### (Press Release No.23/2018)

Information Note to the Press





### TELECOM REGULATORY AUTHORITY OF INDIA

New Delhi, 16<sup>th</sup> February, 2018 (www.trai.gov.in)

### Highlights of Telecom Subscription Data as on 31st December, 2017

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1167.44	23.23	1190.67
Net Addition in December, 2017 (Million)	4.97	-0.18	4.79
Monthly Growth Rate	0.43%	-0.76%	0.40%
Urban Telephone Subscribers (Million)	668.44	19.81	688.25
Net Addition in December, 2017 (Million)	3.50	-0.13	3.36
Monthly Growth Rate	0.53%	-0.67%	0.49%
Rural Telephone Subscribers (Million)	499.00	3.42	502.42
Net Addition in December, 2017 (Million)	1.47	-0.04	1.42
Monthly Growth Rate	0.29%	-1.29%	0.28%
Overall Tele-density*(%)	90.11	1.79	91.90
Urban Tele-density*(%)	163.44	4.84	168.29
Rural Tele-density*(%)	56.28	0.39	56.66
Share of Urban Subscribers	57.26%	85.28%	57.80%
Share of Rural Subscribers	42.74%	14.72%	42.20%
Broadband Subscribers (Million)	345.01	17.86	362.87

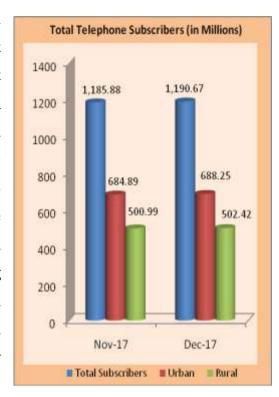
- ❖ In the month of December, 2017, 7.43 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 330.98 million at the end of Nov-17 to 338.41 million at the end of Dec-17, since implementation of MNP.
- ❖ Number of active wireless subscribers (on the date of peak VLR<sup>#</sup>) in December, 2017 was 1,015.52 million.

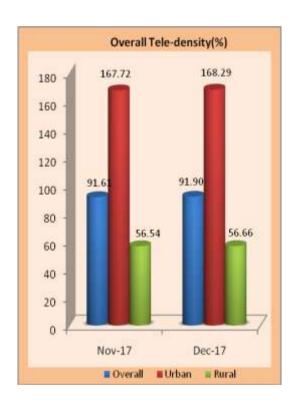
#### Note:

- Information in this Press Release is based on the data provided by the Service Providers
- \* Based on the population projections from Census data published by the Office of Registrar General & Census Commissioner of India.
- # 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

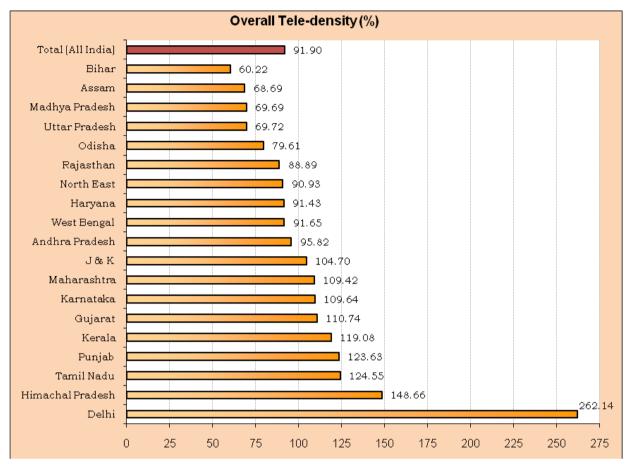
• The number of telephone subscribers in India increased from 1,185.88 million at the end of Nov-17 to 1,190.67 million at the end of Dec-17, thereby showing a monthly growth rate of 0.40%. The urban subscription increased from 684.89 million at the end of Nov-17 to 688.25 million at the end of Dec-17, and the rural subscription also increased from 500.99 million to 502.42 million during the same period. The monthly growth rates of urban and rural subscription 0.49% and 0.28% were respectively during the month of Dec-17.





• The overall Tele-density in India increased from 91.61 at the end of Nov-17 to 91.90 at the end of Dec-17. The Urban Tele-density increased from 167.72 at the end of Nov-17 to 168.29 at the end of Dec-17, and the Rural Tele-density also increased from 56.54 at the end of Nov-17 to 56.66 at the end of Dec-17. The share of urban and rural subscribers in total number telephone subscribers at the end of Nov-17 was 57.80% and 42.20% respectively.





#### 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 projections of population published by the Office of the Registrar General & Census Commissioner, India.
- 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, Tamil Nadu includes Chennai 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 December, 2017

Circle		s in the month mber, 2017	Telephone Subscriber base as on 31st December, 2017				
Category	Wireline segment	Wireless segment	Wireline segment	Wireless segment			
Circle A	-48,741	1,673,842	9,213,530	402,520,286			
Circle B	-114,373	1,761,001	5,911,949	464,551,257			
Circle C	-8,358	161,960	1,043,520	177,419,593			
Metro	-6,807	1,368,410	7,065,688	122,944,509			
All India	-178,279	4,965,213	23,234,687	1,167,435,645			

### Circle Category-wise monthly and yearly Growth Rates in Telephone Subscribers in the month of December, 2017

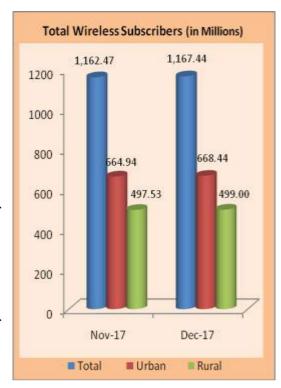
Circle	Monthly gro (Nov-17 t	wth rate (%) to Dec-17)	Yearly growth rate (%) (Dec-16 to Dec-17)				
Category	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment			
Circle A	-0.53	0.42	-4.20	2.04			
Circle B	-1.90	0.38	-9.18%	3.27			
Circle C	-0.79	0.09	-11.07	4.71			
Metro	-0.10	1.13	-0.54	8.18			
All India	-0.76 0.43		-4.79	3.55			

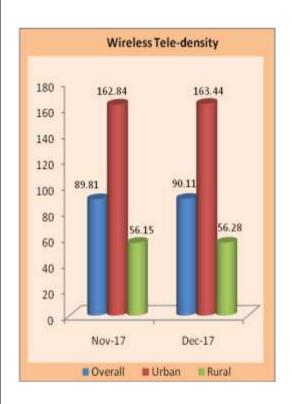
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, Circles of Category-B showed maximum monthly net addition in subscriber base during the month of Dec-17. However, Metro Circles showed maximum monthly growth rate in wireless subscribers during the month.
- In Wireline segment, all categories showed decline in their subscriber base during the month of Dec-17. Circles of Category-B showed maximum monthly net decline and maximum monthly decline rate in number of wireline subscribers during the month.

#### III. Wireless Subscribers

Total wireless subscribers (GSM, CDMA & LTE) increased from 1,162.47 million at the end of Nov-17 to 1,167.44 million at the end of Dec-17, thereby registering a monthly growth rate of 0.43%. The Wireless subscription in urban areas increased from 664.94 million at the end of Nov-17 to 668.44 million at the end of Dec-17, and wireless subscriptions in rural areas also increased from 497.53 million to 499.00 million during the month. The monthly growth rates of urban and rural wireless subscription were 0.53% and 0.29% respectively.

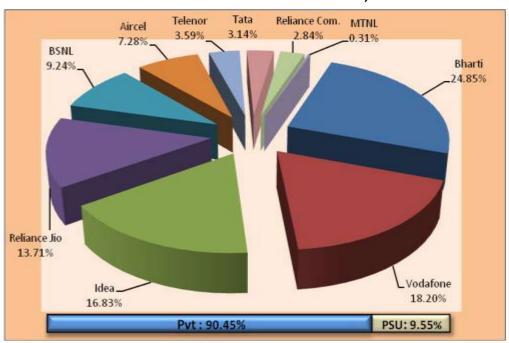




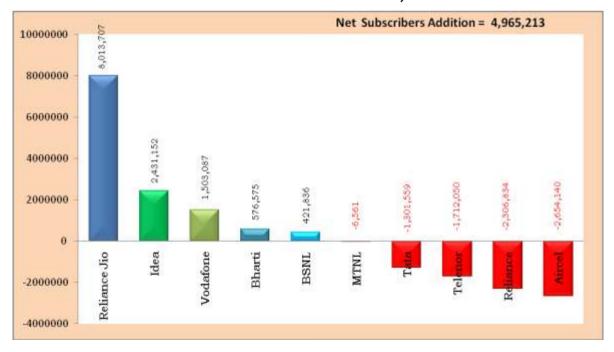
- The Wireless Tele-density in India increased from 89.81 at the end of Nov-17 to 90.11 at the end of Dec-17. The Urban Wireless Tele-density increased from 162.84 at the end of Nov-17 to 163.44 at the end of Dec-17, and Rural Wireless Teledensity also increased from 56.15 to 56.28 during the same period. The share of urban and rural wireless subscribers in total of wireless number subscribers 57.26% and 42.74% respectively at the end of Dec-17. Detailed statistics of wireless subscriber base is available at Annexure-I.
- As on 31st December, 2017, the private access service providers held 90.45% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 9.55%.

• 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, 2017



Net Additions in Wireless Subscribers of Access Service Providers in the Month of December, 2017



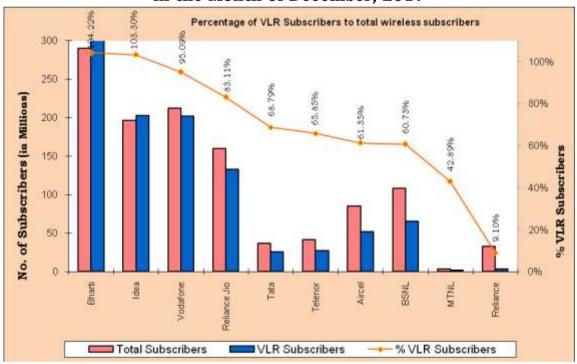
**Note:** 1. On noticing that while reporting number of subscribers, some of the TSPs were deducting inactive subscribers. A Direction was issued on 18th August 2017 to TSPs to strictly adhere to the Department of Telecommunications' methodology for reporting their number of subscribers. However, some of the Telecom Service Providers are yet to comply with the Direction.

2. M/s Sistema Shyam has been merged with M/s Reliance Communications.

### IV. Active Wireless Subscribers (VLR Data)

- Out of the total wireless subscribers (1,167.44 million), 1,015.52 million wireless subscribers were active on the date of peak VLR in the month of Dec-17. The proportion of active wireless subscribers was approximately 86.99% 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 Dec-17 is available at **Annexure-II** and the methodology used for reporting VLR subscribers is available at **Annexure-IV**.

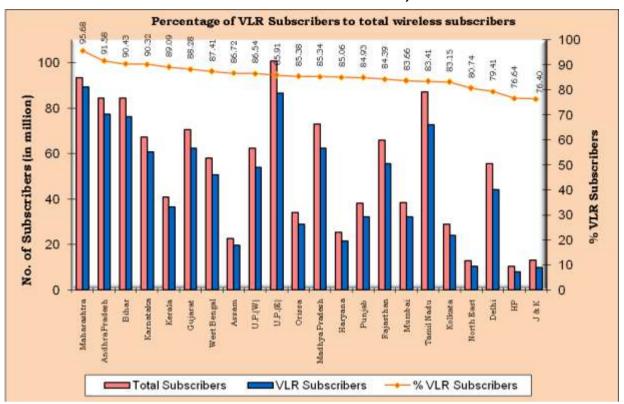
# Access Service Provider-wise Percentage of VLR Subscribers in the Month of December, 2017



#### Note-

1. Number of VLR subscribers of Bharti Airtel and Idea Cellular were more than their subscriber base due to a large number of inroamers in its network.

## Service Area wise percentage of VLR Subscribers in the Month of December, 2017

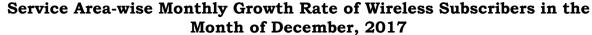


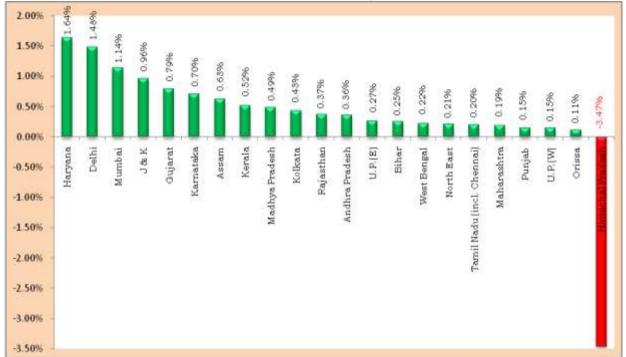
### V. Growth in Wireless Subscribers

# Access Service Provider-wise Monthly Growth Rate of Wireless Subscribers in the Month of December, 2017



Note: M/s Sistema Shyam has been merged with M/s Reliance Communications.





• During the month of Dec-17, Haryana service area showed maximum growth rate in wireless subscribers. However, Himachal Pradesh service areas showed decline rate in wireless subscribers during the month due to closure of wireless service by M/s Aircel Ltd. in Himachal Pradesh.

## 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 Dec-17, a total of 7.43 million requests were received for MNP. With this, the cumulative MNP requests increased from 330.98 million at the end of Oct-17 to 338.41 million at the end of Dec-17, since the implementation of MNP.

- In MNP Zone-I (Northern and Western India), the highest number of requests till date have been received in Rajasthan (about 28.09 million) followed by Maharashtra (about 23.86 million) service area.
- In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 34.84 million) followed by Andhra Pradesh (about 29.69 million).

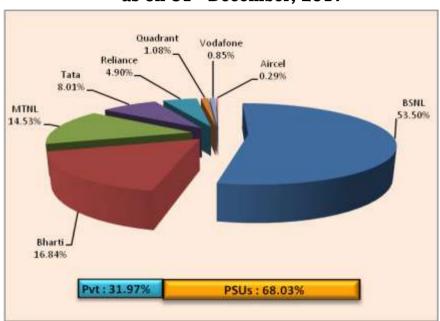
Service Area Wis	Service Area Wise MNP Status at the end of December, 2017									
Zone -l	[	Zone – II								
Service Area	Number of Porting Requests	Service Area	Number of Porting Requests							
Delhi	16156443	Andhra Pradesh	29693986							
Gujarat	23626592	Assam	2022169							
Haryana	13132637	Bihar	12316580							
Himachal Pradesh	1629794	Karnataka	34837301							
Jammu & Kashmir	352817	Kerala	8729343							
Maharashtra	23862283	Kolkata	7684224							
Mumbai	18654431	Madhya Pradesh	24166009							
Punjab	13020740	North East	673333							
Rajasthan	28093807	Orissa	6654270							
Uttar Pradesh - East	17882531	Tamil Nadu	21438244							
Uttar Pradesh - West	15303601	West Bengal	18477256							
Total	171,715,676	Total	166,692,715							
Total (Zone-I + Zone-II)			338,408,391							
Net Addition (in December, 2017)			7,427,468							

### VII. Wireline Subscribers

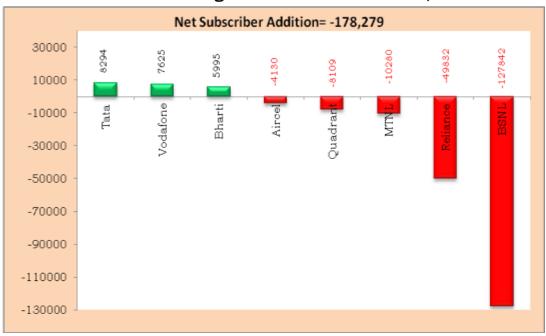
• Wireline subscribers further declined from 23.41 million at the end of Nov-17 to 23.23 million at the end of Dec-17. Net decline in the wireline subscriber base was 0.18 million with a monthly decline rate of 0.76%. The share of urban and rural subscribers in total wireline subscribers were 85.28% and 14.72% respectively at the end of Dec-17.

- The Overall Wireline Tele-density(%) declined from 1.81 at the end of Nov-17 to 1.79 at the end of Dec-17. Urban and Rural Wireline Teledensity were 4.84 and 0.39 respectively during the same period.
- BSNL and MTNL, the two PSU access service providers, held 68.03% of the wireline market share. Detailed statistics of wireline subscriber base are available at **Annexure-III**.

Access Service Provider-wise Market Shares of Wireline Subscribers as on 31st December, 2017



Access Service Provider-wise Net Additions/declines in Wireline Subscribers during the Month of December, 2017



## VIII. Broadband (≥ 512 Kbps download)

• As per the reports received from the service providers, the number of broadband subscribers increased from 350.70 million at the end of Nov-17 to 362.87 million at the end of Dec-17 with a monthly growth rate of 3.47%. 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, 2017

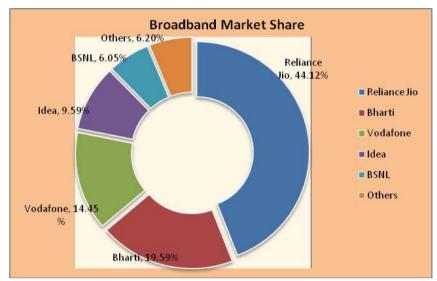
	Broadband (in mi	Monthly growth			
Segment	As on 30 <sup>th</sup> November, 2017	As on 31st December, 2017	rate in the month of Dec-17		
Wired subscribers	17.85	17.86	0.02%		
Mobile devices users (Phones and dongles)	332.40	344.57	3.66%		
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to- Point Radio & VSAT)	0.45	0.44	-2.78%		
Total	350.70	362.87	3.47%		

• Top five service providers constituted 93.80% market share of the total broadband subscribers at the end of Dec-17. These service providers were Reliance Jio Infocom Ltd (160.09 million), Bharti Airtel (71.09 million), Vodafone (52.44 million), Idea Cellular (34.81 million) and BSNL (21.95 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 31.12.2017



- As on 31st December, 2017, the top five <u>Wired</u> Broadband Service providers were BSNL (9.38 million), Bharti Airtel (2.15 million), Atria Convergence Technologies (1.28 million), MTNL (0.91 million) and Hathway Cable & Datacom (0.73 million).
- As on 31st December, 2017, the top five <u>Wireless</u> Broadband Service providers were Reliance Jio Infocomm Ltd (160.09 million), Bharti Airtel (68.94 million), Vodafone (52.43 million), Idea Cellular (34.80 million) and BSNL (12.57 million).

Contact details in case of any clarification:

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### **Wireless Subscriber Base**

Annexure-I

		Group											
0: 1	Bh	arti	Reli	ance	Voda	afone	Та	ıta	lde	ea	Air	cel	
Circle	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	
Andhra Pradesh	27233943	27184997	784819	747146	6741779	6689828	3138367	3043823	16522606	16626241	2503802	2455229	
Assam	6729592	6766210	653858	569804	3782319	3787049			1139549	1151178	5903813	5892499	
Bihar	31355658	31181437	1111679	1003168	9511730	9550764	915801	848179	11954411	12047235	7523944	7549103	
Delhi	12572987	12877050	4649018	4389205	11375983	11617410	1402015	1366540	6650103	6794793	6796403	6763176	
Gujarat	9714317	9652110	901080	890477	20384158	20537804	1985028	1910192	13169384	13378193	15227	0	
Haryana	3909911	3943506	173302	178794	6159562	6272831	1588231	1543240	5012669	5084778	3092	2092	
Himachal Pradesh	3315025	3361346	1079492	1031862	602514	592849	25040	22799	857814	880211	1016641	496715	
J & K	4061763	4084556	755753	726412	881292	862593			573104	572422	3373553	3422896	
Karnataka	24098251	24251336	1094156	1092687	7691228	7667041	5434770	5317638	9213325	9300939	3110532	3051390	
Kerala	4819002	4799436	185525	180987	7875754	7877602	978281	911955	11488769	11590307	316408	292060	
Kolkata	5549403	5606347	2432691	2282737	5930984	6021446	1950010	1878877	2394688	2443926	4356856	4254927	
Madhya Pradesh	14950434	15039063	7089676	6144470	6491679	6544311	3382682	3320267	25852556	26420511	20552	552	
Maharashtra	14761254	14700063	433532	415822	19894584	20120081	4014976	3903771	28071878	28506515	2104820	1404799	
Mumbai	7518985	7659322	3185923	2957240	9426795	9639460	2194873	2136115	4363534	4472581	2577107	2526680	
North East	4378457	4426986	161795	148351	1567712	1570490			488800	474695	3339867	3292595	
Orissa	11973807	11949613	1348633	1283869	4276871	4293210	1298243	1219159	1703986	1713464	4094097	4030336	
Punjab	9816723	9767310	1181399	1144604	5012098	4943452	1532943	1475054	7346965	7417252	1061062	904542	
Rajasthan	21666642	21710763	3697935	3587447	11640370	11709525	517144	467893	7732998	7812272	6331127	6239272	
Tamil Nadu (incl. Chennai)	19853584	19899546	956764	954122	16533994	16531883	2876336	2736879	5923045	5902784	20691085	20492085	
U.P.(E)	25208908	25210561	941904	886914	22081845	22422483	2457128	2378946	11694964	11736184	6580078	6520776	
U.P.(W)	9140527	9121232	701463	682203	12273879	12295907	2144061	2070183	16238628	16466929	840973	566634	
West Bengal	16907331	16920289	1952786	1868028	20888146	20980344	158585	141445	5673246	5704764	5027759	4776300	
Total	289536504	290113079	35473183	33166349	211025276	212528363	37994514	36692955	194067022	196498174	87588798	84934658	
Net Addition		576575		-2306834		1503087		-1301559		2431152		-2654140	
Rural Subscribers	147591060	147893436	5444626	4892215	114746994	114882870	6858364	6415564	105473160	106048020	31421554	30813896	

### **Wireless Subscriber Base**

Annexure-I (contd.)

				G	roup						
	BS	NL	МТ	NL	Tele	enor	Reliar	ce Jio	То	tal	
Circle	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17 Dec-17		Nov-17	Dec-17	Net Addition
Andhra Pradesh	10061544	10068021			4392049	4223046	12634097	13276818	84013006	84315149	302143
Assam	1598402	1630211					2653449	2804544	22460982	22601495	140513
Bihar	4086263	4147876			8154983	7855226	9463125	10105860	84077594	84288848	211254
Delhi			2303368	2299685			8987465	9440273	54737342	55548132	810790
Gujarat	5437922	5544792			7418197	7132006	11012866	11546414	70038179	70591988	553809
Haryana	4190143	4251802					4017332	4188177	25054242	25465220	410978
Himachal Pradesh	2422013	2469366					1632045	1715932	10950584	10571080	-379504
J & K	1550866	1548957					1800670	1904180	12997001	13122016	125015
Karnataka	7224695	7259286					8864453	9260031	66731410	67200348	468938
Kerala	10207824	10285323					4926286	5072047	40797849	41009717	211868
Kolkata	1248694	1301293					5079359	5278886	28942685	29068439	125754
Madhya Pradesh	5762399	5827364					9194362	9802824	72744340	73099362	355022
Maharashtra	6946141	6996873			6080995	5741125	10902292	11594705	93210472	93383754	173282
Mumbai			1287959	1285081			7340896	7651459	37896072	38327938	431866
North East	1531170	1517183					1318174	1382810	12785975	12813110	27135
Orissa	5255551	5269814					4034309	4263579	33985497	34023044	37547
Punjab	5083743	5143003					6975582	7272099	38010515	38067316	56801
Rajasthan	5641448	5504734					8340222	8776476	65567886	65808382	240496
Tamil Nadu (incl. Chennai)	9916053	9922543					10102516	10589205	86853377	87029047	175670
U.P.(E)	11777028	11661212			10247885	9823240	9517181	10134487	100506921	100774803	267882
U.P.(W)	5824153	5832197			7328669	7136085	7740807	8153481	62233160	62324851	91691
West Bengal	1727443	1733481					5540047	5876955	57875343	58001606	126263
Total	107493495	107915331	3591327	3584766	43622778	41910728	152077535	160091242	1162470432	1167435645	4965213
Net Addition		421836		-6561		-1712050		8013707	0	4965213	
Rural Subscribers	34854475	34998327	48140	48063	12492905	11925658	38598372	41078776	497529650	498996825	1467175

### Proportion of VLR on the date of Peak VLR in the month of Dec-17 (%)

#### Annexure-II

Circle	Aircel	Bharti	BSNL	Idea	MTNL	Reliance	Reliance Jio	Tata	Telenor	Vodafone	Total
Andhra Pradesh	52.64	106.95	72.00	106.54		29.49	78.94	80.63	62.09	91.30	91.58
Assam	76.71	97.60	66.23	101.06		2.21	90.88			96.96	86.72
Bihar	69.81	99.50	63.74	102.24		9.82	95.29	54.33	71.88	95.60	90.43
Delhi	58.01	99.18		102.21	34.21	6.89	81.54	41.91		95.66	79.41
Gujarat	-	115.69	52.41	105.38		0.62	82.51	41.74	53.74	96.33	88.28
Haryana	0.43	109.94	45.83	104.93		5.30	69.01	67.47		97.26	85.06
Himachal Pradesh	94.89	97.43	54.04	114.76		1.12	76.20	14.37		116.16	76.64
J & K	58.50	98.78	61.84	104.51		0.14	81.50			101.87	76.40
Karnataka	47.62	106.23	61.21	101.17		14.93	84.70	77.98		97.47	90.32
Kerala	61.39	110.80	68.92	101.59		17.77	74.21	69.45		98.32	89.09
Kolkata	62.03	112.63	69.08	100.18		14.56	73.93	76.78		102.85	83.15
Madhya Pradesh	41.67	103.04	61.62	102.58		5.31	82.27	72.97		82.27	85.34
Maharashtra	63.43	116.71	60.32	103.92		19.60	93.55	73.03	62.58	99.86	95.68
Mumbai	45.39	111.13		93.10	58.42	9.73	92.97	72.56		88.60	83.66
North East	61.35	93.64	70.71	102.36		3.03	85.21			91.56	80.74
Orissa	54.38	102.94	70.52	113.88		0.14	94.69	67.83		93.73	85.38
Punjab	53.30	107.70	51.10	100.16		13.36	72.77	70.07		97.02	84.93
Rajasthan	43.32	98.33	66.21	105.17		11.91	79.14	153.12		98.48	84.39
<b>Tamil Nadu</b> (incl. Chennai)	66.57	101.24	64.63	101.32		20.90	80.45	60.95		96.90	83.41
U.P. (E)	55.55	107.10	47.40	107.33		13.69	88.02	64.45	69.94	90.90	85.91
U.P. (W)	92.98	105.16	47.26	100.91		12.53	77.48	52.16	70.54	96.98	86.54
West Bengal	61.22	97.34	81.68	105.12		7.56	79.40	4.31		90.94	87.41
Total	61.35	104.22	60.73	103.30	42.89	9.10	83.11	68.79	65.85	95.09	86.99

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

		Group Group												-					
Circle	BS	NL	MT	'nL	Bh	arti	Reli	ance	Та	ta	Quad	drant	Voda	fone	Ai	rcel	Tot	tal	
	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Nov-17	Dec-17	Net Addition
Andhra Pradesh	1093166	1080608			164866	164994	73411	73284	175525	174331			25950	26010	5346	5347	1538264	1524574	-13690
Assam	139575	138036											2580	2700			142155	140736	-1419
Bihar	251731	251263					6246	6246	12043	12087			1890	2010			271910	271606	-304
Delhi			1561699	1555478	1308431	1311798	163814	162689	141137	143514			31410	32070	14895	14909	3221386	3220458	-928
Gujarat	1047333	1041619			77929	78553	70225	70177	91318	92421			9706	9797	1836	1063	1298347	1293630	-4717
Haryana	245,913	243,298			22547	22559	3628	3627	38108	38414							310196	307898	-2298
Himachal Pradesh	123,627	121,623					3889	3889	2365	2389			60	60			129941	127961	-1980
J & K	119,332	116,807															119332	116807	-2525
Karnataka	1136151	1127253			637481	640466	154853	153214	266777	270557			31075	33625	32132	28622	2258469	2253737	-4732
Kerala	1894540	1882601			57875	58236	32093	30828	18832	18799			2310	2430			2005650	1992894	-12756
Kolkata	574348	569979			121984	122138	67428	67394	50040	50239			6270	6420	2620	2592	822690	818762	-3928
Madhya Pradesh	688000	679047			265692	263865	19337	19335	15163	15346			570	600			988762	978193	-10569
Maharashtra	1298111	1283293			80044	80552	77078	76883	308087	307763			15305	15395	564	585	1779189	1764471	-14718
Mumbai			1824732	1820673	359715	357551	249860	248775	556928	558877			26328	29582	10856	11010	3028419	3026468	-1951
North East	113931	113002											120	120			114051	113122	-929
Orissa	261487	260470					3189	3188	8283	8100			1530	1530			274489	273288	-1201
Punjab	492007	483142			119707	120048	18963	18956	15779	15924	258482	250373	1140	1110	31	30	906109	889583	-16526
Rajasthan	524264	514592			49783	49915	72843	29500	12284	12652			5700	5880	3559	3551	668433	616090	-52343
Tamil Nadu (incl. Chennai)	1576915	1565517			554402	555742	128269	127374	113666	113535			14750	14950			2388002	2377118	-10884
U.P.(E)	365652	365061			64137	64156	33869	33804	13572	13570			9070	9100	2	2	486302	485693	-609
U.P.(W)	317160	313711			22553	22568	6967	6967	9788	9593			4050	4050			360518	356889	-3629
West Bengal	295257	279736					1862	1862	3173	3051			60	60			300352	284709	-15643
Total	12558500	12430658	3386431	3376151	3907146	3913141	1187824	1137992	1852868	1861162	258482	250373	189874	197499	71841	67711	23412966	23234687	-178279
Net Addition		-127842		-10280		5995		-49832		8294		-8109		7625		-4130		-178279	
Rural Subscribers	3349468	3308587	0	0	0	0	11077	1696	54676	54632	50013	55491	0	0	0	0	3465234	3420406	-44828

## 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.