0	0	127729	131794	1968967	1971230	2263

Note: - BSNL-FTTH Voice-connections have also been incorporated from the month of May 2021

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.