

Information Note to the Press (Press Release No 65./2026)

TELECOM REGULATORY AUTHORITY OF INDIA

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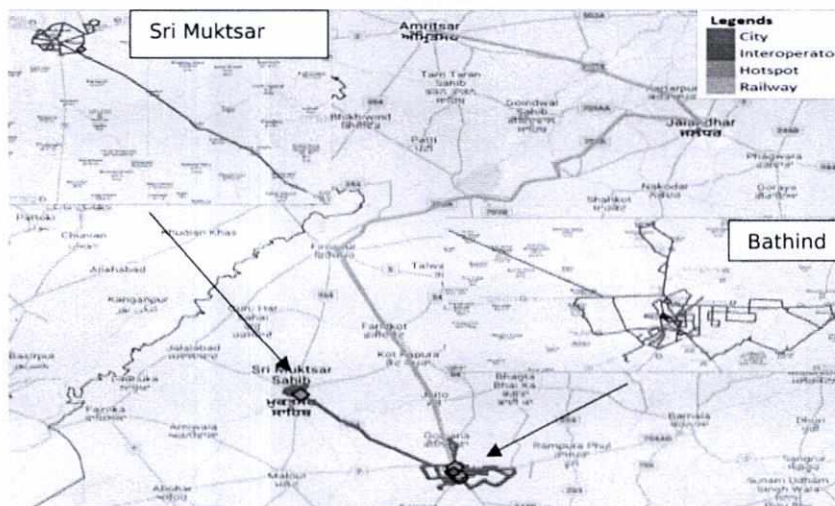
New Delhi, 01-06-2026

For Immediate Release

TRAI Assesses Mobile Network Quality across Bathinda, Sri Muktsar Sahib Cities & Amritsar to Bathinda Rail Route (in Punjab LSA)

The Telecom Regulatory Authority of India (TRAI) has released findings of Independent Drive Test (IDT) conducted across Bathinda, Sri Muktsar Sahib Cities & Amritsar to Bathinda Rail Route (in Punjab 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.

- 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.
- TRAI, through its appointed agency, conducted drive tests across City drive - 276.8 KMs, Hotspot locations - 06, Railway - 282.8 Kms during 16th March 2026 to 19th March 2026 in **Punjab LSA**. These tests were conducted under the supervision of the TRAI Regional Office Jaipur. 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.
- 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 **Bathinda, Sri Muktsar Sahib Cities & Amritsar to Bathinda Rail Route** for the key parameters has been summarised below:

I. Bathinda City:

- 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 **287/30694** for **Airtel**, **7669/29845** for **BSNL**, **378/30653** for **RJIL** and **283/ 30542** 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/ 275** for **Airtel**, **4/ 268** for **BSNL**, **1/276** for **RJIL** and **1/273** 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 **3/267** for **Airtel**, **1/266** for **RJIL** and **17/268** 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 **151.88 Mbps** for **Airtel (5G/4G)**, **14.55 Mbps** for **BSNL (4G)**, **198.27 Mbps** for **RJIL (5G/4G)** and **34.07Mbps** 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 **18.53 Mbps** for **Airtel (5G/4G)**, **5.70 Mbps** for **MTNL (3G)**, **14.19 Mbps** for **RJIL (5G/4G)** and **15.97 Mbps** for **VIL (5G/4G/2G)**. Detail of upload throughput has been provided in the map **Annexed**.

II. Sri Muktsar Sahib City:

- 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 **70/10777** for **Airtel**, **2180/9510** for **BSNL**, **148/10119** for

RJIL and **43/10123** 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 **0/91** for **Airtel**, **2/89** for **BSNL**, **1/91** for **RJIL** and **0/91** 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 **2/87** for **Airtel**, **3/88** for **RJIL** and **0/87** 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 **172.32 Mbps** for **Airtel (5G/4G)**, **18.20 Mbps** for **BSNL (4G)**, **222.90 Mbps** for **RJIL (5G/4G)** and **26.51 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 **11.02 Mbps** for **Airtel (5G/4G)**, **5.00 Mbps** for **BSNL (3G)**, **12.87 Mbps** for **RJIL (5G/4G)** and **13.19 Mbps** for **VIL (5G/4G/2G)**. Detail of upload throughput has been provided in the map **Annexed**.

III. Amritsar to Bathinda Rail Route:

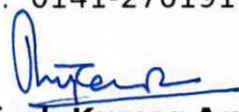
- a) **Coverage Gap** - The signal strength observed during voice testing on the drive test route in auto-selection mode (5G/4G/3G/2G), measured as the number of samples having poor signal strength out of the total samples collected, was **552/21422** for **Airtel**, **4959/20782** for **BSNL**, **287/21228** for **RJIL** and **571/20813** 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 **2/108** for **Airtel**, **8/109** for **BSNL**, **0/108** for **RJIL** and **0/91** for **VIL**. Details of the dropped call locations have been provided in the map **Annexed**
- c) **Data Download and Upload Throughput:**
- (i) **Data Download performance (Overall):** Average download speed was observed as **95.82 Mbps** for **Airtel (5G/4G)**, **18.36 Mbps** for **BSNL (4G/3G)**, **111.72 Mbps** for **RJIL (5G/4G)** and **11.11 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 **19.89 Mbps** for **Airtel (5G/4G)**, **7.82 Mbps** for **BSNL (4G/3G)**, **16.93 Mbps** for **RJIL (5G/4G)** and **13.60 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) **Bathinda City:** - Behman Diwana, Lal Singh Nagar, Ganpati Enclave, Jassi Pauwali, Tungwali, Bhucho Mandi, Guru Gobind Singh Nagar, Bhokra, Goniana, Nehian Wala, Buladewala, Killi Nihal Singhwali and Kothe Chet Singh etc.
 - b) **Sri Muktsar Sahib City:** - Bhalaiana, Buttar Sarinh, Lohara, Doda, Bhullar, New Grain Market, Subash Nagar, Guru Teg Bahadur Nagar, Udekaran and Guru Anand Dev Nagar etc.
 - c) **Railway Route:** - Amritsar to Bathinda Via Beas Jn, Jalandhar City Jn, Kapurthala, Kapurthala Rail Coach Factory, Sultanpur Lodhi, Lohian Khas Jn, Makhu, Firozpur Cantt Jn, Faridkot, Kot Kapura Jn and Gangsar Jaito.
7. 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@traai.gov.in Regional Office of TRAI at Jaipur RO can be contacted on telephone no. 0141-2701919.

Encl: Annexure


(Rajesh Kumar Agerwal) 1/6/26
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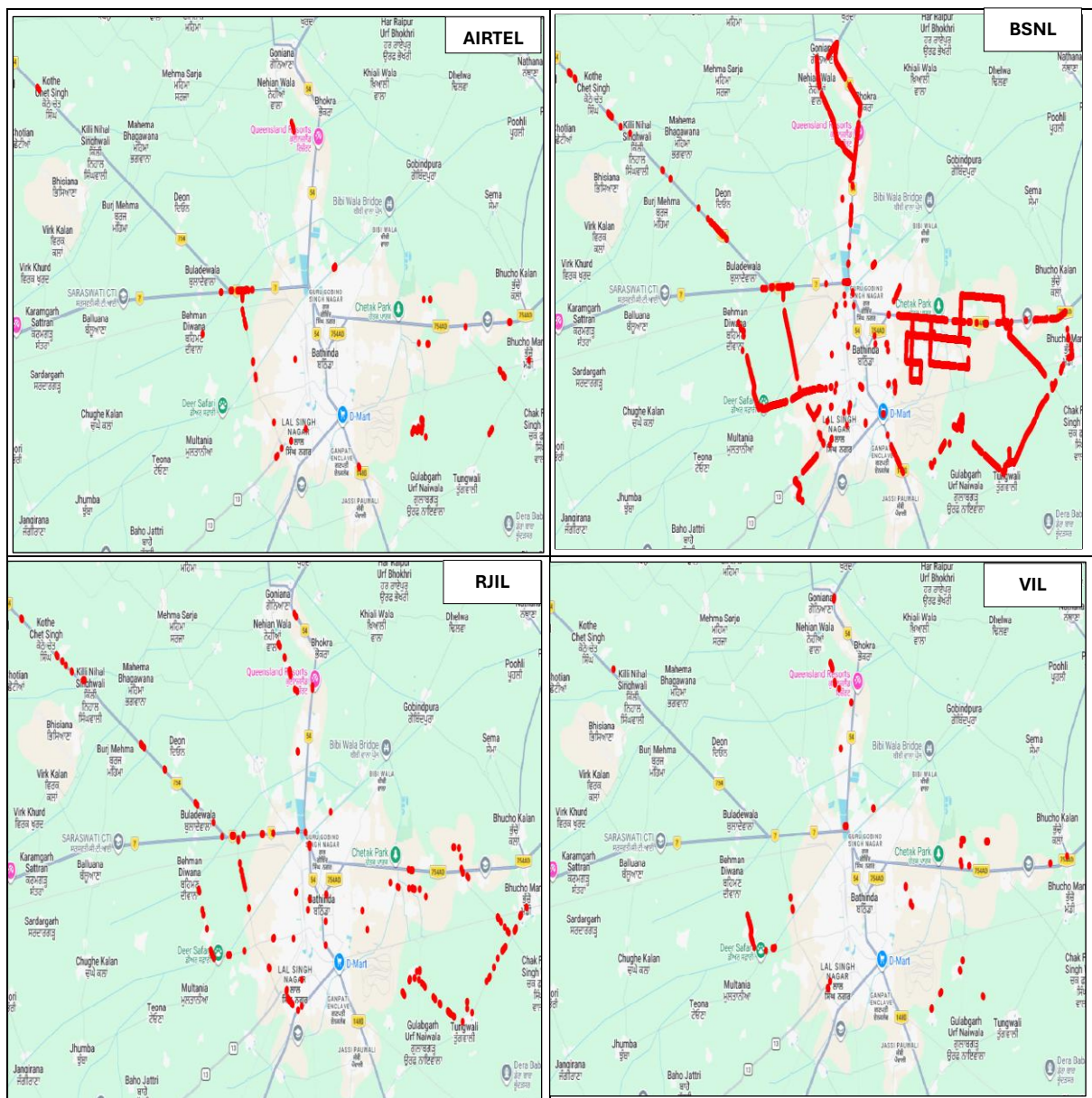
1. Bathinda City:

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	30694	29845	30653	30542
Number of Samples having poor signal strength	287	7669	378	283

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 in Bathinda City



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	275	268	276	273
Number of dropped Calls	0	4	1	1

Locations of Dropped Calls in Bathinda City



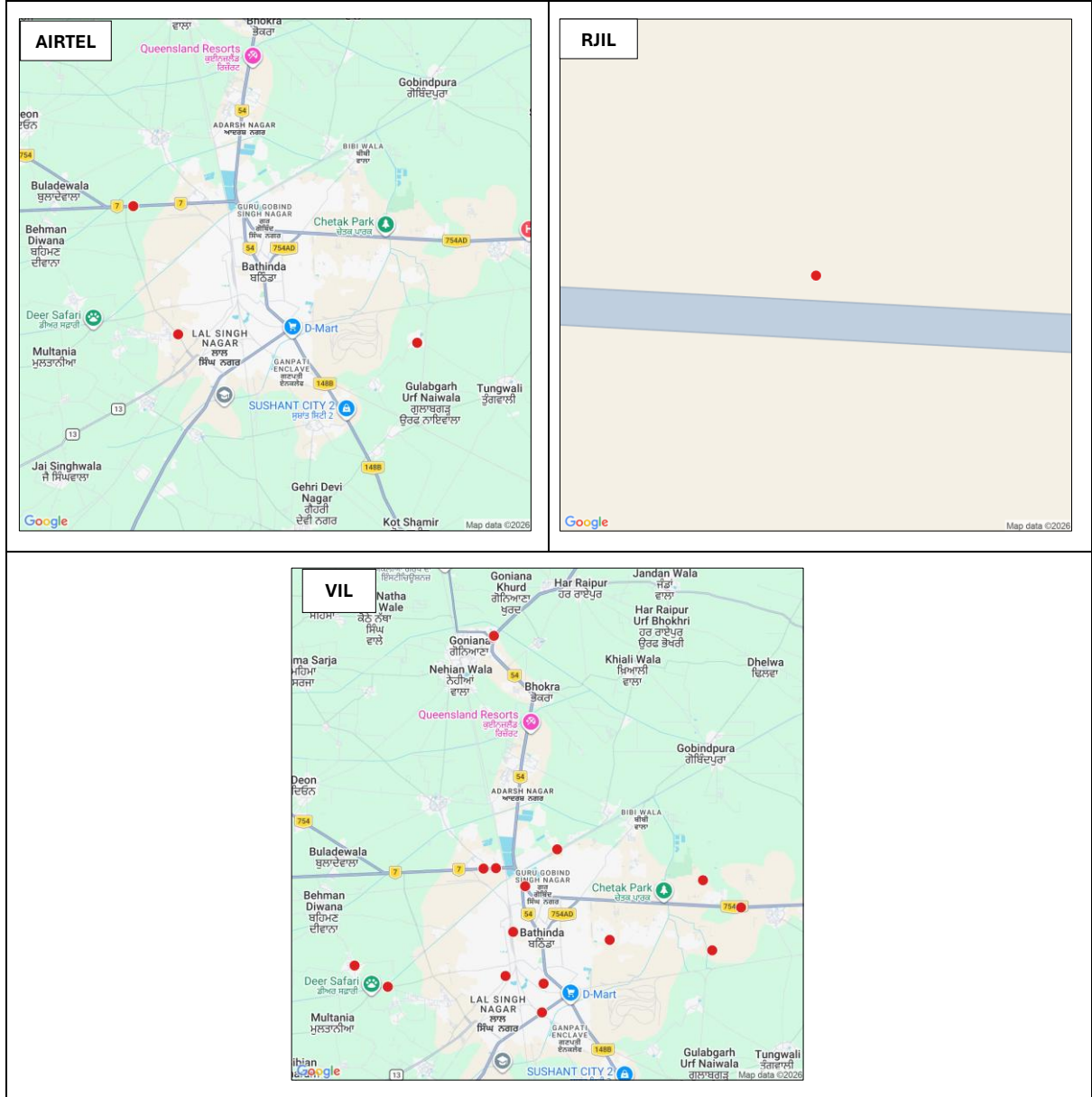
Note: Dropped calls locations are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map

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)	267	NA*	266	268
Number of silences calls for >3 Sec	3	NA*	1	14
Total number of silence instances for >3 Sec	3	NA*	1	17

* NA – Not Applicable

Locations of Call Silence Instance in Bathinda City

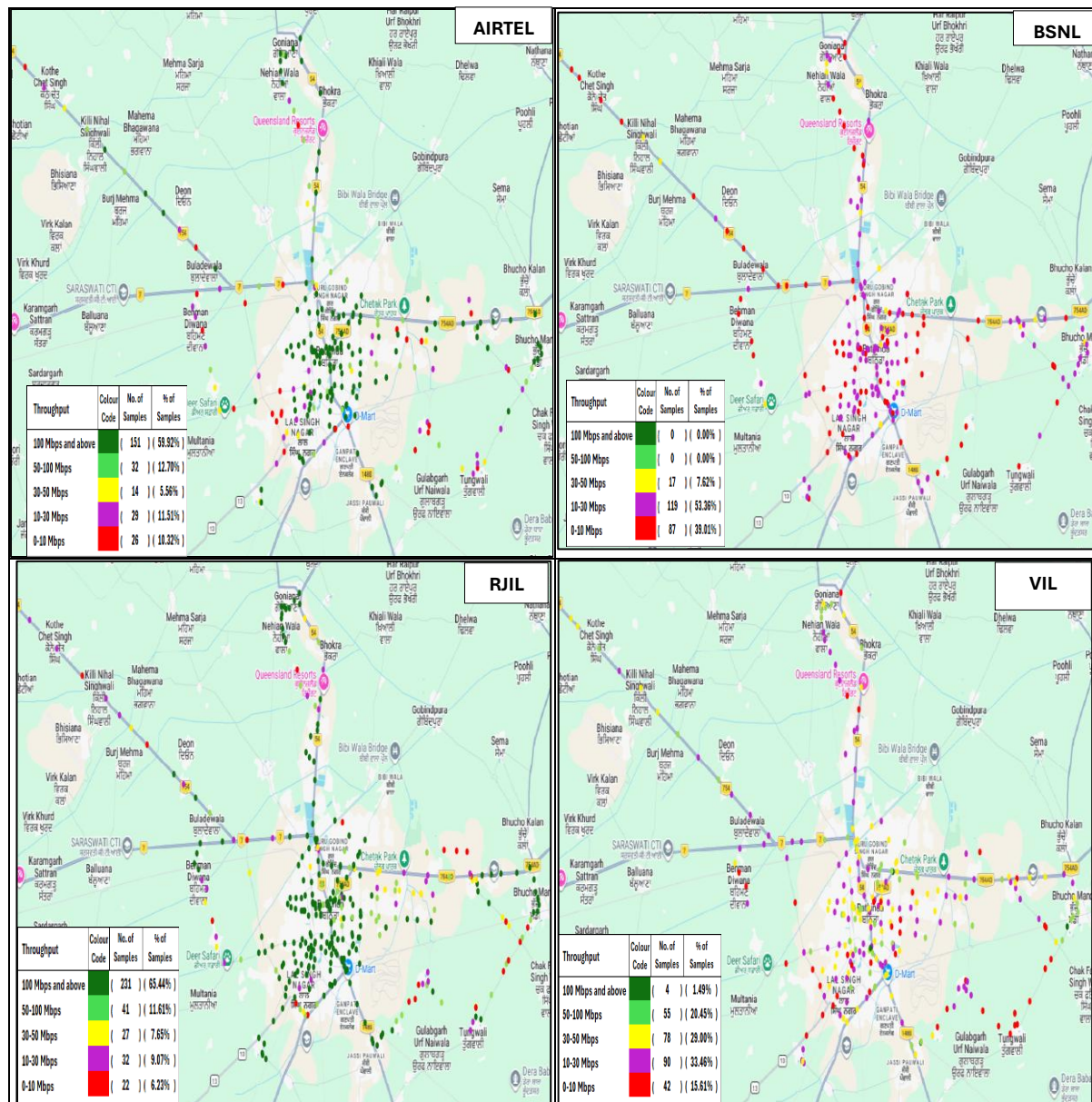


Note: Call silence instances are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map

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 in Bathinda City**

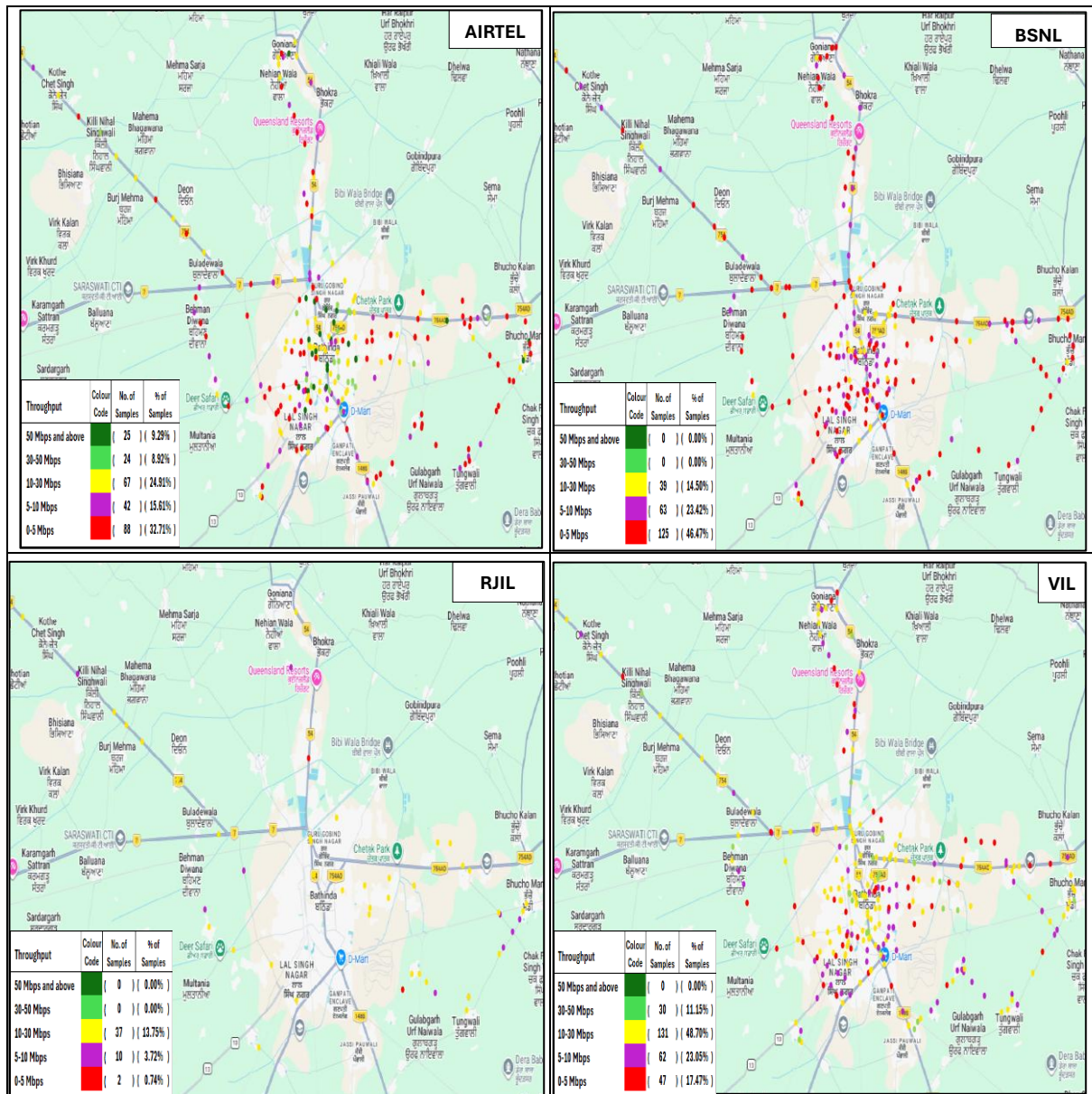
Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 4G)
Typical Download throughput declared by TSP	(Mbits/s)	18.36	5.00	15.00	15.00
Average Download Throughput measured during IDT	(Mbits/s)	151.88	14.55	198.27	34.07



Note: Plot is based on Dynamic Drive Test results only

(ii) Upload Throughput in Bathinda City

Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 4G)
Typical upload throughput declared by TSP	(Mbits/s)	0.68	3.00	7.00	8.00
Average Upload Throughput measured during IDT	(Mbits/s)	18.53	5.70	14.19	15.97



Note: Plot is based on Dynamic Drive Test results only

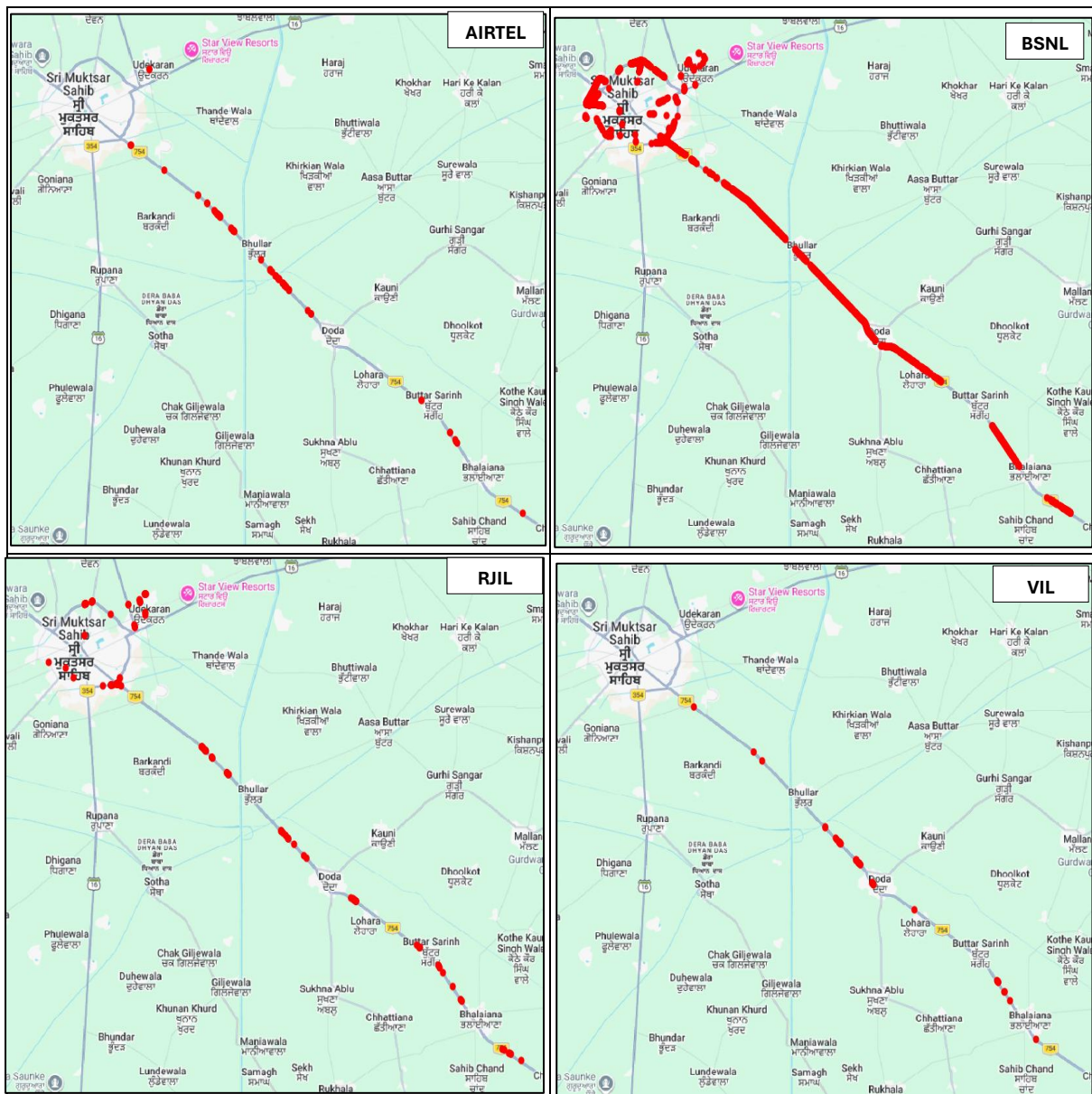
2. Sri Muktsar Sahib City:

- 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	10177	9510	10119	10123
Number of Samples having poor signal strength	70	2180	148	43

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 in Sri Muktsar Sahib City

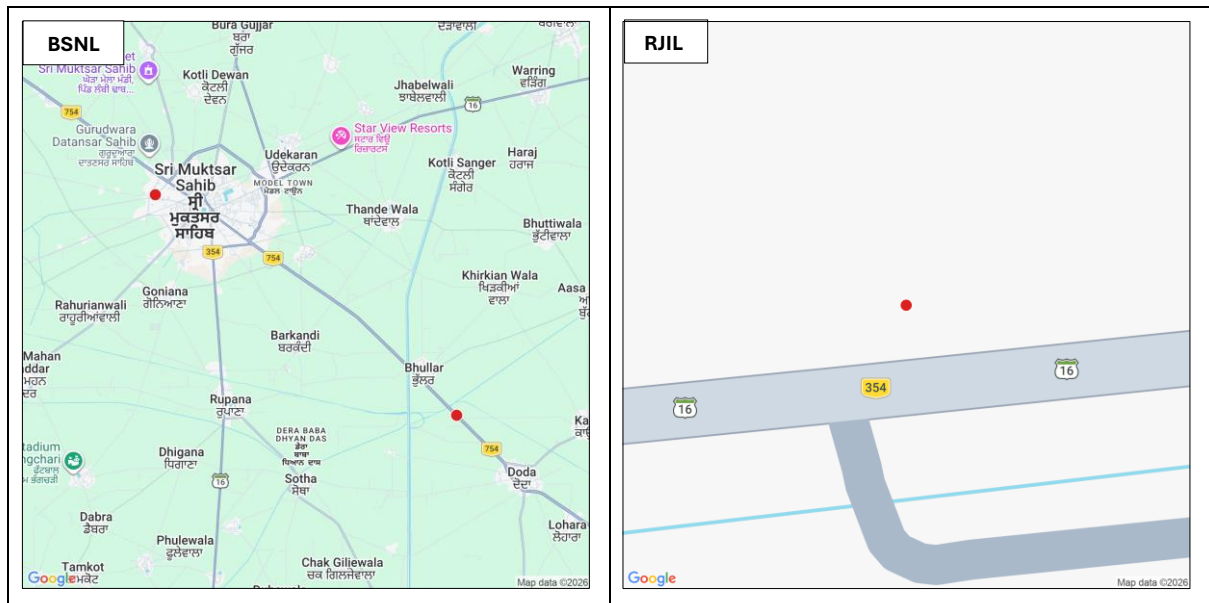


Note: Plot is based on Dynamic Drive Test results only

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	91	89	91	91
Number of dropped Calls	0	2	1	0

Locations of Dropped Calls in Sri Muktsar Sahib City



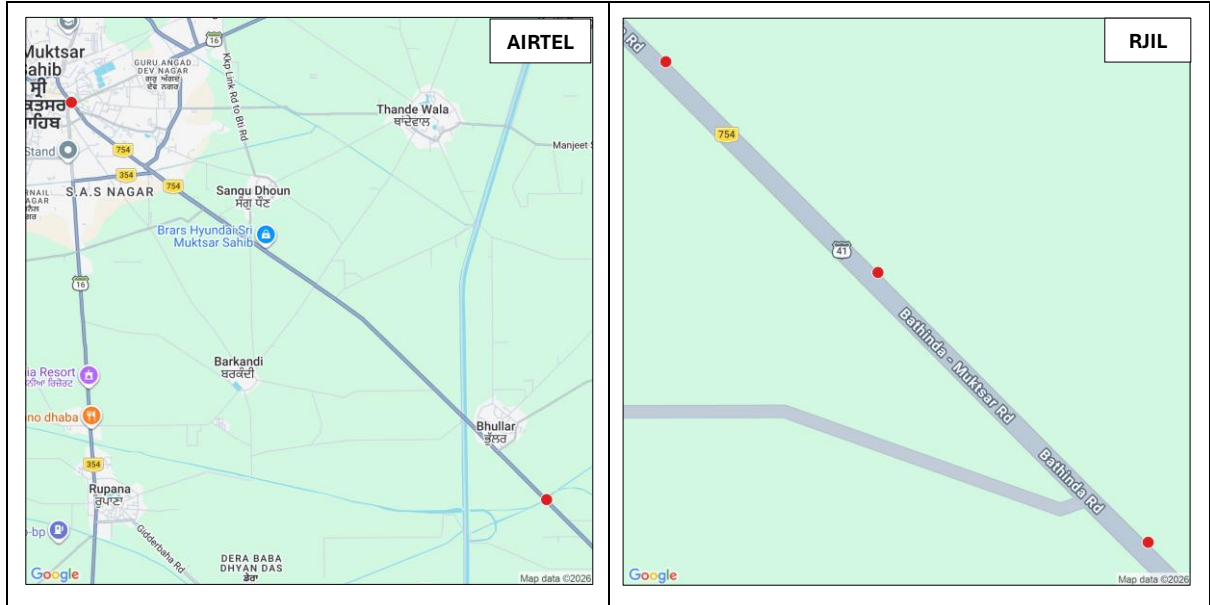
Note: Dropped calls locations are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map

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)	87	NA*	88	87
Number of silences calls for >3 Sec	2	NA*	1	0
Total number of silence instances for >3 Sec	2	NA*	3	0

* NA – Not Applicable

Locations of Call Silence Instance in Sri Muktsar Sahib City

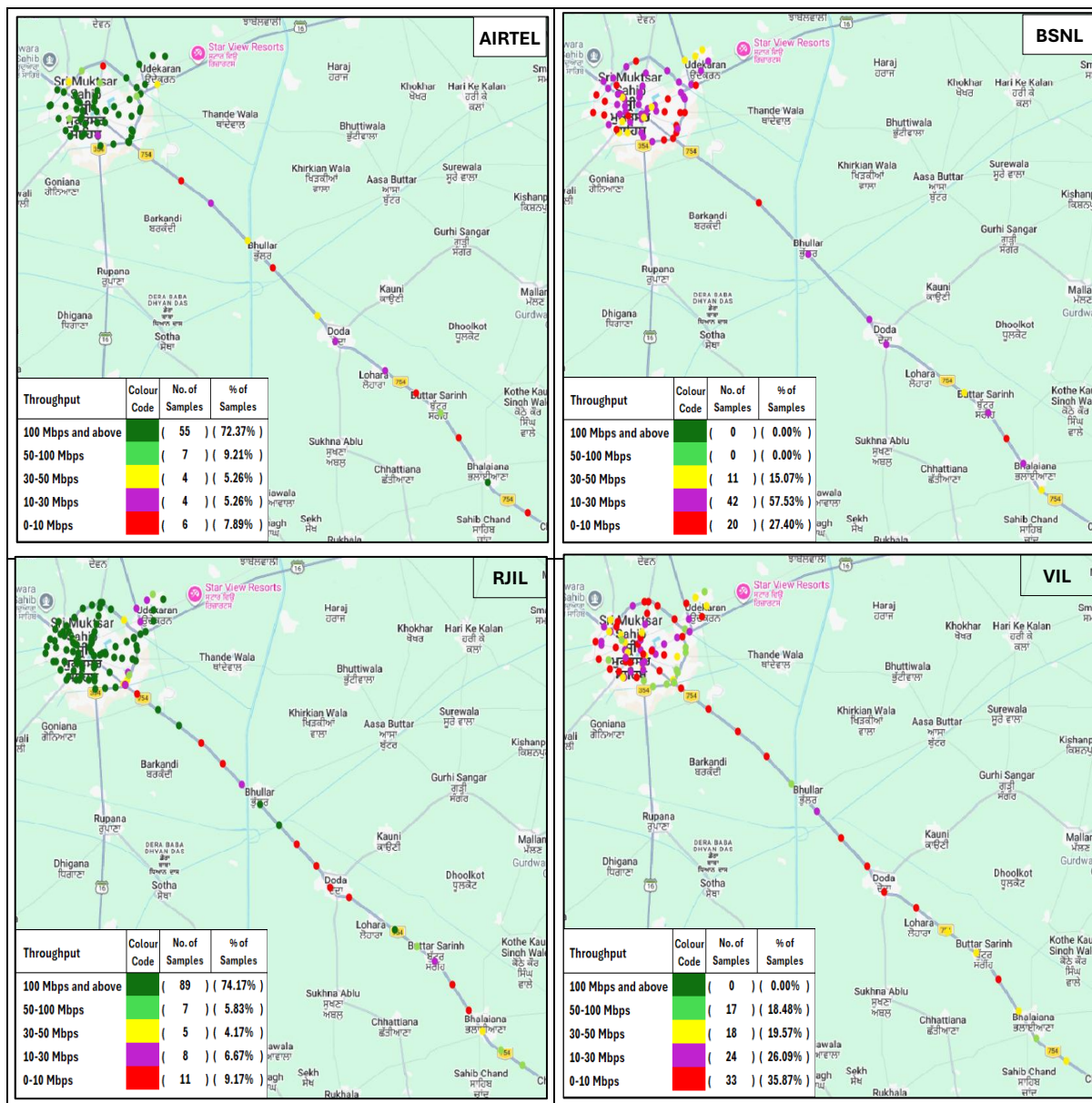


Note: Call silence instances are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map

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 in Sri Muktsar Sahib City**

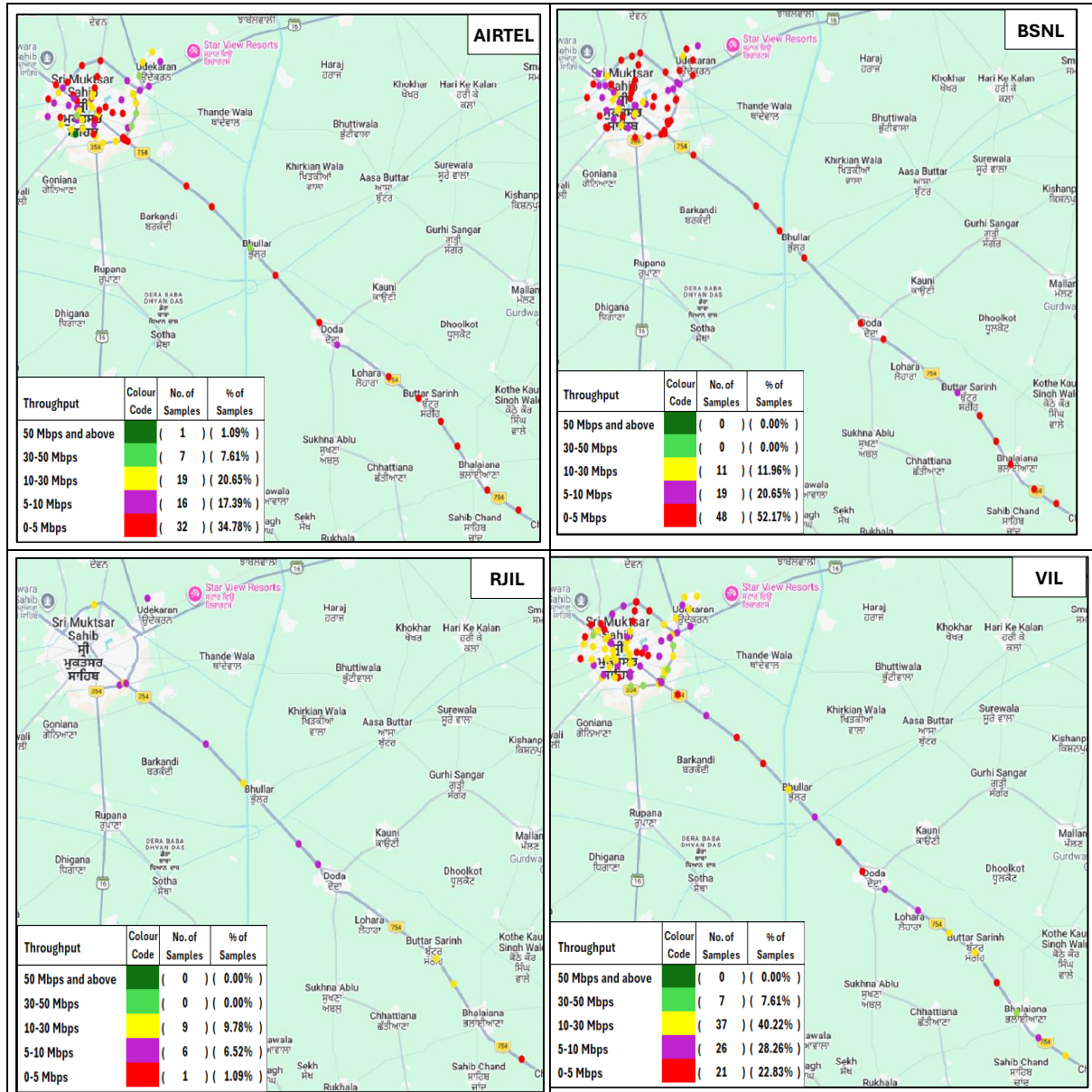
Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 4G)
Typical Download throughput declared by TSP	(Mbits/s)	18.36	5.00	15.00	15.00
Average Download Throughput measured during IDT	(Mbits/s)	172.32	18.20	222.90	26.51



Note: Plot is based on Dynamic Drive Test results only

(ii) Upload Throughput in Sri Muktsar Sahib City

Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 4G)
Typical upload throughput declared by TSP	(Mbits/s)	0.68	3.00	7.00	8.00
Average Upload Throughput measured during IDT	(Mbits/s)	11.02	5.00	12.87	13.19



Note: Plot is based on Dynamic Drive Test results only

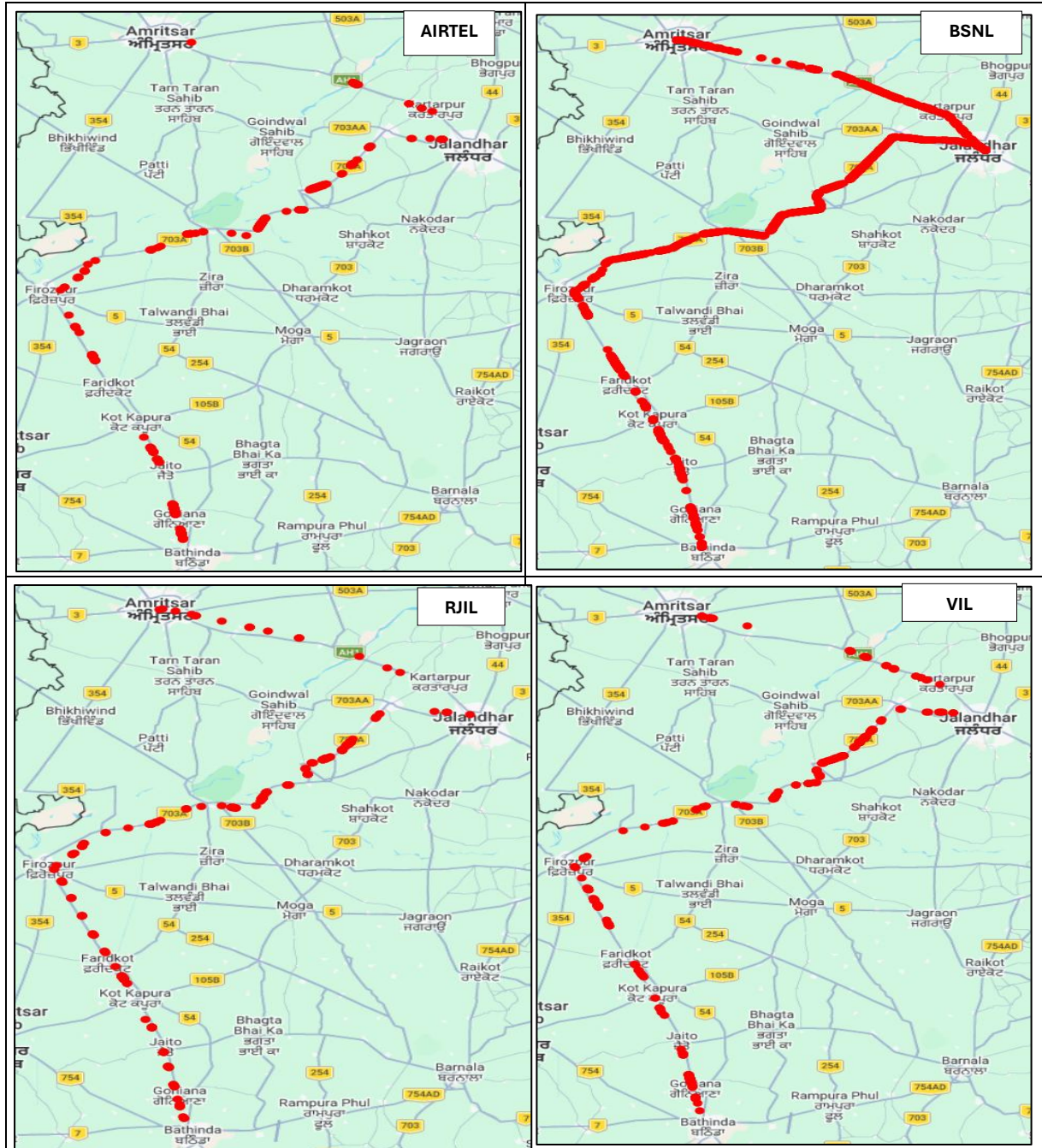
3. Amritsar to Bathinda Railway Route:

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	21422	20782	21228	20813
Number of Samples having poor signal strength	552	4959	287	571

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 on Amritsar to Bathinda Railway Route

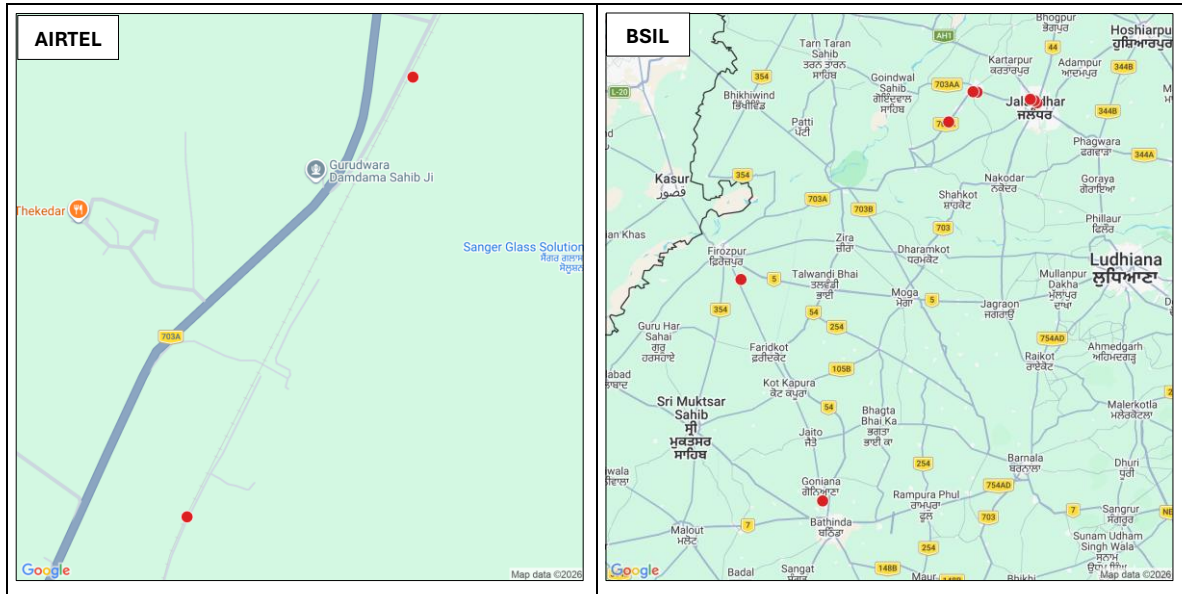


Note: Plot is based on Dynamic Drive Test results only

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	108	109	108	91
Number of dropped Calls	2	8	0	0

Locations of Dropped Calls on Amritsar to Bathinda Railway Route

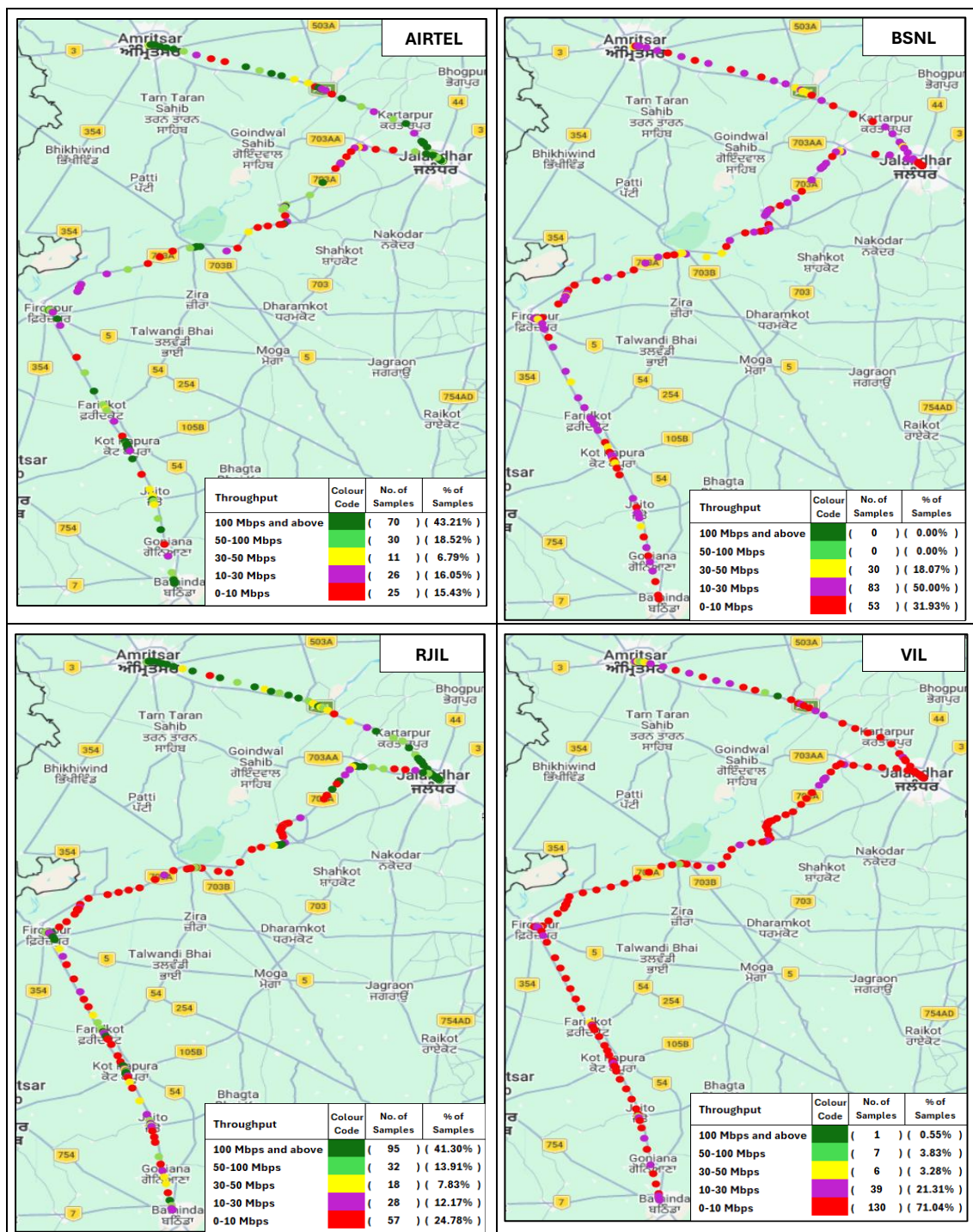


Note: Dropped calls locations are shown in red colour and which can be clicked to know the exact location (latitude and longitude) on the map

c) **Data Download and Upload throughput on Amritsar to Bathinda Railway Route:** 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 on Amritsar to Bathinda Railway Route**

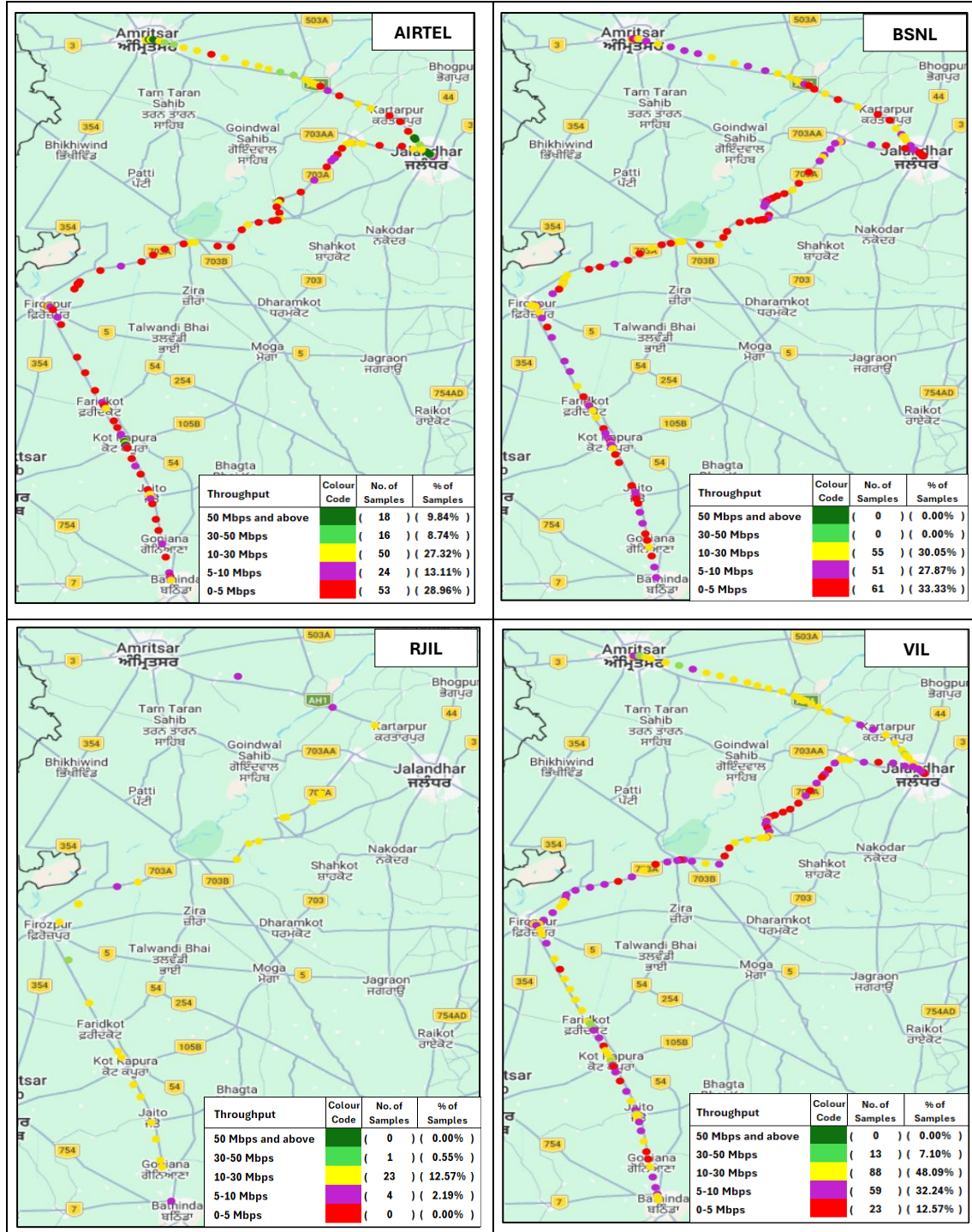
Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 4G)
Typical Download throughput declared by TSP	(Mbits/s)	18.36	5.00	15.00	15.00
Average Download Throughput measured during IDT	(Mbits/s)	95.82	18.36	111.72	11.11



Note: Plot is based on Dynamic Drive Test results only

(ii) Upload Throughput on Amritsar to Bathinda Railway Route

Parameter	Measured in	AIRTEL (upto 5G)	BSNL (upto 4G)	RJIL (upto 5G)	VIL (upto 4G)
Typical upload throughput declared by TSP	(Mbits/s)	0.68	3.00	7.00	8.00
Average Upload Throughput measured during IDT	(Mbits/s)	19.89	7.82	16.93	13.60



Note: Plot is based on Dynamic Drive Test results only