Information Note to the Press





### TELECOM REGULATORY AUTHORITY OF INDIA

New Delhi, 23<sup>rd</sup> May, 2018 (www.trai.gov.in)

## Highlights of Telecom Subscription Data as on 31st March, 2018

Particulars	Wireless	Wireline	Total (Wireless+ Wireline)
Total Telephone Subscribers (Million)	1183.41	22.81	1206.22
Net Addition in March, 2018 (Million)	26.54	-0.15	26.39
Monthly Growth Rate	2.29%	-0.67%	2.24%
Urban Telephone Subscribers (Million)	662.18	19.43	681.61
Net Addition in March, 2018 (Million)	12.15	-0.16	11.98
Monthly Growth Rate	1.87%	-0.84%	1.79%
Rural Telephone Subscribers (Million)	521.23	3.38	524.61
Net Addition in March, 2018 (Million)	14.39	0.01	14.40
Monthly Growth Rate	2.84%	0.32%	2.82%
Overall Tele-density*(%)	91.09	1.76	92.84
Urban Tele-density*(%)	161.17	4.73	165.90
Rural Tele-density*(%)	58.67	0.38	59.05
Share of Urban Subscribers	55.96%	85.19%	56.51%
Share of Rural Subscribers	44.04%	14.81%	43.49%
Broadband Subscribers (Million)	394.65	17.95	412.60

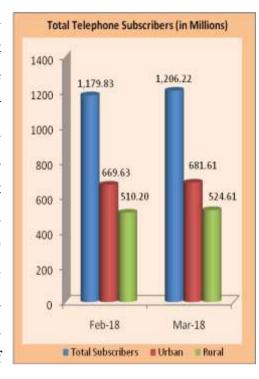
- ❖ In the month of March, 2018, 19.67 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 351.16 million at the end of Feb-18 to 370.83 million at the end of Mar-18, since implementation of MNP.
- Number of active wireless subscribers (on the date of peak VLR\*) in March, 2018 was 998.00 million.

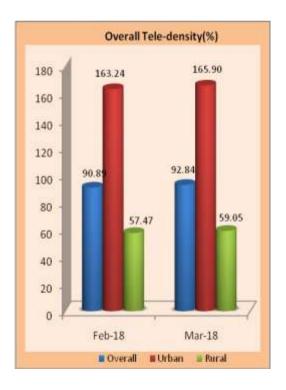
#### Note:

- 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

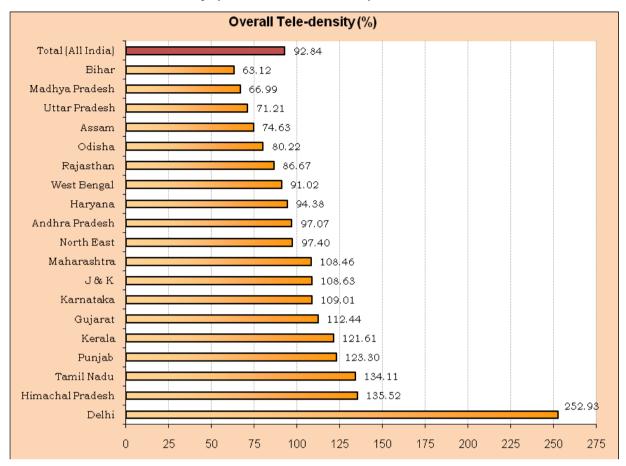
• The number of telephone subscribers in India increased from 1,179.83 million at the end of Feb-18 to 1,206.22 million at the end of Mar-18, thereby showing a monthly growth rate of 2.24%. The urban subscription increased from 669.63 million at the end of Feb-18 to 681.61 million at the end of Mar-18, and the rural subscription also increased from 510.20 million to 524.61 million during the same period. The monthly growth rates of urban and rural subscription were 1.79% and 2.82% respectively during the month of Mar-18.





• The overall Tele-density in India increased from 90.89 at the end of Feb-18 to 92.84 at the end of Mar-18. The Urban Tele-density increased from 163.24 at the end of Feb-18 to 165.90 at the end of Mar-18, and Rural Teledensity also increased from 57.47 at the end of Feb-18 to 59.05 at the end of Mar-18. The share of urban and rural subscribers in total number of telephone subscribers at the end of Mar-18 was 56.51% and 43.49% 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 March, 2018

Circle		s in the month ch, 2018	Telephone Subscriber base as on 31st March, 2018				
Category	Wireline segment	Wireless segment	Wireline segment	Wireless segment			
Circle A	-67,199	10,216,542	9,010,908	413,209,744			
Circle B	-44,985	7,811,754	5,778,013	467,095,132			
Circle C	2,796	6,676,543	1,047,934	184,639,596			
Metro	-44,918	1,835,920	6,973,861	118,464,139			
All India	-154,306	26,540,759	22,810,716	1,183,408,611			

## Circle Category-wise monthly and yearly Growth Rates in Telephone Subscribers in the month of March, 2018

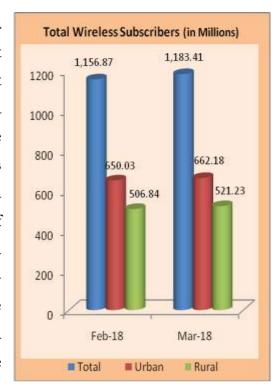
Circle		wth rate (%) to Mar-18)	Yearly growth rate (%) (Mar-17 to Mar-18)				
Category	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment			
Circle A	-0.74	2.54	-6.78	1.01			
Circle B	-0.77	1.70	-10.33	0.15			
Circle C	0.27	3.75	-10.22	5.22			
Metro	-0.64	1.57	-2.11	-0.66			
All India	-0.67	-0.67 2.29		1.13			

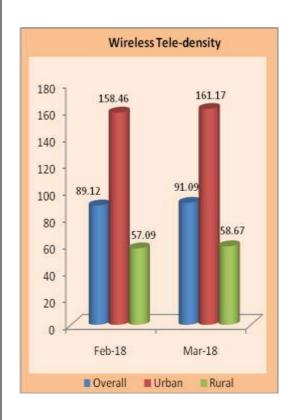
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, Circles of all
  categories showed positive monthly growth in subscriber base during the
  month of Mar-18. Circles of Category-A showed maximum net addition
  in wireless subscribers during the month.
- In Wireline segment, Circles of Category-C showed positive monthly growth rate in number of wireline subscribers during the month of Mar-18. Circles of all other categories showed decline in their subscriber base during the same period.

#### III. Wireless Subscribers

• Total wireless subscribers (GSM, CDMA & LTE) increased from 1,156.87 million at the end of Feb-18 to 1,183.41 million at the end of Mar-18, thereby registering a monthly growth rate of 2.29%. Wireless subscription in urban areas increased from 650.03 million at the end of Feb-18 to 662.18 million at the end of Mar-18, and wireless subscriptions in rural areas also increased from 506.84 million to 521.23 million during the month. The monthly growth rates of urban and rural wireless subscription were 1.87% and 2.84% respectively.



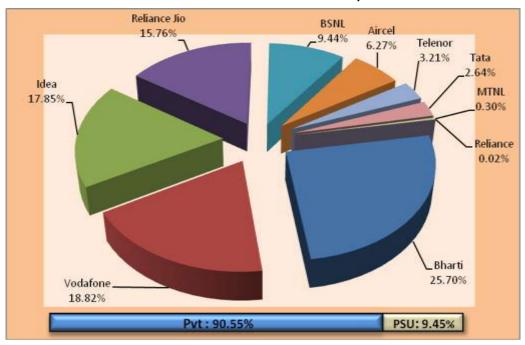


• The Wireless Tele-density in India increased from 89.12 at the end of Feb-18 to 91.09 at the end of Mar-18. The Urban Wireless Tele-density increased from 158.46 at the end of Feb-18 to 161.17 at the end of Mar-18, and Rural Wireless Tele-density also increased from 57.09 to 58.67 during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 55.96% and 44.04% respectively at the end of Mar-18. Detailed statistics of wireless subscriber base is available at **Annexure-I**.

• As on 31st March, 2018, the private access service providers held 90.55% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 9.45%.

• 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 March, 2018



Net Additions in Wireless Subscribers of Access Service Providers in the Month of March, 2018



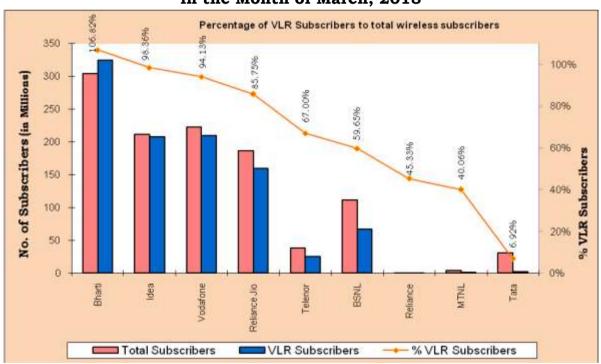
**Note:** 1. On noticing that while reporting number of subscribers, some of the TSPs were deducting inactive subscribers. A Direction was issued on 18th August 2017 to TSPs to strictly adhere to the Department of Telecommunications' methodology for reporting their number of subscribers. However, some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

2. M/s Aircel Ltd has reported estimated subscriber base for the month of March, 2018 due to some technical problem as majority of their core network nodes are shut down.

## IV. Active Wireless Subscribers (VLR Data)

- Out of the total wireless subscribers (1,183.41 million), 998.00 million wireless subscribers were active (except Aircel) on the date of peak VLR in the month of Mar-18. The proportion of active wireless subscribers was approximately 84.33% 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 Mar-18 is available at **Annexure-II** and the methodology used for reporting VLR subscribers is available at **Annexure-IV**.

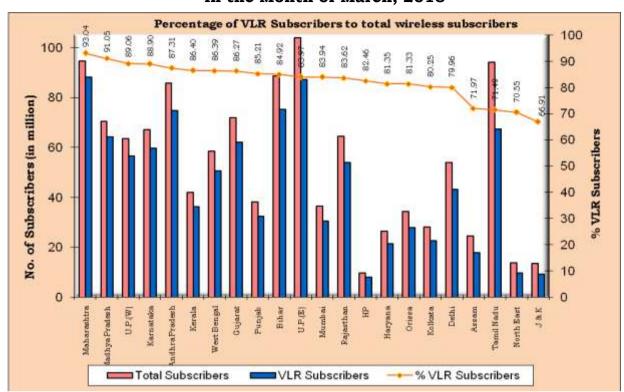
# Access Service Provider-wise Percentage of VLR Subscribers in the Month of March, 2018



#### Note-

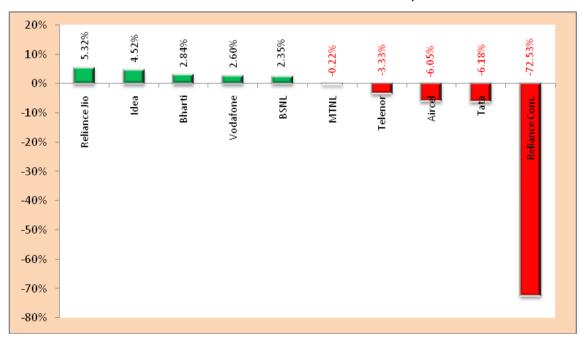
- 1. Number of VLR subscribers of Bharti Airtel and Idea Cellular were more than their subscriber base due to a large number of inroamers in its network.
- 2. M/s Aircel Ltd has not reported their peak VLR subscribers for the month of March, 2018 due to some technical problem.

# Service Area wise percentage of VLR Subscribers in the Month of March, 2018

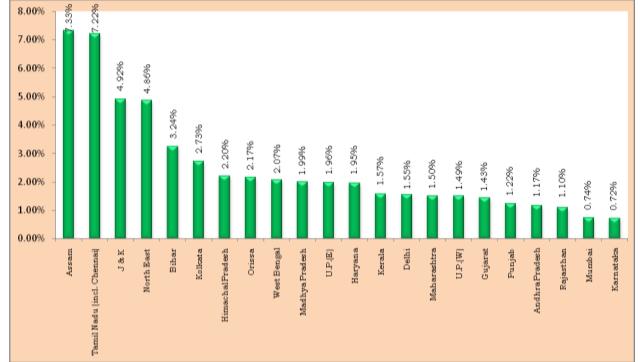


### V. Growth in Wireless Subscribers

Access Service Provider-wise Monthly Growth Rate of Wireless Subscribers in the Month of March, 2018







• During the month of March, 2018, all service areas showed positive growth rate in wireless subscriber. Assam service area showed maximum growth rate (7.33%) followed by Tamil Nadu (including Chennai) service area with 7.22% growth rate in wireless subscribers during the month.

## 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 Mar-18, a total of 19.67 million requests were received for MNP. With this, the cumulative MNP requests increased from 351.16 million at the end of Feb-18 to 370.83 million at the end of Mar-18, 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 30.87 million) followed by Maharashtra (about 25.50 million) service area.
- In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 36.16 million) followed by Andhra Pradesh (about 31.24 million).

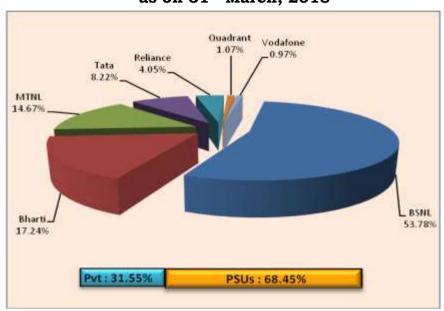
Service Area W	Service Area Wise MNP Status at the end of March, 2018									
Zone -l	[	Zone -	- II							
Service Area	Number of Porting Requests	Service Area	Number of Porting Requests							
Delhi	18,372,428	Andhra Pradesh	31,240,032							
Gujarat	24,513,496	Assam	2,600,946							
Haryana	13,644,337	Bihar	13,882,646							
Himachal Pradesh	1,798,714	Karnataka	36,160,940							
Jammu & Kashmir	688,816	Kerala	9,065,245							
Maharashtra	25,502,069	Kolkata	9,175,055							
Mumbai	19,701,422	Madhya Pradesh	24,849,063							
Punjab	13,777,897	North East	991,342							
Rajasthan	30,871,344	Orissa	7,316,341							
Uttar Pradesh - East	19,738,024	Tamil Nadu	31,104,279							
Uttar Pradesh - West	16,072,254	West Bengal	19,762,291							
Total	184,680,801	Total	186,148,180							
Total (Zone-I + Zone-II)	_		370,828,981							
Net Addition (in March, 2018)			19,668,810							

### VII. Wireline Subscribers

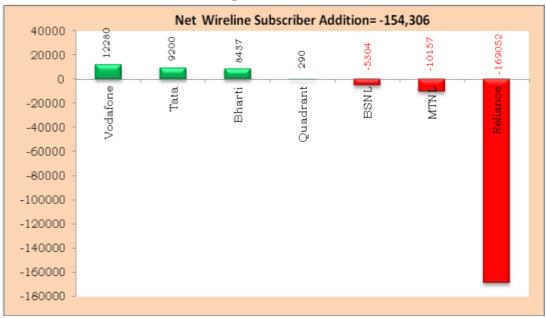
 Wireline subscribers further declined from 22.97 million at the end of Feb-18 to 22.81 million at the end of Mar-18. Net decline in the wireline subscriber base was 0.15 million with a monthly decline rate of 0.67%. The share of urban and rural subscribers in total wireline subscribers were 85.19% and 14.81% respectively at the end of Mar-18.

- The Overall Wireline Tele-density(%) declined from 1.77 at the end of Feb-18 to 1.76 at the end of Mar-18. Urban and Rural Wireline Teledensity were 4.73 and 0.38 respectively during the same period.
- BSNL and MTNL, the two PSU access service providers, held 68.45% 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 March, 2018



Access Service Provider-wise Net Additions/declines in Wireline Subscribers during the Month of March, 2018



## VIII. Broadband (≥ 512 Kbps download)

• As per the reports received from 262 operators as compared to 153 operators in previous month, the number of broadband subscribers increased from 392.06 million at the end of Feb-18 to 412.60 million at the end of Mar-18 with a monthly growth rate of 5.24%. Segment-wise broadband subscribers and their monthly growth rates are as below:

# Segment-wise Broadband Subscribers and Monthly Growth Rate in the month of March, 2018

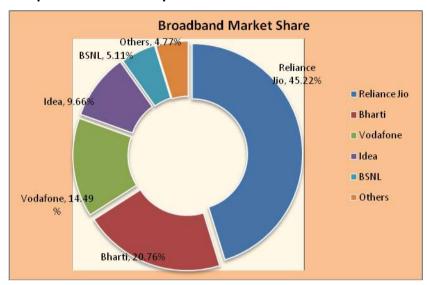
		Broadband subscribers (in million)						
Segment	As on 28 <sup>th</sup> February, 2018	As on 31st March, 2018	rate in the month of Mar-18					
Wired subscribers	17.72	17.95	1.34%					
Mobile devices users (Phones and dongles)	373.94	394.19	5.42%					
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to- Point Radio & VSAT)	0.40	0.46	13.04%					
Total	392.06	412.60	5.24%					

• Top five service providers constituted 95.23% market share of the total broadband subscribers at the end of Mar-18. These service providers were Reliance Jio Infocomm Ltd (186.56 million), Bharti Airtel (85.67 million), Vodafone (59.77 million), Idea Cellular (39.84 million) and BSNL (21.08 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 31.03.2018



- As on 31<sup>st</sup> March, 2018, the top five <u>Wired</u> Broadband Service providers were BSNL (9.30 million), Bharti Airtel (2.18 million), Atria Convergence Technologies (1.31 million), MTNL (0.87 million) and Hathway Cable & Datacom (0.78 million).
- As on 31st March, 2018, the top five <u>Wireless</u> Broadband Service providers were Reliance Jio Infocomm Ltd (186.56 million), Bharti Airtel (83.49 million), Vodafone (59.76 million), Idea Cellular (39.83 million) and BSNL (11.78 million).

Contact details in case of any clarification:

## Shri S. K. Mishra, Pr. Advisor (F&EA),

Telecom Regulatory Authority of India Mahanagar Doorsanchar Bhawan Jawahar Lal Nehru Marg, New Delhi – 110002,

Ph: 011-23221856 Fax: 011-23235249

E-mail: <u>skmishra.trai@nic.in</u>

Authorized to issue:

(Kaushal Kishore) Advisor (F&EA)

### **Wireless Subscriber Base**

Annexure-I

		Group										
<u> </u>	Bh	arti	Reliand	e Com.	Voda	fone	Та	ıta	ld	ea	Air	cel
Circle	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Mar-18
Andhra Pradesh	27251565	27318827	19827	8609	6494795	6397411	2859999	2696111	16959683	17745682	2280719	2152478
Assam	7105674	7803873	191	38	3888691	4220244			1232547	1396473	5811412	5723781
Bihar	31709390	32317362	2546	1293	9971851	10302695	717505	673857	12973886	14188931	7301632	7240203
Delhi	13430668	13916959	190170	48804	12073447	12281591	1273486	1058125	7054416	7378006	6463337	6112896
Gujarat	9694772	9700460	4778	2690	20777643	20787332	1682979	1592529	13827984	14569508	0	0
Haryana	3959144	4002935	1795	313	6415596	6455744	1388730	1321541	5192491	5363143	0	0
Himachal Pradesh	3494635	3522199	2250	323	591311	589785	18776	17858	933628	981637	0	0
J & K	4380565	4814170	678	4	864896	894705			614123	702137	3447971	3378318
Karnataka	24560021	24823003	24871	13220	7731099	7759965	4854192	4561643	9419029	9539659	2709742	2690193
Kerala	4893666	4916310	4425	2705	7917355	7930931	759349	666659	11826218	12229356	234634	233179
Kolkata	5731923	6193156	12036	3725	6183545	6625667	1716310	1600298	2579685	2846495	4117033	3479087
Madhya Pradesh	15278517	15326157	238352	59809	6596051	6541449	3092328	2944834	27011779	27982096	0	0
Maharashtra	14618006	14616112	8776	6084	20535989	20605324	3490226	3307883	29414944	30650020	0	0
Mumbai	7834821	7940801	99793	15944	9775597	9861178	2007357	1876229	4571220	4697339	2324424	2182118
North East	4598186	4904098	0	0	1619941	1751795			496730	549196	3341127	3292069
Orissa	12197449	12382689	817	151	4455900	4537996	1075049	990027	1852991	1988323	3937802	3911300
Punjab	9821577	9870037	3319	692	4960073	4915088	1324804	1266199	7536584	7673236	801576	754818
Rajasthan	21941342	22538857	17834	3604	11886569	12203525	381492	370943	7957854	8271627	6118012	5288258
Tamil Nadu (incl. Chennai)	21035649	24078948	22251	13772	17407912	20191218	2418833	2250785	5620972	6090040	19448120	17828645
U.P.(E)	25655097	26099036	11754	2425	23240071	23762086	2172047	2064058	12058084	12611655	6171020	5836979
U.P.(W)	9390765	9466403	8099	1052	12415851	12495605	1897864	1828398	16999958	17516176	0	0
West Bengal	17206310	17639414	2367	711	21255879	21586423	112594	101248	5932146	6238868	4416121	4047977
Total	295789742	304191806	676929	185968	217060062	222697757	33243920	31189225	202066952	211209603	78924682	74152299
Net Addition		8402064		-490961		5637695		-2054695		9142651		-4772383
Rural Subscribers	152300293	156946820	72864	21407	117208473	120305391	5378104	4814680	109293224	114743105	29457658	28038111

## **Wireless Subscriber Base**

Annexure-I (contd.)

				G	roup						
	BS	NL	MT	NL	Tele	enor	Reliar	ice Jio	То	tal	
Circle	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Feb-18 Mar-18		Mar-18	Net Addition
Andhra Pradesh	10116142	10126809			3944730	3745847	14711909	15438785	84639369	85630559	991190
Assam	1722298	1964401					3192794	3528197	22953607	24637007	1683400
Bihar	4248552	4430024			7357619	7071067	11527727	12365309	85810708	88590741	2780033
Delhi			2287665	2279634			10316656	10835450	53089845	53911465	821620
Gujarat	5700170	5810246			6572212	6259935	12647923	13199987	70908461	71922687	1014226
Haryana	4352454	4476401					4575236	4770299	25885446	26390376	504930
Himachal Pradesh	2520709	2571438					1876235	1961525	9437544	9644765	207221
J & K	1566655	1593836					2138379	2269867	13013267	13653037	639770
Karnataka	7266839	7218971					9936567	10372149	66502360	66978803	476443
Kerala	10374603	10521915					5344457	5502172	41354707	42003227	648520
Kolkata	1382818	1462056					5706181	5967064	27429531	28177548	748017
Madhya Pradesh	5912472	6019594					10981815	11614091	69111314	70488030	1376716
Maharashtra	7069321	7110321			5156825	4823593	12911454	13483734	93205541	94603071	1397530
Mumbai			1277095	1277426			8218536	8524091	36108843	36375126	266283
North East	1522923	1592286					1552237	1679684	13131144	13769128	637984
Orissa	5305906	5419714					4790869	5114718	33616783	34344918	728135
Punjab	5242265	5346523					7941457	8265631	37631655	38092224	460569
Rajasthan	5616033	5538975					9750616	10155612	63669752	64371401	701649
Tamil Nadu (incl. Chennai)	10016832	11111802					11766902	12509414	87737471	94074624	6337153
U.P.(E)	11614218	11850973			9403657	9312386	11515140	12302576	101841088	103842174	2001086
U.P.(W)	5842535	5777895			6858308	6771754	9053407	9543111	62466787	63400394	933607
West Bengal	1722063	1735303					6675149	7157362	57322629	58507306	1184677
Total	109115808	111679483	3564760	3557060	39293351	37984582	177131646	186560828	1156867852	1183408611	26540759
Net Addition		2563675		-7700		-1308769		9429182	0	26540759	
Rural Subscribers	35319309	35820758	47812	47644	11151469	10757080	46606443	49734609	506835649	521229605	14393956

### Proportion of VLR on the date of Peak VLR in the month of Mar-18 (%)

### Annexure-II

Circle	Aircel	Bharti	BSNL	Idea	MTNL	Reliance	Reliance Jio	Tata	Telenor	Vodafone	Total
Andhra Pradesh		107.16	71.68	99.26		60.88	80.55	3.18	62.91	89.60	87.31
Assam		97.42	70.91	96.17		47.37	94.84			95.90	71.97
Bihar		99.37	61.85	94.41		25.37	97.69	8.31	75.83	92.02	84.92
Delhi		102.90		96.89	31.35	53.24	83.03	42.59		93.22	79.96
Gujarat		112.18	48.72	97.48		64.09	82.86	4.27	52.81	95.35	86.27
Haryana		120.08	43.12	101.06		68.37	65.55	1.87		95.41	81.35
Himachal Pradesh		100.18	52.08	109.09		38.08	73.48	2.29		97.07	82.46
J & K		100.10	58.84	99.17		100.00	81.70			92.48	66.91
Karnataka		115.64	62.24	98.98		66.10	83.92	1.79		104.50	88.90
Kerala		106.27	67.05	97.34		38.37	81.53	3.95		95.73	86.40
Kolkata		110.86	65.74	95.17		28.70	88.15	16.62		98.84	80.25
Madhya Pradesh		114.20	60.35	99.81		26.16	84.78	1.81		79.53	91.05
Maharashtra		118.76	58.17	98.25		37.44	94.41	18.39	64.45	96.86	93.04
Mumbai		116.39		89.38	55.60	61.50	87.46	16.09		87.36	83.94
North East		99.62	72.14	98.11		-	90.75			92.33	70.55
Orissa		102.58	72.28	100.66		74.83	94.62	2.31		98.03	81.33
Punjab		109.91	48.34	97.83		36.13	83.99	0.18		93.07	85.21
Rajasthan		100.20	52.99	98.54		51.28	81.89	1.32		96.99	83.62
<b>Tamil Nadu</b> (incl. Chennai)		101.84	68.89	98.41		59.45	84.01	1.30		91.79	71.49
U.P. (E)		108.05	46.12	102.26		45.48	93.91	2.62	69.24	95.04	83.97
U.P. (W)		118.25	48.10	98.13		35.65	81.13	1.11	71.91	101.40	89.06
West Bengal		100.57	82.03	100.73		30.38	81.66	1.94		89.16	86.39
Total		106.82	59.65	98.36	40.06	45.33	85.75	6.92	67.00	94.13	84.33

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

					Grou	ıp						Gro	oup		•	_	
Circle	BS	NL	MT	NL	Bha	arti	Reli	ance	Та	ıta	Quad	lrant	Voda	afone	Tot	tal	
	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Mar-18	Feb-18	Mar-18	Net Addition
Andhra Pradesh	1052864	1054324			167392	168154	72693	53373	172716	174396			26650	29490	1492315	1479737	-12578
Assam	135368	134580											2670	2670	138038	137250	-788
Bihar	257218	258955					6227	5792	11442	11426			2100	2100	276987	278273	1286
Delhi			1544304	1538377	1314917	1320229	159614	156272	144949	144715			32630	32240	3196414	3191833	-4581
Gujarat	1043825	1050516			80352	80744	69887	29886	92600	94004			10037	13427	1296701	1268577	-28124
Haryana	239079	239944			22137	22169	3618	3239	38252	38082				60	303086	303494	408
Himachal Pradesh	119801	120440					3864	3650	2343	2374			60	60	126068	126524	456
J & K	115204	115678													115204	115678	474
Karnataka	1106334	1104785			644318	647602	147473	157210	271532	272695			34455	35925	2204112	2218217	14105
Kerala	1867853	1868937			58299	58335	25241	22061	18672	18761			2520	2550	1972585	1970644	-1941
Kolkata	563998	561941			122699	123535	67205	46902	51912	52091			6630	7050	812444	791519	-20925
Madhya Pradesh	667834	665705			258006	254043	19294	13688	15467	15673			660	660	961261	949769	-11492
Maharashtra	1264121	1258265			82063	82822	74219	62322	308892	309046			16267	16417	1745562	1728872	-16690
Mumbai			1812421	1808191	360852	360902	243930	221476	559256	562828			33462	37112	3009921	2990509	-19412
North East	112345	111924											210	210	112555	112134	-421
Orissa	263180	265031					3180	3112	8276	8282			1650	1650	276286	278075	1789
Punjab	472000	467488			121130	121841	18677	12874	15935	15524	243530	243820	1560	1560	872832	863107	-9725
Rajasthan	505874	504786			50046	50155	18898	26265	13279	13391			6240	6450	594337	601047	6710
Tamil Nadu (incl. Chennai)	1535658	1539528			555920	555991	115901	86417	116458	117849			15480	15720	2339417	2315505	-23912
U.P.(E)	366035	363772			63738	63815	33778	11735	12801	12806			11280	11400	487632	463528	-24104
U.P.(W)	309463	308642			22227	22196	6936	5244	8864	8905			4080	4170	351570	349157	-2413
West Bengal	274641	272150					1831	1896	3163	3161			60	60	279695	277267	-2428
Total	12272695	12267391	3356725	3346568	3924096	3932533	1092466	923414	1866809	1876009	243530	243820	208701	220981	22965022	22810716	-154306
Net Addition		-5304		-10157		8437		-169052		9200		290		12280		-154306	
Rural Subscribers	3258614	3270003	0	0	0	0	1693	1640	54808	54834	52620	51868	0	0	3367735	3378345	10610

## 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.