

**TELECOM REGULATORY AUTHORITY OF INDIA**New Delhi, 17th February, 2022

(www.traigov.in)

Highlights of Telecom Subscription Data as on 31st December, 2021

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1154.62	23.79	1178.41
Net Addition in December, 2021 (Million)	-12.88	0.24	-12.64
Monthly Growth Rate	-1.10%	1.02%	-1.06%
Urban Telephone Subscribers (Million)	633.34	21.86	655.20
Net Addition in December, 2021 (Million)	-5.12	0.24	-4.88
Monthly Growth Rate	-0.80%	1.09%	-0.74%
Rural Telephone Subscribers (Million)	521.28	1.93	523.21
Net Addition in December, 2021 (Million)	-7.76	0.01	-7.76
Monthly Growth Rate	-1.47%	0.29%	-1.46%
Overall Tele-density*(%)	84.17%	1.73%	85.91%
Urban Tele-density*(%)	132.68%	4.58%	137.26%
Rural Tele-density*(%)	58.28%	0.22%	58.50%
Share of Urban Subscribers	54.85%	91.89%	55.60%
Share of Rural Subscribers	45.15%	8.11%	44.40%
Broadband Subscribers (Million)	765.65	26.43	792.08

- ❖ In the month of December, 2021, 8.54 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 652.88 million at the end of November-21 to 661.42 million at the end of December-21, since implementation of MNP.
- ❖ Number of active wireless subscribers (on the date of peak VLR#) in December, 2021 was 1000.63 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.

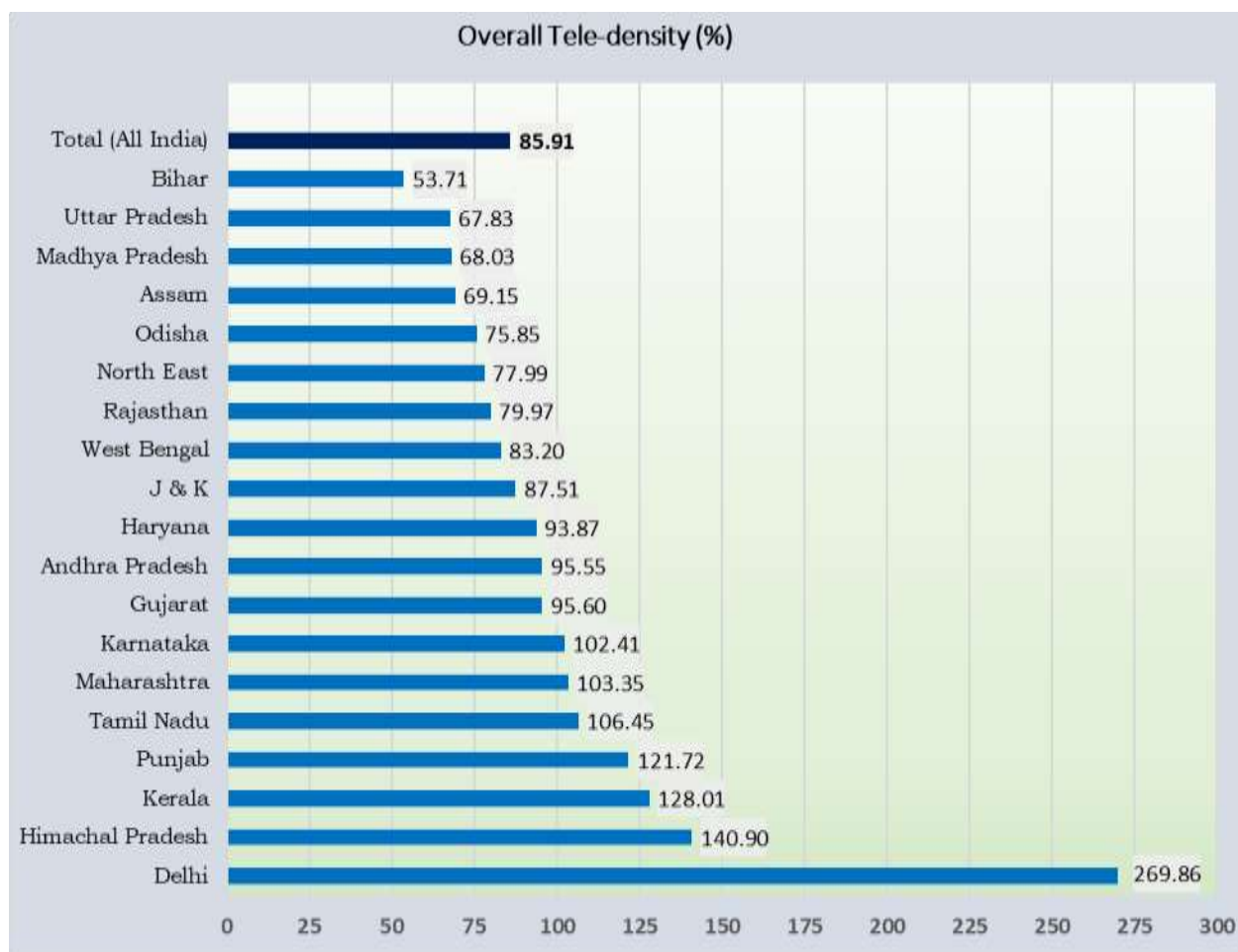
I. Total Telephone Subscribers

- The number of telephone subscribers in India decreased from 1,191.05 million at the end of November-21 to 1,178.41 million at the end of December-21, thereby showing a monthly decline rate of 1.06%. Urban telephone subscription decreased from 660.08 million at the end of November-21 to 655.20 million at the end of December-21 and the rural subscription also decreased from 530.96 million to 523.21 million during the same period. The monthly decline rates of urban and rural telephone subscription were 0.74% and 1.46% respectively during the month of December-21.



- The overall Tele-density in India decreased from 86.90% at the end of November-21 to 85.91% at the end of December-21. The Urban Tele-density decreased from 138.50% at the end of November-21 to 137.26% at the end of December-21 and Rural Tele-density also decreased from 59.39% to 58.50% during the same period. The share of urban and rural subscribers in total number of telephone subscribers at the end of December-21 was 55.60% and 44.40% respectively.

Overall Tele-density (LSA Wise) – As on 31st December, 2021



- 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 December-21. Delhi service area has maximum tele-density of 269.86% and the Bihar service area has minimum tele-density of 53.71% at the end of December-21.

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 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.

II. Category-wise Growth in subscriber base

Circle Category-wise Net Additions in Telephone Subscribers in the month of December 2021

Circle Category	Net additions in the month of December, 2021		Telephone Subscriber base as on 31 st December, 2021	
	Wireline segment	Wireless segment	Wireline segment	Wireless segment
Circle A	1,17,666	-5,337,583	90,99,095	39,20,24,685
Circle B	53,950	-64,11,311	55,04,604	47,24,91,982
Circle C	28,054	-1,70,910	14,27,186	17,89,73,581
Metro	41,317	-9,59,310	77,56,509	11,11,29,371
All India	2,40,987	-1,28,79,114	2,37,87,394	1,15,46,19,619

Circle Category-wise monthly and yearly Growth Rates in Telephone Subscribers in the month of December 2021

Circle Category	Monthly growth rate (%) (November-21 to December-21)		Yearly growth rate (%) (December-20 to December-21)	
	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment
Circle A	1.31%	-1.34%	18.07%	-1.09%
Circle B	0.99%	-1.34%	23.46%	1.36%
Circle C	2.01%	-0.10%	59.88%	0.82%
Metro	0.54%	-0.86%	10.90%	-2.30%
All India	1.02%	-1.10%	18.63%	0.07%

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

III. Wireless subscriber

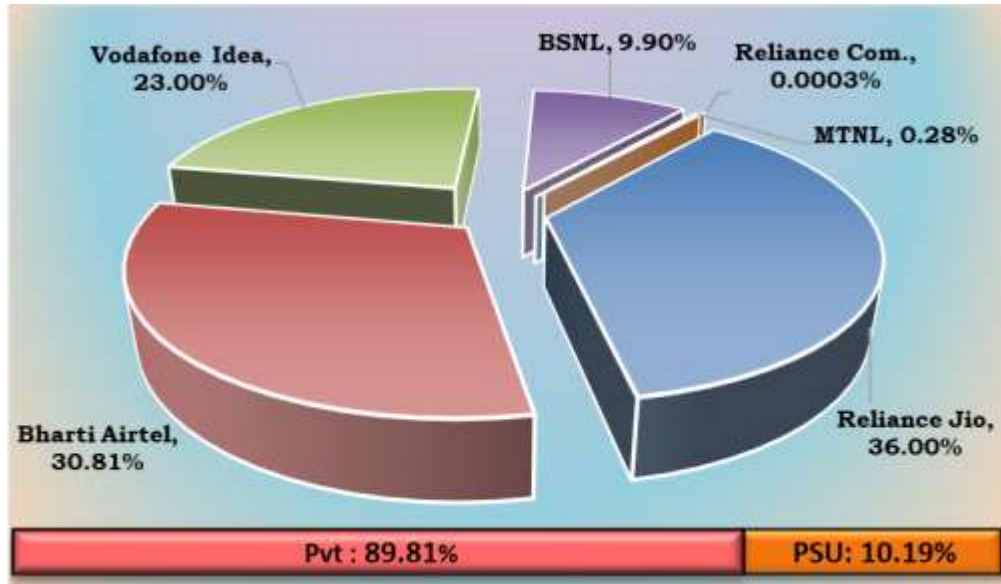
• Total wireless subscribers decreased from 1,167.50 million at the end of November-21 to 1,154.62 million at the end of December-21, thereby registering a monthly decline rate of 1.10%. Wireless subscription in urban areas decreased from 638.46 million at the end of November-21 to 633.34 million at the end of December-21, and wireless subscription in rural areas also decreased from 529.04 million to 521.28 million during the same period. Monthly decline rates of urban and rural wireless subscription were 0.80% and 1.47% respectively.



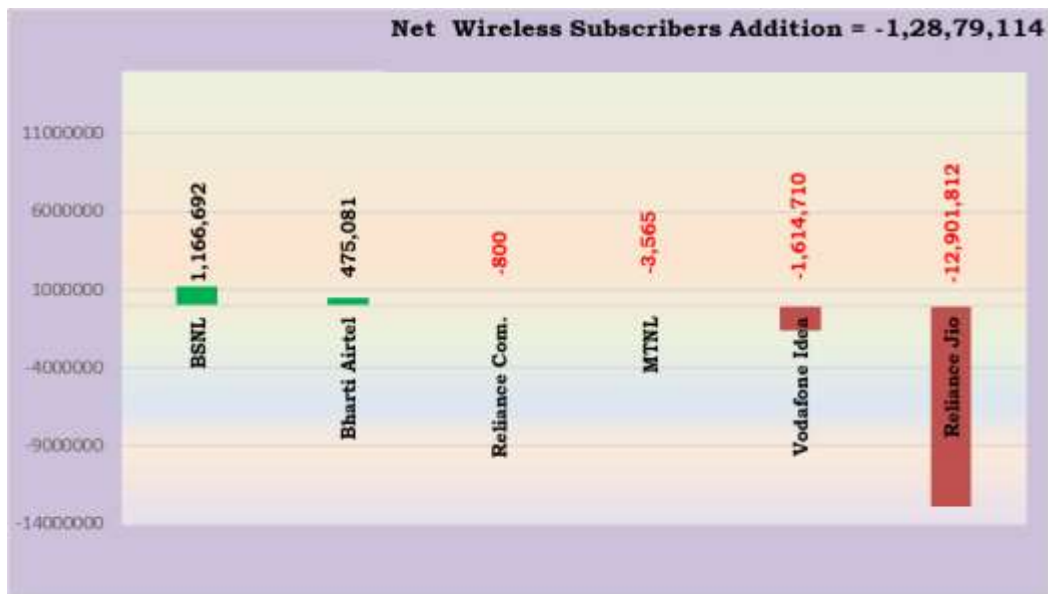
• The Wireless Tele-density in India decreased from 85.18% at the end of November-21 to 84.17% at the end of December-21. The Urban Wireless Tele-density decreased from 133.96% at the end of November-21 to 132.68% at the end of December-21 and Rural Tele-density also decreased from 59.17% to 58.28% during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 54.85% and 45.15% respectively at the end of December-21. Detailed statistics of wireless subscriber base is available at **Annexure-I**.

- As on 31st December, 2021, the private access service providers held 89.81% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 10.19%.
- 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 December, 2021



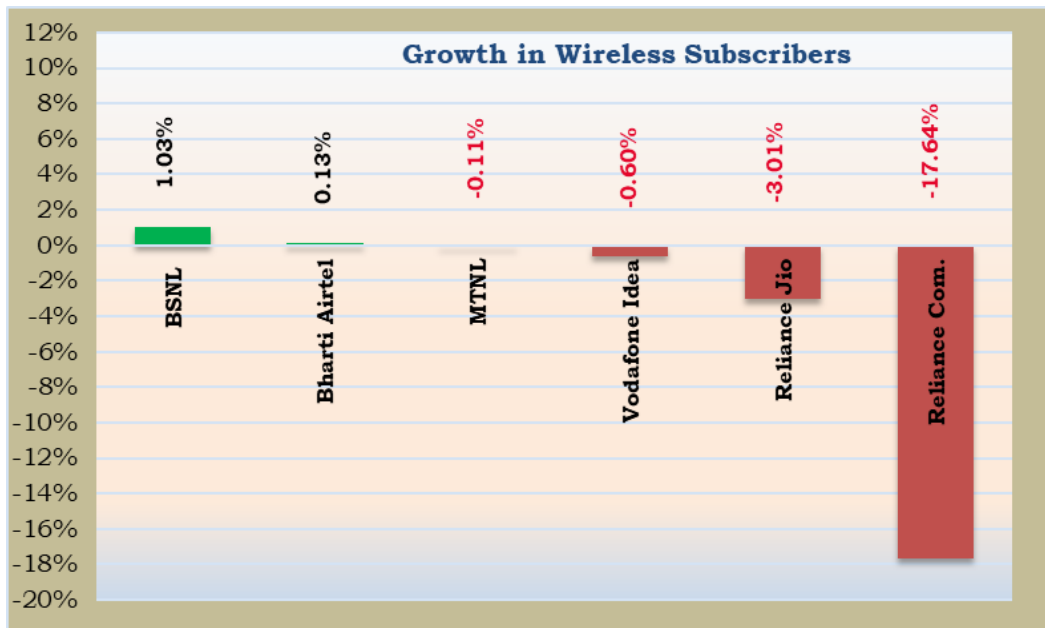
Net Addition/decline in Wireless Subscribers of Access Service Providers in the month of December, 2021



- Note:**
- M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd.
 - Virtual Network Operator (VNO) of BSNL has started reporting of its subscribers from the month of October, 2018 and the same has been included in the subscriber base of BSNL.

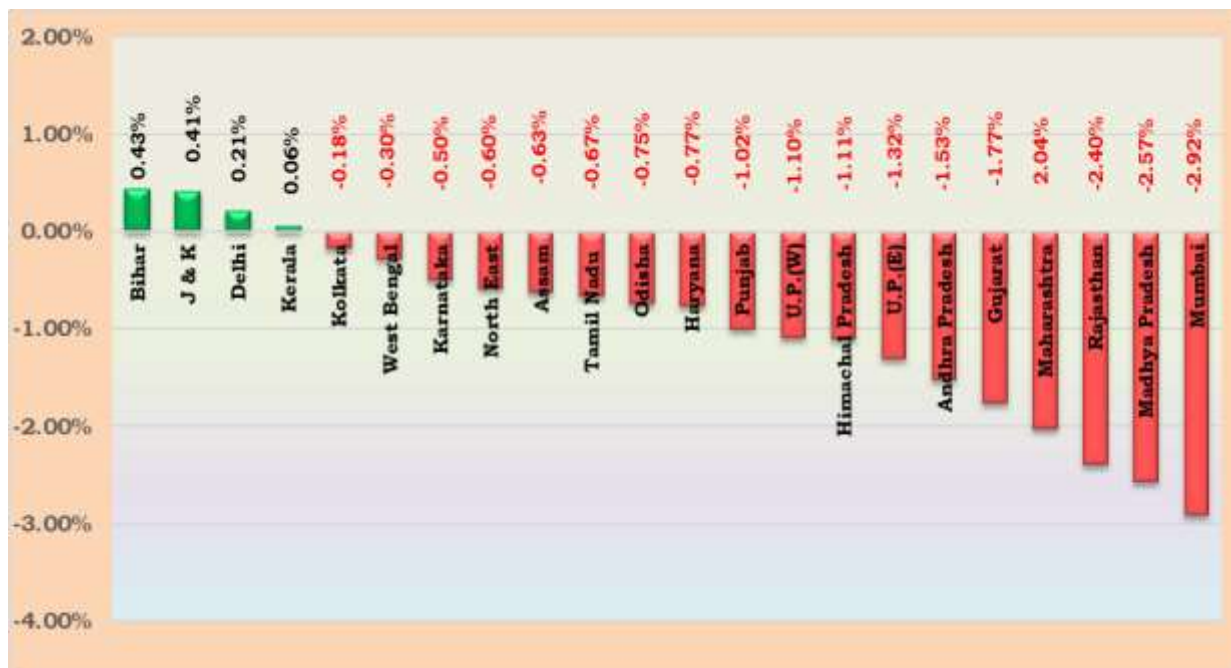
IV. Growth in Wireless Subscribers

Access Service Provider-wise Monthly Growth Rate of Wireless Subscribers in the month of December, 2021



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

Service Area-wise Monthly Growth Rate of Wireless Subscribers in the month of December, 2021

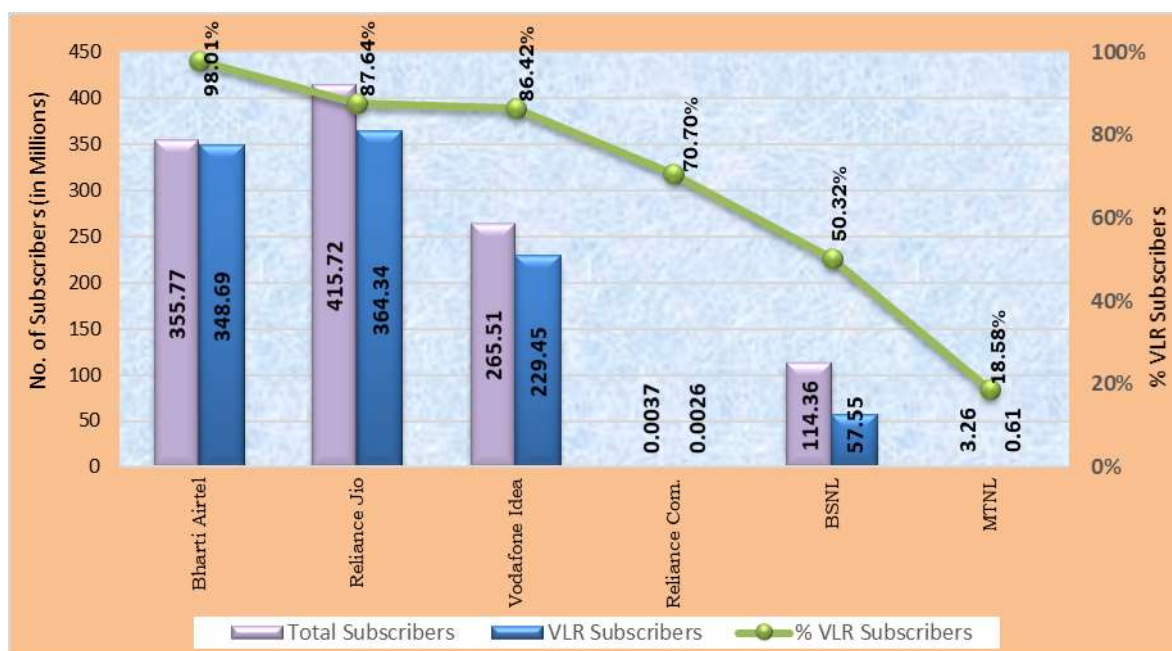


- Except Bihar, Jammu & Kashmir, Delhi and Kerala service areas, all other service areas have showed decline in their wireless subscribers during the month of December-21.

V. Active Wireless Subscribers (VLR Data)

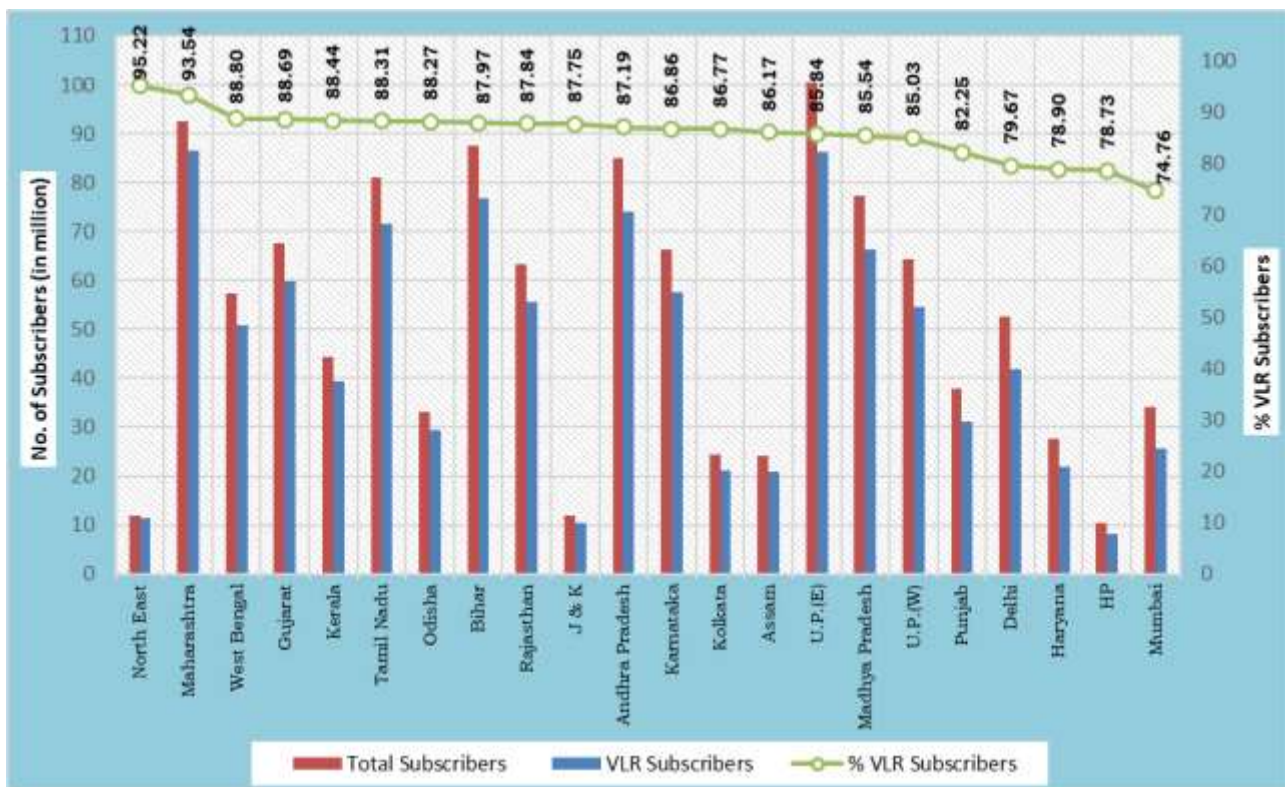
- Out of the total wireless subscribers (1,154.62 million), 1000.63 million wireless subscribers were active on the date of peak VLR in the month of December-21. The proportion of active wireless subscribers was approximately 86.66% of the total wireless subscriber base.
- The detailed statistics on proportion of active wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of December-21 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 December, 2021



- Bharti Airtel has the maximum proportion (98.01%) of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of peak VLR in the month of December-21 and MTNL has the minimum proportion of VLR (18.58%) of its HLR during the same period.

Service Area wise percentage of VLR Subscribers in the month of December, 2021



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 December-21, a total of 8.54 million requests were received for MNP. Out of total 8.54 million new requests, 4.91 million requests received from Zone-I and 3.63 million requests received from Zone-II. The cumulative MNP requests increased from 652.88 million at the end of November-21 to 661.42 million at the end of December-21, 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 54.73 million) followed by Uttar Pradesh-East (about 49.42 million) service area.

- In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 51.72 million) followed by Andhra Pradesh (about 50.04 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)	
	Nov-21	Dec-21		Nov-21	Dec-21
Delhi	31.83	32.23	Andhra Pradesh	49.57	50.04
Gujarat	44.03	44.55	Assam	4.52	4.58
Haryana	21.65	21.87	Bihar	32.04	32.60
Himachal Pradesh	2.98	3.01	Karnataka	51.27	51.72
Jammu & Kashmir	1.44	1.46	Kerala	17.39	17.61
Maharashtra	54.02	54.73	Kolkata	13.52	13.64
Mumbai	26.78	26.94	Madhya Pradesh	47.36	48.06
Punjab	24.22	24.46	North East	1.67	1.69
Rajasthan	46.94	47.46	Odisha	12.66	12.79
U.P.(East)	48.18	49.42	Tamil Nadu	47.99	48.42
U.P.(West)	38.41	39.25	West Bengal	34.40	34.89
Total	340.48	345.39	Total	312.39	316.03
Total (Zone-1 + Zone-2)				652.88	661.42
Net Addition (December, 2021)			8.54 million		

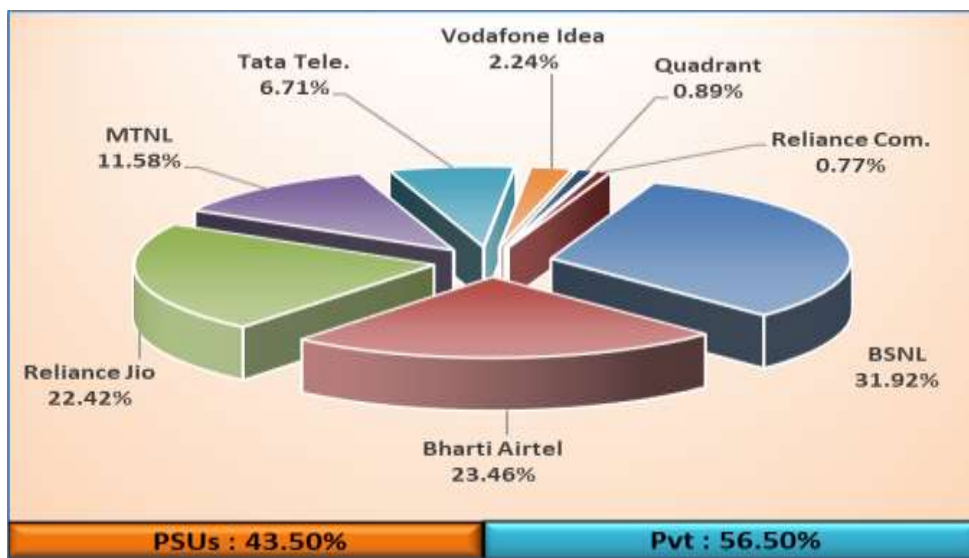
VII. Wireline Subscribers

- Wireline subscribers increased from 23.55 million at the end of November-21 to 23.79 million at the end of December-21. Net increase in the wireline subscriber base was 0.24 million with a monthly growth rate of 1.02%. The share of urban and rural subscribers in total wireline subscribers were 91.89% and 8.11% respectively at the end of December, 2021.
- The Overall Wireline Tele-density in India, increased from 1.72% at the end of November-21 to 1.73% at the end of December-21. Urban and Rural Wireline Tele-density were 4.58% and 0.22% respectively during the same period.

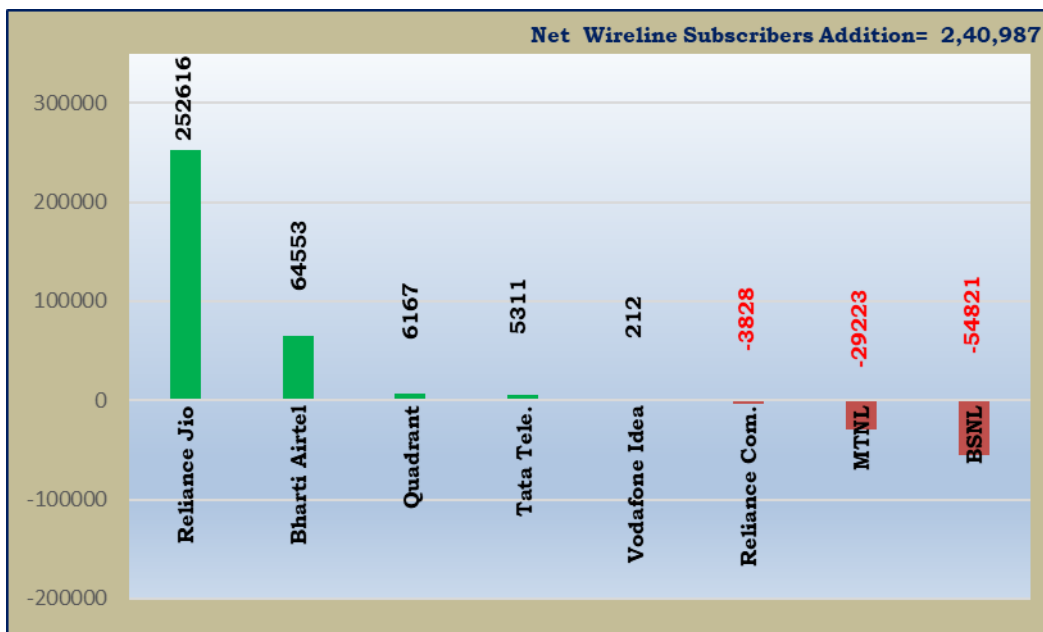
- BSNL and MTNL, the two PSU access service providers, held 43.50% of the wireline market share as on 31st December, 2021.

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

Access Service Provider-wise Market Share of Wireline Subscribers as on 31st December, 2021



Access Service Provider-wise Net Addition/Decline in Wireline Subscribers during the month of December, 2021



VIII. Broadband (\geq 512 Kbps download)

- As per the information received from 616 operators in December 2021 in comparison to 592 Operator in November 2021, the total Broadband Subscribers decreased from 801.60 million at the end of November-21 to 792.08 million at the end of December-21 with a monthly decline rate of 1.19%. Segment-wise broadband subscribers and their monthly growth rates are as below: -

Segment-wise Broadband Subscribers and Monthly Growth Rate in the month of December, 2021

Segment	Broadband subscribers (in million)		Monthly growth rate in the month of December-21
	As on 30 th November, 2021	As on 31 st December, 2021	
Wired subscribers	24.42	26.43	8.24%
Mobile devices users (Phones and dongles)	775.93	764.52*	-1.47%
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT)	1.26	1.13	-9.74%
Total	801.60	792.08	-1.19%

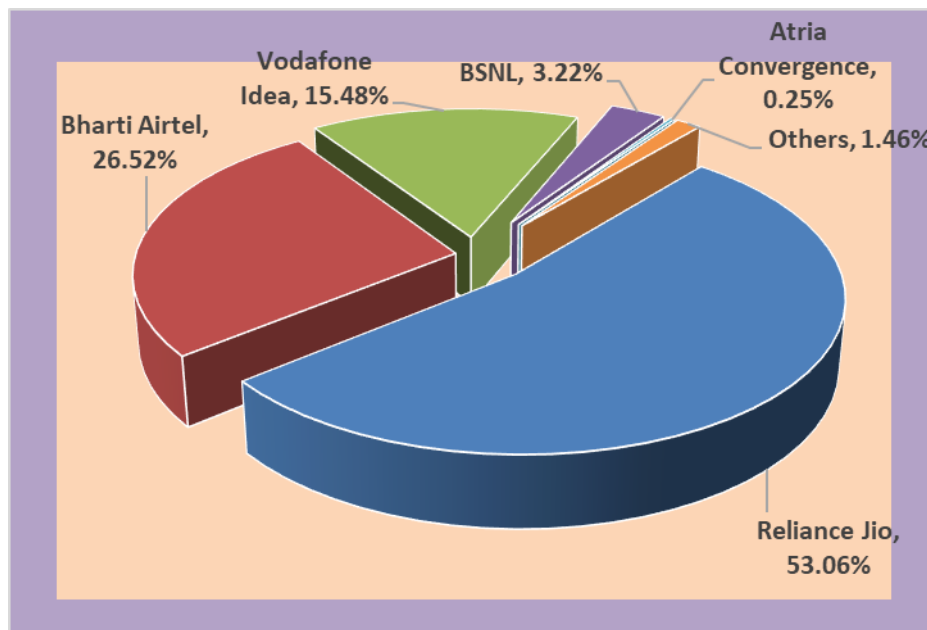
* Major changes due to decrease in RJIL Wireless Subscribers

- Top five service providers constituted 98.54% market share of the total broadband subscribers at the end of December-21. These service providers were Reliance Jio Infocomm Ltd (420.28 million), Bharti Airtel (210.07 million), Vodafone Idea (122.62 million), BSNL (25.54 million) and Atria Convergence (2.01 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 December 2021**



- As on 31st December, 2021, the top five Wired Broadband Service providers were Reliance Jio Infocomm Ltd (4.57 million), Bharti Airtel (4.20 million), BSNL (4.07 million), Atria Convergence Technologies (2.01 million) and Hathway Cable & Datacom (1.08 million).

As on 31st December, 2021, the top five Wireless Broadband Service providers were Reliance Jio Infocomm Ltd (415.72 million), Bharti Airtel (205.87 million), Vodafone Idea (122.14 million), BSNL (21.47 million) and Intech Online Pvt. Ltd. (0.20 million).

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Secretary, TRAI**

Wireless Subscriber Base

Annexure-I

Circle	Bharti Airtel (including Tata)		Reliance Com.		Vodafone Idea		BSNL		BSNL (VNO's)		MTNL		Reliance Jio		Total		Net Addition
	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	
Andhra Pradesh	31298106	31441078			14417213	14241991	9182467	9250321					31335317	29977838	86233103	84911228	-1321875
Assam	9,813,893	9,863,684			2808749	2751705	3127340	3148812					8636783	8469432	24386765	24233633	-153132
Bihar	36,212,977	36,617,800			10747890	10577260	5453955	6055483					34626924	34164308	87041746	87414851	373105
Delhi	15876083	16083381	250	208	15823733	15994885					2154158	2153573	18629786	18363659	52484010	52595706	111696
Gujarat	11700880	11706924	142	109	24075093	23790340	5558866	5557094					27355288	26419800	68690269	67474267	-1216002
Haryana	5702016	5758268	19	19	7896091	7912039	4962800	5008936					9299197	8964965	27860123	27644227	-215896
Himachal Pradesh	3328678	3346476	93	93	589772	581906	2710918	2731558					3831736	3685363	10461197	10345396	-115801
J & K	5513815	5585762	0	0	490285	460394	1313545	1314310					4434671	4440438	11752316	11800904	48588
Karnataka	30400959	30515006	728	691	8362821	8249302	6953582	6883854					20893192	20628775	66611282	66277628	-333654
Kerala	7563895	7655543	187	185	16499736	16408387	10675401	10713151					9602106	9590349	44341325	44367615	26290
Kolkata	5495146	5551034	4	2	6355564	6313538	2236564	2282912					10311973	10207503	24399251	24354989	-44262
Madhya Pradesh	15406932	15204073	0	0	20566331	20461601	5967668	6016461					37474968	35689111	79415899	77371246	-2044653
Maharashtra	20236300	20034296	0	0	28900729	28665552	6594366	6626836					38599140	37083113	94330535	92409797	-1920738
Mumbai	9426690	9457931	2020	1380	11603364	11587899					1106687	1103707	13066659	12027759	35205420	34178676	-1026744
North East	5504889	5541403	0	0	1235345	1217071	1350345	1355620					3984784	3889037	12075363	12003131	-72232
Odisha	10986849	11054462	74	66	2031253	2002780	6246307	6230390					14162621	13887968	33427104	33175666	-251438
Punjab	11576445	11698618	134	144	8932142	8871081	5307331	5340564					12372060	11889299	38188112	37799706	-388406
Rajasthan	21506066	21437654	162	183	11512840	11463411	6178117	6339200					25692343	24090835	64889528	63331283	-1558245
Tamil Nadu	27848022	28022805	328	317	18157872	18029076	9932629	9948483	59,984	51,438			25498244	24899646	81497079	80951765	-545314
U.P.(E)	36545014	35978842	0	0	20548863	20531856	11120915	11135129					33590714	32816775	101805506	100462602	-1342904
U.P.(W)	18068668	17844869	27	21	19123461	19033068	5651015	5707962					22079143	21620210	64922314	64206130	-716184
West Bengal	15282211	15369706	366	316	16449885	16369180	2607548	2659841					23140476	22910130	57480486	57309173	-171313
Total	355294534	355769615	4534	3734	267129032	265514322	113131679	114306917	59984	51438	3260845	3257280	428618125	415716313	1167498733	1154619619	-12879114
Net Addition		475081		-800		-1614710		1175238		-8546		-3565		-12901812	0	-12879114	
Rural Subscribers	171,327,023	170,148,053	0	0	135298593	134325487	36,474,853	36,827,143	0	0	45022	45010	185894234	179930365	529039725	521276058	-7763667

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 December-21 (%)							Annexure-II
Circle	Bharti	BSNL	Vodafone Idea	MTNL	Reliance Com.	Reliance Jio	Total
Andhra Pradesh	98.59	57.37	89.82		-	83.19	87.19
Assam	96.77	44.04	87.38		-	89.09	86.17
Bihar	94.33	40.17	82.42		-	91.36	87.97
Delhi	96.03		74.81	11.96	95.19	77.53	79.67
Gujarat	102.84	46.95	91.58		88.99	88.59	88.69
Haryana	108.78	33.41	87.90		78.95	77.19	78.90
Himachal Pradesh	101.73	37.08	105.23		31.18	84.52	78.73
J & K	92.69	52.54	81.12		-	92.64	87.75
Karnataka	94.97	49.28	84.57		87.55	88.31	86.86
Kerala	100.84	71.72	92.03		92.43	91.10	88.44
Kolkata	96.87	42.47	88.11		50.00	90.36	86.77
Madhya Pradesh	96.41	43.26	82.25		-	89.92	85.54
Maharashtra	106.07	58.90	89.78		-	95.86	93.54
Mumbai	84.53		70.32	31.50	64.64	75.33	74.76
North East	102.26	62.02	87.93		-	99.04	95.22
Odisha	98.83	56.87	89.81		31.82	93.73	88.27
Punjab	103.81	41.84	82.38		63.19	79.09	82.25
Rajasthan	99.16	43.74	90.65		60.11	88.03	87.84
Tamil Nadu	94.79	69.36	94.04		93.06	84.46	88.31
U.P. (E)	97.99	32.02	87.52		-	89.74	85.84
U.P. (W)	104.56	39.09	83.43		47.62	82.46	85.03
West Bengal	96.43	66.16	86.27		33.23	88.13	88.80
Total	98.01	50.32	86.42	18.58	70.70	87.64	86.66

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	
	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21	Nov-21	Dec-21		
Andhra Pradesh	683522	685587			329515	331146	20362	20421	156268	156777			62400	61800	581604	612321	1833671	1868052	34381	
Assam	102,769	102,699			0	0	0	0	0	0			3360	3090	79695	84138	185824	189927	4103	
Bihar	178,936	178,530			0	0	19	20	7817	7821			1740	1740	200459	213702	388971	401813	12842	
Delhi	0	0	1295076	1292016	1708394	1726905	30130	29875	137860	138496			85451	86377	510231	529284	3767142	3802953	35811	
Gujarat	436908	426891			139250	141669	3540	3466	76107	77024			39296	43306	325465	336570	1020566	1028926	8360	
Haryana	182355	182248			44207	39709	0	0	33713	33788			360	360	58215	60652	318850	316757	-2093	
Himachal Pradesh	88334	87852			0	0	0	0	1620	1587			30	30	24642	26389	114626	115858	1232	
J & K	105788	104446			35379	34236	0	0	0	0			30	30	120796	126060	261993	264772	2779	
Karnataka	870560	871076			855780	876762	24407	23731	242431	245416			96617	93657	402200	429875	2491995	2540517	48522	
Kerala	1069835	1062807			74351	74927	5030	4838	18712	18668			8740	8770	124352	130981	1301020	1300991	-29	
Kolkata	394976	389729			164942	167235	6774	6516	45661	45924			9910	9930	222091	234916	844354	854250	9896	
Madhya Pradesh	291409	289096			333077	339682	5	95	10906	10951			8050	9500	298016	314866	941463	964190	22727	
Maharashtra	749978	736465			222184	240718	11074	10683	215223	213806			25093	24673	140045	145434	1363597	1371779	8182	
Mumbai	0	0	1488736	1462573	456620	461513	55305	53726	479387	480526			109795	107871	513853	533097	3103696	3099306	-4390	
North East	81557	80197			0	0	0	0	0	0			330	330	66812	70448	148699	150975	2276	
Odisha	193146	190624			0	0	6	4	8264	8353			3570	3670	94033	101190	299019	303841	4822	
Punjab	258750	257504			176966	179032	1668	1668	13153	13223	205578	211745	2070	2100	138885	145064	797070	810336	13266	
Rajasthan	301005	296733			126426	128159	4121	4007	12102	12197			15080	15200	186927	195944	645661	652240	6579	
Tamil Nadu	1036242	1033111			646280	650686	23758	23321	118128	117937			38210	37880	408982	426886	2271600	2289821	18221	
U.P.(E)	189592	187383			117606	110259	20	20	7875	7979			20070	20070	227757	239448	562920	565159	2239	
U.P.(W)	203375	200908			85817	78709	7	7	4347	4427			3220	3250	240897	254497	537663	541798	4135	
West Bengal	229424	229754			0	0	12	12	2425	2410			120	120	114026	120837	346007	353133	7126	
Total	7648461	7593640	2783812	2754589	5516794	5581347	186238	182410	1591999	1597310	205578	211745	533542	533754	5079983	5332599	23546407	23787394	240987	
Net Addition		-54821		-29223		64553		-3828		5311		6167		212		252616		240987		
Rural Subscribers	1806426	1801564	0	0	0	0	180	180	38181	37943	24071	23685	0	0	55011	65993	1923869	1929365	5496	

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.