

**For Immediate Release**

**TRAI Assesses Network Quality Across Itanagar and Naharlagun City, and their adjoining areas in the State of Arunachal Pradesh, Dimapur and Kohima districts and their adjoining areas in the State of Nagaland and Itanagar to Bumla Pass (Tawang) Highway (NH-13) in the State of Arunachal Pradesh, all under North East Licensed Service Area**

The Telecom Regulatory Authority of India (TRAI) released its Independent Drive Test (IDT) findings for the North East Licensed Service Area (LSA), covering extensive city routes of Itanagar, Naharlagun of Arunachal Pradesh and Dimapur, Kohima of Nagaland and **highway route** of Itanagar to Bumla Pass (Tawang) along NH-13 in the month of June 2025. The drive tests, conducted under the supervision of the TRAI Regional Office, Kolkata, were designed to capture real-world mobile network performance across diverse usage environments- Urban Zones, Institutional Hotspots, rural residential areas etc.

Between **2<sup>nd</sup> June 2025 to 23<sup>rd</sup> June 2025**, TRAI teams conducted detailed tests across Itanagar, Naharlagun, Itanagar to Bumla Pass (Tawang) along NH-13 in Arunachal Pradesh and Dimapur, Kohima in Nagaland covering 270.3 Km of city drive test, 526.6 Km of highway test, 28 Hotspot locations and 1 Km of walk test. Technologies evaluated included 2G, 3G, 4G, and 5G, reflecting the service experience of users across multiple handset capabilities. The findings of the IDT have already been intimated to all the TSPs concerned.

**Key Parameters Assessed:**

- a) **Voice Services:** Call Setup Success Rate (CSSR), Drop Call Rate (DCR), Call Setup Time, Call Silence Rate, Speech Quality (MOS), Coverage.
- b) **Data Services:** Download/Upload Throughput, Latency, Jitter, Packet Drop Rate, and Video Streaming Delay.

The overall mobile network performance in Itanagar & Naharlagun, Arunachal Pradesh and Itanagar to Bumla Pass, Tawang along NH-13 and Dimapur & Kohima, Nagaland is summarized below:

**Call Setup Success Rate-** Airtel, BSNL, RJIL and VIL have call setup success rate of 90.11%, 49.45%, 89.73% and 67.18% respectively in Auto-selection mode (5G/4G/3G/2G).

**Drop Call Rate-** Airtel, BSNL, RJIL and VIL have drop call rate of 1.23%, 6.41%, 2.17% & 3.68% respectively in Auto-selection mode (5G/4G/3G/2G).

**5G Data Services** delivered peak download speed 299.92 Mbps and upload speed touching 44.38 Mbps in hotspots.

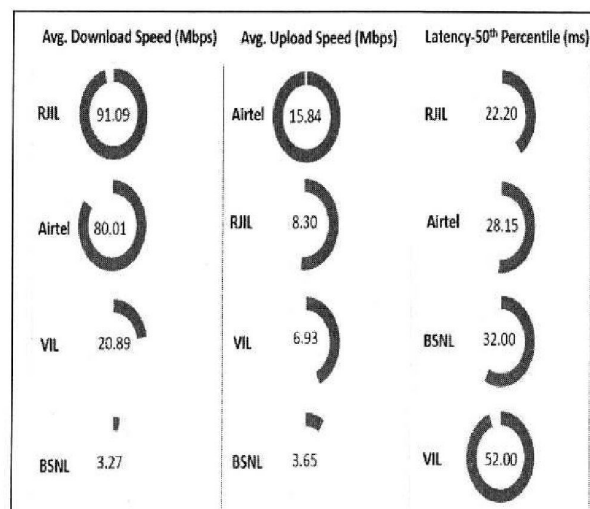
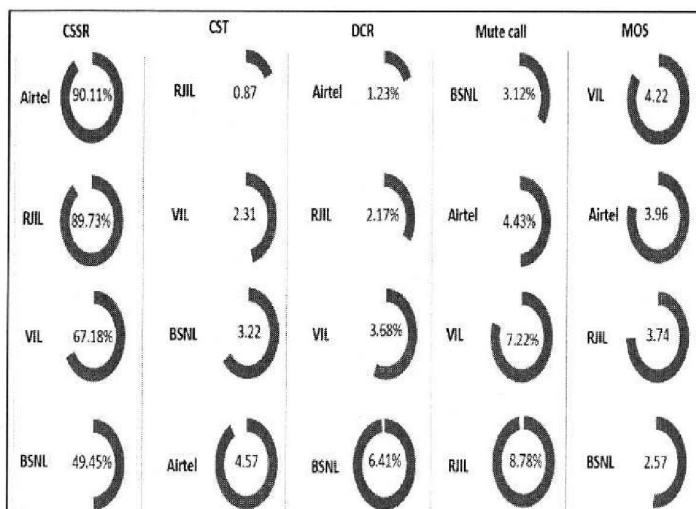
In **Itanagar** and **Naharlagun, Arunachal Pradesh** the assessment included the areas of - Hollongi Chariali, Chakma-6, Pom, Chimpu, Doni Colony, C Sector, B Sector, Sood, Papu Nalah, Lobi Dariya, Himalayan University, Tarajuli, Nirjuli Village and Doimukh etc. TRAI also evaluated real-world conditions at (i) Arunachal Pradesh State Legislative Assembly, (ii) Commissioner of Tax & Excise Office, (iii) Daily Market new, Naharlagun, (iv) Ramkrishna Mission Hospital through **static testing** and at (i) Donyi Polo Airport, Itanagar, (ii) Naharlagun (Itanagar) Rly. Station, through **walk-test**.

**Along National Highway (NH-13) from Itanagar to Bumla Pass (Tawang)** the areas including Sagalee, Rachi, Pakke Kessang, Rilloh, Jollang, Pampoli, Bana, Palizi, Buragaon, Kimi Village, Tenga Valley, Bomdila, Thembang, Dirang Village, Rama Camp, Senge, Lhou Jang, Khrimu and Twang, etc. were tested to understand quality of service during inter-city travel. TRAI also evaluated real-world conditions at (i) Jaswantgarh War Memorial, (ii) Sela Pass, (iii) Unit Hospital, (iv) Government ITI College, (v) Bomdila Market, (vi) Ball of Fire Museum , (vii) Palizi Catholic Church, (viii) Government Residential School, (ix) Post Office, Seppa , (x) Government Middle School, (xi) Office of Additional Deputy Commissioner, Sagalee, (xii) Laptap Baptist Church, (xiii) Government Secondary School, Toru , (xiv) Hoj- yajee market, (xv) Sopo Market, (xvi) Government College , Doimukh

In **Dimapur** and **Kohima, Nagaland** the assessment included the areas of - the areas of - Khushiabil, Nagarjan, Thahekhu, Padampukhari, Nihoto, Medziphema, Mengujuma, Kiruphe, Sechu (Zubza), Meriema, Kohima Vill, Rusoma, Chiedema and Phesama etc. TRAI also evaluated real-world conditions at (i) Dimapur Railway Station, (ii) Dimapur Airport, (iii) Nouna Resort, (iv) Nit Nagaland, (v) Nagaland Medical College, (vi) Kohima New High Court, (vii) Nagaland University, (viii) Kohima Raj Bhawan to reflect stationary user experience

## Performance against key QoS parameters:

**CSSR:** Call Setup Success Rate (in %), **CST:** Call Setup Time (in seconds), **DCR:** Drop Call Rate (in %) & **MOS:** Mean Opinion Score



### Summary-Voice services

**Call Setup Success Rate:** Airtel, BSNL, RJIL and VIL have call setup success rate of 90.11%, 49.45%, 89.73% and 67.18% respectively in Auto-selection mode (5G/4G/3G/2G).

**Call Setup Time:** Airtel, BSNL, RJIL and VIL have call setup time of 4.57, 3.22, 0.87 & 2.31 seconds respectively in Auto-selection mode (5G/4G/3G/2G).

**Drop Call Rate:** Airtel, BSNL, RJIL and VIL have drop call rate of 1.23%, 6.41%, 2.17% & 3.68% respectively in Auto-selection mode (5G/4G/3G/2G).

**Call Silence/Mute Rate:** Airtel, BSNL, RJIL and VIL have silence call rate of 4.43, 3.12%, 8.78% and 7.22% respectively in packet switched network (5G/4G).

**Mean Opinion Score (MOS):** Airtel, BSNL, RJIL and VIL have Average MOS of 3.96, 2.57, 3.74 & 4.22 respectively.

### Summary-Data services

**Data Download performance (Overall):** Average download speed of Airtel (5G/4G/2G) is 80.01 Mbps, BSNL (4G/3G/2G) is 3.27 Mbps, RJIL (5G/4G) is 91.09 Mbps and VIL (4G/2G) is 20.89 Mbps.

**Data Upload performance (Overall):** Average upload speed of Airtel (5G/4G/2G) is 15.84 Mbps, BSNL (4G/3G/2G) is 3.65 Mbps, RJIL (5G/4G) is 8.30 Mbps and VIL (4G/2G) is 6.93 Mbps.

### Data performance - Hotspots (in Mbps):

Airtel- 4G D/L: 22.44	4G U/L: 8.50
5G D/L: 155.38	5G U/L: 44.38
BSNL- 4G D/L: 7.54	4G U/L: 9.01
RJIL- 4G D/L: 38.55	4G U/L: 7.45
5G D/L: 299.92	5G U/L: 25.16
VIL- 4G D/L: 16.59	4G U/L: 8.02

**Note- "D/L" Download speed, "U/L" Upload speed**

The tests were conducted using TRAI suggested equipment and standardised protocols in real-time environments. The detailed report is available at TRAI website [www.trai.gov.in](http://www.trai.gov.in). For any clarification/information, Shri B. Praveen Kumar, Advisor (Regional Office, Kolkata) TRAI may be contacted on email: [adv.kolkata@trai.gov.in](mailto:adv.kolkata@trai.gov.in) or at Tel. No. +91-33-22361401.

  
 (B. Praveen Kumar)  
 Advisor, TRAI RO Kolkata