(Press Release No.23/2022)

Information Note to the Press





TELECOM REGULATORY AUTHORITY OF INDIA

New Delhi, 19th April, 2022 (www.trai.gov.in)

Highlights of Telecom Subscription Data as on 28th February, 2022

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1141.53	24.52	1166.05
Net Addition in February, 2022 (Million)	-3.72	0.31	-3.41
Monthly Growth Rate	-0.32%	1.27%	-0.29%
Urban Telephone Subscribers (Million)	625.19	22.57	647.76
Net Addition in February, 2022 (Million)	-1.93	0.31	-1.62
Monthly Growth Rate	-0.31%	1.40%	-0.25%
Rural Telephone Subscribers (Million)	516.34	1.94	518.29
Net Addition in February, 2022 (Million)	-1.79	0.00	-1.79
Monthly Growth Rate	-0.34%	-0.20%	-0.34%
Overall Tele-density*(%)	83.10%	1.78%	84.88%
Urban Tele-density*(%)	130.57%	4.71%	135.28%
Rural Tele-density*(%)	57.70%	0.22%	57.91%
Share of Urban Subscribers	54.77%	92.07%	55.55%
Share of Rural Subscribers	45.23%	7.93%	44.45%
Broadband Subscribers (Million)	756.75	26.63	783.37

- ❖ In the month of February, 2022, 9.16 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 670.95 million at the end of January-22 to 680.11 million at the end of February-22, since implementation of MNP.
- ❖ Number of active wireless subscribers (on the date of peak VLR[#]) in February, 2022 was 1016.09 million.

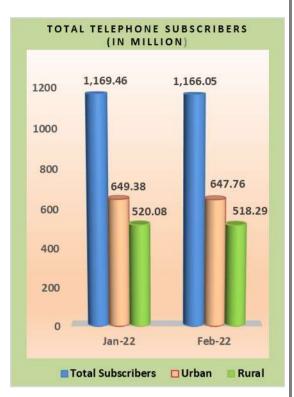
Note:

- 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

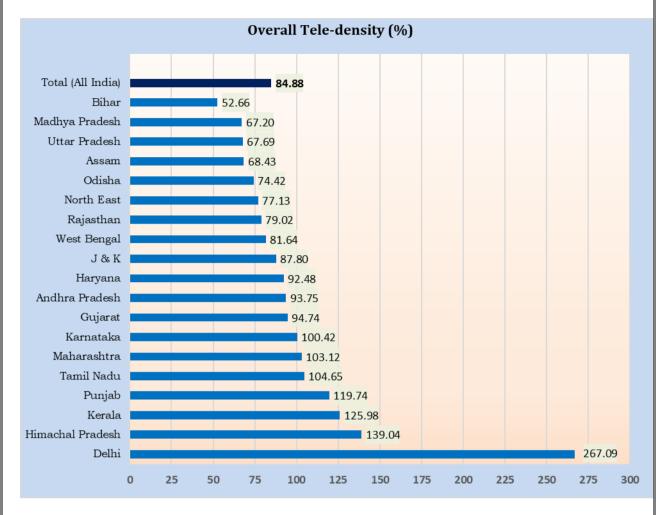
• The number of telephone subscribers in India decreased from 1,169.46 million at the end of January-22 to 1,166.05 million at the end of February-22, thereby showing a monthly decline rate of 0.29%. Urban telephone subscription decreased from 649.38 million at the end of January-22 to 647.76 million at the end of February-22 and the rural subscription also decreased from 520.08 million to 518.29 million during the same period. The monthly decline rates of urban and rural telephone subscription were 0.25% and 0.34% respectively during the month of February-22.





• The overall Tele-density in India decreased from 85.19% at the end of January-22 to 84.88% at the end of February-22. The Urban Tele-density decreased from 135.83% at the end of January-22 to 135.28% at the end of February-22 and Rural Tele-density also decreased from 58.13% to 57.91% during the same period. The share of urban and rural subscribers in total number of telephone subscribers at the end of February-22 was 55.55% and 44.45% respectively.





• As may be seen in the above chart, eight LSA have less tele-density than the all India average tele-density at the end of February-22. Delhi service area has maximum tele-density of 267.09% and the Bihar service area has minimum tele-density of 52.66% at the end of February-22.

Notes: -

- 1. Population data/projections are available state wise only.
- 2. Tele-density figures are derived from the telephone subscriber data provided by the access service providers and the projection of population from the "Report of the Technical Group on Population Projections for India and States 2011 2036, which is available under the link 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.

II. Category-wise Growth in subscriber base

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

Circle		in the month ary, 2022	Telephone Subscriber base as on 28 th February, 2022				
Category	Wireline segment	Wireless segment	Wireline segment	Wireless segment			
Circle A	1,24,209	-17,69,069	93,57,243	38,69,32,633			
Circle B	97,737	-10,75,978	57,95,455	46,81,09,731			
Circle C	36,348	-4,93,989	15,06,006	17,63,59,493			
Metro	49,479	-3,78,316	78,59,966	11,01,24,990			
All India	3,07,773	-37,17,352	2,45,18,670	1,14,15,26,847			

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

Circle		owth rate (%) to February-22)	Yearly growth rate (%) (February-21 to February-22)				
Category	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment			
Circle A	1.35%	-0.46%	21.44%	-3.24%			
Circle B	1.72%	-0.23%	29.24%	-0.82%			
Circle C	2.47%	-0.28%	63.41%	-1.60%			
Metro	0.63%	-0.34%	11.09%	-5.55%			
All India	1.27%	-0.32%	21.46%	-2.24%			

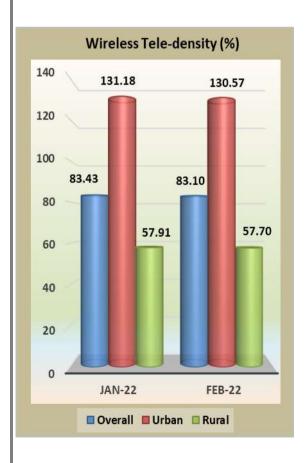
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, both on monthly and yearly basis, all circles have registered decline 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 1,145.24 million at the end of January-22 to 1,141.53 million at the end of February-22, thereby registering a monthly decline rate of 0.32%. Wireless subscription in urban areas decreased from 627.12 million at the end of January-22 to 625.19 million at the end of February-22 and wireless subscription in rural areas also decreased from 518.13 million to 516.34 million during the same period. Monthly decline rates of urban and rural wireless subscription were 0.31% and 0.34% respectively.

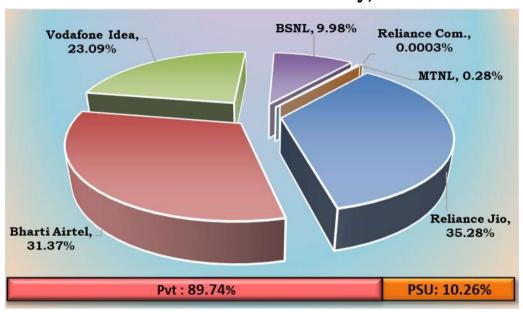




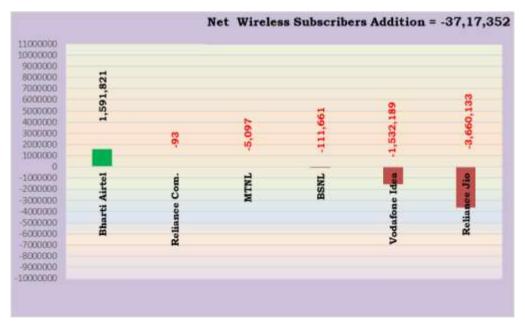
• The Wireless Tele-density in India decreased from 83.43% at the end of January-22 to 83.10% at the end of February-22. The Urban Wireless Teledensity decreased from 131.18% at the end of January-22 to 130.57% at the end of February-22 and Rural Tele-density also decreased from 57.91% to 57.70% during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 54.77% and 45.23% respectively at the end of February-22. Detailed statistics of wireless subscriber base is available at **Annexure-I**.

- As on 28th February, 2022, the private access service providers held 89.74% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 10.26%.
- 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 28th February, 2022



Net Addition/decline in Wireless Subscribers of Access Service Providers in the month of February, 2022



Note: 1. M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd.

2. 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.

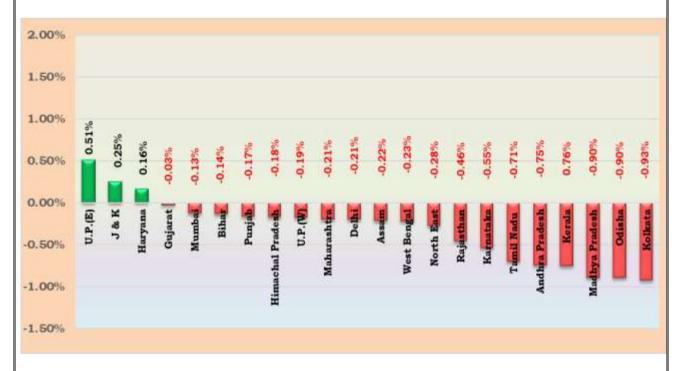
IV. Growth in Wireless Subscribers

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



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

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

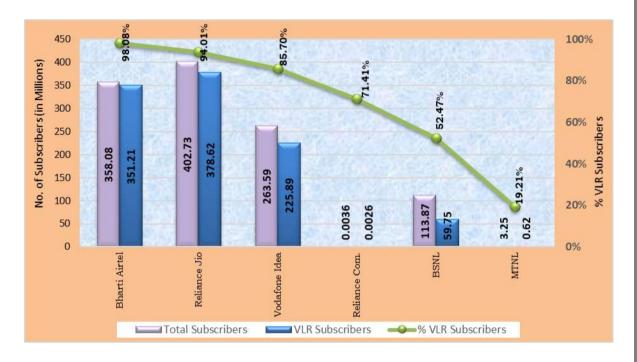


• Except Uttar Pradesh (E), Jammu & Kashmir and Haryana service areas, all other service areas have showed decline in their wireless subscribers during the month of February-22.

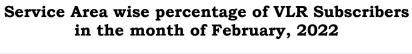
V. Active Wireless Subscribers (VLR Data)

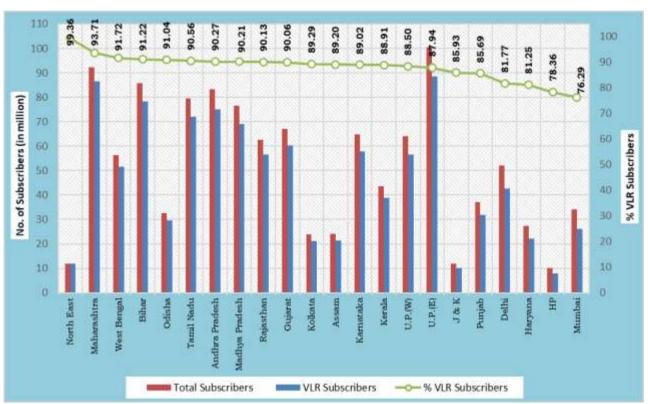
- Out of the total 1,141.53 million wireless subscribers, 1016.09 million wireless subscribers were active on the date of peak VLR in the month of February-22. The active wireless proportion of subscribers approximately was 89.01% of the total wireless subscriber base.
- The detailed statistics on proportion active of wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of February-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 February, 2022



- Bharti Airtel has the maximum proportion 98.08% of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of
- peak VLR in the month of February-22 and MTNL has the minimum proportion of VLR 19.21% of its HLR during the same period.





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 February-22, a total of 9.16 million requests were received for MNP. Out of total 9.16 million new requests, 4.57 million requests received from Zone-I and 4.59 million requests received from Zone-II. The cumulative MNP requests increased from 670.95 million at the end of January-22 to 680.11 million at the end of February-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 56.02 million) followed by Uttar Pradesh-East (about 51.60 million) service area.

• In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 52.77 million) followed by Andhra Pradesh (about 51.03 million).

Service Area Wise MNP Status									
Zo	ne -1	Zone – 2							
Service Area	Number of Requests (i		Service Area	Number of Porting Requests (in Million)					
	Jan-22 Feb-22			Jan-22	Feb-22				
Delhi	32.61	32.87	Andhra Pradesh	50.55	51.03				
Gujarat	45.13	46.04	Assam	4.63	4.90				
Haryana	22.13	22.64	Bihar	33.30	33.94				
Himachal Pradesh	3.05	3.08	Karnataka	52.18	52.77				
Jammu & Kashmir	1.49	1.52	Kerala	17.83	18.24				
Maharashtra	55.53	56.02	Kolkata	13.77	13.99				
Mumbai	27.12	27.23	Madhya Pradesh	48.87	49.64				
Punjab	24.73	24.90	North East	1.70	1.71				
Rajasthan	48.04	48.70	Odisha	12.94	13.08				
U.P.(East)	50.81	51.60	Tamil Nadu	48.86	49.31				
U.P.(West)	40.26	40.84	West Bengal	35.45	36.06				
Total	350.88	355.45	Total	320.07	324.66				
Total (Zone-1 +	Zone-2)			670.95	680.11				
Net Addition (Februa	ary, 2022)			9.16	million				

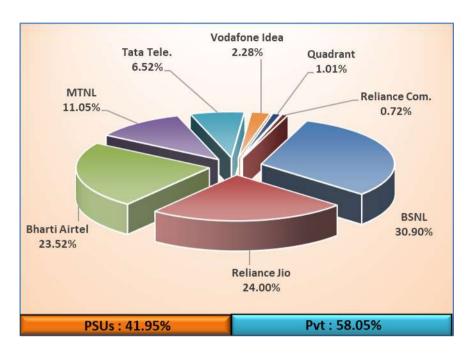
VII. Wireline Subscribers

- Wireline subscribers increased from 24.21 million at the end of January-22 to 24.52 million at the end of February-22. Net increase in the wireline subscriber base was 0.31 million with a monthly growth rate of 1.27%. The share of urban and rural subscribers in total wireline subscribers were 92.07%
- and 7.93% respectively at the end of February, 2022.
- The Overall Wireline Tele-density in India, increased from 1.76% at the end of January-22 to 1.78% at the end of February-22. Urban and Rural Wireline Tele-density were 4.71% and 0.22% respectively during the same period.

BSNL and MTNL, the two PSU access service providers, held
41.95% of the wireline market share as on 28th February, 2022.

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

Access Service Provider-wise Market Share of Wireline Subscribers as on 28th February, 2022



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



VIII. Broadband (≥ 512 Kbps download)

 As per the information received from 645 operators in February 2022 in comparison to 618 Operator in January 2022, the total Broadband Subscribers decreased from 783.43 million at the end of January-22 to 783.37 million at the end of February-22 with a monthly decline rate of 0.01%. Segment-wise broadband subscribers and their monthly growth rates are as below:

Segment-wise Broadband Subscribers and Monthly Growth Rate in the month of February, 2022

	Broadband s	Monthly growth rate in		
Segment	As on 31 st January, 2022	As on 28 th February, 2022	the month of February, 2022	
Wired subscribers	26.65	26.63	-1.10%	
Mobile devices users (Phones and dongles)	755.66	755.68	0.004%	
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to- Point Radio & VSAT)	1.12	1.06	-5.18%	
Total	783.43	783.37	-0.01%	

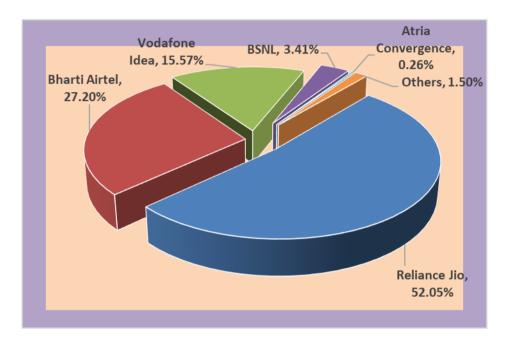
• Top five service providers constituted 98.50% market share of the total broadband subscribers at the end of February-22. These service providers were Reliance Jio

Infocomm Ltd (407.77 million), Bharti Airtel (213.11 million), Vodafone Idea (121.94 million), BSNL (26.73 million) and Atria Convergence (2.06 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 28th February 2022



As on 28th February, 2022, the top five Wired Broadband Service providers were Reliance Jio Infocomm Ltd (5.04 million), Bharti Airtel (4.43 million), BSNL (3.81 million), Atria Convergence Technologies (2.06 million) and Hathway Cable & Datacom (1.10 million).

As on 28th February, 2022, the top five <u>Wireless</u> Broadband Service providers were Reliance Jio Infocom Ltd (402.73 million), Bharti Airtel (208.68 million), Vodafone Idea (121.93 million), BSNL (22.92 million) and Intech Online Pvt. Ltd. (0.21 million).

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	Wireless Subscriber Base										A	nnexure-I					
Circle	Bharti (including	Airtel Tata Tele.)	Relian	ce Com.	Vodafo	ne Idea	BS	BSNL		VNO's)	мт	rnl	Relian	ce Jio	То	tal	Net
Official	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Addition
Andhra Pradesh	31357641	31321286			14095576	13803355	9290633	9307279					29144296	28824624	83888146	83256544	-631602
Assam	9,917,783	9,984,555			2634479	2567962	3170289	3188296					8338150	8266401	24060701	24007214	-53487
Bihar	36,786,692	37,096,283			10377727	10314616	5412137	5291655					33416852	33168563	85993408	85871117	-122291
Delhi	16119708	16189175	208	206	16103982	16054137					2153142	2152799	17844325	17715367	52221365	52111684	-109681
Gujarat	11626613	11771457	109	109	23844613	23867662	5589794	5596715					25950498	25753239	67011627	66989182	-22445
Haryana	5803574	5860741	19	19	7888919	7918102	4927210	4946357					8605409	8544389	27225131	27269608	44477
Himachal Pradesh	3323549	3312278	93	93	562770	568575	2755701	2776272					3589258	3555618	10231371	10212836	-18535
J & K	5570413	5588163	0	0	456444	435897	1321570	1322743					4464079	4495332	11812506	11842135	29629
Karnataka	30539030	30621855	725	715	7981269	7827250	6937785	6859823					19800475	19592774	65259284	64902417	-356867
Kerala	7683913	7706947	185	183	16329344	16163782	10669413	10567195					9313299	9222719	43996154	43660826	-335328
Kolkata	5606499	5683302	2	0	6239867	6136945	2330334	2223499					9838331	9748635	24015033	23792381	-222652
Madhya Pradesh	15136663	15082785	0	0	20684045	20307524	6037258	6029470					35357826	35103338	77215792	76523117	-692675
Maharashtra	20129289	20138484	0	0	29317539	29301925	6646400	6665130					36334081	36131701	92427309	92237240	-190069
Mumbai	9522065	9620974	1367	1330	11849869	11846621					1103707	1098953	11789900	11653047	34266908	34220925	-45983
North East	5560199	5589232	0	0	1149253	1120579	1355854	1356526					3847195	3813016	11912501	11879353	-33148
Odisha	11063924	11004185	64	62	1943167	1883692	6273295	6234994					13562545	13423905	32842995	32546838	-296157
Punjab	11718655	11798232	139	123	8666491	8618570	5291338	5308297					11489023	11377338	37165646	37102560	-63086
Rajasthan	21502619	21609275	183	181	11378812	11183574	6395775	6436509					23674011	23431111	62951400	62660650	-290750
Tamil Nadu	28003817	27585280	316	310	17762548	17898703	10038454	10142269	52,494	53,510			24257707	23867178	80115336	79547250	-568086
U.P.(E)	36034430	36659560	0	0	20736110	20942068	11124399	11070126					32174664	31909847	100069603	100581601	511998
U.P.(W)	18036076	18268262	21	17	19143370	19026856	5813800	5895131					21091113	20773542	64084380	63963808	-120572
West Bengal	15440662	15583324	300	290	15979046	15804656	2546902	2597378					22510693	22361913	56477603	56347561	-130042
Total	356483814	358075635	3731	3638	265125240	263593051	113928341	113815664	52494	53510	3256849	3251752	406393730	402733597	1145244199	1141526847	-3717352
Net Addition		1591821		-93		-1532189		-112677		1016		-5097		-3660133	0	-3717352	
Rural Subscribers	171,475,760	172,287,323	0	0	133922181	133087637	36,640,975	36,503,979	0	0	45001	44994	176044602	174417790	518128519	516341723	-1786796

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 February-22 (%) Annexure-II										
Circle	Bharti	BSNL	Vodafone Idea	MTNL	Reliance Com.	Reliance Jio	Total			
Andhra Pradesh	98.45	57.67	89.90		-	92.08	90.27			
Assam	98.58	43.50	91.44		-	94.81	89.20			
Bihar	92.93	51.15	82.13		-	98.53	91.22			
Delhi	96.33		69.88	12.89	95.63	87.61	81.77			
Gujarat	102.46	48.42	91.03		88.99	92.54	90.06			
Haryana	109.82	36.26	86.69		78.95	82.67	81.25			
Himachal Pradesh	100.59	37.08	98.97		31.18	86.59	78.36			
J & K	93.44	51.08	82.00		-	87.24	85.93			
Karnataka	94.79	50.17	87.15		85.03	94.35	89.02			
Kerala	98.82	73.79	90.32		92.90	95.47	88.91			
Kolkata	94.80	47.32	88.84		#DIV/0!	95.94	89.29			
Madhya Pradesh	97.76	46.33	82.11		-	99.20	90.21			
Maharashtra	105.95	63.82	85.97		-	98.69	93.71			
Mumbai	83.96		69.35	31.57	65.34	81.22	76.29			
North East	104.76	62.95	93.21		-	106.20	99.36			
Odisha	100.30	57.18	93.41		30.65	98.83	91.04			
Punjab	106.65	43.51	83.44		66.67	85.35	85.69			
Rajasthan	99.75	45.94	91.83		60.22	92.58	90.13			
Tamil Nadu	96.09	68.03	93.55		94.19	91.57	90.56			
U.P. (E)	97.96	33.04	83.83		-	98.17	87.94			
U.P. (W)	102.30	41.48	87.94		52.94	90.23	88.50			
West Bengal	96.79	77.65	86.54		34.83	93.48	91.72			
Total	98.08	52.47	85.70	19.21	71.41	94.01	89.01			

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.

						Wirel	ine Sub	scriber I	Base									Anne	exure-III
	BS	NL	M 7	'NL	Bharti	Airtel	Relian	ce Com.	Tata	Tele.	Quad	rant	Vodafo	ne Idea	Reliance Jio		Total		Net
Service Area	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Jan-22	Feb-22	Addition
Andhra Pradesh	684866	684713			337615	346590	20186	19932	157188	157072			61900	63860	643371	674549	1905126	1946716	41590
Assam	103,267	103,678			0	0	0	0	0	0			2970	2850	90687	95127	196924	201655	4731
Bihar	179,660	173,201			0	0	20	9	7890	7952			1740	1710	230479	246203	419789	429075	9286
Delhi	0	0	1289714	1287403	1741827	1757932	31664	28794	139357	139500			86527	84520	563779	585454	3852868	3883603	30735
Gujarat	414657	404734			152788	155498	3407	3455	76849	77156			43136	44186	352406	364129	1043243	1049158	5915
Haryana	183928	185119			42354	47274	0	0	33367	33236			360	330	63566	66220	323575	332179	8604
Himachal Pradesh	87850	88207			0	0	0	0	1560	1562			30	30	27903	29145	117343	118944	1601
J & K	103203	102611			35727	39571	0	0	0	0			30	30	131052	135768	270012	277980	7968
Karnataka	873712	873527			884700	903620	22854	23633	245141	246021			96457	116937	466935	481571	2589799	2645309	55510
Kerala	1066853	1057379			75392	78741	4933	4703	18534	18584			8890	8910	137897	145867	1312499	1314184	1685
Kolkata	381087	381675			168094	168690	6534	6394	45216	45367			10780	11915	251913	266233	863624	880274	16650
Madhya Pradesh	290388	287268			345639	350971	5	5	12140	12199			9530	10560	333895	351521	991597	1012524	20927
Maharashtra	729707	713630			251647	267468	10604	10245	212389	211986			24703	25493	152461	158621	1381511	1387443	5932
Mumbai	0	0	1441400	1421811	465895	471553	50980	50460	479252	481119			106861	106311	549607	564835	3093995	3096089	2094
North East	80159	80185			0	0	0	0	0	0			330	330	74373	78887	154862	159402	4540
Odisha	189168	189335			0	0	4	4	8311	7959			3770	3770	109475	117882	310728	318950	8222
Punjab	312867	313889			181865	183628	1647	1616	13476	13710	228494	247116	2190	2190	152033	158190	892572	920339	27767
Rajasthan	294915	293219			133571	137655	3953	3909	12511	12743			15500	15580	207666	216983	668116	680089	11973
Tamil Nadu	1030730	1025074			658275	664907	22968	22507	117887	118548			37180	37680	446315	459901	2313355	2328617	15262
U.P.(E)	186749	186996			115823	98535	20	20	8102	8094			17130	16930	254932	267406	582756	577981	-4775
U.P.(W)	200249	199288			84145	93967	7	7	4359	4404			3330	4170	272119	285926	564209	587762	23553
West Bengal	231723	232936			0	0	12	12	2464	2553			120	120	128075	134776	362394	370397	8003
Total	7625738	7576664	2731114	2709214	5675357	5766600	179798	175705	1595993	1599765	228494	247116	533464	558412	5640939	5885194	24210897	24518670	307773
Net Addition		-49074		-21900		91243		-4093		3772		18622		24948		244255		307773	
Rural Subscribers	1814384	1813374	0	0	0	0	150	180	37684	37612	25558	22931	0	0	70882	70756	1948658	1944853	-3805

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.