

TELECOM REGULATORY AUTHORITY OF INDIA

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For Immediate Release

TRAI Assesses Mobile Network Quality Across in Mumbai LSA.

The Telecom Regulatory Authority of India (TRAI) has released findings of Independent Drive Test (IDT) conducted across **Mumbai LSA, during the month of June 2026**, for information of general telecom consumers. The purpose of this drive test is to assess and verify real time quality of mobile network services (both voice & data) provided by Telecom Service Providers (TSPs). During the IDT, TRAI captures performance of TSPs for key Quality of Service (QoS) parameters like Coverage, Call Drop Rate (CDR), Call Setup Success Rate (CSSR), data Download (DL) and Upload (UL) throughput etc., which are then published to inform Consumers and encourage TSPs to improve their services.

2. These IDTs have been designed to capture on ground mobile network performance of all TSPs across diverse usages environment like cities, hotspots, public transport hubs, etc. In this type of drive testing, live data and voice sessions are established using SIM cards from all TSPs over 2G, 3G, 4G, and 5G networks. Multiple advanced test handsets are used, and the sessions are monitored and analysed in real-time using advanced Software Systems.

3. TRAI, through its appointed agency, conducted drive tests across City drive - 204.3 Kms, Hotspot locations - 7 in Mumbai city during 10th June 2026 to 12th June 2026 in **Mumbai LSA**. These tests were conducted under the supervision of the TRAI Regional Office Bengaluru. The observations presented in drive test reports represent the performance of the TSPs on the area/ route under test on the day/ time of conducting the drive test.

4. **Drive Test Route Map:** The following map provides overview of drive test routes indicating City drive, Inter-operator calling, Hotspots and Walk tests, as per the legends shown on the map:-



5. Key Parameters Assessed

- a) **Coverage Gap:** Percentage of samples, for which signal strength observed less than the minimum prescribed signal strength for respective technology (2G/ 3G/ 4G/ 5G).

- b) **Voice Services:** Call Setup Success Rate (CSSR), Drop Call Rate (DCR), Call Setup Time, Call Silence Rate, Speech Quality (MOS).
- c) **Call Silence Instance:** Number of call silence instance occurred during the calls.
- d) **Data Services:** Download/ Upload Throughput, Latency, Jitter, Packet Drop Rate

6. The overall mobile network performance in Uttara Kannada District for the key parameters has been summarised below:-

- a) **Coverage Gap** - The signal strength observed during voice testing on the drive test route in auto-selection mode (5G/4G/3G/2G), measured as the number of samples having poor signal strength out of the total samples collected, was **102/54857** for **Airtel**, **17877/23461** for **MTNL**, **144/54576** for **RJIL** and **5/54511** for **VIL**. Details of the coverage gaps have been provided in the map **Annexed**.
- b) **Dropped Calls** - Dropped calls, measured as the number of dropped calls out of the number of successfully established calls, were **1/490** for **Airtel**, **28/203** for **MTNL**, **0/489** for **RJIL** and **1/491** for **VIL**. Details of the dropped call locations have been provided in the map **Annexed**.
- c) **Call Silence Instance** - Call silence instances, measured as the total number of silence instances observed for > 3 seconds out of the total calls established, were **14/ 481** for **Airtel**, **Not Available** for **MTNL**, **1/475** for **RJIL** and **1/479** for **VIL**. Details of the call silence instance locations have been provided in the map **Annexed**.
- d) **Data Download and Upload Throughput:**
 - i) **Data Download performance (Overall):** Average download speed was observed as **93.76 Mbps** for **Airtel (5G/4G)**, **Not Available** for **MTNL**, **237.81 Mbps** for **RJIL (5G/4G)** and **70.69 Mbps** for **VIL (5G/4G/2G)**. Detail of Download throughput has been provided in the map **Annexed**.
 - ii) **Data Upload performance (Overall):** Average upload speed was observed as **25.92 Mbps** for **Airtel (5G/4G)**, **Not Available** for **MTNL**, **40.92 Mbps** for **RJIL (5G/4G)** and **25.57 Mbps** for **VIL (5G/4G/2G)**. Detail of Upload throughput has been provided in the map **Annexed**.

Locations of Dropped Calls and Call Silence instances can be seen by clicking red dot on the map **Annexed**.

7. Details of drive test route and area covered during the IDT is as under:-

- a) **City** - The areas covered in the city drive are Bandra Worli Sealink, Mahim, Dadar, Sion, Antop Hill, Worli, Parel, Sewri, Haji Ali, Mumbai Central, Byculla, Malabar Hill, Girgaon, Mazgaon and Churchgate etc in Mumbai city.
- b) **Hotspot** - The hot spot locations, capturing stationary user experience, are Byculla Railway Station, Chhatrapati Shivaji Maharaj Terminus, Churchgate Railway Station, Dadar Railway Station, Gateway of India, Marine Drive, and Parel Railway Station.

8. The findings of this IDT report have been shared with respective TSPs for taking further necessary action at their end. Detailed reports of IDT are made available on the TRAI website at www.trai.gov.in. For any clarification or additional information, an email can be sent to adv.bengaluru@trai.gov.in or Regional Office of TRAI at Bengaluru RO can be contacted on telephone No. +91-80-22865004.



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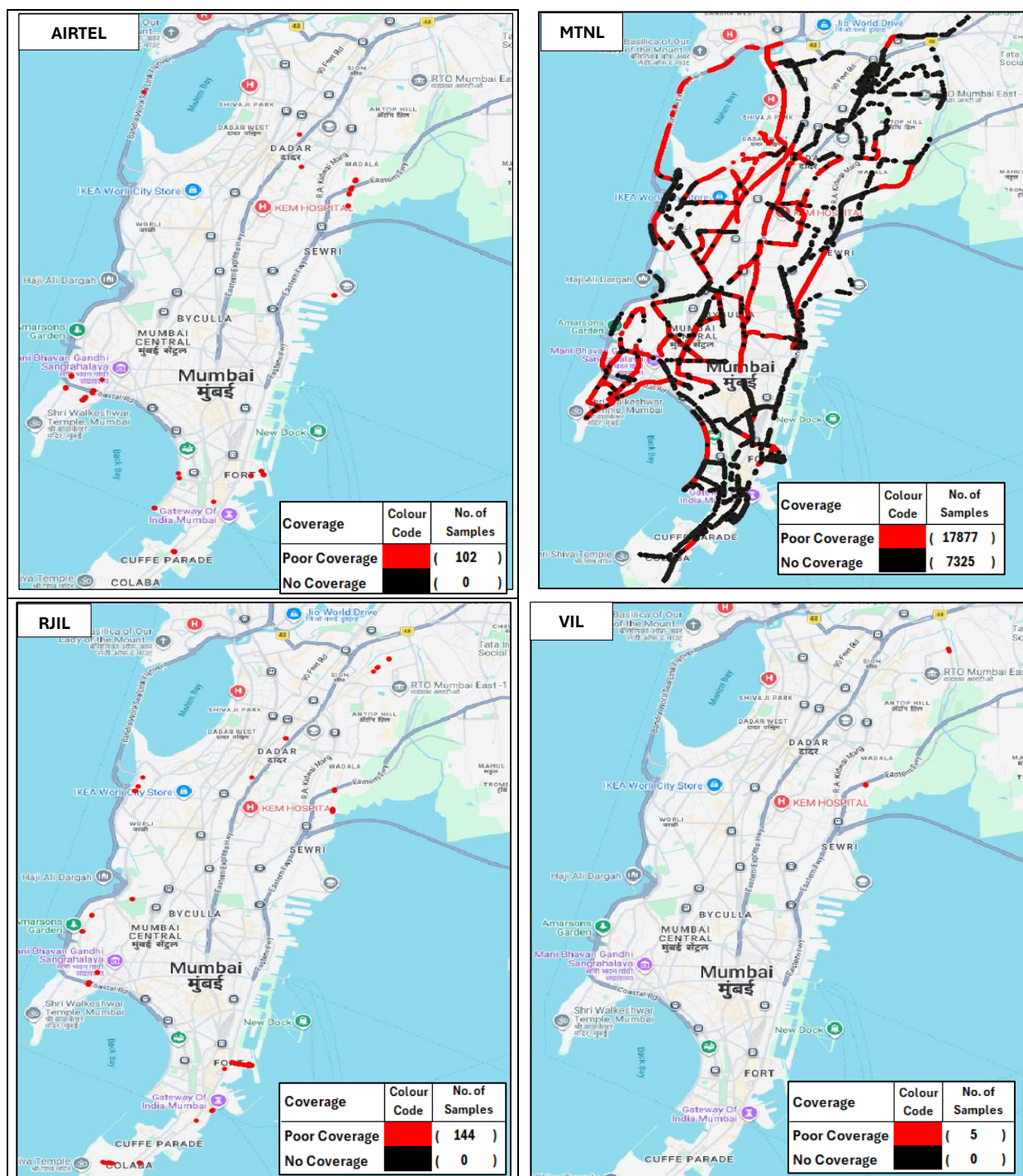
1. Mumbai LSA

2. **Coverage Gap** – The coverage distribution found less than the minimum specified signal strength for the drive test route in auto-selection mode (5G/4G/3G/2G) during voice testing, is as below:

Parameter	AIRTEL	MTNL	RJIL	VIL
Total Number of Samples captured on Drive test route	54857	23461	54576	54511
Number of Samples having poor signal strength	102	17877	144	5
Number of Samples having limited service (No Coverage)	0	7325	0	0

Note: Signal strength has been considered poor if it falls below -110 dBm for 5G & 4G, -90 dBm for 3G, and -85 dBm for 2G.

Coverage Gap observed

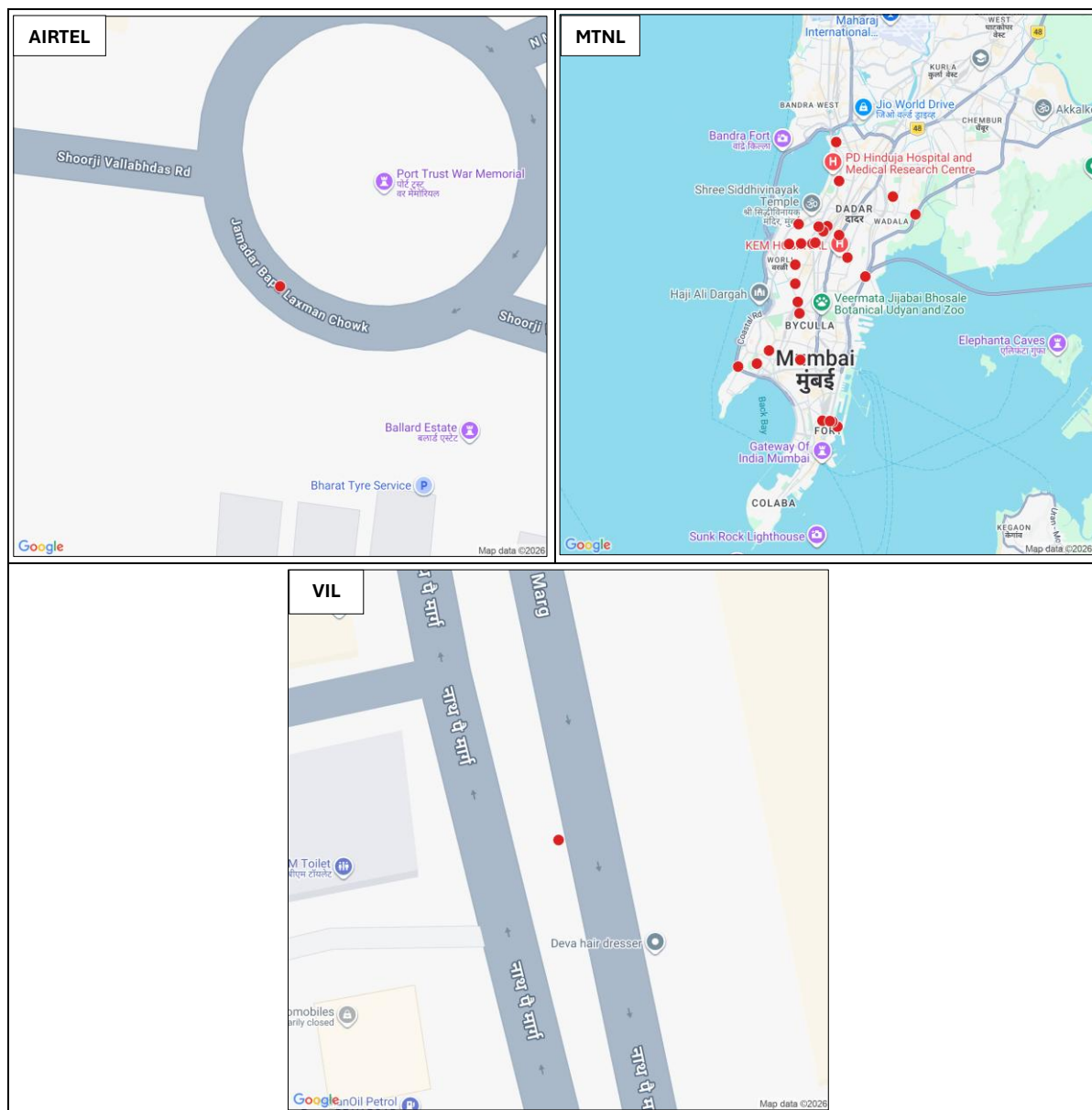


Note: Plot is based on Dynamic Drive Test results only.

b) Dropped Calls - The TSP-wise details of dropped calls in auto-selection mode (5G/ 4G/ 3G/ 2G) are as below:

Parameter	AIRTEL	MTNL	RJIL	VIL
Number of successful Calls Established	490	203	489	491
Number of dropped Calls	1	28	0	1

Locations of Dropped Calls



Note: Dropped calls locations are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map.

c) **Call Silence Instance** - The TSP-wise details of Call silence instance in Auto-selection mode (5G/4G) are as below:

Parameter	AIRTEL	MTNL	RJIL	VIL
Call Established (within service provider network)	481	NA*	475	479
Number of silences calls for >3 Sec	14	NA*	1	1
Total number of silence instances for >3 Sec	23	NA*	1	1

* NA – Not Applicable

Locations of Call Silence Instance

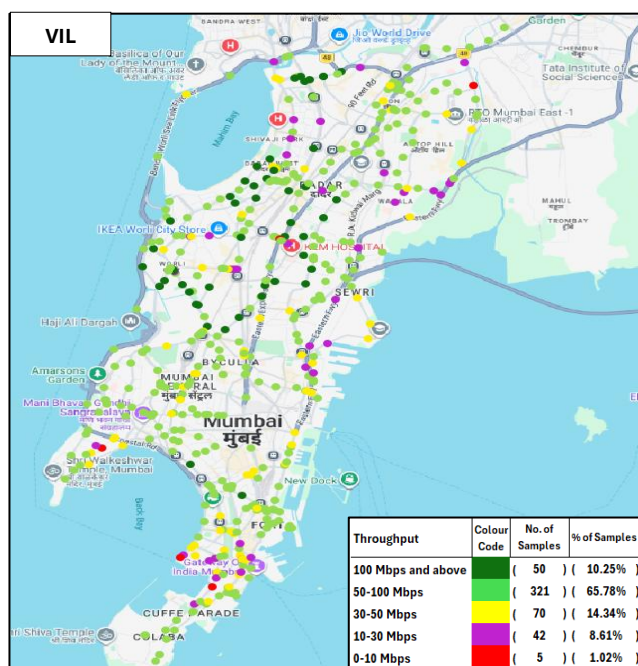
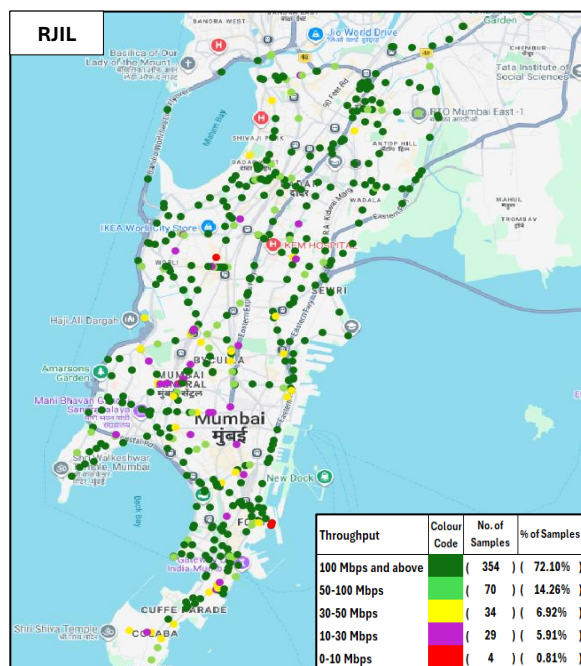
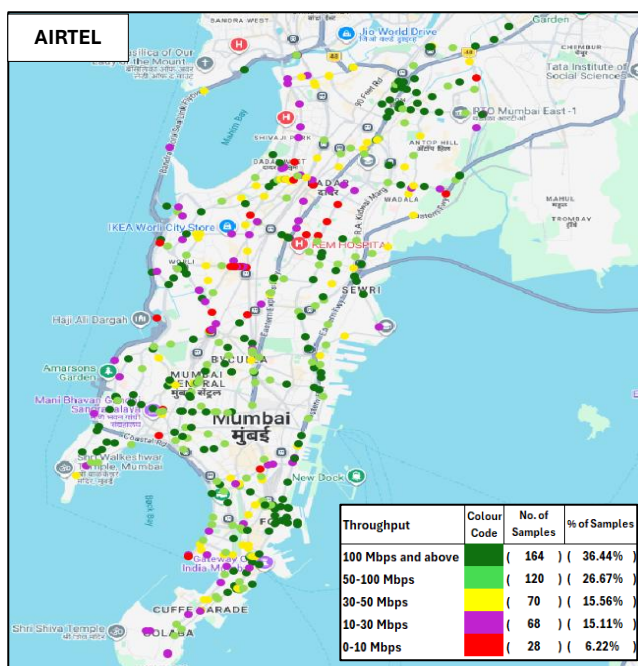


Note: Call silence instances are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map.

d) Data Download and Upload throughput: The TSP-wise details of **Average Download (DL)** and **Upload (UL) throughput** against declared typical DL/UL Throughput for month, in Auto-selection mode (5G/4G/3G/2G) are as below:

(i) Download Throughput

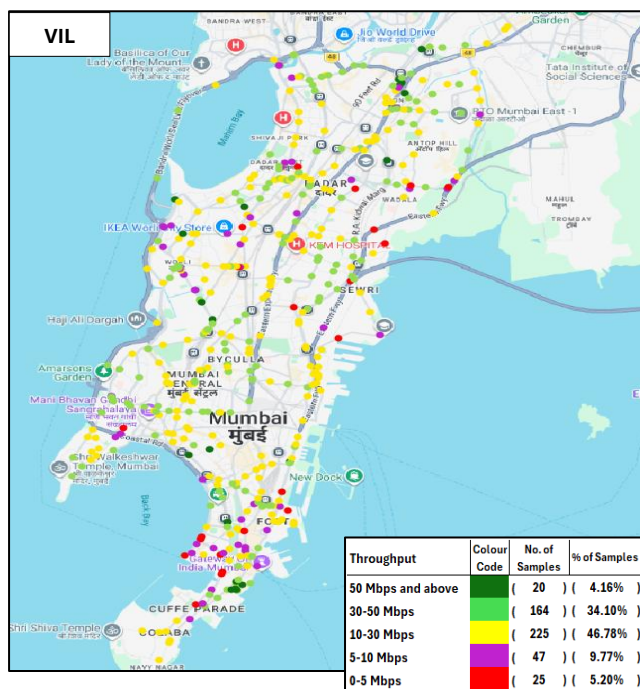
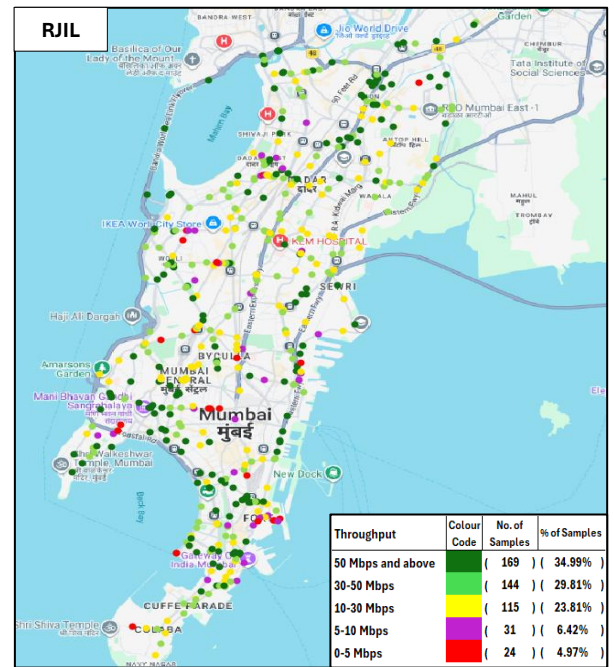
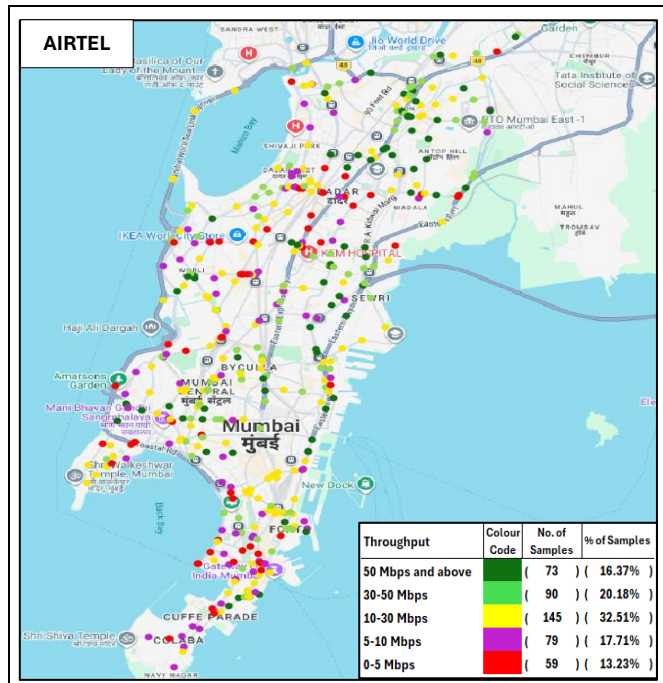
Parameter	Measured in	AIRTEL (upto 5G)	MTNL (upto 3G)	RJIL (upto 5G)	VIL (upto 5G)
Typical Download throughput declared by TSP	(Mbits/s)	7.37	2.86	15.00	15.00
Average Download Throughput measured during IDT	(Mbits/s)	93.76	-	237.81	70.69



Note: Plot is based on Dynamic Drive Test results only.

(ii) Upload Throughput

Parameter	Measured in	AIRTEL (upto 5G)	MTNL (upto 3G)	RJIL (upto 5G)	VIL (upto 5G)
Typical upload throughput declared by TSP	(Mbits/s)	2.08	0.25	7.00	8.00
Average Upload Throughput measured during IDT	(Mbits/s)	25.92	-	40.92	25.57



Note: Plot is based on Dynamic Drive Test results only.