

For Immediate Release

TRAI Assesses Network Quality Across Shillong city and East Khasi Hills district in the State of Meghalaya under North - East Licensed Service Area

The Telecom Regulatory Authority of India (TRAI) released its Independent Drive Test (IDT) findings for the North-East (LSA), covering extensive city routes of Shillong city and East Khasi Hills district of the state of Meghalaya in the month of September 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, tourist spots etc.

Between **01st September 2025 and 5th September 2025**, TRAI teams conducted detailed tests across Shillong city and East Khasi Hills district in the state of Meghalaya covering 269.4 Km of city drive test, 9 Hotspot locations and 1.6 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 Shillong city and East Khasi Hills district areas is summarized below:

Call Setup Success Rate- Airtel, BSNL, RJIL and VIL have call setup success rate of 96.34%, 73.63%, 99.12% and 80.20% respectively in Auto-selection mode (5G/4G/3G/2G).

Drop Call Rate- Airtel, BSNL, RJIL and VIL have drop call rate of 2.46%, 12.19%, 0.89% & 3.49% respectively in Auto-selection mode (5G/4G/3G/2G).

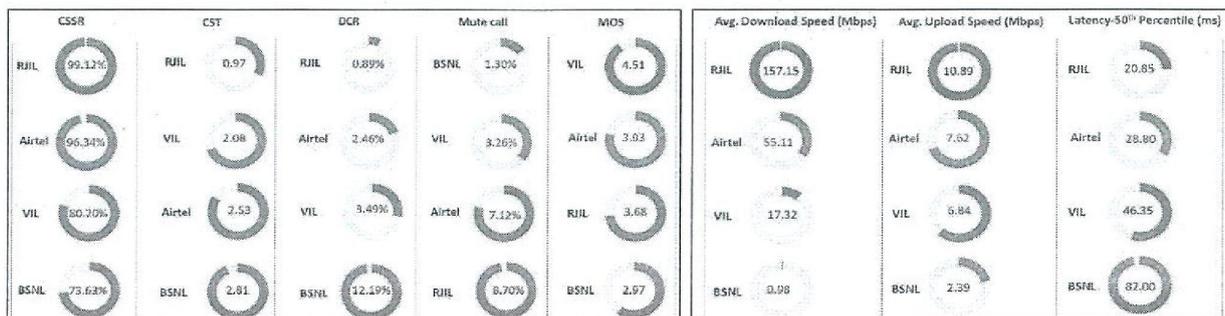
5G Data Services delivered maximum average download speed of 157.15 Mbps and maximum average upload speed of 10.89 Mbps in city drive.

In **Shillong city and East Khasi Hills district**, the assessment included the areas of Jorabat, Byrnihat, Umrai, Umtrew, Bhoriybong, Umiam, kyrdemkhla, Mawkdok, Cherrapunji and Mawsynram etc. TRAI also evaluated real-world conditions at (i) Administrative Block Meghalaya Legislative Assembly, (ii) Elephant Falls Shillong, (iii) IIM Shillong New Building Admin Block, (iv) ISBT Shillong Mawlai-Mawiong, (v) Mawphlang Sacred Forest, (vi) Mawsmi Cave Cherrapunji, (vii) Police Bazaar, (viii) Seven Sisters Waterfall Cherrapunji, (ix) Umiam Lake through **static testing** and at (i) Civil Hospital

Lachumiere, Shillong, (ii) Meghalaya Legislative Assembly and (iii) Ward's Lake, through walk-test.

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 96.34%, 73.63%, 99.12% and 80.20% respectively in Auto-selection mode (5G/4G/3G/2G).

Call Setup Time: Airtel, BSNL, RJIL and VIL have call setup time of 2.53, 2.81, 0.97 & 2.08 seconds respectively in Auto-selection mode (5G/4G/3G/2G).

Drop Call Rate: Airtel, BSNL, RJIL and VIL have drop call rate of 2.46%, 12.19%, 0.89% & 3.49% respectively in Auto-selection mode (5G/4G/3G/2G).

Call Silence/Mute Rate: Airtel, BSNL, RJIL and VIL have silence call rate of 7.12%, 1.30%, 8.70% and 3.26% respectively in packet switched network (5G/4G).

Mean Opinion Score (MOS): Airtel, BSNL, RJIL and VIL have Average MOS of 3.93, 2.97, 3.68 & 4.51 respectively.

Summary-Data services

Data Download performance (Overall): Average download speed of Airtel (5G/4G/2G) is 55.11 Mbps, BSNL (4G/3G/2G) is 0.98 Mbps, RJIL (5G/4G) is 157.15 Mbps and VIL (4G/2G) is 17.32 Mbps.

Data Upload performance (Overall): Average upload speed of Airtel (5G/4G/2G) is 7.62 Mbps, BSNL (4G/3G/2G) is 2.39 Mbps, RJIL (5G/4G) is 10.89 Mbps and VIL (4G/2G) is 6.84 Mbps.

Latency (Overall): Airtel, BSNL, RJIL & VIL 50th percentile latency is 28.80 ms, 82.00 ms, 20.85 ms & 46.35 ms respectively.

Data performance - Hotspots (in Mbps):

Airtel- 4G D/L: 23.81	4G U/L: 6.21
5G D/L: 136.70	5G U/L: 14.56
BSNL- 4G D/L: 0.86	4G U/L: 2.51
RJIL- 4G D/L: 18.38	4G U/L: 2.23
5G D/L: 204.70	5G U/L: 14.53
VIL- 4G D/L: 20.48	4G U/L: 7.03

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. For any clarification/information, Shri Kaushik Mukherjee, Advisor (Regional Office, Kolkata) TRAI may be contacted on email: adv.kolkata@trai.gov.in or at Tel. No. +91-33-22361401.

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