

TELECOM REGULATORY AUTHORITY OF INDIA

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For Immediate Release

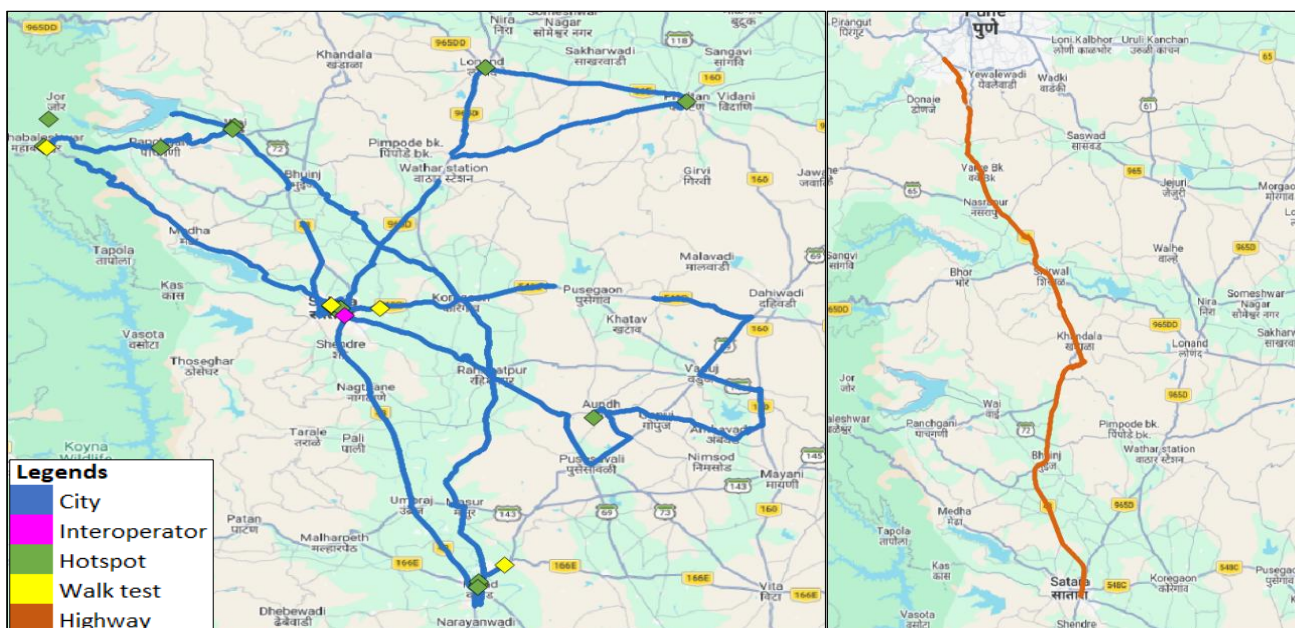
TRAI Assesses Mobile Network Quality Across in Satara District and Highway Drive from Pune to Satara, Maharashtra LSA.

The Telecom Regulatory Authority of India (TRAI) has released findings of Independent Drive Test (IDT) conducted across **Satara, Maharashtra LSA, during the month of March 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 – 535.5 KMs, Hotspot locations - 15, Walk Test - 9.8 Kms and Highway drive – 103.3 Kms in Satara District during **10th March 2026 to 13th March 2026** in **Maharashtra 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 Satara 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 **4033/57154** for **Airtel**, **16393/55159** for **BSNL**, **3467/57826** for **RJIL** and **4191/57458** 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 **5/515** for **Airtel**, **38/ 493** for **BSNL**, **6/ 524** for **RJIL** and **3/521** 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 **23/ 498** for **Airtel**, **19/ 415** for **BSNL**, **16/ 502** for **RJIL** and **13/ 502** 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 **113.79 Mbps** for **Airtel (5G/4G)**, **5.66 Mbps** for **BSNL (4G)**, **176.95 Mbps** for **RJIL (5G/4G)** and **46.86 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 **19.33 Mbps** for **Airtel (5G/4G)**, **2.14 Mbps** for **BSNL (4G)**, **19.81 Mbps** for **RJIL (5G/4G)** and **12.92 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 Phaltan-Satara Rd, Ghadewadi, Laxminagar, Phaltan, Taradgaon, Lonand, Salpe, Shivthar, Wadhe, Pirwadi, Shendre, Umbraj, Malkapur, Karad, Masur, Padali, Rahimatpur, Shirambe, Koregaon, Satara-road (Padali), Nihalewadi, Bhuinj, Panchwad, S. T. Stand Wai, Panchgani, Satara Machutar, Bibhavi, Shahupuri, Panmalewadi, Guruwar Peth, Godoli, Chichner Vandan, Dhamner, Pawarwadi, Pusesavali, Aundh, Ambavade, Suryachiwadi, Vaduj, Ukride, Vardhangad and Triputi etc. in Satara City etc.
- b) **Highway** - Pune to Satara passing through Shivrushti Historical Theme Park, Pune, Shindevadi, Shivare, Kapurhol, Sarole, Shirwal, Bengrutwadi, Wele, Surur, Joshi Vihar, Panchwad, Khed and Pirwadi etc.

- c) **Hotspot** - The hot spot locations, capturing stationary user experience, are District & Sessions Court Satara, District Collector Office Satara, Karad Bus Stand, Karad Municipal Council, Lonand Junction, Mahabaleshwar Bus Stand, Mahabaleshwar Temple, Panchgani St Stand, Phaltan Municipal Council, Rajpath Market Area Satara, Shri Yamai Devi Temple Aundh, Tehsildar Office Karad, Wai Municipal Council, Wai St Bus Stand, and Zilla Parishad Satara.
- d) **Walk Test** - The walk tests conducted on 10th to 13th March 2026, covered Karad Railway Station, Main Market Mahabaleshwar, Satara New St Bus Stand to Market Yard, and Satara Railway Station. capturing mobile network behaviour in crowded pedestrian environments.

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.traigov.in. For any clarification or additional information, an email can be sent to adv.bengaluru@traigov.in or Regional Office of TRAI at Bengaluru RO can be contacted on telephone No. +91-80-22865004.



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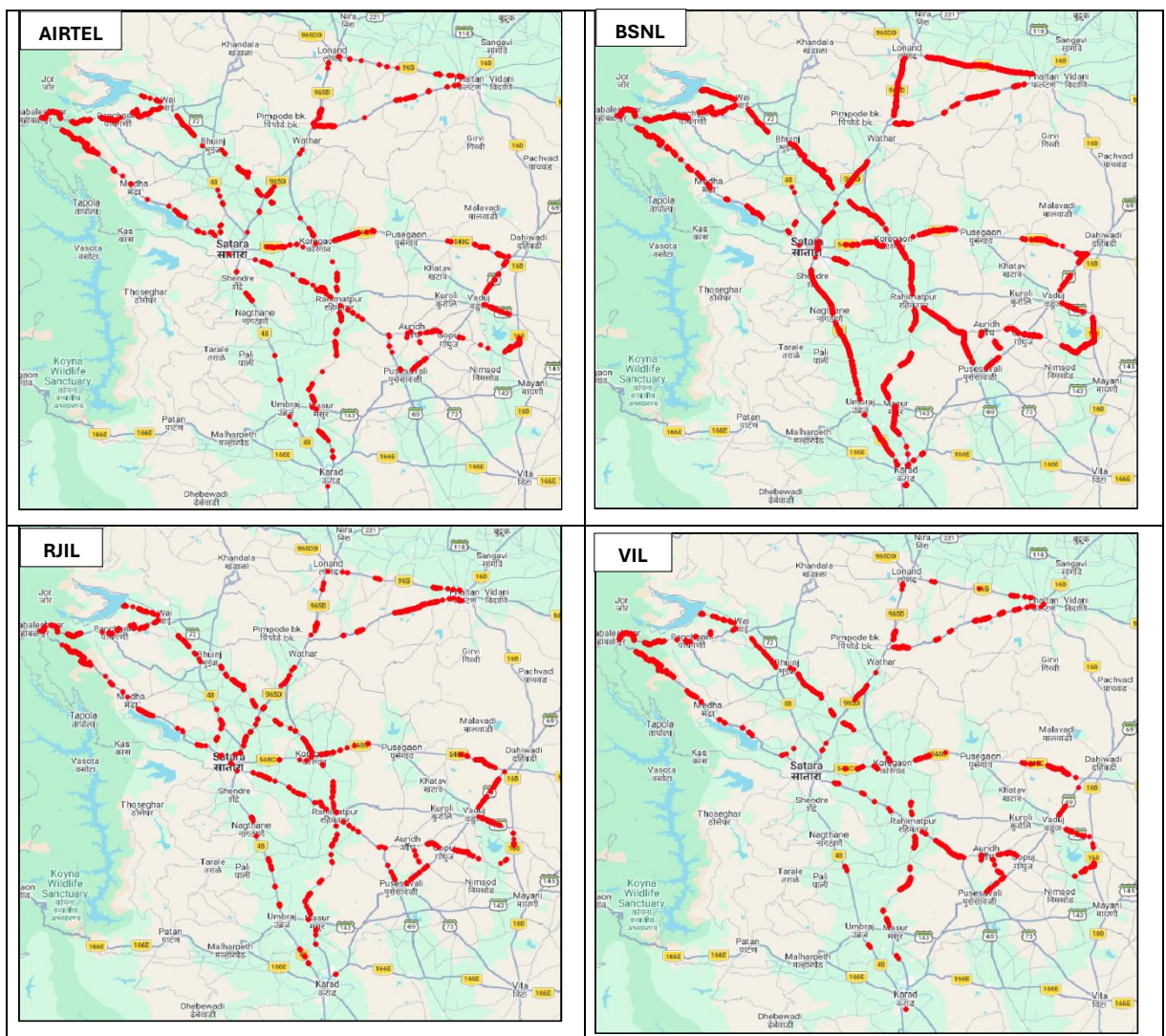
1. Satara city & nearby areas:

a) **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	BSNL	RJIL	VIL
Total Number of Samples captured on Drive test route	57154	55179	57826	57458
Number of Samples having poor signal strength	4033	16393	3467	4191

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

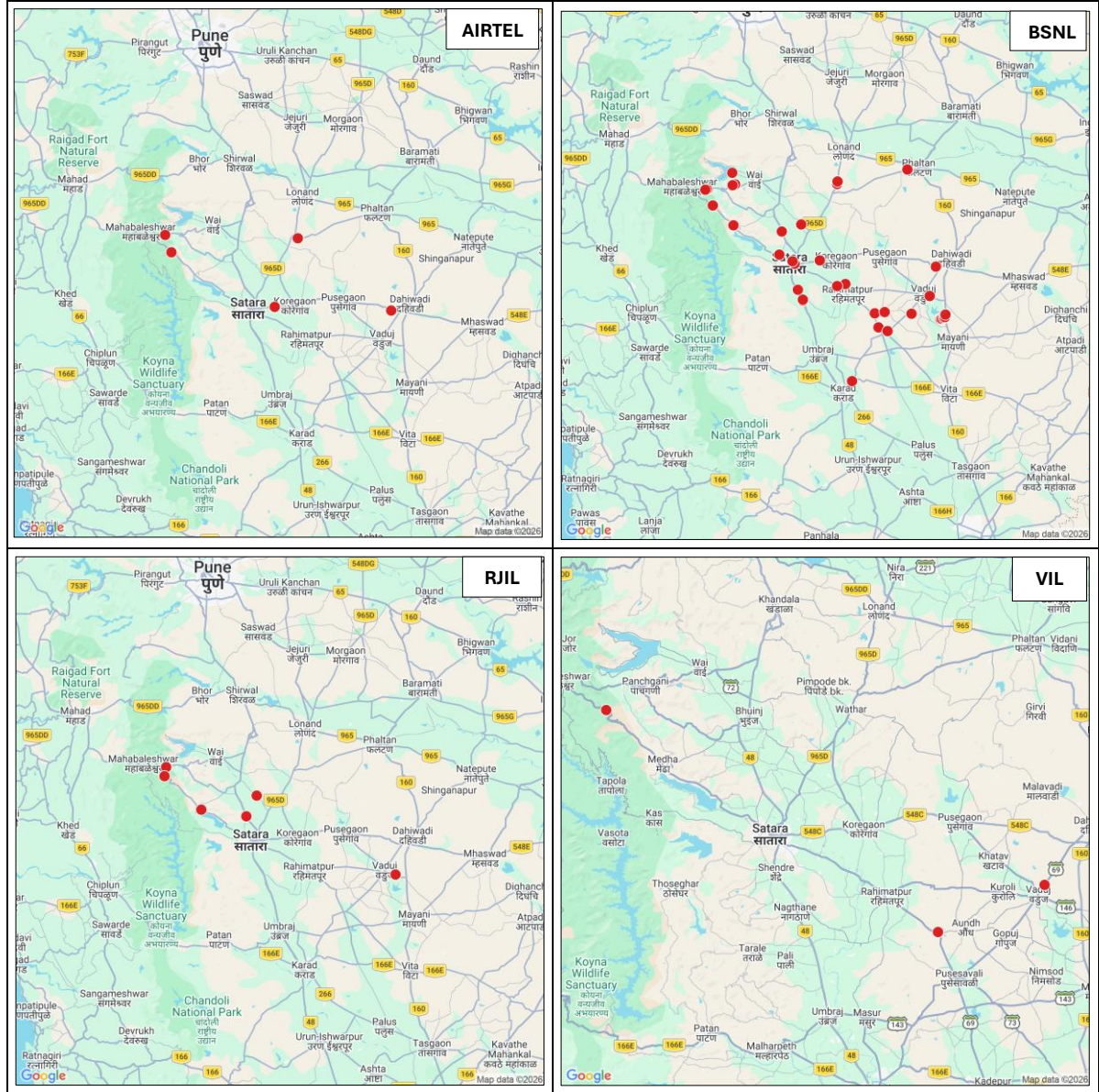


Note: Plot is based on Dynamic Drive Test results only

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

Parameter	AIRTEL	BSNL	RJIL	VIL
Number of successful Calls Established	515	493	524	521
Number of dropped Calls	5	38	6	3

Locations of Dropped Calls



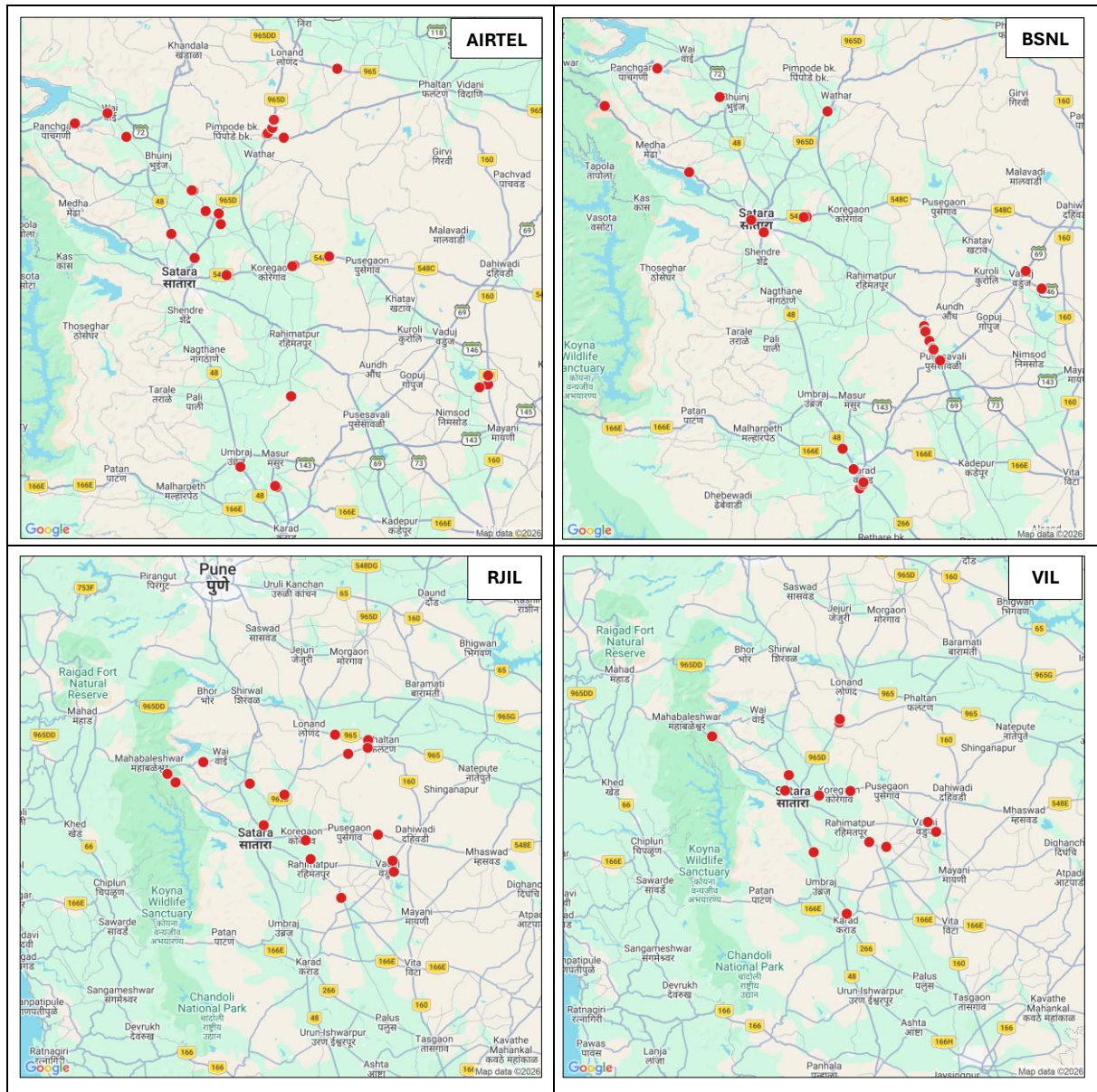
Note: Dropped calls locations are shown in red color and which can be clicked to know the exact location (latitude and longitude) on the map

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

Parameter	AIRTEL	BSNL	RJIL	VIL
Call Established (within service provider network)	498	415	502	506
Number of silences calls for >3 Sec	23	19	16	13
Total number of silence instances for >3 Sec	35	26	17	14

* NA – Not Applicable

Locations of Call Silence Instance

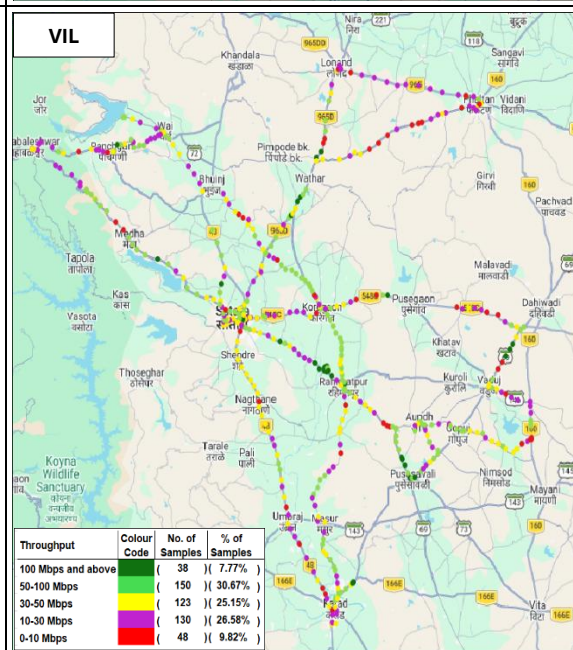
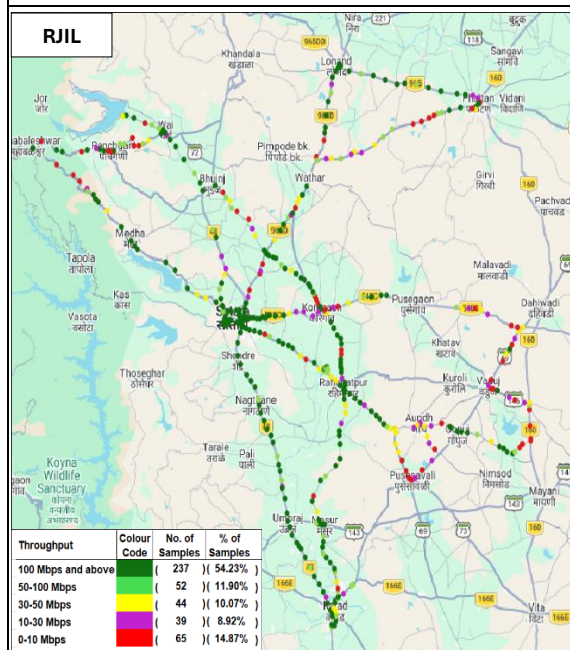
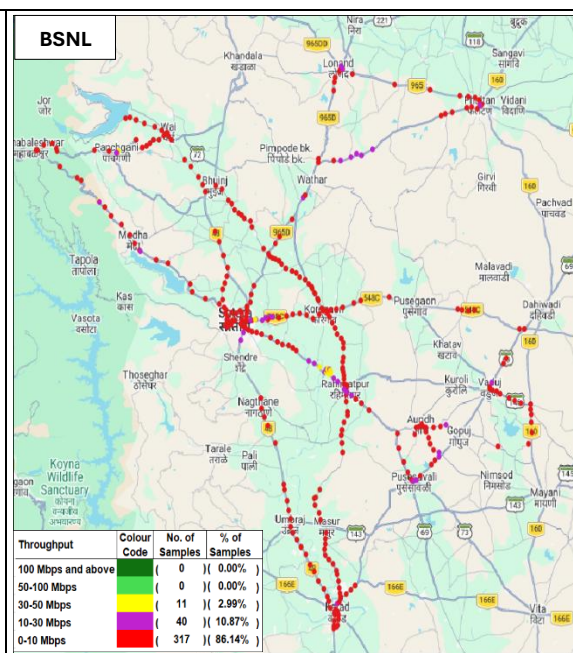
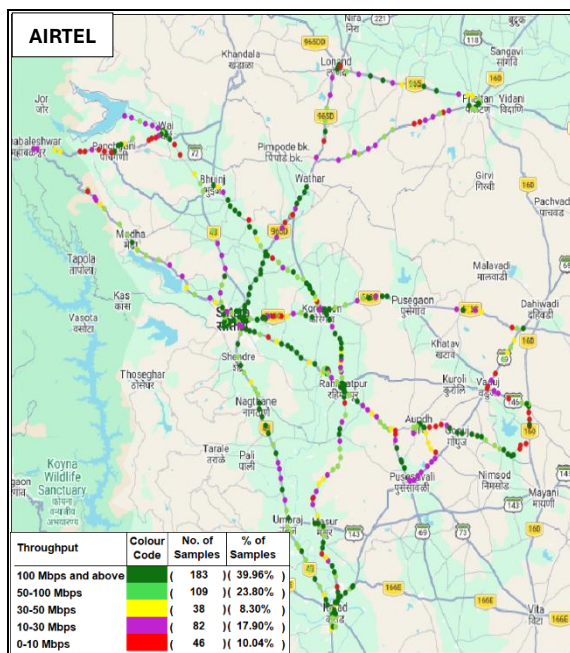


Note: Call silence instances are shown in red color and which can be clicked to know the exact location (latitude and longitude) on the map

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**

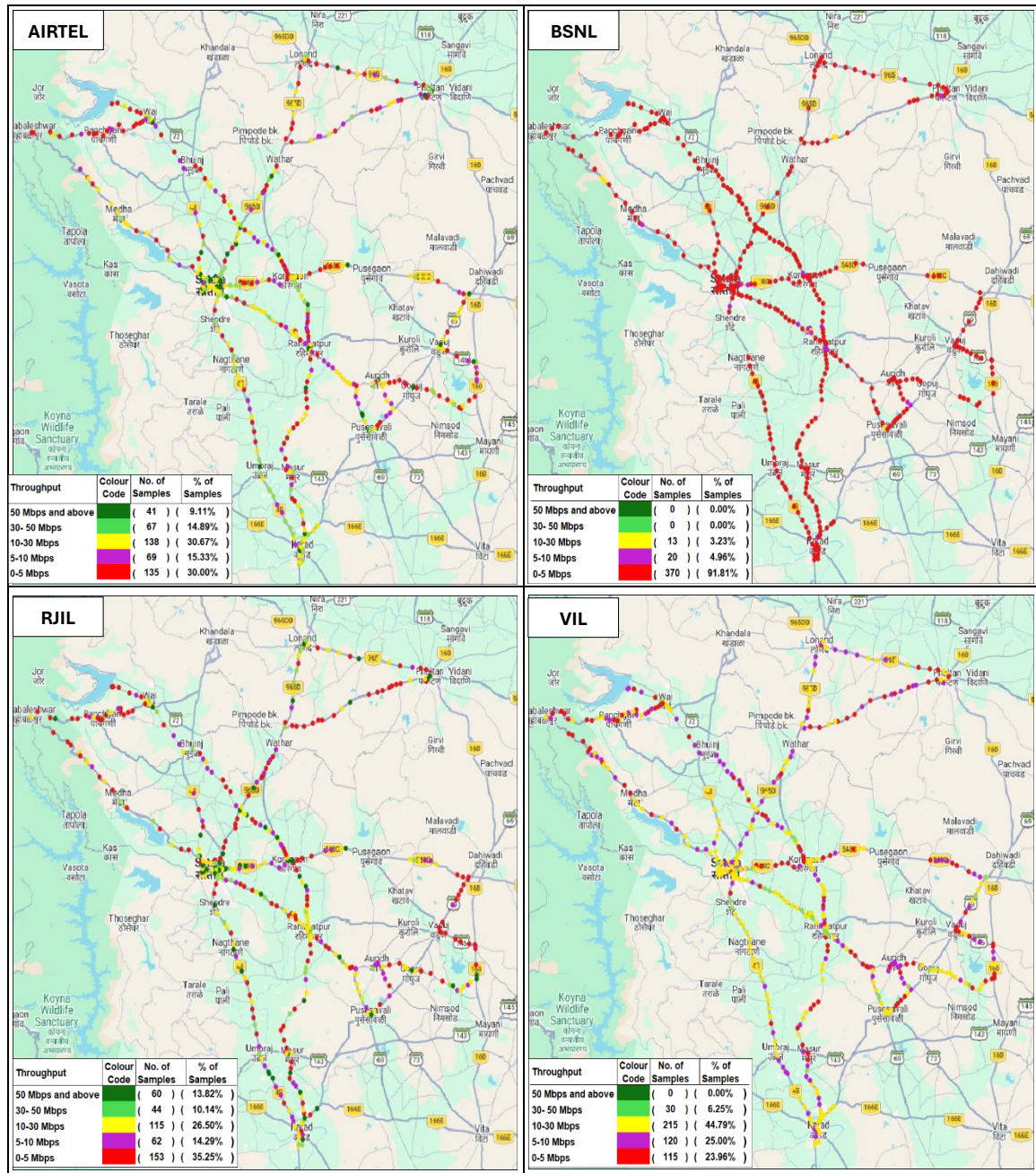
Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 4G)
Typical Download throughput declared by TSP	(Mbits/s)	39.68	5.00	15.00	15.00
Average Download Throughput measured during IDT	(Mbits/s)	113.79	5.66	176.95	46.86



Note: Plot is based on Dynamic Drive Test results only

(ii) Upload Throughput

Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 4G)
Typical upload throughput declared by TSP	(Mbits/s)	3.98	3.00	7.00	8.00
Average Upload Throughput measured during IDT	(Mbits/s)	19.33	2.14	19.81	12.92



Note: Plot is based on Dynamic Drive Test results only

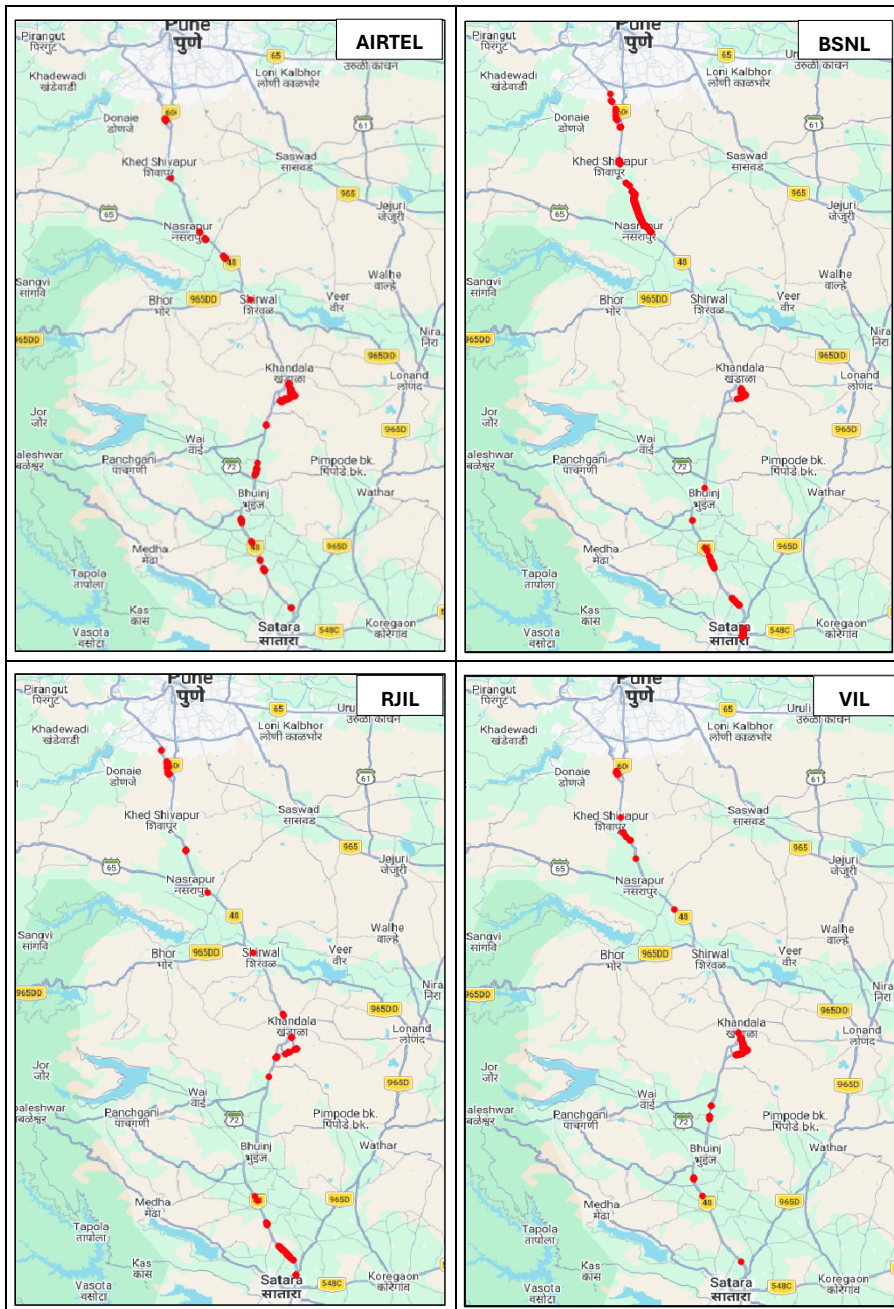
2. Pune to Satara Highway Route:

- a) **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	BSNL	RJIL	VIL
Total Number of Samples captured on Drive test route	7074	6660	6747	6944
Number of Samples having poor signal strength	300	560	161	198

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

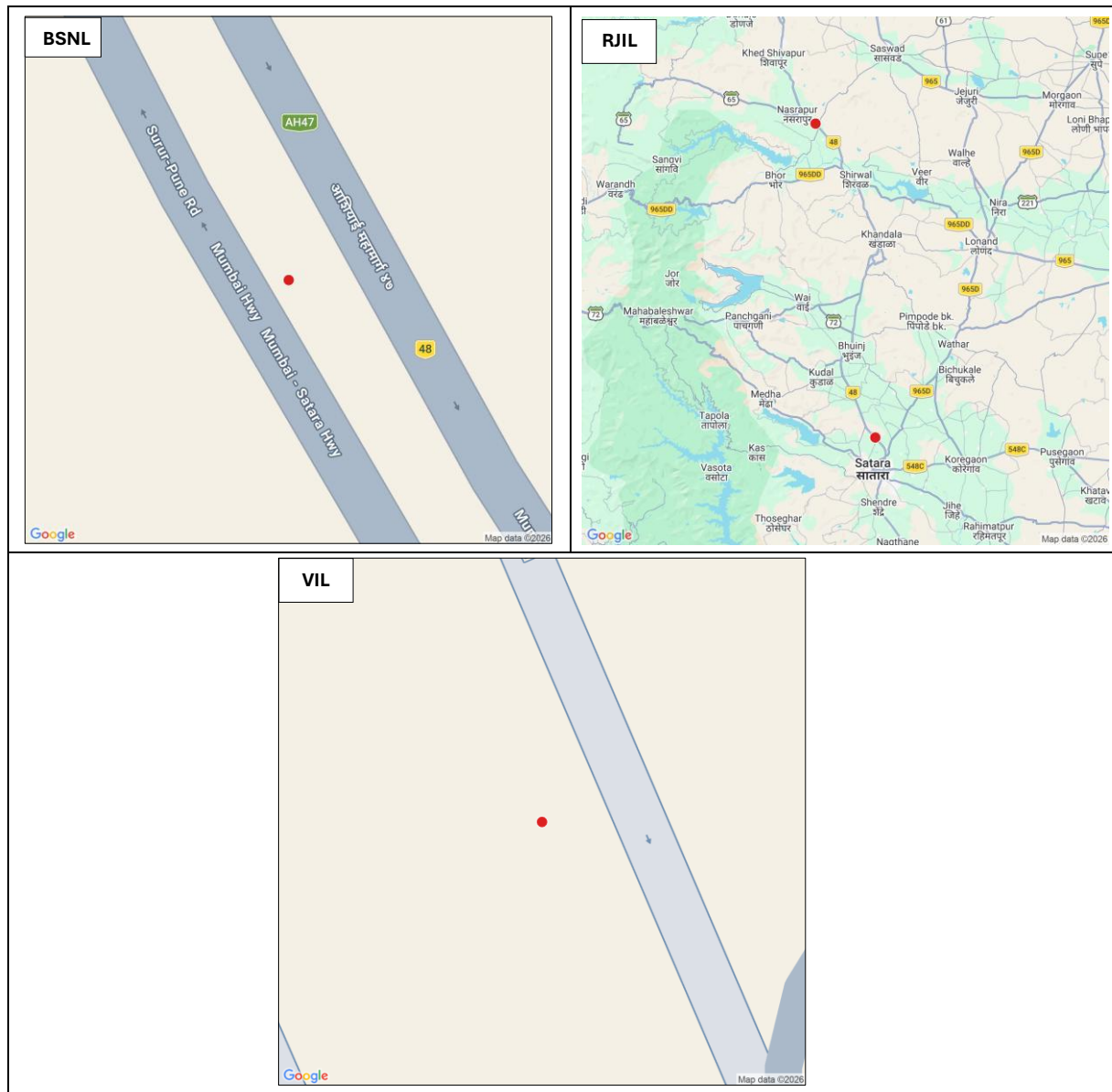


Note: Plot is based on Dynamic Drive Test results only

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

Parameter	AIRTEL	BSNL	RJIL	VIL
Number of successful Calls Established	35	34	35	35
Number of dropped Calls	0	1	2	1

Locations of Dropped Calls

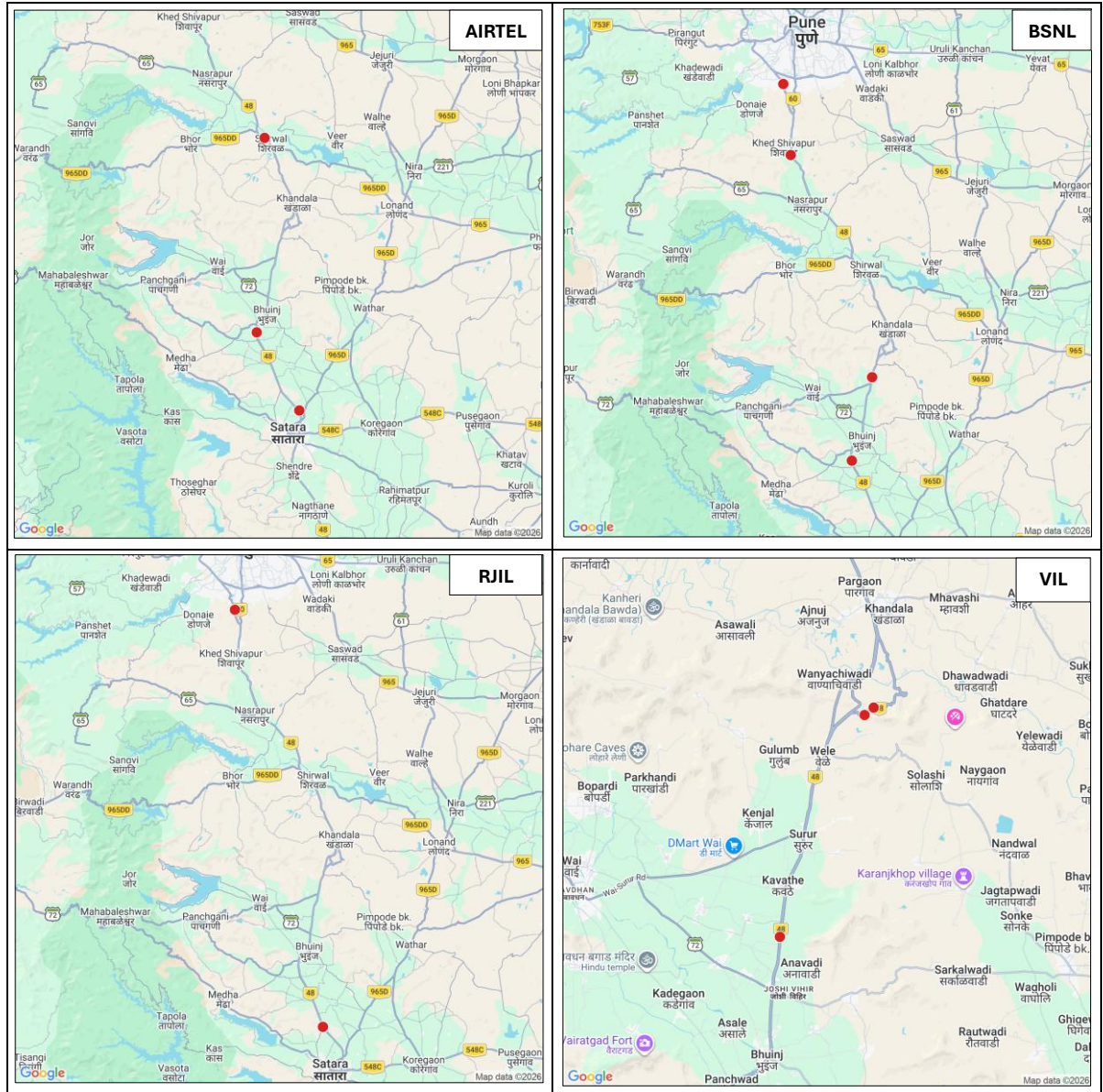


Note: Dropped calls locations are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map

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

Parameter	AIRTEL	BSNL	RJIL	VIL
Call Established (within service provider network)	34	31	35	35
Number of silences calls for >3 Sec	3	4	2	3
Total number of silence instances for >3 Sec	3	4	2	3

Locations of Call Silence Instance

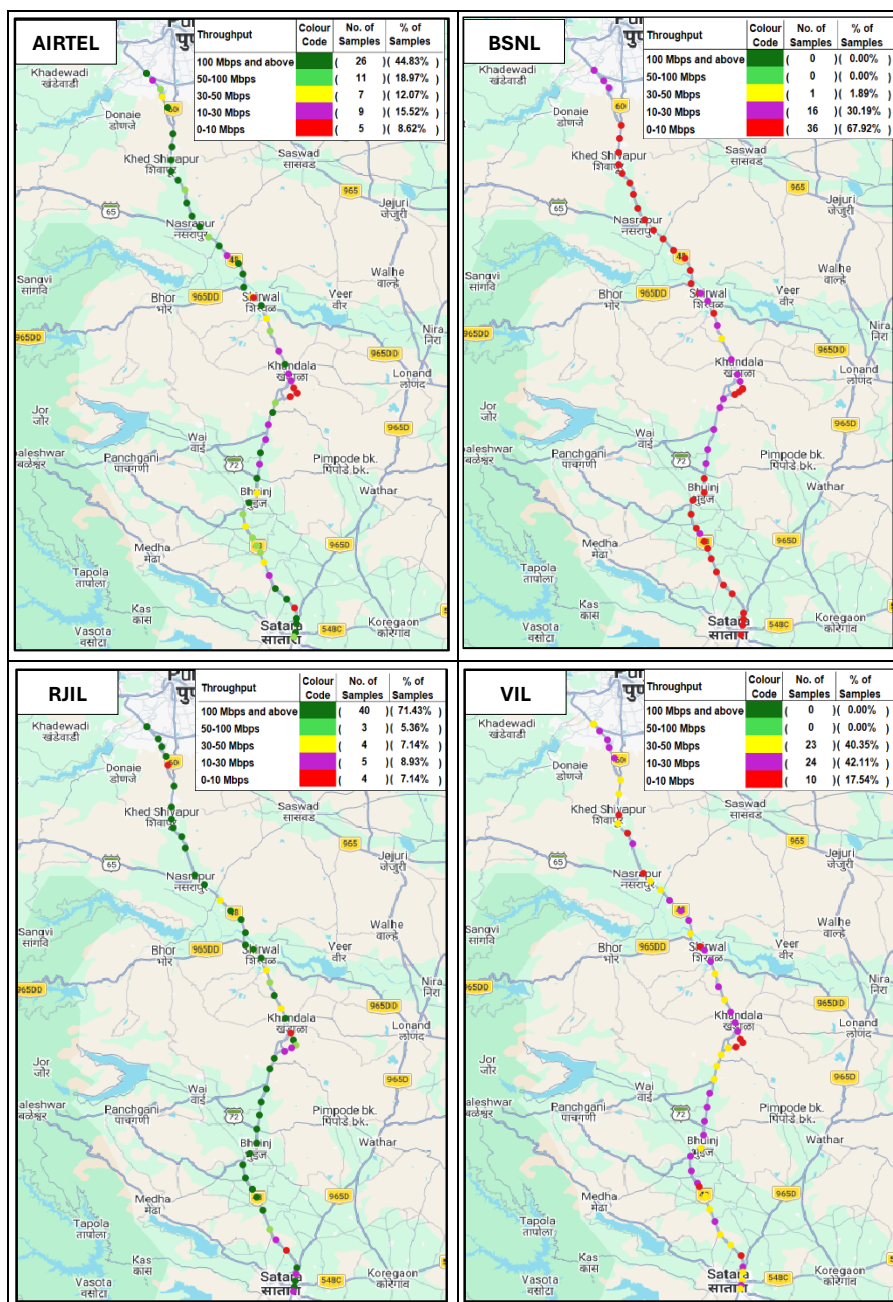


Note: Call silence instances are shown in red color and which can be clicked to know the exact location (latitude and longitude) on the map

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**

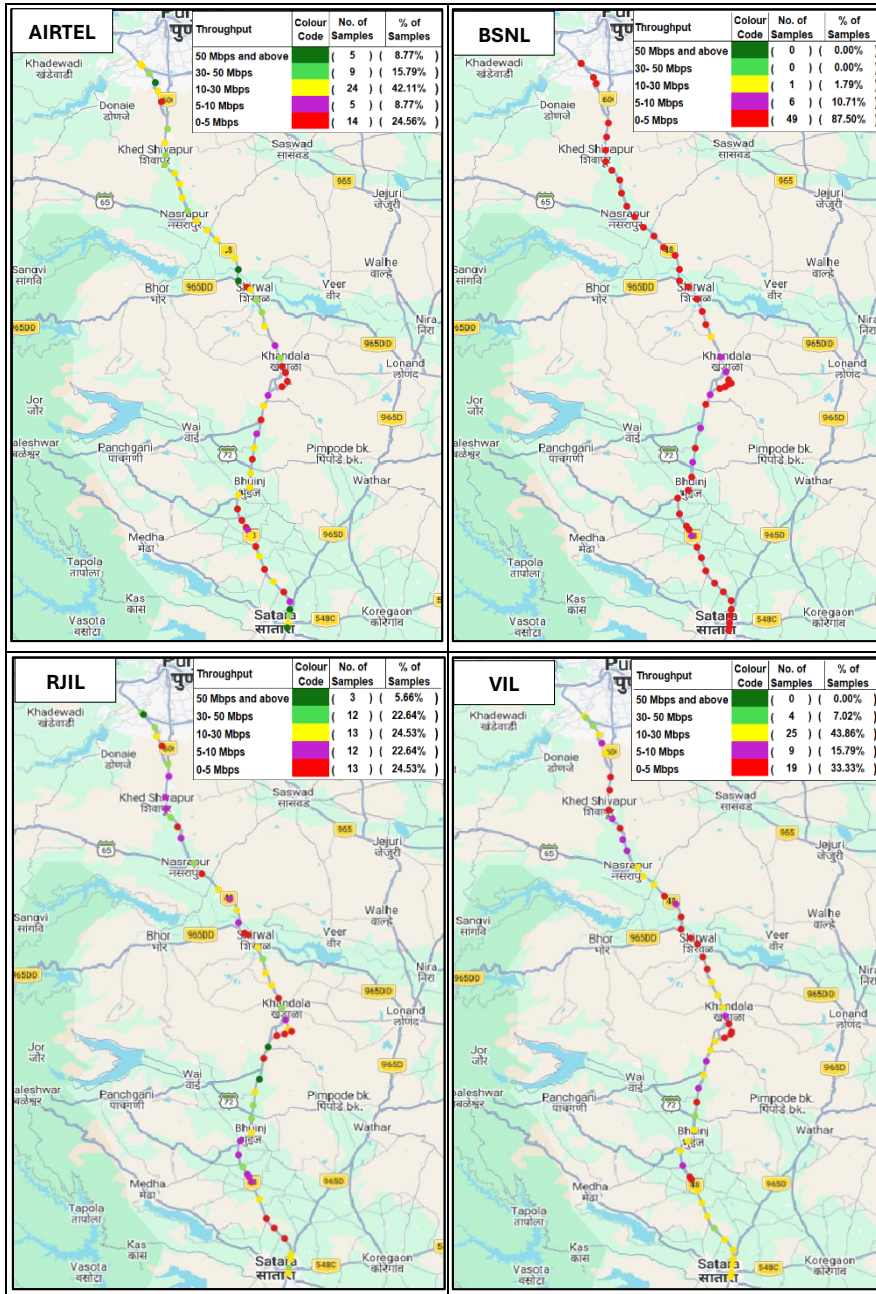
Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 4G)
Typical Download throughput declared by TSP	(Mbits/s)	39.68	5.00	15.00	15.00
Average Download Throughput measured during IDT	(Mbits/s)	113.12	8.73	261.99	25.88



Note: Plot is based on Dynamic Drive Test results only

(ii) Upload Throughput

Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 4G)
Typical upload throughput declared by TSP	(Mbits/s)	3.98	3.00	7.00	8.00
Average Upload Throughput measured during IDT	(Mbits/s)	20.89	2.86	19.62	12.51



Note: Plot is based on Dynamic Drive Test results only