For immediate release

#### (Press Release No. 66/2014)

Information Note to the Press



**TELECOM REGULATORY AUTHORITY OF INDIA** 

New Delhi, 14<sup>th</sup> October, 2014 (www.trai.gov.in)



# Highlights of Telecom Subscription Data as on 31<sup>st</sup> August, 2014

Particulars	Wireless	Wireline	<b>Total</b> (Wireless+ Wireline)
Total Telephone Subscribers (Million)	924.32	27.52	951.84
Net Addition in August, 2014 (Million)	5.60	-0.16	5.44
Monthly Growth Rate	0.61%	-0.57%	0.57%
Urban Telephone Subscribers (Million)	544.69	21.91	566.60
Net Addition in August, 2014 (Million)	4.25	-0.08	4.17
Monthly Growth Rate	0.79%	-0.38%	0.74%
Rural Telephone Subscribers (Million)	379.63	5.61	385.25
Net Addition in August, 2014 (Million)	1.34	-0.07	1.27
Monthly Growth Rate	0.36%	-1.27%	0.33%
Overall Tele-density*	74.16	2.21	76.36
Urban Tele-density*	141.84	5.71	147.54
Rural Tele-density*	44.02	0.65	44.67
Share of Urban Subscribers	58.93%	79.61%	59.53%
Share of Rural Subscribers	41.07%	20.39%	40.47%
Broadband Subscribers (Million)	59.26	15.05	74.31

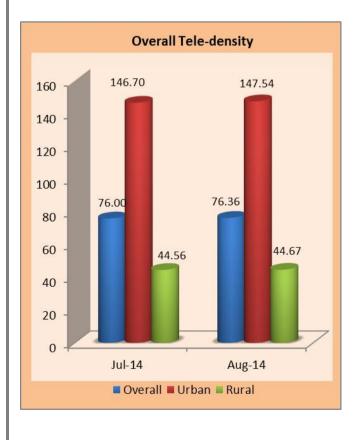
- In the month of August, 2014, 2.83 million subscribers submitted requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 126.72 million at the end of July, 2014 to 129.56 million at the end of August, 2014.
- Number of active wireless subscribers on the date of peak VLR<sup>#</sup> in August, 2014 was 807.29 million (87.34% of the total wireless subscriber base).

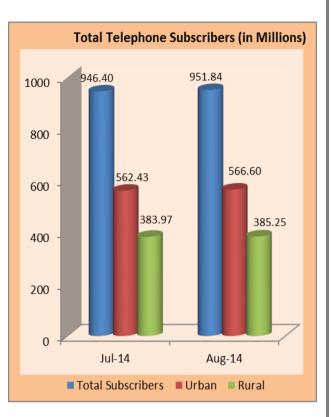
# VLR is acronym of Visitor Location Register.

<sup>\*</sup> Based on the population projections from Census data published by the Office of Registrar General & Census Commissioner of India.

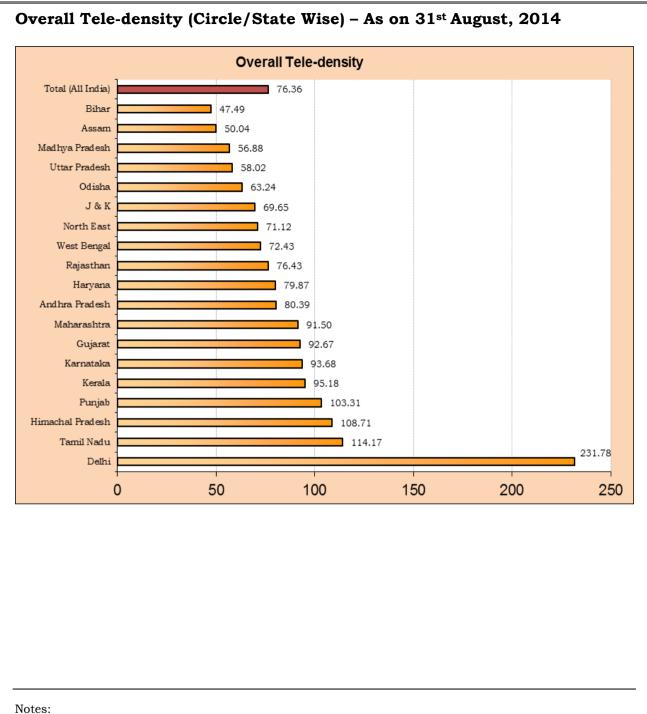
### I. Total Telephone Subscribers

The number telephone of • subscribers in India increased from 946.40 million at the end of July, 2014 to 951.84 million at the end of August, 2014, thereby showing a monthly growth rate of 0.57%. The urban subscription increased from 562.43 million at the end of July, 2014 to 566.60 million at the end of 2014 and the August, rural subscription increased from 383.97 million to 385.25 million during the same period. The monthly growth rates of urban and rural subscription were 0.74% and 0.33% respectively.





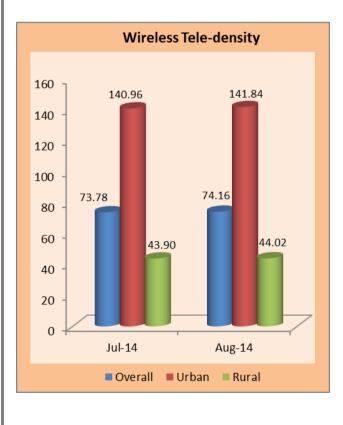
The overall Tele-density in India increased from 76.00 at the end of July, 2014 to 76.36 at the end of August, 2014. The Urban Tele-density increased from 146.70 to 147.54 and Rural Teledensity increased from 44.56 to 44.67 in the month of August 2014. The shares of urban subscribers and rural subscribers at the end of August, 2014 were 59.53% and 40.47% respectively.

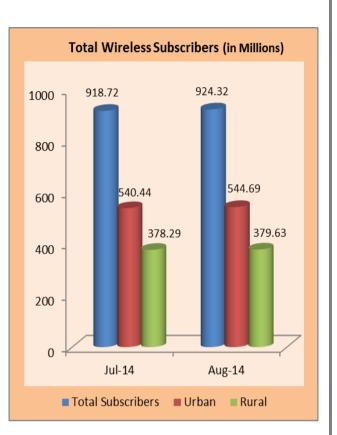


- NULES.
  - 1. Population data/projections are available state wise only.
  - 2. Tele-density figures are derived from the telephone subscriber data provided by the access service providers and the projections of population published by the Office of the Registrar General & Census Commissioner, India.
  - 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). West Bengal includes Kolkata, Maharashtra includes Mumbai and Tamil Nadu includes Chennai.

### **II. Wireless Subscribers**

Total wireless subscriber base increased from 918.72 million at the end of July, 2014 to 924.32 million at the end of August, 2014, thereby registering a monthly growth rate of 0.61%. Wireless subscription in urban areas increased from 540.44 million at the end of July, 2014 to 544.69 million at the end of August, 2014. The wireless subscription in rural areas increased from 378.29 million to 379.63 million during the same period. The shares of urban and rural wireless subscribers were 58.93% and 41.07% respectively at the end of August, 2014.

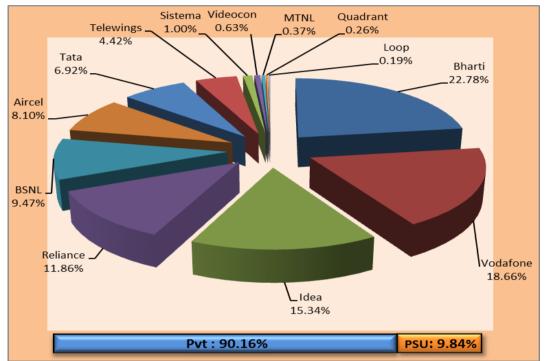




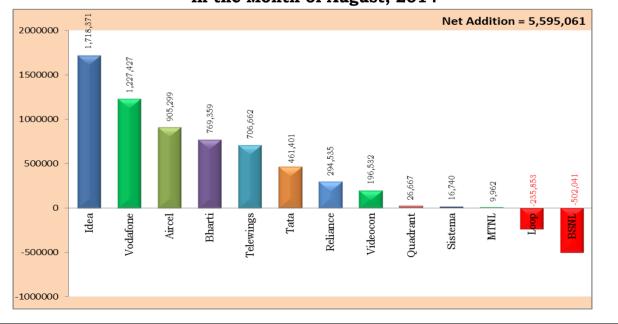
The Wireless Tele-density in India increased from 73.78 at the end of July, 2014 to 74.16 at the end of August, 2014. The Urban Wireless Tele-density increased from 140.96 to 141.84 and Rural Wireless Tele-density increased from 43.90 to 44.02 in the month of August 2014. Detailed statistics of wireless subscriber base is available at Annexure-I.

• As on 31<sup>st</sup> August, 2014, the private access service providers held 90.16% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, held only 9.84% market share. The graphical representations of access service provider-wise market shares in the wireless segment and net additions in wireless subscriber bases in the month of August, 2014 are given below:

Access Service Provider-wise Market Shares in the Wireless Subscribers as on 31<sup>st</sup> August, 2014



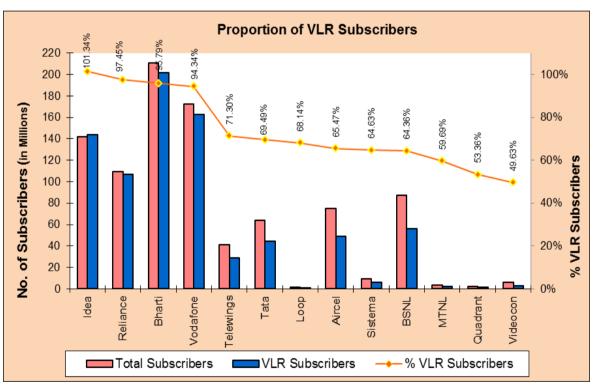
Net Additions in Wireless Subscriber Bases of Access Service Providers in the Month of August, 2014



# **III. Active Wireless Subscribers (VLR Data)**

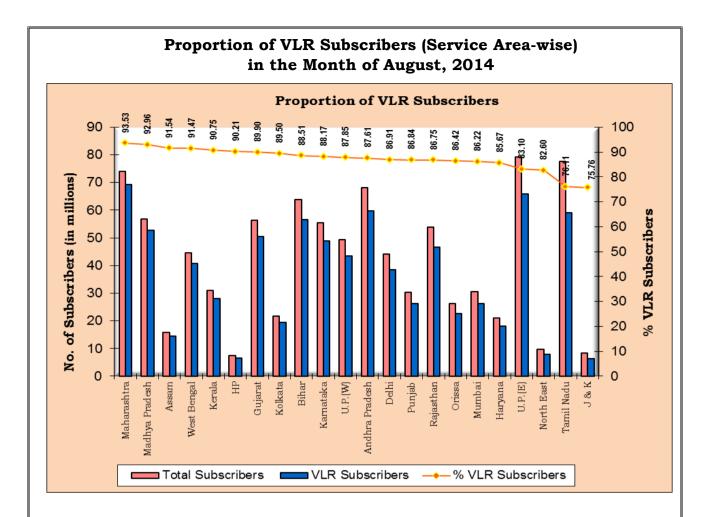
- Out of the total wireless subscriber base (924.32 million), 807.29 million wireless subscribers were active on the date of peak VLR in the month of August, 2014. The proportion of active wireless subscribers was approximately 87.34% of the total wireless subscriber base.
- The detailed statistics on proportion of active wireless subscribers (also referred to as VLR subscribers) on the date of peak VLR in the month of August 2014 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 August, 2014

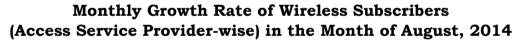


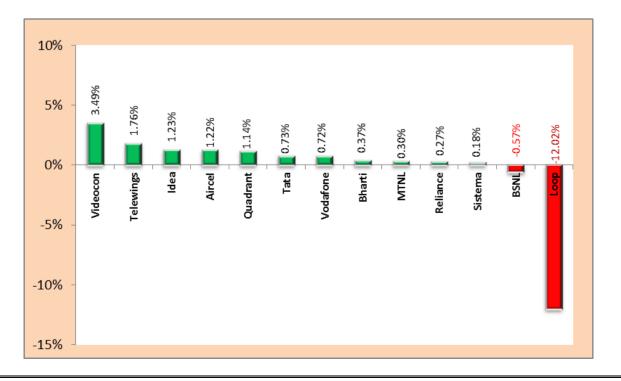
Note-

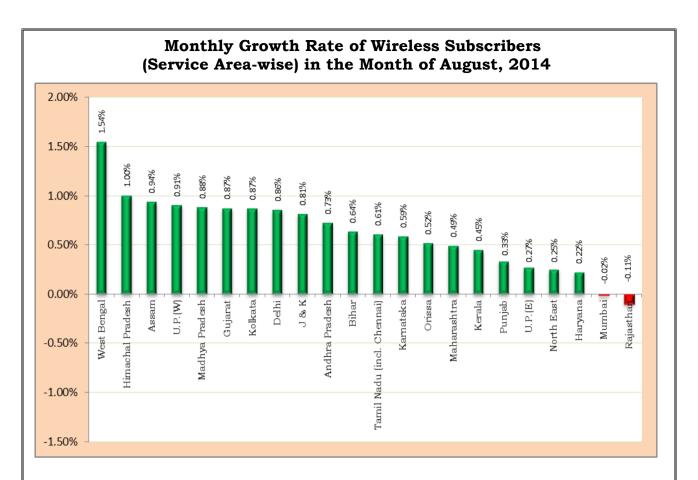
- 1. Number of VLR subscribers of Idea Cellular was more than its subscriber base due to a large number of inroamers in its network.
- 2. Telewings was formerly known as Unitech.
- 3. In the Press Release no. 61/2014 dated 10.09.2014, the active wireless subscriber base on the date of peak VLR in the month of July, 2014 should be read as 799.27 million (in place of 797.06 million) and the proportion of active wireless subscribers in July, 2014 should be read as 87% (in place of 86.76%).



### **IV. Growth in Wireless Subscribers**







• West Bengal recorded the highest growth rate in wireless subscribers during the month of August, 2014 whereas Rajasthan and Mumbai showed decline in subscriber bases during the month.

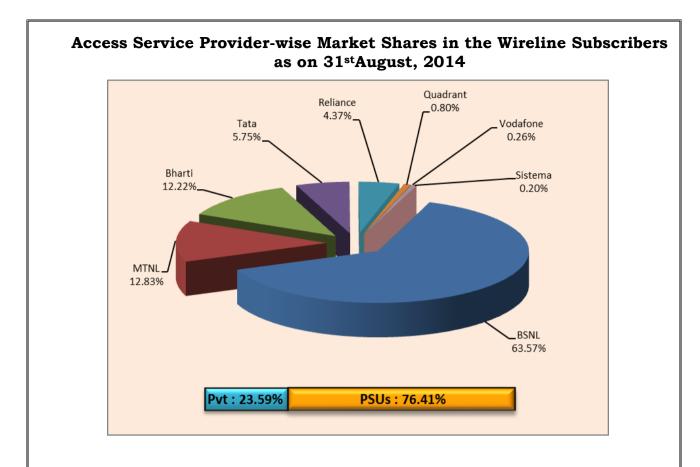
# V. Mobile Number Portability

- In the month of August, 2014, a total of 2.83 million subscribers submitted their requests for MNP. With this, the cumulative MNP requests increased from 126.72 million at the end of July, 2014 to 129.56 million at the end of August, 2014.
- In MNP Zone-I (Northern and Western India), the highest number of requests till date have been received in Rajasthan (about 12.91 million) followed by Gujarat (about 10.88 million). In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 14.65 million) followed by Andhra Pradesh (about 12.10 million).

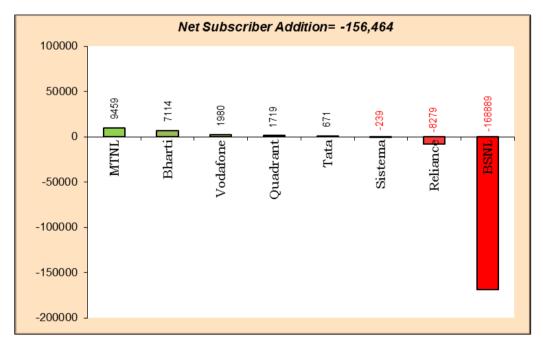
• The status of MNP	requests in vario	ous service areas is	given below:					
MNP Requests (Se	ervice Area-wise	) at the end of Aug	gust, 2014					
Zone -1		Zone - 2						
Service Area	Number of Porting Requests	Service Area	Number of Porting Requests					
Delhi	5020156	Andhra Pradesh	12097655					
Gujarat	10879506	Assam	441795					
Himachal Pradesh	445176	Bihar	3006054					
Haryana	4846306	Karnataka	14645896					
Jammu & Kashmir	27738	Kerala	4864356					
Maharashtra	10031264	Kolkata	2969534					
Mumbai	5999552	Madhya Pradesh	7418113					
Punjab	4495689	North East	228343					
Rajasthan	12911524	Orissa	2723872					
Uttar Pradesh - East	6890973	Tamil Nadu	7837038					
Uttar Pradesh - West	6747015	West Bengal	5029263					
Total	68,294,899	Total	61,261,919					
Total (Zone-1 + Zone-2)			129,556,818					
Net Addition (in August, 2014)			2,833,539					

### VI. Wireline Subscribers

- Wireline subscriber base declined from 27.68 million at the end of July, 2014 to 27.52 million at the end of August, 2014. Net reduction in the wireline subscriber base was 0.16 million at the monthly decline rate of 0.57%. The share of urban and rural subscribers in total wireline subscribers were 79.61% and 20.39% respectively at the end of August, 2014.
- The Overall Wireline Tele-density decreased from 2.22 in July, 2014 to 2.21 in August, 2014, with Urban Wireline Tele-density and Rural Wireline Tele-density being 5.71 and 0.65 respectively. BSNL and MTNL, the two PSU access service providers, held 76.41% of the wireline market share. Detailed statistics of wireline subscriber base are available at Annexure-III. The graphical representations of access service provider-wise market shares in the wireline segment and net additions in wireline subscriber bases in the month of August, 2014 are given below:



Net Additions in Wireline Subscriber Bases of Access Service Providers in the Month of August, 2014



Note : Vodafone has informed that it offers only Primary Rate Interfaces (PRIs) in wireline service segment.

### VII. Category-wise Growth

• As can be seen from the following tables, in wireless segment, the Circles of Category-A showed the highest net addition and Circles of Category-C showed the highest monthly growth rate of subscriber base in the month of August, 2014. In Wireline segment, Circles of Category-A showed the highest net decline and Circles of Category-C showed the highest monthly decline rate of subscriber base in the same period.

Circle Category		in the month of t, 2014	Telephone Subscriber bas as on 31 <sup>st</sup> August, 2014						
Category	Wireline segment	Wireless segment	Wireline segment	Wireless segment					
Circle A	-67090	2131410	10913450	331340976					
Circle B	-64965	2056884	7980723	365651615					
Circle C	-23716	848869	1429565	131111886					
Metro	-693	557898	7199482	96214450					
All India	-156,464	5,595,061	27,523,220	924,318,927					

#### **Circle Category-wise Net Additions in Telephone Subscribers**

#### **Circle Category-wise Growth Rates in Telephone Subscribers**

Circle	Monthly gro (Jul-14 t	wth rate (%) o Aug-14)	Yearly growth rate (%) (Aug-13 to Aug-14)					
Category	Wireline Segment	Wireless Segment	Wireline Segment	Wireless Segment				
Circle A	-0.61	0.65	-6.50	5.77				
Circle B	-0.81	0.57	-11.87	5.03				
Circle C	-1.63	0.65	-7.37	6.36				
Metro	-0.01	0.58	0.18	4.55				
All India	-0.57	0.61	-6.56	5.43				

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

# VIII. Broadband ( $\geq$ 512 Kbps download)

• As per the reports received from the service providers, the number of broadband subscribers increased from 70.81 Million at the end of July 2014 to 74.31 million at the end of August 2014 with monthly growth rate of 4.95%. Segment-wise broadband subscribers and their monthly growth rates are as below:

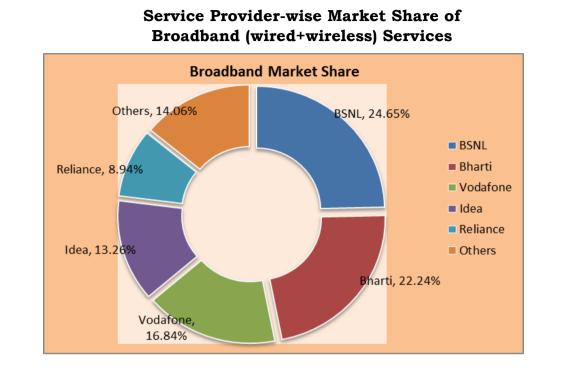
Segment		Broadband subscribers (in million)								
	As on 31 <sup>st</sup> July, 2014	As on 31 <sup>st</sup> August, 2014	growth rate							
Wired subscribers	15.04	15.05	0.06%							
Mobile devices users (Phones and dongles)	55.34	58.82	6.29%							
Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point- to-Point Radio & VSAT)	0.43	0.44	2.75%							
Total	70.81	74.31	4.95%							

#### Segment-wise Broadband Subscribers and Monthly Growth Rates

• Top five service providers constituted 85.94% market share of total broadband subscribers at the end of August, 2014. These service providers were BSNL (18.32 million), Bharti Airtel (16.53 million), Vodafone (12.52 million), Idea Cellular Ltd\* (9.86 million) and Reliance Communications Group\* (6.64 million).

<sup>\*</sup> Wireless subscribers with less than 1MB data usage in a month have not been considered as internet/broadband subscribers by Reliance Communication Group and Idea Cellular Ltd.

• The graphical representation of the service provider-wise market share of broadband services is given below:



# As on 31<sup>st</sup> August, 2014, the top five <u>Wired</u> Broadband Service providers were BSNL (9.97million), Bharti Airtel (1.39 million), MTNL (1.13 million), Beam Telecom (0.40 million) and YOU Broadband (0.41 million).

 As on 31<sup>st</sup> August, 2014, the top five <u>Wireless</u> Broadband Service providers were Bharti Airtel (15.14 million), Vodafone (12.51 million), Idea Cellular (9.85 million), BSNL (8.35 million) and Reliance Communications Group (6.53 million).

Contact details in case of any clarification:

Manish Sinha, Advisor (F&EA), TRAI Mahanagar Doorsanchar Bhawan Jawahar Lal Nehru Marg, New Delhi – 110002, Ph: 011-23230752 Fax: 011-23236650 E-mail: <u>manishsinha@trai.gov.in</u>

Authorised to issue:

(Manish Sinha) Advisor (F&EA)

**Note:** Information in this Press Release is based on the data provided by the Service Providers.

					Wire	eless Sub	scriber B	ase					An	nexure-l	
														Page 1 of 2	
	Dh	orti	Deli		Veda	fana	Group	-	اما		۸:-		BS	NII	
Circle		arti	_	ance		fone	Ta		Ide Ide		Air				
	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	
Andhra Pradesh	20430991	20504182	4913378	4927156	6370618	6448700	6153102	6160065	12631404	12861243	2127382	2171267	9909625	990741	
Assam	4692276	4728560	2192884	2233096	2917978	2936351			632671	653677	3890231	3923704	1300835	129783	
Bihar	22533606	22628959	9471733	9495425	7685362	7662118	2557637	2503525	6856705	6959036	5392248	5417636	3115709	306905	
Delhi	10561710	10637283	7918777	7967356	9188895	9256984	2876952	2861262	5617071	5698658	4284324	4384389			
Gujarat	7443789	7445299	6112047	6165936	17735776	17870983	3110535	3124293	9890916	10027476	22063	18563	3222330	319624	
Haryana	2413514	2404621	1933924	1942884	4949503	4962346.22	2602940	2613848	4215124	4201068	3592	3592	3199231	320909	
Himachal Pradesh	2290683	2316489	1426868	1423733	578418	589996	119037	117546	605574	620170	845662	868923	1436898	143952	
J&K	2792045	2816533	736966	724825	860146	879918			411571	426434	2229294	2246674	1252632	125564	
Karnataka	17608463	17670667	5296925	5221272	7347737	7413554	6245533	6401995	7081626	7151070	2680731	2740310	7001216	700626	
Kerala	3771318	3783546	1806322	1728519	6789275	6833066	1689128	1697441	9046932	9142717	918	918	7297997	735356	
Kolkata	3928115	3957518	3699595	3662945	4740717	4726709	2871900	2922573	1422581	1482547	3284972	3382547	835696	83051	
Madhya Pradesh	10620076	10859173	12021594	12046746	4962479	4955361	4462259	4543053	18138137	18210734	22694	22694	3848148	384930	
Maharashtra	10773067	10579242	6971383	6992254	15949616	16153899	6264513	6318207	19557617	19868100	1631184	1670909	5632914	559855	
Mumbai	4541890	4599522	5994366	5997585	7737658	7805244	3454062	3482701	3499365	3551403	2185706	2199731			
North East	3176998	3173211	850162	843536	1203468	1218843			364446	377288	2440428	2447281	1563996	156311	
Orissa	8218533	8246808	3757322	3771231	3546628	3577433	2182013	2193127	1148545	1170828	3820473	3831385	3392612	341058	
Punjab	7535163	7535544	2780293	2857115	4716532	4733707	2395683	2420111	5909524	5915564	966699	982716	3471420	340429	
Rajasthan	16242896	16311392	5726611	5814598	10360760	10357586	1924582	1897919	6227703	6244583	5083671	5194172	6057847	573272	
Tamil Nadu (incl. Chennai)	14856451	14980817	5896534	5828277	13452204	13560660	5627832	5691800	3140362	3288171	23212685	23330712	9914547	989945	
U.P.(E)	17410290	17314300	7730553	7747305	16395808	16437590	4258216	4300911	8238207	8270920	5601849	5698589	9769154	973222	
U.P.(W)	7049086	7089398	5250391	5168453	10051406	10181424	3636946	3662210	12038434	12161905	109150	111903	3843236	383423	
West Bengal	10868894	10946149	6865104	7088020	13725118	13931057	1050383	1032067	3442254	3551548	4153291	4245931	2009827	198417	
Total	209759854	210529213	109353732	109648267	171266102	172493529	63483253	63944654	140116769	141835140	73989247	74894546	88075870	8757382	
Net Addition		769359		294535		1227427.2		461401		1718371		905299		-50204	

					Wire	less Sub	scriber	Base						A	nnexure-
						_									Page 2 of 2
				_		Grou	-				_	-		_	
Circle	МТ	NL	Telev	vings	Sist	ema	Loop		Videocon		Quadrant		Total		Nat
	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Net Addition
Andhra Pradesh			5179970	5228043									67716470	68208072	491602
Assam													15626875	15773220	14634
Bihar			5771724	6051831									63384724	63787588	402864
Delhi	2308385	2310602			1003476	1018699							43759590	44135233	375643
Gujarat			6129458	6219119	177931	178494			1911910	1997202			55756755	56243613	486858
Haryana									1618848	1646225			20936676	20983678	47002.22
Himachal Pradesh													7303140	7376380	7324
J&K													8282654	8350027	6737
Karnataka					1765085	1745823							55027316	55350953	32363
Kerala					405016	404837							30806906	30944604	13769
Kolkata					672318	677766							21455894	21643118	187224
Madhya Pradesh									2106903	2190766			56182290	56677834	49554
Maharashtra			6805123	6766076									73585417	73947243	361820
Mumbai	1065430	1073175					1962591	1726738					30441068	30436099	-4969
North East													9599498	9623272	23774
Orissa													26066126	26201399	135273
Punjab											2343389	2370056	30118703	30219108	10040
Rajasthan					2175229	2189820							53799299	53742796	-5650
Tamil Nadu (incl. Chennai)					1022993	1011199							77123608	77591095	46748
U.P.(E)			9571501	9685732									78975578	79187575	21199
U.P.(W)			6709596	6923233	207556	206442							48895801	49339206	44340
West Bengal					1764607	1777871							43879478	44556814	67733
Total	3373815	3383777	40167372	40874034	9194211	9210951	1962591	1726738	5637661	5834193	2343389	2370056	918723866	924318927	559506 <sup>-</sup>

	]	Proportion	of VLR o	n the dat	e of Peak	VLR in	the mon	th of Aug	-14 (%)			An	nexure-II	
Circle	Aircel	Bharti	BSNL	Quadrant	ldea*	Loop	MTNL	Reliance	Sistema	Tata	Telewings	Videocon	Vodafone	Total
Andhra Pradesh	63.96	98.44	62.98		100.77			99.15		75.21	68.80		91.02	87.61
Assam	85.06	97.75	80.30		91.81			93.11					93.91	91.54
Bihar	70.89	95.17	61.95		101.66			99.33		51.20	72.09		91.76	88.51
Delhi	65.18	86.86			98.68		51.05	99.22	46.38	59.26			101.35	86.91
Gujarat	56.45	95.73	86.86		102.55			99.36	80.78	67.06	69.69	49.50	93.31	89.90
Haryana	127.17	96.88	66.91		99.40			99.33		73.54		48.83	93.99	85.67
Himachal Pradesh	58.97	96.29	85.78		110.11			95.17		48.78			98.55	90.21
J & K	84.53	95.69	9.66		91.77			69.73					81.13	75.76
Karnataka	62.12	99.79	57.47		102.98			99.28	65.22	78.72			90.55	88.17
Kerala	109.26	98.52	76.41		101.34			98.00	61.96	73.28			91.91	90.75
Kolkata	74.92	96.53	87.34		93.96			98.65	92.45	70.86			97.04	89.50
Madhya Pradesh	2.82	97.26	82.40		105.04			92.20		70.46		50.36	89.07	92.96
Maharashtra	61.95	97.42	83.79		103.74			99.54		75.18	72.22		98.56	93.53
Mumbai	61.76	93.49			94.39	68.14	78.28	99.32		68.78			87.94	86.22
North East	72.63	96.73	64.37		89.39			84.50					85.77	82.60
Orissa	59.57	96.51	90.10		94.22			95.99		68.86			86.56	86.42
Punjab	49.50	95.20	73.54	53.36	100.27			99.17		64.08			95.04	86.84
Rajasthan	65.05	94.78	46.30		105.25			99.28	59.48	90.03			94.33	86.75
<b>Tamil Nadu</b> (incl. Chennai)	59.00	98.39	48.55		83.33			93.88	67.28	66.87			96.23	76.11
U.P. (E)	63.67	93.59	47.60		103.42			99.21		59.62	71.24		95.12	83.10
U.P. (W)	54.43	89.52	61.76		99.08			99.22	55.30	64.79	73.14		96.63	87.85
West Bengal	74.67	95.08	81.80		99.81			97.32	68.80	52.23			95.82	91.47
Total	65.47	95.79	64.36	53.36	101.34	68.14	59.69	97.45	64.63	69.49	71.30	49.63	94.34	87.34

\*Peak VLR figures in some circles of Idea Cellular Ltd. and M/s Aircel Ltd. are more than their HLR figures due to a large number of inroamers.

						Wireli	ine Sub	scriber	Base									Anno	ex ure-II
	·							Group	)										
Circle	BS	NL	M	ſŊĹ	Bha	arti	Reliance		Τa	ita	Quad	drant	Sist	tema	Vodafone		Total		
	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Jul-14	Aug-14	Net Additior
Andhra Pradesh	1601699	1590478			123157	122952	85534	85181	168438	166949					8,460	8,490	1987288	1974050	-1323
Assam	180488	179670													1,230	1,260	181718	180930	-78
Bihar	359071	358027					5953	5955	11831	11752					660	690	377515	376424	-109
Delhi			1603141	1602785	1195841	1195952	182495	181254	110552	112555					18,750	18,990	3110779	3111536	75
Gujarat	1393960	1379483			58906	59192	89841	87996	77885	78130					1,890	1,980	1622482	1606781	-1570
Haryana	436,466	433,407			16542	16467	5191	5059	28705	28675					90	90	486994	483698	-329
Himachal Pradesh	236,347	233,657					4858	4861	2619	2672					90	90	243914	241280	-263
J & K	179,580	161,478															179580	161478	-1810
Karnataka	1474860	1464480			498424	502978	121194	122793	169142	169228					5,850	6,060	2269470	2265539	-393
Kerala	2710402	2682080			48358	48590	46632	44919	13422	13584					450	450	2819264	2789623	-2964
Kolkata	816325	806442			105386	105672	80722	80726	43477	44159					2220	2850	1048130	1039849	-828
Madhya Pradesh	830507	831359			227320	228228	22171	22177	19256	19048					270	330	1099524	1101142	161
Maharashtra	1821017	1804708			69785	70069	90964	89235	263218	263605					8,970	9,030	2253954	2236647	-1730
Mumbai			1919917	1929732	349736	349849	236238	235040	525085	523036					10,290	10,440	3041266	3048097	683
North East	131,349	130,906													60	90	131409	130996	-41
Orissa	328169	327519					2885	2912	7611	7546					480	480	339145	338457	-68
Punjab	835074	827091			91913	91999	21772	21430	16951	17078	218273	219992			540	540	1184523	1178130	-639
Rajasthan	765719	758386			38613	38857	22001	21907	9227	9165			55128	54889	1,560	1,680	892248	884884	-736
Tamil Nadu (incl. Chennai)	2151468	2135092			459896	459752	144414	143132	86138	86787					5430	5670	2847346	2830433	-1691
U.P.(E)	450653	440908			52735	53189	38697	38701	15084	15313					960	1,020	558129	549131	-899
U.P.(W)	484839	480892			20594	20574	6399	6408	9625	9602					330	330	521787	517806	-398
West Bengal	477588	470629					1901	1897	3700	3753					30	30	483219	476309	-691
Total	17665581	17496692	3523058	3532517	3357206	3364320	1209862	1201583	1581966	1582637	218273	219992	55128	54889	68610	70590	27679684	27523220	-15646
Net Addition		-168889		9459		7114		-8279		671		1719		-239		1980		-156464	

# 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.