TELECOM REGULATORY AUTHORITY OF INDIA
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For Immediate Release

TRAI Assesses Network Quality Across Goa (South) and Surrounding Area

The Telecom Regulatory Authority of India (TRAI) released its Independent Drive Test (IDT) findings for the Goa (South), Maharashtra 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 22nd July 2025 to 25th July 2025, TRAI teams conducted detailed tests across 261.8 kms of City Test, 3.9 Kms of coastal Test, 8.9 kms of Walk Test and 09 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.
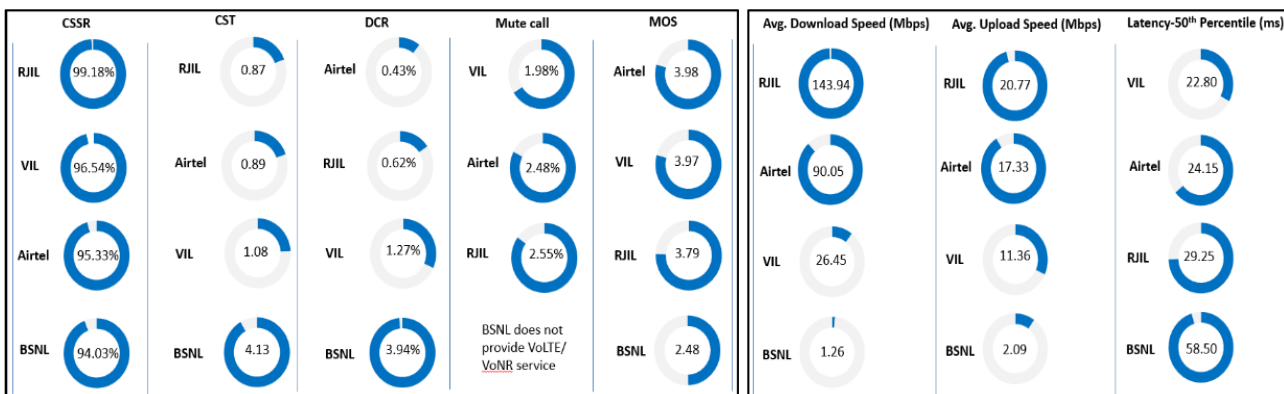
Key Parameters Assessed:

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 95.33%, 94.03%, 99.18% and 96.54% 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 0.43%, 3.94%, 0.62% and 1.27% 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.

CSSR		CST		DCR		Mute call		MOS			Avg. Download Speed (Mbps)		Avg. Upload Speed (Mbps)		Latency-50th Percentile (ms)	
RJIL	99.18%	RJIL	0.87	Airtel	0.43%	VIL	1.98%	Airtel	3.98		RJIL	143.94	RJIL	20.77	VIL	22.80
VIL	96.54%	Airtel	0.89	RJIL	0.62%	Airtel	2.48%	VIL	3.97		Airtel	90.05	Airtel	17.33	Airtel	24.15
Airtel	95.33%	VIL	1.08	VIL	1.27%	RJIL	2.55%	RJIL	3.79		VIL	26.45	VIL	11.36	RJIL	29.25
BSNL	94.03%	BSNL	4.13	BSNL	3.94%	BSNL does not provide VoLTE/ VoNR service		BSNL	2.48		BSNL	1.26	BSNL	2.09	BSNL	58.50

Summary-Voice services

Call Setup Success Rate: Airtel, BSNL, RJIL and VIL have 95.33%, 94.03%, 99.18% and 96.54% 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 0.89, 4.13, 0.87 and 1.08 seconds respectively in Auto-selection mode (5G/4G/3G/2G).

Drop Call Rate: Airtel, BSNL, RJIL and VIL have drop call rate 0.43%, 3.94%, 0.62% and 1.27% respectively in Auto-selection mode (5G/4G/3G/2G).

Call Silence/Mute Rate: Airtel, RJIL and VIL have silence call rate 2.48%, 2.55% and 1.98% respectively in packet switched network (4G/5G).

Mean Opinion Score (MOS): Airtel, BSNL, RJIL and VIL have average MOS of 3.98, 2.48, 3.79 and 3.97 respectively.

Summary-Data services

Data Download performance (Overall): Average download speed of Airtel (5G/4G/2G) is 90.05 Mbps, BSNL (4G/3G/2G) is 1.26 Mbps, RJIL (5G/4G) is 143.94 Mbps and VIL (4G/2G) is 26.45 Mbps.

Data Upload performance (Overall): Average upload speed of Airtel (5G/4G/2G) is 17.33 Mbps, BSNL (4G/3G/2G) is 2.09 Mbps, RJIL (5G/4G) is 20.77 Mbps and VIL (4G/2G) is 11.36 Mbps.

Latency (Overall): Airtel, BSNL, RJIL & VIL 50th percentile latency is 24.15 ms, 58.50 ms, 29.25 ms & 22.80 ms respectively.

Data performance - Hotspots (in Mbps):
Airtel- 4G D/L: 56.41   4G U/L: 6.80
          5G D/L: 178.70   5G U/L: 19.49
BSNL- 4G D/L: 1.15   4G U/L: 2.88
RJIL- 4G D/L: 31.14   4G U/L: 7.51
          5G D/L: 157.02   5G U/L: 18.34
VIL-   4G D/L: 37.61   4G U/L: 10.92

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

In Goa (South), the assessment included high-density neighbourhoods like Vasco Da Gama, Colva, Cuncolim, Kolsar, Bally, Quepem, Chandor, Davorlim, Madgaon, Verna, Coralim & Bambolim etc.

TRAI also evaluated real-world conditions at Big Foot Goa, Birla Mandir, Colva Beach, Dabolim Airport, Dona Paula, Madgaon Railway Station, Miramar Beach, Shri Mahalasa Narayani Devalaya, South Goa Collector Office to reflect stationary user experience.

The walk tests, conducted on 24th July 2025 focused on Goa Medical College, Panjim KTC Bus Stand, Panjim Market, and Vasco Da Gama Railway Station, capturing mobile network behaviour in crowded pedestrian environments.

The coastal test was conducted from Mandovi Bridge to Miramar Beach 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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