

Information Note to the Press (Press Release No **142/2026**)

TELECOM REGULATORY AUTHORITY OF INDIA

www.trai.gov.in

New Delhi, 29-10-2026

For Immediate Release

TRAI Assesses Mobile Network Quality across Kachchh area including Gandhidham & Bhuj cities and Bhuj to Bachau highway (in Gujarat LSA)

The Telecom Regulatory Authority of India (TRAI) has released findings of Independent Drive Test (IDT) conducted across **Kachchh area including Gandhidham & Bhuj cities and Bhuj to Bachau highway (in Gujarat LSA)**, during the month of September 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), Packet loss rate, 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 including City drive – 245.2 KMs, Hotspot locations – 09 & Bhuj to Bachau highway -75.7 KMs across **Kachchh area including Gandhidham & Bhuj cities and Bhuj to Bachau highway** during 8th September to 11th September 2026 in **Gujarat LSA**. These tests were conducted under the supervision of the TRAI Regional Office Jaipur. The observations presented in the 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 Servies:** Download/ Upload Throughput, Latency, Jitter, Packet Drop Rate.

6. The overall mobile network performance in **Kachchh area including Gandhidham & Bhuj cities and Bhuj to Bachau highway in Gujarat LSA** for the key parameters has been summarised below:

(i) **Kachchh area including Gandhidham & Bhuj cities :**

- 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 **242/56687** for **Airtel**, **575/56051** for **BSNL**, **290/55391** for **RJIL** and **245/56876** 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 **0/496** for **Airtel**, **10/496** for **BSNL**, **3/495** for **RJIL** and **0/499** 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 **0/460** for **Airtel**, **6/459** for **BSNL**, **7/462** for **RJIL** and **2/476** for **VIL**. Details of the call silence instance locations have been provided in the map **Annexed**.
- d) **Packet Loss rate (Downlink & Uplink):**
 - i) Packet Loss rate (Downlink): Downlink Packet loss rate measured for **Airtel as 0.17 %**, **for BSNL as 1.52%**, **for RJIL as 0.93%** and **for VIL as 0.42%**.
 - ii) Packet Loss rate (uplink): Uplink Packet loss rate measured for **Airtel as 0.22%**, **for BSNL as 2.40%**, **for RJIL as 0.79%** and **for VIL as 0.39 %**.
- e) **Data Download and Upload Throughput:**
 - iii) **Data Download performance (Overall):** Average download speed was observed as **177.25 Mbps** for **Airtel (5G/4G)**, **10.27 Mbps** for **BSNL (4G/3G/2G)**, **231.92 Mbps** for **RJIL (5G/4G)** and **31.68 Mbps** for **VIL (5G/4G/2G)**. Detail of Download throughput has been provided in the map **Annexed**.

- iv) **Data Upload performance (Overall):** Average upload speed was observed as **34.26 Mbps** for **Airtel (5G/4G)**, **7.32 Mbps** for **BSNL (4G/3G/2G)**, **29.44 Mbps** for **RJIL (5G/4G)** and **16.86 Mbps** for **VIL (5G/4G/2G)**. Detail of upload throughput has been provided in the map **Annexed**.

(ii) Bhuj to Bhachau Highway :

- f) **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 **202/11015** for **Airtel**, **1718/10423** for **BSNL**, **187/10902** for **RJIL** and **164/11198** for **VIL**. Details of the coverage gaps have been provided in the map **Annexed**.
- g) **Dropped Calls** - Dropped calls, measured as the number of dropped calls out of the number of successfully established calls, were **0/54** for **Airtel**, **7/56** for **BSNL**, **0/54** for **RJIL** and **1/55** for **VIL**. Details of the dropped call locations have been provided in the map **Annexed**.
- h) **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 **0/53** for **Airtel**, **0/61** for **BSNL**, **1/52** for **RJIL** and **1/55** for **VIL**. Details of the call silence instance locations have been provided in the map **Annexed**.

i) Packet Loss rate (Downlink & Uplink):

- v) Packet Loss rate (Downlink): Downlink Packet loss rate measured for **Airtel as 0.50 %**, **for BSNL as 3.88%**, **for RJIL as 0.98%** and **for VIL as 1.11%**.
- vi) Packet Loss rate (uplink): Uplink Packet loss rate measured for **Airtel as 0.43%**, **for BSNL as 4.19%**, **for RJIL as 0.65%** and **for VIL as 1.12%**.
- j) **Data Download and Upload Throughput:**
 - vii) **Data Download performance (Overall):** Average download speed was observed as **139.15 Mbps** for **Airtel (5G/4G)**, **10.66 Mbps** for **BSNL (4G/3G/2G)**, **241.22 Mbps** for **RJIL (5G/4G)** and **22.97 Mbps** for **VIL (5G/4G/2G)**. Detail of Download throughput has been provided in the map **Annexed**.
 - viii) **Data Upload performance (Overall):** Average upload speed was observed as **17.68 Mbps** for **Airtel (5G/4G)**, **3.80 Mbps** for **BSNL (4G/3G/2G)**, **19.41 Mbps** for **RJIL (5G/4G)** and **13.80 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 are as under: -

City: Sukhpar, Uma Nagar, Airport Ring Road, Sanskar Nagar, Din Dayal Nagar, Junavas, Somiya Nagar, Anjar, Jalaram Nagar, Bharat Nagar, Gandhidham, Vinayak Society, Kandla, Mundra etc. in Kachchh area including Gandhidham & Bhuj.

Highway Route - Bhuj to Bhachau via Danda Bazar, Bhuj-Bhachau Highway, Padhar, Kaniyabe, Budharmora, Amardi, Kumbhardi, Euro Colony, Madina Nagar etc.

8. The findings of this IDT report have been shared with respective TSPs for taking further necessary action at their end, if required. Detailed report of IDT is made available on the TRAI website at www.trai.gov.in. For any clarification or additional information, an email can be sent to Regional office of TRAI at Jaipur on Email id adv.jaipur@traigov.in Regional Office of TRAI at Jaipur RO can be contacted on telephone no. 0141-2701919.

Digitally signed by
Rajesh Kumar Agerwal
Date: 29-10-2026
12:29:08

(Rajesh Kumar Agerwal)
Advisor, TRAI
Regional Office, Jaipur.

Enclosed: Annexure

Annexure

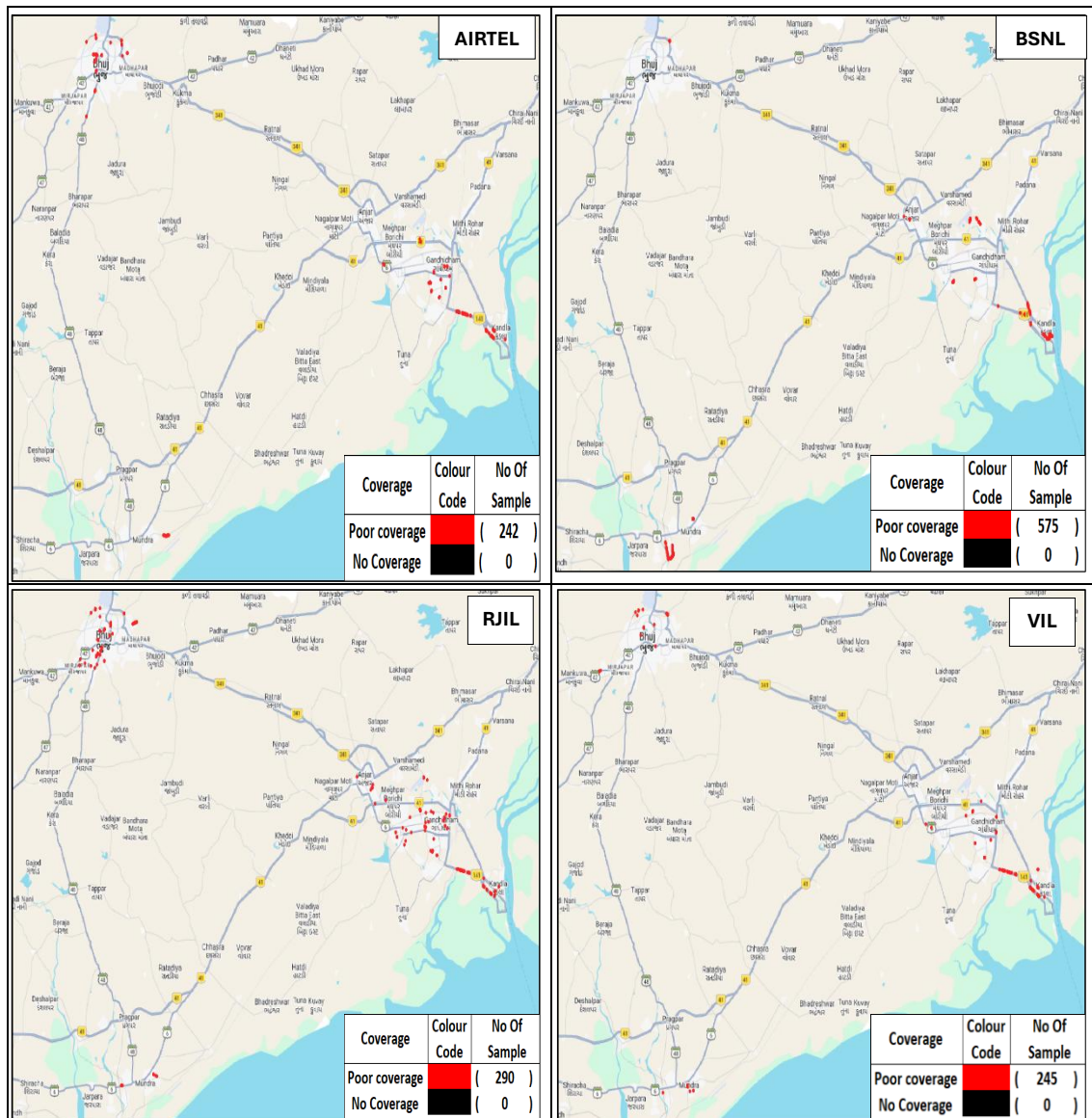
1. Kachchh area including Gandhidham & Bhuj:

- 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	56687	56051	55391	56876
Number of Samples having poor signal strength	242	575	290	245
Number of Samples having limited service (No Coverage)	0	0	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

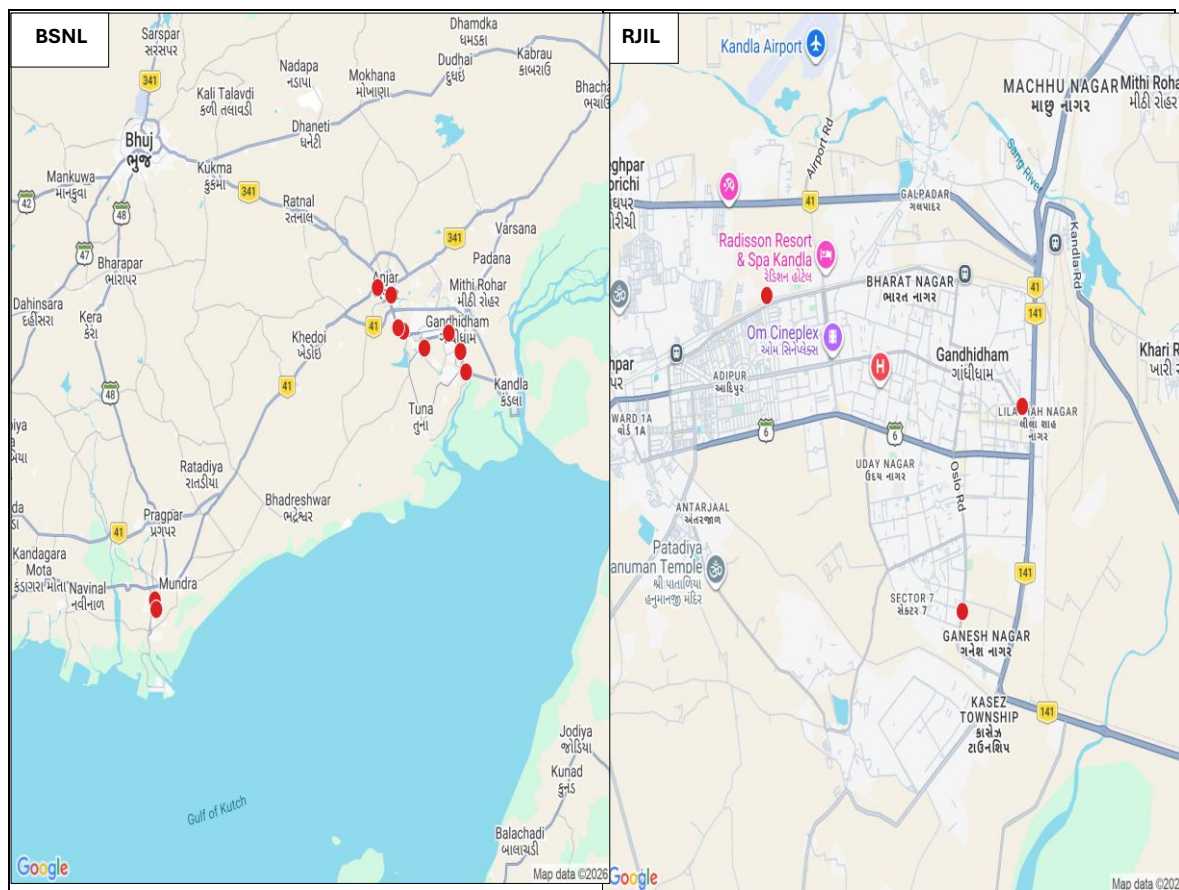


Note: Plot is based on Dynamic Drive Test results only.

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

Parameter	AIRTEL	BSNL	RJIL	VIL
Number of successful Calls Established	496	496	495	499
Number of dropped Calls	0	10	3	0

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 maps.

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)	460	459	462	476
Number of silences calls for >3 Sec	0	6	6	2
Total number of silence instances for >3 Sec	0	6	7	4

Locations of Call Silence Instance

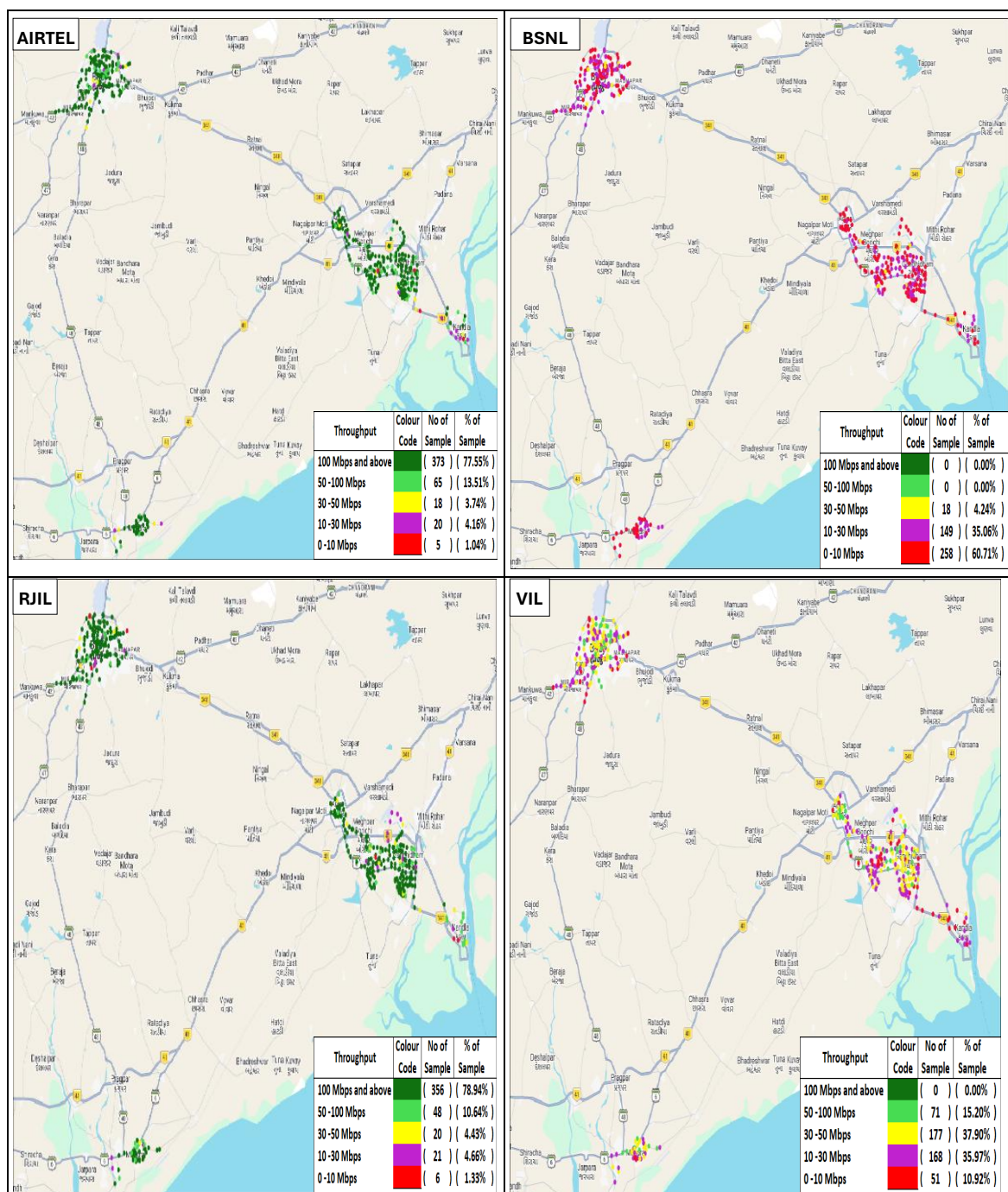


Note: Call silence instances are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map.

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

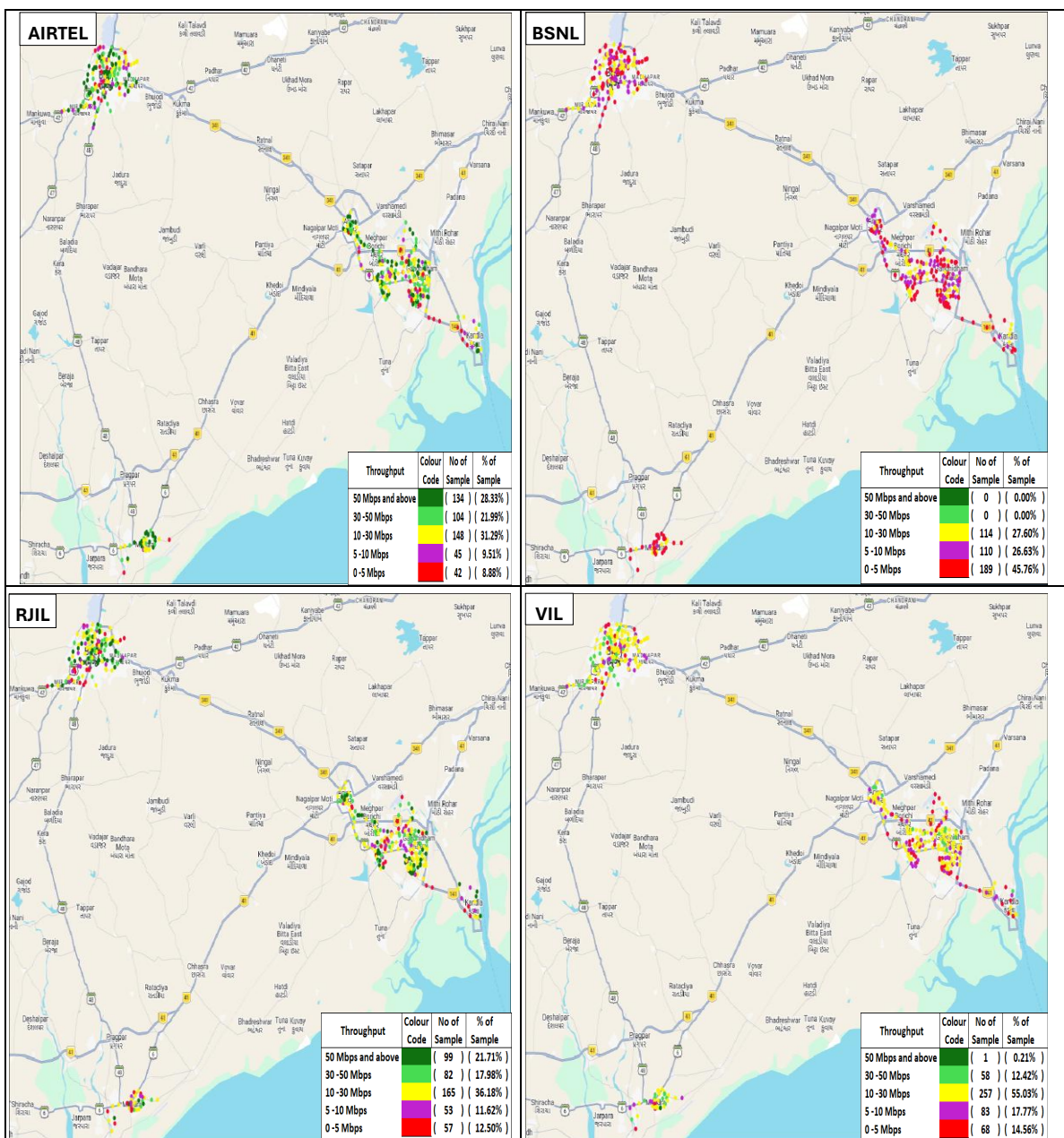
Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 5G)
Typical Download throughput declared by TSP	(Mbits/s)	23.00	5.00	15.00	15.00
Average Download Throughput measured during IDT	(Mbits/s)	177.25	10.27	231.92	31.68



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 5G)
Typical upload throughput declared by TSP	(Mbits/s)	10.00	3.00	7.00	8.00
Average Upload Throughput measured during IDT	(Mbits/s)	34.26	7.32	29.44	16.86



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

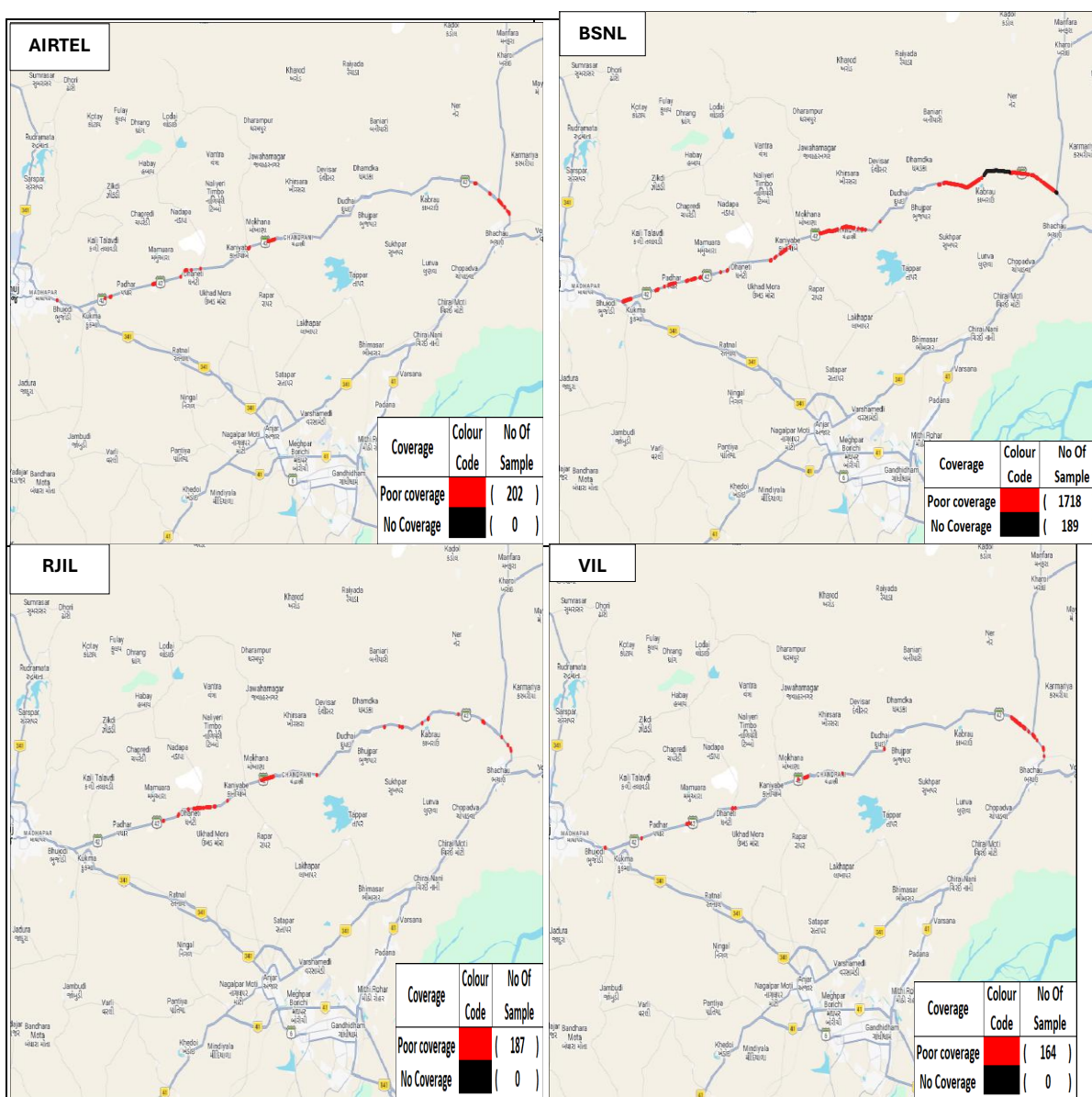
2. Bhuj to Bhachau Highway:

- 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	11015	10423	10902	11198
Number of Samples having poor signal strength	202	1718	187	164
Number of Samples having limited service (No Coverage)	0	189	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

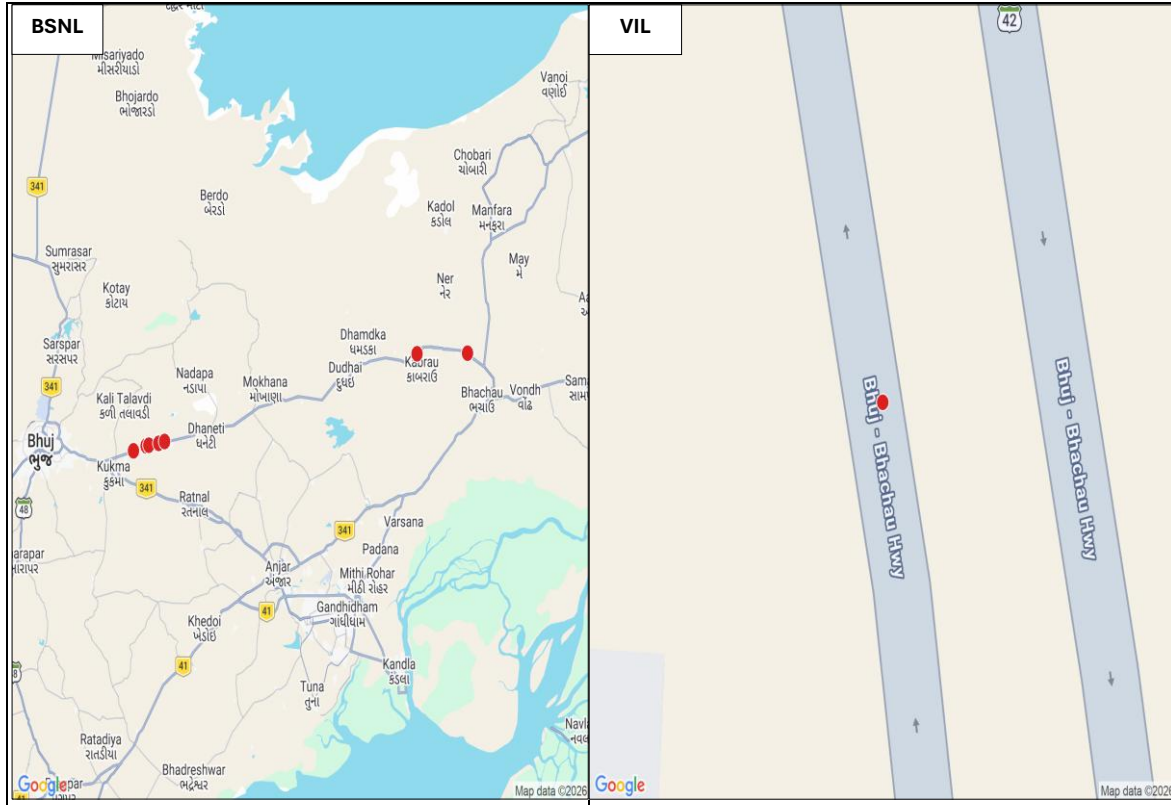


Note: Plot is based on Dynamic Drive Test results only.

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

Parameter	AIRTEL	BSNL	RJIL	VIL
Number of successful Calls Established	54	56	54	55
Number of dropped Calls	0	7	0	1

Locations of Dropped Calls

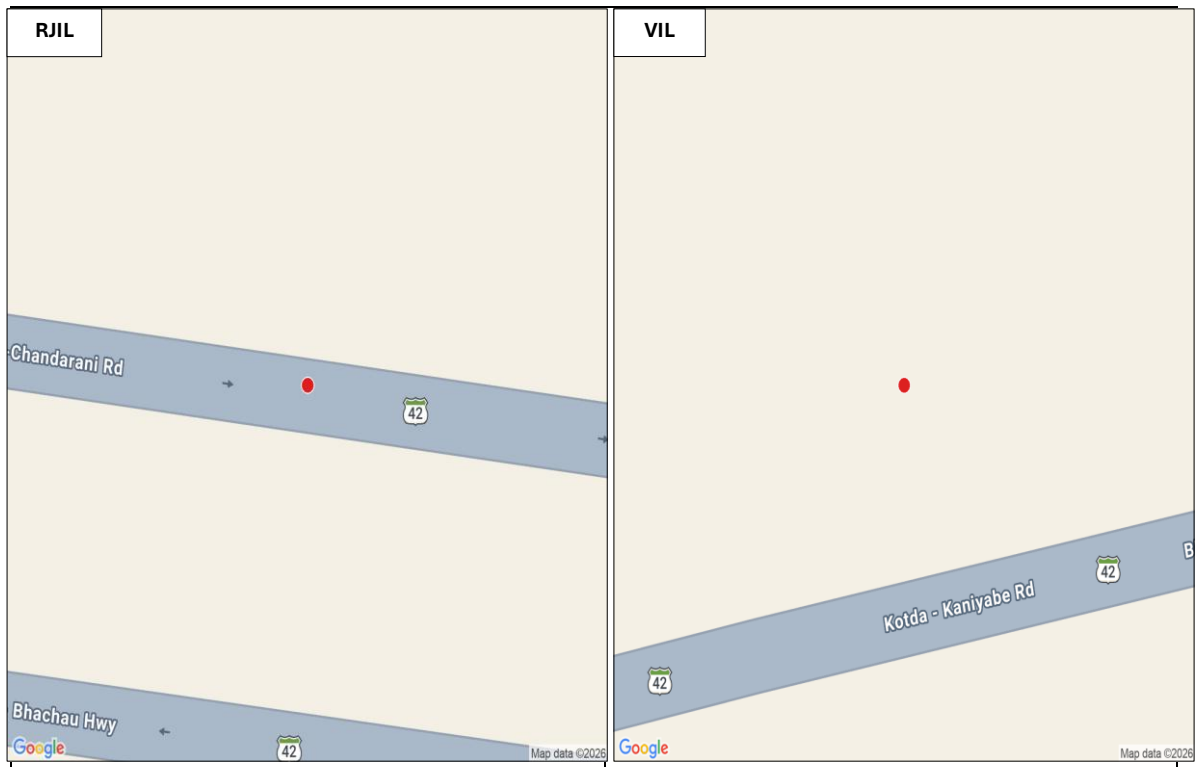


Note: Dropped calls locations are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the maps.

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)	53	61	52	55
Number of silences calls for >3 Sec	0	0	1	1
Total number of silence instances for >3 Sec	0	0	1	1

Locations of Call Silence Instance

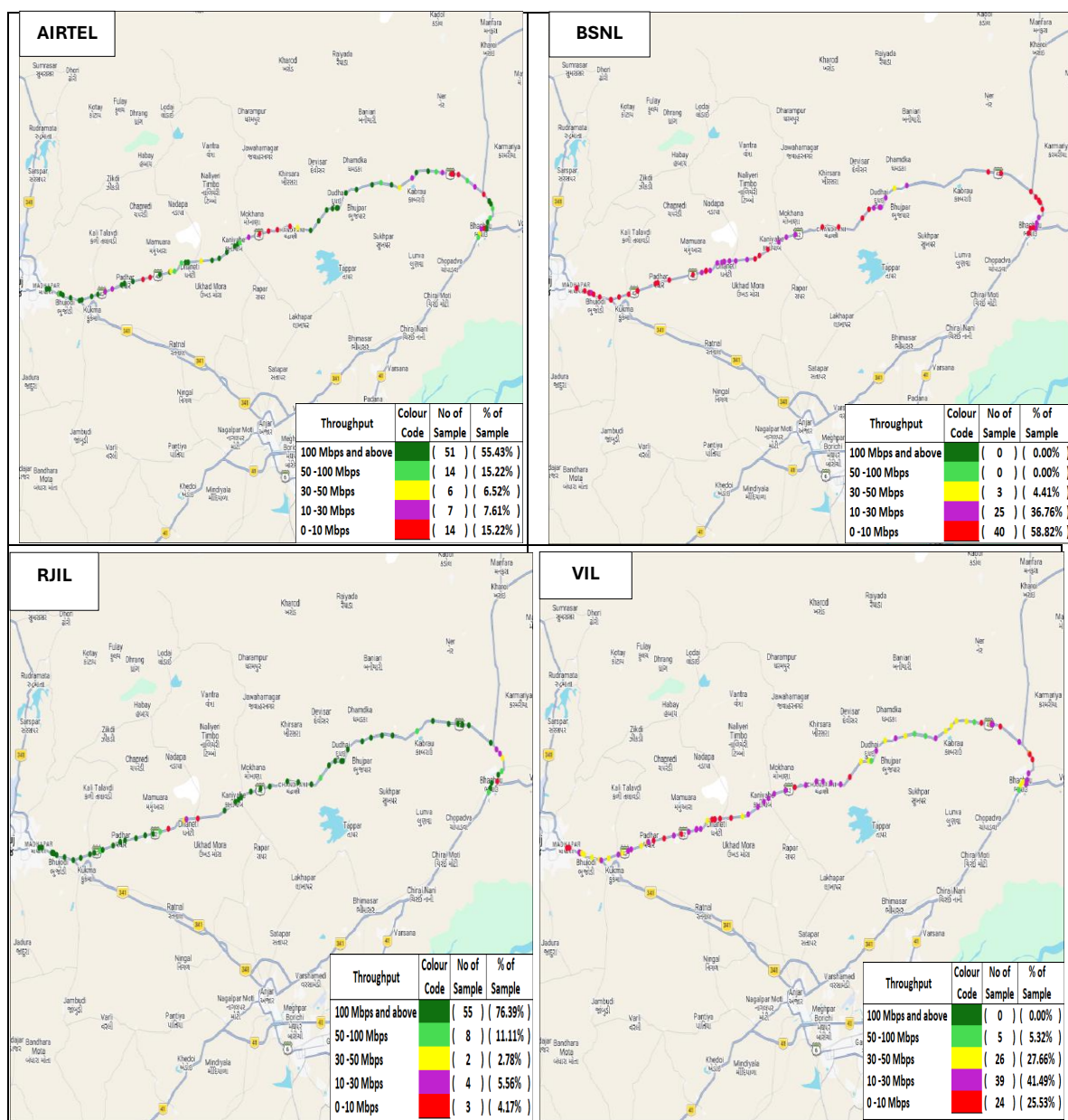


Note: Call silence instances are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map.

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

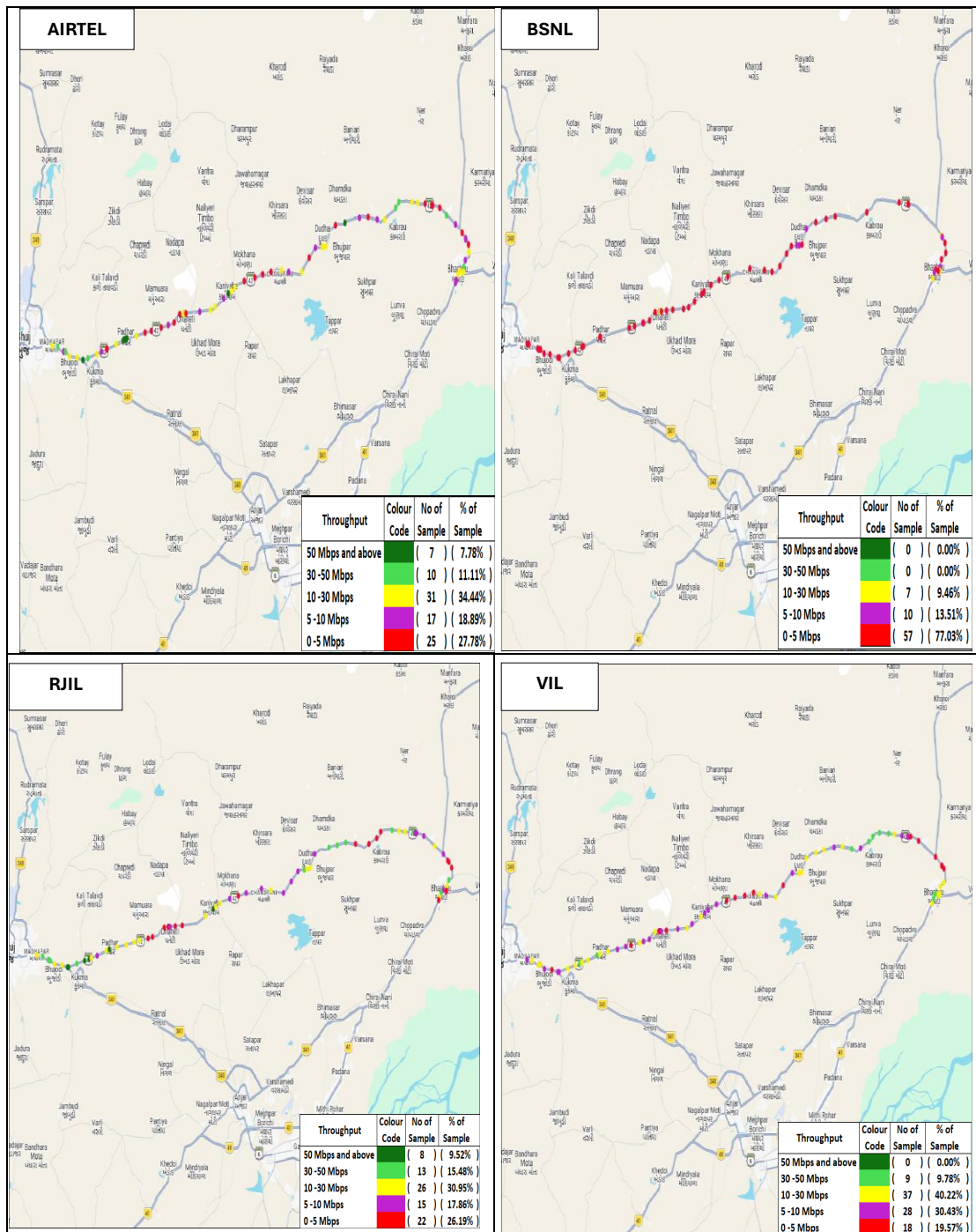
Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 5G)
Typical Download throughput declared by TSP	(Mbits/s)	23.00	5.00	15.00	15.00
Average Download Throughput measured during IDT	(Mbits/s)	139.15	10.66	241.22	22.97



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 5G)
Typical upload throughput declared by TSP	(Mbits/s)	10.00	3.00	7.00	8.00
Average Upload Throughput measured during IDT	(Mbits/s)	17.68	3.80	19.41	13.80



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