#### For immediate release

### (Press Release No. 74/2019)

Information Note to the Press





## TELECOM REGULATORY AUTHORITY OF INDIA

New Delhi, 18<sup>th</sup> September, 2019 (www.trai.gov.in)

| Highlights of Telecom Subscription I  | Data as on | 31 <sup>st</sup> July | <mark>, 2019</mark>                     |
|---------------------------------------|------------|-----------------------|---|
| Particulars                           | Wireless   | Wireline              | <b>Total</b><br>(Wireless+<br>Wireline) |
| Total Telephone Subscribers (Million) | 1168.31    | 20.96                 | 1189.28                                 |
| Net Addition in July, 2019 (Million)  | 2.85       | -0.20                 | 2.65                                    |
| Monthly Growth Rate                   | 0.24%      | -0.97%                | 0.22%                                   |
| Urban Telephone Subscribers (Million) | 659.87     | 18.16                 | 678.02                                  |
| Net Addition in July, 2019 (Million)  | 2.60       | -0.16                 | 2.44                                    |
| Monthly Growth Rate                   | 0.40%      | -0.87%                | 0.36%                                   |
| Rural Telephone Subscribers (Million) | 508.45     | 2.81                  | 511.25                                  |
| Net Addition in July, 2019 (Million)  | 0.25       | -0.05                 | 0.21                                    |
| Monthly Growth Rate                   | 0.05%      | -1.60%                | 0.04%                                   |
| Overall Tele-density*(%)              | 88.64      | 1.59                  | 90.23                                   |
| Urban Tele-density*(%)                | 156.80     | 4.31                  | 161.12                                  |
| Rural Tele-density*(%)                | 56.67      | 0.31                  | 56.98                                   |
| Share of Urban Subscribers            | 56.48%     | 86.60%                | 57.01%                                  |
| Share of Rural Subscribers            | 43.52%     | 13.40%                | 42.99%                                  |
| Broadband Subscribers (Million)       | 585.60     | 18.52                 | 604.12                                  |

- In the month of July, 2019, 5.92 million subscribers submitted their requests for Mobile Number Portability (MNP). With this, the cumulative MNP requests increased from 441.49 million at the end of Jun-19 to 447.41 million at the end of Jul-19, since implementation of MNP.
- Number of active wireless subscribers (on the date of peak VLR<sup>#</sup>) in July, 2019 was 972.38 million.

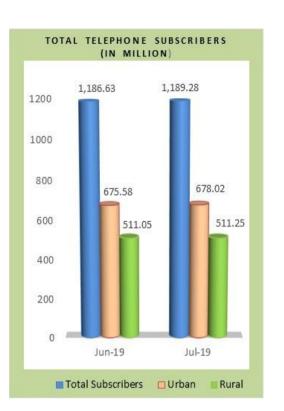
#### Note:

- Information in this Press Release is based on the data provided by the Service Providers
- \* Based on the population projections from Census data published by the Office of Registrar General & Census Commissioner of India.
- # VLR is acronym of Visitor Location Register. The dates of peak VLR for various TSPs are different in different service areas.

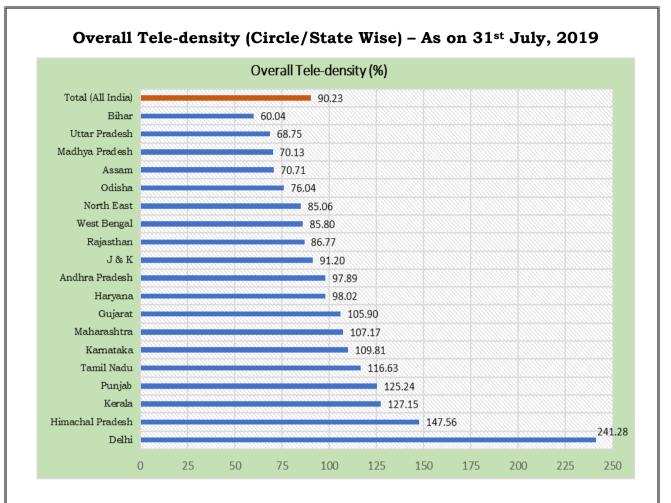
## I. Total Telephone Subscribers

• The number of telephone subscribers in India increased from 1,186.63 million at the end of Jun-19 to 1,189.28 million at the end of Jul-19, thereby showing a monthly growth rate of 0.22%. The Urban subscription increased from 675.58 million at the end of Jun-19 to 678.02 million at the end of Jul-19 and the rural subscription also increased from 511.05 million to 511.25 million during the same period. The monthly growth rates of urban and rural subscription were 0.36% and 0.04% respectively during the month of Jul-19.





• The overall Tele-density in India increased from 90.11 at the end of Jun-19 to 90.23 at the end of Jul-19. The Urban Tele-density increased from 160.78 at the end of Jun-19 to 161.12 at the end of Jul-19. However, Rural Tele-density slightly declined from 56.99 at the end of Jun-19 to 56.98 at the end of Jul-19. The share of rural and urban subscribers in total number of telephone subscribers at the end of Jul-19 was 57.01% and 42.99% respectively.



• As may be seen in the above chart, eight states have less tele-density than the all India average tele-density at the end of Jul-19. Delhi service area has maximum tele-density of 241.28 and the Bihar service area has minimum tele-density of 60.04 at the end of July, 2019.

#### Notes:

- 1. Population data/projections are available state wise only.
- 2. Tele-density figures are derived from the telephone subscriber data provided by the access service providers and the projections of population published by the Office of the Registrar General & Census Commissioner, India.
- 3. Telephone subscriber data for Delhi, includes, apart from the data for the State of Delhi, wireless subscriber data for the areas served by the local exchanges of Ghaziabad & Noida (in Uttar Pradesh) and Gurgaon & Faridabad (in Haryana).
- 4. Data/information for West Bengal includes Kolkata, Maharashtra includes Mumbai, Tamil Nadu includes Chennai and Uttar Pradesh includes UPE & UPW service area(s).
- 5. Data/information for Andhra Pradesh includes Telengana, Madhya Pradesh includes Chhatishgarh, Bihar includes Jharkhand, Maharashtra includes Goa, Uttar Pradesh includes Uttarakhand, West Bengal includes Sikkim and North-East includes Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland & Tripura States.

## II. Category-wise Growth in subscriber base

| Circle    |                     | s in the month<br>ly, 2019 | Telephone Subscriber base a<br>on 31 <sup>st</sup> July, 2019 |                     |  |  |  |  |  |  |
|-----------|---------------------|----------------------------|---|---------------------|--|--|--|--|--|--|
| Category  | Wireline<br>segment | Wireless<br>segment        | Wireline<br>segment   | Wireless<br>segment |  |  |  |  |  |  |
| Circle A  | -70,590             | 1,273,991                  | 8,125,951   | 40,0047,186         |  |  |  |  |  |  |
| Circle B  | -63,984             | 547,500                    | 5,152,325   | 473,692,257         |  |  |  |  |  |  |
| Circle C  | -44,748             | 648,120                    | 821,977   | 176,572,815         |  |  |  |  |  |  |
| Metro     | -25,492             | 383,454                    | 6,864,465   | 118,000,567         |  |  |  |  |  |  |
| All India | -204,814            | 2,853,065                  | 20,964,718  | 1,168,312,825       |  |  |  |  |  |  |

# Circle Category-wise Net Additions in Telephone Subscribers in the month of July, 2019

#### Circle Category-wise monthly and yearly Growth Rates in Telephone Subscribers in the month of July, 2019

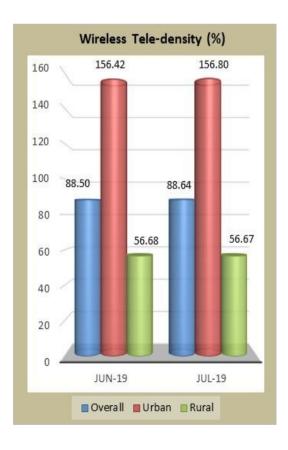
| Circle    | Monthly gro<br>(Jun-19 | wth rate (%)<br>to Jul-19) |        | wth rate (%)<br>to Jul-19) |
|-----------|------------------------|----------------------------|--------|----------------------------|
| Category  | Wireline<br>Segment    |                            |        | Wireless<br>Segment        |
| Circle A  | -0.86                  | 0.32                       | -7.12  | 0.14                       |
| Circle B  | -1.23                  | 0.12                       | -8.06  | 0.35                       |
| Circle C  | -5.16                  | 0.37                       | -16.93 | 1.38                       |
| Metro     | -0.37                  | 0.33                       | -0.95  | 5.96                       |
| All India | -0.97                  | 0.24                       | -5.87  | 0.97                       |

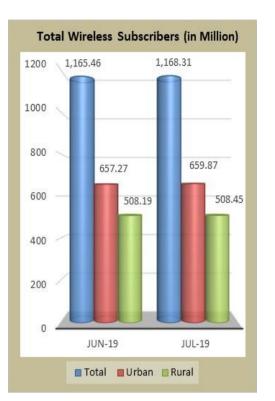
Note: Circle Category-Metro includes Delhi, Mumbai and Kolkata. Data for Chennai has been included in Circle Category-A, as part of TamilNadu.

- As can be seen in the above tables, in wireless segment, Circles of all Categories showed monthly growth in their subscribers during Jul-19. Circles in Category 'A' showed maximum net addition in their wireless subscribers during the month.
- In Wireline segment, Circles in all other Categories showed decline rate in their subscribers during the month of Jul-19. Circles in Category 'A' showed maximum decline in wireline subscribers, however circles in Category 'C' showed maximum decline rate during the month.

### **III. Wireless Subscribers**

Total wireless subscribers (GSM, CDMA & LTE) increased from 1,165.46 million at the end of Jun-19 to 1,168.31 million at the end of Jul-19, thereby registering a monthly growth rate of 0.24%. Wireless subscription in urban areas increased from 657.27 million at the end of Jun-19 to 659.87 million at the end of Jul-19 and wireless subscription in rural areas increased from 508.19 million at the end of Jul-19. Monthly growth rates of urban and rural wireless subscription were 0.40% and 0.05% respectively.



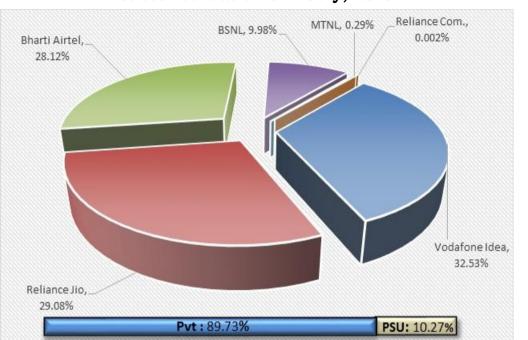


The Wireless Tele-density in India increased from 88.50 at the end of Jun-19 to 88.64 at the end of Jul-19. The Urban Wireless Tele-density increased from 156.42 at the end of Jun-19 to 156.80 at the end of Jul-19. However, Rural Wireless Tele-density slightly declined from 56.68 to 56.67 during the same period. The share of urban and rural wireless subscribers in total number of wireless subscribers was 56.48% and 43.52% respectively at the end of Jul-19. Detailed statistics of wireless subscriber base is available at Annexure-I.

• As on 31<sup>st</sup> July, 2019, the private access service providers held 89.73% market share of the wireless subscribers whereas BSNL and MTNL, the two PSU access service providers, had a market share of only 10.27%.

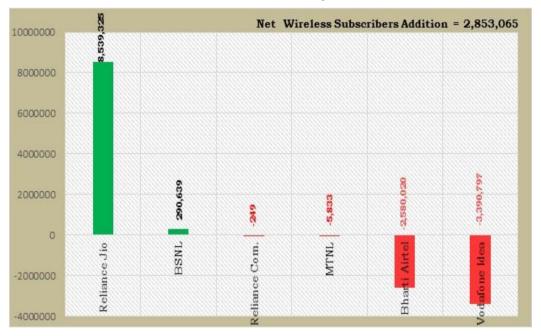
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• The graphical representation of access service provider-wise market share and net additions in wireless subscriber base are given below:



#### Access Service Provider-wise Market Shares in term of Wireless Subscribers as on 31<sup>st</sup> July, 2019

#### Net Additions in Wireless Subscribers of Access Service Providers in the month of July, 2019

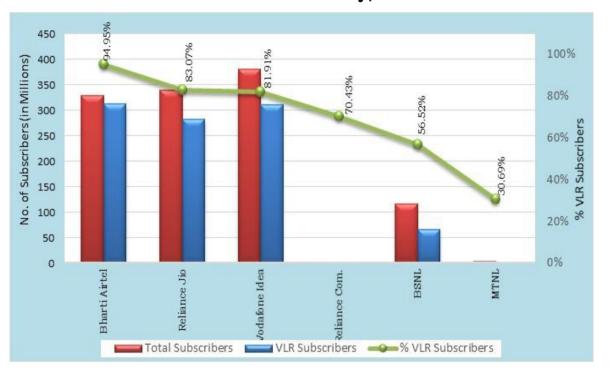


- **Note:** 1. M/s Bharti Airtel Ltd has reported the wireless subscribers including the subscribers of M/s Tata Teleservices Ltd. However, DoT has not yet approved merger of them.
  - 2. Virtual Network Operator (VNO) of BSNL has started reporting of its subscribers from the month of October, 2018 and the same has been included in the subscriber base of BSNL.

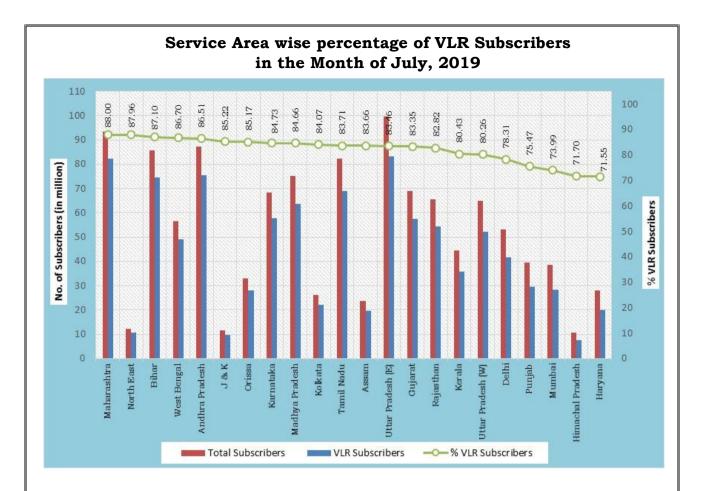
# IV. Active Wireless Subscribers (VLR Data)

- Out of the total wireless subscribers (1, 168.31)million), 972.38 million wireless subscribers were active on the date of peak VLR in the month of Jul-19. The of proportion active wireless subscribers approximately was 83.23% of total wireless the 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 Jul-19 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 July, 2019

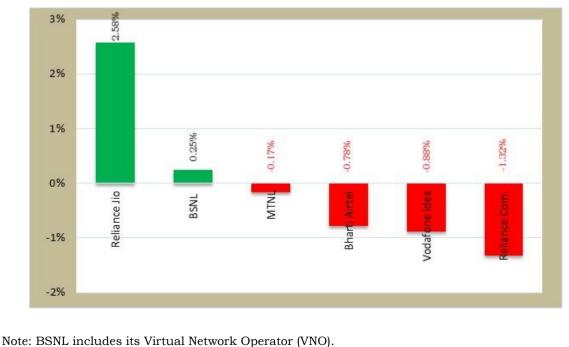


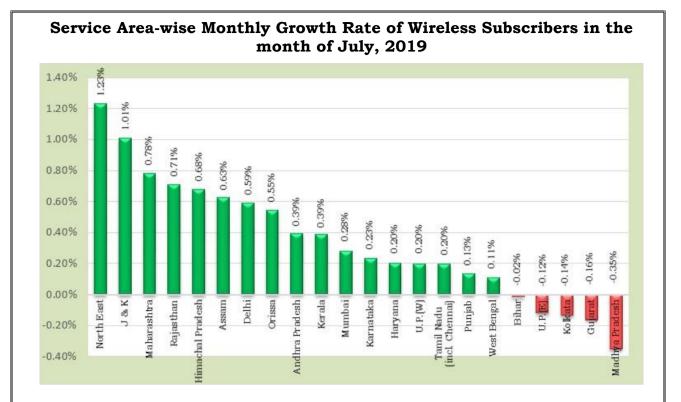
 Bharti Airtel (including Tata Teleservices) has the maximum proportion (94.95%) of its active wireless subscribers (VLR) as against its total wireless subscribers (HLR) on the date of peak VLR in the month of Jul-19.



# V. Growth in Wireless Subscribers

### Access Service Provider-wise Monthly Growth Rate of Wireless Subscribers in the month of July, 2019





 Out of the total 22 service areas, five service areas showed negative growth in their wireless subscribers during the month of July, 2019. North-East service area showed maximum growth of 1.23% and Madhya Pradesh service area showed maximum decline (0.35%) in their wireless subscriber during the month.

## VI. Mobile Number Portability (MNP)

Intra-service area Mobile number portability (MNP) was implemented first in Harvana service area w.e.f. 25.11.2010 and in the rest of the country w.e.f. 20.01.2011. Inter-Service MNP Area 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 Jul-19, a • total of 5.92 million requests were received for MNP. Out of total 5.92 million new requests, 2.58 million requests received from Zone-I and 3.34 million requests received from The Zone-II. cumulative MNP requests increased from 441.49 million at the end of Jun-19 to 447.41 million at the end of Jul-19, 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 35.24 million) followed by Maharashtra (about 33.04 million) service area. In MNP Zone-II (Southern and Eastern India), the highest number of requests till date have been received in Karnataka (about 41.44 million) followed by Andhra Pradesh (about 37.84 million) and Tamil Nadu (about 37.67 million).

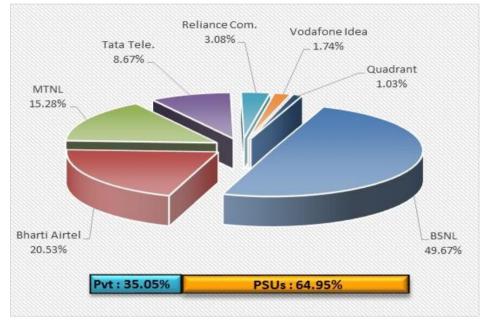
| Service Area Wise MNP Status |                           |        |                |   |        |  |  |  |  |
|------------------------------|---------------------------|--------|----------------|---|--------|--|--|--|--|
| Zon                          | e -1                      |        | Zone - 2       |   |        |  |  |  |  |
| Service Area                 | Number o<br>Reque<br>Mill | •      | Service Area   | Number of<br>Porting Requests<br>(in Million) |        |  |  |  |  |
|                              | Jun-19                    | Jul-19 |                | Jun-19  | Jul-19 |  |  |  |  |
| Delhi                        | 22.77                     | 23.03  | Andhra Pradesh | 37.31   | 37.84  |  |  |  |  |
| Gujarat                      | 29.44                     | 29.78  | Assam          | 3.45  | 3.48   |  |  |  |  |
| Haryana                      | 16.09                     | 16.26  | Bihar          | 17.79   | 18.05  |  |  |  |  |
| Himachal Pradesh             | 2.15                      | 2.18   | Karnataka      | 40.77   | 41.44  |  |  |  |  |
| Jammu & Kashmir              | 1.09                      | 1.11   | Kerala         | 10.75   | 10.96  |  |  |  |  |
| Maharashtra                  | 32.50                     | 33.04  | Kolkata        | 10.52   | 10.76  |  |  |  |  |
| Mumbai                       | 22.53                     | 22.71  | Madhya Pradesh | 28.94   | 29.47  |  |  |  |  |
| Punjab                       | 17.04                     | 17.24  | North East     | 1.35  | 1.36   |  |  |  |  |
| Rajasthan                    | 34.98                     | 35.24  | Orissa         | 8.80  | 9.00   |  |  |  |  |
| U.P.(East)                   | 24.31                     | 24.63  | Tamil Nadu     | 37.19   | 37.67  |  |  |  |  |
| U.P.(West)                   | 19.66                     | 19.93  | West Bengal    | 22.04   | 22.24  |  |  |  |  |
| Total                        | 222.56                    | 225.14 | Total          | 218.93  | 222.27 |  |  |  |  |
| Total (Zone-1 + Zon          | e-2)                      |        |                | 441.49  | 447.41 |  |  |  |  |
| Net Addition (July, 2        | 019)                      |        |                |   | 5.92   |  |  |  |  |

# VII. Wireline Subscribers

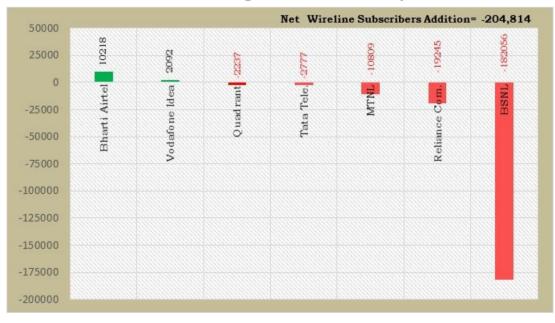
• Wireline subscribers further declined from 21.17 million at the end of Jun-19 to 20.96 million at the end of Jul-19. Net decline in the wireline subscriber base was 0.21 million with a monthly decline rate of 0.97%. The share of urban and rural subscribers in total wireline subscribers were 86.60% and 13.40% respectively at the end of Jul-19.

- The Overall Wireline Tele-density declined from 1.61 at the end of Jun-19 to 1.59 at the end of Jul-19. Urban and Rural Wireline Tele-density were 4.31 and 0.31 respectively during the same period.
- BSNL and MTNL, the two PSU access service providers, held 64.95% of the wireline market share as on 31<sup>st</sup> July, 2019. Detailed statistics of wireline subscriber base are available at Annexure-III.

#### Access Service Provider-wise Market Shares of Wireline Subscribers as on 31<sup>st</sup> July, 2019



#### Access Service Provider-wise Net Additions/declines in Wireline Subscribers during the month of July, 2019



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

As per the reports received from 324 operators in the month of July, 2019, the number of broadband subscribers increased from 594.59 million at the end of Jun-19 to 604.12 million at the end of Jul-19 with a monthly growth rate of 1.60%. Segmentwise broadband subscribers and their monthly growth rates are as below:

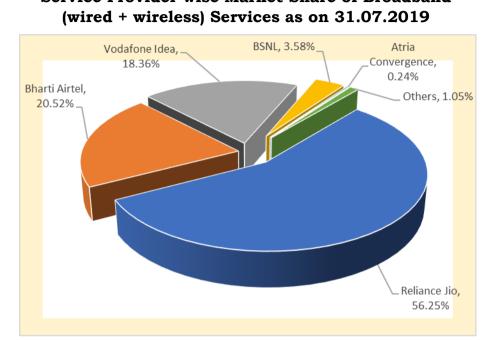
# Segment-wise Broadband Subscribers and Monthly Growth Rate in the month of July, 2019

|  | Broadband s<br>(in mil               | Monthly<br>growth                    |                                   |
|--|--------------------------------------|--------------------------------------|-----------------------------------|
| Segment  | As on 30 <sup>th</sup><br>June, 2019 | As on 30 <sup>th</sup><br>July, 2019 | rate in the<br>month of<br>Jul-19 |
| Wired subscribers  | 18.42                                | 18.52                                | 0.56%                             |
| Mobile devices users<br>(Phones and dongles)                                   | 575.63                               | 585.05                               | 1.64%                             |
| Fixed Wireless subscribers<br>(Wi-Fi, Wi-Max, Point-to-<br>Point Radio & VSAT) | 0.54                                 | 0.55                                 | 1.33%                             |
| Total  | 594.59                               | 604.12                               | 1.60%                             |

• Top five service providers constituted 98.95% market share of the total broadband subscribers at the end of Jul-19. These service providers were Reliance Jio Infocomm Ltd (339.79 million), Bharti Airtel (123.94 million), Vodafone Idea (110.92 million), BSNL (21.64 million) and Atria Convergence (1.47 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

- As on 31<sup>st</sup> July, 2019, the top five Wired Broadband Service providers were BSNL (9.05 million), Bharti (2.40)million), Airtel Atria Convergence Technologies (1.47)million). Hathway Cable & Datacom (0.85 million) and You Broadband (0.75 million).
- As on 31<sup>st</sup> July, 2019, the top five Broadband Service Wireless providers were Reliance Jio Infocomm Ltd (339.79 million), Bharti Airtel (121.54)million), Vodafone Idea (110.90 million), BSNL (12.58 million) and MTNL (0.21 million).

Contact details in case of any clarification:

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Authorized to issue:

(S. K. Mishra) Pr. Advisor (F&EA)

| Circle -                      | Bharti<br>(including<br>Jun-19 |             |        |         |               |           |           |           |              |        |         |         |           |           |            |            |          |
|-------------------------------|--------------------------------|-------------|--------|---------|---------------|-----------|-----------|-----------|--------------|--------|---------|---------|-----------|-----------|------------|------------|----------|
|                               | True 10                        | Tata Tele.) | Relian | ce Com. | Vodafone Idea |           | BSNL      |           | BSNL (VNO's) |        | МТ      | NL      | Relian    | ce Jio    | Total      |            | Net      |
| Andhra Pradesh                | Jun-19                         | Jul-19      | Jun-19 | Jul-19  | Jun-19        | Jul-19    | Jun-19    | Jul-19    | Jun-19       | Jul-19 | Jun-19  | Jul-19  | Jun-19    | Jul-19    | Jun-19     | Jul-19     | Addition |
|                               | 28922938                       | 28819821    | 2055   | 2060    | 21546770      | 21345464  | 10086993  | 10075956  |              |        |         |         | 26415879  | 27074628  | 86974635   | 87317929   | 343294   |
| Assam                         | 8256291                        | 8327828     |        |         | 5724541       | 5663147   | 2627522   | 2552782   |              |        |         |         | 6936372   | 7148423   | 23544726   | 23692180   | 147454   |
| Bihar                         | 36731684                       | 36568810    | 221    | 229     | 19836397      | 19238015  | 4759554   | 4837277   |              |        |         |         | 24241071  | 24910635  | 85568927   | 85554966   | -13961   |
| Delhi                         | 15480305                       | 15426329    | 2473   | 2260    | 19042181      | 19065315  |           |           |              |        | 2205188 | 2202615 | 16226566  | 16571642  | 52956713   | 53268161   | 311448   |
| Gujarat                       | 11232618                       | 11047857    | 581    | 584     | 30758854      | 30365913  | 6035935   | 6049371   |              |        |         |         | 20898968  | 21350850  | 68926956   | 68814575   | -112381  |
| Haryana                       | 4391688                        | 4259707     | 182    | 182     | 10387003      | 10342007  | 4982715   | 4977904   |              |        |         |         | 8136927   | 8375544   | 27898515   | 27955344   | 56829    |
| Himachal Pradesh              | 3338046                        | 3347009     | 72     | 72      | 1290579       | 1248951   | 2866605   | 2890712   |              |        |         |         | 3068725   | 3149088   | 10564027   | 10635832   | 71805    |
| J & K                         | 5575369                        | 5620579     |        |         | 1145475       | 1124763   | 1188249   | 1206629   |              |        |         |         | 3569571   | 3642510   | 11478664   | 11594481   | 115817   |
| Karnataka                     | 28676100                       | 28410654    | 1666   | 1609    | 14197272      | 14047662  | 7213935   | 7257083   |              |        |         |         | 18064488  | 18594624  | 68153461   | 68311632   | 158171   |
| Kerala                        | 5371037                        | 5367259     | 498    | 498     | 20199999      | 20155387  | 10917598  | 10919476  |              |        |         |         | 7777070   | 7994970   | 44266202   | 44437590   | 171388   |
| Kolkata                       | 6667314                        | 6494422     | 0      | 34      | 8792103       | 8705084   | 1639440   | 1664788   |              |        |         |         | 9200591   | 9399016   | 26299448   | 26263344   | -36104   |
| Madhya Pradesh                | 15329290                       | 15092709    | 839    | 850     | 28465545      | 28007021  | 6400394   | 6404824   |              |        |         |         | 25204518  | 25629060  | 75400586   | 75134464   | -266122  |
| Maharashtra                   | 15637406                       | 15622797    | 4897   | 856     | 44465283      | 44277040  | 7108632   | 7152795   |              |        |         |         | 25393380  | 26280060  | 92609598   | 93333548   | 723950   |
| Mumbai                        | 9518089                        | 9410475     | 0      | 3945    | 14973795      | 14950899  |           |           |              |        | 1209351 | 1206091 | 12659717  | 12897652  | 38360952   | 38469062   | 108110   |
| North East                    | 5211537                        | 5258804     |        |         | 2287414       | 2285848   | 1456548   | 1468229   |              |        |         |         | 3079691   | 3170522   | 12035190   | 12183403   | 148213   |
| Orissa                        | 12301257                       | 12210338    | 299    | 305     | 4563459       | 4472686   | 5707785   | 5715289   |              |        |         |         | 10160361  | 10513335  | 32733161   | 32911953   | 178792   |
| Punjab                        | 10464104                       | 10266681    | 294    | 296     | 10994036      | 11027742  | 5464880   | 5483368   |              |        |         |         | 12397296  | 12595197  | 39320610   | 39373284   | 52674    |
| Rajasthan                     | 21434612                       | 21487144    | 396    | 411     | 16224497      | 16057949  | 6048835   | 6065131   |              |        |         |         | 21446728  | 22008449  | 65155068   | 65619084   | 464016   |
| Tamil Nadu<br>(incl. Chennai) | 25599398                       | 25376254    | 2784   | 2834    | 23497069      | 23353520  | 12169578  | 12202304  | 104720       | 107332 |         |         | 20734996  | 21227258  | 82108545   | 82269502   | 160957   |
| U.P.(E)                       | 31091701                       | 30630083    | 869    | 812     | 33500937      | 33236041  | 11703066  | 11671692  |              |        |         |         | 23523837  | 24159850  | 99820410   | 99698478   | -121932  |
| U.P.(W)                       | 13275541                       | 12999576    | 0      | 62      | 28434559      | 28366191  | 5853201   | 5887283   |              |        |         |         | 17306295  | 17745706  | 64869596   | 64998818   | 129222   |
| West Bengal                   | 16587064                       | 16468233    | 747    | 725     | 23083463      | 22683789  | 1929929   | 1966528   |              |        |         |         | 14812567  | 15355920  | 56413770   | 56475195   | 61425    |
| Total                         | 331093389                      | 328513369   | 18873  | 18624   | 383411231     | 380020434 | 116161394 | 116449421 | 104720       | 107332 | 3414539 | 3408706 | 331255614 | 339794939 | 1165459760 | 1168312825 | 2853065  |
| Net Addition                  |                                | -2580020    |        | -249    |               | -3390797  |           | 288027    |              | 2612   |         | -5833   |           | 8539325   | 0          | 2853065    |          |

Note: 1. The subscribers of M/s Bharti Airtel includes subscribers of M/s Tata Teleservices Ltd. However, DoT has not yet approved the merger of them.

2. Virtual Network Operator (VNO) of BSNL has reported its subscriber number from the month of October, 2018.

| Proportion of V                      | LR on the | date of Pea | k VLR in the  | month | of Jul-19 (%) | Anı          | nexure-II |
|--------------------------------------|-----------|-------------|---------------|-------|---------------|--------------|-----------|
| Circle                               | Bharti    | BSNL        | Vodafone Idea | MTNL  | Reliance Com. | Reliance Jio | Total     |
| Andhra Pradesh                       | 100.12    | 65.87       | 84.20         |       | 65.97         | 81.52        | 86.51     |
| Assam                                | 95.21     | 59.06       | 73.51         |       |               | 87.03        | 83.66     |
| Bihar                                | 91.62     | 57.71       | 74.10         |       | 41.92         | 96.22        | 87.10     |
| Delhi                                | 94.83     |             | 72.89         | 21.10 | 90.80         | 76.76        | 78.31     |
| Gujarat                              | 95.24     | 50.01       | 87.63         |       | 33.05         | 80.56        | 83.35     |
| Haryana                              | 102.89    | 37.21       | 80.66         |       | 40.66         | 64.77        | 71.55     |
| Himachal Pradesh                     | 92.13     | 42.35       | 83.63         |       | 51.39         | 72.20        | 71.70     |
| J & K                                | 93.83     | 67.00       | 70.55         |       | -             | 82.51        | 85.22     |
| Karnataka                            | 94.49     | 61.04       | 83.28         |       | 95.90         | 80.17        | 84.73     |
| Kerala                               | 98.14     | 65.82       | 88.23         |       | 37.55         | 68.82        | 80.43     |
| Kolkata                              | 94.48     | 62.59       | 83.79         |       | -             | 80.93        | 84.07     |
| Madhya Pradesh                       | 93.33     | 51.36       | 82.33         |       | 45.76         | 90.42        | 84.66     |
| Maharashtra                          | 96.82     | 54.23       | 87.84         |       | 62.03         | 92.24        | 88.00     |
| Mumbai                               | 76.92     |             | 71.22         | 48.20 | -             | 77.47        | 73.99     |
| North East                           | 97.21     | 75.78       | 72.25         |       | -             | 89.61        | 87.96     |
| Orissa                               | 93.49     | 73.20       | 79.41         |       | 19.34         | 84.47        | 85.17     |
| Punjab                               | 98.36     | 43.39       | 76.41         |       | 28.38         | 69.95        | 75.47     |
| Rajasthan                            | 95.45     | 47.04       | 82.44         |       | 39.42         | 80.63        | 82.82     |
| <b>Tamil Nadu</b> (incl.<br>Chennai) | 94.57     | 69.36       | 87.50         |       | 83.24         | 74.87        | 83.71     |
| U.P. (E)                             | 96.61     | 41.41       | 79.21         |       | 44.09         | 92.96        | 83.46     |
| U.P. (W)                             | 100.24    | 43.82       | 79.99         |       |               | 78.14        | 80.26     |
| West Bengal                          | 92.85     | 87.97       | 81.53         |       | 30.48         | 87.58        | 86.70     |
| Total                                | 94.95     | 56.52       | 81.91         | 30.69 | 70.43         | 83.07        | 83.23     |

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.

|                            |          |          |         |            | ŢŢ      | Wireline   | Subscri       | ber Base   |                    | '<br>بــــــــــــــــــــــــــــــــــــ | I          | ļ '        |               |        | Annexure | :-III    |          |
|----------------------------|----------|----------|---------|------------|---------|------------|---------------|------------|--------------------|--|------------|------------|---------------|--------|----------|----------|----------|
|                            | BSI      | NL       | MT      | NL         | Bharti  | Airtel     | Reliance Com. |            | liance Com. Tata 1 |  | Quad       | lrant      | Vodafone Idea |        | Total    |          | Net      |
| Service Area               | Jun-19   | Jul-19   | Jun-19  | Jul-19     | Jun-19  | Jul-19     | Jun-19        | Jul-19     | Jun-19             | Jul-19                                     | Jun-19     | Jul-19     | Jun-19        | Jul-19 | Jun-19   | Jul-19   | Addition |
| Andhra Pradesh             | 882330   | 871268   | 1       | ·          | 212945  | 212265     | 42141         | 39806      | 173592             | 174058                                     | ,          |            | 60820         | 61130  | 1371828  | 1358527  | -13301   |
| Assam                      | 106661   | 104384   | 1       | ·          |         | ·          | ,,            | ıl         | ı]                 | I  | []         | ۱ <u> </u> | 2970          | 3030   | 109631   | 107414   | -2217    |
| Bihar                      | 204211   | 167630   | 1       | ·          |         | ·          | 2957          | 2643       | 8428               | 8396                                       | ·[]        | ·'         | 1950          | ) 1980 | 217546   | 180649   | -36897   |
| Delhi                      |          | ·        | 1466619 | 1461217    | 1496226 | 1500205    | 5 107370      | 103294     | 155335             | 155294                                     | []         | I          | 59040         | 60190  | 3284590  | 3280200  | -4390    |
| Gujarat                    | 866711   | 862943   | 1       | ·          | 97329   | 97781      | 16648         | 16001      | 88408              | 87665                                      | , I        | I          | 30940         | 30660  | 1100036  | 1095050  | -4986    |
| Haryana                    | 202096   | 197769   | ı       | ·1         | 23336   | 23251      | 2170          | 2160       | 36461              | 36909                                      |            | ·'         | 240           | 240    | 264303   | 260329   | -3974    |
| Himachal Pradesh           | 106212   | 104094   |         | ,,         | 1       | ıī         | 1710          | 1676       | 1772               | 1780                                       |            |            | 60            | 60     | 109754   | 107610   | -2144    |
| J & K                      | 101706   | 101706   |         | ·          |         | ,T         |               | , <u> </u> | ,                  |  |            | 1          |               |        | 101706   | 101706   | 0        |
| Karnataka                  | 978200   | 968952   |         | ·          | 702520  | 706830     | 114402        | 112728     | 272182             | 273059                                     |            | 1          | 53407         | 51307  | 2120711  | 2112876  | -7835    |
| Kerala                     | 1750579  | 1740081  | 1       | ·          | 62207   | 61927      | 14491         | 13922      | 18923              | 18948                                      | اا         | ·'         | 3750          | 4110   | 1849950  | 1838988  | -10962   |
| Kolkata                    | 459691   | 446093   | ı       | ·          | 132527  | 133727     | 37334         | 36835      | 53053              | 53705                                      | <u>ا</u> ا | <u>ا</u> ا | 11380         | 11290  | 693985   | 681650   | -12335   |
| Madhya Pradesh             | 643404   | 640629   | ı       | ·          | 244404  | 243509     | 9478          | 7835       | 14354              | 14399                                      | <u>ا</u> ا | <u>ا</u> ا | 1140          | 1170   | 912780   | 907542   | -5238    |
| Maharashtra                | 1026765  | 1004915  | ı       | · !        | 101564  | 102225     | 43420         | 42091      | 269841             | 268695                                     | <u>ا</u> ا | ·'         | 23777         | 23990  | 1465367  | 1441916  | -23451   |
| Mumbai                     |          |          | 1747717 | 1742310    | 383620  | 386497     | 167421        | 165441     | 555495             | 551199                                     | ۱ <u> </u> | <u> </u>   | 57129         | 57168  | 2911382  | 2902615  | -8767    |
| North East                 | 100547   | 99004    | ı       | ·          |         | اا         | <u> </u>      | ıl         | ا <u></u> ا        | <u>ا</u> '                                 | <u> </u>   | <u> </u>   | 270           | 240    | 100817   | 99244    | -1573    |
| Orissa                     | 214462   | 209793   | ı       | ·          |         | اا<br>۱ا   | 2195          | 2075       | 8304               | 8146                                       | اا         |            | 2310          | 5340   | 227271   | 225354   | -1917    |
| Punjab                     | 374052   | 364626   | ı       | ا <u> </u> | 137834  | 137954     | 10651         | 10408      | 12084              | 12414                                      | 4 219089   | 216852     | 2 1680        | ) 1770 | 755390   | 744024   | -11366   |
| Rajasthan                  | 423266   | 412952   | ı       | ·          | 57651   | 57673      | 18901         | 17662      | 11617              | 11507                                      |            | <u>ا</u> ' | 12600         | 12480  | 524035   | 512274   | -1176    |
| Tamil Nadu (incl. Chennai) | 1375905  | 1357712  | ı       | ·          | 551464  | 550079     | 64152         | 62663      | 124018             | 124698                                     | J          | I'         | 23060         | 22430  | 2138599  | 2117582  | -21017   |
| U.P.(E)                    | 324057   | 318756   |         | ·          | 65091   | 64858      | 5495          | 4882       | 8203               | 8317                                       |            | I'         | 12350         | 12320  | 415196   | 409133   | -606     |
| U.P.(W)                    | 254593   | 249489   | ·       | · !        | 24134   | 24289      | 3056          | 2625       | 4954               | 4987                                       | <u>ا</u> ا | ·'         | 4410          | 4470   | 291147   | 285860   | -528     |
| West Bengal                | 199373   | 189969   | ı       | ·          | اا      | ا <u> </u> | 1562          | 1562       | 2453               | 2524                                       | <u>ا</u> ا | <u>ا</u> ' | 120           | 120    | 203508   | 194175   | -933     |
| Total                      | 10594821 | 10412765 | 3214336 | 3203527    | 4292852 | 4303070    | 665554        | 646309     | 1819477            | 1816700                                    | 219089     | 216852     | 2 363403      | 365495 | 21169532 | 20964718 | -20481   |
| Net Addition               | ı        | -182056  | 1 I     | -10809     | 1       | 10218      | 1             | -19245     | 1                  | -2777                                      | 1          | -2237      | 1             | 2092   |          | -204814  | I        |

# VLR Subscribers in the Wireless Segment

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

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

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

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

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

The VLR subscriber data calculated here is based on active subscribers in VLR on the date of Peak subscriber number in VLR of the particular month for which the data is being collected. This data is to be taken from the switches having the purge time of not more than 72 hours.