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For Immediate Release

TRAI Assesses Network Quality Across Mathura City

The Telecom Regulatory Authority of India (TRAI) released its Independent Drive Test (IDT) findings for the UP West Licensed Service Area (LSA), covering extensive City routes during the month of July 2025. The drive tests, conducted under the supervision of the TRAI Regional Office, Delhi, 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 17th July 2025 to 19th July 2025, TRAI teams conducted detailed tests across 214.7 km of City Drive Test, 08 Hotspot locations and Inter-operator calling at 1 location. Technologies evaluated included 2G, 3G, 4G, and 5G, reflecting the service experience of users across multiple handset capabilities. The findings of 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.

Call Setup Success Rate: Airtel, BSNL, RJIL and VIL have 100.00%, 84.21%, 99.48% and 99.74% call 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%, 3.13%, 0.00% and 0.00% respectively in Auto-selection mode (5G/4G/3G/2G).

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.

CSSR	CST	DCR	Mute call	MOS	Avg. Download Speed (Mbps)	Avg. Upload Speed (Mbps)	Latency-50 th Percentile(ms)
Airtel 100.00%	VII 0.62	Airtel 0.00%	BSNL 0.70%	VIL 4,44	RJIL 176.81	Airtel 26.54	RJIL 17.75
VIL 99.74%	RJIL 0.75	RIIL 0.00%	Airtel 1.03%	Airtel 3.95	Airtel 141.46	RJIL 25,38	Airtel 20.85
RJIL 99,48%	Airtel 1.22	VIL 0.00%	RJIL 1.38%	RJIL 3.77	VIL 38.53	VIL 12.55	BSNL 26.60
BSNL 84.21%	BSNL 3.08	BSNL 3.13%	VIL 1.71%	BSNL 2.60	# BSNL 4.76	BSNL 5.46	VIL 32.90

Summary-Voice Service

Call Setup Success Rate: Airtel, BSNL, RJIL and VIL have 100.00%, 84.21%, 99.48% and 99.74% call setup success rate respectively in Auto-selection mode (5G/4G/3G/2G).

Call Setup Time: Airtel, BSNL, RJIL and VIL have call setup time of 1.22, 3.08, 0.75 and 0.62 seconds respectively in Auto-selection mode (5G/4G/3G/2G).

Drop Call Rate: Airtel, BSNL, RJIL and VIL have drop call rate of 0.00%, 3.13%, 0.00% and 0.00% respectively in Auto-selection mode (5G/4G/3G/2G).

Call Silence/Mute Rate: Airtel, BSNL, RJIL and VIL have silence call rate 1.03%, 0.70%, 1.38% and 1.71% respectively in packet switched network (4G/5G).

Mean Opinion Score (MOS): Airtel, BSNL, RJIL and VIL have average MOS of 3.95, 2.60, 3.77 and 4.44 respectively.

Summary-Data Service

Data Download performance (Overall): Average download speed of Airtel (5G/4G/2G) is 141.46 Mbps, BSNL (4G/3G/2G) is 4.76 Mbps, RJIL (5G/4G) is 176.81 Mbps and VIL (4G/2G) is 38.53 Mbps

Data Upload performance (Overall): Average upload speed of Airtel (5G/4G/2G) is 26.54 Mbps, BSNL (4G/3G/2G) is 5.46 Mbps, RJIL (5G/4G) is 25.38 Mbps and VIL (4G/2G) is 12.55 Mbps.

Latency (Overall): Airtel, BSNL, RJIL & VIL 50th percentile latency is 20.85 ms, BSNL 26.60 ms, RJIL 17.75 ms & VIL 32.90 ms.

Data performance - Hotspots (in Mbps):

Airtel- 4G D/L: 28.71 4G U/L: 11.38

5G D/L: 154.77 5G U/L: 47.74

BSNL-4G D/L: 4.94 4G U/L: 6.61

RJIL- 4G D/L: 25.61 4G U/L: 11.16

5G D/L: 232.73 5G U/L: 39.05

VIL- 4G D/L: 30.43 4G U/L: 14.05

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

speed

The assessment in Mathura included high-density neighbourhoods such as Govardhan, Jikhangaon, Chhatikara, Vrindavan, Panigaon Khader, Diwana, Hayatpur, Mahaban Bangar, Gokul, Mathura Refinery Nagar, Maholi, Datiya, Pali Khera, and Janam Bhumi etc. TRAI also evaluated real-world conditions at Delhi Public School, District Hospital Mathura, GLA University, Mathura District Court, Mathura Railway Station, New Bus Stand Mathura, Prem Mandir, Vishram Ghat.

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 Vivek Khare, Advisor (Regional Office, Delhi) TRAI may be contacted on email: adv.ca@trai.gov.in or at Tel. No. +91-11-20907772.

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