Information Note to the Press



## TELECOM REGULATORY AUTHORITY OF INDIA



New Delhi, 29<sup>th</sup> July, 2016 (www.trai.gov.in)

## Highlights of Telecom Subscription Data as on 31st May, 2016

| Particulars                           | Wireless | Wireline | <b>Total</b><br>(Wireless+<br>Wireline) |
|---------------------------------------|----------|----------|---|
| Total Telephone Subscribers (Million) | 1033.16  | 24.87    | 1058.03                                 |
| Net Addition in May, 2016 (Million)   | -1.10    | -0.16    | -1.26                                   |
| Monthly Growth Rate                   | -0.11%   | -0.64%   | -0.12%                                  |
| Urban Telephone Subscribers (Million) | 584.25   | 20.73    | 604.98                                  |
| Net Addition in May, 2016 (Million)   | -2.16    | -0.08    | -2.23                                   |
| Monthly Growth Rate                   | -0.37%   | -0.38%   | -0.37%                                  |
| Rural Telephone Subscribers (Million) | 448.90   | 4.15     | 453.05                                  |
| Net Addition in May, 2016 (Million)   | 1.06     | -0.08    | 0.98                                    |
| Monthly Growth Rate                   | 0.24%    | -1.95%   | 0.22%                                   |
| Overall Tele-density*                 | 81.18    | 1.95     | 83.14                                   |
| Urban Tele-density*                   | 147.12   | 5.22     | 152.34                                  |
| Rural Tele-density*                   | 51.27    | 0.47     | 51.75                                   |
| Share of Urban Subscribers            | 56.55%   | 83.32%   | 57.18%                                  |
| Share of Rural Subscribers            | 43.45%   | 16.68%   | 42.82%                                  |
| Broadband Subscribers (Million)       | 142.60   | 17.16    | 159.76                                  |

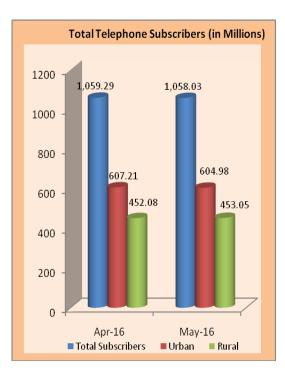
- ❖ In the month of May, 2016, 5.23 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 214.04 million at the end of Apr-16 to 219.27 million at the end of May-16, since implementation of MNP.
- ❖ Number of active wireless subscribers (on the date of peak VLR<sup>#</sup>) in May, 2016 was 932.51 million.

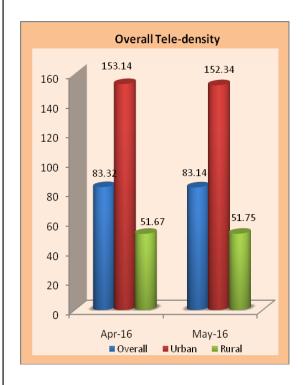
#### Note:

- 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

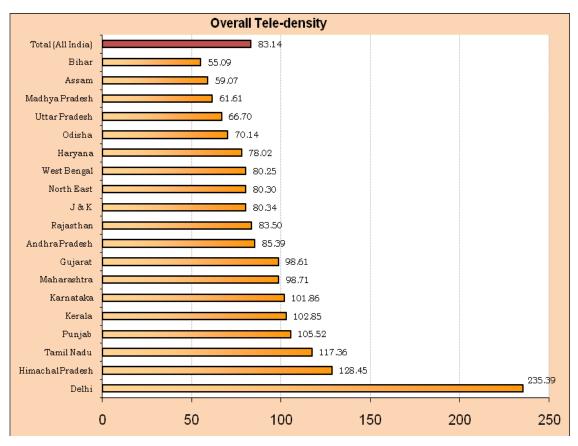
The number of telephone subscribers in India declined from 1,059.29 million at the end of Apr-16 to 1,058.03 million at the end of May-16, thereby showing a monthly growth rate of -0.12%. The urban subscription declined from 607.21 million at the end of Apr-16 to 604.98 million at the end of May-16 whereas the rural subscription increased from 452.08 million to 453.05 million during the same period. The monthly growth rates of urban and rural subscription were -0.37% and 0.22% respectively during the month of May-16.





• The overall Tele-density in India declined from 83.32 at the end of Apr-16 to 83.14 at the end of May-16. The Urban Tele-density declined from 153.14 at the end of Apr-16 to 152.34 at the end of May-16, whereas the Rural Tele-density increased from 51.67 at the end of Apr-16 to 51.75 at the end of May-16. The share of urban subscribers and rural subscribers in total number of subscribers at the end of May-16 was 57.18% and 42.82% 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). West Bengal includes Kolkata, Maharashtra includes Mumbai and Tamil Nadu includes Chennai.

## II. Category-wise Growth in subscriber base

Circle Category-wise Net Additions in Telephone Subscribers in the month of May, 2016

| Circle    |          | in the month of , 2016 | Telephone Subscriber base as<br>on 31 <sup>st</sup> May, 2016 |               |  |  |  |  |
|-----------|----------|------------------------|---|---------------|--|--|--|--|
| Category  | Wireline | Wireless               | Wireline  | Wireless      |  |  |  |  |
|           | segment  | segment                | segment   | segment       |  |  |  |  |
| Circle A  | -94,932  | -584,279               | 9,820,665   | 362,041,240   |  |  |  |  |
| Circle B  | -35,928  | -2,336,389             | 6,752,408   | 412,713,584   |  |  |  |  |
| Circle C  | -14,951  | 1,303,229              | 1,202,110   | 154,230,547   |  |  |  |  |
| Metro     | -15,113  | 521,125                | 7,099,518   | 104,171,643   |  |  |  |  |
| All India | -160,924 | -1,096,314             | 24,874,701  | 1,033,157,014 |  |  |  |  |

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

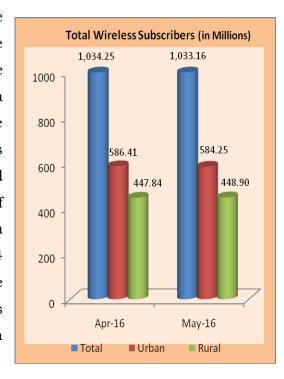
| Circle    | Monthly gro<br>(Apr-16 t | wth rate (%)<br>o May-16) | Yearly growth rate (%)<br>(May-15 to May-16) |                     |  |  |  |  |
|-----------|--------------------------|---------------------------|--|---------------------|--|--|--|--|
| Category  | Wireline<br>Segment      | Wireless<br>Segment       | Wireline<br>Segment                          | Wireless<br>Segment |  |  |  |  |
| Circle A  | -0.96                    | -0.16                     | -5.85  | 5.17                |  |  |  |  |
| Circle B  | -0.53                    | -0.56                     | -7.97  | 6.63                |  |  |  |  |
| Circle C  | -1.23                    | 0.85                      | -7.04  | 6.01                |  |  |  |  |
| Metro     | -0.21                    | 0.50                      | -1.48  | 5.25                |  |  |  |  |
| All India | -0.64                    | -0.11                     | -5.30  | 5.88                |  |  |  |  |

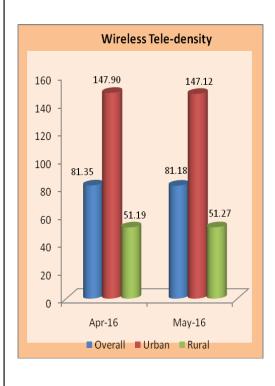
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, the Circles of Category-C and Metro Circles showed the net addition, whereas Circles in Category-A and Category-B showed the net decline in their wireless subscriber base in the month of May-16.
- In Wireline segment, Circles of Category-A showed the highest net decline and highest monthly decline rate in subscriber base in the month of May-16.

#### III. Wireless Subscribers

wireless **Total** subscriber base declined from 1,034.25 million at the end of Apr-16 to 1,033.16 million at the end of May-16, thereby registering a monthly growth rate of -0.11%. The Wireless subscription in urban areas declined from 586.41 million at the end of Apr-16 to 584.25 million at the end of May-16, whereas wireless subscription in rural areas increased from 447.84 million to 448.90 million during the same period. The monthly growth rates of urban and rural wireless subscription were -0.37% and 0.24% respectively.

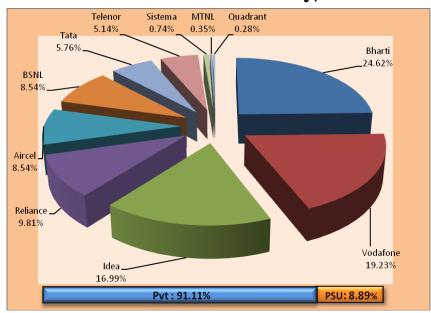




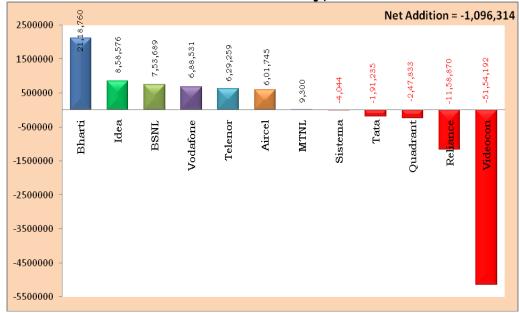
• The Wireless Tele-density in India slightly declined from 81.35 at the end of Apr-16 to 81.18 at the end of May-16. The Urban Wireless Tele-density declined from 147.90 at the end of Apr-16 to 147.12 at the end of May-16, whereas Rural Wireless Tele-density increased from 51.19 to 51.27 during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 56.55% and 43.45% respectively at the end of May-16. Detailed statistics of wireless subscriber base is available at **Annexure-I**.

• As on 31st May, 2016, the private access service providers held 91.11% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 8.89%. The graphical representation of access service provider-wise market share and net additions in wireless subscriber base are given below:

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



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

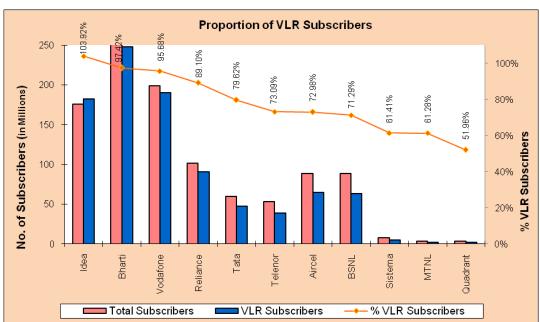


Note: M/s Videocon has closed their commercial services in all its service areas.

## IV. Active Wireless Subscribers (VLR Data)

- Out of the total wireless subscriber base (1,033.16 million), 932.51 million wireless subscribers were active on the date of peak VLR in the month of May-16. The proportion of active wireless subscribers was approximately 90.26% 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 May-16 is available at **Annexure-II** and the methodology used for reporting VLR subscribers is available at **Annexure-IV**.

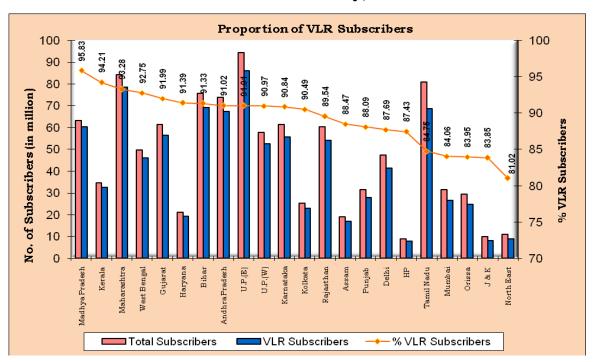
# Access Service Provider-wise Proportion of VLR Subscribers in the Month of May, 2016



#### Note-

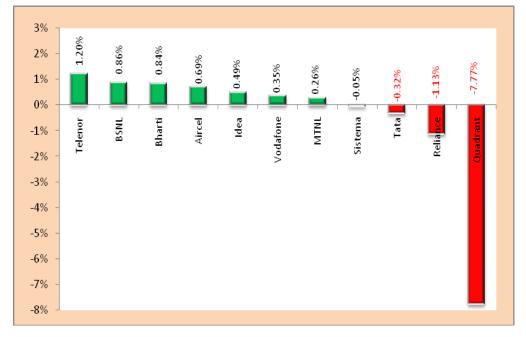
- 1. Number of VLR subscribers of Idea Cellular was more than its subscriber base due to a large number of inroamers in its network.
- 2. Peak VLR of M/s Idea Cellular for the month of April, 2016 may be read as 104.91% instead of 104.65%.

## Service Area wise proportion of VLR Subscribers in the Month of May, 2016

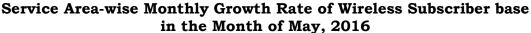


### V. Growth in Wireless Subscribers

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



Note: M/s Videocon has closed their commercial services in all its service areas.





• J&K service area recorded the highest growth rate in wireless subscribers during the month of May-16, whereas Haryana service area showed maximum decline in wireless subscribers.

## VI. Mobile Number Portability (MNP)

- Intra-service area Mobile number portability (MNP) has been implemented 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.
- In the month of May-16, a total of 5.23 million requests were received for MNP. With this, the cumulative MNP requests increased from 214.04 million at the end of Apr-16 to 219.27 million at the end of May-16, since the implementation of MNP.
- In MNP Zone-I (Northern and Western India), the highest number of requests till date have been received in Rajasthan (about 18.86 million) followed by Gujarat (about 16.55 million).

• In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 24.28 million) followed by Andhra Pradesh (about 20.67 million).

| Service Area Wise MNP Status at the end of May, 2016 |                                  |                |                                  |  |  |  |  |  |  |  |
|--|----------------------------------|----------------|----------------------------------|--|--|--|--|--|--|--|
| Zone -I  |                                  | Zone – II      |                                  |  |  |  |  |  |  |  |
| Service Area   | Number of<br>Porting<br>Requests | Service Area   | Number of<br>Porting<br>Requests |  |  |  |  |  |  |  |
| Delhi  | 8,753,943                        | Andhra Pradesh | 20,674,785                       |  |  |  |  |  |  |  |
| Gujarat  | 16,547,932                       | Assam          | 1,050,850                        |  |  |  |  |  |  |  |
| Haryana  | 8,530,077                        | Bihar          | 7,846,805                        |  |  |  |  |  |  |  |
| Himachal Pradesh                                     | 773,355                          | Karnataka      | 24,284,982                       |  |  |  |  |  |  |  |
| Jammu & Kashmir                                      | 79,982                           | Kerala         | 6,620,033                        |  |  |  |  |  |  |  |
| Maharashtra  | 15,343,488                       | Kolkata        | 4,856,747                        |  |  |  |  |  |  |  |
| Mumbai   | 12,018,068                       | Madhya Pradesh | 14,948,143                       |  |  |  |  |  |  |  |
| Punjab   | 7,779,109                        | North East     | 428,952                          |  |  |  |  |  |  |  |
| Rajasthan  | 18,855,614                       | Orissa         | 4,538,806                        |  |  |  |  |  |  |  |
| Uttar Pradesh - East                                 | 10,345,717                       | Tamil Nadu     | 13,722,528                       |  |  |  |  |  |  |  |
| Uttar Pradesh - West                                 | 9,988,052                        | West Bengal    | 11,278,032                       |  |  |  |  |  |  |  |
| Total  | 109,015,337                      | Total          | 110,250,663                      |  |  |  |  |  |  |  |
| Total (Zone-I + Zone-II)                             |                                  |                | 219,266,000                      |  |  |  |  |  |  |  |
| Net Addition<br>(in April, 2016)                     |                                  |                | 5,227,870                        |  |  |  |  |  |  |  |

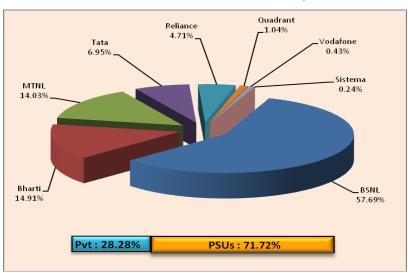
Note: For Zone-II, available MNP data for May, 2016 are provisional.

#### VII. Wireline Subscribers

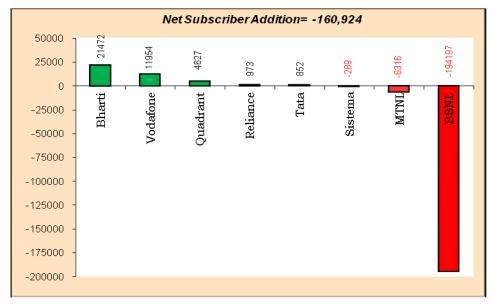
- Wireline subscriber base declined from 25.04 million at the end of Apr-16 to 24.87 million at the end of May-16. Net decline in the wireline subscriber base was 0.16 million with a monthly decline rate of 0.64%. The share of urban and rural subscribers in total wireline subscribers was 83.32% and 16.68% respectively at the end of May-16.
- The Overall Wireline Tele-density declined from 1.97 at the end of Apr-16 to 1.95 at the end of May-16. Urban Wireline Tele-density and Rural Wireline Tele-density were workout as 5.22 and 0.47 respectively.

- BSNL and MTNL, the two PSU access service providers, held 71.72% of the wireline market share. Detailed statistics of wireline subscriber base are available at **Annexure-III**.
- The graphical representation of service provider-wise market shares in the wireline segment and net additions in wireline subscriber bases in the month of May-16 are given below:

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



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



## VIII. Broadband (≥ 512 Kbps download)

• As per the reports received from the service providers, the number of broadband subscribers increased from 151.09 Million at the end of Apr-16 to 159.76 million at the end of May-16 with a monthly growth rate of 5.74%. Segment-wise broadband subscribers and their monthly growth rates are as below:

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

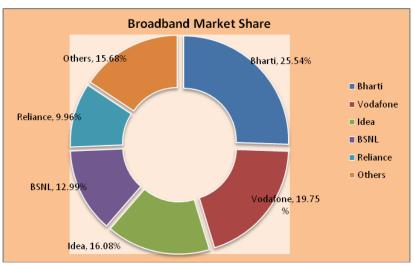
| Segment  | Broadband s<br>(in mi<br>As on 30 <sup>th</sup><br>April, 2016 |        | Monthly<br>growth<br>rate in the<br>month of<br>May-16 |
|--|--|--------|--|
| Wired subscribers  | 17.05  | 17.16  | 0.63%  |
| Mobile devices users (Phones and dongles)                                      | 133.49   | 142.06 | 6.42%  |
| Fixed Wireless subscribers<br>(Wi-Fi, Wi-Max, Point-to-<br>Point Radio & VSAT) | 0.55   | 0.54   | -0.39%   |
| Total  | 151.09   | 159.76 | 5.74%  |

• Top five service providers constituted 84.32% market share of the total broadband subscribers at the end of May-16. These service providers were Bharti Airtel (40.80 million), Vodafone (31.55 million), Idea Cellular (25.70 million), BSNL (20.76 million) and Reliance Communications Group (15.91 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 31.05.2016



- As on 31st May, 2016, the top five <u>Wired</u> Broadband Service providers were BSNL (9.89 million), Bharti Airtel (1.79 million), MTNL (1.10 million), Atria Convergence Technologies (0.99 million) and YOU Broadband (0.55 million).
- As on 31st May, 2016, the top five <u>Wireless</u> Broadband Service providers were Bharti Airtel (39.01 million), Vodafone (31.54 million), Idea Cellular (25.69 million), Reliance Communications Group (15.79 million) and BSNL (10.87 million).

Contact details in case of any clarification:

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Authorized to issue:

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## Wireless Subscriber Base

Annexure-I

|                            | Group     |           |           |           |           |           |          |               |           |               |          |          |  |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|----------|---------------|-----------|---------------|----------|----------|--|
|                            | Bh        | arti      | Relia     | ance      | Voda      | fone      | Та       | ta            | lde       | ea            | Air      | cel      |  |
| Circle                     | Apr-16    | May-16    | Apr-16    | May-16    | Apr-16    | May-16    | Apr-16   | Apr-16 May-16 |           | Apr-16 May-16 |          | May-16   |  |
| Andhra Pradesh             | 23664526  | 23726881  | 5421044   | 5294842   | 6865224   | 6869479   | 4767284  | 4674820       | 15417153  | 15518775      | 2685198  | 2690406  |  |
| Assam                      | 6054937   | 6086610   | 1383527   | 1399677   | 3705296   | 3738897   |          |               | 1171233   | 1155241       | 5263651  | 5354792  |  |
| Bihar                      | 28560298  | 28928011  | 4574012   | 4602257   | 9487772   | 9499126   | 1687253  | 1678217       | 11046975  | 11162653      | 7143837  | 7194973  |  |
| Delhi                      | 11162010  | 11228186  | 8027144   | 8070922   | 10020796  | 10087105  | 2173194  | 2134686       | 6038187   | 6086250       | 6354618  | 6422280  |  |
| Gujarat                    | 8527810   | 8567520   | 6072137   | 6273937   | 19298837  | 19319206  | 2896262  | 2894615       | 12068364  | 12054249      | 17063    | 17063    |  |
| Haryana                    | 3042567   | 3196199   | 1943009   | 1648137   | 5417424   | 5488186   | 2861206  | 2959012       | 4670503   | 4780487       | 3092     | 3092     |  |
| Himachal Pradesh           | 2859056   | 2876188   | 1751661   | 1617536   | 718950    | 722037    | 68222    | 66725         | 803150    | 810187        | 1095840  | 1100300  |  |
| J & K                      | 3303727   | 3352868   | 893061    | 942990    | 1049497   | 1048210   |          |               | 645840    | 655992        | 2516445  | 2554562  |  |
| Karnataka                  | 20874564  | 20951030  | 5969764   | 5835239   | 7653675   | 7635491   | 7241390  | 7212571       | 8411210   | 8473157       | 3125450  | 3166265  |  |
| Kerala                     | 4363959   | 4392891   | 2227152   | 2146203   | 7508131   | 7515912   | 1569032  | 1564027       | 10443233  | 10505457      | 303736   | 308609   |  |
| Kolkata                    | 4639464   | 4656240   | 4755734   | 4879041   | 5378891   | 5429941   | 2771849  | 2771747       | 2062465   | 2065028       | 4111846  | 4146480  |  |
| Madhya Pradesh             | 12744771  | 13065774  | 11727225  | 11632019  | 6920742   | 7005881   | 4948247  | 5169348       | 21536864  | 21758808      | 20694    | 20694    |  |
| Maharashtra                | 13434143  | 13474068  | 5588799   | 5672807   | 18496204  | 18416241  | 6375650  | 6343372       | 23435381  | 23518976      | 2616553  | 2631698  |  |
| Mumbai                     | 5746499   | 5762769   | 5695531   | 5774205   | 8654302   | 8651415   | 3236134  | 3187188       | 4133518   | 4106103       | 2871493  | 2878087  |  |
| North East                 | 3866002   | 3885136   | 391492    | 398967    | 1544467   | 1547665   |          |               | 495103    | 493506        | 3224032  | 3213662  |  |
| Orissa                     | 10440339  | 10568965  | 1908554   | 1871486   | 4164347   | 4186494   | 2271657  | 2209617       | 1722450   | 1740084       | 4634816  | 4658881  |  |
| Punjab                     | 7983668   | 7984779   | 1645549   | 1627032   | 5104212   | 5108370   | 2714307  | 2705362       | 6434870   | 6459693       | 1064842  | 1080736  |  |
| Rajasthan                  | 19462201  | 19578681  | 6716136   | 6607193   | 12159160  | 12099976  | 1529584  | 1538597       | 7702649   | 7646989       | 6461835  | 6485305  |  |
| Tamil Nadu (incl. Chennai) | 17364894  | 17386619  | 6918208   | 6472068   | 15522068  | 15545968  | 4678921  | 4566088       | 5760375   | 5732885       | 21643738 | 21714409 |  |
| U.P.(E)                    | 21068649  | 21346116  | 9542131   | 9767873   | 19182928  | 19428672  | 4022960  | 3973399       | 10853729  | 10927697      | 6952510  | 7003282  |  |
| U.P.(W)                    | 8280870   | 8387936   | 6081794   | 5888002   | 11567575  | 11493205  | 3442356  | 3422610       | 14368823  | 14406368      | 697207   | 725738   |  |
| West Bengal                | 14770539  | 14930786  | 3285272   | 2937633   | 17572917  | 17844469  | 445181   | 437453        | 5464358   | 5486424       | 4850985  | 4889912  |  |
| Total                      | 252215493 | 254334253 | 102518936 | 101360066 | 197993415 | 198681946 | 59700689 | 59509454      | 174686433 | 175545009     | 87659481 | 88261226 |  |
| Net Addition               |           | 2118760   |           | -1158870  |           | 688531    |          | -191235       |           | 858576        |          | 601745   |  |

#### Wireless Subscriber Base

## Annexure-I (contd.)

|                            |          |          | Group   |         |          |          |         |         |         |          |         |         |            |            |              |
|----------------------------|----------|----------|---------|---------|----------|----------|---------|---------|---------|----------|---------|---------|------------|------------|--------------|
|                            | BS       | NL       | МТ      | NL      | Tele     | nor      | Sist    | ema     | Vide    | ocon     | Qua     | drant   | To         | tal        |              |
| Circle                     | Apr-16   | May-16   | Apr-16  | May-16  | Apr-16   | May-16   | Apr-16  | May-16  | Apr-16  | May-16   | Apr-16  | May-16  | Apr-16     | May-16     | Net Addition |
| Andhra Pradesh             | 9585649  | 9555139  |         |         | 5598726  | 5582554  |         |         |         |          |         |         | 74004804   | 73912896   | -91908       |
| Assam                      | 1321865  | 1328206  |         |         |          |          |         |         |         |          |         |         | 18900509   | 19063423   | 162914       |
| Bihar                      | 3362240  | 3346768  |         |         | 8968364  | 9251426  |         |         | 9611    |          |         |         | 74840362   | 75663431   | 823069       |
| Delhi                      |          |          | 2318211 | 2318569 |          |          | 927620  | 935582  |         |          |         |         | 47021780   | 47283580   | 261800       |
| Gujarat                    | 3676307  | 3746891  |         |         | 8554346  | 8423671  | 208056  | 209602  | 511526  |          |         |         | 61830708   | 61506754   | -323954      |
| Haryana                    | 3217005  | 3079785  |         |         |          |          |         |         | 1824934 |          |         |         | 22979740   | 21154898   | -1824842     |
| Himachal Pradesh           | 1745025  | 1774003  |         |         |          |          |         |         |         |          |         |         | 9041904    | 8966976    | -74928       |
| J & K                      | 1307692  | 1319945  |         |         |          |          |         |         |         |          |         |         | 9716262    | 9874567    | 158305       |
| Karnataka                  | 7027706  | 7033329  |         |         |          |          | 1135540 | 1117964 |         |          |         |         | 61439299   | 61425046   | -14253       |
| Kerala                     | 7685880  | 7790572  |         |         |          |          | 354640  | 355232  |         |          |         |         | 34455763   | 34578903   | 123140       |
| Kolkata                    | 783501   | 786792   |         |         |          |          | 533275  | 529849  |         |          |         |         | 25037025   | 25265118   | 228093       |
| Madhya Pradesh             | 4449256  | 4446851  |         |         |          |          |         |         | 2791341 |          |         |         | 65139140   | 63099375   | -2039765     |
| Maharashtra                | 5919866  | 5985274  |         |         | 8087104  | 8225845  |         |         |         |          |         |         | 83953700   | 84268281   | 314581       |
| Mumbai                     |          |          | 1254236 | 1263178 |          |          |         |         |         |          |         |         | 31591713   | 31622945   | 31232        |
| North East                 | 1552861  | 1566834  |         |         |          |          |         |         |         |          |         |         | 11073957   | 11105770   | 31813        |
| Orissa                     | 4212161  | 4320853  |         |         |          |          |         |         |         |          |         |         | 29354324   | 29556380   | 202056       |
| Punjab                     | 3655235  | 3728675  |         |         |          |          |         |         |         |          | 3188450 | 2940617 | 31791133   | 31635264   | -155869      |
| Rajasthan                  | 4140128  | 4264833  |         |         |          |          | 2101349 | 2117213 |         |          |         |         | 60273042   | 60338787   | 65745        |
| Tamil Nadu (incl. Chennai) | 8763328  | 8773121  |         |         |          |          | 745476  | 737105  |         |          |         |         | 81397008   | 80928263   | -468745      |
| U.P.(E)                    | 9079722  | 9283782  |         |         | 12584686 | 12775465 |         |         | 7440    |          |         |         | 93294755   | 94506286   | 1211531      |
| U.P.(W)                    | 4345726  | 4443064  |         |         | 8636227  | 8799751  | 146441  | 149751  | 9340    |          |         |         | 57576359   | 57716425   | 140066       |
| West Bengal                | 1654097  | 1664222  |         |         |          |          | 1496692 | 1492747 |         |          |         |         | 49540041   | 49683646   | 143605       |
| Total                      | 87485250 | 88238939 | 3572447 | 3581747 | 52429453 | 53058712 | 7649089 | 7645045 | 5154192 | 0        | 3188450 | 2940617 | 1034253328 | 1033157014 | -1096314     |
| Net Addition               |          | 753689   |         | 9300    |          | 629259   |         | -4044   |         | -5154192 |         | -247833 |            | -1096314   |              |

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

#### Annexure-II

| Circle                        | Aircel  | Bharti | BSNL  | Quadrant | Idea   | MTNL  | Reliance | Sistema | Tata   | Telenor | Vodafone | Total |
|-------------------------------|---------|--------|-------|----------|--------|-------|----------|---------|--------|---------|----------|-------|
| Andhra Pradesh                | 57.99   | 98.64  | 73.02 |          | 103.91 |       | 97.16    |         | 87.13  | 74.31   | 85.06    | 91.02 |
| Assam                         | 88.68   | 96.49  | 82.38 |          | 97.45  |       | 4.82     |         |        |         | 105.83   | 88.47 |
| Bihar                         | 91.82   | 97.85  | 74.09 |          | 103.25 |       | 42.70    |         | 70.50  | 72.35   | 108.88   | 91.33 |
| Delhi                         | 64.24   | 91.82  |       |          | 93.45  | 57.21 | 97.02    | 46.12   | 55.42  |         | 104.77   | 87.69 |
| Gujarat                       | 2786.34 | 95.16  | 74.28 |          | 105.25 |       | 99.11    | 43.60   | 75.94  | 68.46   | 94.23    | 91.99 |
| Haryana                       | 0.55    | 97.87  | 60.08 |          | 103.43 |       | 98.92    |         | 83.52  |         | 96.73    | 91.39 |
| Himachal Pradesh              | 54.73   | 94.44  | 73.23 |          | 112.43 |       | 98.59    |         | 41.58  |         | 95.41    | 87.43 |
| J & K                         | 89.01   | 88.34  | 72.54 |          | 97.86  |       | 59.38    |         |        |         | 84.42    | 83.85 |
| Karnataka                     | 59.25   | 99.67  | 62.35 |          | 105.29 |       | 97.40    | 68.23   | 88.08  |         | 90.85    | 90.84 |
| Kerala                        | 78.08   | 93.96  | 81.37 |          | 108.39 |       | 91.01    | 61.30   | 86.64  |         | 92.53    | 94.21 |
| Kolkata                       | 72.11   | 96.73  | 89.45 |          | 91.62  |       | 98.40    | 90.48   | 81.84  |         | 96.20    | 90.49 |
| Madhya Pradesh                | 1.05    | 96.02  | 77.81 |          | 106.94 |       | 98.92    |         | 77.53  |         | 81.05    | 95.83 |
| Maharashtra                   | 56.49   | 98.22  | 77.76 |          | 105.04 |       | 98.56    |         | 79.89  | 71.76   | 97.53    | 93.28 |
| Mumbai                        | 52.04   | 96.31  |       |          | 87.65  | 68.74 | 96.13    |         | 74.24  |         | 82.64    | 84.06 |
| North East                    | 68.90   | 96.19  | 68.69 |          | 98.96  |       | 5.37     |         |        |         | 94.38    | 81.02 |
| Orissa                        | 67.20   | 96.95  | 76.83 |          | 102.28 |       | 11.67    |         | 82.74  |         | 102.46   | 83.95 |
| Punjab                        | 63.95   | 99.26  | 71.78 | 51.96    | 104.44 |       | 99.00    |         | 74.21  |         | 91.63    | 88.09 |
| Rajasthan                     | 52.96   | 95.79  | 76.82 |          | 103.89 |       | 99.02    | 59.36   | 109.23 |         | 92.04    | 89.54 |
| Tamil Nadu (incl.<br>Chennai) | 71.99   | 96.98  | 66.22 |          | 95.58  |       | 95.12    | 53.88   | 73.61  |         | 95.77    | 84.75 |
| U.P. (E)                      | 82.06   | 101.74 | 58.62 |          | 109.26 |       | 97.97    |         | 77.02  | 75.75   | 97.05    | 91.01 |
| U.P. (W)                      | 105.21  | 97.61  | 63.78 |          | 101.65 |       | 98.88    | 58.15   | 77.14  | 74.92   | 95.12    | 90.97 |
| West Bengal                   | 88.19   | 98.09  | 89.43 |          | 109.08 |       | 9.41     | 65.03   | 56.79  |         | 101.74   | 92.75 |
| Total                         | 72.98   | 97.42  | 71.29 | 51.96    | 103.92 | 61.28 | 89.10    | 61.41   | 79.62  | 73.09   | 95.68    | 90.26 |

Note: 1. 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. 2. Peak VLR of M/s Idea Cellular for the month of April, 2016 may be read as 104.91% instead of 104.65%.

#### Wireline Subscriber Base

#### Annexure-III

|                            | Group    |          |         |         |         |         |         |         |         |         |        |        |        |        | _      |        |          |          |                 |
|----------------------------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|----------|----------|-----------------|
| Circle                     | BS       | NL       | M'      | rnl     | Bh      | arti    | Reli    | iance   | Ta      | ıta     | Quad   | drant  | Sist   | tema   | Voda   | afone  | To       | tal      |                 |
|                            | Apr-16   | May-16   | Apr-16  | May-16  | Apr-16  | May-16  | Apr-16  | May-16  | Apr-16  | May-16  | Apr-16 | May-16 | Apr-16 | May-16 | Apr-16 | May-16 | Apr-16   | May-16   | Net<br>Addition |
| Andhra Pradesh             | 1304282  | 1283465  |         |         | 147119  | 148614  | 75897   | 75871   | 164041  | 166462  |        |        |        |        | 9,450  | 10,500 | 1700789  | 1684912  | -15877          |
| Assam                      | 158653   | 156997   |         |         |         |         |         |         |         |         |        |        |        |        | 1,860  | 1,860  | 160513   | 158857   | -1656           |
| Bihar                      | 311153   | 309155   |         |         |         |         | 6,879   | 6,849   | 13,182  | 13,165  |        |        |        |        | 1080   | 1110   | 332294   | 330279   | -2015           |
| Delhi                      |          |          | 1615829 | 1615626 | 1231072 | 1235216 | 174724  | 174687  | 133920  | 132477  |        |        |        |        | 21,360 | 21,600 | 3176905  | 3179606  | 2701            |
| Gujarat                    | 1144157  | 1128323  |         |         | 72936   | 74529   | 74697   | 74637   | 87149   | 87424   |        |        |        |        | 4,860  | 5,220  | 1383799  | 1370133  | -13666          |
| Haryana                    | 3,00,228 | 2,96,893 |         |         | 20599   | 21176   | 4427    | 4397    | 37881   | 37647   |        |        |        |        | 30     | 30     | 363165   | 360143   | -3022           |
| Himachal Pradesh           | 1,60,139 | 1,57,601 |         |         |         |         | 4126    | 4126    | 2748    | 2708    |        |        |        |        | 60     | 30     | 167073   | 164465   | -2608           |
| J & K                      | 1,29,768 | 1,28,477 |         |         |         |         |         |         |         |         |        |        |        |        |        |        | 129768   | 128477   | -1291           |
| Karnataka                  | 1276766  | 1269633  |         |         | 597841  | 599671  | 149666  | 150672  | 207514  | 207976  |        |        |        |        | 9,810  | 17,580 | 2241597  | 2245532  | 3935            |
| Kerala                     | 2157677  | 2137903  |         |         | 56731   | 56923   | 33841   | 33598   | 18517   | 18480   |        |        |        |        | 1590   | 1560   | 2268356  | 2248464  | -19892          |
| Kolkata                    | 661585   | 649535   |         |         | 117382  | 117596  | 69197   | 69179   | 50806   | 49576   |        |        |        |        | 3930   | 4560   | 902900   | 890446   | -12454          |
| Madhya Pradesh             | 736611   | 729749   |         |         | 262227  | 265328  | 20256   | 19994   | 18151   | 18067   |        |        |        |        | 390    | 390    | 1037635  | 1033528  | -4107           |
| Maharashtra                | 1517126  | 1474537  |         |         | 74762   | 75209   | 82876   | 82786   | 283986  | 284669  |        |        |        |        | 11,010 | 11,640 | 1969760  | 1928841  | -40919          |
| Mumbai                     |          |          | 1879410 | 1873297 | 350435  | 350685  | 251483  | 252298  | 536090  | 535524  |        |        |        |        | 17408  | 17662  | 3034826  | 3029466  | -5360           |
| North East                 | 124071   | 123270   |         |         |         |         |         |         |         |         |        |        |        |        | 150    | 150    | 124221   | 123420   | -801            |
| Orissa                     | 290712   | 284183   |         |         |         |         | 3290    | 3290    | 8230    | 8179    |        |        |        |        | 960    | 960    | 303192   | 296612   | -6580           |
| Punjab                     | 646905   | 641545   |         |         | 110323  | 111786  | 21268   | 21284   | 16817   | 16763   | 254002 | 258629 |        |        | 900    | 930    | 1050215  | 1050937  | 722             |
| Rajasthan                  | 641008   | 638690   |         |         | 46368   | 46910   | 20814   | 20764   | 11552   | 11801   |        |        | 58931  | 58642  | 1,860  | 1,830  | 780533   | 778637   | -1896           |
| Tamil Nadu (incl. Chennai) | 1854577  | 1819425  |         |         | 514832  | 519984  | 134251  | 134211  | 108552  | 109137  |        |        |        |        | 7440   | 8490   | 2619652  | 2591247  | -28405          |
| U.P.(E)                    | 387896   | 387957   |         |         | 62079   | 62286   | 35111   | 35097   | 15390   | 15313   |        |        |        |        | 1,080  | 1,080  | 501556   | 501733   | 177             |
| U.P.(W)                    | 381704   | 379420   |         |         | 22027   | 22292   | 7105    | 7105    | 10091   | 10081   |        |        |        |        | 480    | 480    | 421407   | 419378   | -2029           |
| West Bengal                | 359636   | 353699   |         |         |         |         | 1898    | 1934    | 3875    | 3895    |        |        |        |        | 60     | 60     | 365469   | 359588   | -5881           |
| Total                      | 14544654 | 14350457 | 3495239 | 3488923 | 3686733 | 3708205 | 1171806 | 1172779 | 1728492 | 1729344 | 254002 | 258629 | 58931  | 58642  | 95768  | 107722 | 25035625 | 24874701 | -160924         |
| Net Addition               |          | -194197  |         | -6316   |         | 21472   |         | 973     |         | 852     |        | 4627   |        | -289   |        | 11954  |          | -160924  |                 |

## 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.