



प्रभावी विनियमन – सुगम संचार
Effective Regulation – Ease of Communication

Operator Assisted Drive Test Report

Agra City and nearby Area

13/06/2023 to 15/06/2023

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 Agra City and surrounding areas from 9:00 AM to 8:00 PM from 13/06/2023 to 15/06/2023. The drive test covered drive route of around 363 KMs.

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

Data speed was also tested in some hotspot locations in 5G technology

Key Performance Indicators:

KPI	Benchmark	Observations
Block call rate %	≤3%	All TSPs achieved the benchmark
Drop call rate %	≤2%	All TSPs achieved the benchmark
CSSR %	≥95 %	All TSPs achieved the benchmark
Mobility HOSR %	≥95%	All TSPs achieved the benchmark
Good RX Quality %	≥95%	All TSPs achieved the benchmark except Airtel 2G, BSNL 3 G and Airtel & JIO VoLTE

Overview

Regional Office, TRAI Bhopal 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 **120-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)

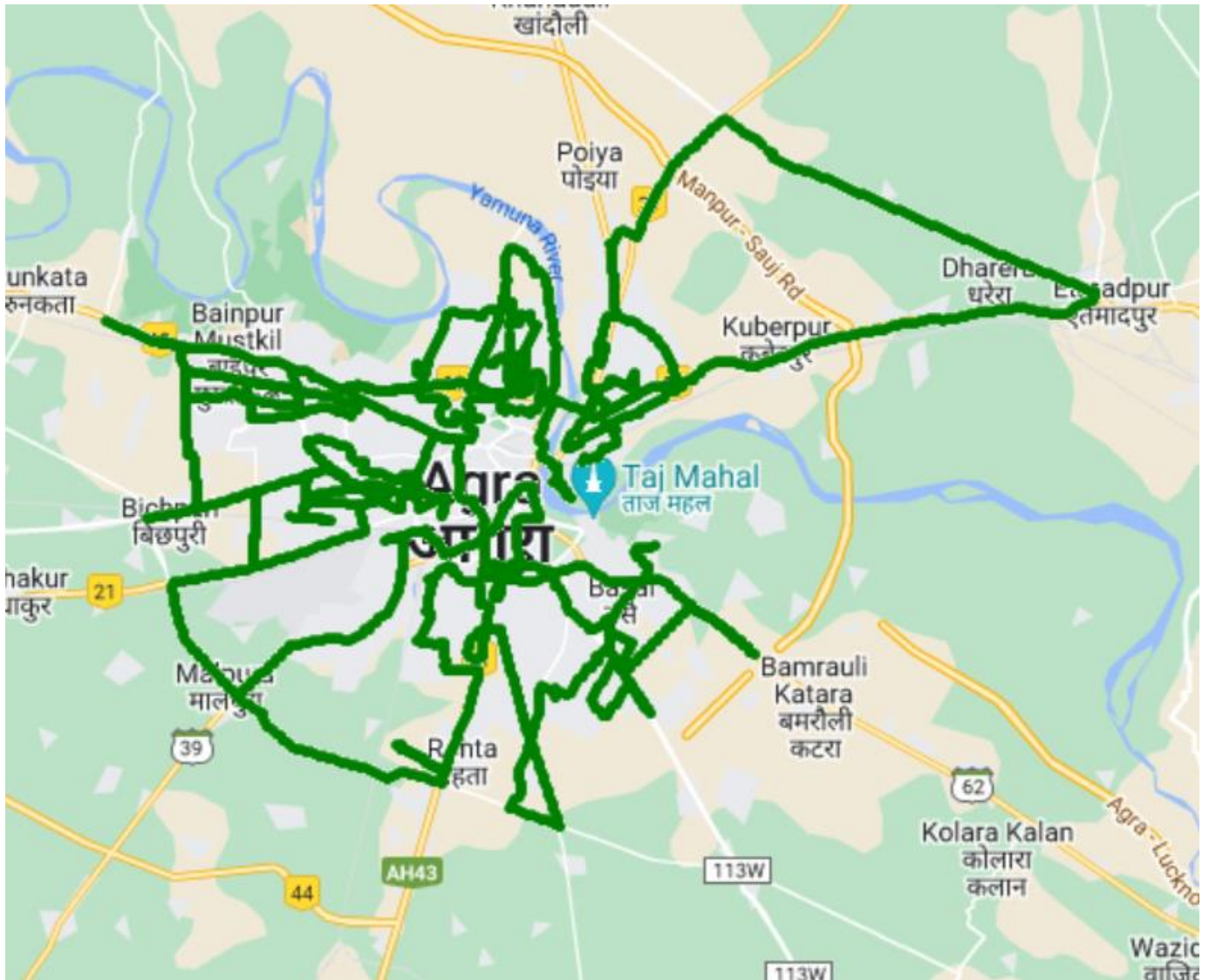
- i.3G – measurement – UE in 3G File Size- 20MB
- ii.4G – measurement – UE in LTE File Size- 40MB
- iii.5G – measurement – UE in 5G File Size- 200MB

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

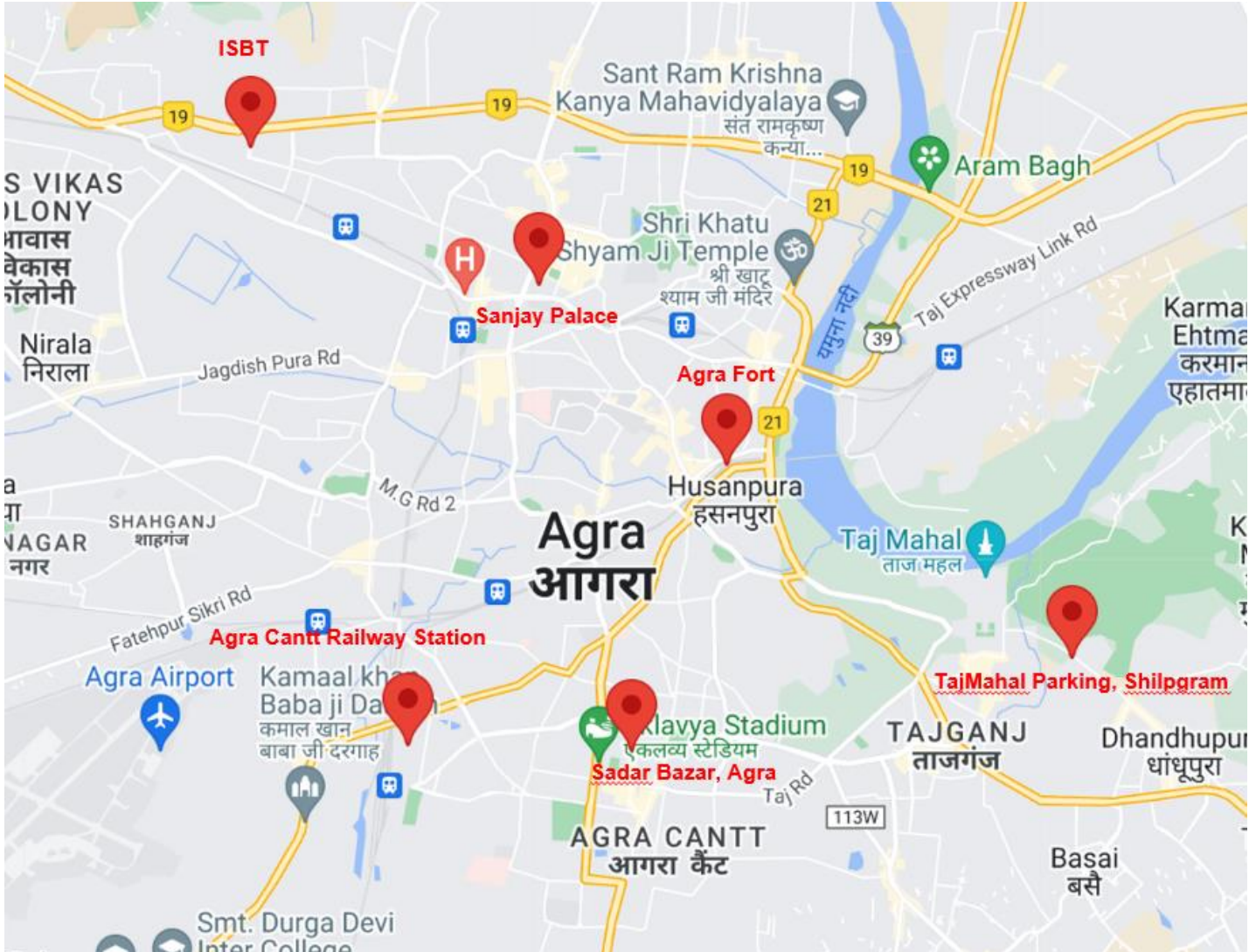


List of important area covered during the drive test

SANJAY PLACE , MG ROAD,COSOMOS MALL ,AGRA FORT ,AGRA CANTT ,SADAR MARKET
FATEHABAD ROAD , SAMSABAD ROAD ,GWALIOR ROAD, INDUSTRIAL AREA, DAYAL
BAGH,KAMLA
NAGAR , AWAS VIKAS COLONY, SHASTRIPURAM,POIYA GHAT, VIJAY NAGAR,BHAGWAN
TALKIES,
ISBT RAMBAGH, SIKANDARA, AITMADPUR, SHAHGANJ, NEHRU NAGAR

Overview

Data Service Test- Static Locations



Hotspot Locations

Sadar Bazar, Agra

Agra Cantt Railway Station

Sanjay Palace

TajMahal Parking, Shilpgram

ISBT

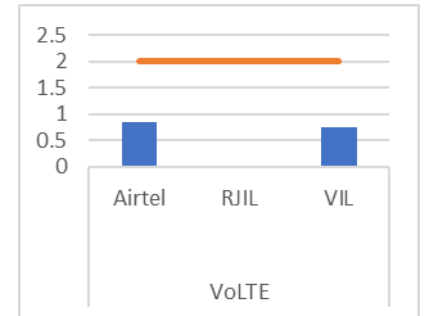
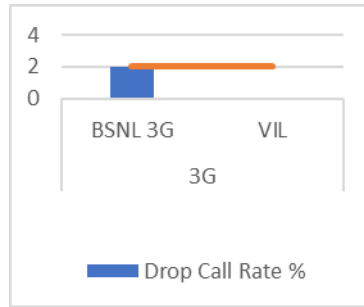
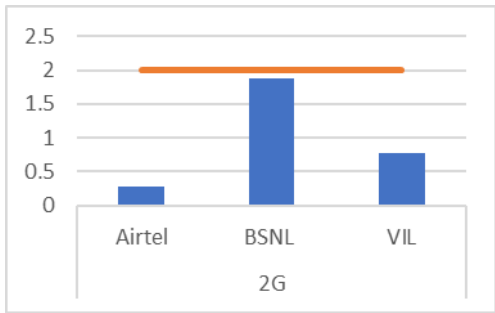
Agra Fort

Voice Calls

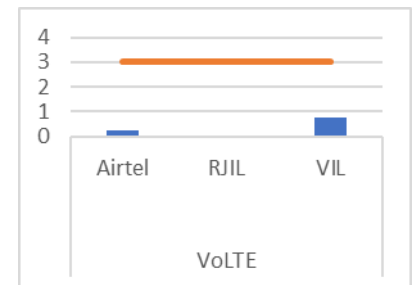
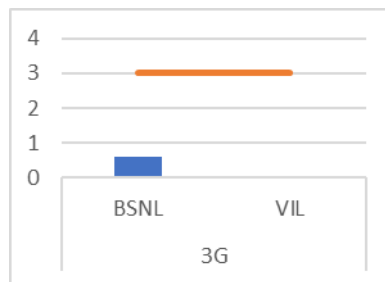
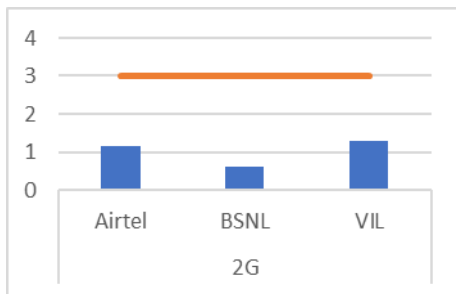
Key Observations

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

Drop Call Rate (%)



Block Call Rate (%)



KPIs	2G			3G		VoLTE		
	Airtel	BSNL	VIL	BSNL	VIL	Airtel	RJIL	VIL
Drop Call Rate %	0.28	1.88	0.77	2	NA	0.84	0	0.75
Block Call Rate %	1.17	0.625	1.28	0.61	NA	0.27	0	0.76

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

b) Call Block Rate (CBR%) benchmark of 3% was achieved by all TSP's.

Voice Calls

Key Observations

Coverage

a) Percentage of coverage samples for 2G \geq -85 dBm.

TSPs	2G		
	Airtel	BSNL	VIL
Coverage %	91.01	77	86.24

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

TSPs	3G
	BSNL
Coverage %	72.75

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

TSPs	VoLTE		
	Airtel	JIO	VIL
Coverage %	98.71	99.55	97.5

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

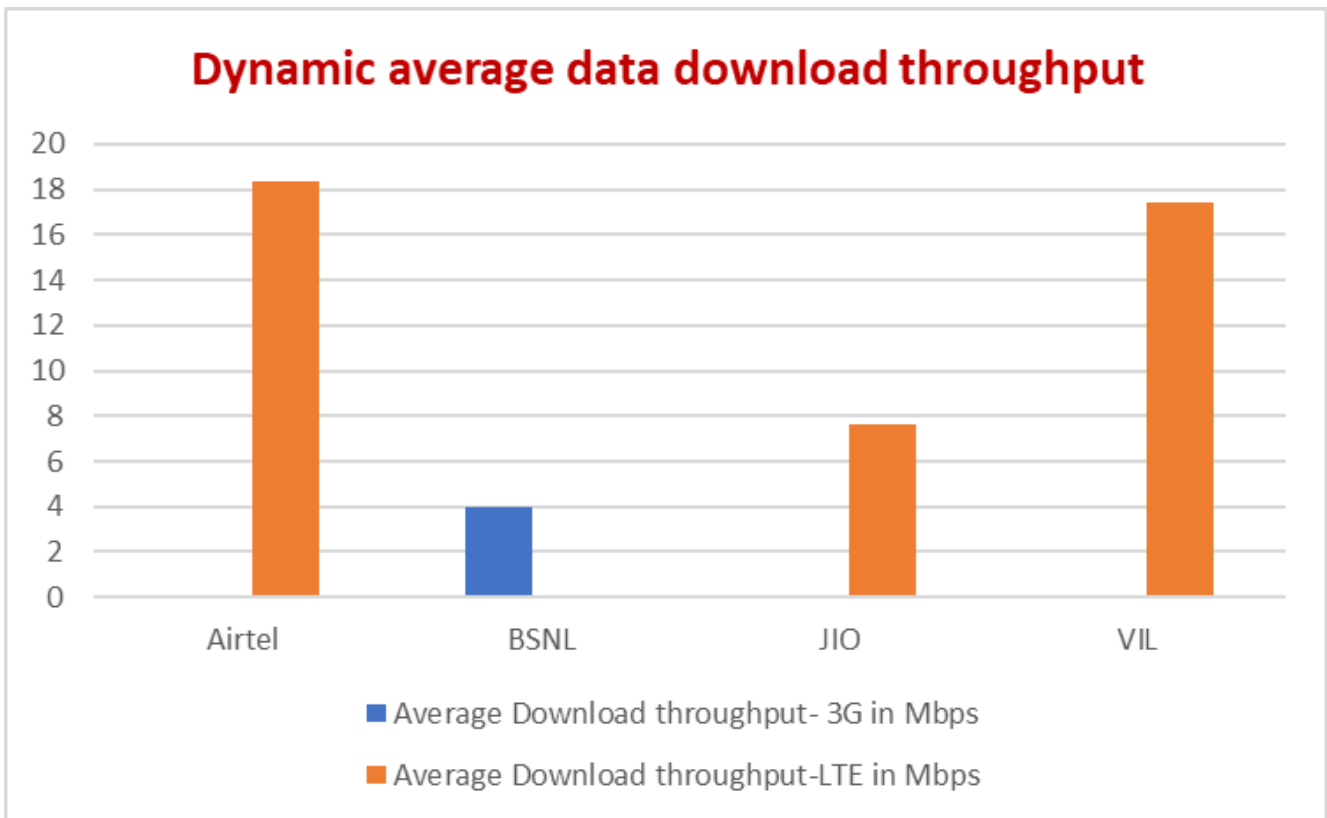
TSPs	3G		VoLTE		
	BSNL	VIL	Airtel	VIL	JIO
Time Spent on 3G/4G %	27.86	NA	100	100	100

Data Services Dynamic

Key Observations

Dynamic Data -Download Throughput was tested.

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



TSP	Airtel	BSNL	JIO	VIL
Average Download throughput- 3G In Mbps	NA	4.01	NA	NA
Average Download throughput-LTE in Mbps	18.35	NA	7.62	17.4
Average Download throughput- 5G in Mbps	NA	NA	NA	NA

Summary

City Level Summary- Voice

TSP (For 2G)	Airtel	BSNL	VIL
Call attempts	358	639	391
Block call rate %	1.17	0.625	1.28
CSSR %	98.83	99.375	98.72
Drop call rate %	0.28	1.88	0.77
Mobility HOSR %	98.48	96.517	98.42
RX Quality %	92.21	96.2	95.9
Average CST Sec	3.29	3.5	3.9

TSP (For 3G)	BSNL
Call attempts	654
Block call rate %	0.61
CSSR %	99.39
Drop call rate %	2
Mobility HOSR %	96.82
RX Quality %	92.45
Average CST (Sec)	1.19

TSP (For Volte)	Airtel	BSNL	JIO	VIL
Call attempts	359	NA	497	397
Block call rate %	0.27	NA	0	0.76
CSSR %	99.72	NA	100	99.24
Drop call rate %	0.84	NA	0	0.75
Mobility HOSR %	100	NA	99.61	98.44
RX Quality %	77.68	NA	92.36	97.06
Average CST(Sec)	1.79	NA	0.56	1.4

Summary

City Level Summary- Data Services -Static

TSP (For 3G)	BSNL
Download throughput in Mbps	3.88
Upload Throughput in Mbps	1.56
Video streaming delay in sec	0.51
Web browsing delay in second	0.44
Latency in (msec)	45

TSP (For LTE)	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	41.45	NA	37.39	11.76
Upload Throughput in Mbps	3.72	NA	7.65	7.23
Video streaming delay in sec	1.34	NA	0	1.42
Web browsing delay in second	6.21	NA	2.08	1.88
Latency in (msec)	72.9	NA	57.11	70.5

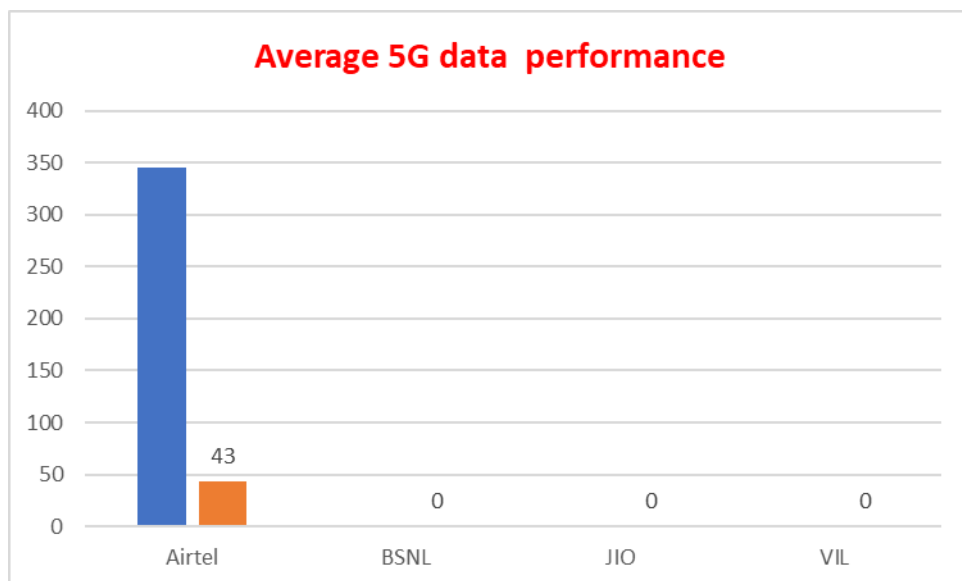
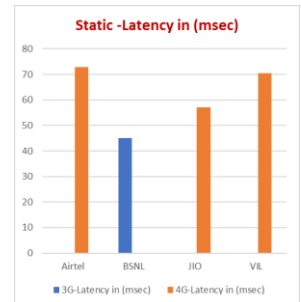
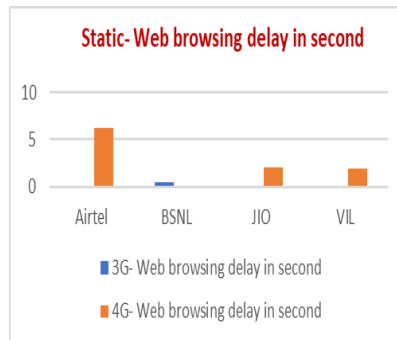
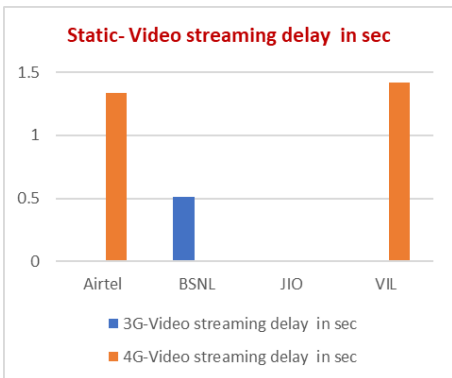
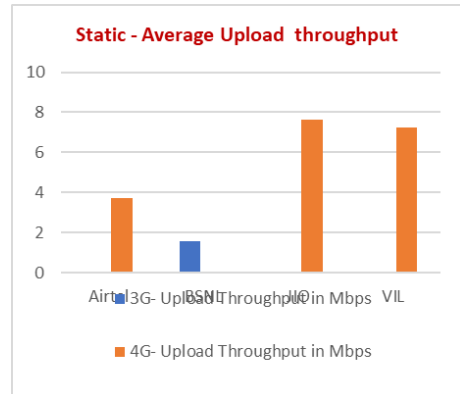
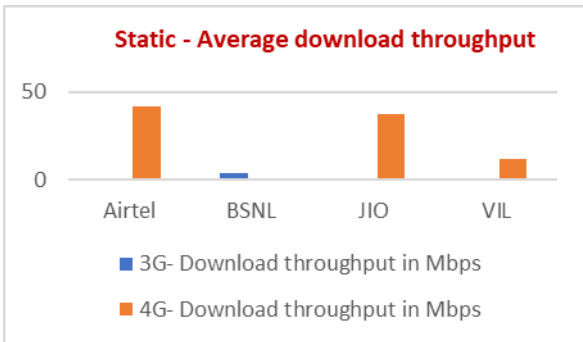
TSP (For 5G)	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	345	NA	NA	NA
Upload Throughput in Mbps	43	NA	NA	NA
Video streaming delay in sec	0	NA	NA	NA
Web browsing delay in second	6.9	NA	NA	NA
Latency in (msec)	46.1	NA	NA	NA

Data Services Static

Key Observations

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



1. Hotspot Location- SADAR BAZAR

	3G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	NA	1.24	NA	NA
Upload Throughput in Mbps	NA	1.47	NA	NA
Video streaming delay in sec	NA	0.58	NA	NA
Web browsing delay in second	NA	0.53	NA	NA
Latency in (msec)	NA	45.5	NA	NA

	LTE			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	46.78	NA	57.63	12.55
Upload Throughput in Mbps	3.42	NA	7.08	3.75
Video streaming delay in sec	2.68	NA	0	1.2
Web browsing delay in second	7.21	NA	2.01	1.8
Latency in (msec)	61	NA	67.5	63

	5G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	NA	NA	NA	NA
Upload Throughput in Mbps	NA	NA	NA	NA
Video streaming delay in sec	NA	NA	NA	NA
Web browsing delay in second	NA	NA	NA	NA
Latency in (msec)	NA	NA	NA	NA

2. Hotspot Location- AGRA CANTT RAILWAY STATION

	3G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	NA	3.95	NA	NA
Upload Throughput in Mbps	NA	1.70	NA	NA
Video streaming delay in sec	NA	0.50	NA	NA
Web browsing delay in second	NA	0.43	NA	NA
Latency in (msec)	NA	42.5	NA	NA
	LTE			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	40.4	NA	36.99	7.76
Upload Throughput in Mbps	2.98	NA	8.57	8.72
Video streaming delay in sec	2.64	NA	0	1.7
Web browsing delay in second	11.01	NA	1.94	2.1
Latency in (msec)	59	NA	59.8	77
	5G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	450	NA	NA	NA
Upload Throughput in Mbps	60	NA	NA	NA
Video streaming delay in sec	0	NA	NA	NA
Web browsing delay in second	7.36	NA	NA	NA
Latency in (msec)	46	NA	NA	NA

3. Hotspot Location- ISBT

	3G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	NA	6.60	NA	NA
Upload Throughput in Mbps	NA	1.81	NA	NA
Video streaming delay in sec	NA	0.52	NA	NA
Web browsing delay in second	NA	0.48	NA	NA
Latency in (msec)	NA	48	NA	NA
	LTE			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	27	NA	31.76	12.4
Upload Throughput in Mbps	3.1	NA	8.13	1.34
Video streaming delay in sec	0.64	NA	0	1.6
Web browsing delay in second	4.68	NA	1.95	1.9
Latency in (msec)	58	NA	51.5	63
	5G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	301	NA	NA	NA
Upload Throughput in Mbps	40.4	NA	NA	NA
Video streaming delay in sec	0	NA	NA	NA
Web browsing delay in second	7.4	NA	NA	NA
Latency in (msec)	48	NA	NA	NA

4. Hotspot Location- Sanjay Palace

	3G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	NA	6.49	NA	NA
Upload Throughput in Mbps	NA	1.74	NA	NA
Video streaming delay in sec	NA	0.35	NA	NA
Web browsing delay in second	NA	0.20	NA	NA
Latency in (msec)	NA	23	NA	NA
	LTE			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	51.3	NA	42.7	10.03
Upload Throughput in Mbps	4.3	NA	9.08	15.89
Video streaming delay in sec	0.54	NA	0	1.1
Web browsing delay in second	4.76	NA	2.19	1.7
Latency in (msec)	45	NA	48.3	68
	5G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	297	NA	NA	NA
Upload Throughput in Mbps	56	NA	NA	NA
Video streaming delay in sec	0	NA	NA	NA
Web browsing delay in second	6.74	NA	NA	NA
Latency in (msec)	46.6	NA	NA	NA

5. Hotspot Location- TajMahal Parking, Shilpgram

	3G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	NA	1.14	NA	NA
Upload Throughput in Mbps	NA	0.56	NA	NA
Video streaming delay in sec	NA	0.48	NA	NA
Web browsing delay in second	NA	0.49	NA	NA
Latency in (msec)	NA	57.9	NA	NA
	LTE			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	44.04	NA	42.5	14.14
Upload Throughput in Mbps	5.1	NA	6.51	7.73
Video streaming delay in sec	0.79	NA	0	1.5
Web browsing delay in second	5.73	NA	2.23	1.8
Latency in (msec)	129	NA	52.3	75
	5G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	176	NA	NA	NA
Upload Throughput in Mbps	66	NA	NA	NA
Video streaming delay in sec	0	NA	NA	NA
Web browsing delay in second	6.88	NA	NA	NA
Latency in (msec)	45.3	NA	NA	NA

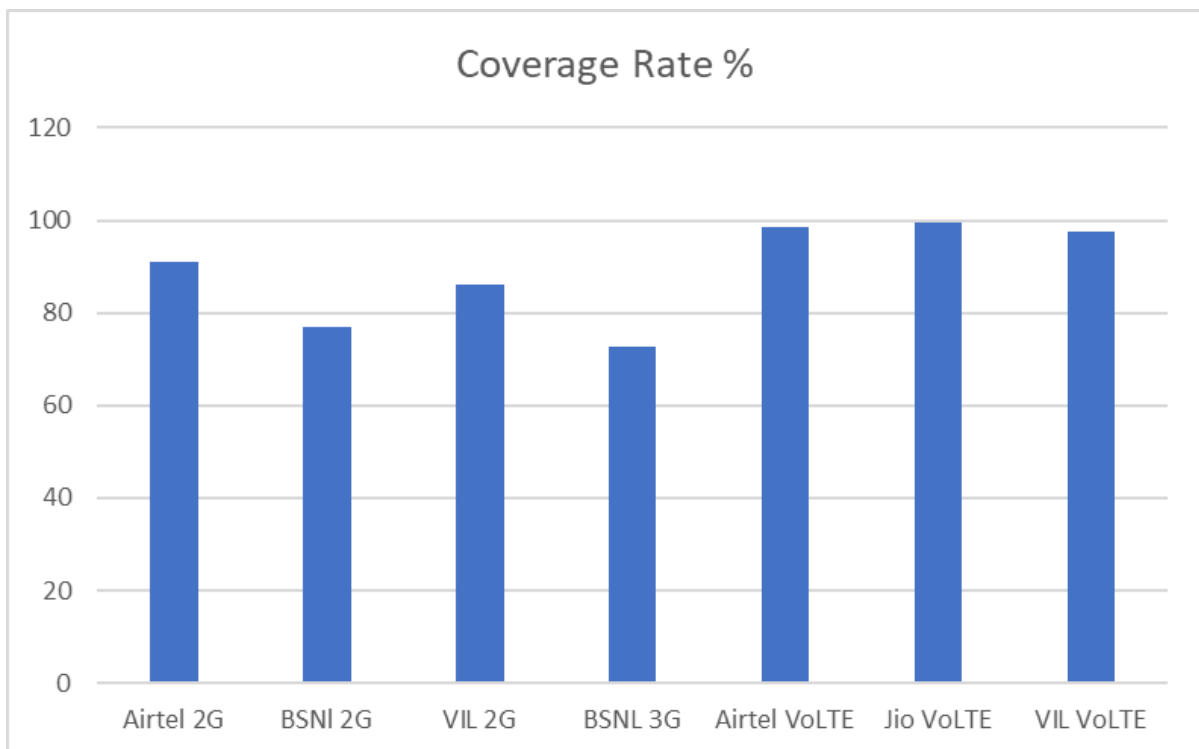
6. Hotspot Location- Agra Fort

	3G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	NA	4.68	NA	NA
Upload Throughput in Mbps	NA	1.57	NA	NA
Video streaming delay in sec	NA	0.25	NA	NA
Web browsing delay in second	NA	0.21	NA	NA
Latency in (msec)	NA	55	NA	NA
	LTE			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	38	NA	12.78	13.70
Upload Throughput in Mbps	3.39	NA	6.52	5.92
Video streaming delay in sec	0.546	NA	0	1.4
Web browsing delay in second	5.02	NA	2.15	2
Latency in (msec)	82.6	NA	63.3	77
	5G			
	Airtel	BSNL	JIO	VIL
Download throughput in Mbps	250	NA	NA	NA
Upload Throughput in Mbps	27	NA	NA	NA
Video streaming delay in sec	0	NA	NA	NA
Web browsing delay in second	7.3	NA	NA	NA
Latency in (msec)	46.32	NA	NA	NA

Coverage Details

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 \geq -85 dBm, RSCP is \geq -90 dBm & RSRP \geq -110dBm. The details are as follows.

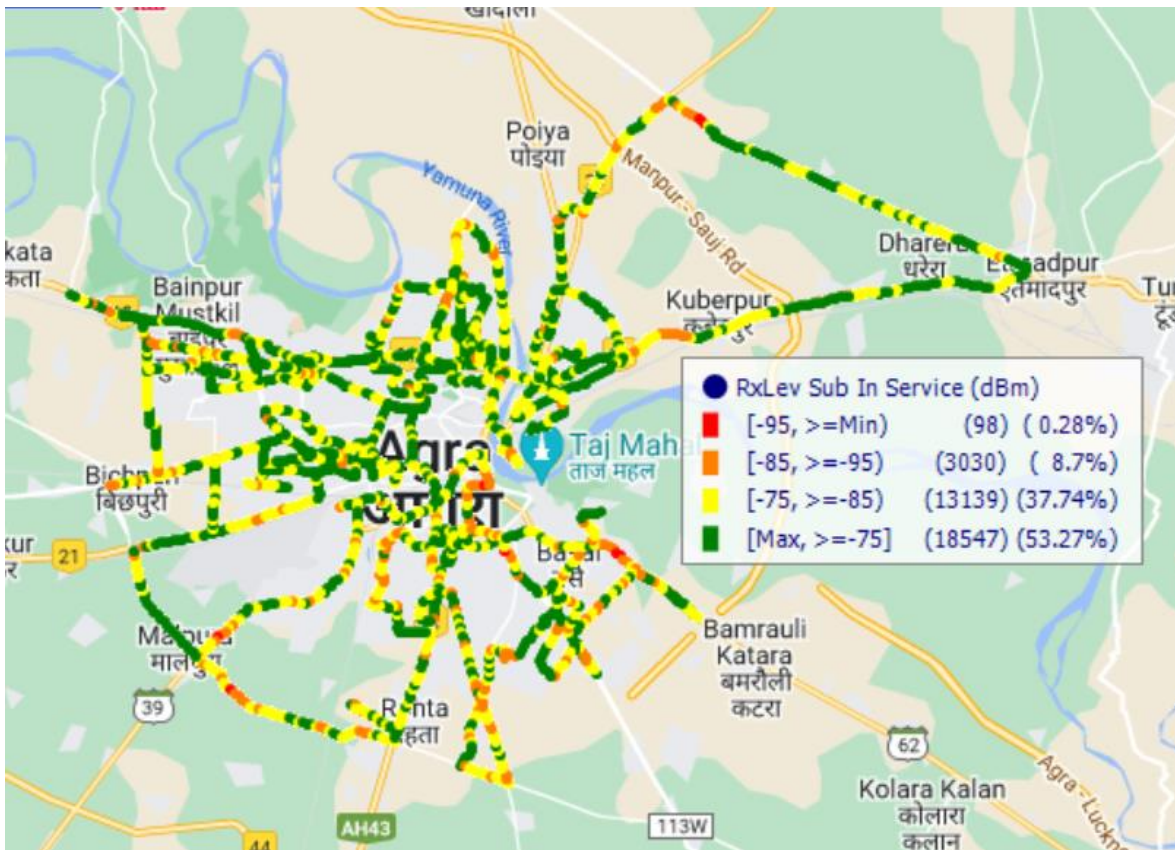
TSP	Coverage Rate %
Airtel 2G	91.01
BSNI 2G	77
VIL 2G	86.24
BSNL 3G	72.75
Airtel VoLTE	98.71
Jio VoLTE	99.55
VIL VoLTE	97.5



Coverage Details

TSP-Airtel

Technology	Coverage %
2G	91.01

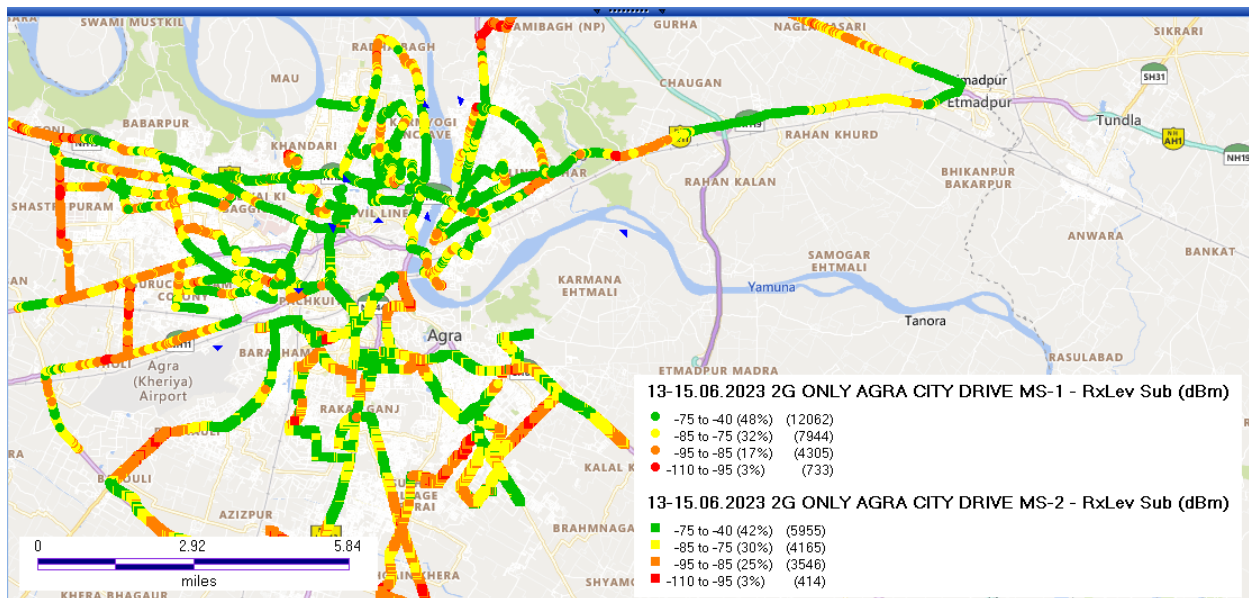


2G			
Overall RxLevel	# Samples	% PDF	Legends
[Max, >=-75]	18547	53.27	
[-75, >=-85)	13139	37.74	
[-85, >=-95)	3030	8.7	
[-95, >=Min)	98	0.28	
Total	34814	100	

Coverage Details

TSP-BSNL

Technology	Coverage %
2G	77%

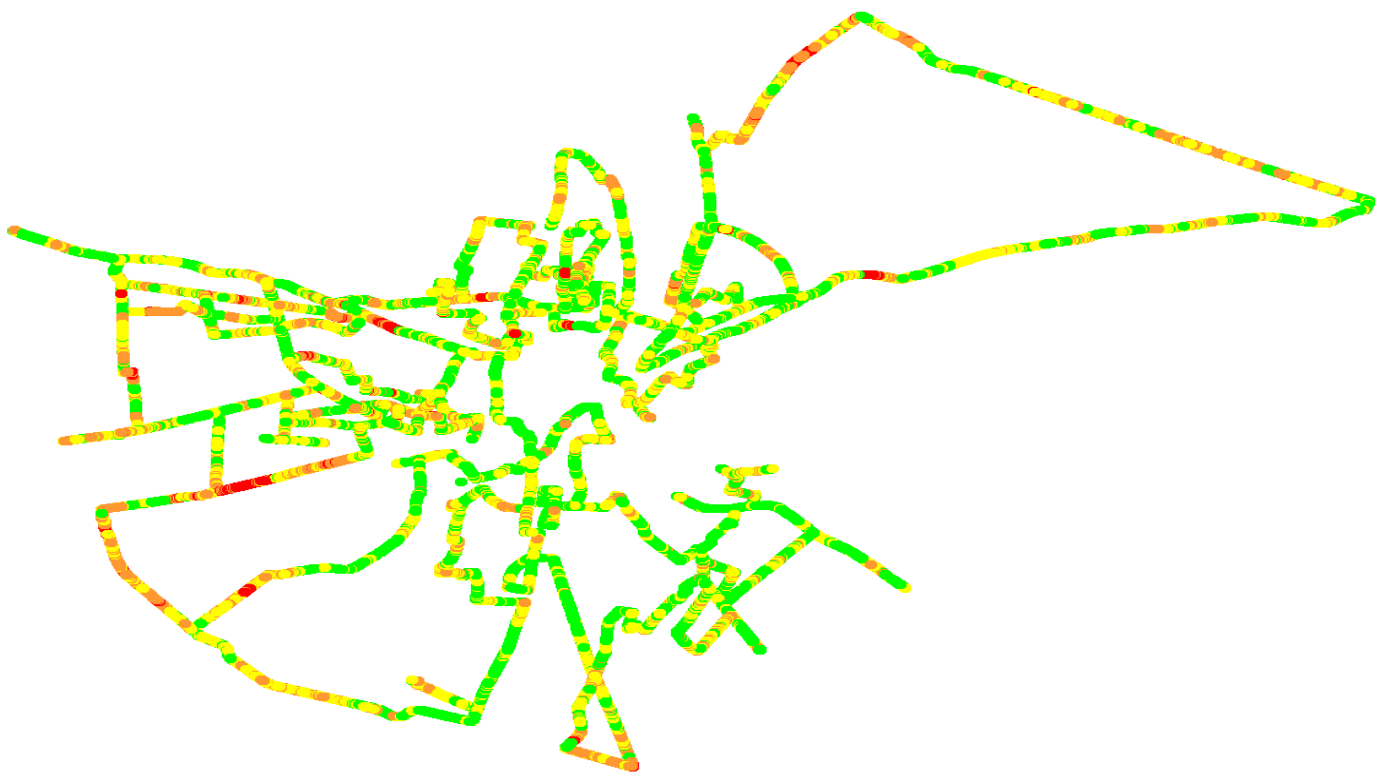



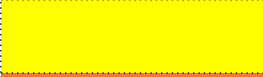


2G			
Overall RxLevel	# Samples	% PDF	Legends
[Max, >=-75]	18017	46	
[-75, >=-85)	12109	30	
[-85, >=-95)	7851	20	
[-95, >=Min)	1147	4	
Total	39124	100	

Coverage Details

TSP-.....VIL

Technology	Coverage %
2G	86.24

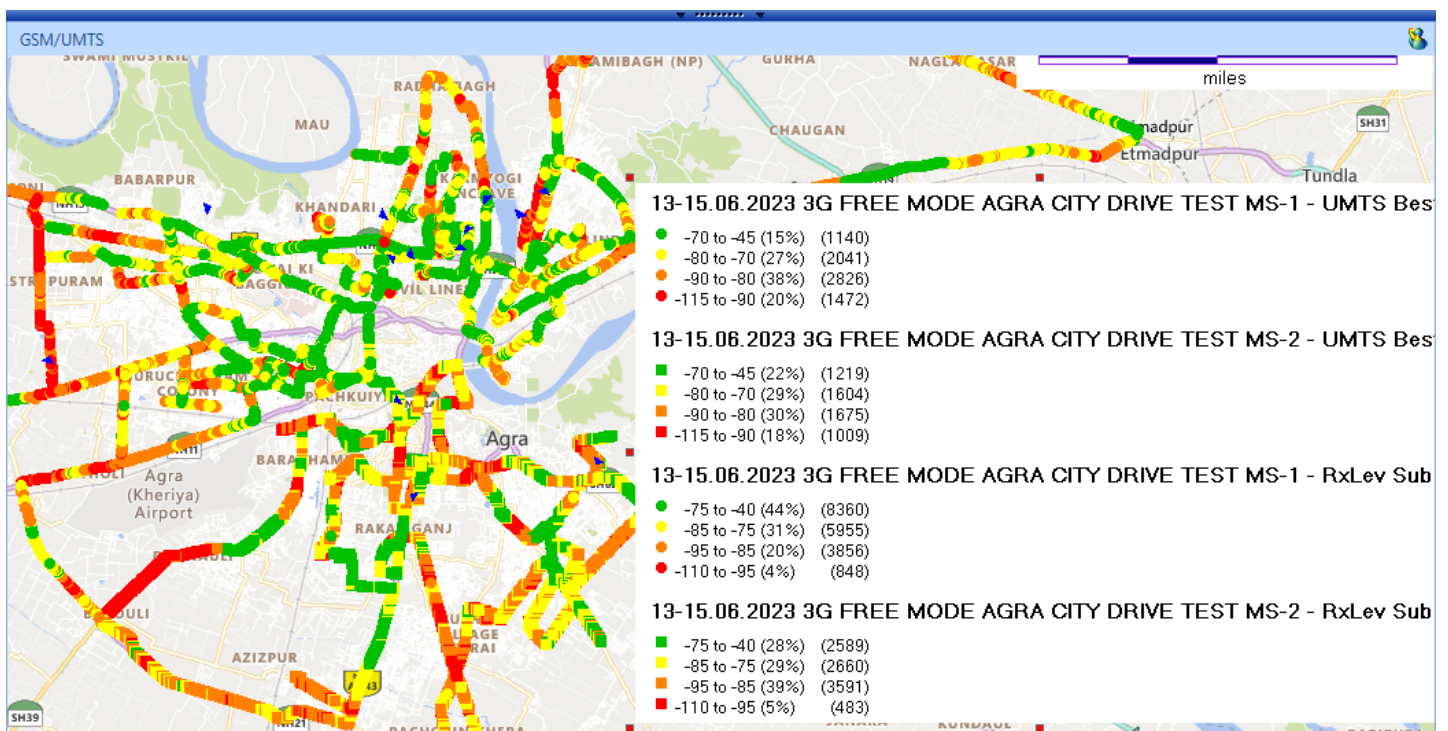


2G			
Overall RxLevel	# Samples	% PDF	Legends
[Max, >=-75]	2603931	44.19	
[-75, >=-85)	2477931	42.05	
[-85, >=-95)	747702	12.7	
[-95, >=Min)	62379	1.06	
Total	5891943	100	

Coverage Details

TSP- BSNL

Technology	Coverage %
3G	72.75%

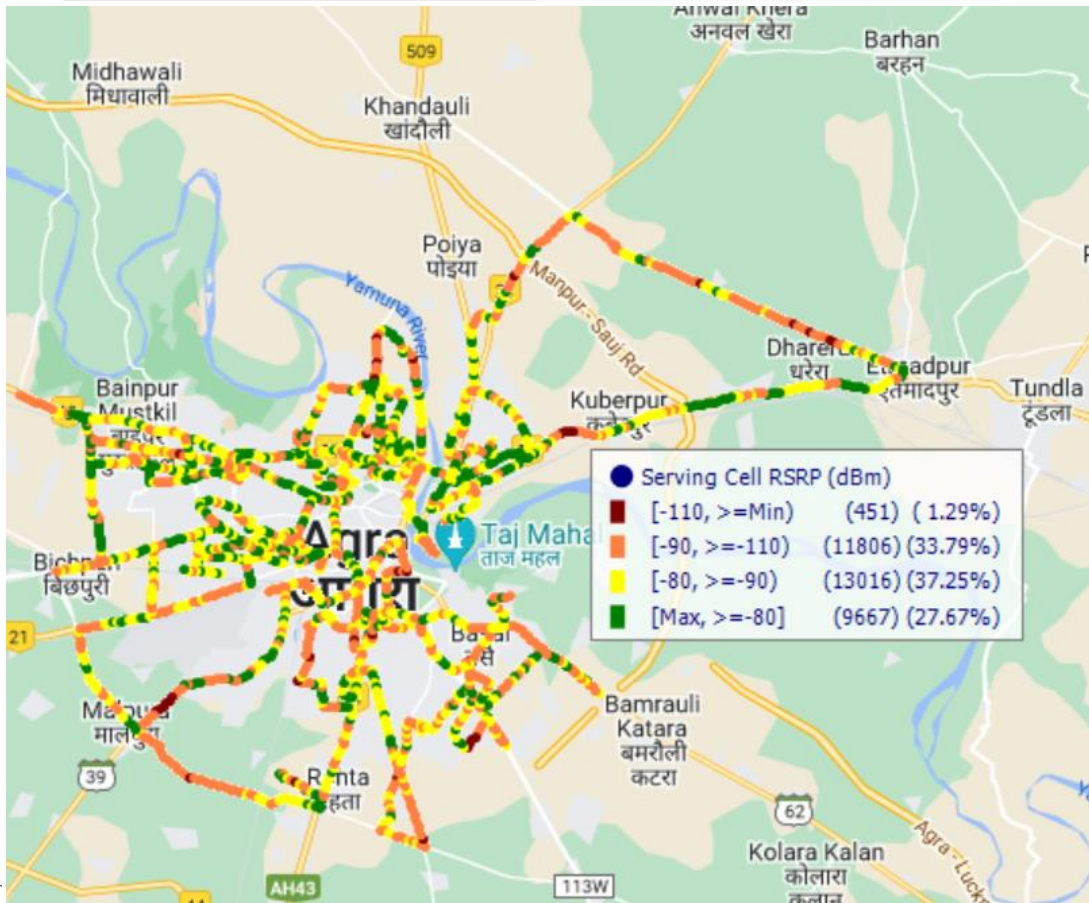


3G			
Overall RSCP	# Samples	% PDF	Legends
[Max, >=-70]	2359	18	
[-70, >=-80]	3645	28	
[-80, >=-90]	4501	35	
[-90, >=Min)	2481	19	
Total	12986	100	

Coverage Details

TSP-Airtel

Technology	Coverage %
VoLTE	98.71

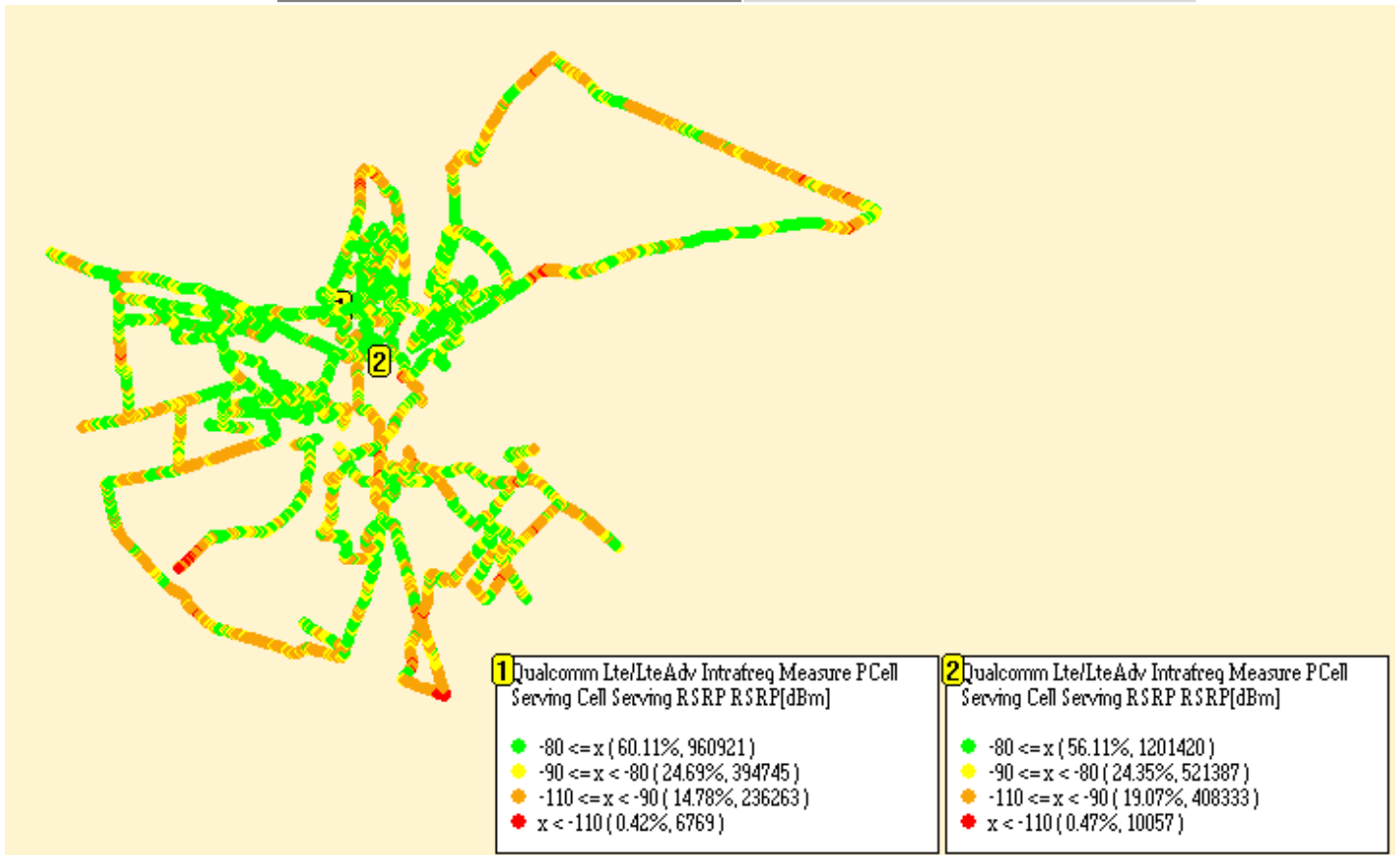


VoLTE

Overall RSRP	# Samples	% PDF	Legends
[Max, >=-80]	9667	27.67	
[-80, >=-90)	13016	37.25	
[-90, >=-110)	11806	33.79	
[-110, >=Min)	451	1.29	
Total	34940	100	

TSP- Jio

Technology	Coverage %
VoLTE	99.55







VoLTE			
Overall RSRP	# Samples	% PDF	Legends
[Max, >=-80]	2162341	57.82	
[-80, >=-90)	916132	24.49	
[-90, >=-110)	644596	17.24	
[-110, >=Min)	16826	0.45	
Total	3739895		

Coverage Details

TSP-.....VIL

Technology	Coverage %
VoLTE	97.5

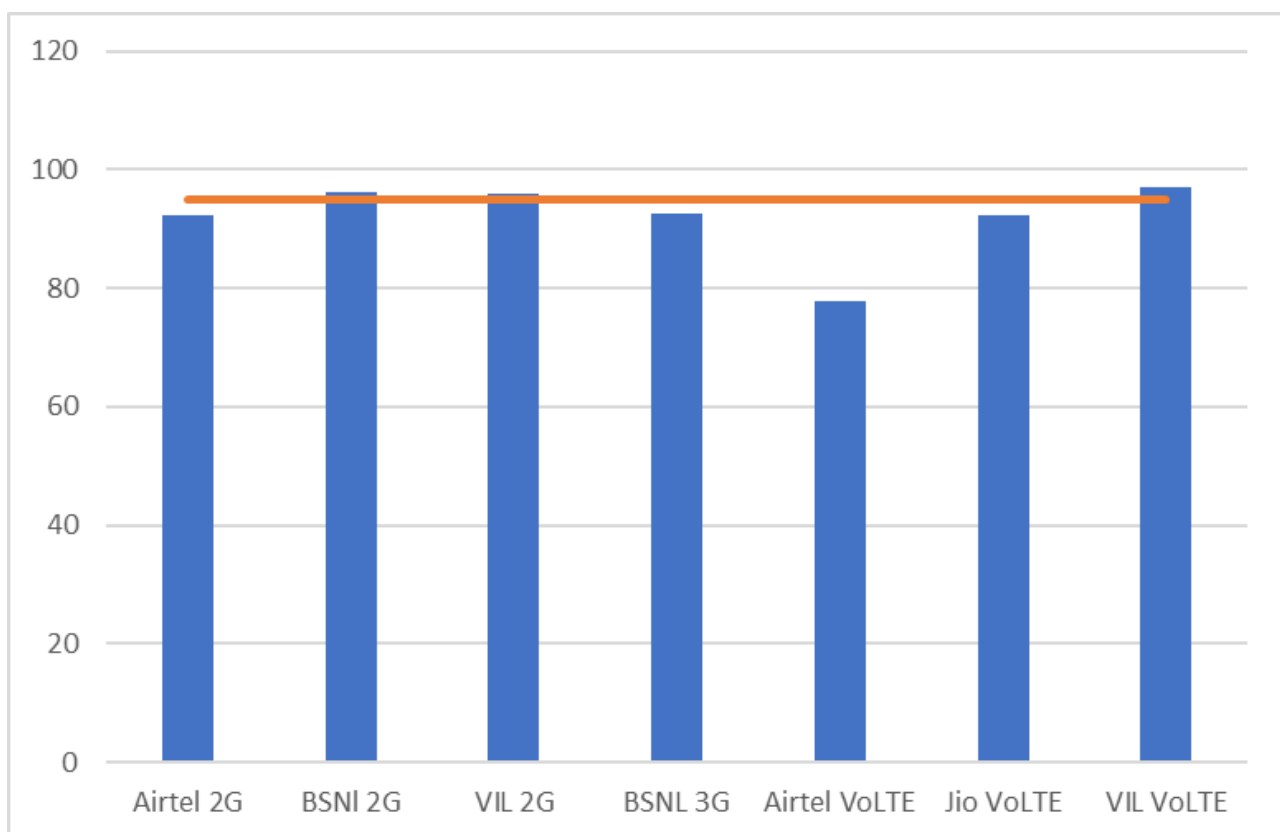


VoLTE			
Overall RSRP	# Samples	% PDF	Legends
[Max, >=-80]	342147	25	
[-80, >=-90)	426042	31.1	
[-90, >=-110)	568035	41.5	
[-110, >=Min)	34018	2.5	
Total	137042	100	

Quality Details

For measuring voice quality, as per the QoS norms, RxQual ≤ 5 for GSM TSPs, EcNo ≥ -14 dBm for 3G TSP and 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 $\geq 95\%$.

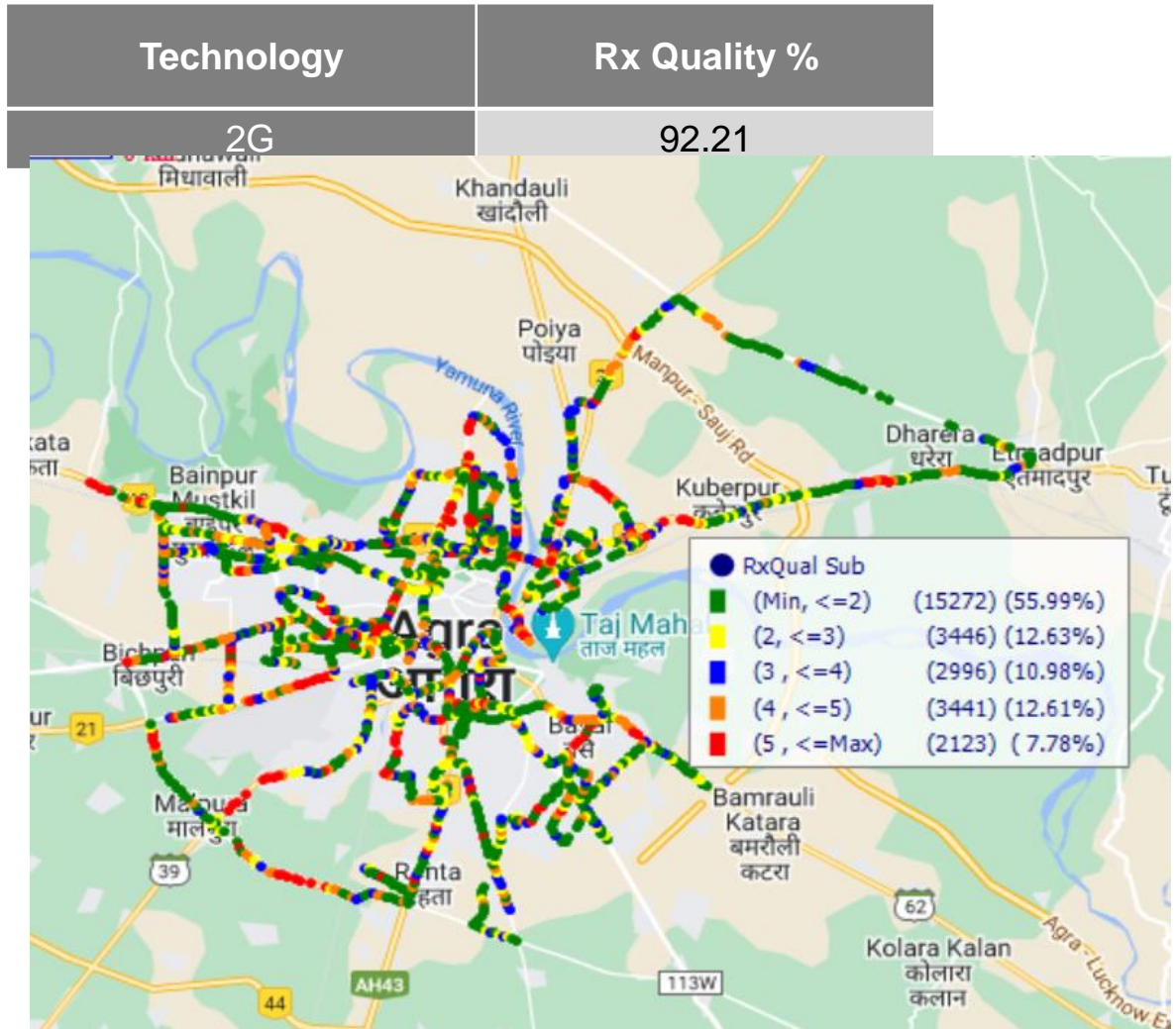
TSP	Rx Quality %
Airtel 2G	92.21
BSNI 2G	96.2
VIL 2G	95.9
BSNL 3G	92.45
Airtel VoLTE	77.68
Jio VoLTE	92.36
VIL VoLTE	97



Quality Details

For measuring voice quality, as per the QoS norms, RxQual ≤ 5 for GSM TSPs, EcNo ≥ -14 dBm for 3G TSP and 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 $\geq 95\%$.

TSP-Airtel



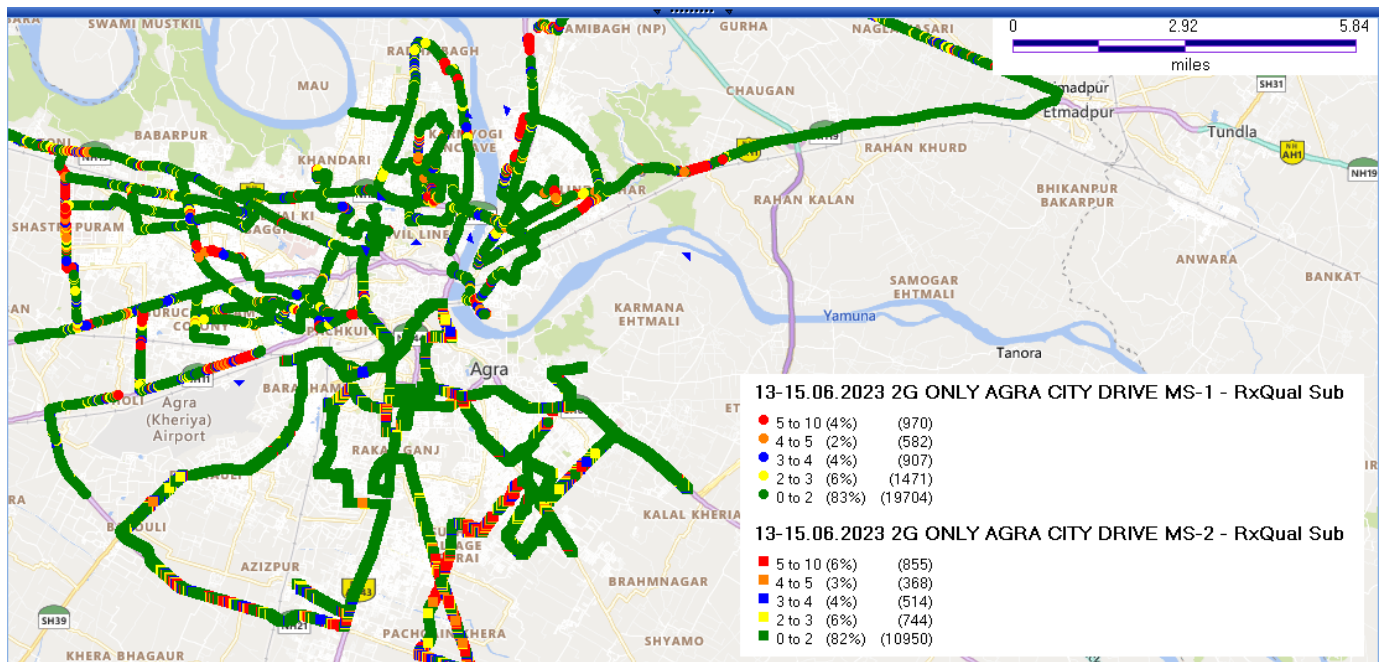
Overall Rx Quality	# Samples	% PDF	Legends
(Min, ≤ 2)	15272	55.99	
(2, ≤ 3)	3446	12.63	
(3, ≤ 4)	2996	10.98	
(4, ≤ 5)	3441	12.61	
(5, $\leq \text{Max}$)	2123	7.78	
Total	27278	100	

Quality Details

For measuring voice quality, as per the QoS norms, RxQual ≤ 5 for GSM TSPs, EcNo ≥ -14 dBm for 3G TSP and 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 $\geq 95\%$.

TSP-BSNL

Technology	Rx Quality %
2G	96.2%



Overall Rx Quality	# Samples	% PDF	Legends
(Min, ≤ 2)	30654	83	
(2, ≤ 3)	2215	6	
(3, ≤ 4)	1421	4	
(4, ≤ 5)	950	2	
(5, \leq Max)	1825	5	
Total	37065	100	






Quality Details

For measuring voice quality, as per the QoS norms, RxQual ≤ 5 for GSM TSPs, EcNo ≥ -14 dBm for 3G TSP and 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 $\geq 95\%$.

TSP-.....VIL

Technology	Rx Quality %
2G	95.9



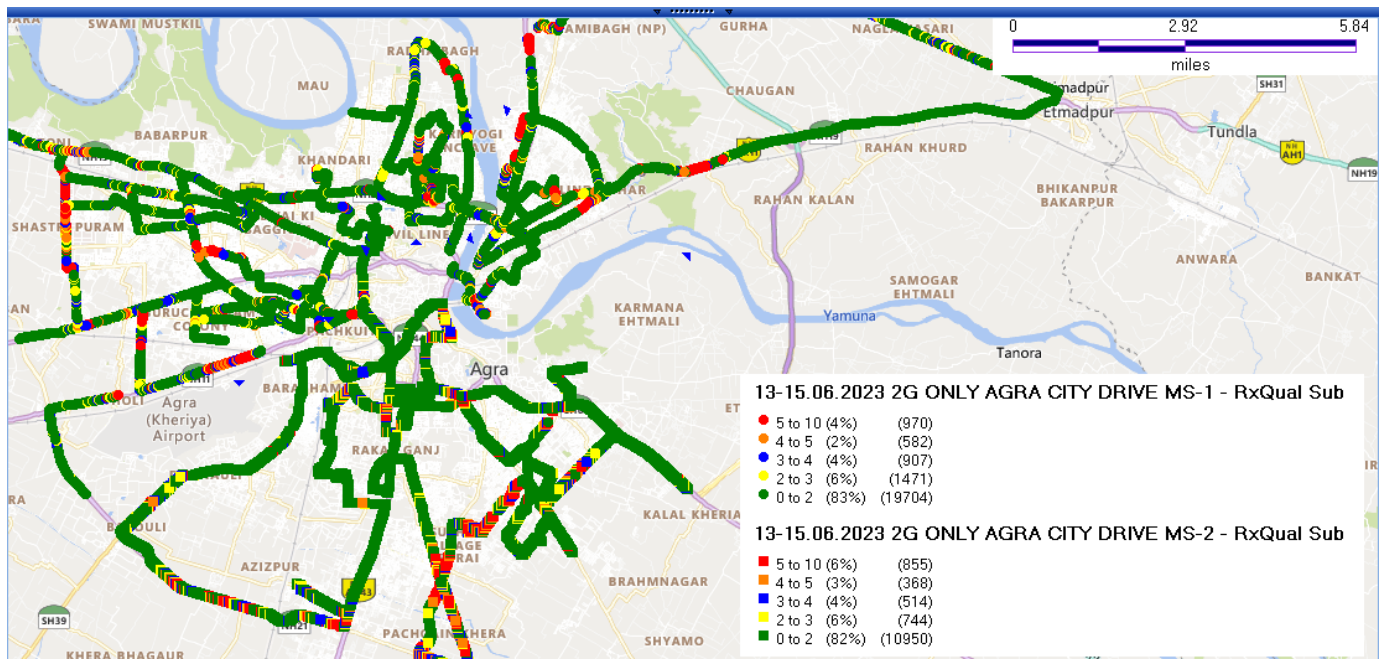
Overall Rx Quality	# Samples	% PDF	Legends
(Min, ≤ 2)	129560	91.6	
(2, ≤ 3)	1903	1.3	
(3, ≤ 4)	2001	1.4	
(4, ≤ 5)	2124	1.5	
(5, $\leq \text{Max}$)	5841	4.1	
Total	141429	100	

Quality Details

For measuring voice quality, as per the QoS norms, RxQual ≤ 5 for GSM TSPs, EcNo ≥ -14 dBm for 3G TSP and 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 $\geq 95\%$.

TSP-BSNL

Technology	Rx Quality %
2G	96.2%



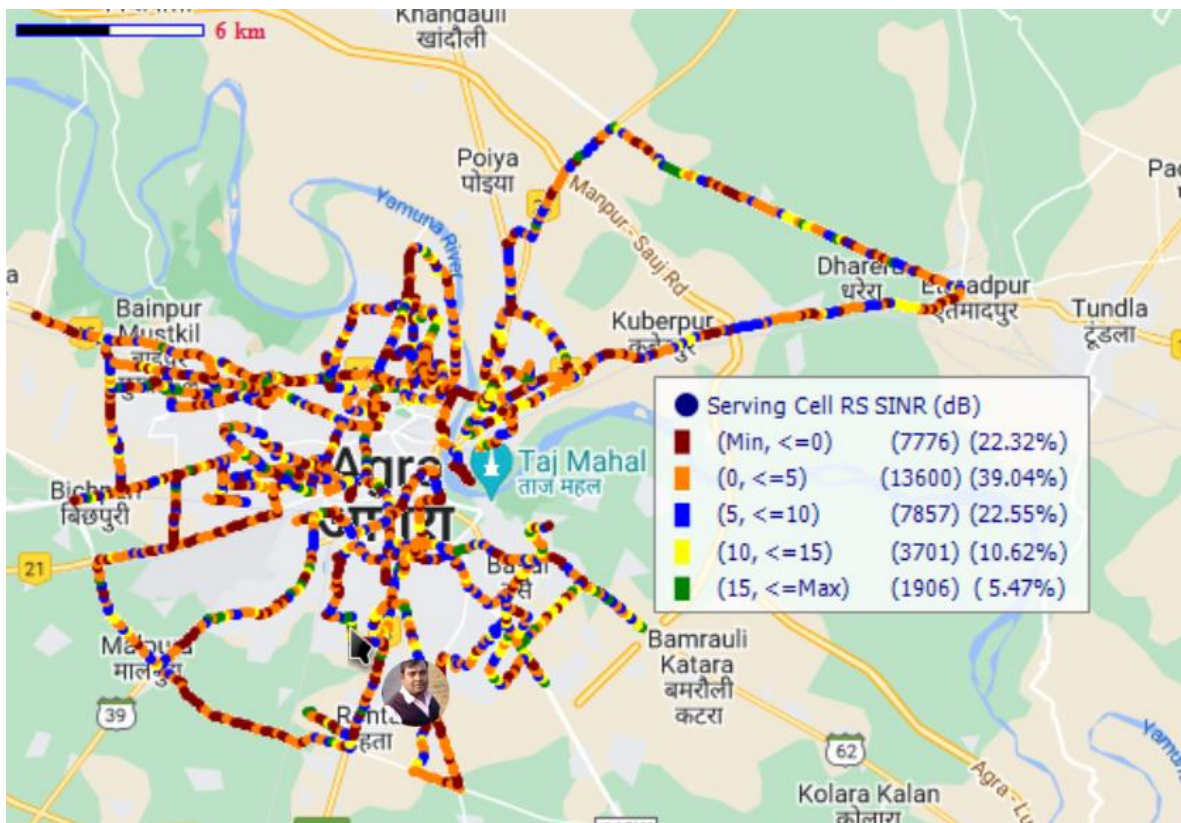
Overall Rx Quality	# Samples	% PDF	Legends
(Min, ≤ 2)	30654	83	
(2, ≤ 3)	2215	6	
(3, ≤ 4)	1421	4	
(4, ≤ 5)	950	2	
(5, \leq Max)	1825	5	
Total	37065	100	

Quality Details

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 $\geq 95\%$.

TSP-Airtel

Technology	Rx Quality %
VoLTE	78.68



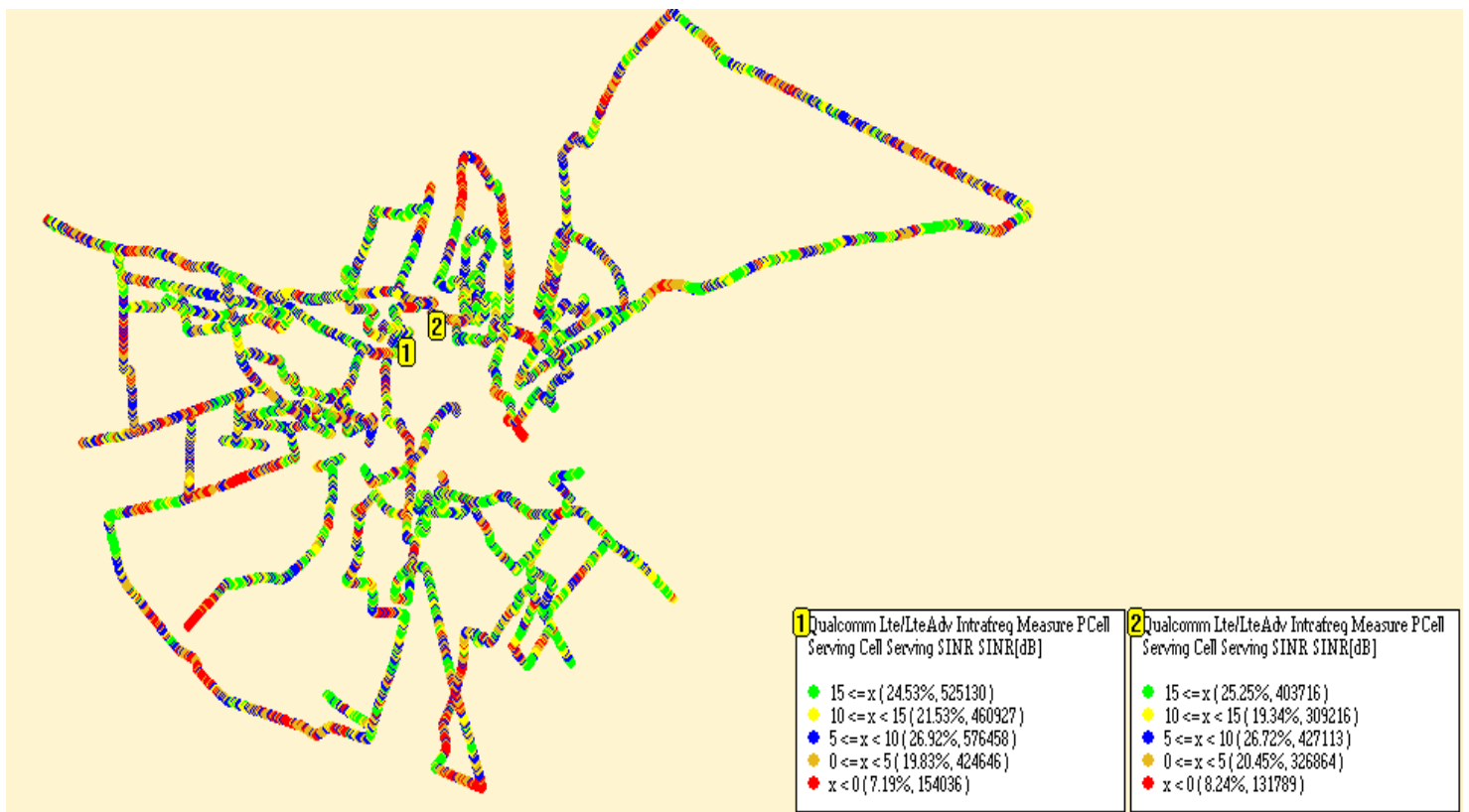
Overall SINR	# Samples	% PDF	Legends
(Min, ≤ 0)	7776	22.32	
(0, ≤ 5)	13600	39.04	
(5, ≤ 10)	7857	22.55	
(10, ≤ 15)	3701	10.62	
(15, $\leq \text{Max}$)	1906	5.47	
Total	34840	100	

Quality Details

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 $\geq 95\%$.

TSP- Jio

Technology	Rx Quality %
VoLTE	92.36



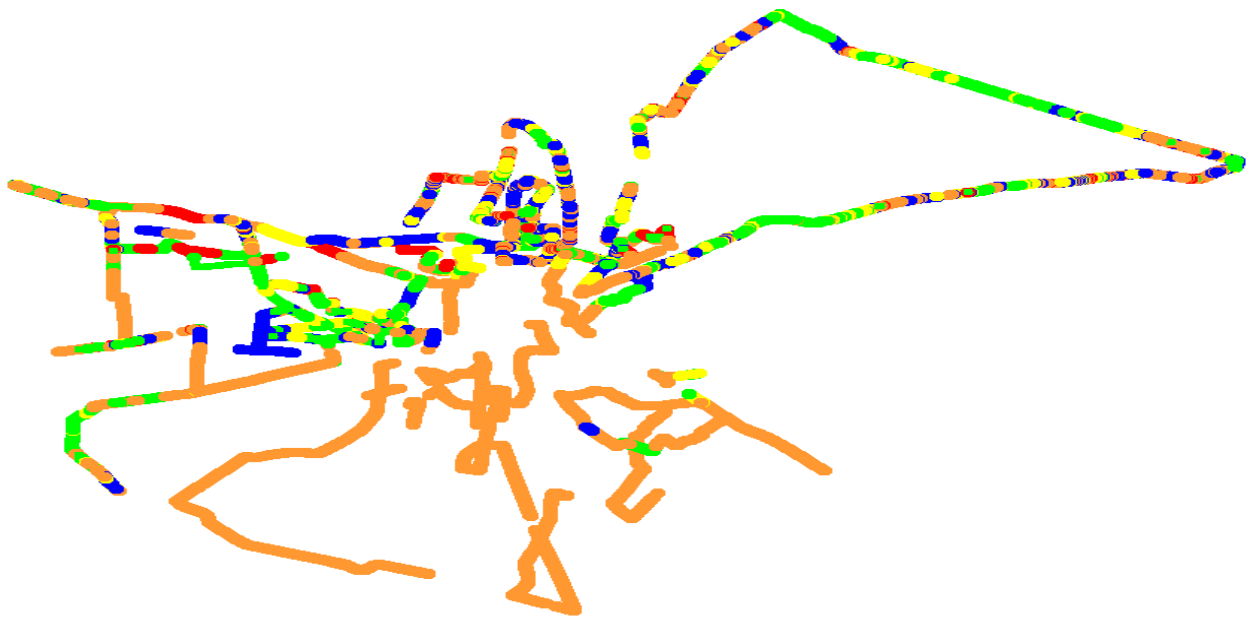
Overall SINR	# Samples	% PDF	Legends
(Min, ≤ 0)	285825	7.64	
(0, ≤ 5)	751510	20.09	
(5, ≤ 10)	1003571	26.83	
(10, ≤ 15)	770143	20.6	
(15, \leq Max)	928846	24.84	
Total	3739895		






Quality Details

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 $\geq 95\%$.

TSP-.....VIL

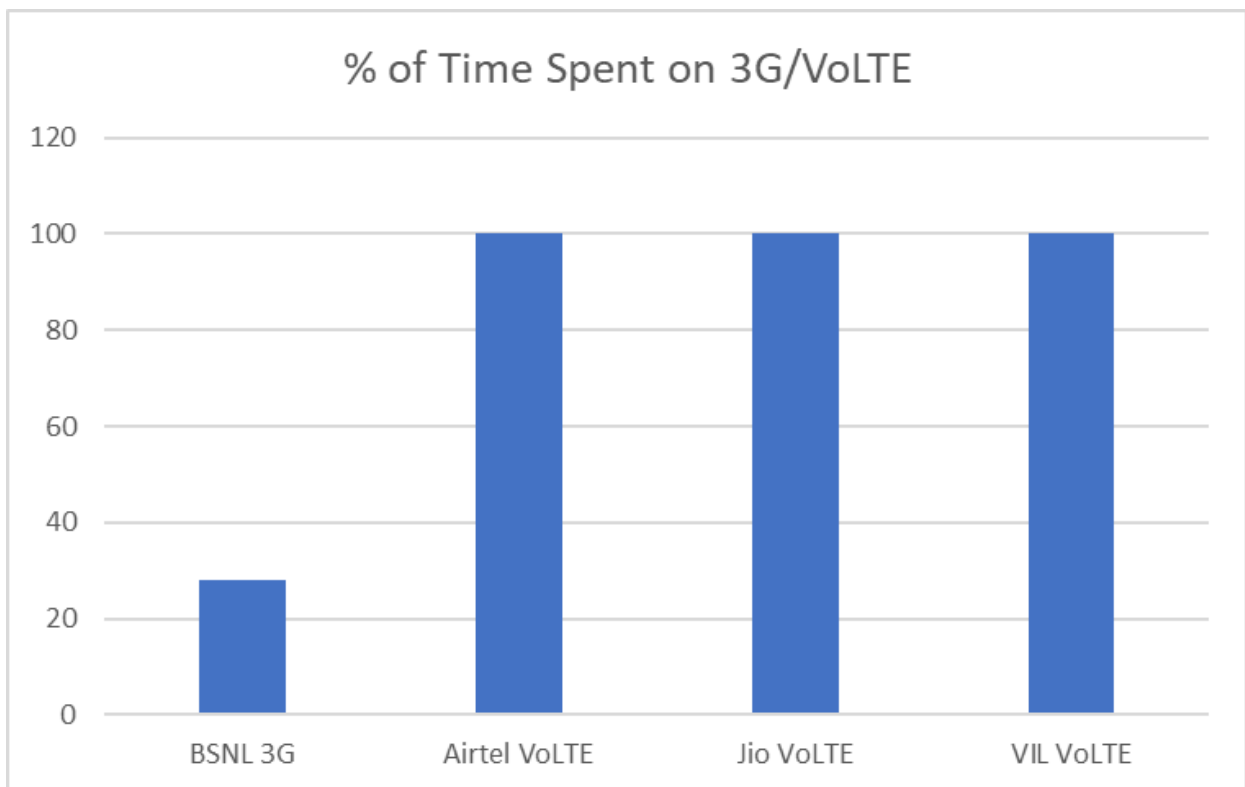
Technology	Rx Quality %
VoLTE	97.06



Overall SINR	# Samples	% PDF	Legends
(Min, ≤ 0)	324620	2.94	
(0, ≤ 5)	8113640	73.53	
(5, ≤ 10)	439460	3.98	
(10, ≤ 15)	1670105	15.14	
(15, $\leq \text{Max}$)	486238	4.41	
Total	11034063	100	

Technology Details

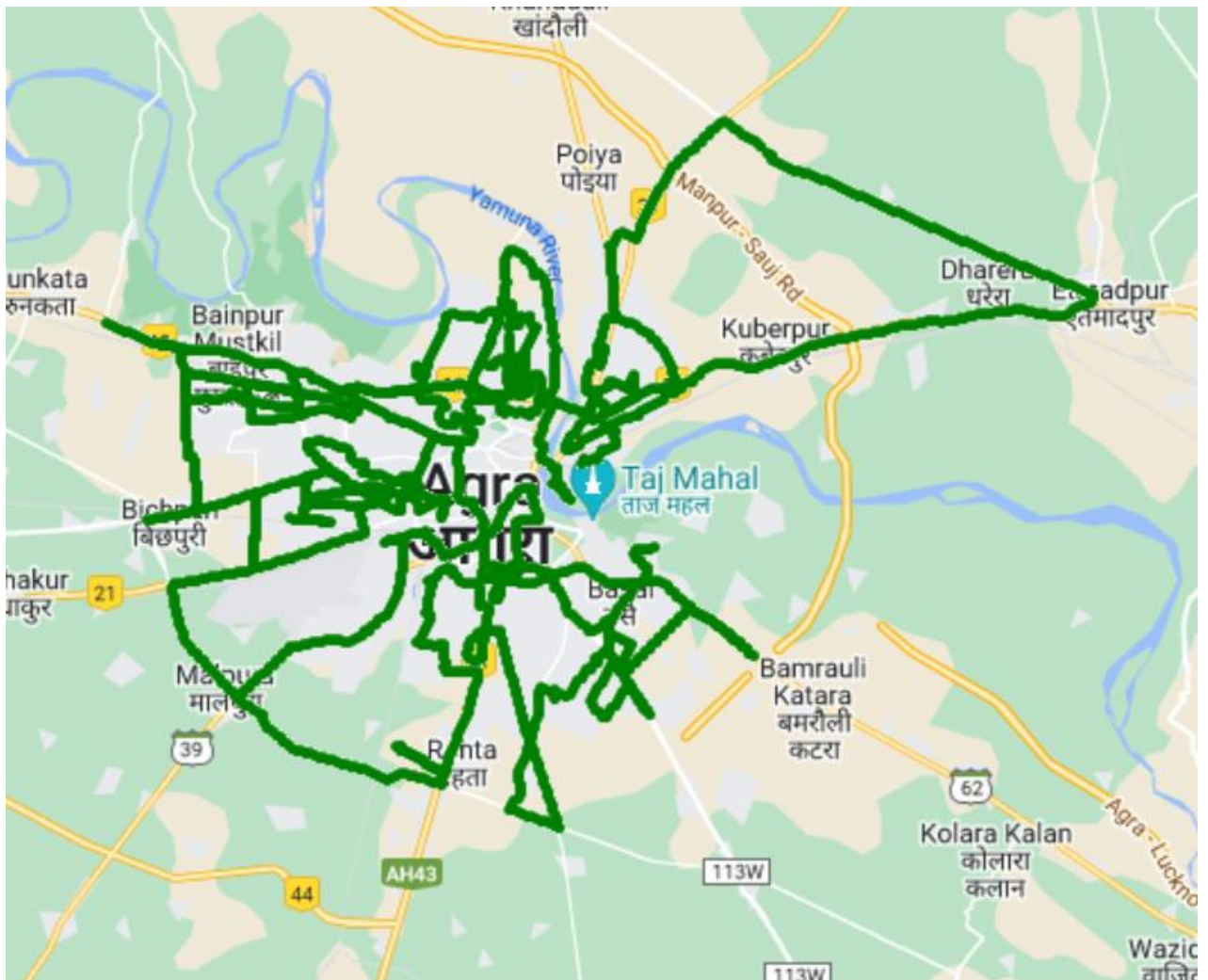
TSP	% of Time Spent on 3G/VoLTE
BSNL 3G	27.86
Airtel VoLTE	100
Jio VoLTE	100
VIL VoLTE	100



Technology Details

TSP-Airtel

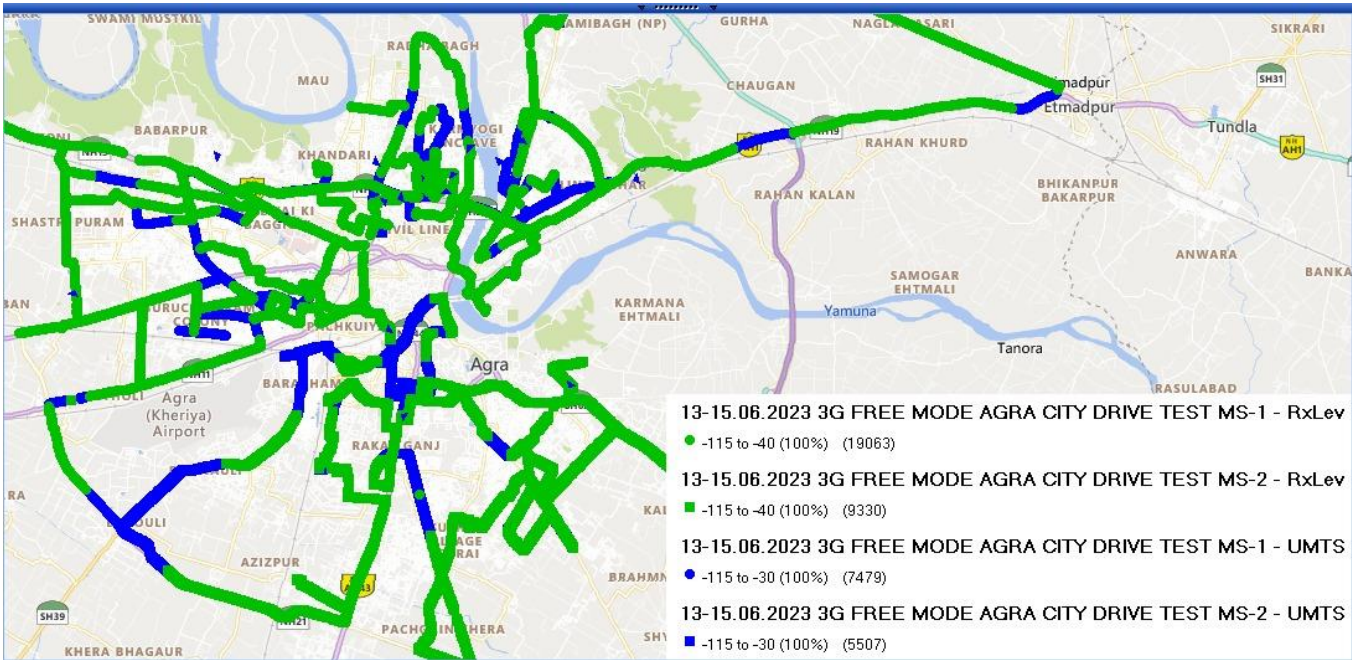
Technology	% of Time Spent on
3G	
VoLTE	100



Technology Details

TSP-BSNL

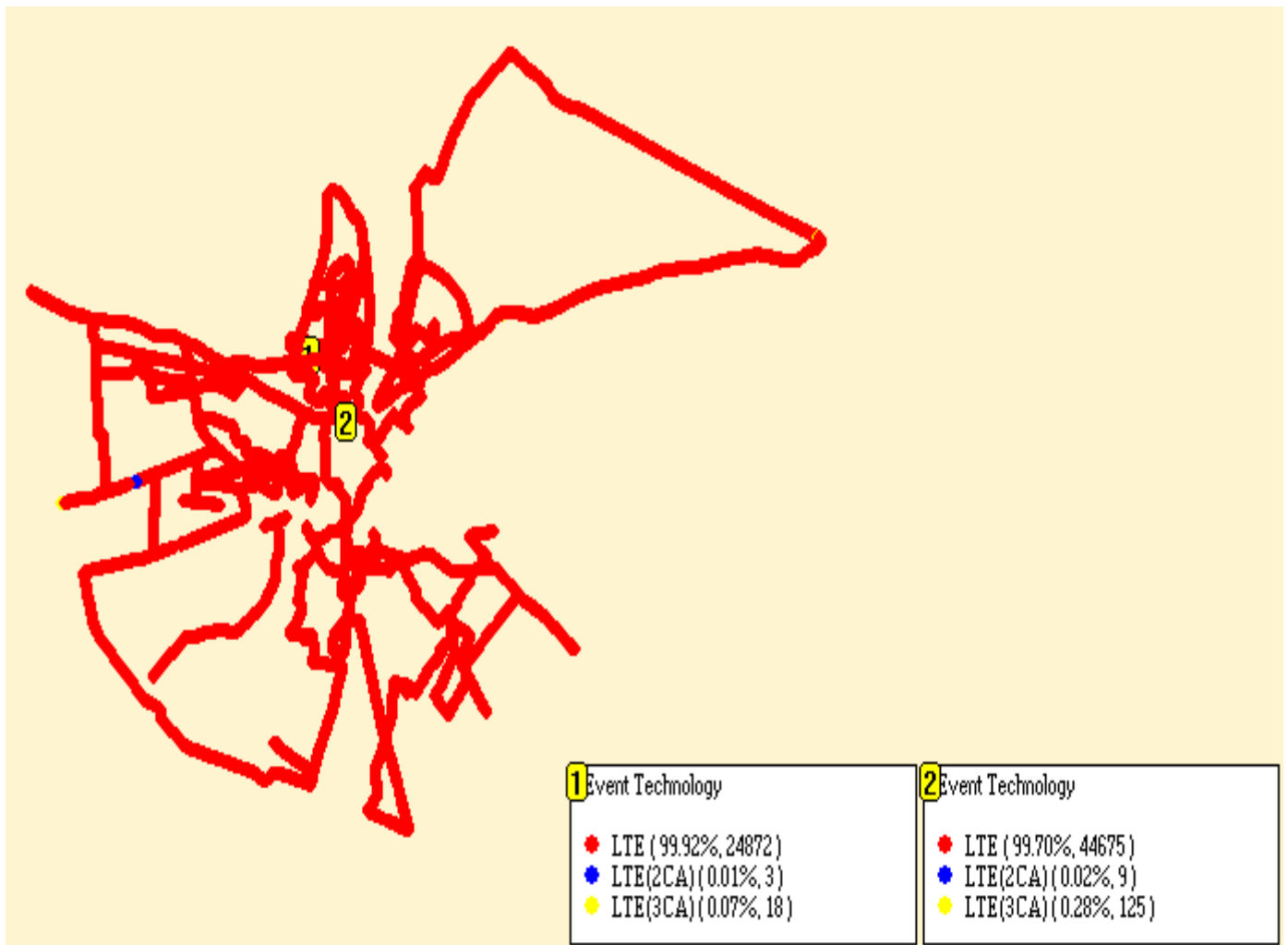
Technology	% of Time Spent on
3G	27.86%
VoLTE	



Technology Details

TSP- Jio

Technology	% of Time Spent on
3G	
VoLTE	100%



TSP-VIL

Technology	% of Time Spent on
3G	
VoLTE	100

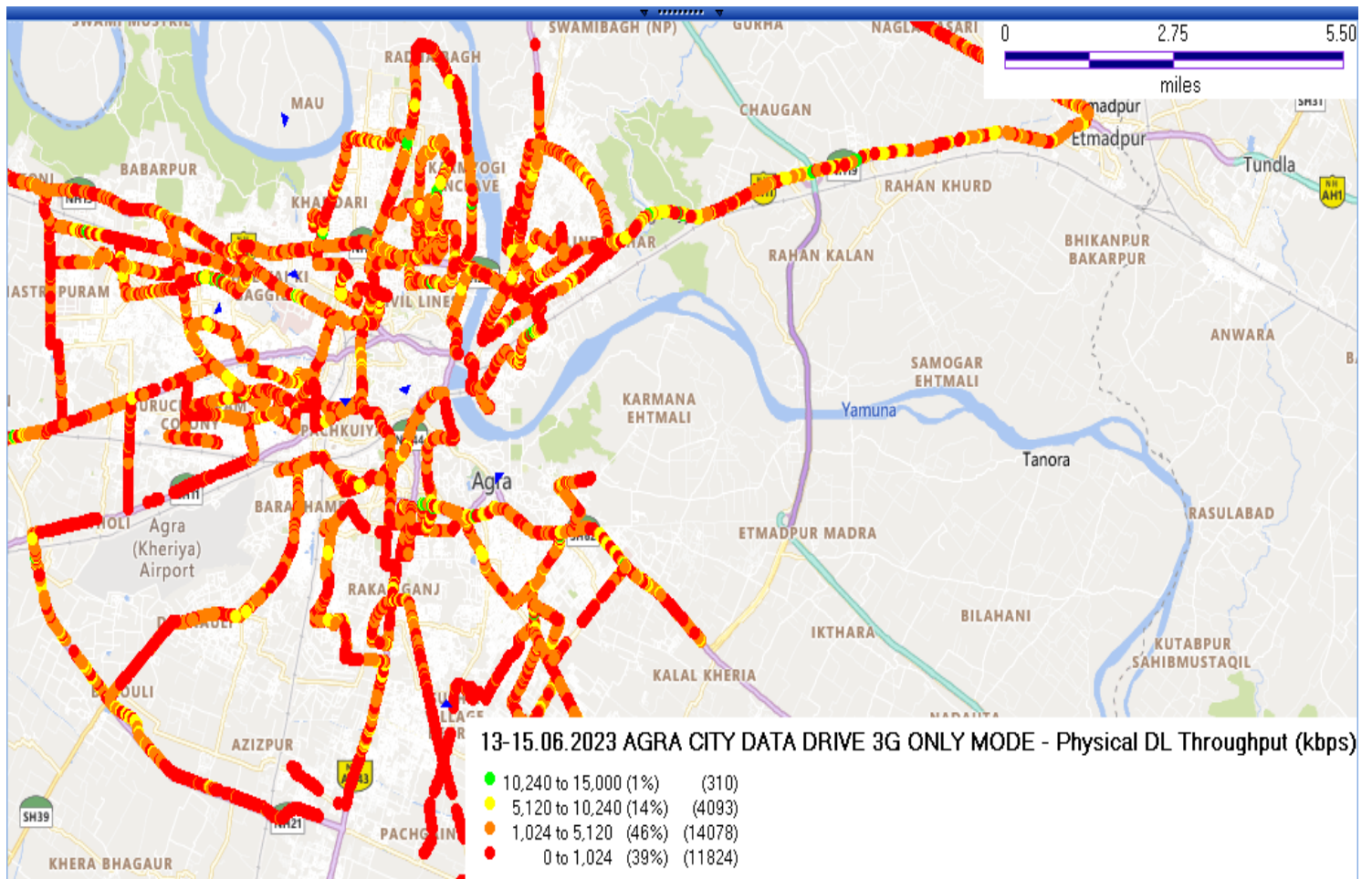


Dynamic Data Test

TSP- BSNL

Data Statistics - Dynamic data testing

Data KPIs - Overall	3G
Download Throughput (Mbps)	4.01

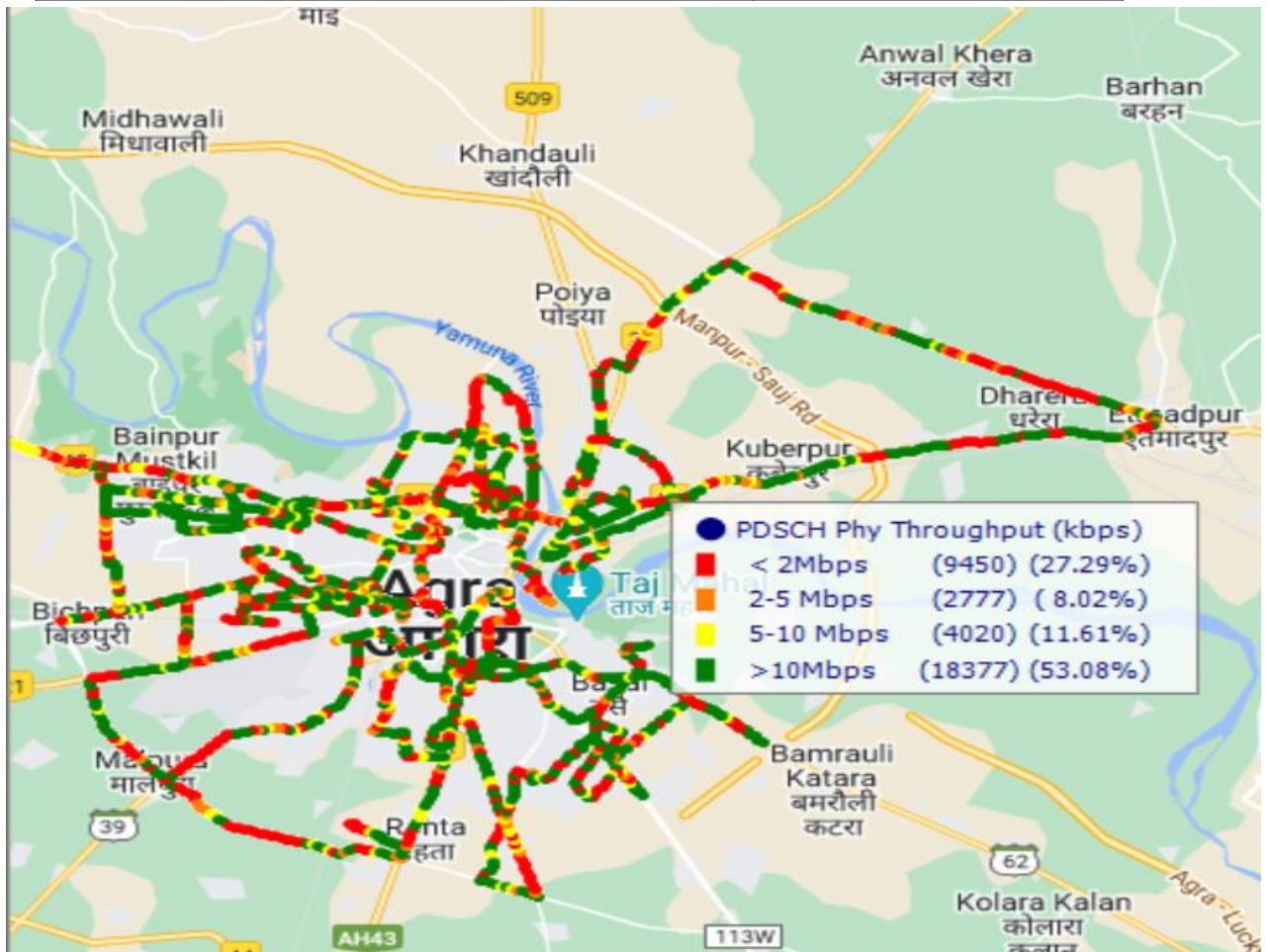


DL throughput	No of Sample	%	Legends
< 1 Mbps	11824	39.02	Red
1-5 Mbps	14078	46.45	Orange
5-10 Mbps	4093	13.51	Yellow
>10Mbps	310	1.02	Green

TSP-Airtel

Data Statistics - Dynamic data testing

Data KPIs - Overall	LTE
Download Throughput (Mbps)	18.35



DL throughput	No of Sample	%	Legends
< 2Mbps	9450	27.29	
2-5 Mbps	2777	8.02	
5-10 Mbps	4020	11.61	
>10Mbps	18377	53.08	

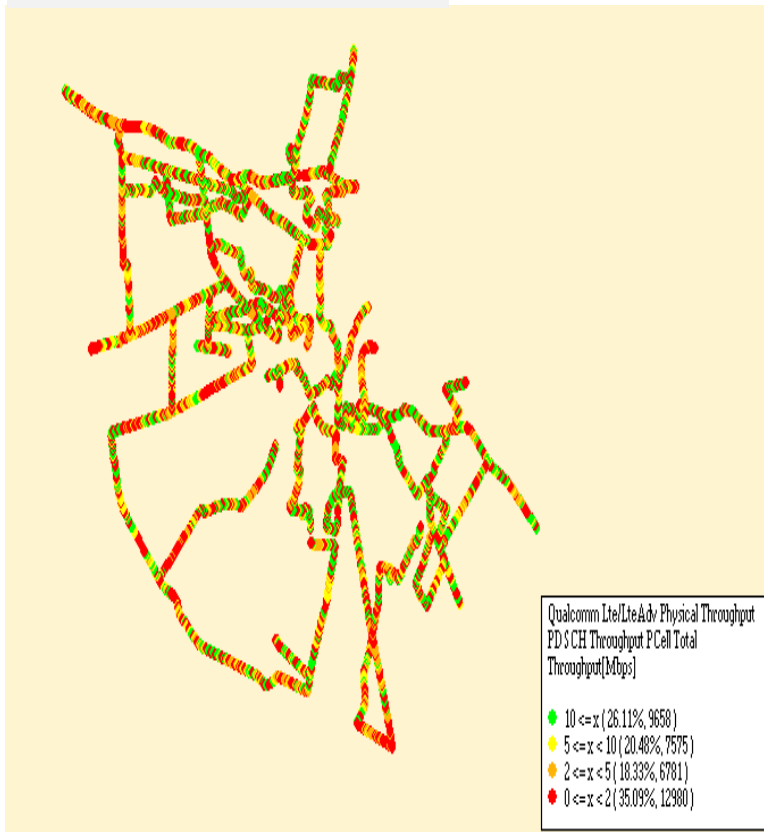
Dynamic Data Test

TSP- Jio

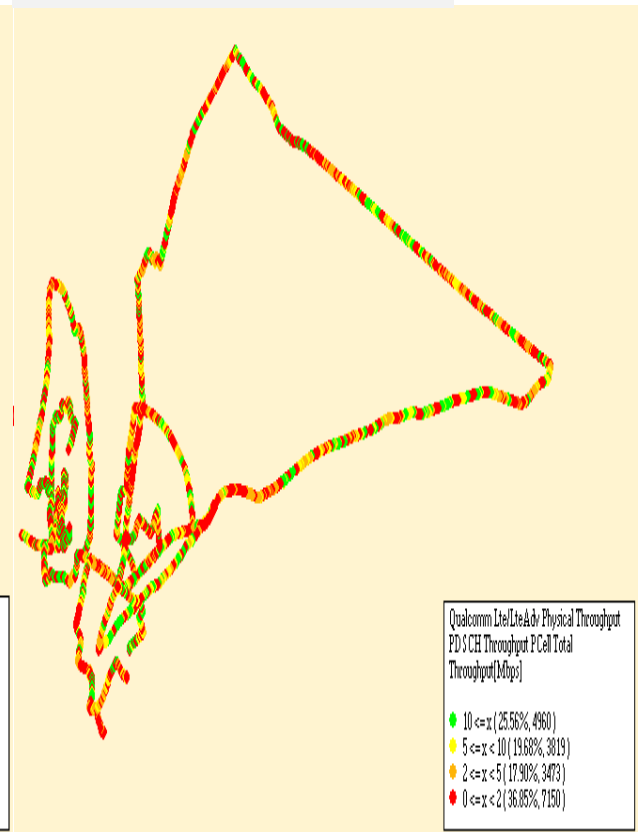
Data Statistics - Dynamic data testing

Data KPIs - Overall	LTE
Download Throughput (Mbps)	7.62

Dynamic data testing Day1&2



Dynamic data testing Day 3



DL throughput	No of Sample	%	Legends
< 2Mbps	20130	35.7	
2-5 Mbps	10254	18.18	
5-10 Mbps	11394	20.2	
>10Mbps	14618	25.92	

Dynamic Data Test

TSP-.....VIL

Data Statistics - Dynamic data testing 363 km

Data KPIs - Overall	LTE
Download Throughput (Mbps)	17.4



DL throughput	No of Sample	%	Legends
< 2Mbps	88868	20.4	Red
2-5 Mbps	61722	14.2	Orange
5-10 Mbps	64145	14.8	Yellow
>10Mbps	220128	50.6	Green