Operator Assisted Drive Test Report Chhindwara-City and nearby Area
10/06/2025 to 11/06/2025
By
TRAI Regional Office Bhopal

The Operator Assisted Drive Test has been carried out by Regional Office, Bhopal with the help of Telecom Service Providers for Chhindwara City and surrounding areas from 9:00 AM to 8:00 PM from 10/06/2025 to 11/06/2025. The drive test covered drive route of around 150 KMs.

TSP	Network tested
Airtel	2G & VoLTE
BSNL	2G & 3G
JIO	VoLTE
VIL	2G, VoLTE

Key Performance Indicators:

KPI	Benchmark	Observations
Drop call rate %	≤2%	All TSPs achieved the Benchmark
CSSR %	≥98 %	All TSPs achieved the Benchmark
Mobility HOSR %	≥95%	All TSPs achieved the Benchmark
Good RX Quality %	≥95%	All TSPs achieved the Benchmark except Airtel in VoLTE

Overview

Regional Office, TRAI Haridwar-Rishikesh conducted Operator Assisted Drive Test. The performance of Airtel, BSNL, Vodafone Idea and Jio was monitored across various technologies (2G, 3G,4G & 5G). The test results obtained from these drive tests were utilized to assess the network quality for Voice and Data services.

Voice: Coverage, Quality, Handover Success Rate, Call Setup Success Rate, Drop Call Rate and Block Call Rate.

Data: Download Throughputs

Drive Test Details :
Voice Tests:
i.   2G – measurement – UE Locked in 2G
ii.   3G – measurement – UE in Dual mode (2G and 3G)
iii. 4G – measurement – UE in Free mode

Calls were made for the **90-sec** duration with a wait time of **10 sec** between calls in all technologies.

Data Tests:
**Dynamic data –** repeat data file download (to check throughput on the entire route)

i.   3G – measurement – UE in 3G   File Size- 20MB
ii.   4G – measurement – UE in LTE File Size- 40MB
iii. 5G – measurement – UE in 5G File Size- 200MB
Static Data: Download and Upload Throughputs, Web Browsing Delay, Video Streaming Delay, and Latency
i.   Download- 3G - 20 MB, 4G - 40MB, 5G -200 MB
ii.   Upload - 3G - 5 MB, 4G - 10MB, 5G – 100 MB
iii. Web browsing -   3 links of e-commerce websites https://www.amazon.in, https://www.flipkart.com, https://paytm.com.
iv.   Video Streaming – 130 sec clip
v.   Latency – 32 Bytes on www.google.com.

Overview

Voice & Dynamic Data Test Drive Route
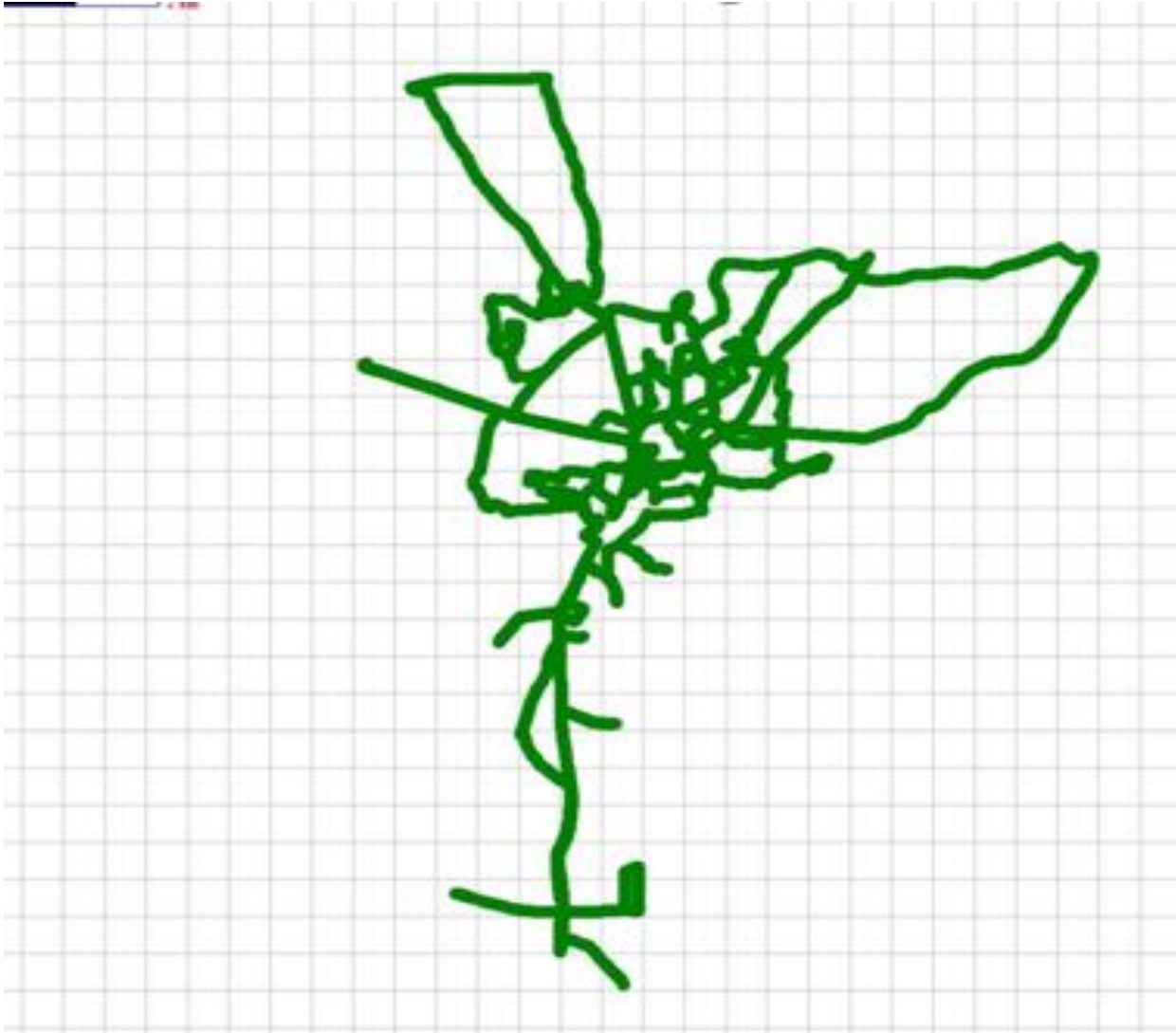
List of important area covered during the drive test
VIP Road, Dharm Tekri,Seoni Road,Police line Chhindwara,Samta colony,
Railways Station Road, Sanchai Colony
Fubbara Chowk,MP EB Office area,Rajpal Chowk,Collector office Road,
Itwari Bazar,Sharda Chowk,Priya darsni Colony,Gauraiya Road

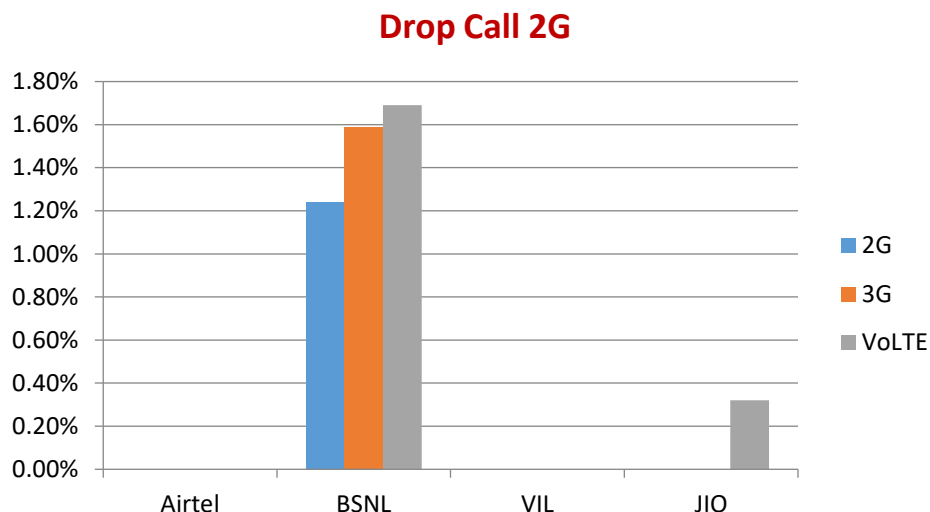## Data Service Test- Static Locations

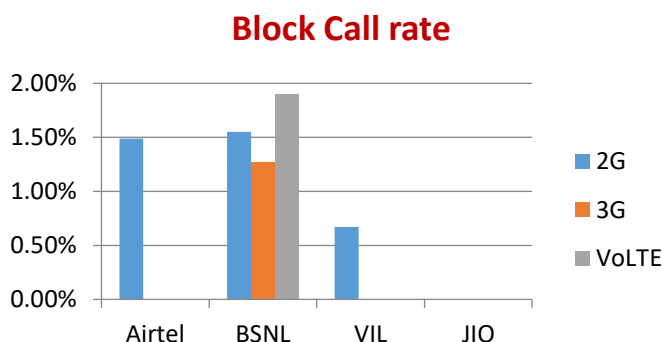| Hotspot Locations |
| --- |
| 1. Bus Stand Chhindwara |
| 2. Railway Station Chhindwara |
| 3. Badal Bhoi Tribal Museum Chhindwara |
| 4. Venkatesh Mall Chhindwara |
| 5. Danielson Degree College Chhindwara |

Voice Calls

QoS **compliance** of the TSPs   for Voice across technologies 2G/3G/4G-VoLTE:

Drop Call Rate (%)

Drop Call 2G

Block Call Rate (%)

Block Call rate

KPIs	2G			3G	VoLTE			
	Airtel	BSNL	VIL	BSNL	Airtel	BSNL	RJIL	VIL
Drop Call Rate %	0	1.24	0	1.59	0	1.69	0	0.32
Block Call Rate %	1.49	1.55	0.67	1.27	0	1.9	-	0

a) All TSPs have met the 2% QOS benchmark of Drop Call Rate (DCR%)

Voice Calls

Coverage

a) Percentage of coverage samples for 2G **≥** -85 dBm.

TSPs	2G		
	Airtel	BSNL	VIL
Coverage %	86.25	97.89	95.28

b) Percentage of coverage samples for 3G ≥ -90 dBm

TSPs	3G
	BSNL
Coverage %	98.33

b) Percentage of coverage samples for LTE ≥ -110 dBm.

TSPs	VoLTE			
	Airtel	BSNL	JIO	VIL
Coverage %	99.81	97.21	99.98	97.46

c) Percentage of time spent on 3G/4G network

TSPs	3G	VoLTE			
	BSNL	Airtel	BSNL	VIL	JIO
Time Spent on 3G/4G %	12.85	100	87.15	9.8	100%

Data Services Dynamic

Dynamic Data -Download Throughput was tested.

Data Download Performance – Dynamic 3G/4G/ 5G Network

■ Avg Download Throughput 4G   ■ Avg Download Throughput 3G

Dynamic Data Avg. Download Throughput (Mbps)
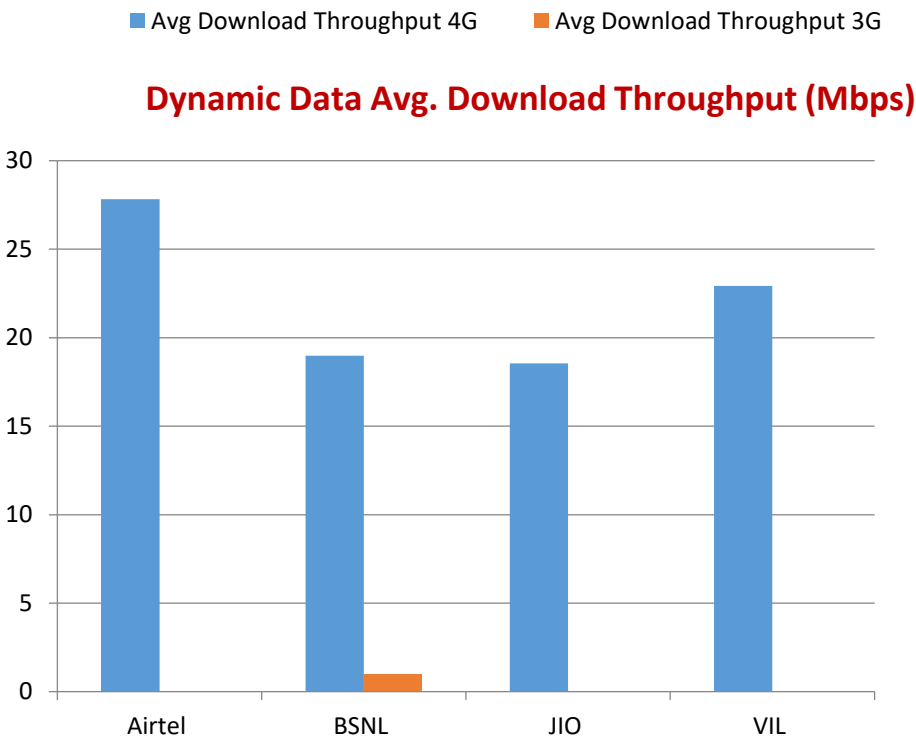
TSP	Airtel	BSNL	JIO	VIL
Average Download throughput- 3G In Mbps	-	1	-	-
Average Download throughput-LTE in Mbps	27.82	18.98	18.55	22.92

Summary

TSP (For 2G)	Airtel	BSNL	VIL
Call attempts	403	327	295
Block call rate %	1.49	1.55	0.67
CSSR %	98.51	98.47	99.33
Drop call rate %	0	1.24	0
Mobility HOSR %	96.68	95.83	98.18
RX Quality %	95.66	97.68	97.4
Average CST Sec	3.22	0.62	2.53

TSP (For 3G)	BSNL
Call attempts	318
Block call rate %	1.27
CSSR %	98.74
Drop call rate %	1.59
Mobility HOSR %	95.56
RX Quality %	96.93
Average CST (Sec)	0.52

TSP (For Volte)	Airtel	BSNL	JIO	VIL
Call attempts	448	315	298	312
Block call rate %	0	1.9	-	0
CSSR %	100	98.09	100	100
Drop call rate %	0	1.69	0	0.32
Mobility HOSR %	97.95	98.96	99.76%	100
RX Quality %	89.92	94.8	99.66%	95.52
Average CST(Sec)	1.22	1.48	0.86	0.74

Summary

TSP (For 3G)	BSNL
Download throughput in Mbps	5.43
Upload Throughput in Mbps	2.75
Video streaming delay in sec	1.4
Web browsing delay in second	0.501
Latency in (msec)	72

| TSP (For LTE)	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	39.34	16.42	35.51	22.92
Upload Throughput in Mbps	12.29	10.17	7.39	20.66
Video streaming delay in sec	1.06	1.2	0.70	1.06
Web browsing delay in second	2.32	0.410	0.89	5.80
Latency in (msec)	71.4	53	32	72.3

Data was tested at 6 locations .Following services were tested: Data Download/Upload, Latency (www.google.com), and Web browsing (Flipkart, Amazon, PayTm)
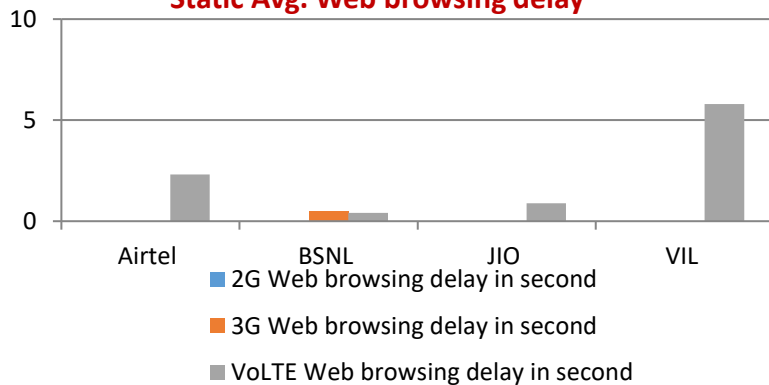
3G/4G/ 5G Network

Static Avg. Data download throughput

- 2G Download throughput in Mbps
- 3G Download throughput in Mbps
- VoLTE Download throughput in Mbps
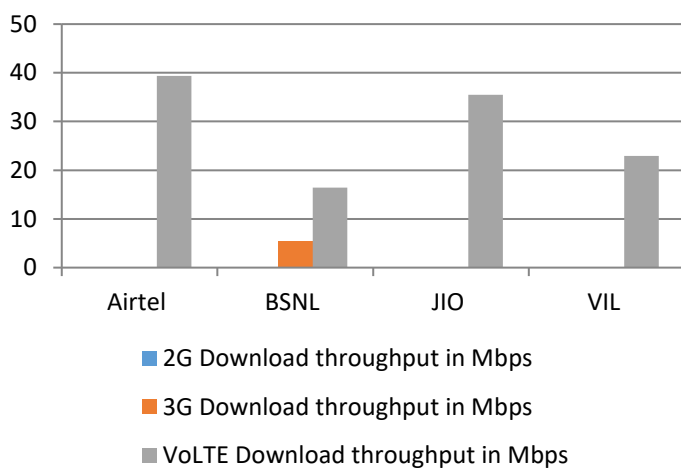
Static Avg. Data Upload Throughput

- 2G Upload Throughput in Kbps
- 3G Upload Throughput in Mbps
- VoLTE Upload Throughput in Mbps
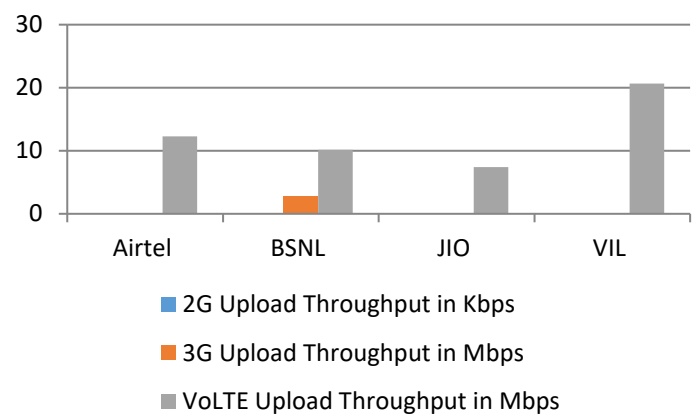
Static Avg. Web browsing delay

- 2G Web browsing delay in second
- 3G Web browsing delay in second
- VoLTE Web browsing delay in second

Static Avg. Latency

- 2G Latency in (msec)
- 3G Latency in (msec)
- VoLTE Latency in (msec)

Stativ Avg. Video Streaming Delay

- 3G Video streaming delay in sec
- VoLTE Video streaming delay in sec
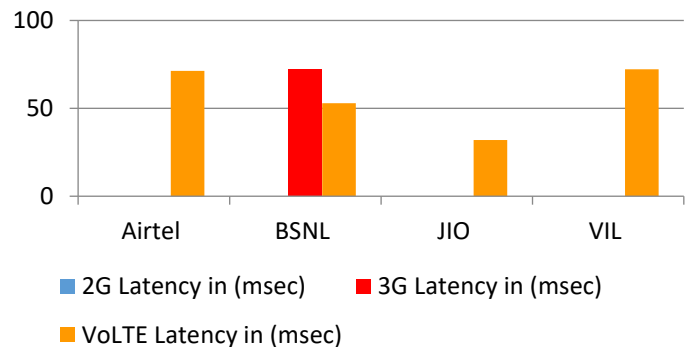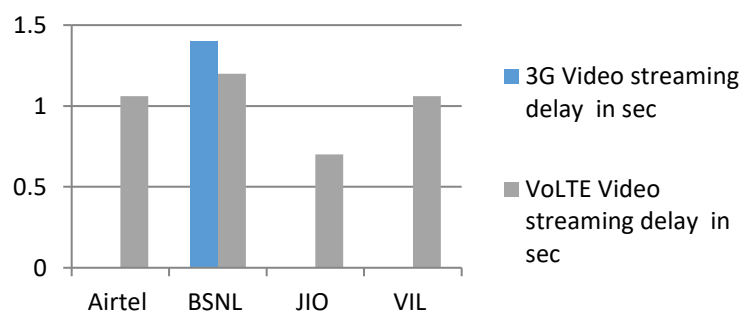
1. Hotspot Location- Bus Stand Chhindwara

	3G			
	Airtel	**BSNL**	**JIO**	**VIL**
Download throughput in Mbps	NA	3.4	NA	NA
Upload Throughput in Mbps	NA	1.8	NA	NA
Video streaming delay in sec	NA	1.5	NA	NA
Web browsing delay in second	NA	0.794	NA	NA
Latency in (msec)	NA	80	NA	NA

	LTE			
	Airtel	**BSNL**	**JIO**	**VIL**
Download throughput in Mbps	31.54	28.6	25.40	29.21
Upload Throughput in Mbps	6.88	6.83	3.89	13.49
Video streaming delay in sec	0.98	1.2	0.84	0.94
Web browsing delay in second	2.16	0.430	0.88	7.2
Latency in (msec)	71	53	27	67

2. Hotspot Location- Railway Station Chhindwara

	3G			
	Airtel	**BSNL**	**JIO**	**VIL**
Download throughput in Mbps	NA	2.48	NA	NA
Upload Throughput in Mbps	NA	1.68	NA	NA
Video streaming delay in sec	NA	1.8	NA	NA
Web browsing delay in second	NA	0.932	NA	NA
Latency in (msec)	NA	73	NA	NA

	LTE			
	Airtel	**BSNL**	**JIO**	**VIL**
Download throughput in Mbps	28.51	15.914	**37.99**	33.58
Upload Throughput in Mbps	5.23	9.06	**6.27**	9.09
Video streaming delay in sec	0.87	1.4	**0.96**	1.18
Web browsing delay in second	2.15	0.438	**1.15**	5.7
Latency in (msec)	67	66	**38**	44

3. Hotspot Location- Badal Bhoi Tribal Museum Chhindwara

	3G			
	Airtel	**BSNL**	**JIO**	**VIL**
Download throughput in Mbps	NA	4.12	NA	NA
Upload Throughput in Mbps	NA	2.4	NA	NA
Video streaming delay in sec	NA	1.9 .	NA	NA
Web browsing delay in second	NA	0.570	NA	NA
Latency in (msec)	NA	67	NA	NA

	LTE			
	Airtel	**BSNL**	**JIO**	**VIL**
Download throughput in Mbps	45.39	21.21	20.51	27.73
Upload Throughput in Mbps	16.04	5.41	4.67	9.48
Video streaming delay in sec	1.1	1.4	0.74	1.11
Web browsing delay in second	1.83	0.375	0.73	6.78
Latency in (msec)	74	70	36	69

4. Hotspot Location- Venkatesh Mall Chhindwara

	3G			
	Airtel	**BSNL**	**JIO**	**VIL**
Download throughput in Mbps	NA	3.85	NA	NA
Upload Throughput in Mbps	NA	2.1	NA	NA
Video streaming delay in sec	NA	1.9	NA	NA
Web browsing delay in second	NA	0.593	NA	NA
Latency in (msec)	NA	70	NA	NA

	LTE			
	Airtel	**BSNL**	**JIO**	**VIL**
Download throughput in Mbps	39.31	10.22	**68.05**	36.89
Upload Throughput in Mbps	12.39	3.4	**13.53**	19.67
Video streaming delay in sec	0.97	1.5	**0.47**	1.10
Web browsing delay in second	2.85	0.412	**0.90**	6.88
Latency in (msec)	70	65	**29**	73

5. Hotspot Location- Danielson Degree College Chhindwara

	3G			
	Airtel	**BSNL**	**JIO**	**VIL**
Download throughput in Mbps	NA	3.01	NA	NA
Upload Throughput in Mbps	NA	2.9	NA	NA
Video streaming delay in sec	NA	1.6	NA	NA
Web browsing delay in second	NA	0.502	NA	NA
Latency in (msec)	NA	64	NA	NA

	LTE			
	Airtel	**BSNL**	**JIO**	**VIL**
Download throughput in Mbps	51.94	11.474	**25.59**	24.83
Upload Throughput in Mbps	20.93	5.96	**8.61**	10.61
Video streaming delay in sec	1.4	1.14	**0.51**	0.87
Web browsing delay in second	2.63	0.410	**0.80**	5.49
Latency in (msec)	75	70	**31**	71

RF Coverage relates to the geographical footprint within the system that has sufficient RF signal strength to provide for a call session. The Coverage rate is calculated on the basis of % of samples in which the Rx level ≥ -85 dBm, RSCP is ≥ -90 dBm & RSRP ≥ -110dBm. The details are as follows.
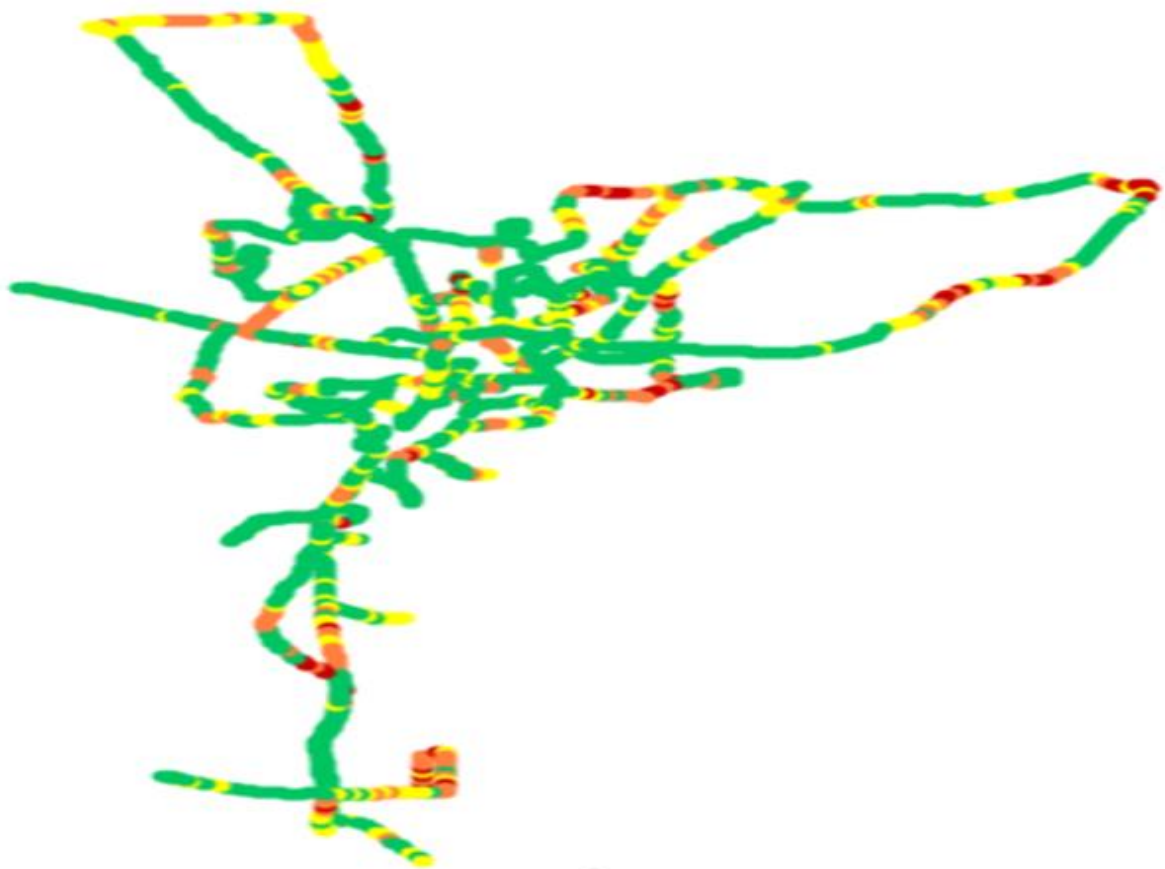
TSP	Coverage Rate %
Airtel 2G	86.25
BSNl 2G	97.89
VIL 2G	95.28
BSNL 3G	98.33
Airtel VoLTE	99.81
BSNL VoLTE	97.51
Jio VoLTE	99.98
VIL VoLTE	97.54

Coverage Rate %
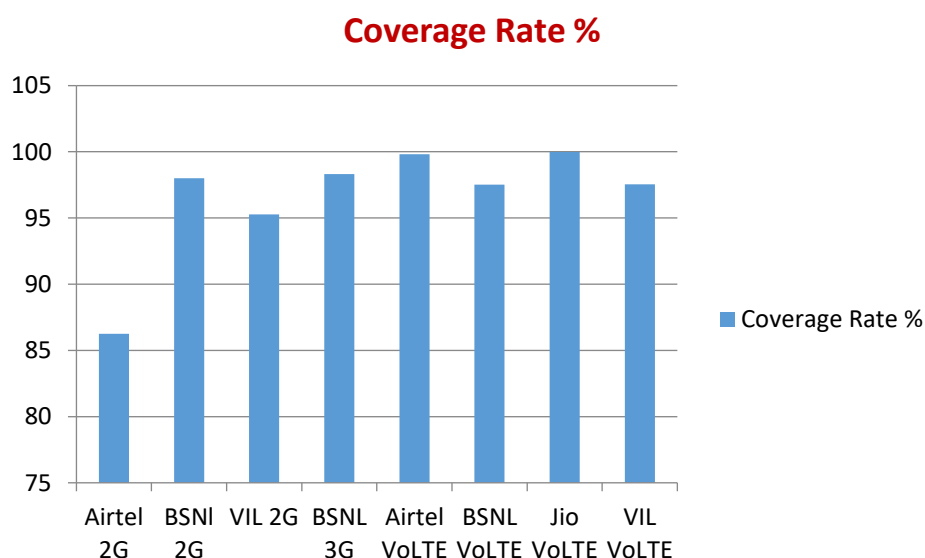
TSP-Airtel

Technology	Coverage %
2G	86.25

2G			
Overall RxLevel	**# Samples**	**% PDF**	**Legends**
[Max, >=-75]	70771	68.64	
[-75, >=-85)	18159	17.61	
[-85, >=-95)	10714	10.39	
[-95, >=Min)	3459	3.36	
Total			

TSP-BSNL

Technology	Coverage %
2G	97.89%
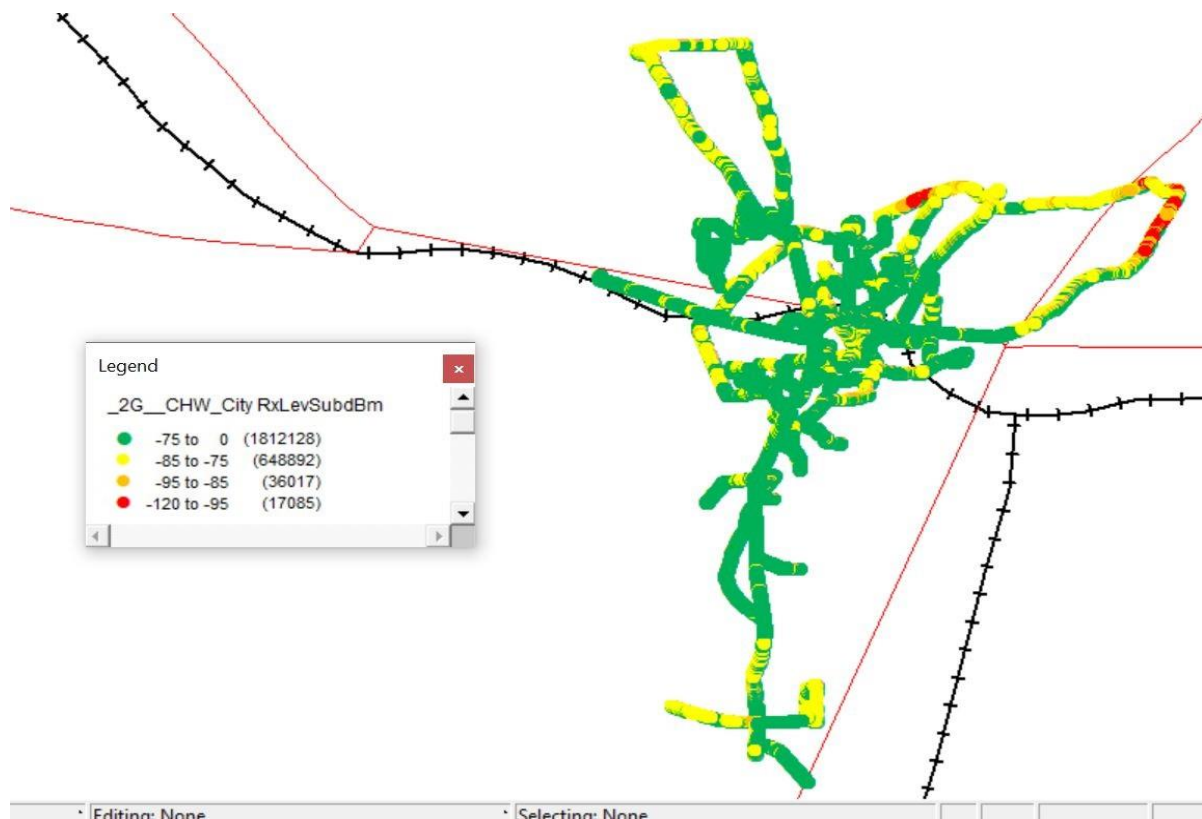
2G			
Overall RxLevel	**# Samples**	**% PDF**	**Legends**
[Max, >=-75]	1812128	72.08	
[-75, >=-85)	648892	25.81	
[-85, >=-95)	36017	1.43	
[-95, >=Min)	17085	0.68	
Total	2514122	100	

TSP-VI

Technology	Coverage %
2G	95.28

RxLevFull dbm

- -75 to 0 (13213)
- -85 to -75 (3063)
- -95 to -85 (947)
- -110 to -95 (40)
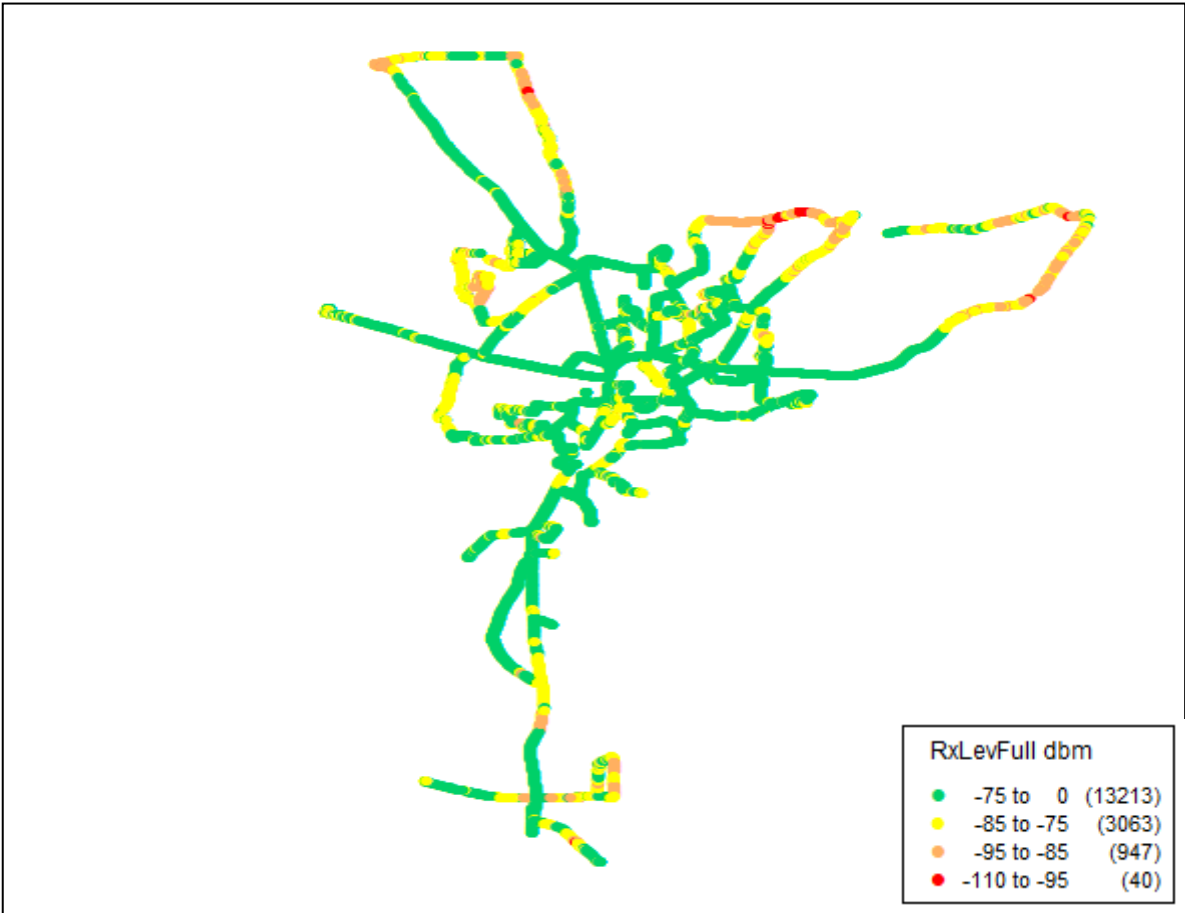
2G			
Overall RxLevel	**# Samples**	**% PDF**	**Legends**
[Max, >=-75]	13213	77.53	
[-75, >=-85)	3063	17.75	
[-85, >=-95)	947	5.48	
[-95, >=Min)	40	0.23	
Total	**17263**	100	

TSP- BSNL

Technology	Coverage %
3G	98.33

Legend
3G_CHW- RSCP_1
- ● -70 to 0 (343747)
- ● -80 to -70 (469930)
- ● -90 to -80 (397978)
- ● -120 to -90 (20629)
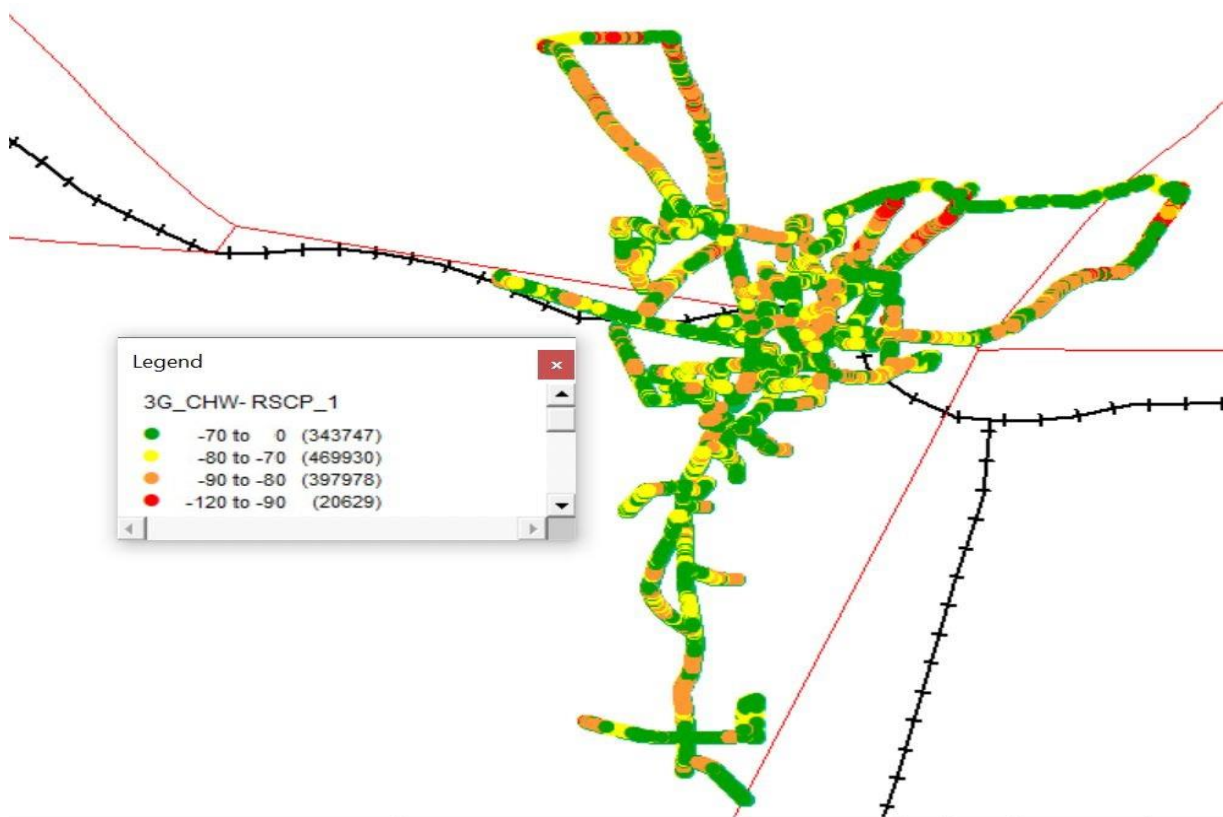
3G			
Overall RSCP	**# Samples**	**% PDF**	**Legends**
[Max, >=-70]	343747	27.90	
[-70, >=-80)	469930	38.13	
[-80, >=-90)	397978	32.30	
[-90, >=Min)	20629	1.67	
Total	1232284	**100**	

TSP-Airtel

Technology	Coverage %
VoLTE	99.81
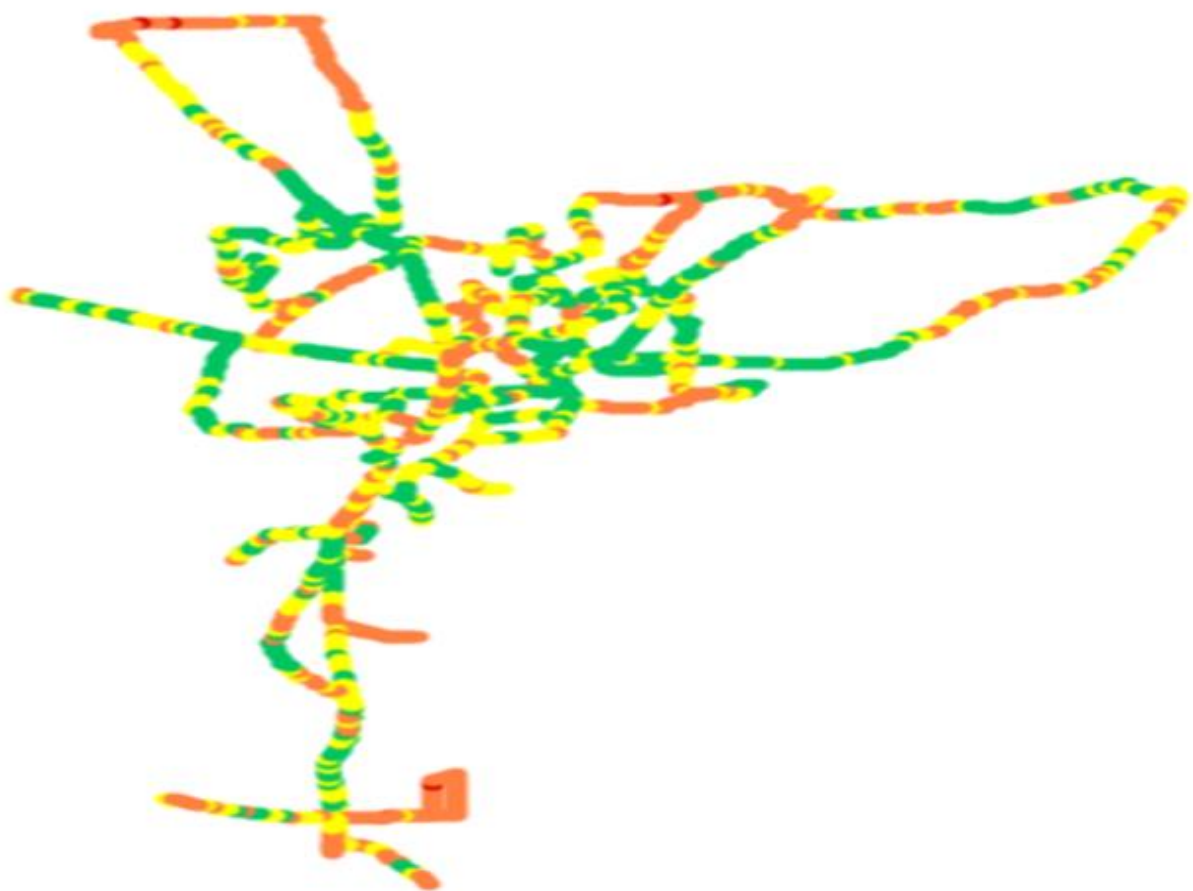
	VoLTE		
Overall RSRP	**# Samples**	**% PDF**	**Legends**
[Max, >=-80]	95491	34.27	
[-80, >=-90)	116146	41.68	
[-90, >=-110)	66493	23.86	
[-110, >=Min)	533	0.19	
Total			

TSP-BSNL

Technology	Coverage %
VoLTE	97.21

RSRP Trai

Serving Cell RSRP (dBm)
- [Min, -110) (351) (2.79%)
- [-110, -90) (6494) (51.67%)
- [-90, -80) (3977) (31.64%)
- [-80, Max] (1747) (13.9%)
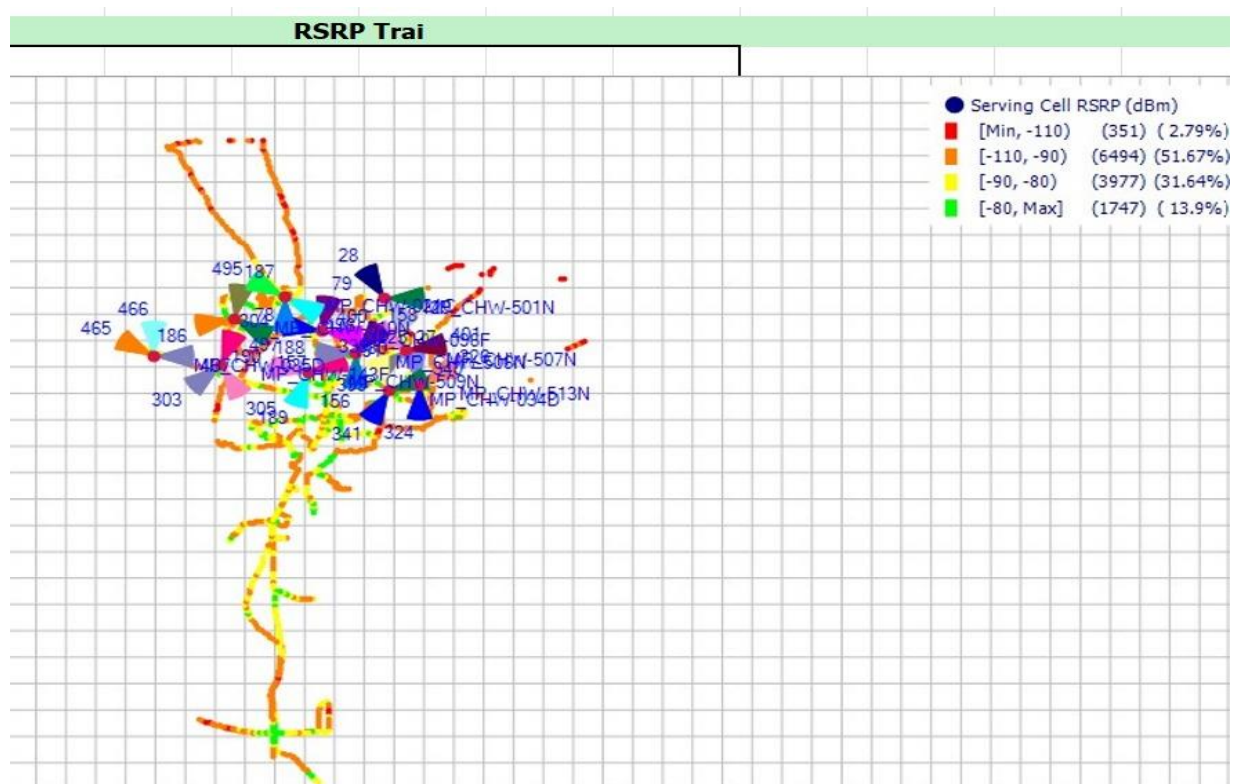
VoLTE			
Overall RSRP	# Samples	% PDF	Legends
[Max, >=-80]	1747	13.9	
[-80, >=-90)	3977	31.64	
[-90, >=-110)	6494	51.67	
[-110, >=Min)	351	2.79	
Total	12569	100	

TSP-RJIO

Technology	Coverage %
VoLTE	99.98%

VoLTE			
Overall RSRP	**# Samples**	**% PDF**	**Legends**
[Max, >=-80]	18175	58.32%	
[-80, >=-90)	9436	30.28%	
[-90, >=-110)	3545	11.38%	
[-110, >=Min)	6	0.02%	
Total	31162		

TSP-VI

Technology	Coverage %
VoLTE	**97.46%**

VOLTE RSRP plot
- -80 to   0   (5832)
- -90 to -80   (5585)
- -110 to -90 (5668)
- -140 to -110   (446)
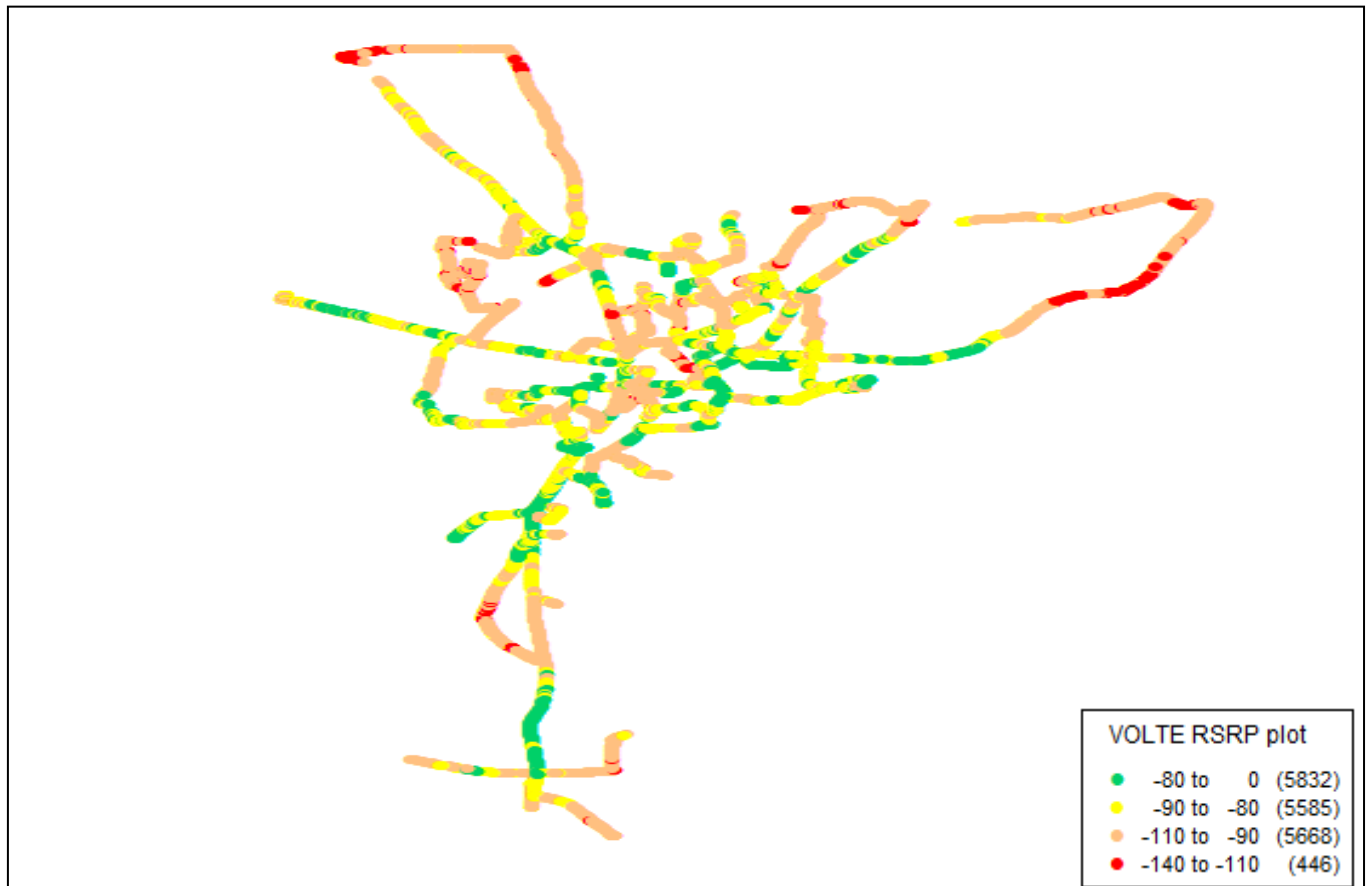
VoLTE			
Overall RSRP	**# Samples**	**% PDF**	**Legends**
[Max, >=-80]	**5832**	**33.27**	
[-80, >=-90)	**5585**	**31.86**	
[-90, >=-110)	**5668**	**32.33**	
[-110, >=Min)	**446**	**2.54**	
Total	**17531**	**100**	

For measuring voice quality, as per the QoS norms, RxQual <=5 for GSM TSPs, EcNo >= -14 dBm for 3G TSP sand SINR >0 in case of VoLTE is considered to be good, where as quality beyond this benchmark is considered to be bad. The benchmark should usually be ≥ 95%.

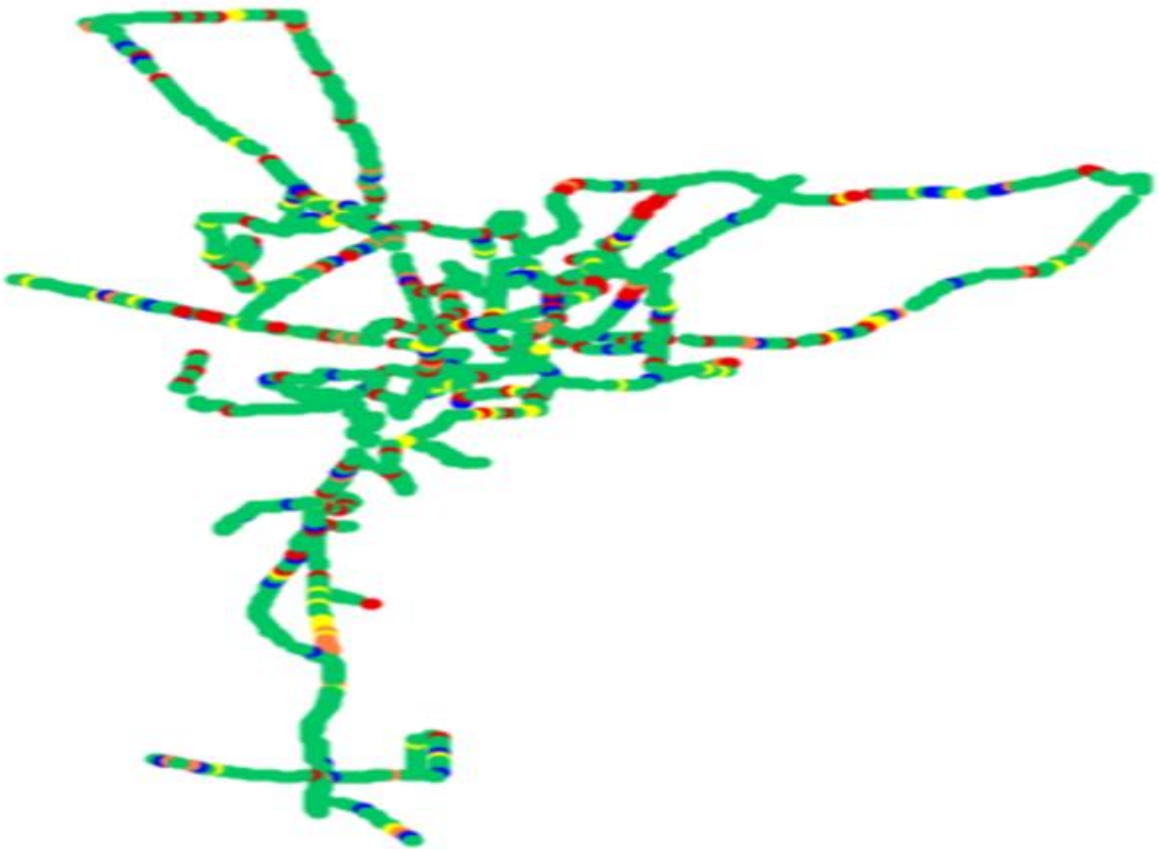| TSP	Rx Quality %
Airtel 2G	95.66
BSNl 2G	97.69
VIL 2G	97.4
BSNL 3G	96.93
Airtel VoLTE	89.92
BSNL VoLTE	94.8
Jio VoLTE	99.66
VIL VoLTE	95.52
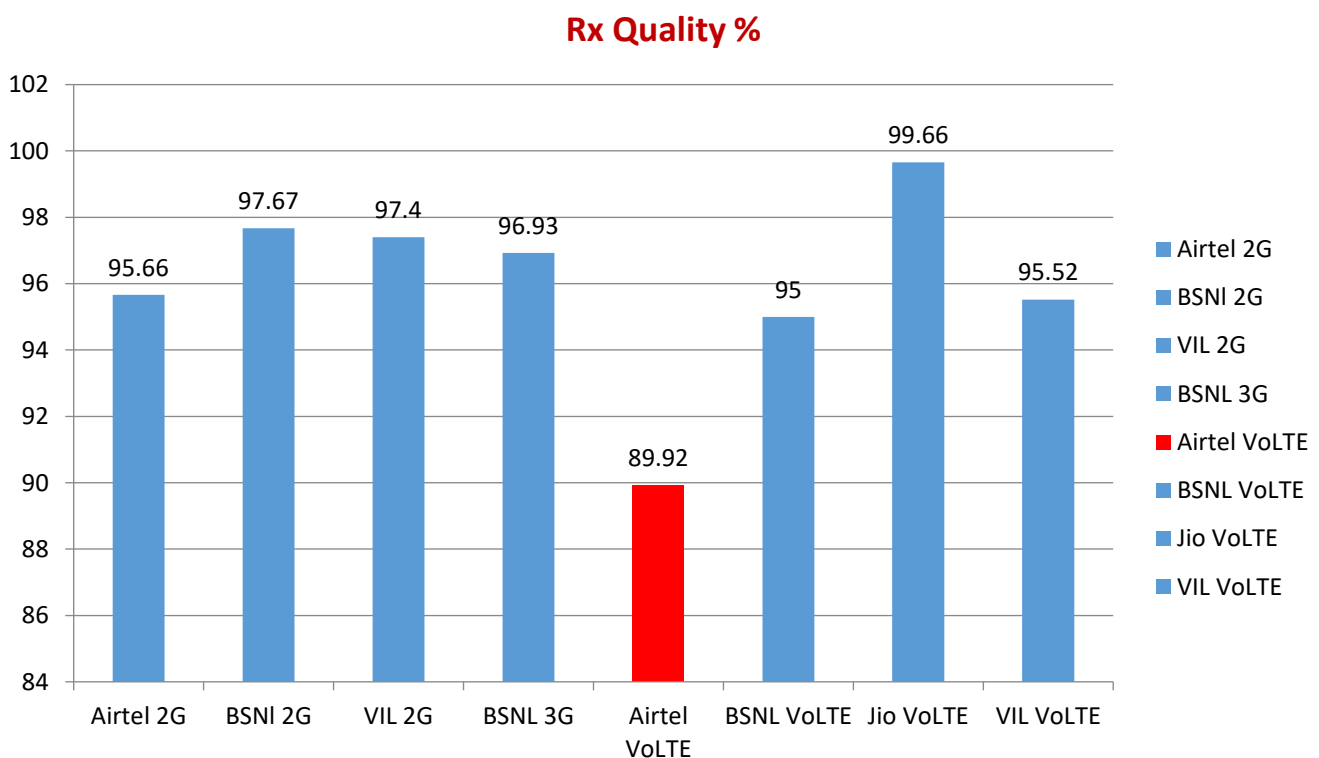
Rx Quality %

For measuring voice quality, as per the QoS norms, RxQual <=5 for GSM TSPs, EcNo >= -14 dBm for 3G TSP sand SINR >0 in case of VoLTE is considered to be good, where as quality beyond this benchmark is considered to be bad. The benchmark should usually be ≥ 95%.
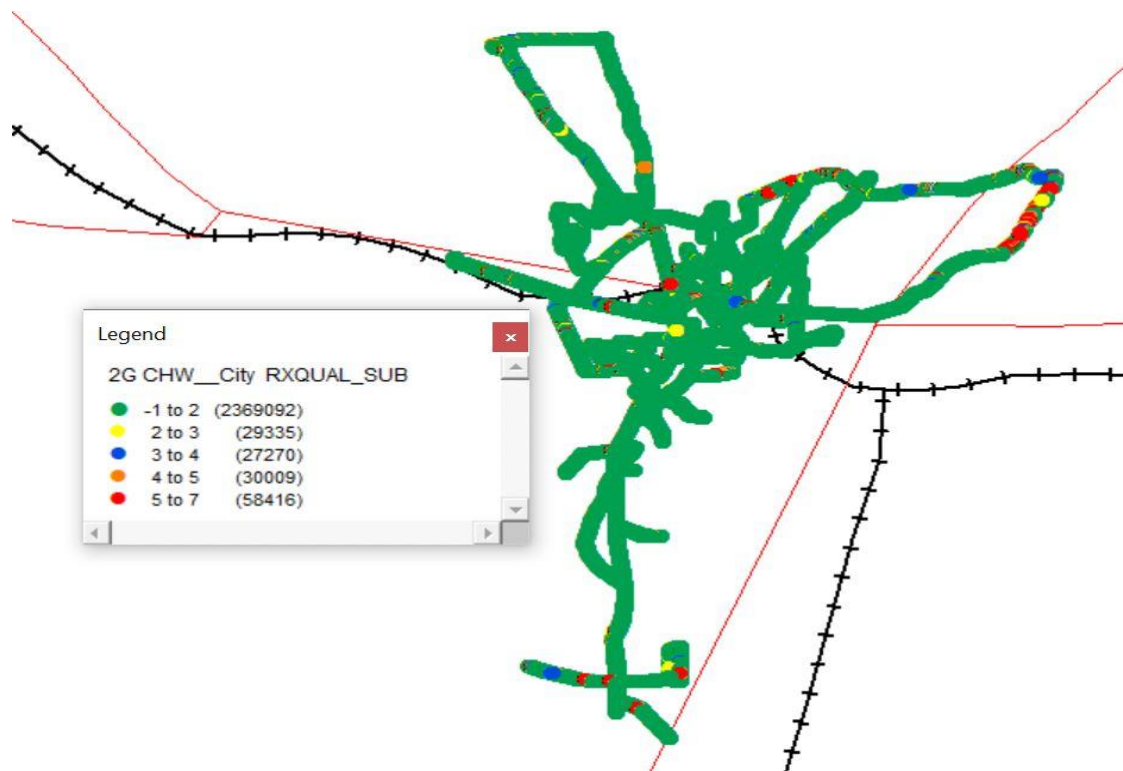
TSP-Airtel

Technology	Rx Quality %
2G	95.66

Overall Rx Quality	# Samples	% PDF	Legends
(Min, <=2)	57681	79.08	
(2, <=3)	4045	5.55	
(3 , <=4)	3981	5.46	
(4 , <=5)	4066	5.57	
(5 , <=Max)	3167	4.34	
Total			

For measuring voice quality, as per the QoS norms, RxQual <=5 for GSM TSPs, EcNo >= -14 dBm for 3G TSP sand SINR >0 in case of VoLTE is considered to be good, where as quality beyond this benchmark is considered to be bad. The benchmark should usually be ≥ 95%.

TSP-BSNL

Technology	Rx Quality %
2G	97.68

Legend

2G CHW__City RXQUAL_SUB

- -1 to 2 (2369092)
- 2 to 3 (29335)
- 3 to 4 (27270)
- 4 to 5 (30009)
- 5 to 7 (58416)

Overall Rx Quality	# Samples	% PDF	Legends
(Min, <=2)	2369092	94.23	
(2, <=3)	29335	1.17	
(3 , <=4)	27270	1.08	
(4 , <=5)	30009	1.19	
(5 , <=Max)	58416	2.32	
Total	2514122	100	

For measuring voice quality, as per the QoS norms, RxQual <=5 for GSM TSPs, EcNo >= -14 dBm for 3G TSP sand SINR >0 in case of VoLTE is considered to be good, where as quality beyond this benchmark is considered to be bad. The benchmark should usually be ≥ 95%.
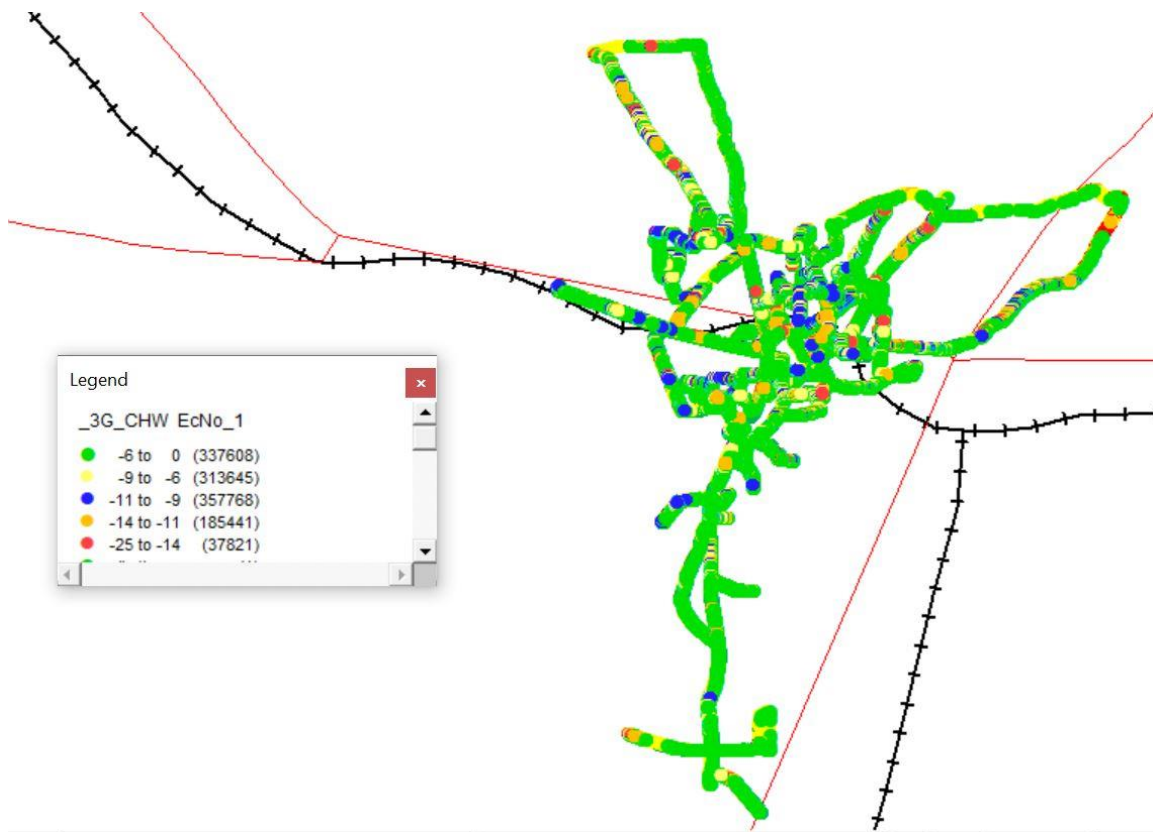
TSP-VIL

Technology	Rx Quality %
2G	95.36

RxQual_Full dbm

- 5 to 7 (342)
- 4 to 5 (731)
- 3 to 4 (1282)
- 2 to 3 (2289)
- 0 to 2 (8463)
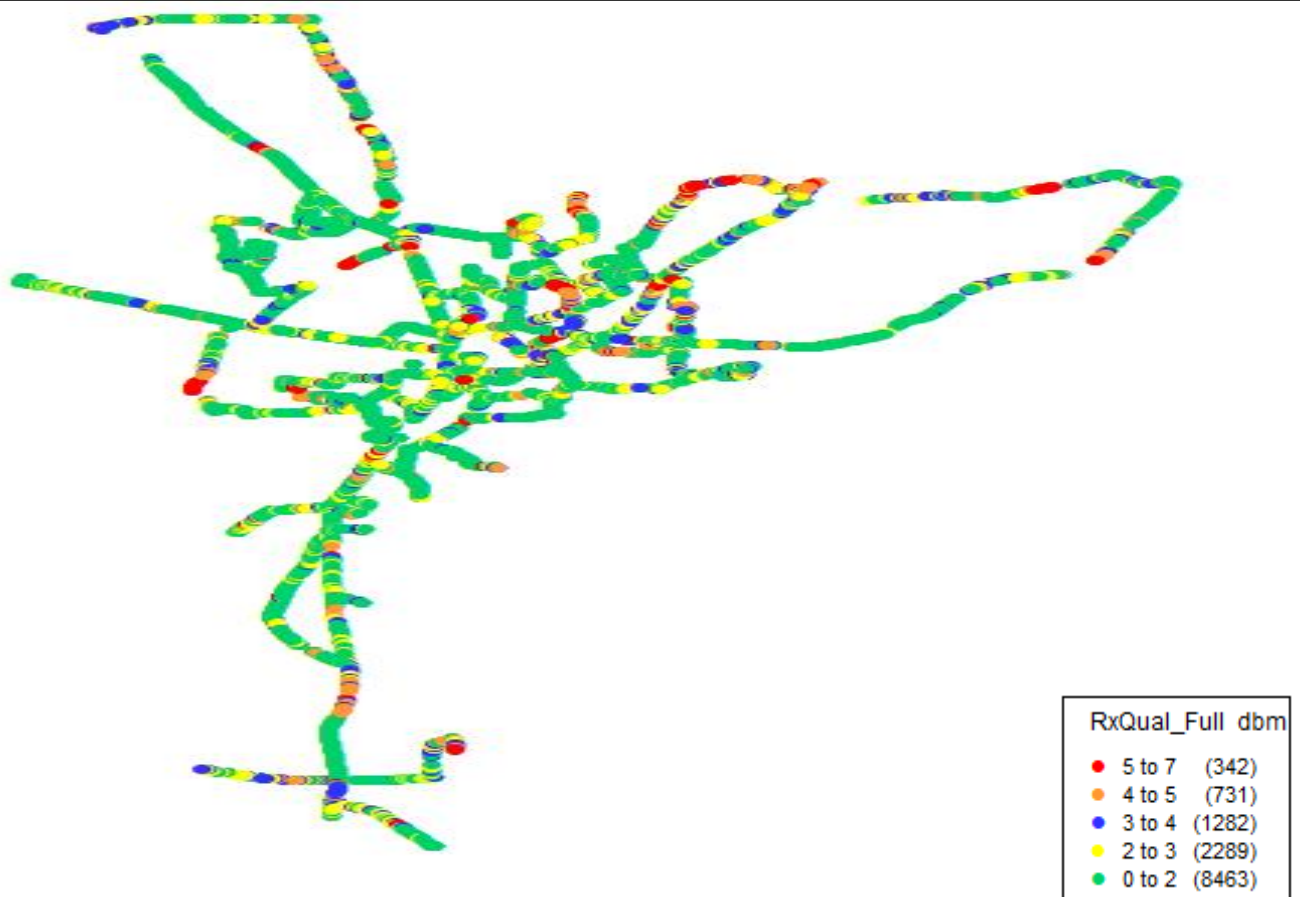
Overall Rx Quality	# Samples	% PDF	Legends
(Min, <=2)	8463	64.57	
(2, <=3)	2259	17.47	
(3 , <=4)	1282	9.78	
(4 , <=5)	731	5.58	
(5 , <=Max)	342	2.6	
Total	13107	100	

For measuring voice quality, as per the QoS norms, RxQual <=5 for GSM TSPs, EcNo >= -14 dBm for 3G TSP sand SINR >0 in case of VoLTE is considered to be good, where as quality beyond this benchmark is considered to be bad. The benchmark should usually be ≥ 95%.

TSP-BSNL

Technology	Rx Quality %
3G	96.93

Legend

_3G_CHW EcNo_1

- -6 to   0   (337608)
- -9 to -6   (313645)
- -11 to -9   (357768)
- -14 to -11 (185441)
- -25 to -14   (37821)

Overall Ec/No	# Samples	% PDF	Legends
(Max, <=-6)	337608	27.40	
(-6, <=-9)	313645	25.45	
(-9, <=-11)	357768	29.03	
(-11, <=-14)	185441	15.05	
(-14, <= Min)	37821	3.07	
Total	1232283	100	

For measuring voice quality, as per the QoS norms, RxQual <=5 for GSM TSPs, EcNo >= -14 dBm for 3G TSP sand SINR >0 in case of VoLTE is considered to be good, where as quality beyond this benchmark is considered to be bad. The benchmark should usually be ≥ 95%.

TSP-Airtel

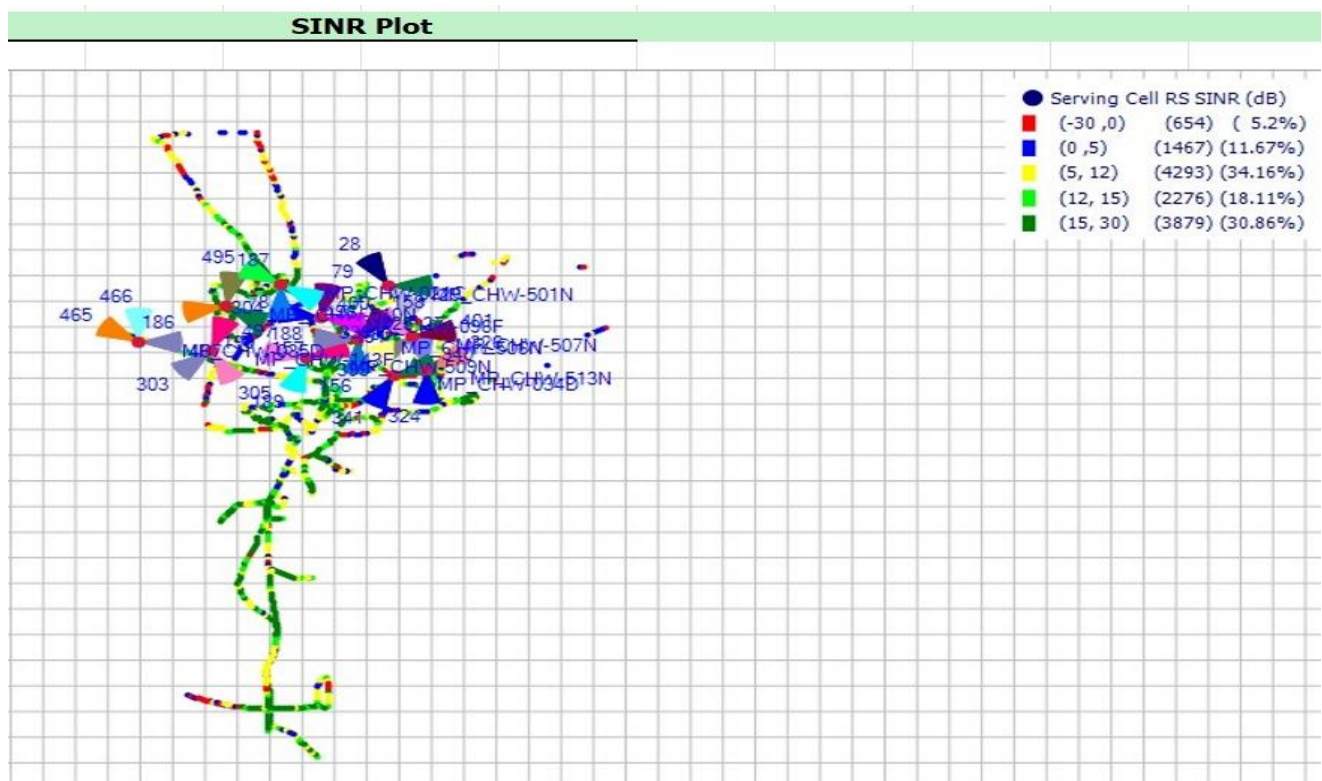| Technology	Rx Quality %
VoLTE	89.92
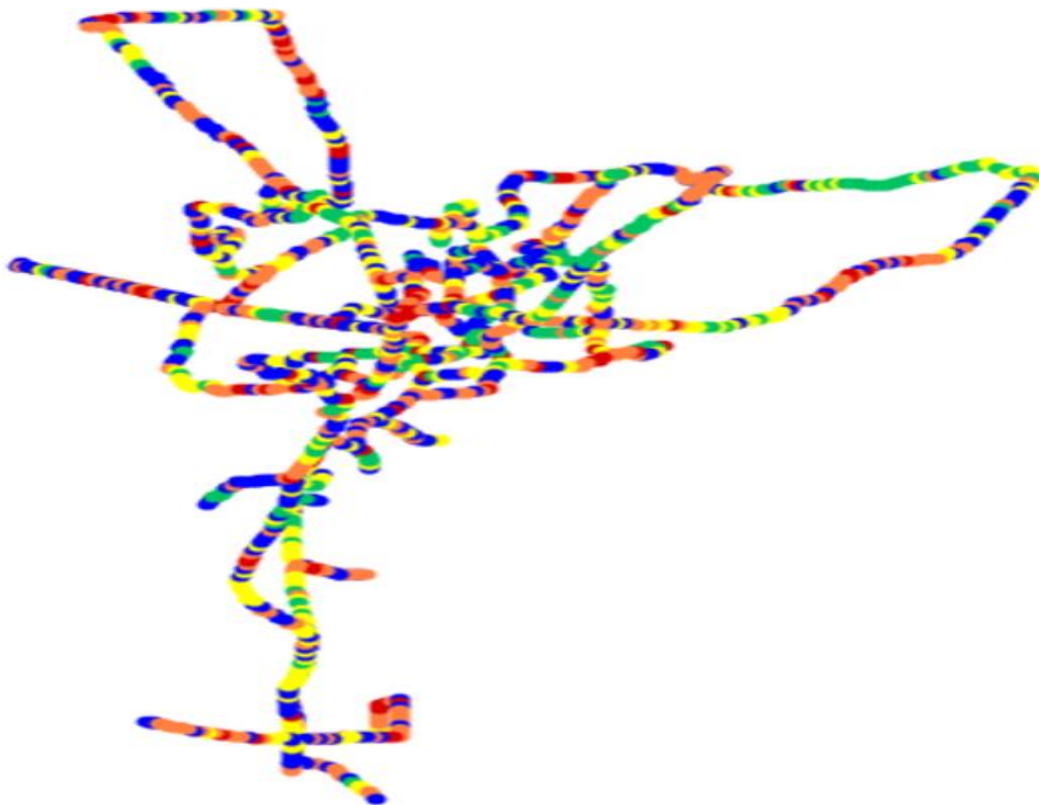
Overall SINR	# Samples	% PDF	Legends
(Min, <=0)	28064	10.08	
(0, <=5)	79265	28.48	
(5, <=10)	79760	28.66	
(10, <=15)	52300	18.79	
(15, <=Max)	38952	13.99	
Total			

For measuring voice quality, as per the QoS norms, RxQual <=5 for GSM TSPs, EcNo >= -14 dBm for 3G TSP sand SINR >0 in case of VoLTE is considered to be good, where as quality beyond this benchmark is considered to be bad. The benchmark should usually be ≥ 95%.

TSP-BSNL

Technology	Rx Quality %
VoLTE	94.8

SINR Plot

Serving Cell RS SINR (dB)
- (-30 ,0)   (654)   (5.2%)
- (0 ,5)   (1467) (11.67%)
- (5, 12)   (4293) (34.16%)
- (12, 15)   (2276) (18.11%)
- (15, 30)   (3879) (30.86%)

Overall SINR	# Samples	% PDF	Legends
(Min, <=0)	654	5.2	
(0, <=5)	1467	11.67	
(5, <=10)	4293	34.16	
(10, <=15)	2276	18.11	
(15, <=Max)	3879	30.86	
Total	12569	100	

For measuring voice quality, as per the QoS norms, RxQual <=5 for GSM TSPs, EcNo >= -14 dBm for 3G TSP sand SINR >0 in case of VoLTE is considered to be good, where as quality beyond this benchmark is considered to be bad. The benchmark should usuallv be ≥ 95%.

TSP-RJIO

Technology	Rx Quality %
VoLTE	99.66%

Overall SINR	# Samples	% PDF	Legends
(Min, <=0)	107	0.34%	(dark red)
(0, <=5)	12701	40.72%	(orange)
(5, <=10)	9418	30.20%	(blue)
(10, <=15)	5002	16.04%	(yellow)
(15, <=Max)	3961	12.70%	(green)
Total	31189		

For measuring voice quality, as per the QoS norms, RxQual <=5 for GSM TSPs, EcNo >= -14 dBm for 3G TSP sand SINR >0 in case of VoLTE is considered to be good, where as quality beyond this benchmark is considered to be bad. The benchmark should usually be ≥ 95%.
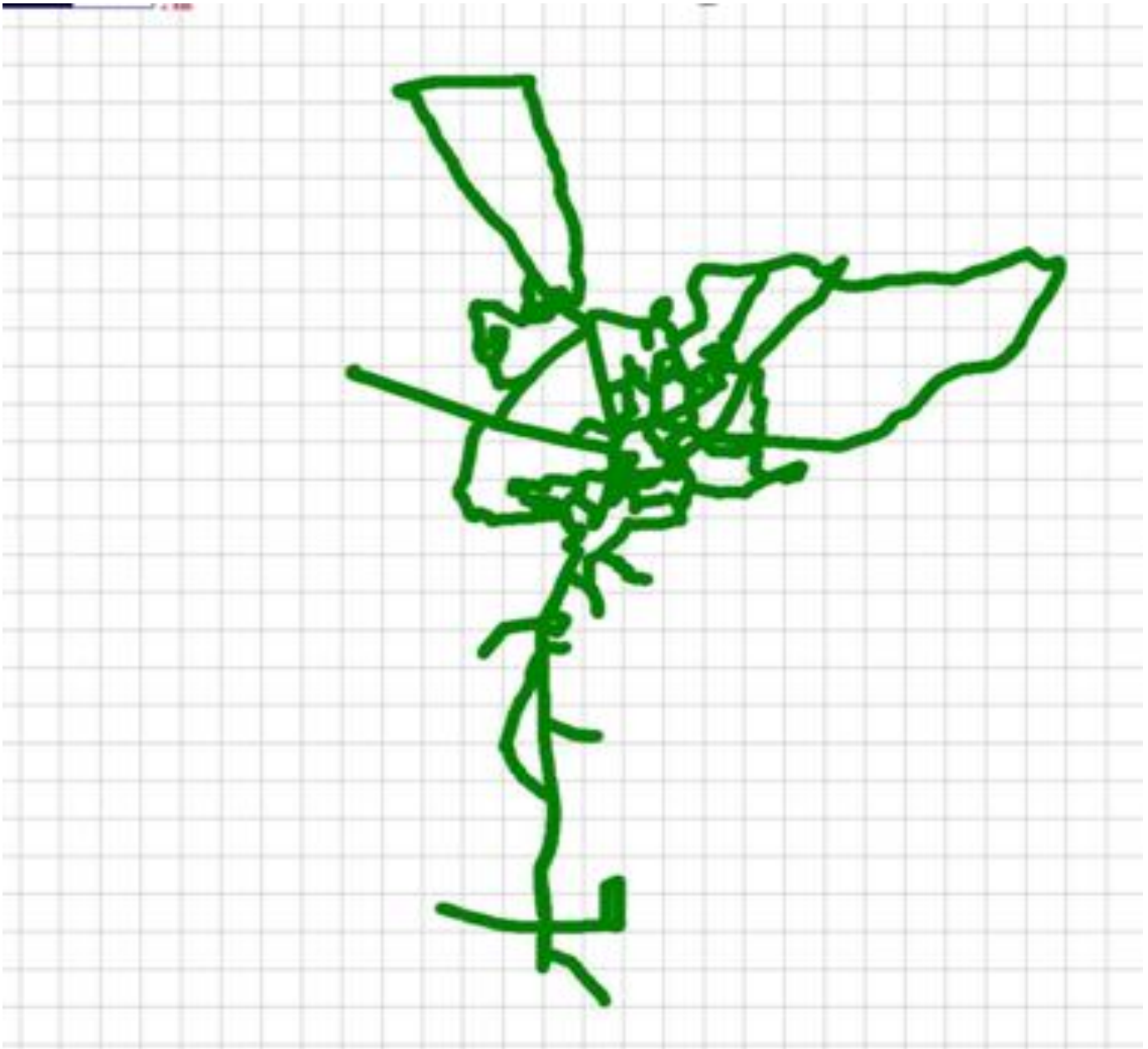
TSP-VI

Technology	Rx Quality %
VoLTE	95.52

SINR plot

- 15 to Max (5573)
- 10 to 15 (3205)
- 5 to 10 (5034)
- 0 to 5 (2934)
- -32 to 0 Min (785)
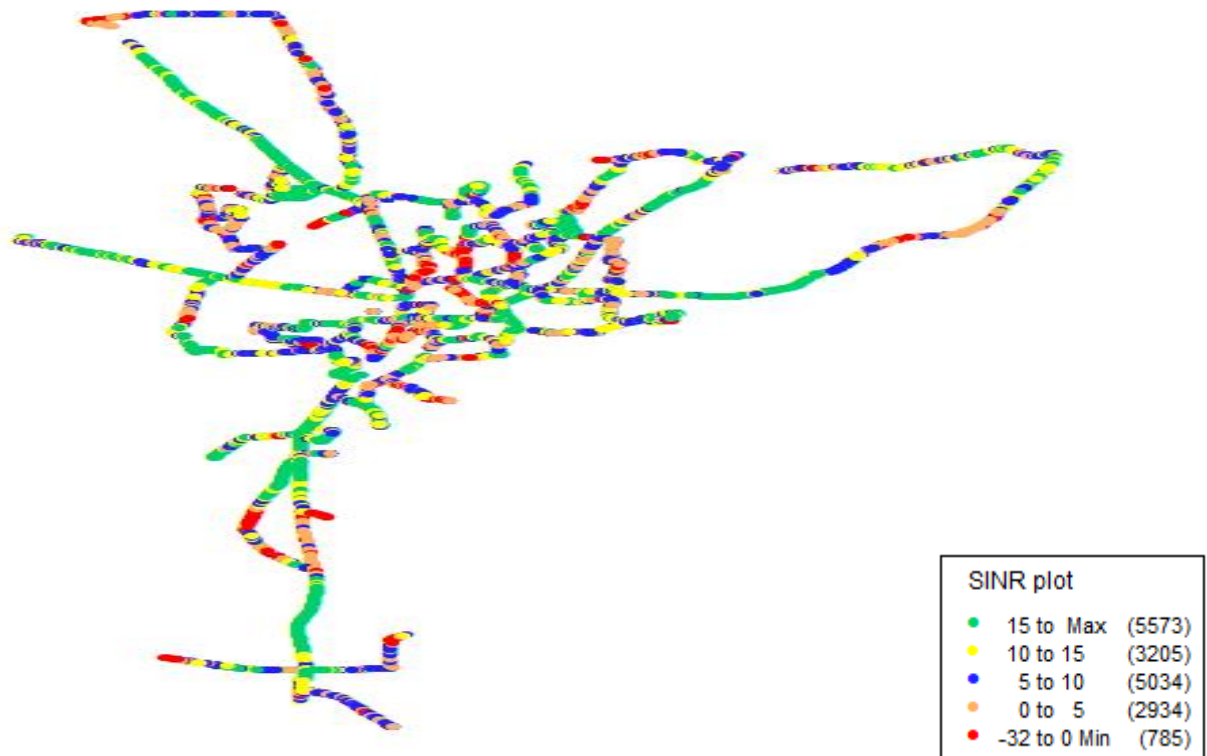
Overall SINR	# Samples	% PDF	Legends
(Min, <=0)	785	4.47	
(0, <=5)	2934	16.73	
(5, <=10)	5034	28.72	
(10, <=15)	3205	18.29	
(15, <=Max)	5573	31.79	
Total	17531	100	

TSP	% of Time Spent on 3G/VoLTE
BSNL 3G	12.85
Airtel VoLTE	100
BSNL VoLTE	87.15
Jio VoLTE	100
VIL VoLTE	99.8

TSP-Airtel

Technology	% of Time Spent on
VoLTE	100%
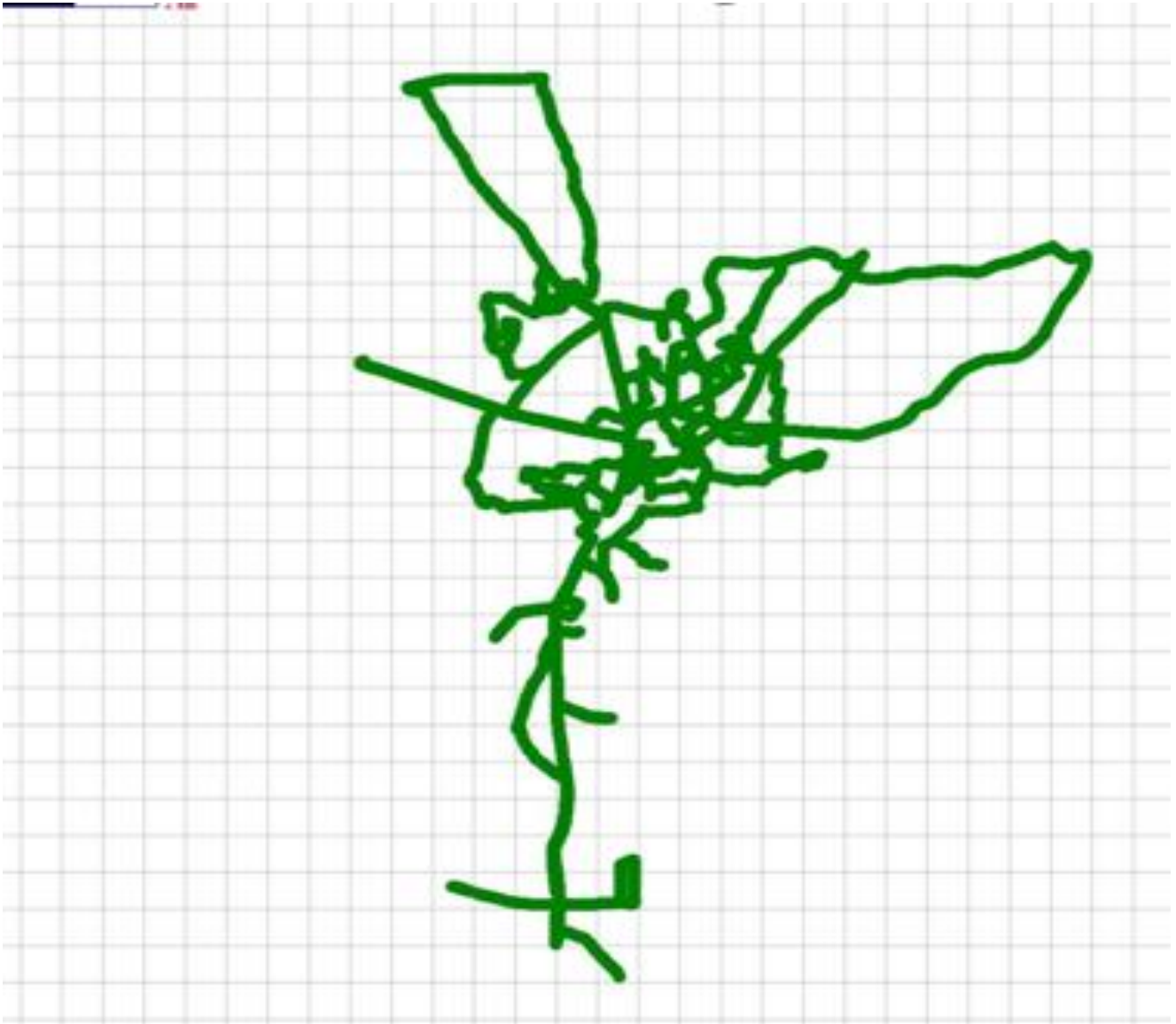
TSP-BSNL

Technology	% of Time Spent on
3G +2G	8.6 + 4.11
VoLTE	87.15

Technology Plot

RadioAccessTechnology
- Unknown (43) (0.15%)
- GSM (1188) (4.11%)
- WCDMA (2485) (8.6%)
- LTE (25196) (87.15%)
- CDMA (0) (0%)
- 1xEV-DO (0) (0%)
- NR (0) (0%)
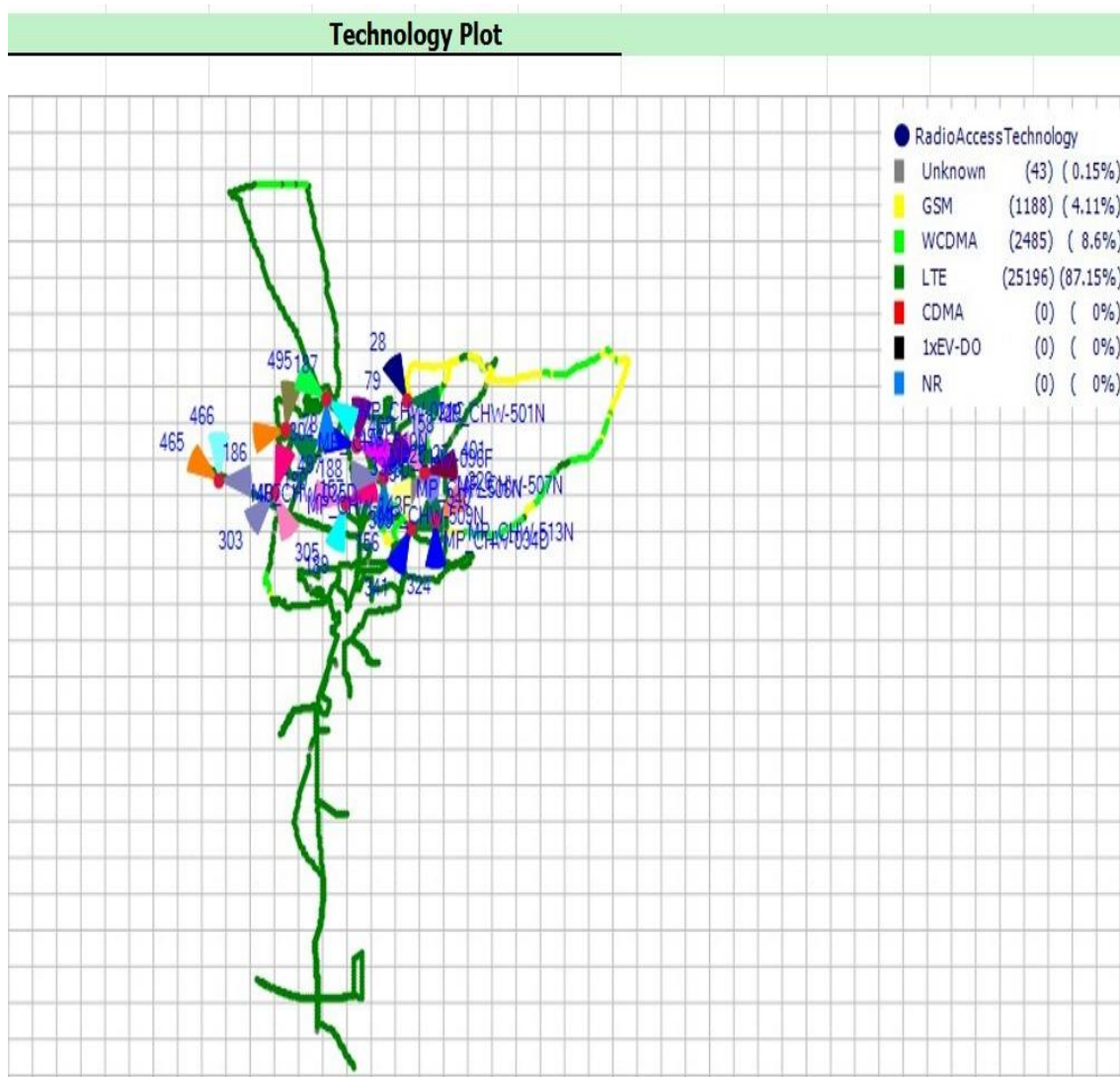
TSP-RJIO

Technology	% of Time Spent on
VoLTE	100%

TSP-VI

Technology	% of Time Spent on
VoLTE	99.8
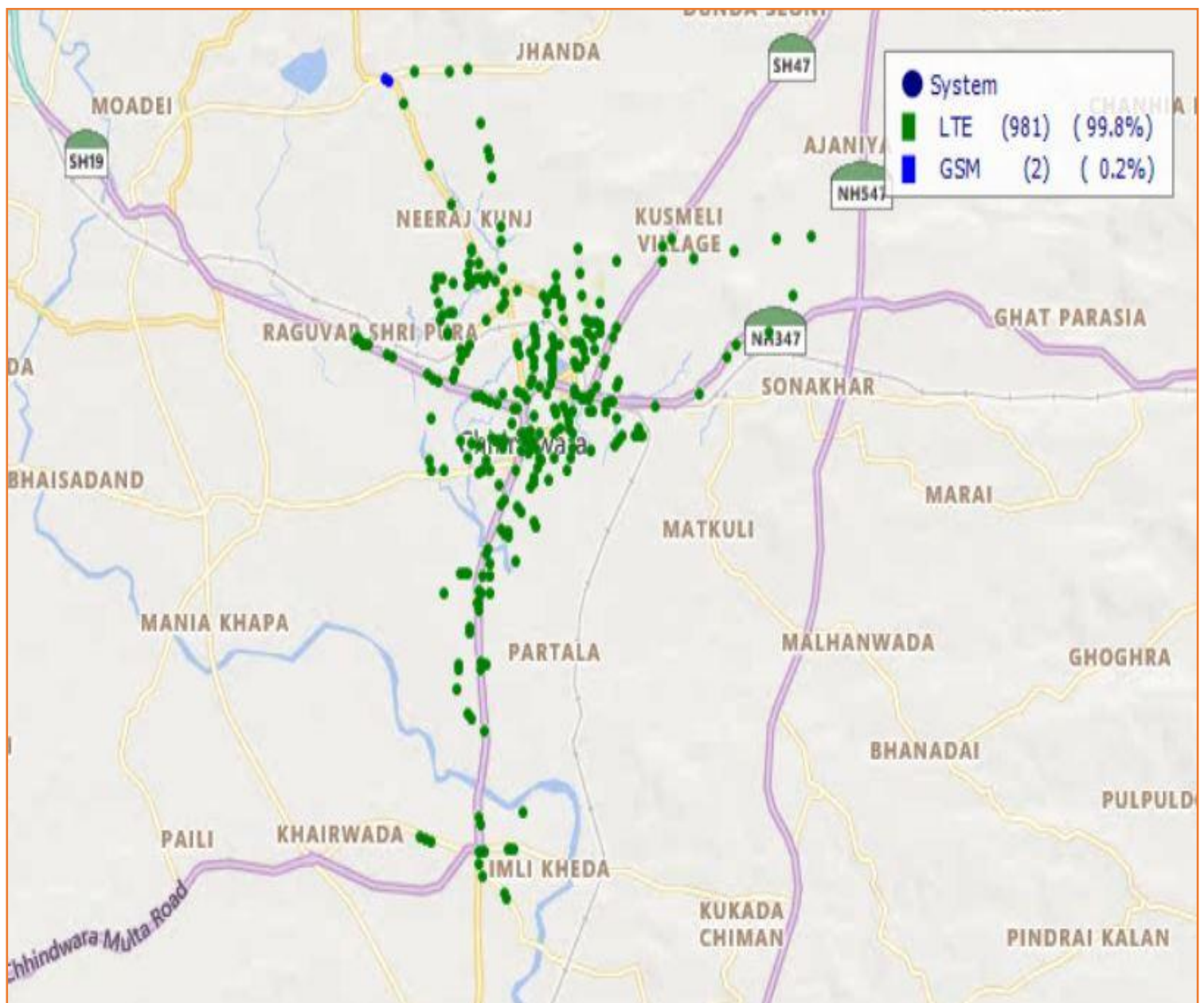
TSP- BSNL

Data Statistics - Dynamic data testing

Data KPIs - Overall	3G
Download Throughput (Mbps)	1
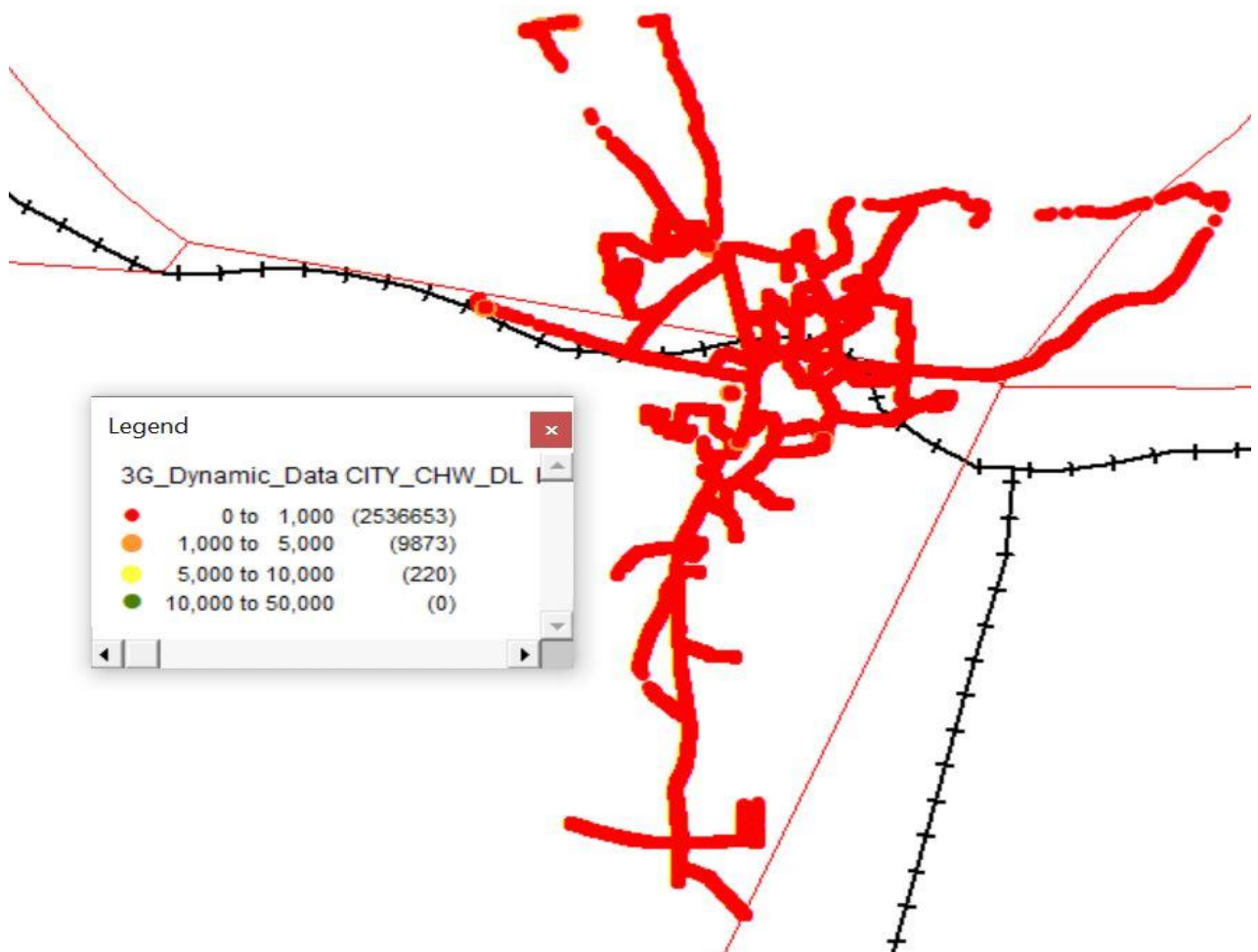
DL throughput	No of Sample	%	Legends
< 1 Mbps	2536653	99.60	
1-5 Mbps	9873	0.39	
5-10 Mbps	220	0.01	
>10Mbps	0	0	

TSP-Airtel

Data Statistics - Dynamic data testing

Data KPIs - Overall	LTE
Download Throughput (Mbps)	**27.82**

DL throughput	No of Sample	%	Legends
< 2Mbps	5277	19.2	
2-5 Mbps	807	2.94	
5-10 Mbps	1799	6.54	
>10Mbps	19605	71.32	

Dynamic Data Test

TSP- BSNL

Data Statistics - Dynamic data testing

Data KPIs - Overall	LTE
Download Throughput (Mbps)	18.98

Trai PDSCH Throughput

- PDSCH Phy Throughput (Mbps)
- < 2 Mbps (1482) (11.08%)
- 2-6 Mbps (994) (7.43%)
- 6-10 Mbps (1264) (9.45%)
- >10 Mbps (9634) (72.04%)
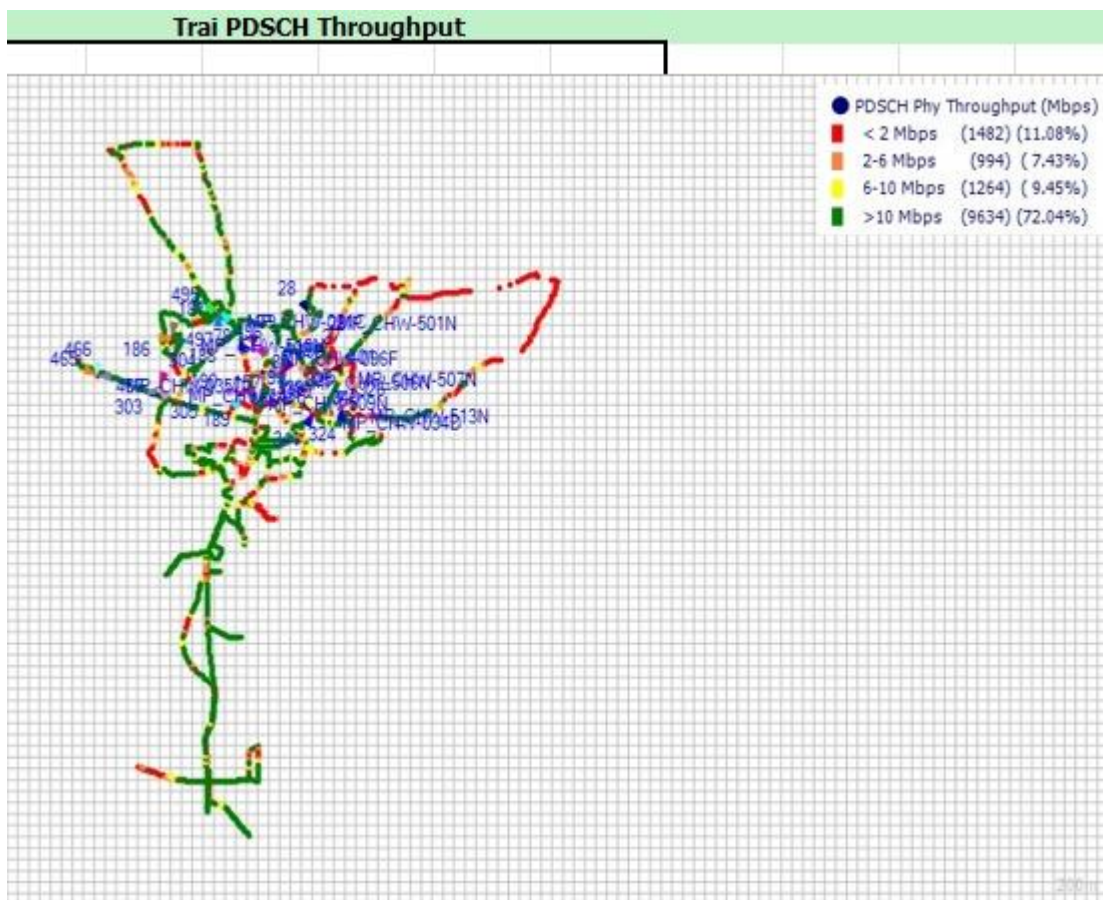
DL throughput	No of Sample	%	Legends
< 2Mbps	1482	11.08	
2-5 Mbps	994	7.43	
5-10 Mbps	1264	9.45	
>10Mbps	9634	72.04	

TSP-RJIO

Data Statistics - Dynamic data testing

Data KPIs - Overall	LTE
Download Throughput (Mbps)	**18.55**
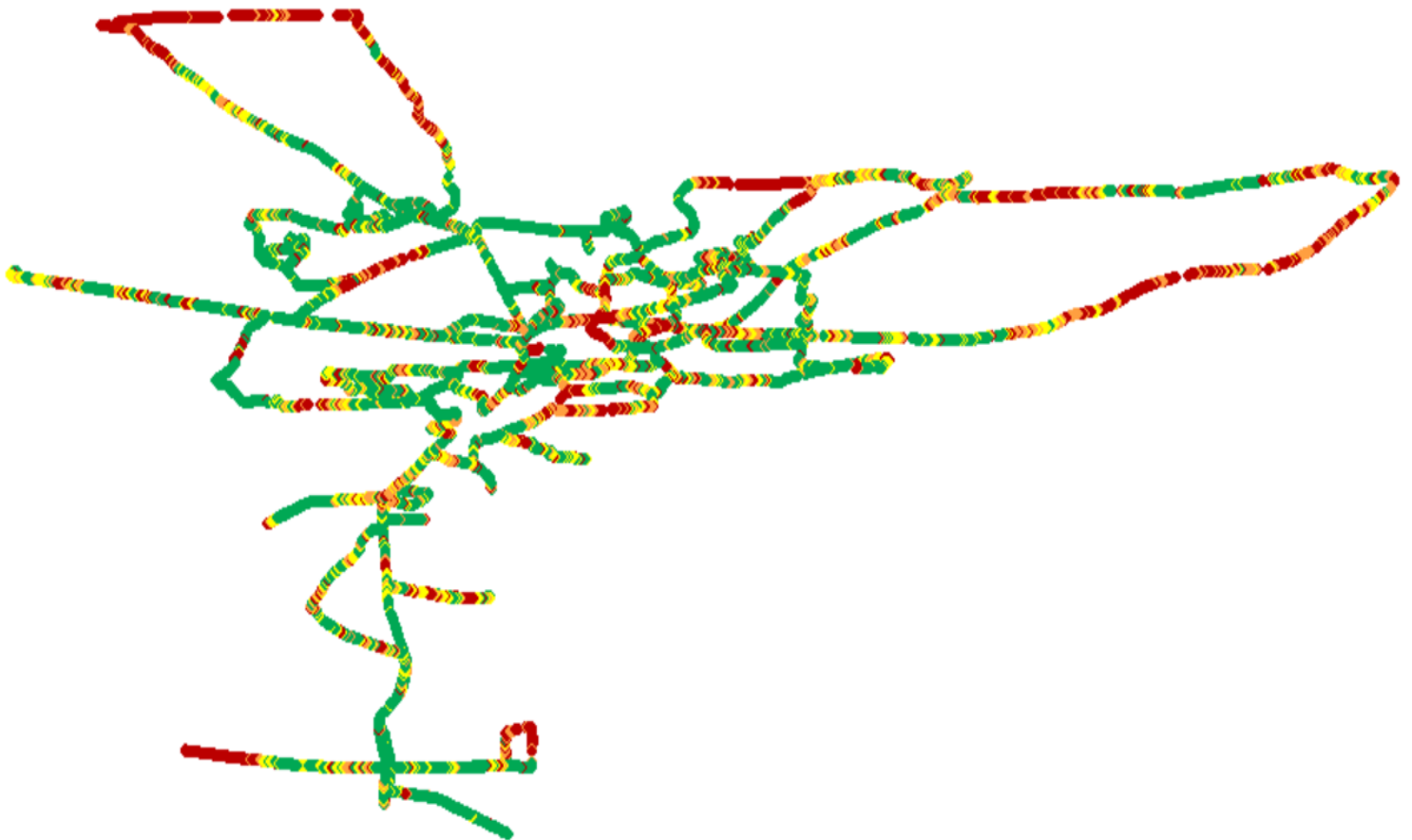
DL throughput	No of Sample	%	Legends
< 2Mbps	3379	12.56%	
2-5 Mbps	2857	10.62%	
5-10 Mbps	4044	15.03%	
>10Mbps	16630	61.80%	

TSP- VI

Data Statistics - Dynamic data testing

Data KPIs - Overall	LTE
Download Throughput (Mbps)	22.92
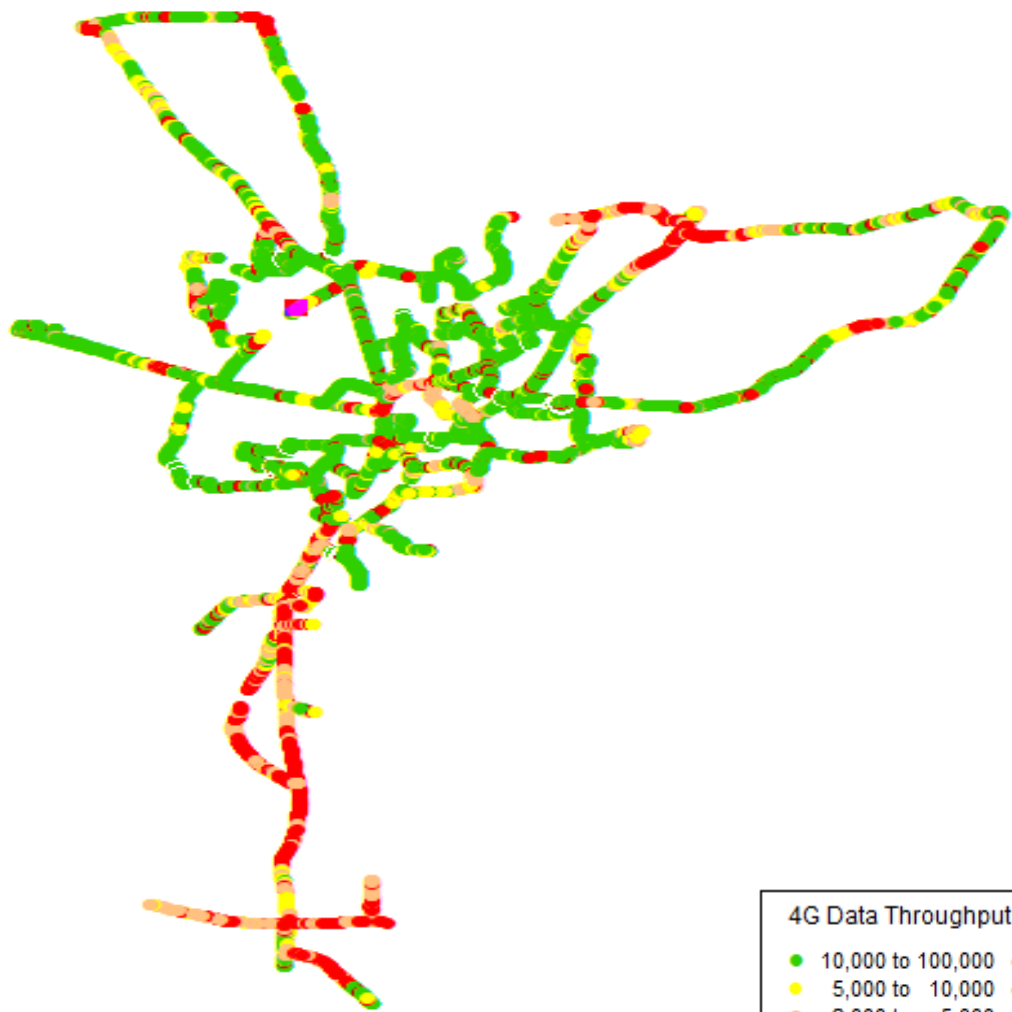
4G Data Throughput
- 10,000 to 100,000 (9464)
- 5,000 to 10,000 (1758)
- 2,000 to 5,000 (1789)
- 0 to 2,000 (2473)

DL throughput	No of Sample	%	Legends
< 2Mbps	2473	15.97	
2-5 Mbps	1789	11.55	
5-10 Mbps	1758	11.36	
>10Mbps	9464	61.12	

Hotspot		Airtel	BSNL	JIO	VIL
1. Bus Stand Chhindwara	3G download in Mbps	NA	4.3	NA	NA
	3G upload in Mbps	NA	1.56	NA	NA
	4G download in Mbps	32.9	14.05	47.28	31.11
	4G upload in Mbps	8.15	8.23	24.91	14.41
	5G download in Mbps	NA	NA	NA	NA
	5G upload in Mbps	NA	NA	NA	NA
2. Railway Station Chhindwara	3G download in Mbps	NA	5.57	NA	NA
	3G upload in Mbps	NA	1.95	NA	NA
	4G download in Mbps	40.71	25.63	47.40	29.58
	4G upload in Mbps	7.10	22.89	9.09	7.09
	5G download in Mbps	NA	NA	NA	NA
	5G upload in Mbps	NA	NA	NA	NA

Hotspot		Airtel	BSNL	JIO	VIL
3. Venkatesh Mall Chhindwara	3G download in Mbps	NA	2.70	NA	NA
	3G upload in Mbps	NA	0.44	NA	NA
	4G download in Mbps	16.11	11.27	47.82	21.94
	4G upload in Mbps	10.59	16.68	17.29	10.26
	5G download in Mbps	NA	NA	NA	NA
	5G upload in Mbps	NA	NA	NA	NA
4. Danielson Degree College Chhindwara	3G download in Mbps	NA	11.89	NA	NA
	3G upload in Mbps	NA	1.82	NA	NA
	4G download in Mbps	32.68	13.7	36.18	24.83
	4G upload in Mbps	4.56	3.39	6.63	10.61
	5G download in Mbps	NA	NA	NA	NA
	5G upload in Mbps	NA	NA	NA	NA

Hotspot		Airtel	BSNL	JIO	VIL
5. Badal Bhoi Tribal Museum Chhindwara	3G download in Mbps	NA	4.60	NA	NA
	3G upload in Mbps	NA	1.88	NA	NA
	4G download in Mbps	63.32	15.04	22.72	17..73
	4G upload in Mbps	13.11	5.12	7.80	9.48
	5G download in Mbps	NA	NA	NA	NA
	5G upload in Mbps	NA	NA	NA	NA