

**TELECOM REGULATORY AUTHORITY OF INDIA**New Delhi, 28<sup>th</sup> April, 2017

(www.trai.gov.in)

**Highlights of Telecom Subscription Data as on 28<sup>th</sup> February, 2017**

| <b>Particulars</b>                           | <b>Wireless</b> | <b>Wireline</b> | <b>Total</b><br>(Wireless+<br>Wireline) |
|--|-----------------|-----------------|---|
| <b>Total Telephone Subscribers</b> (Million) | <b>1164.20</b>  | <b>24.35</b>    | <b>1188.55</b>                          |
| Net Addition in February, 2017 (Million)     | 13.75           | 0.003           | 13.75                                   |
| Monthly Growth Rate <sup>\$</sup>            | 1.19%           | 0.01%           | 1.17%                                   |
| <b>Urban Telephone Subscribers</b> (Million) | <b>671.63</b>   | <b>20.52</b>    | <b>692.15</b>                           |
| Net Addition in February, 2017 (Million)     | 11.00           | 0.01            | 11.01                                   |
| Monthly Growth Rate <sup>\$</sup>            | 1.66%           | 0.05%           | 1.62%                                   |
| <b>Rural Telephone Subscribers</b> (Million) | <b>492.57</b>   | <b>3.83</b>     | <b>496.39</b>                           |
| Net Addition in February, 2017 (Million)     | 2.75            | -0.01           | 2.74                                    |
| Monthly Growth Rate <sup>\$</sup>            | 0.56%           | -0.16%          | 0.56%                                   |
| <b>Overall Tele-density*(%)</b>              | <b>90.70</b>    | <b>1.90</b>     | <b>92.59</b>                            |
| Urban Tele-density*(%)                       | 166.77          | 5.10            | 171.86                                  |
| Rural Tele-density*(%)                       | 55.92           | 0.43            | 56.35                                   |
| Share of Urban Subscribers                   | 57.69%          | 84.29%          | 58.24%                                  |
| Share of Rural Subscribers                   | 42.31%          | 15.71%          | 41.76%                                  |
| <b>Broadband Subscribers</b> (Million)       | <b>243.13</b>   | <b>18.18</b>    | <b>261.31</b>                           |

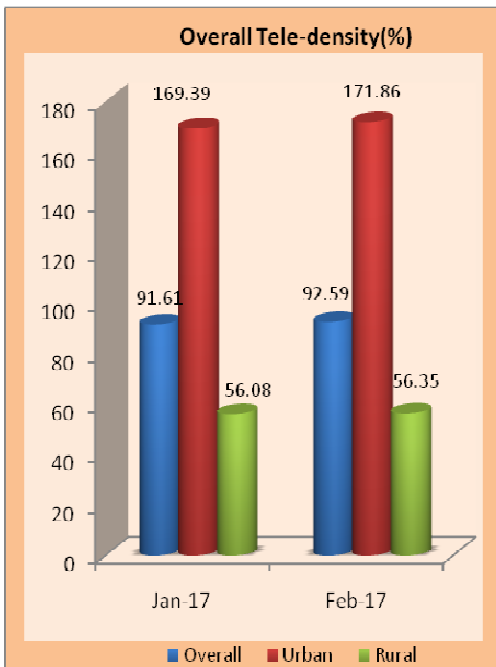
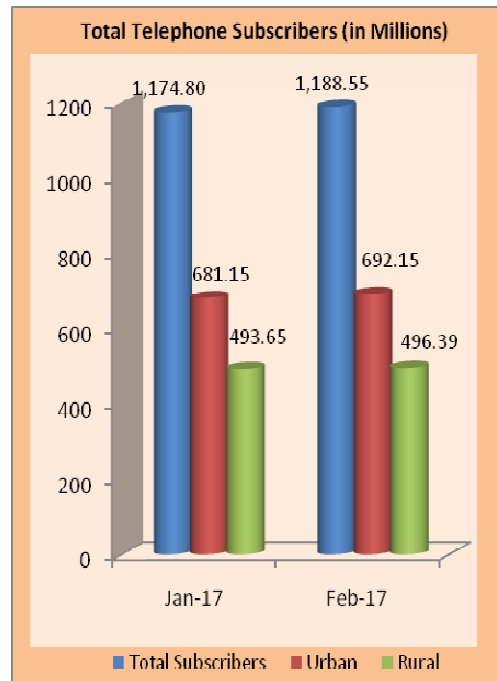
- ❖ In the month of February, 2017, 5.67 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 261.06 million at the end of Jan-17 to 266.73 million at the end of Feb-17, since implementation of MNP.
- ❖ Number of active wireless subscribers (on the date of peak VLR<sup>#</sup>) in February, 2017 was 1,010.63 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.
- \$ Growth over previous month.

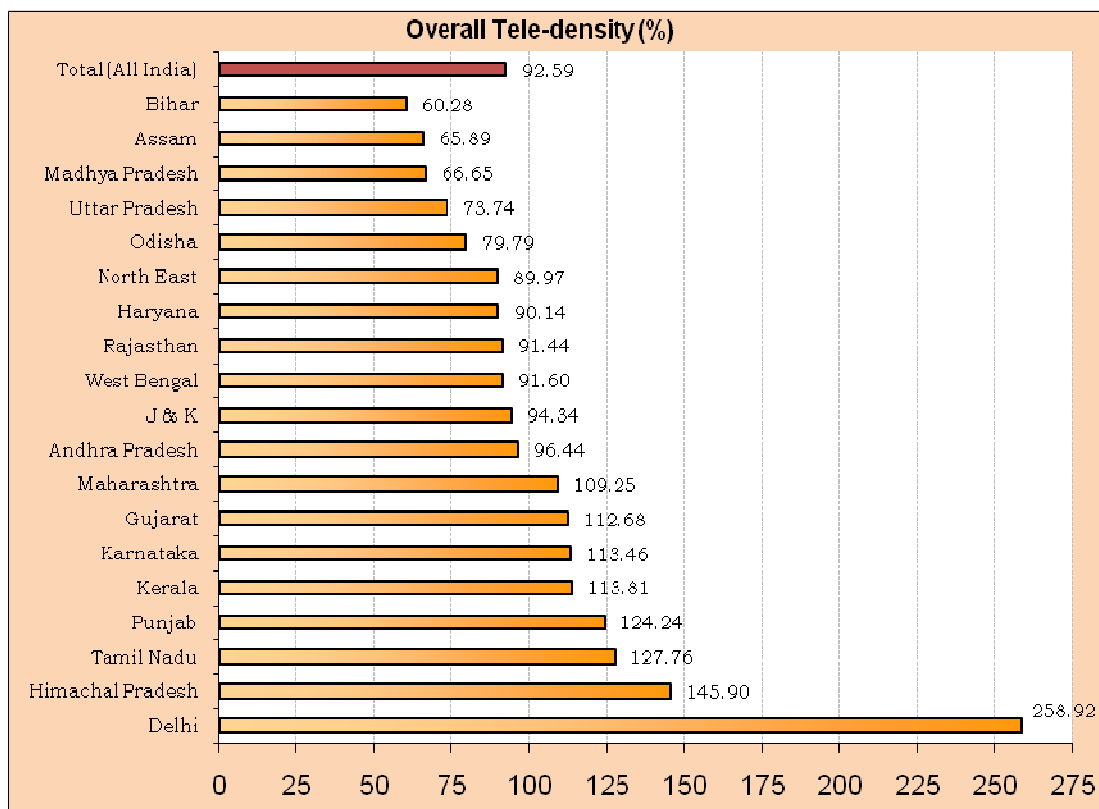
## I. Total Telephone Subscribers

The number of telephone subscribers in India increased from 1,174.80 million at the end of Jan-17 to 1,188.55 million at the end of Feb-17, thereby showing a monthly growth rate of 1.17%. The urban subscription increased from 681.15 million at the end of Jan-17 to 692.15 million at the end of Feb-17, however the rural subscription increased from 493.65 million to 496.39 million during the same period. The monthly growth rates of urban and rural subscription were 1.62% and 0.56% respectively during the month of Feb-17.



The overall Tele-density in India increased from 91.61 at the end of Jan-17 to 92.59 at the end of Feb-17. The Urban Tele-density increased from 169.39 at the end of Jan-17 to 171.86 at the end of Feb-17, and the Rural Tele-density increased from 56.08 at the end of Jan-17 to 56.35 at the end of Feb-17. The share of urban subscribers and rural subscribers in total number of telephone subscribers at the end of Feb-17 was 58.24% and 41.76% respectively.

## Overall Tele-density (Circle/State Wise) – As on 28<sup>th</sup> February, 2017



### 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 Chhatisgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura States.

## II. Category-wise Growth in subscriber base

### Circle Category-wise Net Additions in Telephone Subscribers in the month of February, 2017

| Circle Category  | Net additions in the month of February, 2017 |                   | Telephone Subscriber base as on 28 <sup>th</sup> February, 2017 |                      |
|------------------|--|-------------------|---|----------------------|
|                  | Wireline segment                             | Wireless segment  | Wireline segment  | Wireless segment     |
| Circle A         | 7,290  | 4,081,417         | 9,599,519   | 406,843,434          |
| Circle B         | -13,153                                      | 6,045,044         | 6,459,523   | 464,852,918          |
| Circle C         | -759   | 1,450,406         | 1,164,660   | 173,426,087          |
| Metro            | 9,981  | 2,170,283         | 7,123,011   | 119,077,779          |
| <b>All India</b> | <b>3,359</b>                                 | <b>13,747,150</b> | <b>24,346,713</b>   | <b>1,164,200,218</b> |

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

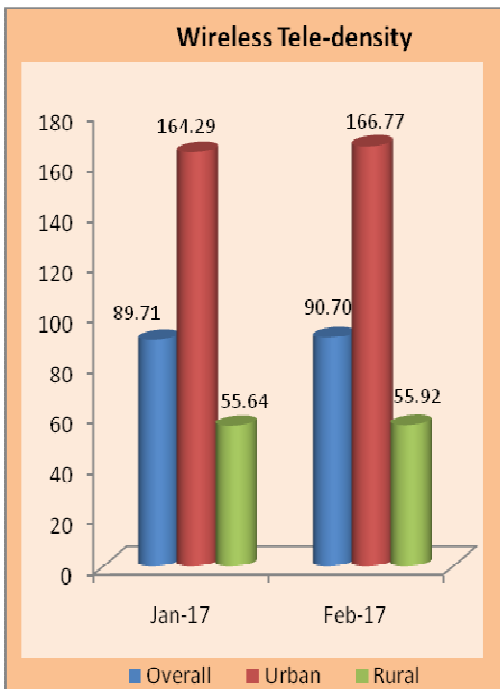
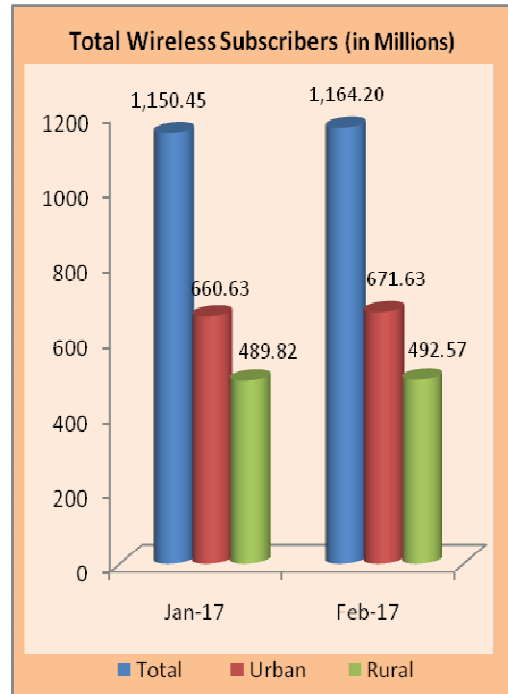
| Circle Category  | Monthly growth rate (%) (Jan-17 to Feb-17) |                  | Yearly growth rate (%) (Feb-16 to Feb-17) |                  |
|------------------|--|------------------|---|------------------|
|                  | Wireline Segment                           | Wireless Segment | Wireline Segment                          | Wireless Segment |
| Circle A         | 0.08                                       | 1.01             | -4.07                                     | 12.09            |
| Circle B         | -0.20                                      | 1.32             | -5.89                                     | 13.49            |
| Circle C         | -0.07                                      | 0.84             | -5.12                                     | 16.02            |
| Metro            | 0.14                                       | 1.86             | 0.07                                      | 13.84            |
| <b>All India</b> | <b>0.01</b>                                | <b>1.19</b>      | <b>-3.44</b>                              | <b>13.40</b>     |

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 Feb-17. However, Metro circles showed maximum monthly growth rate in subscriber base during the same period.
- In Wireline segment, Circles of Category-A and Metros showed the positive monthly growth in subscriber base during the month of Feb-17. However, Circles of Category-B and Category-C showed monthly decline rate in subscriber base during the same period.

### III. Wireless Subscribers

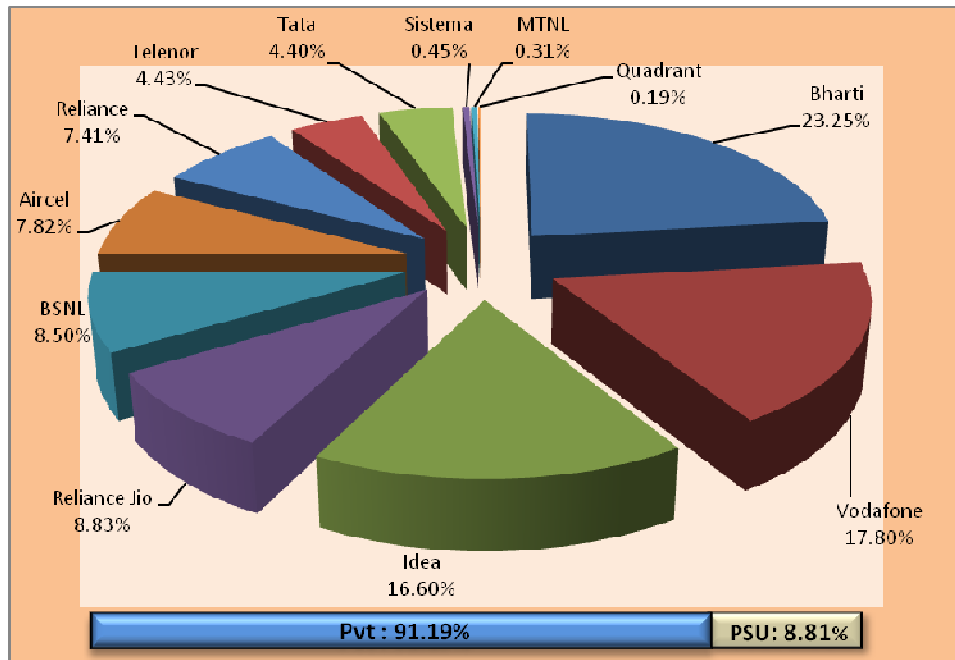
- Total wireless subscribers (GSM, CDMA & LTE) increased from 1,150.45 million at the end of Jan-17 to 1,164.20 million at the end of Feb-17, thereby registering a monthly growth rate of 1.19%. The Wireless subscription in urban areas increased from 660.63 million at the end of Jan-17 to 671.63 million at the end of Feb-17, and wireless subscription in rural areas increased from 489.82 million to 492.57 million during the same period. The monthly growth rates of urban and rural wireless subscription were 1.66% and 0.56% respectively.



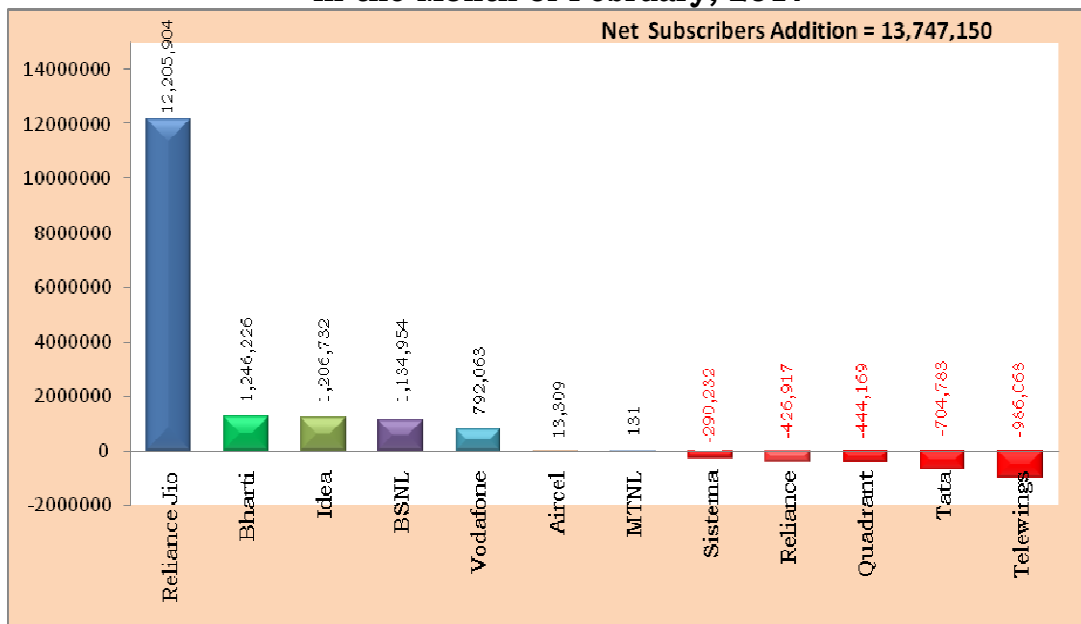
- The Wireless Tele-density(%) in India increased from 89.71 at the end of Jan-17 to 90.70 at the end of Feb-17. The Urban Wireless Tele-density increased from 164.29 at the end of Jan-17 to 166.77 at the end of Feb-17, and Rural Wireless Tele-density increased from 55.64 to 55.92 during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 57.69% and 42.31% respectively at the end of Feb-17. Detailed statistics of wireless subscriber base is available at **Annexure-I**.

- As on 28<sup>th</sup> February, 2017, the private access service providers held 91.19% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 8.81%. 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 28<sup>th</sup> February, 2017**



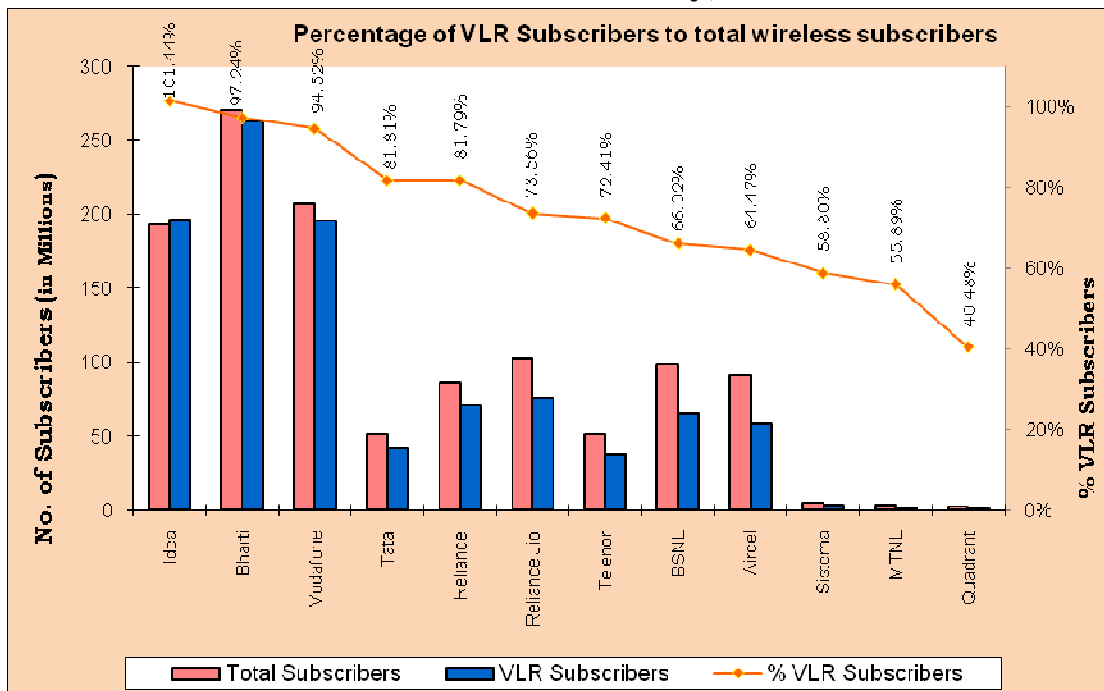
**Net Additions in Wireless Subscribers of Access Service Providers in the Month of February, 2017**



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

- Out of the total wireless subscribers (1,164.20 million), 1,010.63 million wireless subscribers were active on the date of peak VLR in the month of Feb-17. The proportion of active wireless subscribers was approximately 86.81% 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 Feb-17 is available at **Annexure-II** and the methodology used for reporting VLR subscribers is available at **Annexure-IV**.

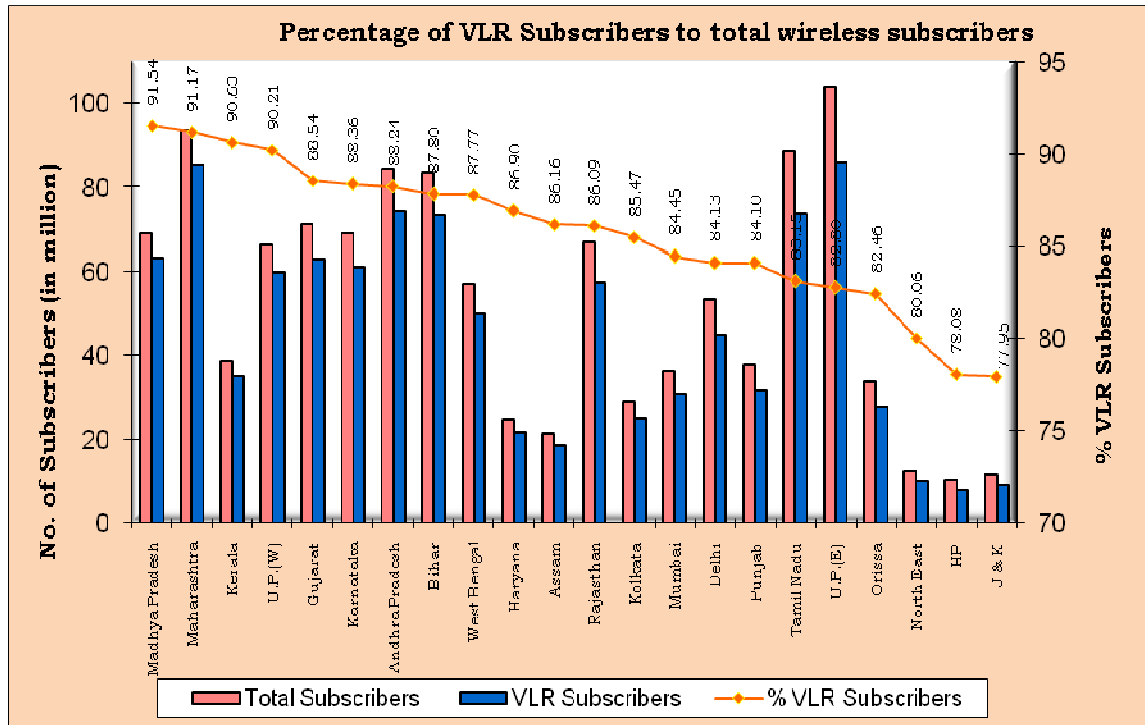
**Access Service Provider-wise Percentage of VLR Subscribers in the Month of February, 2017**



Note-

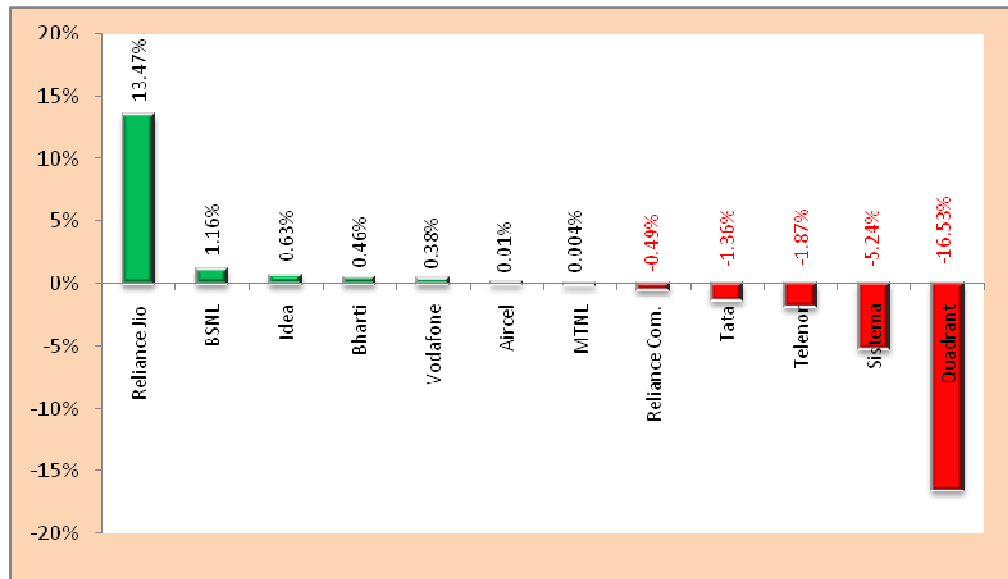
1. Number of VLR subscribers of Idea Cellular was more than its subscriber base due to a large number of inroamers in its network.

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



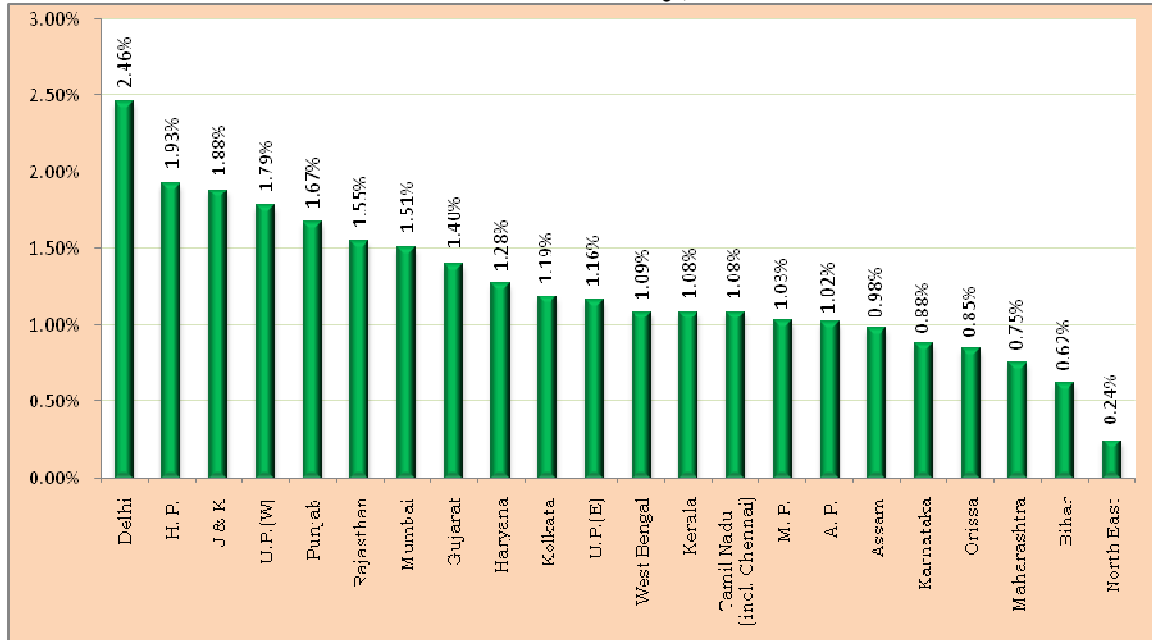
### V. Growth in Wireless Subscribers

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





### Service Area-wise Monthly Growth Rate of Wireless Subscribers in the Month of February, 2017



- All the service areas showed positive growth in wireless subscribers during the month of Feb-17. 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 Feb-17, a total of 5.67 million requests were received for MNP. With this, the cumulative MNP requests increased from 261.06 million at the end of Jan-17 to 266.73 million at the end of Feb-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 22.49 million) followed by Gujarat (about 19.17 million).

- In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 29.42 million) followed by Andhra Pradesh (about 24.18 million).

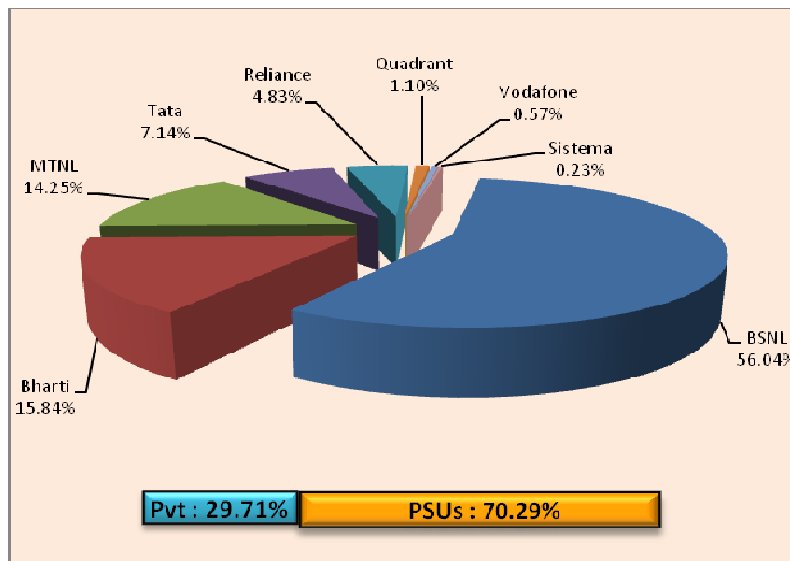
| <b>Service Area Wise MNP Status at the end of February, 2017</b> |                                   |                     |                                   |
|--|-----------------------------------|---------------------|-----------------------------------|
| <b>Zone -I</b>   |                                   | <b>Zone - II</b>    |                                   |
| <b>Service Area</b>  | <b>Number of Porting Requests</b> | <b>Service Area</b> | <b>Number of Porting Requests</b> |
| Delhi  | 11403388                          | Andhra Pradesh      | 24175011                          |
| Gujarat  | 19172802                          | Assam               | 1362633                           |
| Haryana  | 10566664                          | Bihar               | 9967586                           |
| Himachal Pradesh   | 954256                            | Karnataka           | 29415185                          |
| Jammu & Kashmir  | 113611                            | Kerala              | 7415614                           |
| Maharashtra  | 18180413                          | Kolkata             | 5586775                           |
| Mumbai   | 14788501                          | Madhya Pradesh      | 18487093                          |
| Punjab   | 10472299                          | North East          | 520390                            |
| Rajasthan  | 22494838                          | Orissa              | 5348130                           |
| Uttar Pradesh - East   | 13303275                          | Tamil Nadu          | 16393884                          |
| Uttar Pradesh - West   | 12047267                          | West Bengal         | 14562498                          |
| <b>Total</b>   | <b>133,497,314</b>                | <b>Total</b>        | <b>133,234,799</b>                |
| <b>Total (Zone-I + Zone-II)</b>                                  |                                   |                     | <b>266,732,113</b>                |
| <b>Net Addition (in February, 2017)</b>                          |                                   |                     | <b>5,672,509</b>                  |

## VII. Wireline Subscribers

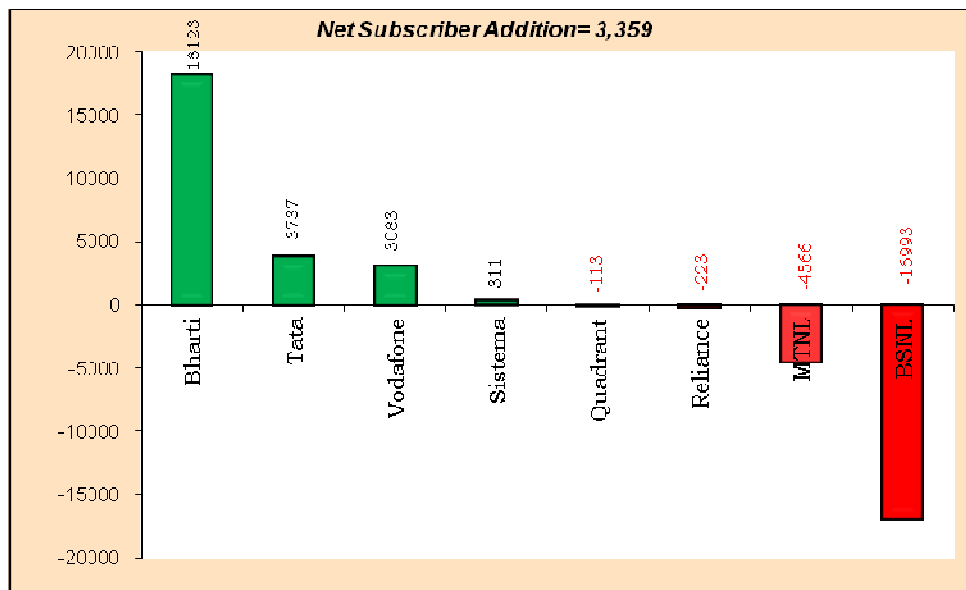
- Wireline subscribers increased from 24.34 million at the end of Jan-17 to 24.35 million at the end of Feb-17. Net addition in the wireline subscriber base was 0.003 million with a monthly growth rate of 0.01%. The share of urban and rural subscribers in total wireline subscribers were 84.29% and 15.71% respectively at the end of Feb-17.
- The Overall Wireline Tele-density(%) remained same as at the end of Jan-17 i.e. 1.90 at the end of Feb-17. Urban and Rural Wireline Tele-density were 5.10 and 0.43 respectively during the same period.

- BSNL and MTNL, the two PSU access service providers, held 70.29% 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 Feb-17 are given below:

**Access Service Provider-wise Market Shares (Wireline Subscribers) as on 28<sup>th</sup> February, 2017**



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



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

- As per the reports received from the service providers, the number of broadband subscribers increased from 253.75 Million at the end of Jan-17 to 261.31 million at the end of Feb-17 with a monthly growth rate of 2.98%. Segment-wise broadband subscribers and their monthly growth rates are as below:

### Segment-wise Broadband Subscribers and Monthly Growth Rate in the month of February, 2017

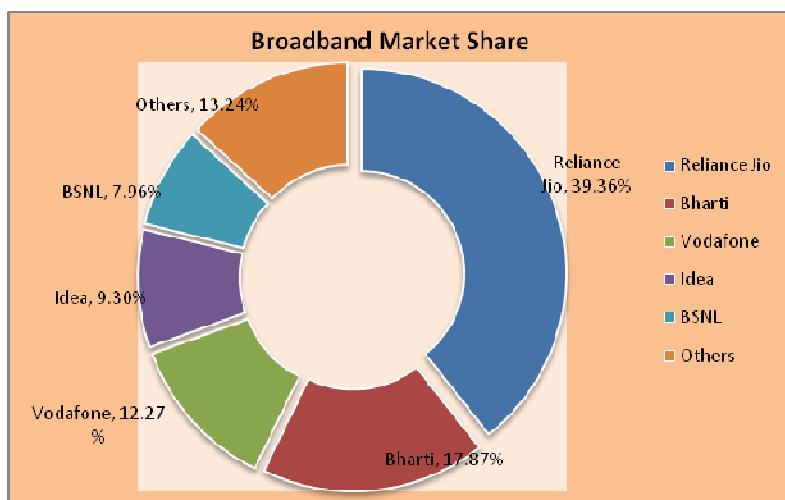
| Segment   | Broadband subscribers (in million)   |                                       | Monthly growth rate in the month of Feb-17 |
|---|--------------------------------------|---------------------------------------|--|
|   | As on 31 <sup>st</sup> January, 2017 | As on 28 <sup>th</sup> February, 2017 |  |
| Wired subscribers   | 18.10                                | 18.18                                 | 0.39%                                      |
| Mobile devices users (Phones and dongles)                               | 235.07                               | 242.57                                | 3.19%                                      |
| Fixed Wireless subscribers (Wi-Fi, Wi-Max, Point-to-Point Radio & VSAT) | 0.58                                 | 0.57                                  | -1.12%                                     |
| <b>Total</b>  | <b>253.75</b>                        | <b>261.31</b>                         | <b>2.98%</b>                               |

- Top five service providers constituted 86.76% market share of the total broadband subscribers at the end of Feb-17. These service providers were Reliance Jio Infocom Ltd (102.84 million), Bharti Airtel (46.69 million), Vodafone (32.06 million), Idea Cellular (24.31 million) and BSNL (20.81 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 28.02.2017**



- As on 28<sup>th</sup> February, 2017, the top five Wired Broadband Service providers were BSNL (9.95 million), Bharti Airtel (2.07 million), Atria Convergence Technologies (1.14 million), MTNL (1.03 million) and YOU Broadband (0.62 million).
- As on 28<sup>th</sup> February, 2017, the top five Wireless Broadband Service providers were Reliance Jio Infocomm Ltd (102.84 million), Bharti Airtel (44.62 million), Vodafone (32.05 million), Idea Cellular (24.31 million) and Reliance Communications (14.04 million).

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Authorized to issue:

**(Vinod Kotwal)**  
**Advisor (F&EA)**

**Wireless Subscriber Base**

**Annexure-I**

| Circle                     | Group            |                  |                 |                 |                  |                  |                 |                 |                  |                  |                 |                 |
|----------------------------|------------------|------------------|-----------------|-----------------|------------------|------------------|-----------------|-----------------|------------------|------------------|-----------------|-----------------|
|                            | Bharti           |                  | Reliance        |                 | Vodafone         |                  | Tata            |                 | Idea             |                  | Aircel          |                 |
|                            | Jan-17           | Feb-17           | Jan-17          | Feb-17          | Jan-17           | Feb-17           | Jan-17          | Feb-17          | Jan-17           | Feb-17           | Jan-17          | Feb-17          |
| Andhra Pradesh             | 25349888         | 25350900         | 3745288         | 3757610         | 6947827          | 6920655          | 3923807         | 3867812         | 17474485         | 17496332         | 2547676         | 2593866         |
| Assam                      | 6345353          | 6379734          | 1232121         | 1145762         | 3923211          | 3956464          |                 |                 | 1310720          | 1330851          | 5814988         | 5807277         |
| Bihar                      | 30485905         | 30487219         | 3219896         | 3256542         | 9771545          | 9603217          | 1443416         | 1425158         | 12098042         | 12354378         | 7466488         | 7554303         |
| Delhi                      | 11483091         | 11590370         | 5779544         | 5999188         | 10576153         | 10642941         | 1528706         | 1591722         | 6445041          | 6465245          | 6749177         | 6830343         |
| Gujarat                    | 8955933          | 9045978          | 5940153         | 5778199         | 19909407         | 19923817         | 2554385         | 2551441         | 12832591         | 13014605         | 17063           | 17063           |
| Haryana                    | 3420024          | 3430338          | 1576895         | 1510376         | 5931783          | 6004148          | 2575783         | 2532130         | 5023361          | 5046351          | 3092            | 3092            |
| Himachal Pradesh           | 2935910          | 2945760          | 1583443         | 1587728         | 733437           | 725787           | 49905           | 48143           | 797026           | 805297           | 1125928         | 1121747         |
| J & K                      | 3529511          | 3560866          | 915167          | 863666          | 986262           | 980545           |                 |                 | 640768           | 679116           | 2904458         | 2947876         |
| Karnataka                  | 22204342         | 22205227         | 5343716         | 5329344         | 7959195          | 7848321          | 6619594         | 6589124         | 9652409          | 9575818          | 3371034         | 3393786         |
| Kerala                     | 4542675          | 4543147          | 1452852         | 1418997         | 7695803          | 7673321          | 1355867         | 1329905         | 10977843         | 10972529         | 379763          | 379835          |
| Kolkata                    | 4947767          | 4967599          | 4317121         | 4194693         | 5621531          | 5656444          | 2549426         | 2529159         | 2585303          | 2595876          | 4290604         | 4390545         |
| Madhya Pradesh             | 13860937         | 13895358         | 9528120         | 9529830         | 6770743          | 6788067          | 4357333         | 4296583         | 23824717         | 23797344         | 20694           | 20694           |
| Maharashtra                | 14331444         | 14382498         | 4392411         | 4160891         | 19068159         | 19102263         | 5586633         | 5455944         | 25899372         | 26104199         | 2787271         | 2774738         |
| Mumbai                     | 6318238          | 6382756          | 4865177         | 4877394         | 9009290          | 9012152          | 2768781         | 2750048         | 4457207          | 4432118          | 2980747         | 2923667         |
| North East                 | 4155104          | 4167907          | 303544          | 273230          | 1581189          | 1586453          |                 |                 | 636306           | 623779           | 3486866         | 3434000         |
| Orissa                     | 11234287         | 11307773         | 2103448         | 2188067         | 4469490          | 4466564          | 1958320         | 1906541         | 2057315          | 2039436          | 4652863         | 4605849         |
| Punjab                     | 8632894          | 8761053          | 1704289         | 1671225         | 5295631          | 5450023          | 2422658         | 2392372         | 6687822          | 6982188          | 1148597         | 1149015         |
| Rajasthan                  | 20594022         | 20856003         | 5883306         | 5875858         | 12044303         | 12156346         | 1264939         | 1165209         | 8186434          | 8286342          | 6653053         | 6666458         |
| Tamil Nadu (incl. Chennai) | 18266477         | 18289999         | 5436196         | 5456614         | 16483231         | 16305205         | 4034071         | 3997716         | 6319091          | 6171105          | 21519012        | 21426525        |
| U.P.(E)                    | 23005582         | 23240766         | 8375203         | 8375127         | 19935364         | 20221740         | 3541693         | 3449030         | 11827417         | 11996510         | 7194323         | 7040268         |
| U.P.(W)                    | 8925701          | 8927008          | 5468288         | 5492685         | 12176248         | 12410968         | 3035166         | 2996345         | 16024487         | 16189835         | 852409          | 860287          |
| West Bengal                | 15877336         | 15930388         | 3532682         | 3528917         | 19546610         | 19793034         | 359693          | 351011          | 6305242          | 6310477          | 5074199         | 5112380         |
| <b>Total</b>               | <b>269402421</b> | <b>270648647</b> | <b>86698860</b> | <b>86271943</b> | <b>206436412</b> | <b>207228475</b> | <b>51930176</b> | <b>51225393</b> | <b>192062999</b> | <b>193269731</b> | <b>91040305</b> | <b>91053614</b> |
| <b>Net Addition</b>        |                  | <b>1246226</b>   |                 | <b>-426917</b>  |                  | <b>792063</b>    |                 | <b>-704783</b>  |                  | <b>1206732</b>   |                 | <b>13309</b>    |
| <b>Rural</b>               | <b>133174765</b> | <b>134190246</b> | <b>20647768</b> | <b>20380629</b> | <b>111709645</b> | <b>112650789</b> | <b>13614871</b> | <b>12958011</b> | <b>106197729</b> | <b>107017051</b> | <b>31848094</b> | <b>31893777</b> |

**Wireless Subscriber Base**

Annexure-I (contd.)

| Circle                     | Group           |                 |                |                |                 |                 |                |                |                |                |                 |                  |                   |                   | Net Addition    |         |
|----------------------------|-----------------|-----------------|----------------|----------------|-----------------|-----------------|----------------|----------------|----------------|----------------|-----------------|------------------|-------------------|-------------------|-----------------|---------|
|                            | BSNL            |                 | MTNL           |                | Telenor         |                 | Sistema        |                | Quadrant       |                | Reliance Jio    |                  | Total             |                   |                 |         |
|                            | Jan-17          | Feb-17          | Jan-17         | Feb-17         | Jan-17          | Feb-17          | Jan-17         | Feb-17         | Jan-17         | Feb-17         | Jan-17          | Feb-17           | Jan-17            | Feb-17            |                 |         |
| Andhra Pradesh             | 9824079         | 9858720         |                |                | 5621712         | 5485240         |                |                |                |                |                 | 7953577          | 8908009           | 83388339          | 84239144        | 850805  |
| Assam                      | 1426433         | 1451738         |                |                |                 |                 |                |                |                |                |                 | 1199602          | 1389521           | 21252428          | 21461347        | 208919  |
| Bihar                      | 3991403         | 3967381         |                |                | 9590910         | 9308364         |                |                |                |                |                 | 4966741          | 5594541           | 83034346          | 83551103        | 516757  |
| Delhi                      |                 |                 | 2327655        | 2327347        |                 |                 | 622550         | 571655         |                |                |                 | 6674682          | 7452729           | 52186599          | 53471540        | 1284941 |
| Gujarat                    | 4448427         | 4591955         |                |                | 8491791         | 8434173         | 145754         | 135566         |                |                |                 | 6840540          | 7624803           | 70136044          | 71117600        | 981556  |
| Haryana                    | 3602252         | 3621256         |                |                |                 |                 |                |                |                |                |                 | 2328597          | 2626266           | 24461787          | 24773957        | 312170  |
| Himachal Pradesh           | 2029642         | 2073746         |                |                |                 |                 |                |                |                |                |                 | 833774           | 975527            | 10089065          | 10283735        | 194670  |
| J & K                      | 1466858         | 1480035         |                |                |                 |                 |                |                |                |                |                 | 1042560          | 1189709           | 11485584          | 11701813        | 216229  |
| Karnataka                  | 6840478         | 6880744         |                |                |                 |                 | 804912         | 760331         |                |                |                 | 5763806          | 6578004           | 68559486          | 69160699        | 601213  |
| Kerala                     | 8796973         | 8899336         |                |                |                 |                 | 246493         | 240546         |                |                |                 | 2948676          | 3354902           | 38396945          | 38812518        | 415573  |
| Kolkata                    | 879611          | 915381          |                |                |                 |                 | 415539         | 400144         |                |                |                 | 3171384          | 3470533           | 28778286          | 29120374        | 342088  |
| Madhya Pradesh             | 4968329         | 4994116         |                |                |                 |                 |                |                |                |                |                 | 5017974          | 5728777           | 68348847          | 69050769        | 701922  |
| Maharashtra                | 6374428         | 6431910         |                |                | 8083817         | 7951509         |                |                |                |                |                 | 6335089          | 7192705           | 92858624          | 93556657        | 698033  |
| Mumbai                     |                 |                 | 1299248        | 1299687        |                 |                 |                |                |                |                |                 | 4243923          | 4808043           | 35942611          | 36485865        | 543254  |
| North East                 | 1651858         | 1658883         |                |                |                 |                 |                |                |                |                |                 | 715101           | 815611            | 12529968          | 12559863        | 29895   |
| Orissa                     | 4880234         | 4929693         |                |                |                 |                 |                |                |                |                |                 | 2228333          | 2424303           | 33584290          | 33868226        | 283936  |
| Punjab                     | 4485177         | 4479009         |                |                |                 |                 |                |                | 2686895        | 2242726        |                 | 4097657          | 4656222           | 37161620          | 37783833        | 622213  |
| Rajasthan                  | 5278568         | 5381117         |                |                |                 |                 | 1510071        | 1398394        |                |                |                 | 4425036          | 5071640           | 65839732          | 66857367        | 1017635 |
| Tamil Nadu (incl. Chennai) | 8899617         | 9030644         |                |                |                 |                 | 542598         | 528230         |                |                |                 | 6319231          | 7563296           | 87819524          | 88769334        | 949810  |
| U.P.(E)                    | 10721986        | 10935952        |                |                | 12389420        | 12108247        |                |                |                |                |                 | 5748048          | 6566214           | 102739036         | 103933854       | 1194818 |
| U.P.(W)                    | 5440453         | 5601731         |                |                | 8437286         | 8341335         | 110540         | 101337         |                |                |                 | 4792758          | 5507620           | 65263336          | 66429151        | 1165815 |
| West Bengal                | 1770070         | 1728483         |                |                |                 |                 | 1142694        | 1114716        |                |                |                 | 2988045          | 3342063           | 56596571          | 57211469        | 614898  |
| <b>Total</b>               | <b>97776876</b> | <b>98911830</b> | <b>3626903</b> | <b>3627034</b> | <b>52614936</b> | <b>51628868</b> | <b>5541151</b> | <b>5250919</b> | <b>2686895</b> | <b>2242726</b> | <b>90635134</b> | <b>102841038</b> | <b>1150453068</b> | <b>1164200218</b> | <b>13747150</b> |         |
| <b>Net Addition</b>        |                 | <b>1134954</b>  |                | <b>131</b>     |                 | <b>-986068</b>  |                | <b>-290232</b> |                | <b>-444169</b> |                 | <b>12205904</b>  |                   | <b>13747150</b>   |                 |         |

**Proportion of VLR on the date of Peak VLR in the month of Feb-17 (%)**

**Annexure-II**

| Circle                     | Aircel       | Bharti       | BSNL         | Quadrant     | Idea          | MTNL         | Reliance     | Reliance Jio | Sistema      | Tata         | Telenor      | Vodafone     | Total        |
|----------------------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Andhra Pradesh             | 59.02        | 98.59        | 73.47        |              | 100.84        |              | 88.97        | 69.88        |              | 89.79        | 72.25        | 85.46        | <b>88.24</b> |
| Assam                      | 80.81        | 97.15        | 77.12        |              | 99.27         |              | 4.84         | 80.50        |              |              |              | 100.73       | <b>86.16</b> |
| Bihar                      | 79.73        | 97.41        | 64.46        |              | 99.47         |              | 6.25         | 78.19        |              | 72.79        | 75.34        | 105.87       | <b>87.80</b> |
| Delhi                      | 57.81        | 94.09        |              |              | 103.27        | 48.98        | 89.83        | 71.08        | 48.09        | 58.69        |              | 97.90        | <b>84.13</b> |
| Gujarat                    | 2726.68      | 95.85        | 63.74        |              | 103.88        |              | 93.23        | 76.15        | 45.87        | 71.89        | 66.41        | 93.82        | <b>88.54</b> |
| Haryana                    | 0.39         | 95.62        | 55.63        |              | 101.92        |              | 95.55        | 74.49        |              | 83.90        |              | 92.70        | <b>86.90</b> |
| Himachal Pradesh           | 44.74        | 86.52        | 62.74        |              | 107.54        |              | 96.05        | 67.05        |              | 24.24        |              | 85.66        | <b>78.08</b> |
| J & K                      | 68.59        | 92.08        | 69.39        |              | 96.88         |              | 51.34        | 71.08        |              |              |              | 86.37        | <b>77.95</b> |
| Karnataka                  | 52.41        | 98.62        | 64.42        |              | 99.16         |              | 90.33        | 77.24        | 60.75        | 88.98        |              | 92.79        | <b>88.36</b> |
| Kerala                     | 62.46        | 95.88        | 74.66        |              | 104.38        |              | 93.70        | 78.93        | 49.01        | 88.31        |              | 94.00        | <b>90.63</b> |
| Kolkata                    | 62.18        | 95.28        | 88.67        |              | 93.06         |              | 97.26        | 64.58        | 65.79        | 88.22        |              | 95.16        | <b>85.47</b> |
| Madhya Pradesh             | 0.96         | 96.99        | 68.68        |              | 103.78        |              | 91.56        | 72.24        |              | 79.11        |              | 78.69        | <b>91.54</b> |
| Maharashtra                | 47.88        | 100.22       | 68.43        |              | 102.34        |              | 92.21        | 84.55        |              | 82.49        | 70.95        | 96.18        | <b>91.17</b> |
| Mumbai                     | 52.93        | 95.39        |              |              | 91.63         | 68.27        | 89.85        | 65.81        |              | 80.39        |              | 94.01        | <b>84.45</b> |
| North East                 | 61.64        | 98.71        | 66.85        |              | 96.80         |              | 5.35         | 75.86        |              |              |              | 93.20        | <b>80.06</b> |
| Orissa                     | 59.09        | 100.82       | 72.35        |              | 101.15        |              | 6.37         | 73.93        |              | 81.79        |              | 104.94       | <b>82.46</b> |
| Punjab                     | 56.29        | 99.38        | 64.31        | 40.48        | 101.22        |              | 92.82        | 71.61        |              | 76.44        |              | 89.05        | <b>84.10</b> |
| Rajasthan                  | 49.81        | 94.67        | 63.37        |              | 100.39        |              | 92.60        | 76.88        | 58.87        | 126.87       |              | 91.48        | <b>86.09</b> |
| Tamil Nadu (incl. Chennai) | 65.92        | 95.39        | 68.51        |              | 101.01        |              | 94.00        | 74.40        | 54.42        | 73.10        |              | 97.23        | <b>83.15</b> |
| U.P. (E)                   | 65.46        | 98.61        | 53.08        |              | 103.39        |              | 93.07        | 73.26        |              | 80.08        | 50.79        | 93.01        | <b>82.80</b> |
| U.P. (W)                   | 84.87        | 98.47        | 53.50        |              | 98.35         |              | 94.11        | 64.33        | 45.53        | 78.24        | 108.06       | 91.60        | <b>90.21</b> |
| West Bengal                | 70.97        | 97.37        | 83.00        |              | 102.86        |              | 10.35        | 71.68        | 67.31        | 62.41        |              | 98.12        | <b>87.77</b> |
| <b>Total</b>               | <b>64.47</b> | <b>97.24</b> | <b>66.02</b> | <b>40.48</b> | <b>101.44</b> | <b>55.89</b> | <b>81.79</b> | <b>73.56</b> | <b>58.80</b> | <b>81.81</b> | <b>72.41</b> | <b>94.52</b> | <b>86.81</b> |

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**

| Circle                     | Group           |                 |                |                |                |                |                |                |                |                |               |               |              |              |               |               | Total           |                 | Net Addition |
|----------------------------|-----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|--------------|--------------|---------------|---------------|-----------------|-----------------|--------------|
|                            | BSNL            |                 | MTNL           |                | Bharti         |                | Reliance       |                | Tata           |                | Quadrant      |               | Sistema      |              | Vodafone      |               | Jan-17          | Feb-17          |              |
|                            | Jan-17          | Feb-17          | Jan-17         | Feb-17         | Jan-17         | Feb-17         | Jan-17         | Feb-17         | Jan-17         | Feb-17         | Jan-17        | Feb-17        | Jan-17       | Feb-17       | Jan-17        | Feb-17        |                 |                 |              |
| Andhra Pradesh             | 1206933         | 1205999         |                |                | 159727         | 160955         | 75575          | 75539          | 171251         | 171724         |               |               |              |              | 11250         | 12180         | 1624736         | 1626397         | 1661         |
| Assam                      | 154112          | 153679          |                |                |                |                |                |                |                |                |               |               |              |              | 2190          | 2190          | 156302          | 155869          | -433         |
| Bihar                      | 294314          | 294074          |                |                |                |                | 6,367          | 6,367          | 12476          | 12430          |               |               |              |              | 1320          | 1530          | 314477          | 314401          | -76          |
| Delhi                      |                 |                 | 1606732        | 1604299        | 1269629        | 1281030        | 173769         | 173205         | 135393         | 135039         |               |               |              |              | 28170         | 29100         | 3213693         | 3222673         | 8980         |
| Gujarat                    | 1101149         | 1102310         |                |                | 76170          | 76330          | 72806          | 72728          | 88044          | 88140          |               |               |              |              | 7260          | 7860          | 1345429         | 1347368         | 1939         |
| Haryana                    | 282,426         | 281,713         |                |                | 22915          | 22936          | 4014           | 4014           | 36571          | 36564          |               |               |              |              |               |               | 345926          | 345227          | -699         |
| Himachal Pradesh           | 143,829         | 142,888         |                |                |                |                | 3924           | 3924           | 2553           | 2580           |               |               |              |              | 30            | 60            | 150336          | 149452          | -884         |
| J & K                      | 133,432         | 133,716         |                |                |                |                |                |                |                |                |               |               |              |              |               |               | 133432          | 133716          | 284          |
| Karnataka                  | 1212060         | 1209209         |                |                | 618592         | 619815         | 156265         | 156679         | 209555         | 209347         |               |               |              |              | 23280         | 23250         | 2219752         | 2218300         | -1452        |
| Kerala                     | 1999011         | 1997027         |                |                | 57959          | 58251          | 33036          | 32995          | 18767          | 18935          |               |               |              |              | 1650          | 1650          | 2110423         | 2108858         | -1565        |
| Kolkata                    | 616277          | 614998          |                |                | 120671         | 120785         | 69124          | 69117          | 49590          | 49329          |               |               |              |              | 5490          | 5520          | 861152          | 859749          | -1403        |
| Madhya Pradesh             | 721056          | 719580          |                |                | 273038         | 273050         | 19705          | 19688          | 16231          | 16310          |               |               |              |              | 420           | 420           | 1030450         | 1029048         | -1402        |
| Maharashtra                | 1414977         | 1415313         |                |                | 77841          | 78479          | 81985          | 81883          | 282817         | 283721         |               |               |              |              | 13671         | 13815         | 1871291         | 1873211         | 1920         |
| Mumbai                     |                 |                 | 1866977        | 1864844        | 354981         | 356483         | 256950         | 257333         | 537148         | 539681         |               |               |              |              | 22129         | 22248         | 3038185         | 3040589         | 2404         |
| North East                 | 121179          | 120970          |                |                |                |                |                |                |                |                |               |               |              |              | 150           | 180           | 121329          | 121150          | -179         |
| Orissa                     | 276982          | 277492          |                |                |                |                | 3281           | 3281           | 8170           | 8129           |               |               |              |              | 1110          | 1170          | 289543          | 290072          | 529          |
| Punjab                     | 595235          | 591175          |                |                | 119870         | 119882         | 20740          | 20653          | 16053          | 16230          | 267845        | 267732        |              |              | 1050          | 1050          | 1020793         | 1016722         | -4071        |
| Rajasthan                  | 602361          | 600056          |                |                | 48525          | 48556          | 19781          | 19737          | 11563          | 11292          |               |               | 56629        | 56940        | 2400          | 2400          | 741259          | 738981          | -2278        |
| Tamil Nadu (incl. Chennai) | 1725418         | 1726181         |                |                | 552086         | 553540         | 133924         | 133906         | 109033         | 109966         |               |               |              |              | 10560         | 10650         | 2531021         | 2534243         | 3222         |
| U.P.(E)                    | 379850          | 379859          |                |                | 63960          | 63978          | 34737          | 34711          | 15416          | 15165          |               |               |              |              | 1440          | 1380          | 495403          | 495093          | -310         |
| U.P.(W)                    | 357188          | 355921          |                |                | 23143          | 23160          | 7102           | 7102           | 9862           | 9671           |               |               |              |              | 1110          | 1110          | 398405          | 396964          | -1441        |
| West Bengal                | 324093          | 322729          |                |                |                |                | 2048           | 2048           | 3816           | 3793           |               |               |              |              | 60            | 60            | 330017          | 328630          | -1387        |
| <b>Total</b>               | <b>13661882</b> | <b>13644889</b> | <b>3473709</b> | <b>3469143</b> | <b>3839107</b> | <b>3857230</b> | <b>1175133</b> | <b>1174910</b> | <b>1734309</b> | <b>1738046</b> | <b>267845</b> | <b>267732</b> | <b>56629</b> | <b>56940</b> | <b>134740</b> | <b>137823</b> | <b>24343354</b> | <b>24346713</b> | <b>3359</b>  |
| <b>Net Addition</b>        |                 | <b>-16993</b>   |                | <b>-4566</b>   |                | <b>18123</b>   |                | <b>-223</b>    |                | <b>3737</b>    |               | <b>-113</b>   |              | <b>311</b>   |               | <b>3083</b>   |                 | <b>3359</b>     |              |

## 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:-

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