(Press Release No.12/2017)

Information Note to the Press



TELECOM REGULATORY AUTHORITY OF INDIA



New Delhi, 17th February, 2017 (www.trai.gov.in)

Highlights of Telecom Subscription Data as on 31st December, 2016

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1,127.37	24.40	1,151.78
Net Addition in December, 2016 (Million)	27.86	-0.04	27.82
Monthly Growth Rate	2.53%	-0.16%	2.48%
Urban Telephone Subscribers (Million)	662.60	20.55	683.14
Net Addition in December, 2016 (Million)	24.14	-0.02	24.11
Monthly Growth Rate	3.78%	-0.11%	3.66%
Rural Telephone Subscribers (Million)	464.78	3.86	468.64
Net Addition in December, 2016 (Million)	3.72	-0.02	3.71
Monthly Growth Rate	0.81%	-0.45%	0.80%
Overall Tele-density*	88.00	1.90	89.90
Urban Tele-density*	165.04	5.12	170.15
Rural Tele-density*	52.84	0.44	53.27
Share of Urban Subscribers	58.77%	84.19%	59.31%
Share of Rural Subscribers	41.23%	15.81%	40.69%
Broadband Subscribers (Million)	217.95	18.14	236.09

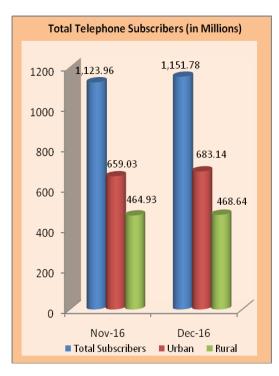
- ❖ In the month of December, 2016, 5.67 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 249.15 million at the end of Nov-16 to 254.82 million at the end of Dec-16, since implementation of MNP.
- ❖ Number of active wireless subscribers (on the date of peak VLR[#]) in December, 2016 was 988.14 million.

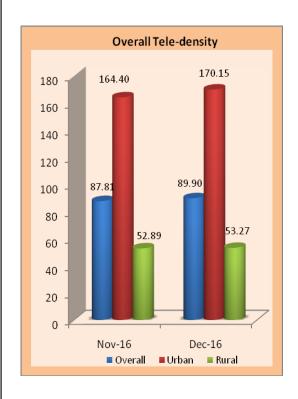
Note:

- 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

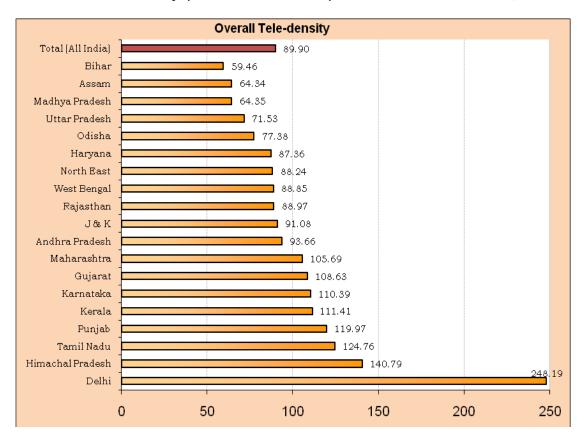
• The number of telephone subscribers in India increased from 1,123.96 million at the end of Nov-16 to 1,151.78 million at the end of Dec-16, thereby showing a monthly growth rate of 2.48%. The urban subscription increased from 659.03 million at the end of Nov-16 to 683.14 million at the end of Dec-16 and the rural subscription also increased from 464.93 million to 468.64 million during the same period. The monthly growth rates of urban and rural subscription were 3.66% and 0.80% respectively during the month of Dec-16.





• The overall Tele-density in India increased from 87.81 at the end of Nov-16 to 89.90 at the end of Dec-16. The Urban Tele-density increased from 164.40 at the end of Nov-16 to 170.15 at the end of Dec-16, and the Rural Tele-density also increased from 52.89 at the end of Nov-16 to 53.27 at the end of Dec-16. The share of urban subscribers and rural subscribers in total number of telephone subscribers at the end of Dec-16 was 59.31% and 40.69% 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, 2016

Circle		s in the month nber, 2016	Telephone Subscriber base as on 31st December, 2016					
Category	Wireline segment	Wireless segment	Wireline segment	Wireless segment				
Circle A	-5,625	9,672,297	9,617,038	394,465,836				
Circle B	-30,083	10,680,742	6,509,518	449,820,882				
Circle C	-3,425	3,827,948	1,173,437	169,433,929				
Metro	-539	3,678,622	7,104,343	113,652,721				
All India	-39,672	27,859,609	24,404,336	1,127,373,368				

Circle Category-wise monthly and yearly Growth Rates in Telephone Subscribers in the month of December, 2016

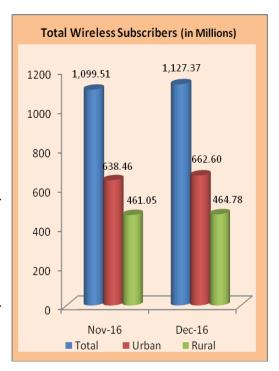
Circle		wth rate (%) to Dec-16)		wth rate (%) to Dec-16)
Category	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment
Circle A	-0.06	2.51	-5.17	10.05
Circle B	-0.46	2.43	-7.21	11.72
Circle C	-0.29	2.31	-5.52	16.09
Metro	-0.01	3.34	-0.22	9.43
All India	-0.16	2.53	-4.37	11.52

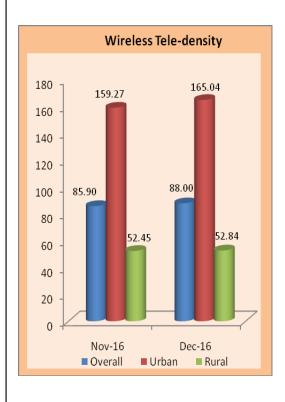
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, Circles of Category-B showed highest monthly net addition during the month of Dec-16. However, Metro circles showed maximum monthly growth rate in subscriber base during the same period.
- In Wireline segment, Circles of Category-B showed the highest net decline and monthly decline rate in subscriber base during the month of Dec-16.

III. Wireless Subscribers (GSM, CDMA & LTE)

Total wireless subscriber base increased from 1,099.51 million at the end of Nov-16 to 1,127.37 million at the end of Dec-16, thereby registering a monthly growth rate of 2.53%. The Wireless subscription in urban areas increased from 638.46 million at the end of Nov-16 to 662.60 million at the end of Dec-16, and wireless subscription in rural areas also increased from 461.05 million to 464.78 million during the same period. The monthly growth rates of urban and rural wireless subscription were 3.78% and 0.81% respectively.

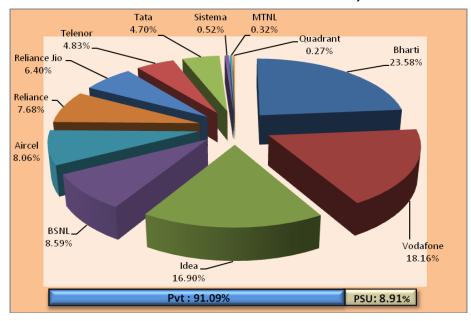




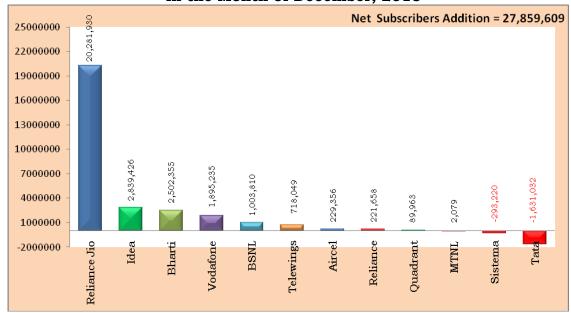
• The Wireless Tele-density in India increased from 85.90 at the end of Nov-16 to 88.00 at the end of Dec-16. The Urban Wireless Tele-density increased from 159.27 at the end of Nov-16 to 165.04 at the end of Dec-16, and Rural Wireless Tele-density also increased from 52.45 to 52.84 during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 58.77% and 41.23% respectively at the end of Dec-16. Detailed statistics of wireless subscriber base is available at **Annexure-I**.

• As on 31st December, 2016, the private access service providers held 91.09% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 8.91%. 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 Subscriber base as on 31st December, 2016



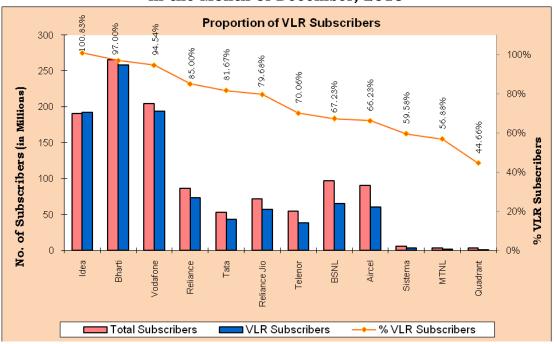
Net Additions in Wireless Subscriber Bases of Access Service Providers in the Month of December, 2016



IV. Active Wireless Subscribers (VLR Data)

- Out of the total wireless subscriber base (1,127.37 million), 988.14 million wireless subscribers were active on the date of peak VLR in the month of Dec-16. The proportion of active wireless subscribers was approximately 87.65% 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-16 is available at **Annexure-II** and the methodology used for reporting VLR subscribers is available at **Annexure-IV**.

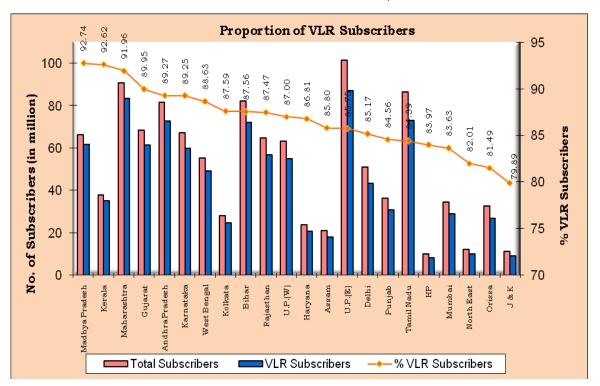
Access Service Provider-wise Proportion of VLR Subscribers in the Month of December, 2016



Note-

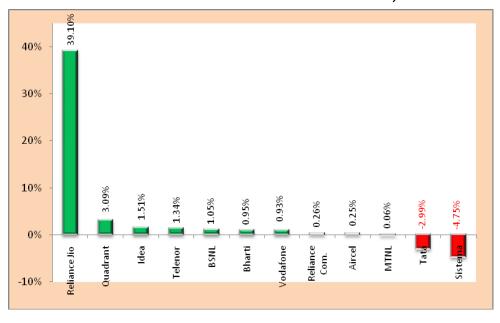
1. Number of VLR subscribers of Idea Cellular was more than its subscriber base due to a large number of inroamers in its network.





V. Growth in Wireless Subscribers

Access Service Provider-wise Monthly Growth Rate of Wireless Subscriber base in the Month of December, 2016







• All the service areas showed positive growth in wireless subscribers during the month of Dec-16. Delhi service area recorded the highest growth rate in wireless subscribers 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 Dec-16, a total of 5.67 million requests were received for MNP. With this, the cumulative MNP requests increased from 249.15 million at the end of Nov-16 to 254.82 million at the end of Dec-16, 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 21.59 million) followed by Gujarat (about 18.58 million).

• In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 28.33 million) followed by Andhra Pradesh (about 23.38 million).

Service Area Wis	e MNP Status at t	the end of Decemb	er, 2016				
Zone -l	Ī	Zone – II					
Service Area	Number of Porting Requests	Service Area	Number of Porting Requests				
Delhi	10608914	Andhra Pradesh	23382030				
Gujarat	18577555	Assam	1295717				
Haryana	9998112	Bihar	9620493				
Himachal Pradesh	913363	Karnataka	28327770				
Jammu & Kashmir	102820	Kerala	7263310				
Maharashtra	17355988	Kolkata	5397053				
Mumbai	14174072	Madhya Pradesh	17880321				
Punjab	9027824	North East	503415				
Rajasthan	21590495	Orissa	5188002				
Uttar Pradesh - East	12510161	Tamil Nadu	15890980				
Uttar Pradesh - West	11506440	West Bengal	13705847				
Total	126,365,744	Total	128,454,938				
Total (Zone-I + Zone-II)			254,820,682				
Net Addition (in November, 2016)			5,667,475				

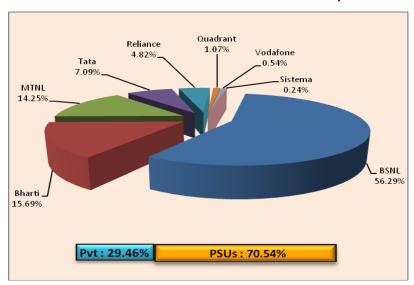
Note: For Zone-II, available MNP data for December, 2016 are provisional.

VII. Wireline Subscribers

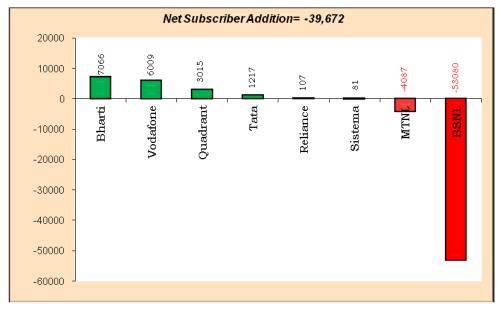
- Wireline subscriber base declined from 24.44 million at the end of Nov-16 to 24.40 million at the end of Dec-16. Net decline in the wireline subscriber base was 0.04 million with a monthly decline rate of 0.16%. The share of urban and rural subscribers in total wireline subscribers were 84.19% and 15.81% respectively at the end of Dec-16.
- The Overall Wireline Tele-density declined from 1.91 at the end of Nov-16 to 1.90 at the end of Dec-16. Urban and Rural Wireline Tele-density were 5.12 and 0.44 respectively during the same period.

- BSNL and MTNL, the two PSU access service providers, held 70.54% of the wireline market share. Detailed statistics of wireline subscriber base are available at **Annexure-III**.
- The graphical representations of service provider-wise market shares in the wireline segment and net additions in wireline subscriber bases in the month of Dec-16 are given below:

Access Service Provider-wise Market Shares in term of Wireline Subscriber base as on 31st December, 2016



Access Service Provider-wise Net Additions/declines in Wireline Subscriber Base during the Month of December, 2016



VIII. Broadband (≥ 512 Kbps download)

• As per the reports received from the service providers, the number of broadband subscribers increased from 218.27 Million at the end of Nov-16 to 236.09 million at the end of Dec-16 with a monthly growth rate of 8.17%. Segment-wise broadband subscribers and their monthly growth rates are as below:

Segment-wise Broadband Subscriber base and Monthly Growth Rates in the month of December, 2016

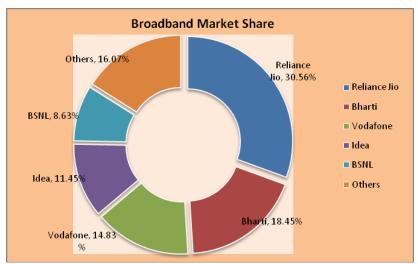
	Broadband s	Monthly growth	
Segment	As on 30 th November, 2016	As on 31st December, 2016	rate in the month of Dec-16
Wired subscribers	18.06	18.14	0.48%
Mobile devices users (Phones and dongles)	199.61	217.36	8.89%
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to- Point Radio & VSAT)	0.60	0.59	-1.39%
Total	218.27	236.09	8.17%

• Top five service providers constituted 83.93% market share of the total broadband subscribers at the end of Dec-16. These service providers were Reliance Jio Infocom Ltd (72.16 million), Bharti Airtel (43.56 million), Vodafone (35.02 million), Idea Cellular (27.04 million) and BSNL (20.36 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 31.12.2016



- As on 31st December, 2016, the top five <u>Wired</u> Broadband Service providers were BSNL (9.95 million), Bharti Airtel (2.04 million), Atria Convergence Technologies (1.12 million), MTNL (1.04 million) and YOU Broadband (0.60 million).
- As on 31st December, 2016, the top five <u>Wireless</u> Broadband Service providers were Reliance Jio Infocomm Ltd (72.16 million), Bharti Airtel (41.53 million), Vodafone (35.01 million), Idea Cellular (27.04 million) and Reliance Communications (16.08 million).

Contact details in case of any clarification:

Ms. Vinod Kotwal, Advisor (F&EA),

Telecom Regulatory Authority of India Mahanagar Doorsanchar Bhawan Jawahar Lal Nehru Marg,

New Delhi – 110002, Ph: 011-23230752

Fax: 011-23236650 E-mail: advfea1@trai.gov.in Authorized to issue:

(Vinod Kotwal)
Advisor (F&EA)

Wireless Subscriber Base

Annexure-I

						Grou	p					
	Bh	arti	Relia	ance	Voda	afone	Та	ıta	lde	ea	Air	cel
Circle	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16
Andhra Pradesh	24876894	25112612	3692797	3681215	7030301	7030425	4151141	4023233	17118446	17448973	2533740	2544880
Assam	6223425	6281027	1363906	1358951	3898040	3920440			1257054	1293198	5622743	5663035
Bihar	29816419	30102995	3363319	3269964	9606367	9706144	1517808	1477175	11743549	12040995	7393257	7436130
Delhi	11311804	11366485	5479543	5815374	10497097	10516019	1748846	1687228	6371429	6368028	6687695	6731212
Gujarat	8673616	8754131	6002860	5925364	19570930	19750344	2655521	2584076	12675064	12850449	17063	17063
Haryana	3352509	3382750	1530705	1574039	5697922	5791557	2749485	2649113	5016509	5042697	3092	3092
Himachal Pradesh	2906527	2932704	1554761	1580165	738791	745499	55690	52991	816098	815885	1114131	1119545
J & K	3471515	3505002	959973	949459	937993	980533			594199	623267	2819583	2867502
Karnataka	21793618	22001544	5206124	5218438	7847062	7911034	6915634	6749222	9494707	9630391	3329811	3365649
Kerala	4524622	4567433	1477969	1492938	7714556	7692872	1442205	1393031	11083166	11018971	377353	378558
Kolkata	4814136	4909018	4317981	4318179	5556384	5589894	2621996	2580243	2381342	2541949	4295357	4314664
Madhya Pradesh	13586861	13665329	9420422	9370161	6795383	6749495	4550288	4416062	23332926	23496338	20694	20694
Maharashtra	13865264	13998508	4469491	4393692	18717363	18894289	5903530	5681044	25064717	25488200	2745608	2773255
Mumbai	6105656	6164308	4758106	4707876	8938403	8983030	2897133	2758760	4391107	4428983	2963743	2970326
North East	4064433	4102960	377324	368596	1614294	1606835			569731	610574	3416148	3384813
Orissa	10875679	10981096	2199352	2121470	4258670	4352964	2004834	1982403	1955343	2042172	4682199	4664702
Punjab	8277966	8408589	1627510	1712133	5225578	5260726	2595180	2483534	6612389	6609685	1158581	1151413
Rajasthan	20231992	20423230	6044476	5965928	11934384	12082927	1446106	1317865	7979127	8074084	6644801	6663523
Tamil Nadu (incl. Chennai)	18149730	18317695	5359017	5354554	16122606	16348225	4183421	4100347	6380894	6422898	21809145	21705386
U.P.(E)	22307562	22524622	8193715	8380772	19520595	19716657	3682922	3600127	11485730	11778588	7122979	7158862
U.P.(W)	8615374	8696883	5514458	5466988	11663076	11851566	3110816	3076434	15387536	15679475	811481	844454
West Bengal	15504648	15653684	3409462	3518673	18905900	19205455	376262	364898	5967387	6212076	5076993	5096795
Total	263350250	265852605	86323271	86544929	202791695	204686930	54608818	52977786	187678450	190517876	90646197	90875553
Net Addition		2502355		221658		1895235		-1631032		2839426		229356

Wireless Subscriber Base

Annexure-I (contd.)

		Group													
	BS	NL	МТ	NL	Tele	nor	Sist	ema	Quad	drant	Relian	ce Jio	Tot	al	
Circle	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Net Addition
Andhra Pradesh	9745462	9820986			5545639	5634582					4485889	6356061	79180309	81652967	2472658
Assam	1411564	1417734									701438	979779	20478170	20914164	435994
Bihar	3957629	4024249			9983573	10138958					2947292	4060254	80329213	82256864	1927651
Delhi			2327248	2327549			730379	699544			3951634	5370396	49105675	50881835	1776160
Gujarat	4257288	4324899			8311249	8424971	165903	155976			3821889	5593057	66151383	68380330	2228947
Haryana	3506169	3578717									1476884	1918855	23333275	23940820	607545
Himachal Pradesh	1968227	1990138									482716	665843	9636941	9902770	265829
J & K	1481981	1471105									655484	875883	10920728	11272751	352023
Karnataka	6905708	6876305					904585	853274			3307185	4521864	65704434	67127721	1423287
Kerala	8581789	8686761					273234	261063			1767244	2414402	37242138	37906029	663891
Kolkata	836826	856129					447886	430489			1900652	2603998	27172560	28144563	972003
Madhya Pradesh	4787913	4745564									2872751	4012836	65367238	66476479	1109241
Maharashtra	6398873	6445149			8115536	8098638					3469908	4994893	88750290	90767668	2017378
Mumbai			1296568	1298346							2345148	3314694	33695864	34626323	930459
North East	1633409	1647856									424223	571525	12099562	12293159	193597
Orissa	4756323	4807936									1408967	1841478	32141367	32794221	652854
Punjab	4360901	4468872							2909195	2999158	2446014	3284526	35213314	36378636	1165322
Rajasthan	4974533	5126562					1726786	1625425			2719971	3595620	63702176	64875164	1172988
Tamil Nadu (incl. Chennai)	8867697	8885962					576605	555764			3558008	4846319	85007123	86537150	1530027
U.P.(E)	10397726	10510884			13379481	13718269					2734172	4212075	98824882	101600856	2775974
U.P.(W)	5181341	5325719			8415972	8454081	123202	112436			2631034	3697898	61454290	63205934	1751644
West Bengal	1772711	1776353					1222253	1183642			1767211	2425388	54002827	55436964	1434137
Total	95784070	96787880	3623816	3625895	53751450	54469499	6170833	5877613	2909195	2999158	51875714	72157644	1099513759	1127373368	27859609
Net Addition		1003810		2079		718049		-293220		89963		20281930		27859609	

Proportion of VLR on the date of Peak VLR in the month of Dec-16 (%)

Annexure-II

Circle	Aircel	Bharti	BSNL	Quadrant	Idea	MTNL	Reliance	Reliance Jio	Sistema	Tata	Telenor	Vodafone	Total
Andhra Pradesh	60.87	98.18	73.73		100.00		94.54	76.55		90.73	72.05	84.53	89.27
Assam	81.99	95.79	77.78		98.70		4.54	85.30				102.24	85.80
Bihar	83.50	97.65	65.36		99.12		5.36	82.30		72.96	69.56	105.20	87.56
Delhi	58.18	93.64			100.70	50.46	96.12	77.47	44.50	57.77		96.53	85.17
Gujarat	2763.66	96.93	65.37		103.59		97.05	81.30	51.24	75.70	66.54	93.53	89.95
Haryana	0.45	94.10	54.82		99.99		96.92	76.99		82.92		93.18	86.81
Himachal Pradesh	47.15	93.66	66.77		113.06		97.94	80.56		32.19		92.32	83.97
J & K	72.76	95.48	71.45		100.01		46.46	69.66				86.41	79.89
Karnataka	54.77	97.74	64.50		98.36		95.98	84.06	55.72	90.97		91.43	89.25
Kerala	67.60	96.51	76.80		105.59		95.43	85.14	50.59	88.49		94.78	92.62
Kolkata	65.29	99.25	92.79		90.48		97.43	67.12	91.95	87.44		94.14	87.59
Madhya Pradesh	0.74	96.85	70.91		103.04		96.97	77.48		77.16		77.55	92.74
Maharashtra	50.21	98.89	69.31		102.57		95.86	93.23		81.26	71.34	97.15	91.96
Mumbai	52.39	90.52			89.54	68.41	95.69	71.34		79.42		88.02	83.63
North East	62.74	105.80	67.30		91.63		6.18	77.98				92.11	82.01
Orissa	57.91	98.13	73.51		99.00		3.69	74.80		82.70		105.62	81.49
Punjab	55.46	100.81	64.34	44.66	101.10		97.34	76.53		75.73		89.12	84.56
Rajasthan	54.65	94.41	66.27		101.16		96.56	82.87	57.34	121.46		90.93	87.47
Tamil Nadu (incl. Chennai)	66.72	96.68	69.44		96.77		97.45	82.87	58.82	74.25		96.92	84.39
U.P. (E)	67.37	98.12	54.62		102.29		96.82	82.35		76.87	68.67	94.51	85.75
U.P. (W)	89.73	92.37	54.90		97.88		97.00	73.21	46.82	77.84	73.89	94.69	87.00
West Bengal	73.61	97.44	81.08		102.21		10.94	77.47	67.23	61.44		99.22	88.63
Total	66.23	97.00	67.23	44.66	100.83	56.88	85.00	79.68	59.58	81.67	70.06	94.54	87.65

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											
Circle	BS	NL	МТ	'nL	Bha	arti	Reli	ance	Та	ıta	Quad	lrant	Sist	ema	Voda	fone	Tot	al	1
	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Nov-16	Dec-16	Net Addition
Andhra Pradesh	1218636	1215896			157375	158654	75686	75656	171396	172538					11040	11250	1634133	1633994	-139
Assam	155434	155325													1980	2100	157414	157425	11
Bihar	298590	297401					6,428	6,436	12871	12761					1200	1260	319089	317858	-1231
Delhi			1609660	1608461	1260903	1263413	174156	173965	135652	136059					26970	27750	3207341	3209648	2307
Gujarat	1103136	1103146			76062	76086	73257	73016	87624	88015					5730	7200	1345809	1347463	1654
Haryana	287,596	285,213			22652	22779	4053	4043	37107	36942							351408	348977	-2431
Himachal Pradesh	146,901	145,415					4014	4014	2594	2589					30	30	153539	152048	-1491
J & K	134,190	134,171															134190	134171	-19
Karnataka	1219706	1216834			618123	618389	155216	155757	207698	208921					22170	23190	2222913	2223091	178
Kerala	2015232	2005095			57723	57915	33126	33096	18610	18723					1620	1680	2126311	2116509	-9802
Kolkata	622016	617718			120263	120571	69154	69154	49179	49330					5400	5460	866012	862233	-3779
Madhya Pradesh	725650	726773			272988	272988	19741	19755	15980	16098					420	420	1034779	1036034	1255
Maharashtra	1422851	1420475			77448	77520	82213	82090	284267	282870					12699	13501	1879478	1876456	-3022
Mumbai			1872488	1869600	353460	354879	256089	256548	529242	529968					20250	21467	3031529	3032462	933
North East	122149	121685													150	150	122299	121835	-464
Orissa	277733	277579					3281	3281	8207	8130					1110	1110	290331	290100	-231
Punjab	609635	602669			119113	119526	20941	20789	16651	16402	259099	262114			1020	1020	1026459	1022520	-3939
Rajasthan	615374	610665			48440	48496	19960	19866	11867	11796			58224	58305	2310	2370	756175	751498	-4677
Tamil Nadu (incl. Chennai)	1734295	1730644			551513	551834	134020	133968	110152	109238					10350	10350	2540330	2536034	-4296
U.P.(E)	383534	382226			63895	63942	34787	34767	15563	15564					1380	1500	499159	497999	-1160
U.P.(W)	367978	360830			23083	23115	7127	7127	9984	9958					1050	1080	409222	402110	-7112
West Bengal	330140	327936					2020	2048	3868	3827					60	60	336088	333871	-2217
Total	13790776	13737696	3482148	3478061	3823041	3830107	1175269	1175376	1728512	1729729	259099	262114	58224	58305	126939	132948	24444008	24404336	-39672
Net Addition		-53080		-4087		7066		107		1217		3015		81		6009		-39672	1

VLR Subscribers in the Wireless Segment

Home Location Register (HLR) is a central database that contains details of each mobile phone subscriber that is authorized to use the GSM core network. The HLRs store details of every SIM card issued by the service provider. Each SIM has a unique identifier called an International Mobile Subscriber Identity (IMSI), which is the primary key to each HLR record. The HLR data is stored for as long as a subscriber remains with the service provider. HLR also manages the mobility of subscribers by means of updating their position in administrative areas. It sends the subscriber data to a Visitor Location Register (VLR).

Subscriber numbers reported by the service providers is the difference between the numbers of IMSI registered in service provider's HLR and sum of other figures as given below:-

1	Total IMSI's in HLR (A)
2	Less: $(B = a + b + c + d + e)$
a.	Test/Service Cards
b.	Employees
	Stock in hand/in Distribution Channels
c.	(Active Card)
d.	Subscriber Retention period expired
e.	Service suspended pending disconnection
3	Subscribers Base (A-B)

Visitor Location Register (VLR) is a temporary database of the subscribers who have roamed into the particular area, which it serves. Each base station in the network is served by exactly one VLR; hence a subscriber cannot be present in more than one VLR at a time.

If subscriber is in active stage i.e. he is able to send/receive calls/SMSs he is available both in HLR and VLR. However, it may be possible that the subscriber is registered in HLR but not in VLR due to the reason that he is either switched-off or moved out of coverage area, not reachable etc. In such circumstances he will be available in HLR but not in VLR. This causes difference between subscriber number reported by the service providers and numbers available in VLR.

The VLR data calculated here is on the basis of active subscribers in VLR on the date of Peak 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.