Information Note to the Press (Press Release No 67/2025)

TELECOM REGULATORY AUTHORITY OF INDIA
Regional Office Bhopal, 30 July 2025
For Immediate release   Website: - www.trai.gov.in

TRAI Assesses Network Quality of Mobile Service Operators across Dewas and Ujjain Cities(Madhya Pradesh), Intermediate Highways of Dewas-Indore-Ujjain and Bhopal and Rail Route of Bhopal to Pandhurna (MP LSA)

Release of findings of Independent Drive Tests (IDT)

The Telecom Regulatory Authority of India (TRAI) has conducted Independent Drive Tests (IDT) covering Dewas and Ujjain Cities, Intermediate Highways of Dewas-Indore-Ujjain and Bhopal and Rail Route of Bhopal to Pandhurna of Madhya Pradesh LSA during the month of June 2025. The IDT have been designed to capture real-world mobile network performance across diverse usage environments –Urban zones, hotspots, public transport hubs, etc.

2. TRAI, through its appointed agency, conducted detailed drive tests across 352.2 Kms of City test and 6.3 kms of walk test in Dewas,Ujjain and Indore, 219.9 Kms of Highway Drive Test in intermediate highways of Dewas-Indore-Ujjain and Bhopal, Rail Route Test from Bhopal to Pandhurna between 2nd June to 7th June 2025. These tests were conducted under the supervision of the TRAI Regional Office, Bhopal.

3. During drive test, live data and voice sessions were established over 2G, 3G, 4G, and 5G networks using mobile advanced test handsets with SIM cards from all telecom operators. The voice calls and data sessions were monitored and analysed in real-time using state-of-the-art Drive test System. The data collected during the drive test had further been analysed by experts using specialized tools, and the final report is prepared based on this analysis.

4. During the IDT, following Key Performance Indicators (KPIs) for Voice as well as Data service were assessed for the networks of all Telecom service providers operating in the region:
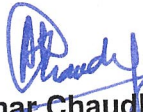
I.   **Voice services:**

   a) Call setup success rate (CSSR)   e) Downlink & Uplink packet (voice) drop rate
   b) Call Setup Time   f) Call Silence Rate
   c) Drop call rate (DCR)   g) Coverage (%)- Signal strength
   d) Speech Quality using MOS(mean opinion score)

II. **Data Services:**

   a) Data Throughput (Downlink and uplink both)   d) Latency
   b) Packet drop rate (Downlink & Uplink)   e) Jitter
   c) Video streaming delay

5. The details of drive test and performance summary in respect of Test results in Dewas and Ujjain Cities, Intermediate Highways of Dewas-Indore-Ujjain and Bhopal and Rail Route of Bhopal to Pandhurna of Madhya Pradesh LSA as detailed above are attached at **Annexure-A**. The report has been shared with respective units of TSPs for taking note & further action required, if any.

6. Detailed reports are available on the TRAI website at www.trai.gov.in. For any clarification or additional information, you may send an email to **adv.bhopal@trai.gov.in** or contact **Regional Office** of TRAI at Bhopal on telephone no. +91-755-2575501.
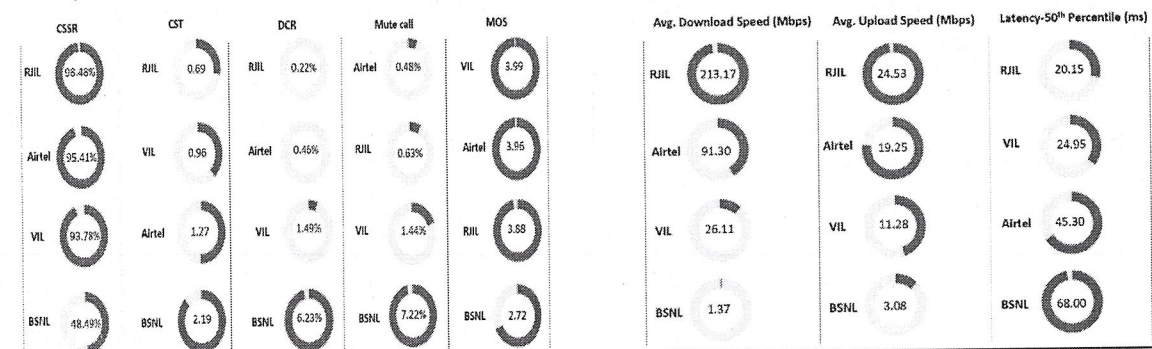
(Atul Kumar Chaudhary)
Secretary,
TRAI

S. No.	City / Routes Covered	Licensed Service Area	Period of Drive Test	Distance Covered
1.	City: Dewas and Ujjain Highway: Dewas-Indore-Ujjain-Bhopal Railway Route: Bhopal-Pandhurna	Madhya Pradesh	2nd June to 7th June 2025	City :352.2 Kms Walk Test: 6.3 Kms Highway: 291.9 Kms Railway Route: 284.3 Kms

Performance against key QoS parameters:

CSSR: Call Setup Success Rate (in %), **CST:** Call Setup Time (in milli 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-50th Percentile (ms)
RJIL 98.48%	RJIL 0.69	RJIL 0.22%	Airtel 0.48%	VIL 3.99	RJIL 213.17	RJIL 24.53	RJIL 20.15
Airtel 95.41%	VIL 0.96	Airtel 0.46%	RJIL 0.63%	Airtel 3.96	Airtel 91.30	Airtel 19.25	VIL 24.95
VIL 93.78%	Airtel 1.27	VIL 1.49%	VIL 1.44%	RJIL 3.88	VIL 26.11	VIL 11.28	Airtel 45.30
BSNL 48.49%	BSNL 2.19	BSNL 6.23%	BSNL 7.22%	BSNL 2.72	BSNL 1.37	BSNL 3.08	BSNL 68.00

Summary-Voice services

Call Setup Success Rate: Airtel, BSNL, RJIL and VIL have call setup success rate of 95.41%, 48.49%, 98.48% and 93.78% respectively in Auto-selection mode (5G/4G/3G/2G).

Call Setup Time: Airtel, BSNL, RJIL & VIL have call setup time of 1.27, 2.19, 0.69 and 0.96 seconds respectively in Auto-selection mode (5G/4G/3G/2G).

Drop Call Rate: Airtel, BSNL, RJIL and VIL have drop call rate of 0.46%, 6.23%, 0.22% and 1.49% respectively in Auto-selection mode (5G/4G/3G/2G).

Call Silence/Mute Rate: Airtel, BSNL, RJIL and VIL have silence call rate of 0.48%, 7.22%, 0.63% and 1.44% respectively in packet switched network (4G/5G).

Mean Opinion Score (MOS): Airtel, BSNL, RJIL and VIL have average MOS 3.96, 2.72, 3.88 and 3.99 respectively

Summary-Data services

Data Download performance (Overall): Average download speed of Airtel (5G/4G/2G) is 91.30 Mbps, BSNL (4G/3G/2G) is 1.37 Mbps, RJIL (5G/4G) is 213.17 Mbps and VIL (4G/2G) is 26.11 Mbps.

Data Upload performance (Overall): Average upload speed of Airtel (5G/4G/2G) is 19.25 Mbps, BSNL (4G/3G/2G) is 3.08 Mbps, RJIL (5G/4G) is 24.53 Mbps and VIL (4G/2G) is 11.28 Mbps.

Data performance - Hotspots (in Mbps):

Airtel- 4G D/L: 23.05   4G U/L: 6.80
         5G D/L: 164.96   5G U/L: 45.97
BSNL- 4G D/L: 0.62   4G U/L: 3.13
RJIL-   4G D/L: 26.23   4G U/L: 11.67
         5G D/L: 211.75   5G U/L: 20.41
VIL-   4G D/L: 24.04   4G U/L: 14.69

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