

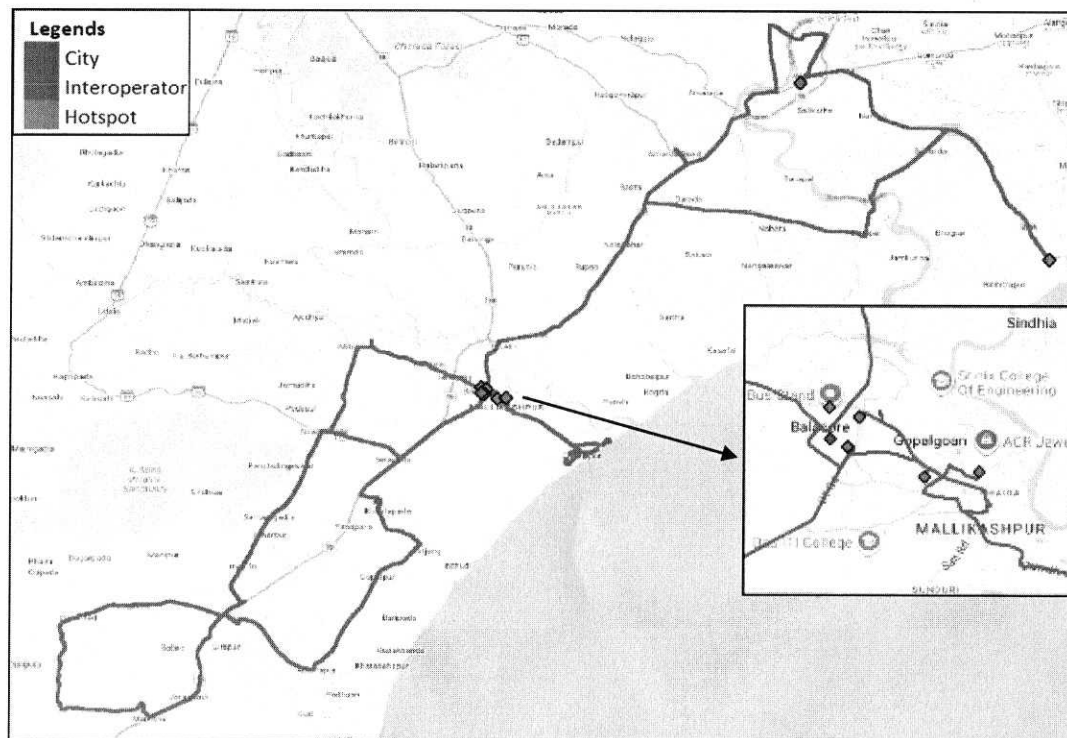
TRAI Assesses Mobile Network Quality Across, Balasore, Januganj, Mallikashpur, Remuna, Fuladi, Soro, Markona, Anantapur, Gopalpur, Jamujhadi, Gandibed, Santaragadia, Seragarh, Nilagiri, Amarda Road, Darada, Jamsuli, Chalanti, Nampo, Jaleswar, Baharda and Baliapal etc.in and around Balasore city.

The Telecom Regulatory Authority of India (TRAI) has released findings of Independent Drive Test (IDT) conducted across Balasore City under OD LSA, during the month of August 2026, for information of general telecom consumers. The purpose of this drive test is to assess and verify real time quality of mobile network services (both voice & data) provided by Telecom Service Providers (TSPs). During the IDT, TRAI captures performance of TSPs for key Quality of Service (QoS) parameters like Coverage, Call Drop Rate (CDR), Call Setup Success Rate (CSSR), data Download (DL) and Upload (UL) throughput etc., which are then published to inform Consumers and encourage TSPs to improve their services.

2. These IDTs have been designed to capture on ground mobile network performance of all TSPs across diverse usages environment like cities, hotspots, public transport hubs, etc. In this type of drive testing, live data and voice sessions are established using SIM cards from all TSPs over 2G, 3G, 4G, and 5G networks. Multiple advanced test handsets are used, and the sessions are monitored and analysed in real-time using advanced Software Systems.

3. TRAI, through its appointed agency, conducted drive tests across City drive – 345 Kms, Hotspot locations - 7, in Balasore city during 18th August 2026 to 20th August 2026 in Odisha LSA. These tests were conducted under the supervision of the TRAI Regional Office Hyderabad. The observations presented in drive test reports represent the performance of the TSPs on the area/ route under test on the day/ time of conducting the drive test.

4. Drive Test Route Map: The following map provides overview of drive test routes indicating City drive, Inter-operator calling and Hotspots, as per the legends shown on the map:-



5. Key Parameters Assessed

- a) Coverage Gap: Percentage of samples, for which signal strength observed less than the minimum prescribed signal strength for respective technology (2G/ 3G/ 4G/ 5G).
- b) Voice Services: Call Setup Success Rate (CSSR), Drop Call Rate (DCR), Call Setup Time, Call Silence Rate, Speech Quality (MOS).
- c) Call Silence Instance: Number of call silence instance occurred during the calls.
- d) Data Services: Download/ Upload Throughput, Latency, Jitter, Packet Drop Rate

6. The overall mobile network performance in Balasore City for the key parameters has been summarised below: -

- a) Coverage Gap - The signal strength observed during voice testing on the drive test route in auto-selection mode (5G/4G/3G/2G), measured as the number of samples having poor signal strength out of the total samples collected, was 1029/43646 for Airtel, 6758/41512 for BSNL, 948/ 42851 for RJIL and 7002/ 42776 for VIL. Details of the coverage gaps have been provided in the map Annexed.  
The signal strength observed during voice testing on the drive test route in auto-selection mode (5G/4G/3G/2G), measured as the number of samples having Limited service out of the total samples collected, was 0/43646 for Airtel, 301/41512 for BSNL, 0/ 42851 for RJIL and 61/ 42776 for VIL. Details of the coverage gaps have been provided in the map Annexed.
- b) Dropped Calls - Dropped calls, measured as the number of dropped calls out of the number of successfully established calls, were 4/393 for Airtel, 11/356 for BSNL, 3/387 for RJIL and 8/ 390 for VIL. Details of the dropped call locations have been provided in the map Annexed.
- c) Call Silence Instance - Call silence instances, measured as the total number of silence instances observed for > 3 seconds out of the total calls established, were 5/375 for Airtel, 31/356 for BSNL 6/372 RJIL and 9/376 for VIL. Details of the call silence instance locations have been provided in the map Annexed.
- d) Data Download and Upload Throughput:
  - i) Data Download performance (Overall): Average download speed was observed as 67.10 Mbps for Airtel (5G/4G), 8.18 Mbps for BSNL (3G), 239.24 Mbps for RJIL (5G/4G) and 24.65 Mbps for VIL (5G/4G/2G). Detail of Download throughput has been provided in the map Annexed.
  - ii) Data Upload performance (Overall): Average upload speed was observed as 16.61 Mbps for Airtel (5G/4G), 3.71 Mbps for BSNL (3G), 16.28 Mbps for RJIL (5G/4G) and 11.05 Mbps for VIL (5G/4G/2G). Detail of Upload throughput has been provided in the map Annexed

**Locations of Dropped Calls and Call Silence instances can be seen by clicking red dot on the map Annexed.**

7. Details of drive test route and area covered during the IDT is as under:-

City - Balasore, Januganj, Mallikashpur, Remuna, Fuladi, Soro, Markona, Anantapur, Gopalpur, Jamujhadi, Gandibed, Santaragadia, Seragarh, Nilagiri, Amarda Road, Darada, Jamsuli, Chalanti, Nampo, Jaleswar, Baharda and Baliapal etc. Balasore city.

Hotspot - The hot spot locations, capturing stationary user experience, are 1. Balasore Bus Stand 2. Chandaneswar Temple 3. Government District Hospital-Balasore 4. Jaleswar Railway Station 5. K K S Women College 6. Main Market Balasore 7. Max Mall

8. The findings of this IDT report have been shared with respective TSPs for taking further necessary action at their end. Detailed reports of IDT are made available on the TRAI website at [www.trai.gov.in](http://www.trai.gov.in). For any clarification or additional information, an email can be sent to [adv.hydreabad@traai.gov.in](mailto:adv.hydreabad@traai.gov.in) or Regional Office of TRAI can be contacted on telephone no. 040-23000761.

  
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Advisor, RO Hyderabad

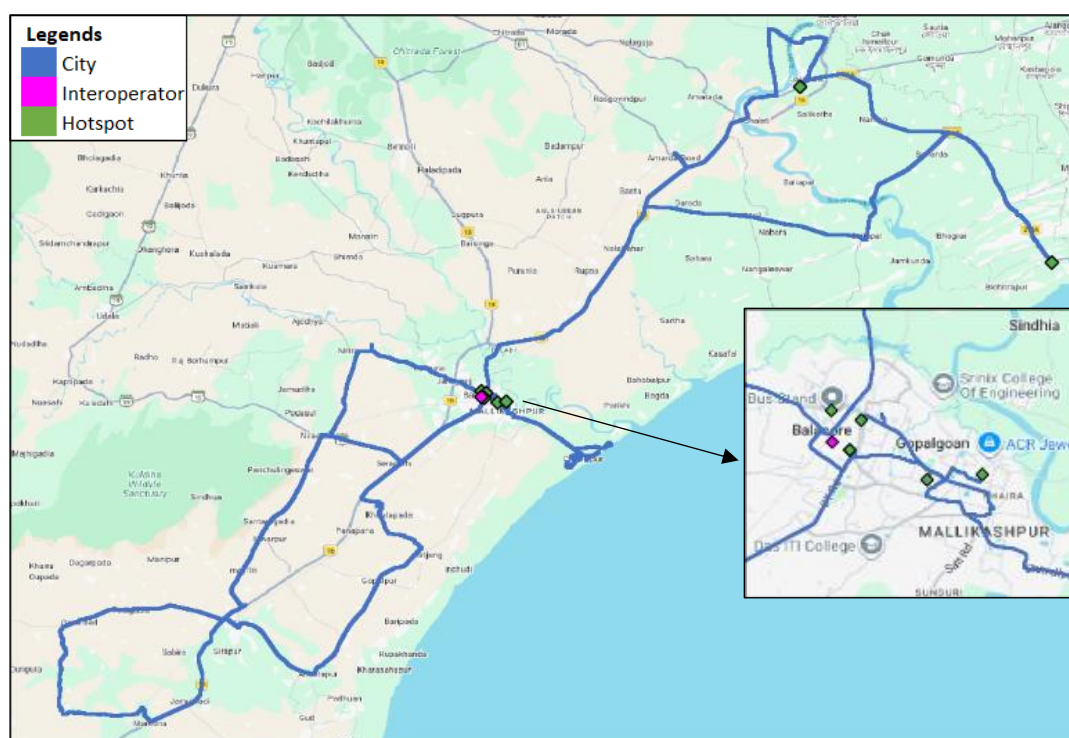
## Annexure

### Additional actionable points or graphical representation of actionable points or deficiencies observed in drive test

**IDT Locations:** City- Balasore, Januganj, Mallikashpur, Remuna, Fuladi, Soro, Markona, Anantapur, Gopalpur, Jamujhadi, Gandibed, Santaragadia, Seragarh, Nilagiri, Amarda Road, Darada, Jamsuli, Chalanti, Nampo, Jaleswar, Baharda and Baliapal etc.

**IDT Summary** - City drive – 345 Kms, Hotspot locations - 7, Kms in Balasore city during 18th August 2026 to 20th August 2026 in **Odisha LSA**.

### Drive Test Route Map:

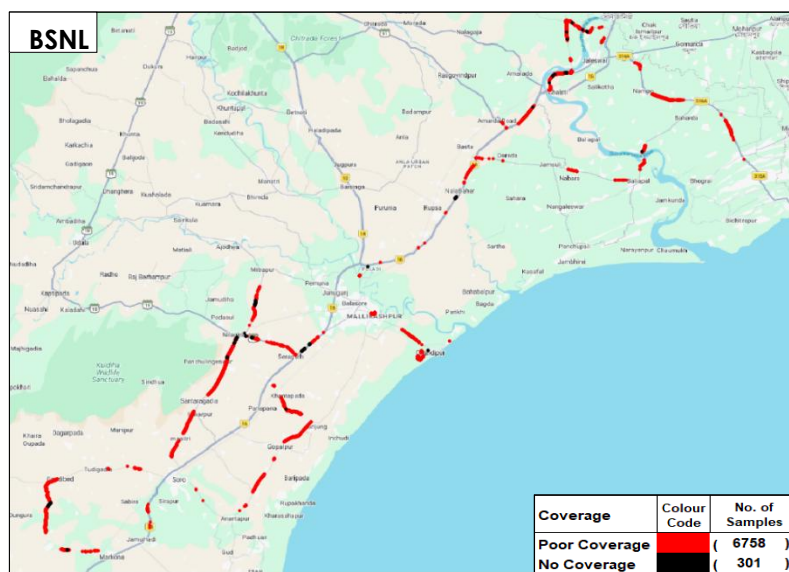


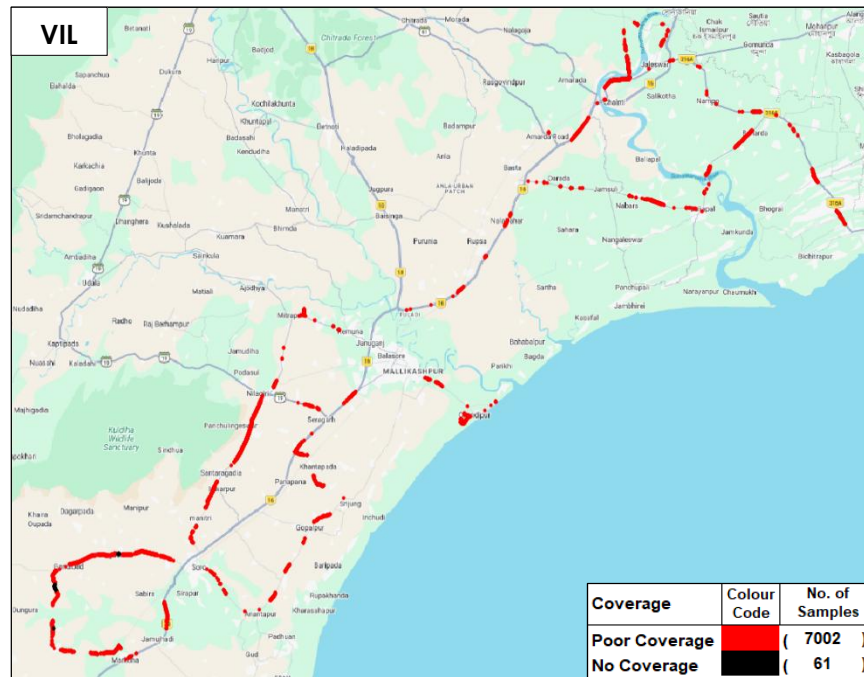
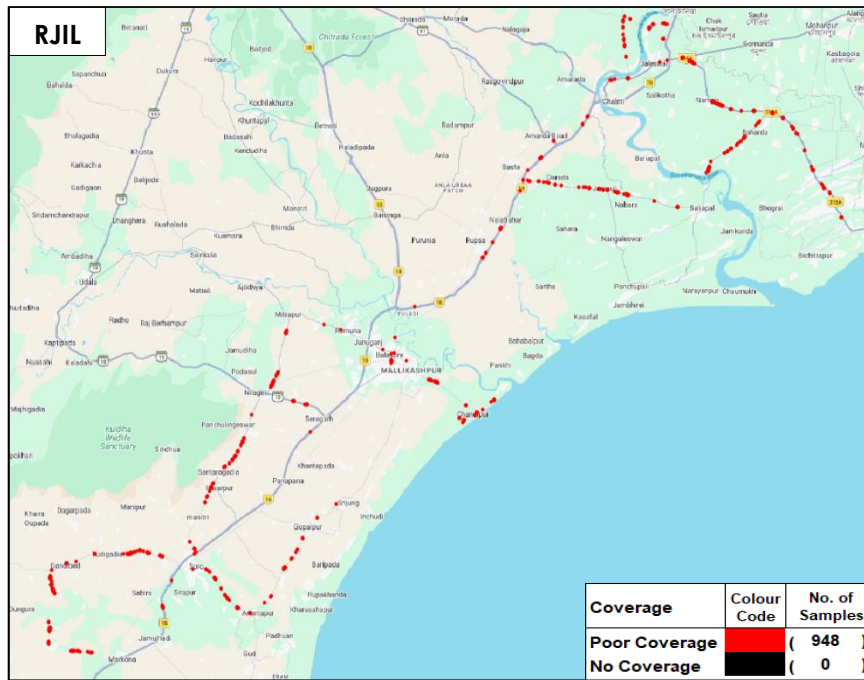
a. Coverage Gap – The coverage distribution found less than the minimum specified signal strength for the drive test route in auto-selection mode (5G/4G/3G/2G) during voice testing, is as below:

| Parameter                                              | AIRTEL | BSNL  | RJIL  | VIL   |
|--------------------------------------------------------|--------|-------|-------|-------|
| Total Number of Samples captured on Drive test route   | 43646  | 41512 | 42851 | 42776 |
| Number of Samples having poor signal strength          | 1029   | 6758  | 948   | 7002  |
| Number of Samples having limited service (No Coverage) | 0      | 301   | 0     | 61    |

**Note:** Signal strength has been considered poor if it falls below  $-110$  dBm for 5G & 4G,  $-90$  dBm for 3G, and  $-85$  dBm for 2G.

Coverage Gap observed: Poor coverage & no coverage locations in auto-selection mode (5G/4G/3G/2G) voice-Airtel, BSNL, JIO and VI

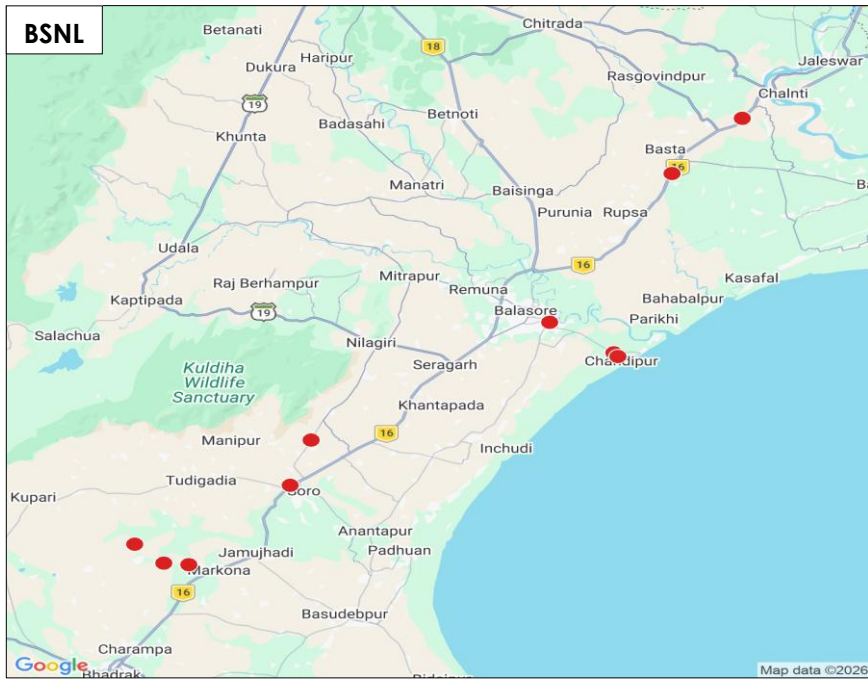
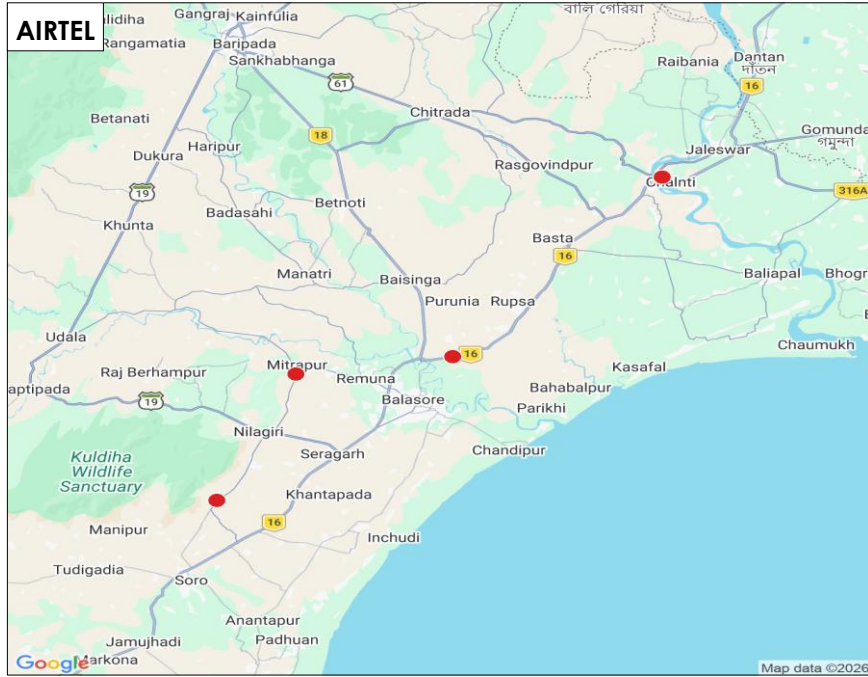


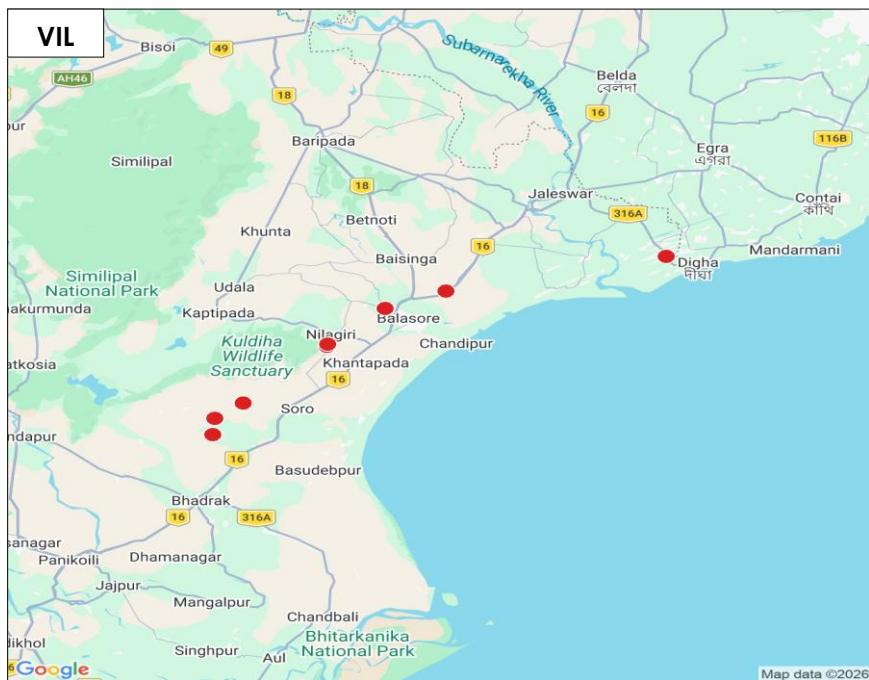


**Note: Plot is based on Dynamic Drive Test results only.**

b. Dropped Calls - The TSP-wise details of dropped calls in auto selection mode (5G/4G/3G/2G) are as below.

| Parameter                              | AIRTEL | BSNL | RJIL | VIL |
|----------------------------------------|--------|------|------|-----|
| Number of successful Calls Established | 393    | 356  | 387  | 390 |
| Number of dropped Calls                | 4      | 11   | 3    | 8   |

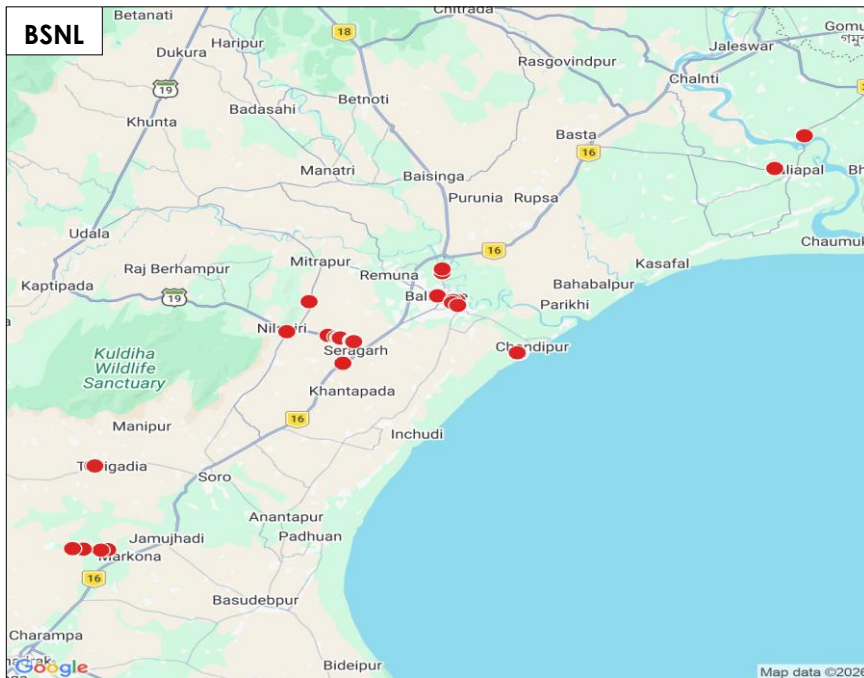
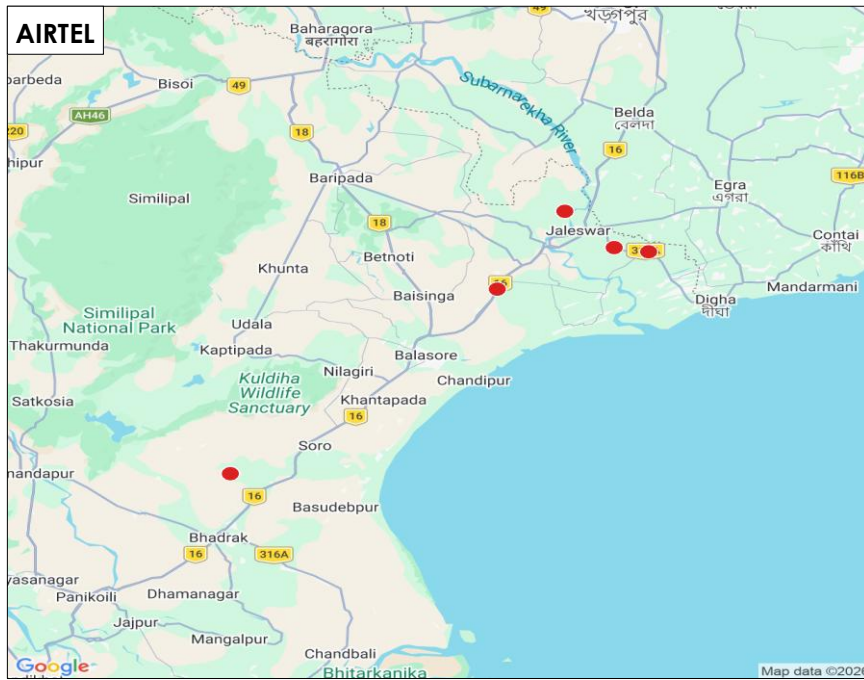


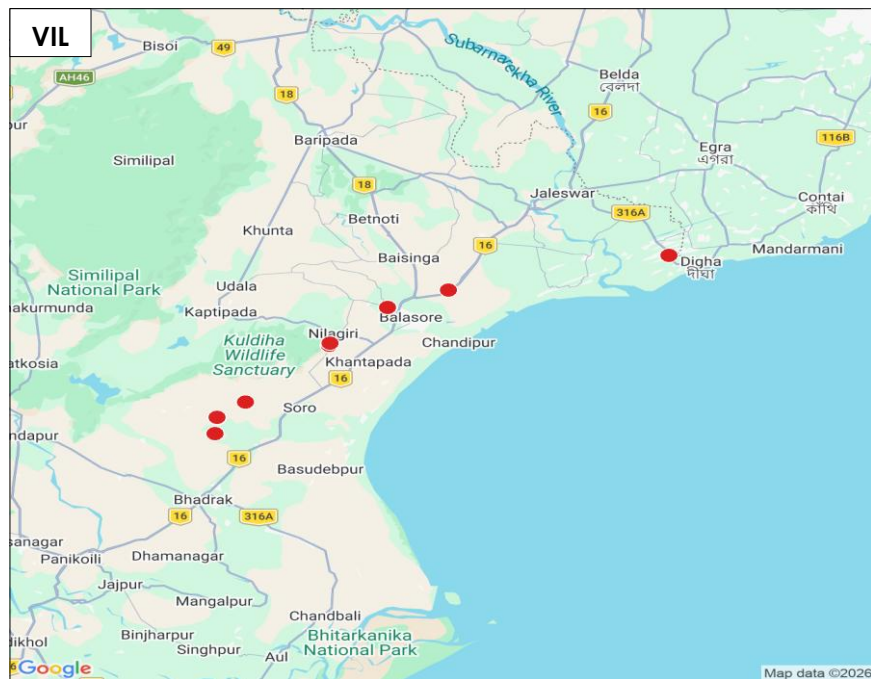
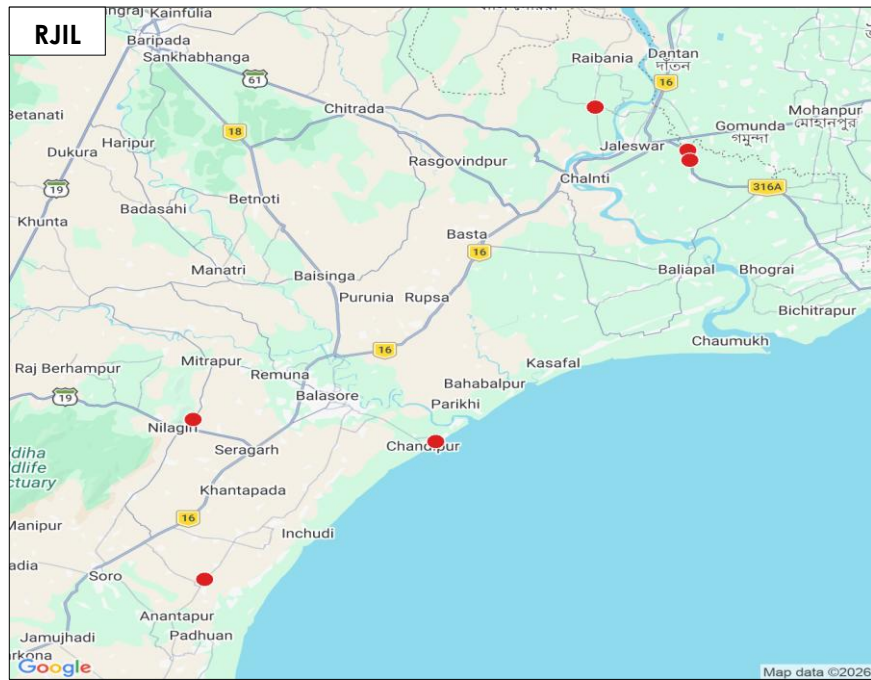


**Note: Dropped calls locations are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map.**

- c. **Call Silence Instance** - The TSP-wise details of Call silence instance in Auto-selection mode (5G/4G) are as below.

| Parameter                                          | AIRTEL | BSNL | RJIL | VIL |
|----------------------------------------------------|--------|------|------|-----|
| Call Established (within service provider network) | 375    | 356  | 372  | 376 |
| Number of silences calls for >3 Sec                | 5      | 21   | 6    | 8   |
| Total number of silence instances for >3 Sec       | 5      | 31   | 6    | 9   |



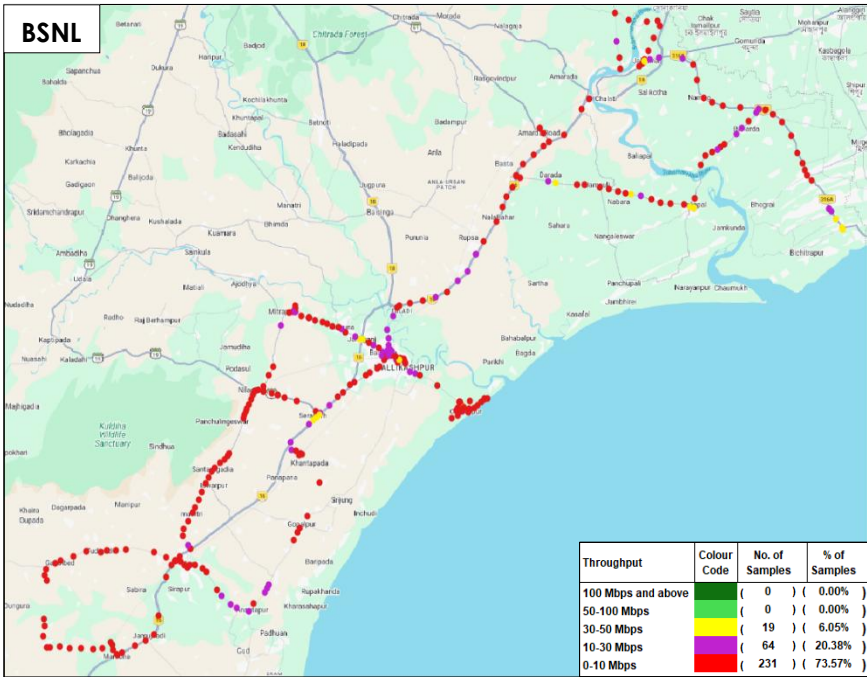
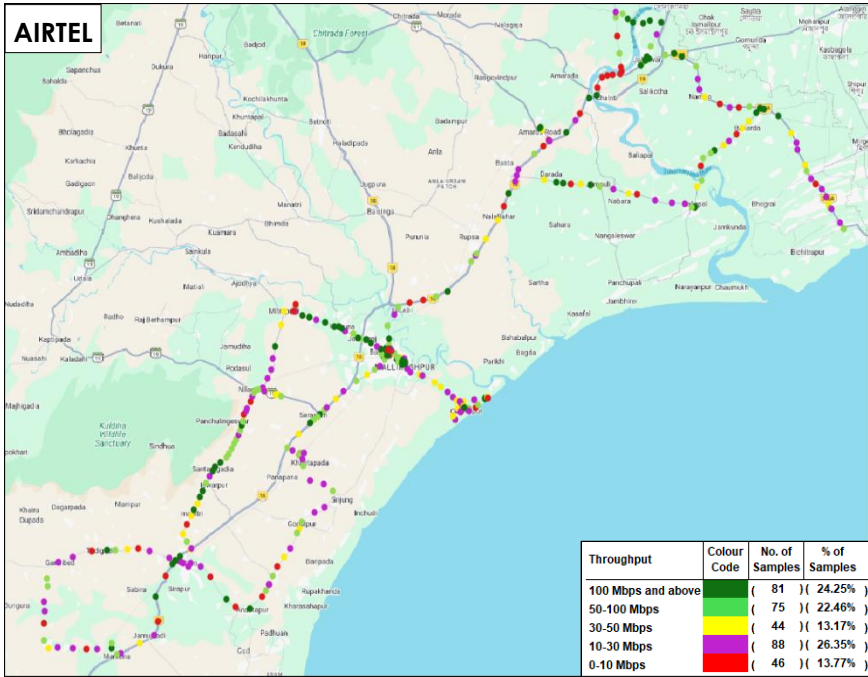


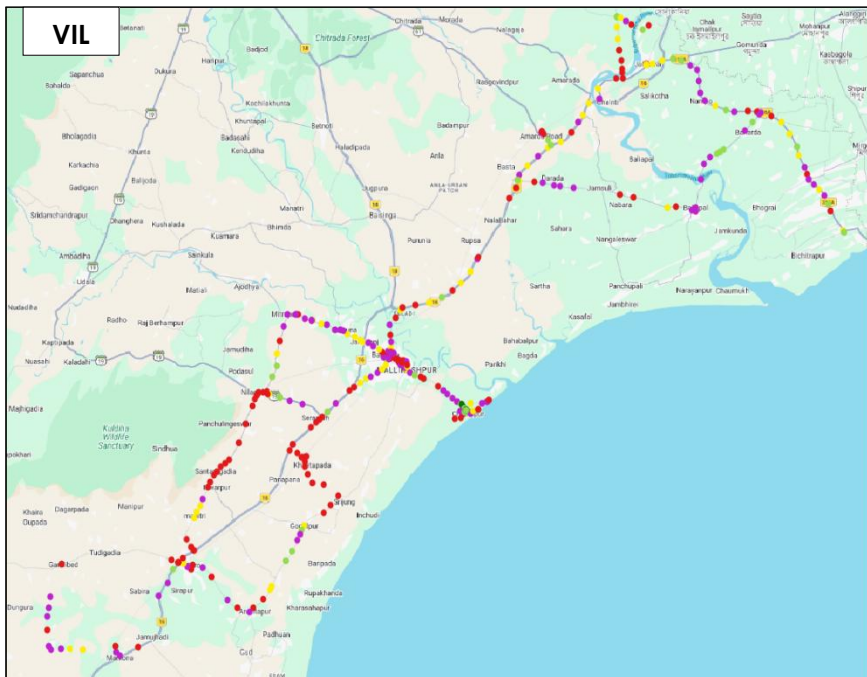
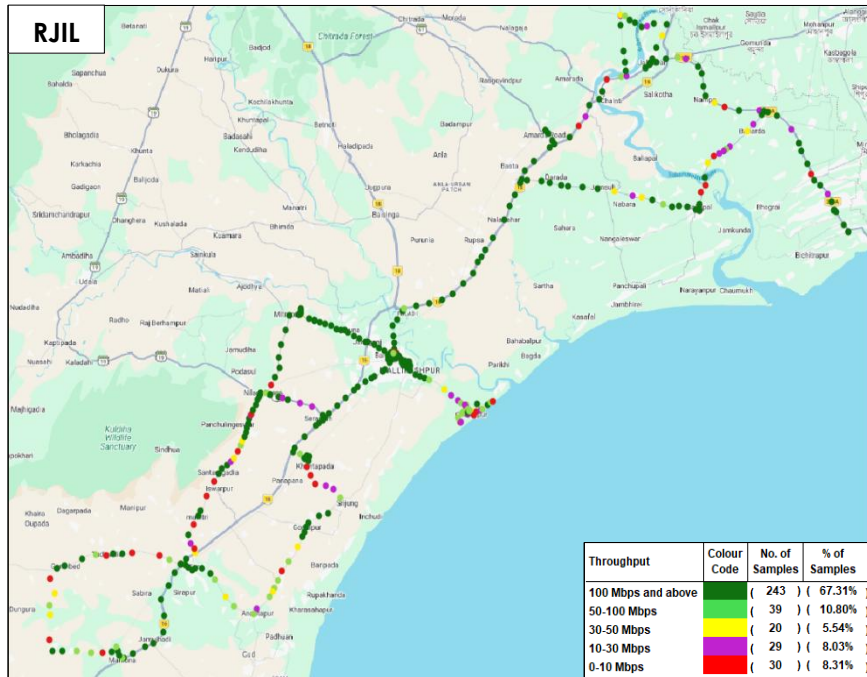
**Note:** Call silence instances are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map.

**d) Data Download and Upload throughput: The TSP-wise details of Average Download (DL) and Upload (UL) throughput against declared typical DL/UL Throughput for month, in Auto-selection mode (5G/4G/3G/2G) are as below:**

**(i) Download Throughput**

| Parameter                                              | Measure d in | AIRTEL<br>(upto 5G) | BSNL<br>(upto 4G) | RJIL<br>(upto 5G) | VIL<br>(upto 4G) |
|--------------------------------------------------------|--------------|---------------------|-------------------|-------------------|------------------|
| <b>Typical Download Throughput declared by TSP</b>     | (Mbits/s)    | 23.00               | 6.34              | 15.00             | 15.00            |
| <b>Average Download Throughput measured during IDT</b> | (Mbits/s)    | 67.10               | 8.18              | 239.24            | 24.65            |

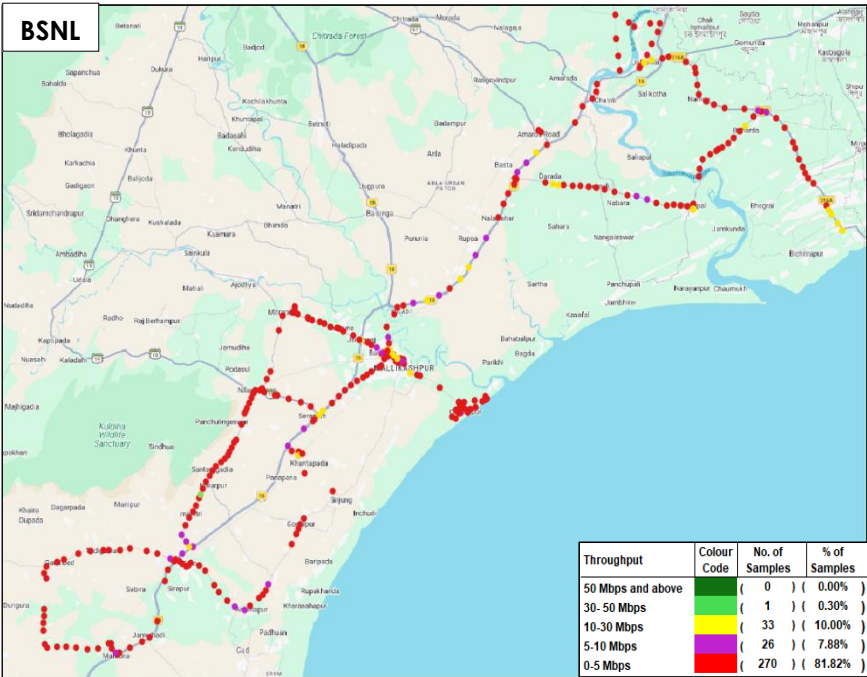
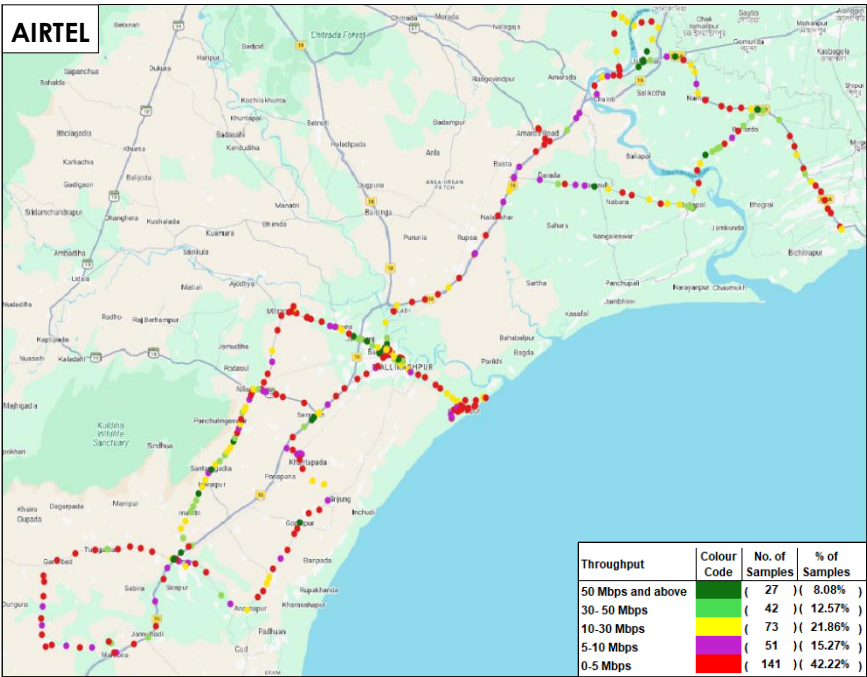


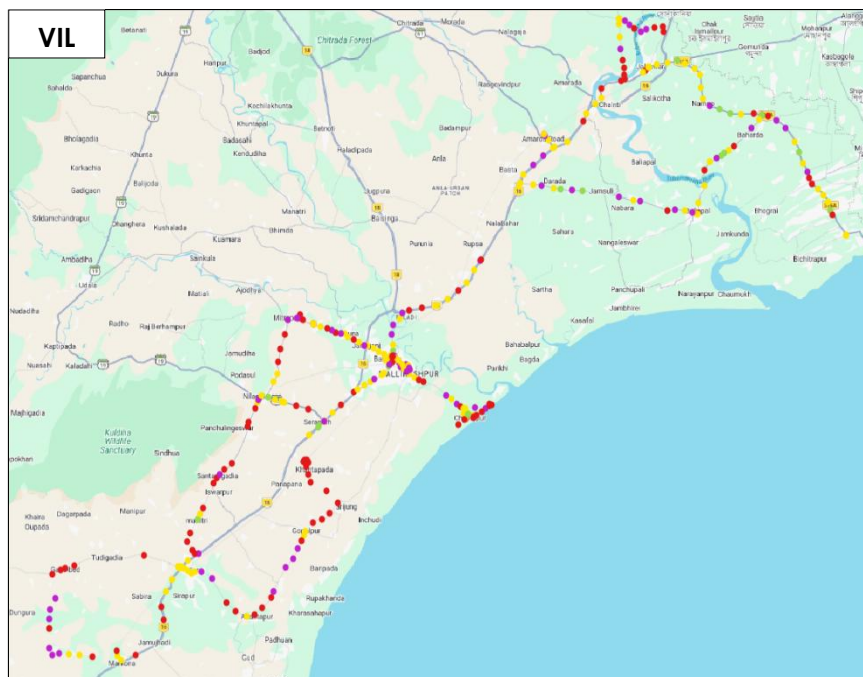
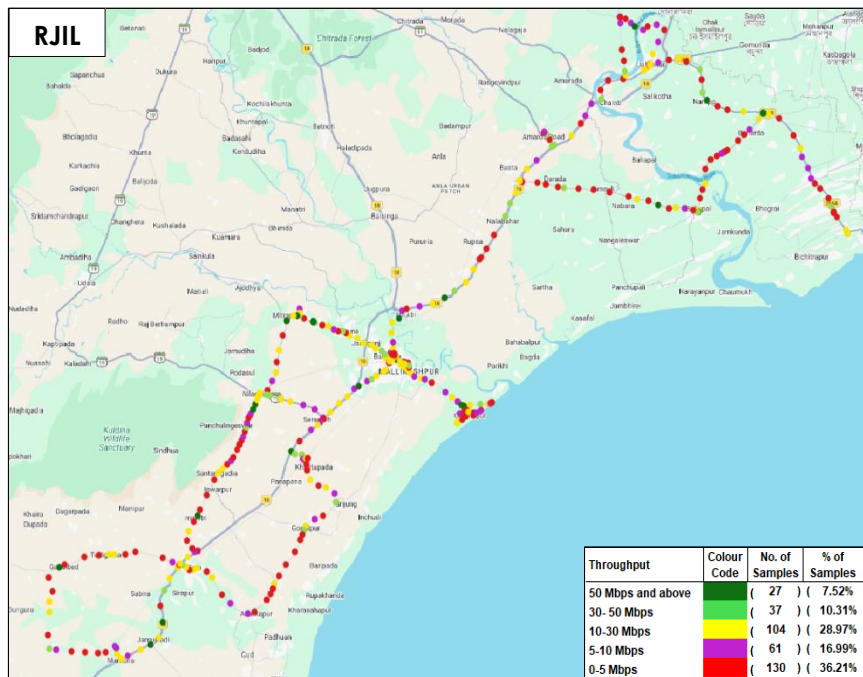


**Note: Plot is based on Dynamic Drive Test results only**

ii. Data Upload Throughput:

| Parameter                                           | Measured in | AIRTEL<br>L<br>(upto<br>5G) | BSNL<br>(upto<br>4G) | RJIL<br>(upto<br>5G) | VIL<br>(upto<br>4G) |
|-----------------------------------------------------|-------------|-----------------------------|----------------------|----------------------|---------------------|
| Typical Upload<br>Throughput declared by<br>TSP     | (Mbits/s)   | 10.00                       | 5.53                 | 7.00                 | 8.00                |
| Average Upload<br>Throughput measured<br>during IDT | (Mbits/s)   | 16.61                       | 3.71                 | 16.28                | 11.05               |





**Note: Plot is based on Dynamic Drive Test results only**