

New Delhi, 29-12- 2025

For Immediate Release

TRAI Assesses Network Quality Across Baddi City

The Telecom Regulatory Authority of India (TRAI) released its Independent Drive Test (IDT) findings for the HP Licensed Service Area (LSA), covering extensive City routes during the month of Nov 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 11th November 2025 to 13th Nov 2025, TRAI teams conducted detailed tests across 180.0 km of City Drive Test, 6 Hotspot locations, 2.3 km of walk test and Inter Operator Calling at 01 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.

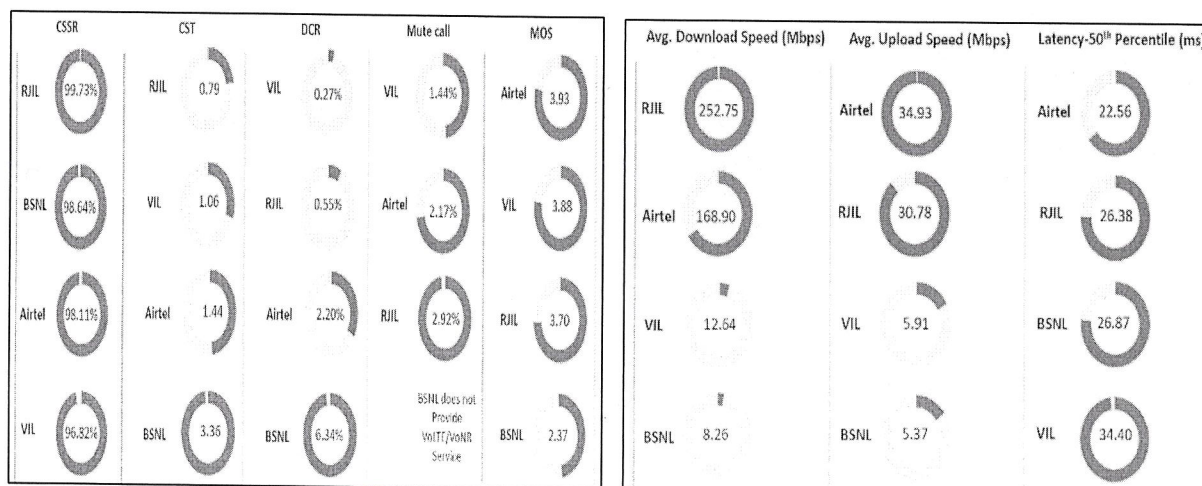
b) **Data Services:** Download/Upload Throughput, Latency, Jitter, Packet Drop Rate and Video Streaming Delay.

Call Setup Success Rate: Airtel, BSNL, RJIL and VIL have 98.11%, 98.64%, 99.73% and 96.82% 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 2.20%, 6.34%, 0.55% and 0.27% 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.



Summary-Voice services

Call Setup Success Rate: Airtel, BSNL, RJIL and VIL have 98.11%, 98.64%, 99.73% and 96.82% 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 1.44, 3.36, 0.79 and 1.06 seconds respectively in Auto-selection mode (5G/4G/3G/2G).

Drop Call Rate: Airtel, BSNL, RJIL and VIL have drop call rate of 2.20%, 6.34%, 0.55% and 0.27% respectively in Auto-selection mode (5G/4G/3G/2G).

Call Silence/Mute Rate: Airtel, RJIL and VIL have silence call rate of 2.17%, 2.92% and 1.44% respectively in packet switched network (4G/5G).

Mean Opinion Score (MOS): Airtel, BSNL, RJIL and VIL have average MOS of 3.93, 2.37, 3.70 and 3.88 respectively.

Summary-Data services

Data Download performance (Overall): Average download speed of Airtel (5G/4G/2G) is 168.90 Mbps, BSNL (4G/2G) is 8.26 Mbps, RJIL (5G/4G) is 252.75 Mbps and VIL (4G/2G) is 12.64 Mbps.

Data Upload performance (Overall): Average upload speed of Airtel (5G/4G/2G) is 34.93 Mbps, BSNL (4G/2G) is 5.37 Mbps, RJIL (5G/4G) is 30.78 Mbps and VIL (4G/2G) is 5.91 Mbps.

Latency (Overall): Airtel, BSNL, RJIL and VIL 50th percentile latency is 22.56 ms, 26.87 ms, 26.38 ms & 34.40 ms respectively.

Data performance - Hotspots (in Mbps):

Airtel-	4G D/L: 40.65	4G U/L: 12.17
	5G D/L: 183.68	5G U/L: 42.66
BSNL-	4G D/L: 15.64	4G U/L: 11.85
RJIL-	4G D/L: 69.20	4G U/L: 12.24
	5G D/L: 377.30	5G U/L: 37.08
VIL-	4G D/L: 11.67	4G U/L: 7.12

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

The assessment in Baddi included high-density neighbourhoods such as Panjhera, Sobhan Majra, Bhanglan, Bhatian, Nalagarh, Reru Jhiri Wala, Khera Nihla, Theda, Kishan Pura, Malku Majra, Baddi, Baddi Sitalpur, Gularwala, Barotiwala and Haripuram etc. TRAI also evaluated real-world conditions at Baddi Bus Stand, Baddi University, City Hospital Baddi, Durga Kali Dham Mata Mandir Baddi, Maurice Square Mall Baddi, Shri Arvindo Public School Baddi.

The walk test, conducted on 13th Nov 2025 in Baddi City, focused on, City Square Mall & Gol Market Baddi, capturing mobile network behaviour in crowded pedestrian environments.

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 Tele No. +91-11-20907772.

(Vivek Khare)
Advisor, RO Delhi, TRAI