Information Note to the Press (Press Release No 77/2025)

TELECOM REGULATORY AUTHORITY OF INDIA www.trai.gov.in

New Delhi, 19th August 2025

For Immediate Release

TRAI Assesses Network Quality Across Mangaluru City and Surrounding Area

The Telecom Regulatory Authority of India (TRAI) released its Independent Drive Test (IDT) findings for the Mangaluru, Karnataka Licensed Service Area (LSA), covering extensive City/Highway routes during the month of July 2025. The drive tests, conducted under the supervision of the TRAI Regional Office, Bengaluru, were designed to capture real-world mobile network performance across diverse usage environments — Urban Zones, Institutional Hotspots, Public Transport Hubs, and high-speed Corridors.

Between 07th July 2025 to 11th July 2025, TRAI teams conducted detailed tests across 313.2 kms of City Test, 3.4 Kms of coastal Test, 10.0 kms of Walk Test and 11 Hotspot locations. Technologies evaluated included 2G, 3G, 4G, and 5G, reflecting the service experience of users across multiple handset capabilities. The findings of IDT have been intimated to all the TSPs concerned for further necessary action.

Key Parameters Assessed:

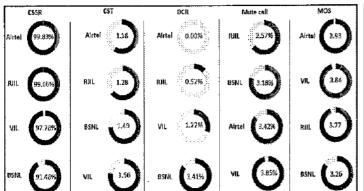
- a) **Voice Services**: Call Setup Success Rate (CSSR), Drop Call Rate (DCR), Call Setup Time, Call Silence Rate, Speech Quality (MOS), Coverage.
- b) **Data Services**: Download/Upload Throughput, Latency, Jitter, Packet Drop Rate, and Video Streaming Delay.

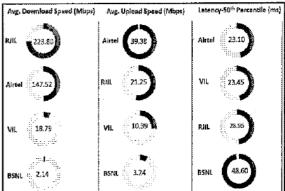
Call Setup Success Rate - Airtel, BSNL, RJIL and VIL have 99.83%, 91.48%, 99.66% and 97.78% call setup success rate respectively in Auto-selection mode (5G/4G/3G/2G).

Drop Call Rate - Airtel, BSNL, RJIL and VIL have drop call rate of 0.00%, 3.41%, 0.52% and 1.22% respectively in Auto-selection mode (5G/4G/3G/2G).

Summary of Performance against key QoS parameters

CSSR: Call Setup Success Rate i.e. (in %), CST: Call Setup Time (in seconds), DCR: Drop Call Rate (in %) & MOS: Mean Opinion Score representing typical voice quality.





Summary-Voice services

Call Setup Success Rate: Airtel, BSNL, RJIL and VIL have 99.83%, 91.48%, 99.66% and 97.78% call setup success rate respectively in Auto-selection mode (5G/4G/3G/2G).

Call Setup Time: Airtel, BSNL, RJIL & VIL have call setup time of 1.18, 1.49, 1.28 and 1.56 seconds respectively in Autoselection mode (5G/4G/3G/2G).

Drop Call Rate: Airtel, BSNL, RJIL and VIL have drop call rate of 0.00%, 3.41%, 0.52% and 1.22% respectively in Autoselection mode (5G/4G/3G/2G).

Call Silence/Mute Rate: Airtel, BSNL, RJIL and VIL have silence call rate of 3.42%, 3.18%, 2.57% and 3.85% respectively in packet switched network (4G/5G).

Mean Opinion Score (MOS): Airtel, BSNL, RJIL and VIL have average MOS of 3.93, 3.26, 3.77 and 3.84 respectively.

Summary-Data services

Data Download performance (Overall): Average download speed of Airtel (5G/4G/2G) is 147.52 Mbps, BSNL (4G/3G/2G) is 2.14 Mbps, RJIL (5G/4G) is 223.80 Mbps and VIL (4G/2G) is 18.79 Mbps.

Data Upload performance (Overall): Average upload speed of Airtel (5G/4G/2G) is 39.38 Mbps, BSNL (4G/3G/2G) is 3.24 Mbps, RJIL (5G/4G) is 21.25 Mbps and VIL (4G/2G) is 10.39 Mbps.

Data performance - Hotspots (in Mbps):

VIL- 4G D/L: 12.81

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

4G U/L: 11.35

In Mangaluru city, the assessment included high-density neighbourhoods like Kulai, Surathkal, Katipalla, Jokatte, Kavoor, Bajpe Proper, Kaikamba, Yamanjoor, Thumbe, Kankanady, Ullal, Kotekar, Mudipu, and Deralakatte etc.

TRAI also evaluated real-world conditions at Bengre Beach, District & Session Court, Indiana Hospital & Heart Institute (IHHI), Mahaltobhaara Sri Mangaladevi Temple, Mangaluru Bus Stand, Mangaluru International Airport, Mangaluru University, Panambur Beach, S C S Hospital, St. Aloysius University, and Sub Registrar Office, Mangaluru City to reflect stationary user experience.

The walk tests, conducted on 08th and 10th July 2025 in Mangaluru City, focused on Central Market, Kadri Park, Mangaluru Railway Station, Praja Soudha, Padil, and Thannirbavi Beach, capturing mobile network behaviour in crowded pedestrian environments.

The coastal test was conducted from Sultan Batheri to Thannirbavi and BMS Ferry Service to Bengre Ferry Point to understand quality of service along the route.

The tests were conducted using TRAI-calibrated 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 Brajendra Kumar, Advisor (Regional Office, Bengaluru) TRAI may be contacted on email: adv.bengaluru@trai.gov.in or at Tel. No. +91-80-22865004.

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