## Information Note to the Press (Press Release No.1.2.5./2025)

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For Immediate release

Website: - www.trai.gov.in

# TRAI Assesses Network Quality of Mobile Service Operators across Gwalior City and Itarsi to Burhanpur Railway Route MP LSA.

### Release of findings of Independent Drive Tests (IDT)

The Telecom Regulatory Authority of India (TRAI) has conducted Independent Drive Tests (IDT) covering Gwalior City and Itarsi to Burhanpur Railway Route of Madhya Pradesh LSA during the month of September 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 of 391.6 Kms of City test and 4.7 kms of walk test in Gwalior City between 1<sup>th</sup> September to 4<sup>th</sup> September 2025 and 252.2 Kms of Railway Route from Itarsi to Burhanpur on 18<sup>th</sup> September 2025. 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 99.66%, 81.33%, 99.44% and 98.22% 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 0.11%, 7.81%, 0.11% and 0.23% respectively in Auto-selection mode (5G/4G/3G/2G).

## Summary of 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	
Airtel	99.66X	RAL	0.64	Airtel	0.11%	Airtei	0.16%	Airtei	4.01
RJIL	95.44%	VIL	0.80	RHL	0.11%	ИГ	0.47%	VIL	3.99
VIL	98.22%	Airtai	1.28	VIL	0.23%	RJIL	0.48%	RHL	3.91
BSML	81.33%	BSNA	2.17	BSML	7,81%	BSNL	3.04%	BSML	3.18

Avg. D	ownload Speed (Mbps)	Avg. Upload Speed (Mbps)	Latency-50 <sup>th</sup> Percentile (ms)
RJIL	22727	RJIL 26.04	RJIL 22.10
Airtel	119.58	Airtel 24.77	VIL 30.45
VIL	24.40	VIL 9.49	Airtel 34.40
BSNL	1.45	BSNL 3.13	BSNL 87.50

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#### Summary-Voice services

Call Setup Success Rate: Airtel, BSNL, RJIL and VIL have 99.66%, 81.33%, 99.44% and 98.22% call setup success rate respectively in Auto-selection mode (50/40/30/20).

Call Setup Time: Antel, BSNL, RJIL & VIL have call setup time of 1.28, 2.17, 0.64 and 0.80 seconds respectively in Auto-selection mode (50/40/30/20).

**Drep Call Rate:** Airtel, BSNL, RJIL and VIL have drop call rate of 0.11%, 7.81%, 0.11% and 0.23% respectively in Auto-selection mode (50/46/36/20).

Call Silence/Mute Rate: Airtel, BSNL, RJIL and VIL have silence call rate of 0.16%, 3.04%, 0.48% and 0.47% respectively in packet switched network (40/50).

Mean Opinion Score (MOS): Airtel, BSNL, RJIL and VIL have average MOS of 4.01, 3.18, 3.91 and 3.99 respectively.

#### Summary-Data services

Data Download performance (Overall): Average download speed of Aintel (5G/4G/2G) is 119.58 Mbps, BSNL (4G/3G/2G) is 1.45 Mbps, RJIL (5G/4G) is 227.27 Mbps and VIL (4G/2G) is 24.40 Mbps.

Data Upload performance (Overall): Average upload speed of Airtel (5G/4G/2G) is 24.77 Mbps, BSNL (4G/3G/2G) is 3.13 Mbps, RJIL (5G/4G) is 26.04 Mbps and VIL (4G/2G) is 9.49 Mbps.

Latency (Overall): Airtel, BSNL, RJIL & VIL 50th percentile latency is 34.40 ms, 87.50 ms, 22.10 ms & 30.45 ms respectively.

### Data performance - Hotspots (in Mbps):

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 Sanjay Kumar Gupta, Advisor (Regional Office, Bhopal) TRAI may be contacted on email: adv.bhopal@trai.gov.in or at Tel. No. +91-755-2575501.

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