Operator Assisted Drive Test Report

For

Belagavi

16th to 19th April 2024

Belagavi – Dharwad – Ramnagar - Belagavi (NH) - 194 Kms (16th April 2024)
Belagavi & Surrounding Area - 316 Kms (17th to 19th April 2024)

TRAI RO, Bengaluru

Key Performance Indicators:

- All TSPs have met the 2% QOS benchmark of Drop Call Rate except BSNL 3G.
- All TSPs have met the 3% QOS benchmark of Call Block Rate except BSNL 3G.
- All 2G/3G/4G TSPs have not met the Rx Quality except Airtel 2G and VIL 2G.
- All 2G/3G/4G TSPs have met the Mobility HOSR except BSNL 3G.
- All 2G/3G/4G TSPs have met the CSSR except BSNL 3G.

The Operator Assisted Drive Test has been carried out by the Regional Office, Bangalore with the help of Service Providers from **16th to 19th Apr 2024**. The drive test covered the route of **510 Kms** including NH/SH of **194 Kms** & **6** hotspots. Approximately **650** calls were made for each of the 7 networks: three 2G networks, one 3G network, and three 4G networks covering four TSPs.

Overview   Voice Summary   Data Summary

Overview

Regional Office, TRAI Bengaluru conducted Operator Assisted Drive Test from **16th to 19th Apr 2024** covering various locations in **Belagavi & Surrounding Region**. The performance of Airtel, BSNL, Vodafone Idea, and Jio were monitored across various technologies (2G, 3G, and 4G). The test results obtained from these drive tests were utilized to assess the network quality for Voice and Data services in terms of

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

Data: Download and Upload Throughputs, Web Browsing Delay and Latency

Drive Test Details:

Voice Tests: Calls were made for 90 sec duration with a wait time of 10 sec between calls in all technologies. The drive test covered a drive route of approximately **510 KMs** including **NH/SH** of **194 Kms** over a period of 4 days from **16th to 19th Apr 2024**. Approximately 650 calls were made for each of the 7 networks: three 2G (Lock Mode) networks, one 3G (Dual mode) network, and four 4G networks covering 4 unique TSPs.

Data Tests: Dynamic data test (Test Data on Move) was conducted for **510 KMs** including **NH/SH** of **194 Kms** over a period of 4 days for download throughput for 3G & 4G technology. Data Tests were performed at 6 static locations; three 2G (Lock mode) networks, one 3G (Dual mode) network, and four 4G (Free mode) networks covering 4 unique TSPs were tested. **All the data through put figure mentioned in the report are based on the average value.**

* For Voice and Data KPI's, 2G measurement is done with UE locked on 2G, 3G measurement is done with UE in Dual mode (2G & 3G) and 4G measurement is done with UE in Free Mode.
* 3G KPI's which are calculated from UE in Dual Mode (2G & 3G) includes samples and events of 2G.
* 4G KPI's which are calculated from the UE in Free Mode included samples and events of 2G & 3G.

| Service	Specifications
Download	2G (Locked) - 500KB, 3G (Dual) - 20 MB, 4G (Free) - 40 MB
Upload	2G (Locked) - 100KB, 3G (Dual) - 5 MB, 4G (Free) - 10 MB
Web Browsing	3 links of e/m commerce website www.amazon.in, www.flipkart.com and PayTm
Latency	32 Bytes on www.google.com
Video Streaming	130 secs clip

Voice & Dynamic Data Test (Data Test on Move) Drive Route
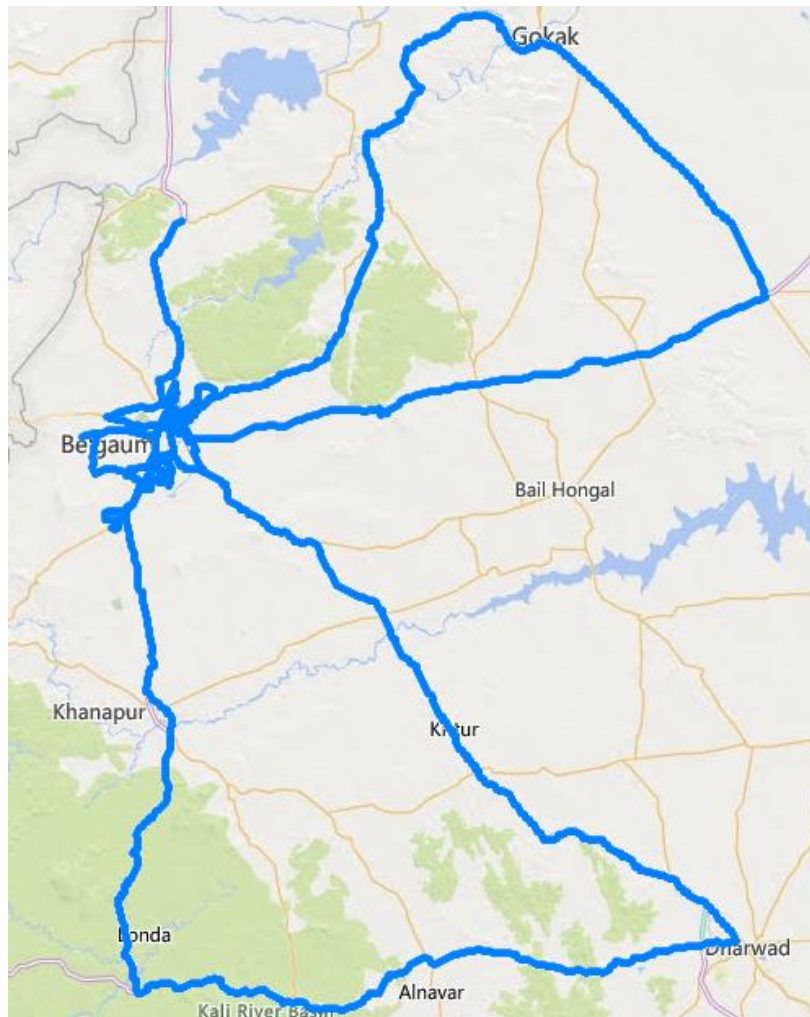
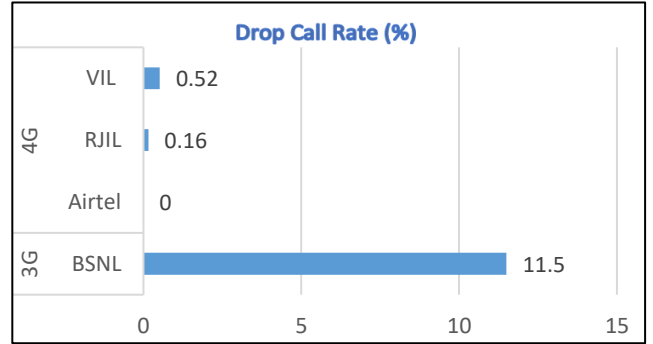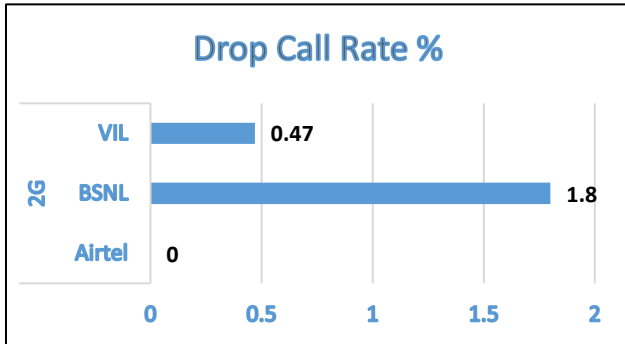| Areas covered	
Belagavi	Gokak
Dharwad Bypass	Pachapur
Alnavar	Gokak State Highway
Raamnagar	Gokak Falls
Khanapur town	Yergatti
Belagavi city	Nesargi State highway
Dharwad Highway	Sambra Airport road Belagavi
Belagavi	Gokak
Dharwad Bypass	Pachapur
Alnavar	Gokak State Highway

Data Service Test- Static Locations
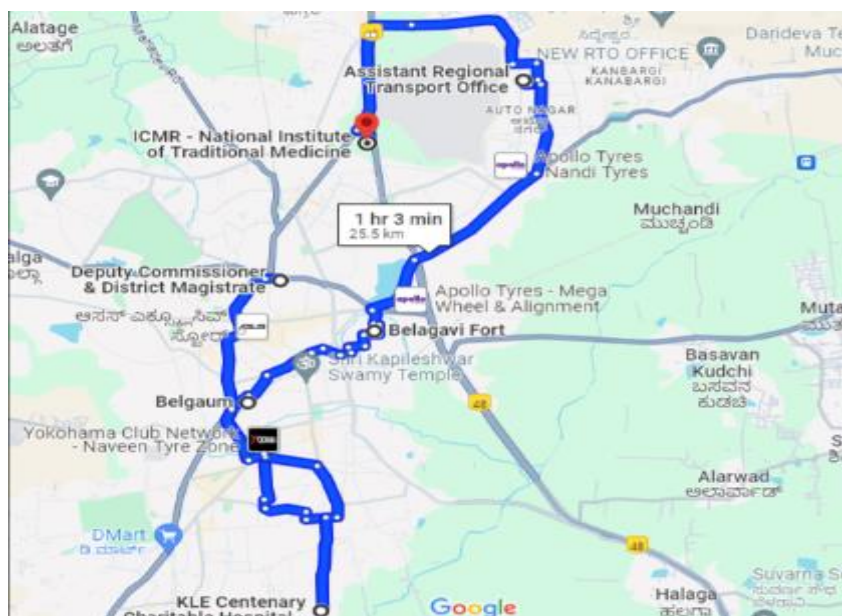
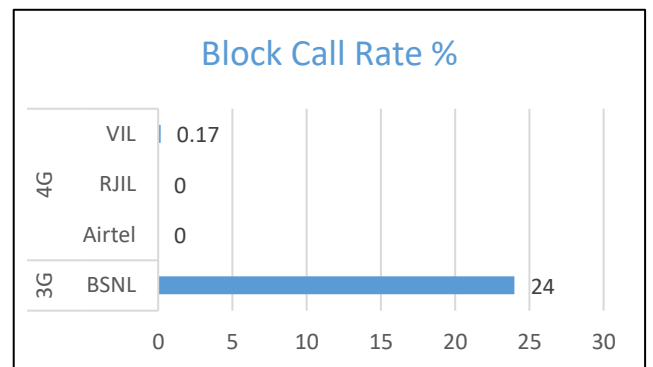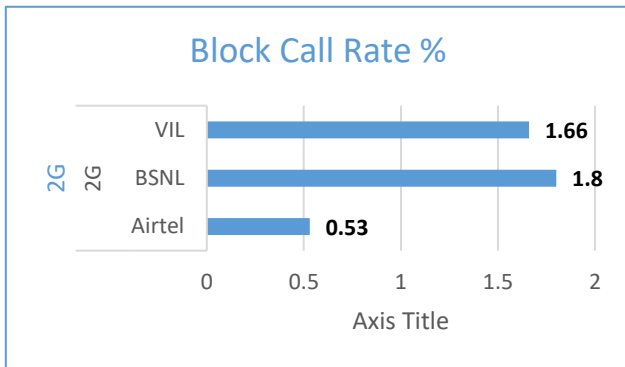| |
|---|
| 1. KLE Centenary Charitable Hospital |
| 2. Office of District Collector |
| 3. Belagavi Railway Station |
| 4. Belagavi Fort |
| 5. RTO Belagavi |
| 6. ICMR |

Voice Calls

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

Drop Call Rate (%)

Drop Call Rate %

2G		
VIL	0.47
BSNL	1.8
Airtel	0

Drop Call Rate (%)

4G VIL	0.52
4G RJIL	0.16
Airtel	0
3G BSNL	11.5

Block Call Rate (%)

Block Call Rate %

2G		
VIL	1.66
BSNL	1.8
Airtel	0.53

Axis Title

Block Call Rate %

4G VIL	0.17
4G RJIL	0
Airtel	0
3G BSNL	24

KPIs	2G			3G	4G		
	Airtel	BSNL	VIL	BSNL	Airtel	RJIL	VIL
Drop Call Rate %	0	1.8	0.47	**11.5**	0	0.16	0.52
Block Call Rate %	0.53	1.8	1.66	**24**	0	0	0.17

a) All TSPs have met the 2% QOS benchmark of Drop Call Rate except BSNL 3G.
b) All TSPs have met the 3% QOS benchmark of Call Block except BSNL 3G.

Voice Calls

Coverage

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

TSPs	2G		
	Airtel	**BSNL**	**VIL**
Coverage%	86.73	75.90	85.95

b) Percentage of coverage samples for 3G ≥ -90 dBm & LTE ≥ -110 dBm.

TSPs	3G	4G		
	BSNL	**Airtel**	**JIO**	**VIL**
Coverage %	67.50	98.41	96.17	92.43

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

TSPs	3G	4G		
	BSNL	**Airtel**	**JIO**	**VIL**
Time Spent on 3G/4G%	21.6	100	100	99.27

Summary

Voice Call	2G		
	Airtel	**BSNL**	**VIL**
Call Attempt	559	703	662
Blocked Call Rate (%)	0.53	1.8	1.66
CSSR% (Accessibility)	99.46	92.31	98.34
Drop Call Rate (%)	0	1.8	0.47
Rx Quality (%)	95.09	92.9	95.4
Mobility HOSR (%)	99.29	96.56	97.38

Voice Call	3G/4G			
	BSNL 3G	**Airtel 4G**	**JIO 4G**	**VIL 4G**
Call Attempt	1124	585	638	582
Blocked Call Rate (%)	24	0	0	0.17
CSSR% (Accessibility)	76	100	99.84	99.83
Drop Call Rate (%)	11.5	0	0.16	0.52
Rx Quality (%)	94.2	92.34	90.87	91.95
Mobility HOSR (%)	86.36	99.03	98.58	98.6

Data Services Static

Data was tested at 6 locations. The following services were tested: Data Download/Upload, Latency (www.google.com), and Web browsing (Flipkart, Amazon, Paytm)

Data Download, Upload Performance (Mbps), Web Browsing delay, Video Streaming and Latency
3G/4G

3G/4G/ Network:

Download Throughput (mbps)

VIL 4G	6.51
JIO 4G	13.88
Airtel 4G	15.25
BSNL 3G	1.39

Upload Throughput (mbps)

VIL 4G	10.03
JIO 4G	5.97
Airtel 4G	16.42
BSNL 3G	0.84

Web Browsing Delay (sec)

VIL 4G	4.09
JIO 4G	1.55
Airtel 4G	2.7
BSNL 3G	36.13

Video Streaming Delay (sec)

VIL 4G	1.29
JIO 4G	0
Airtel 4G	66.9
BSNL 3G	131.41

Latency (msec)

VIL 4G	65.27
JIO 4G	48.96
Airtel 4G	0.08
BSNL 3G	93.57
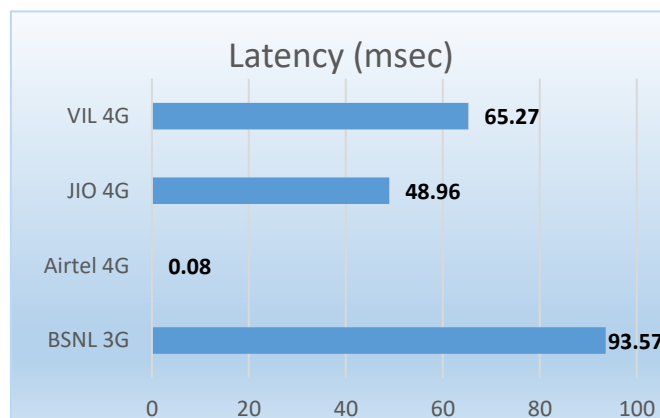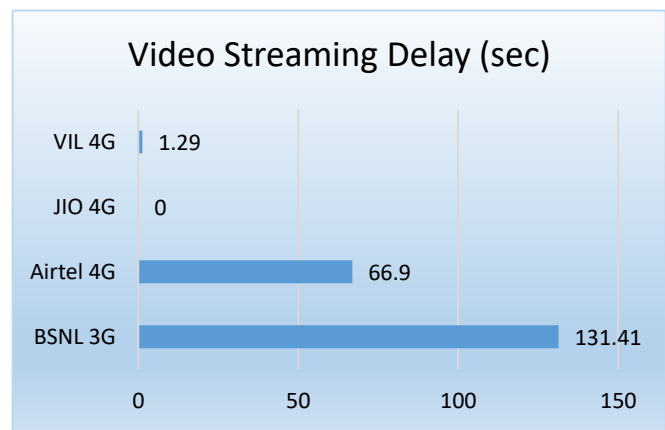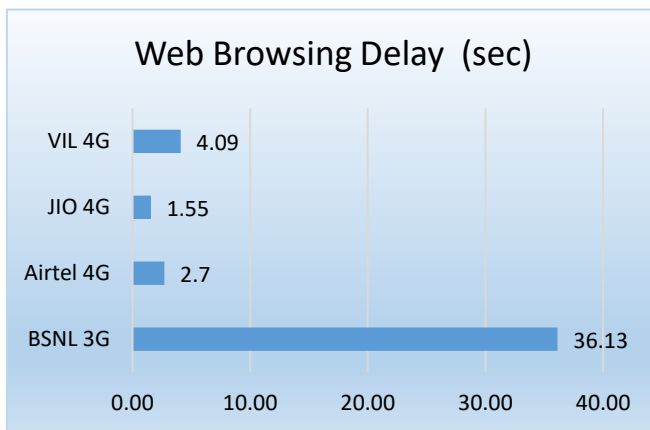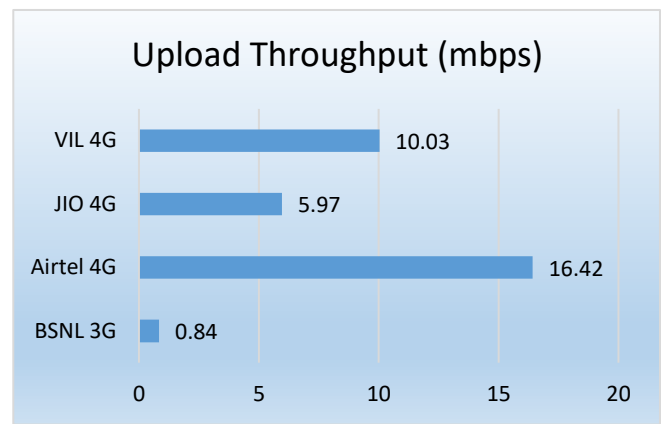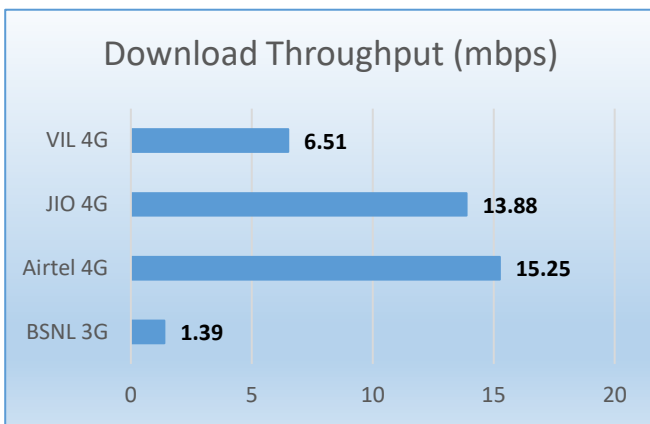
Summary

Data Services Static	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	112.85	40.4	121.03
Upload Throughput (kbps)	11.33	63.31	24
Web Browsing Delay (sec)	70.29	188.98	51
Latency (msec)	262	200.3	153.77

Data Services Static	3G/4G			
	BSNL 3G	Airtel 4G	JIO 4G	VIL 4G
Download Throughput (mbps)	1.39	15.25	13.88	6.51
Upload Throughput (mbps)	0.84	16.42	5.97	10.03
Web Browsing Delay (sec)	36.13	2.7	1.55	4.09
Video Streaming Delay (sec)	131.41	66.9	0	1.29
Latency (msec)	93.57	0.08	48.96	65.27

Data Services Dynamic (Data Test on Move)	3G	4G		
	BSNL	Airtel	JIO	VIL
Download Throughput (mbps)	2.324	16.2	18.07	8.68
Upload Throughput (mbps)	0.088	9.21	3.41	NA

Summary

Data Services Static – KLE Centenary Charitable Hospital	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	169.4	31.52	121.5
Upload Throughput (kbps)	12.18	42.95	69
Web Browsing Delay (sec)	44.95	192.85	54.27
Latency (ms)	276.8	231	215

Data Services Static – KLE Centenary Charitable Hospital	3G	4G		
	BSNL	Airtel	JIO	VIL
Download Throughput (Mbps)	1.56	16.92	8.75	7.03
Upload Throughput (Mbps)	0.82	14.61	5.22	9.28
Web Browsing Delay (sec)	100.75	2.53	1.87	3.86
Video Streaming Delay (sec)	128.7	0.08	0	0.59
Latency (ms)	101	58.6	62.5	59.4

Data Services Static – Collector Office	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	136.53	58.25	121.5
Upload Throughput (kbps)	16.8	61.6	11.462
Web Browsing Delay (sec)	77.59	246.57	54.268
Latency (msec)	267.8	244	151

Data Services Static - Collector Office	3G	4G		
	BSNL	Airtel	JIO	VIL
Download Throughput (Mbps)	1.39	16.78	12.79	11.09
Upload Throughput (Mbps)	0.77	15.79	5.26	11.082
Web Browsing Delay (sec)	17.64	3.08	1.27	3.674
Video Streaming Delay (sec)	127.68	0.08	0	1.222
Latency (ms)	130	68.8	45	58.2

Summary

Data Services Static – Railway Station	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	115	36.22	110.43
Upload Throughput (kbps)	8.6	81.31	17.22
Web Browsing Delay (sec)	49.88	164.40	55.592
Latency (ms)	229	178.40	151

Data Services Static – Railway Station	3G	4G		
	BSNL	Airtel	JIO	VIL
Download Throughput (Mbps)	1.29	11.2	14.12	3.99
Upload Throughput (Mbps)	0.83	12.68	13.26	10.16
Web Browsing Delay (sec)	25.89	2.31	1.37	4.09
Video Streaming Delay (sec)	122.57	0.08	0	1.22
Latency (ms)	48.20	69	47	72

Data Services Static – Belagavi Fort	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	55.8	36.32	90.92
Upload Throughput (kbps)	17.4	80.8	19.148
Web Browsing Delay (sec)	100.16	158.79	46.326
Latency (msec)	220	168	144

Data Services Static – Belagavi Fort	3G	4G		
	BSNL	Airtel	JIO	VIL
Download Throughput (Mbps)	1.58	20.1	20.76	9.65
Upload Throughput (Mbps)	1.1	21.85	4.44	6.72
Web Browsing Delay (sec)	23.48	2.29	1.52	3.03
Video Streaming Delay (sec)	143.548	0.07	0	1.44
Latency (ms)	67.2	71	45	70

Summary

Data Services Static – RTO Office	2G		
	Airtel	**BSNL**	**VIL**
Download Throughput (kbps)	122.4	34.17	128.92
Upload Throughput (kbps)	7.6	40.54	14.63
Web Browsing Delay (sec)	64.89	179.50	55.91
Latency (ms)	289	179.20	73

Data Services Static – RTO Office	3G	4G		
	BSNL	**Airtel**	**JIO**	**VIL**
Download Throughput (Mbps)	1.36	15.49	17.2	3.99
Upload Throughput (Mbps)	0.96	17.91	4.38	10.16
Web Browsing Delay (sec)	29.29	2.33	1.85	4.09
Video Streaming Delay (sec)	136.12	0.07	0	1.22
Latency (ms)	120	69	48	60

Data Services Static – ICMR	2G		
	Airtel	**BSNL**	**VIL**
Download Throughput (kbps)	78	45.90	152.92
Upload Throughput (kbps)	5.4	72.66	12.52
Web Browsing Delay (sec)	84.29	191.74	39.66
Latency (msec)	291.4	201.20	189

Data Services Static – ICMR	3G	4G		
	BSNL	**Airtel**	**JIO**	**VIL**
Download Throughput (Mbps)	1.17	11.01	9.61	3.34
Upload Throughput (Mbps)	0.58	15.7	3.3	12.76
Web Browsing Delay (sec)	19.74	3.67	1.41	5.79
Video Streaming Delay (sec)	129.85	0.09	0	2.04
Latency (ms)	95	65	46	73

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	86.73
BSNl 2G	75.90
VIL 2G	85.95
BSNL 3G	67.50
Airtel 4G	98.41
Jio 4G	96.17
VIL 4G	92.43

Coverage Distribution %
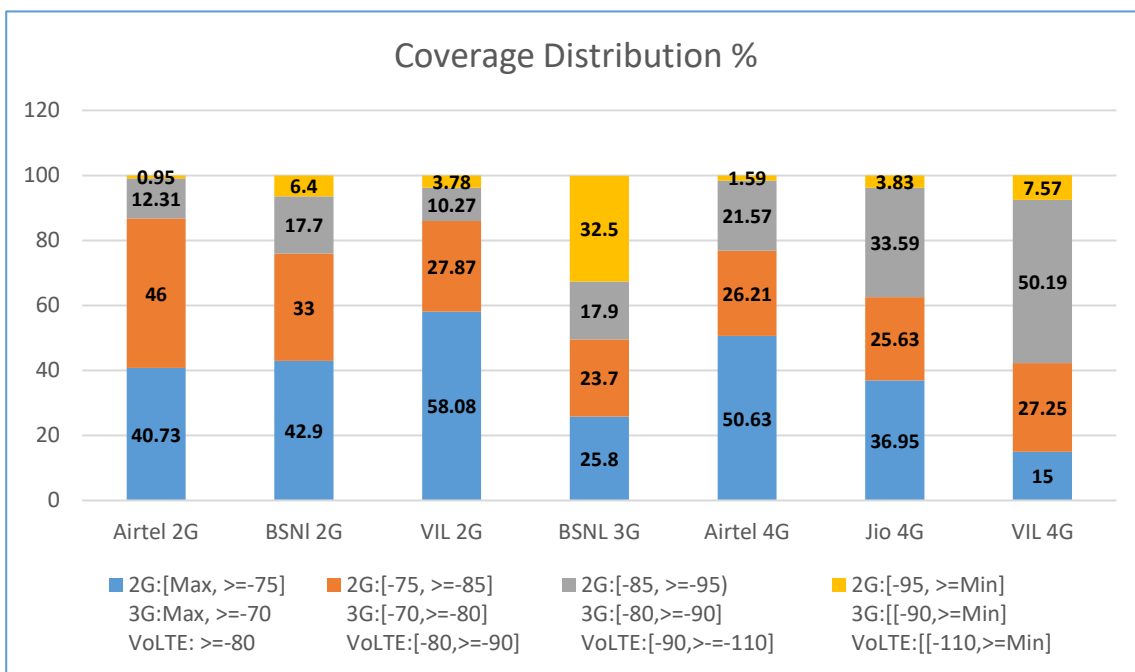
AIRTEL

Technology	Coverage Rate %
2G	86.73
4G	98.41

2G

4G

2G
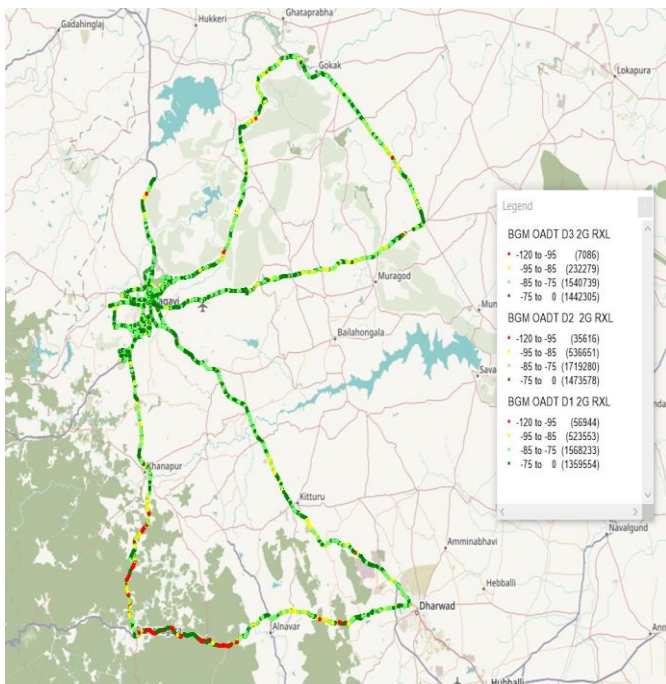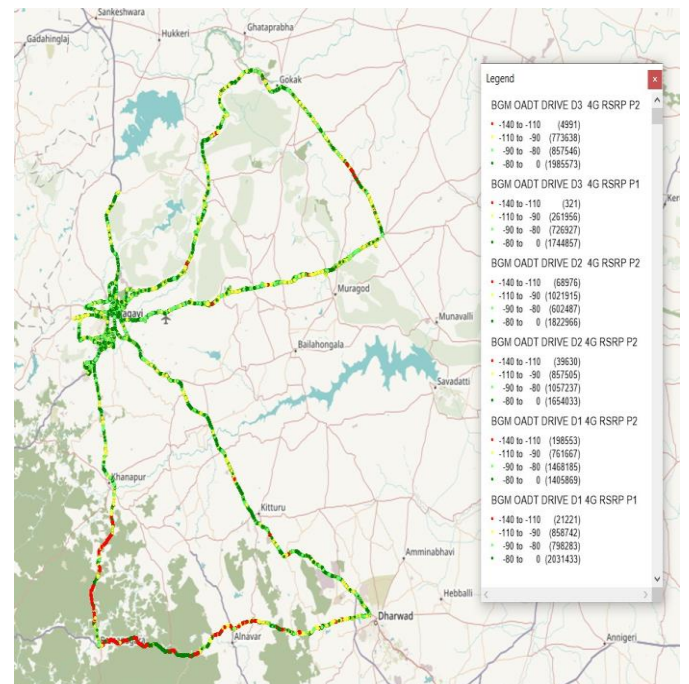
Overall RxLevel	# Samples	% PDF
[Max, >=-75]	4275437	40.73
[-75, >=-85)	4828252	46.00
[-85, >=-95)	1292483	12.31
[-95, >=Min)	99646	0.95
Total	10495818	100.00

4G/VoLTE

Overall RSRP	# Samples	% PDF
[Max, >=-80]	10644731	50.63
[-80, >=-90)	5510665	26.21
[-90, >=-110)	4535423	21.57
[-110, >=Min)	333692	1.59
Total	21024511	100.00

BSNL

Technology	Coverage Rate %
2G	75.9
3G	67.5
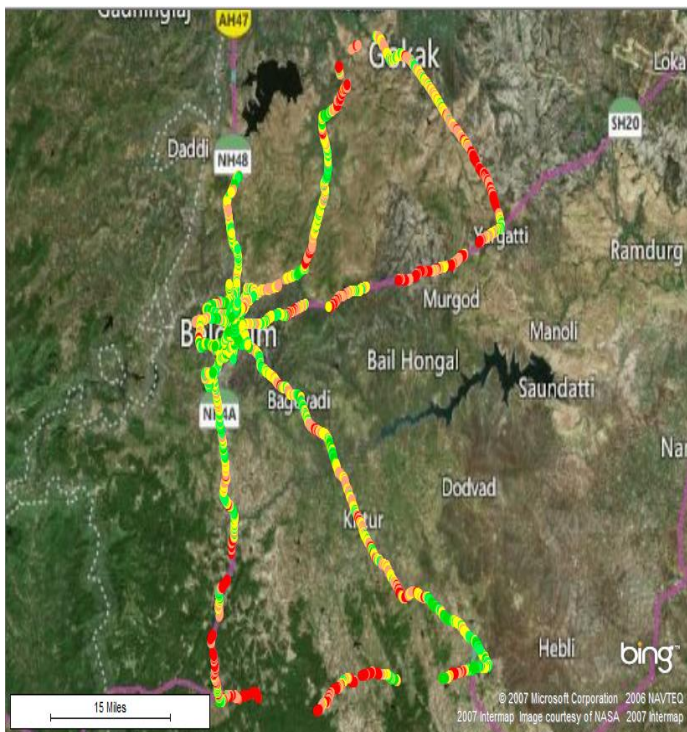
2G	**3G**
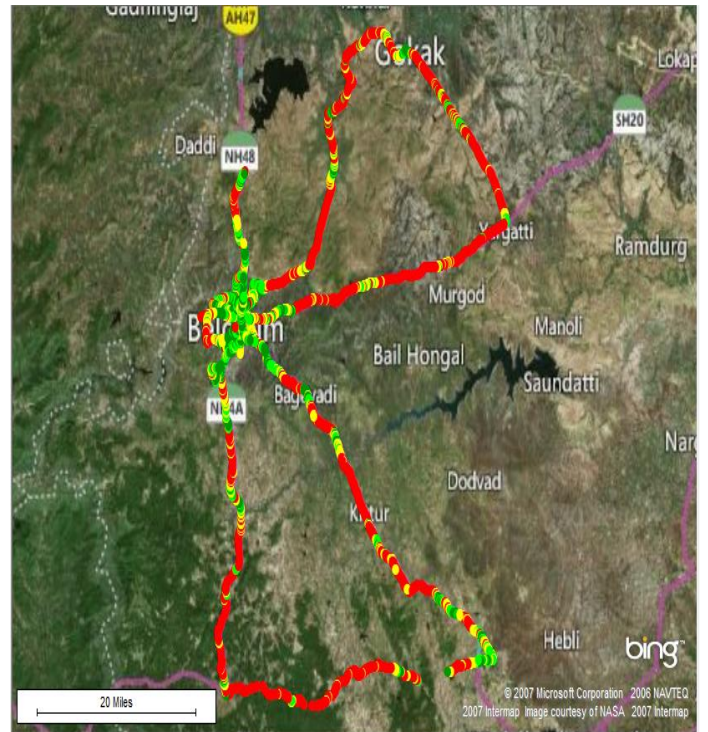
2G		
Overall RxLevel	**# Samples**	**% PDF**
[Max, >=-75]	25761	42.9
[-75, >=-85]	19783	33.0
[-85, >=-95]	10599	17.7
[-95, >=Min]	3811	6.4
Total	**59954**	**100**

3G		
Overall RSCP	**# Samples**	**% PDF**
[Max, >=-70]	19149	25.8
[-70, >=-80]	17553	23.7
[-80, >=-90]	13307	17.9
[-90, >=Min]	24128	32.5
Total	**74137**	**100**

JIO

Technology	Coverage Rate %
4G	96.17
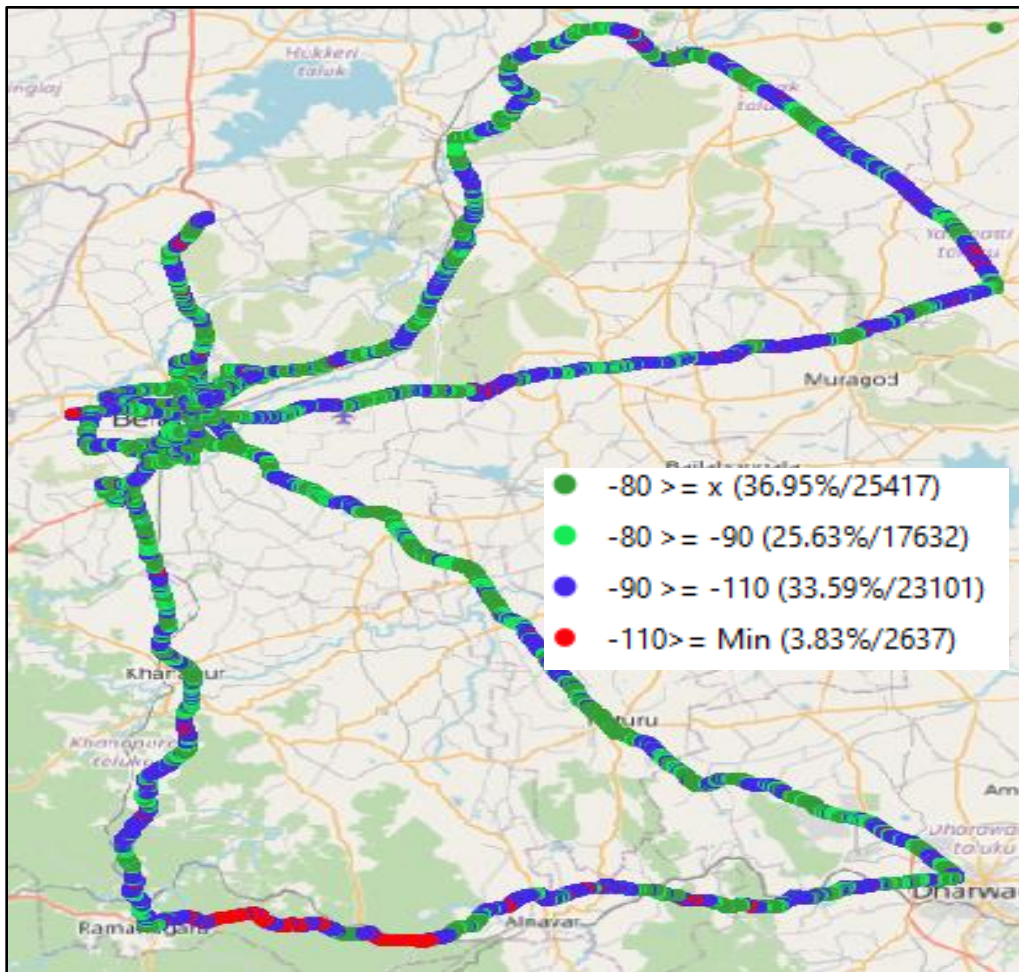
4G		
Overall RSRP	**# Samples**	**% PDF**
[Max, >=-80]	25417	36.95
[-80, >=-90)	17632	25.63
[-90, >=-110)	23101	33.59
[-110, >=Min)	2637	3.83
Total	68787	100

VIL

Technology	Coverage Rate %
2G	85.95
4G	92.43

2G	4G
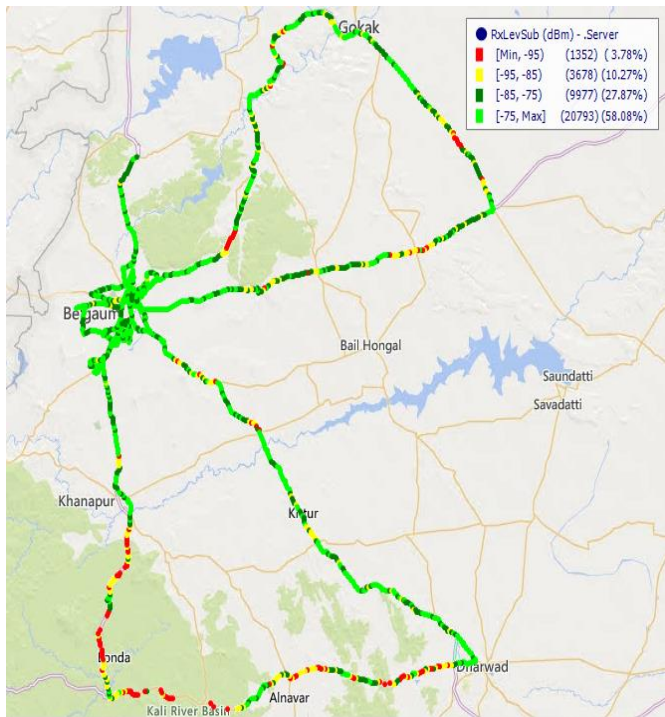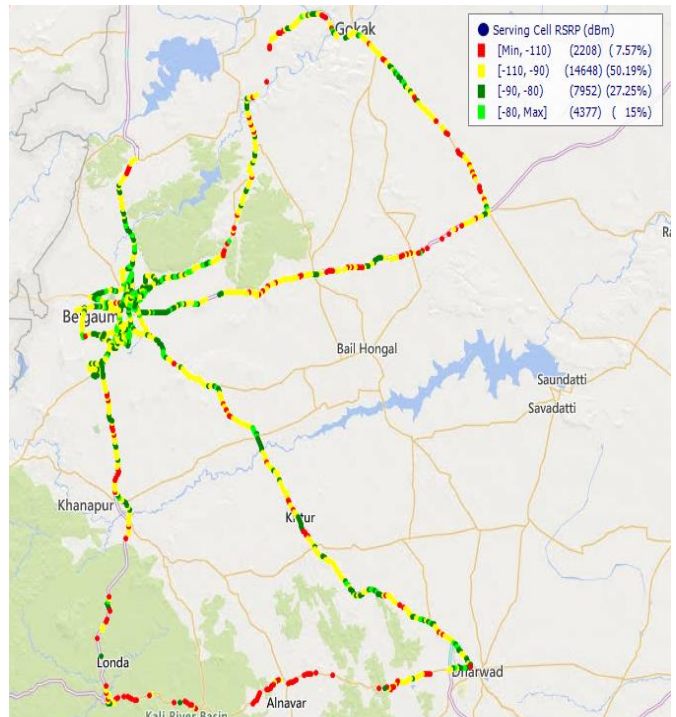
2G		
Overall RxLevel	**# Samples**	**% PDF**
[Max, >=-75]	20793	58.08
[-75, >=-85)	9977	27.87
[-85, >=-95)	3678	10.27
[-95, >=Min)	1352	3.78
Total	35800	100.00

4G/VoLTE		
Overall RSRP	**# Samples**	**% PDF**
[Max, >=-80]	4377	15.00
[-80, >=-90)	7952	27.25
[-90, >=-110)	14648	50.19
[-110, >=Min)	2208	7.57
Total	29185	100.00

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 4G 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	**95.09**
BSNI 2G	**92.90**
VIL 2G	**95.40**
BSNL 3G	**94.20**
Airtel 4G	**92.34**
Jio 4G	**90.87**
VIL 4G	**91.95**

Rx Quality

	Airtel 2G	BSNI 2G	VIL 2G	BSNL 3G	Airtel 4G	Jio 4G	VIL 4G
Rx Quality 2G:[>5] 3G:[EcNo<-14 dBm] VoLTE:[SINR<=0]	4.91	7.1	4.6	5.8	7.66	9.13	8.05
Rx Quality 2G:[<=5] 3G:[EcNo>=-14 dBm] VoLTE:[SINR>0]	95.09	92.90	95.40	94.20	92.34	90.87	91.95

Legend:
- Rx Quality
- Rx Quality 2G:[>5] 3G:[EcNo<-14 dBm] VoLTE:[SINR<=0]
- Rx Quality 2G:[<=5] 3G:[EcNo>=-14 dBm] VoLTE:[SINR>0]

Airtel

Technology	Rx Quality %
2G	95.09
4G	92.34

2G

4G
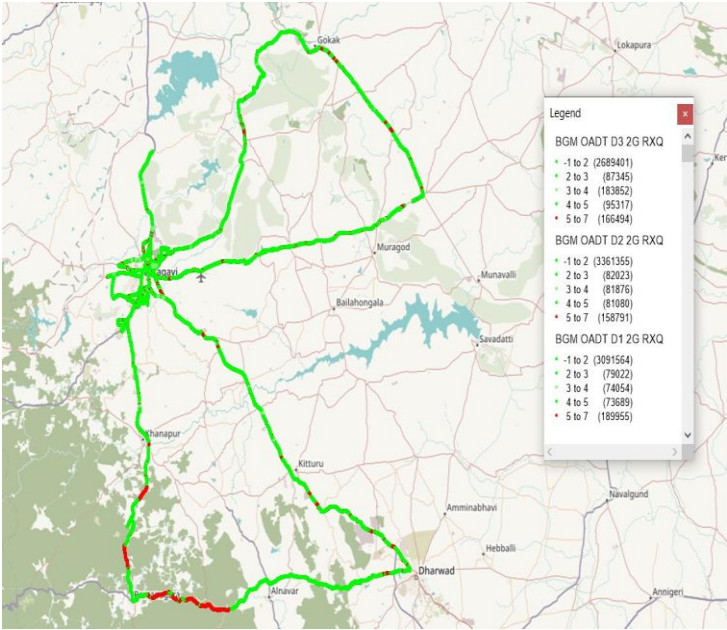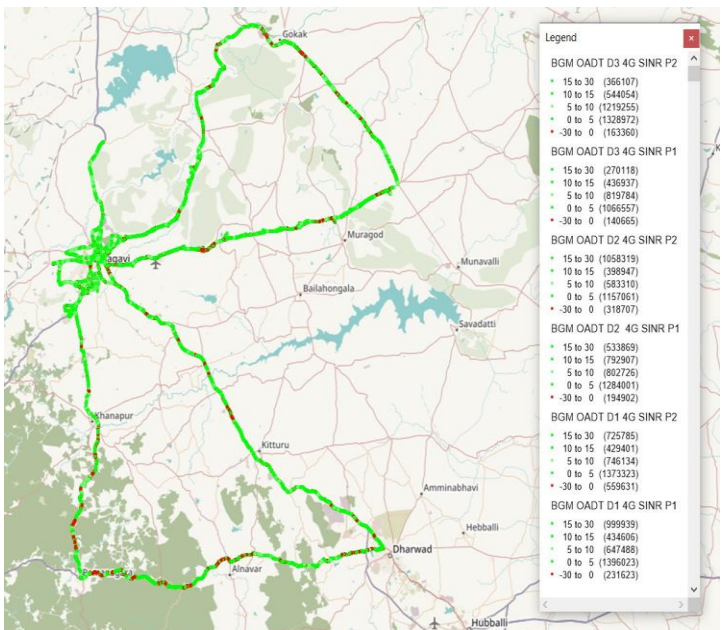
Overall Rx Quality	# Samples	% PDF
(Min, <=2)	9142320	87.10
(2, <=3)	248390	2.37
(3 , <=4)	339782	3.24
(4 , <=5)	250086	2.38
(5 , <=Max)	515240	4.91
Total	10495818	100.00

Overall SINR	# Samples	% PDF
(Min, <=0)	1608888	7.65
(0, <=5)	7605937	36.18
(5, <=10)	4818697	22.92
(10, <=15)	3036852	14.44
(15, <=Max)	3954137	18.81
Total	21024511	100.00

BSNL

Technology	Rx Quality %
2G	92.9
3G	94.2
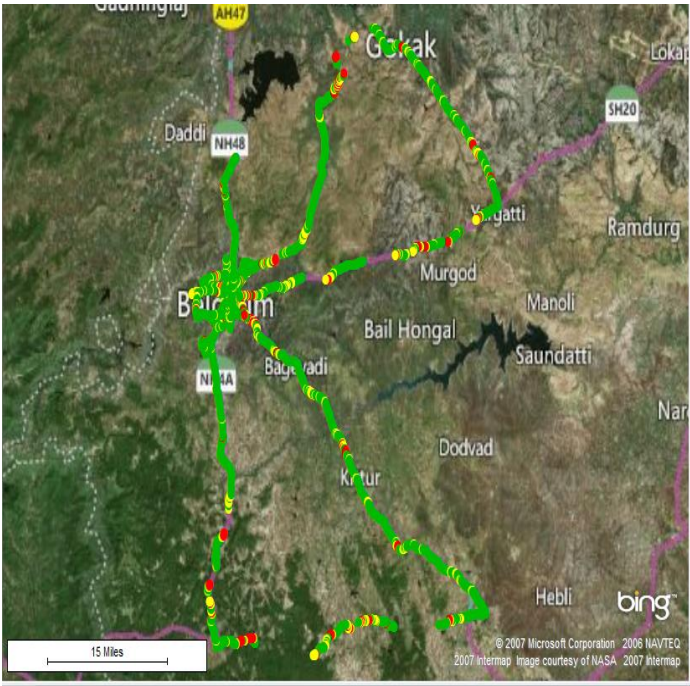
2G	3G
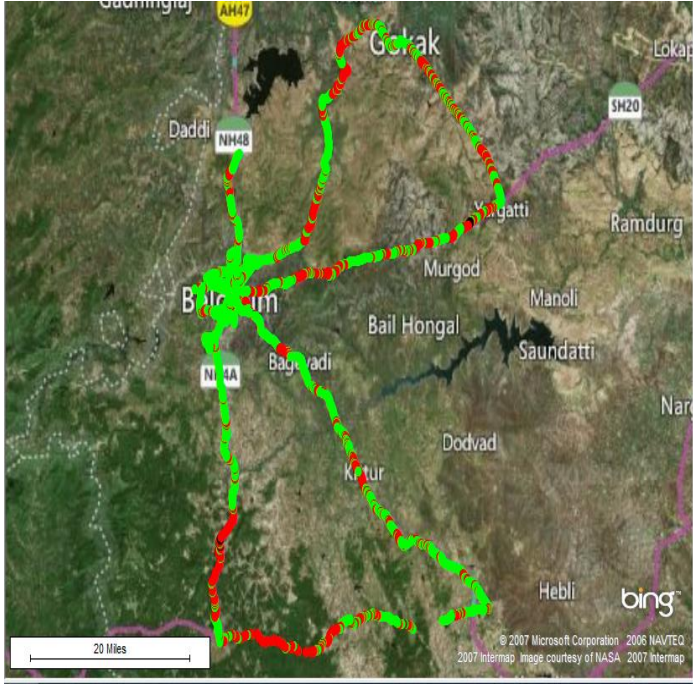
Overall Rx Quality	# Samples	% PDF
(Min, <=2)	50342	84
(2, <=3)	2277	3.8
(3 , <=4)	1917	3.2
(4 , <=5)	1138	1.9
(5 , <=Max)	4255	7.1
Total	59929	100

Overall EcNo	# Samples	% PDF
(Max, <=-6)	11826	19.1
(-6, <=-9)	10154	16.4
(-9, <=-11)	23838	38.5
(-11, <=-14)	12507	20.2
(-14, <= Min)	3591	5.8
Total	61916	100

JIO

Technology	Rx Quality (%)
4G	90.87
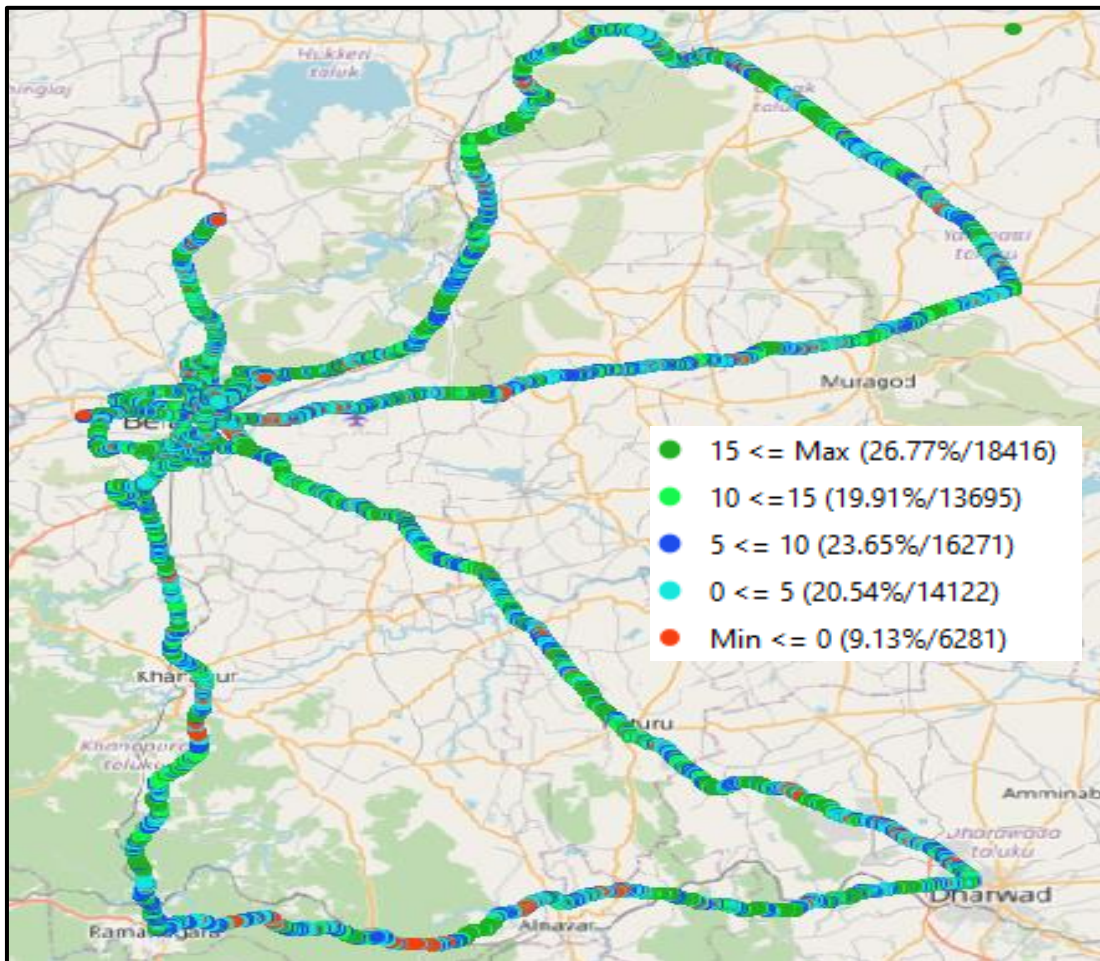
Overall SINR	# Samples	% PDF
(Min, <=0)	6281	9.13
(0, <=5)	14122	20.54
(5, <=10)	16271	23.65
(10, <=15)	13695	19.91
(15, <=Max)	18416	26.77
Total	68785	100

VIL

Technology	Rx Quality %
2G	95.40
4G	91.95

2G

4G
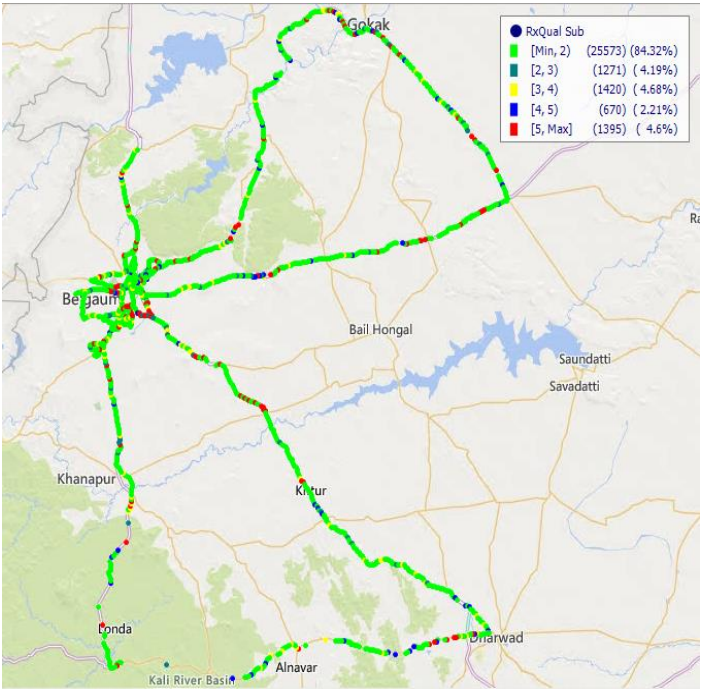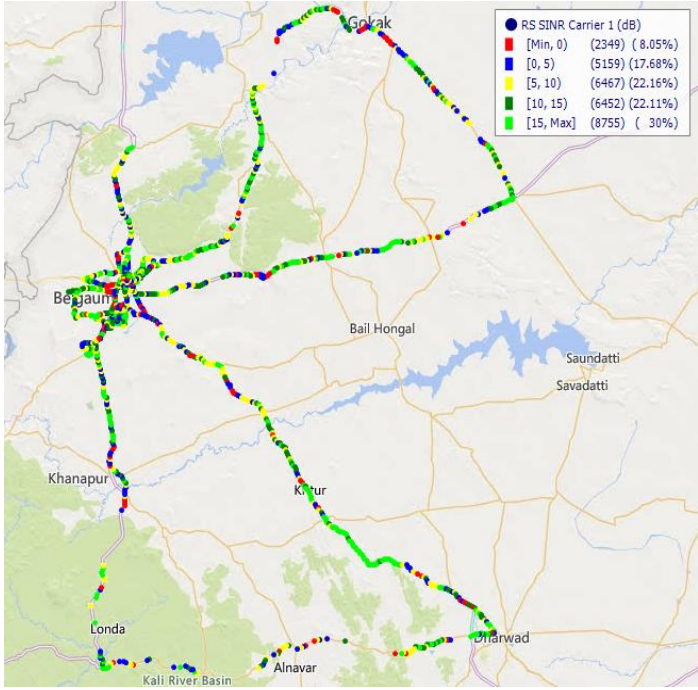
Overall Rx Quality	# Samples	% PDF
(Min, <=2)	25573	84.32
(2, <=3)	1271	4.19
(3 , <=4)	1420	4.68
(4 , <=5)	670	2.21
(5 , <=Max)	1395	4.60
Total	30329	100.00

Overall SINR	# Samples	% PDF
(Min, <=0)	2662	9.48
(0, <=5)	6027	21.47
(5, <=10)	7951	28.32
(10, <=15)	6153	21.92
(15, <=Max)	5279	18.81
Total	28072	100

TSP	Time Spent on 3G/4G %
BSNL 3G	21.6
Airtel 4G	100
Jio 4G	100
VIL 4G	99.27

Percentage of time spent on 3G/4G/4G
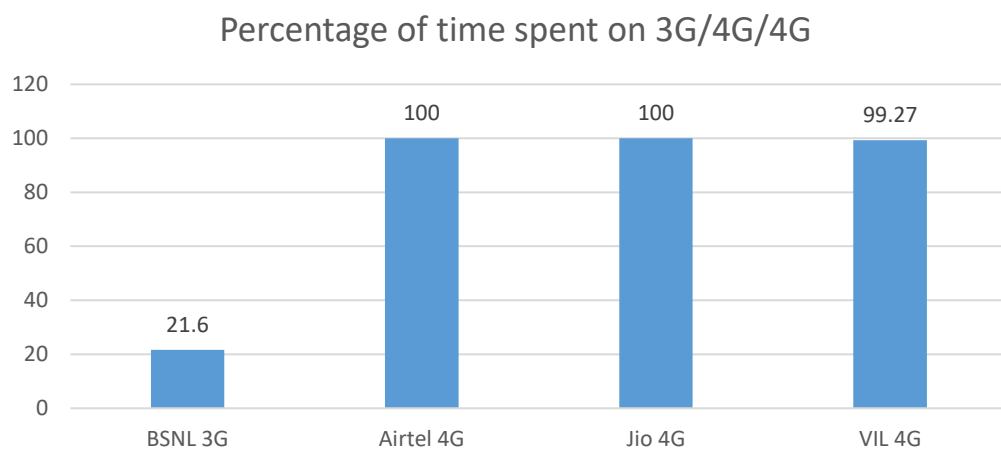
Airtel

Technology	Time Spent %
4G	100
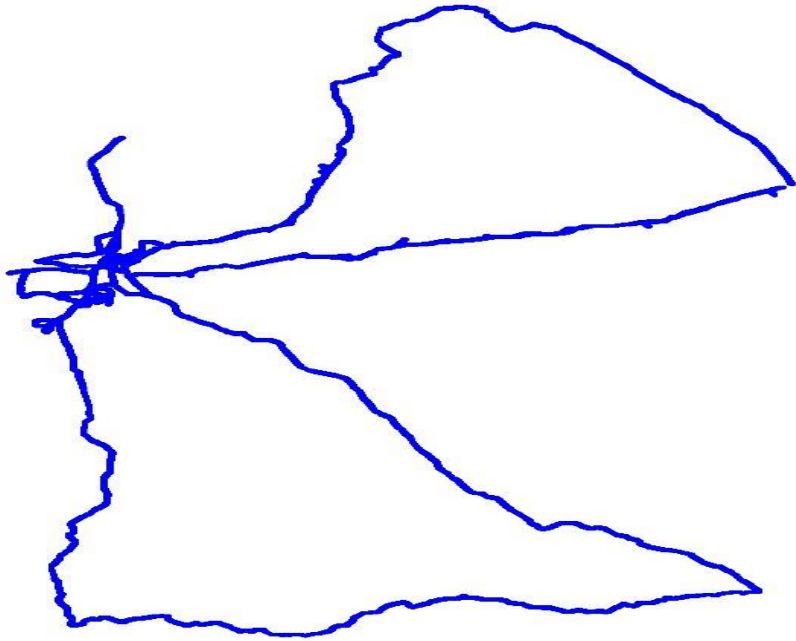
BSNL

Technology	Time Spent %
3G	21.6

Technology Plot of complete SSA (3G)

PLOT NOT AVAILABLE

JIO

Technology	Time Spent %
4G	100
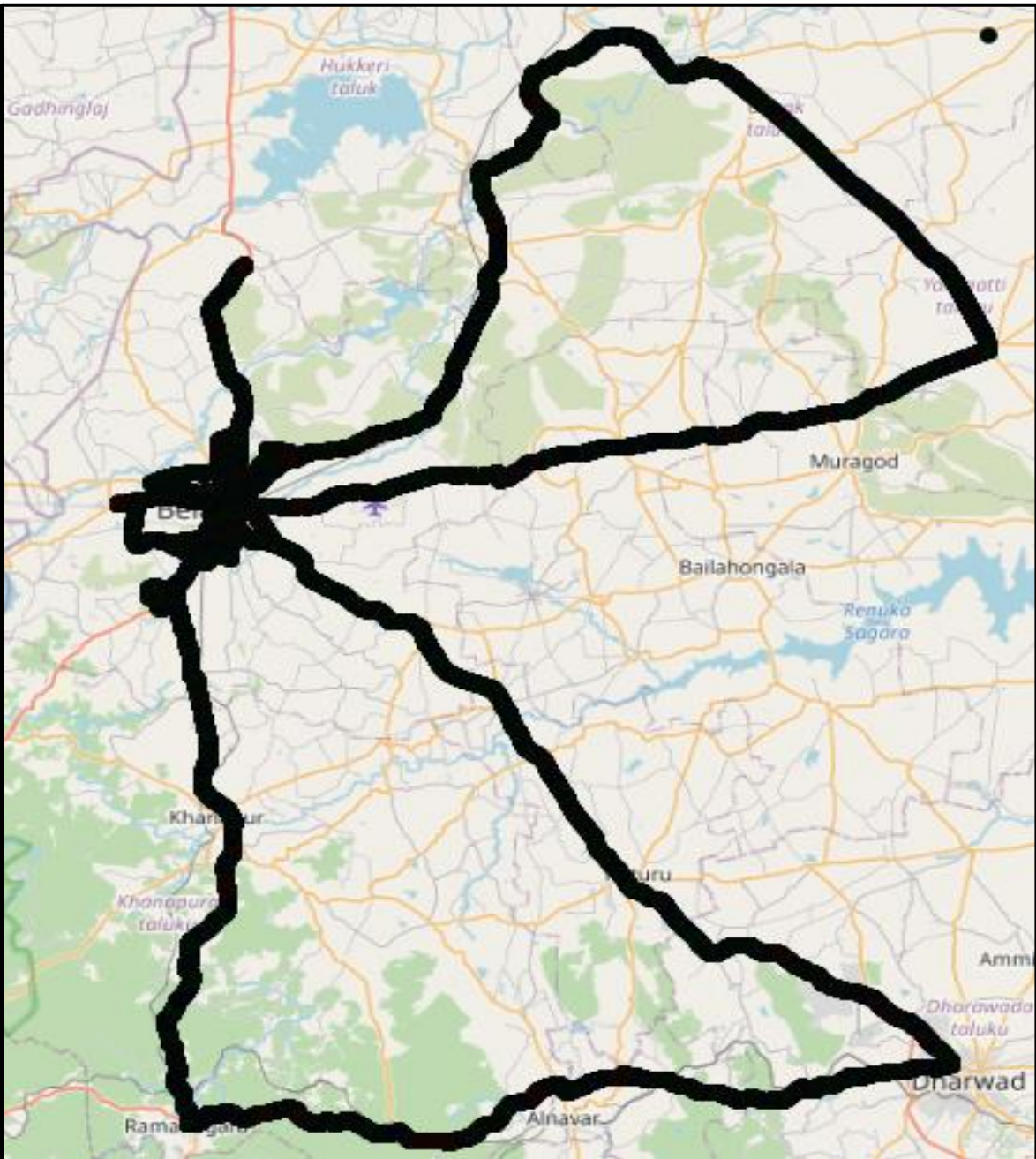
VIL

Technology	Time Spent
4G	99.27
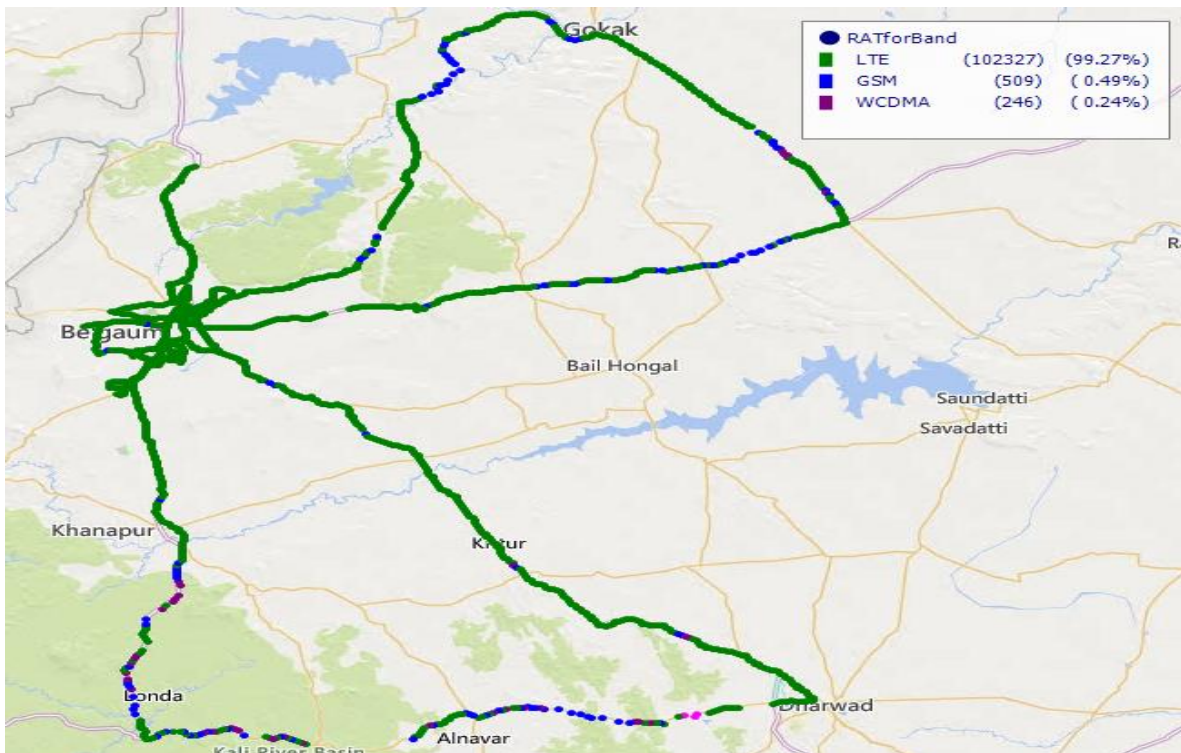
Airtel
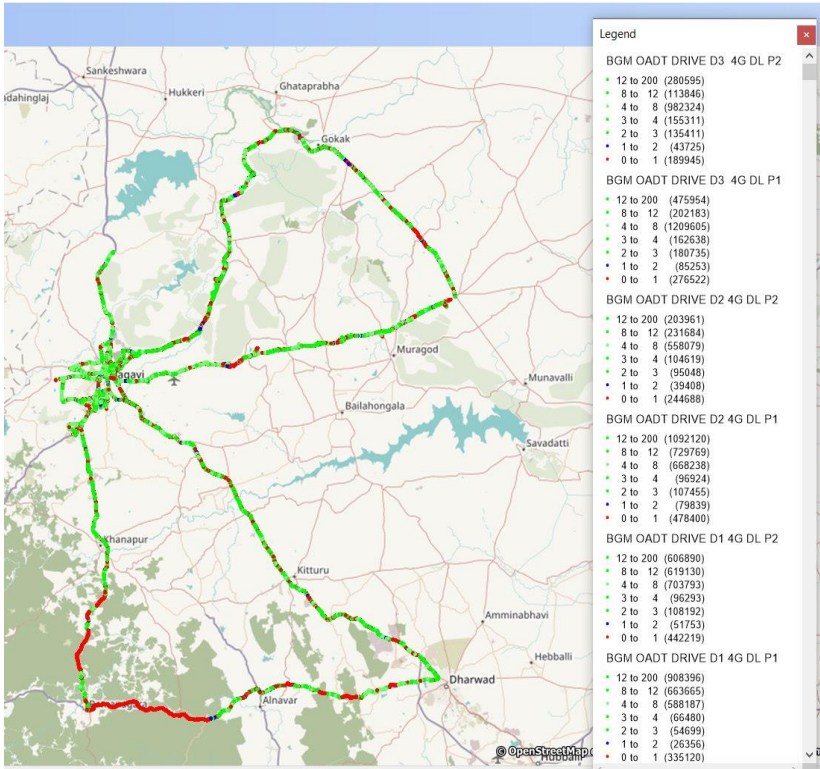
DL throughput	No. of Samples	%
0 to 1 Mbps	1966894	13.57
1 to 2 Mbps	326334	2.25
2 to 3 Mbps	681540	4.70
3 to 4 Mbps	682265	4.71
4 to 8 Mbps	4710226	32.49
8 to 12 Mbps	2560277	17.66
>12 Mbps	3567916	24.61
Total	14495452	100
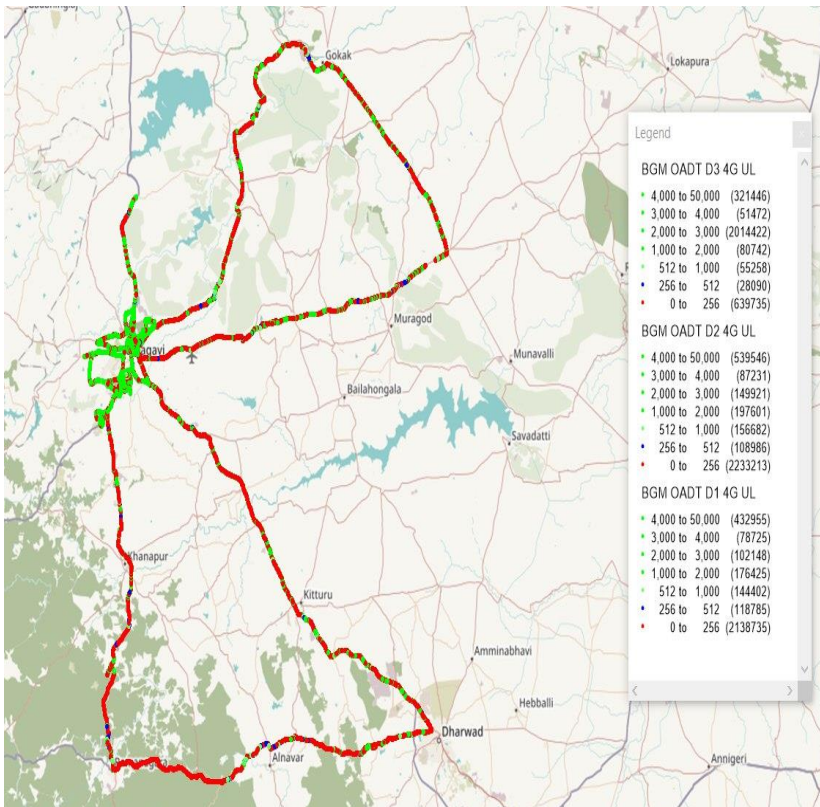
UL throughput	No. of samples	%
0 to 256 Kbps	5011683	50.85
250 to 512 Kbps	255861	2.60
512 Kbps to 1 Mbps	356342	3.62
1 to 2 Mbps	454768	4.61
2 to 3 Mbps	2266491	22.99
3 to 4 Mbps	217428	2.21
>4 Mbps	1293947	13.13
Total	9856520	100.00

BSNL
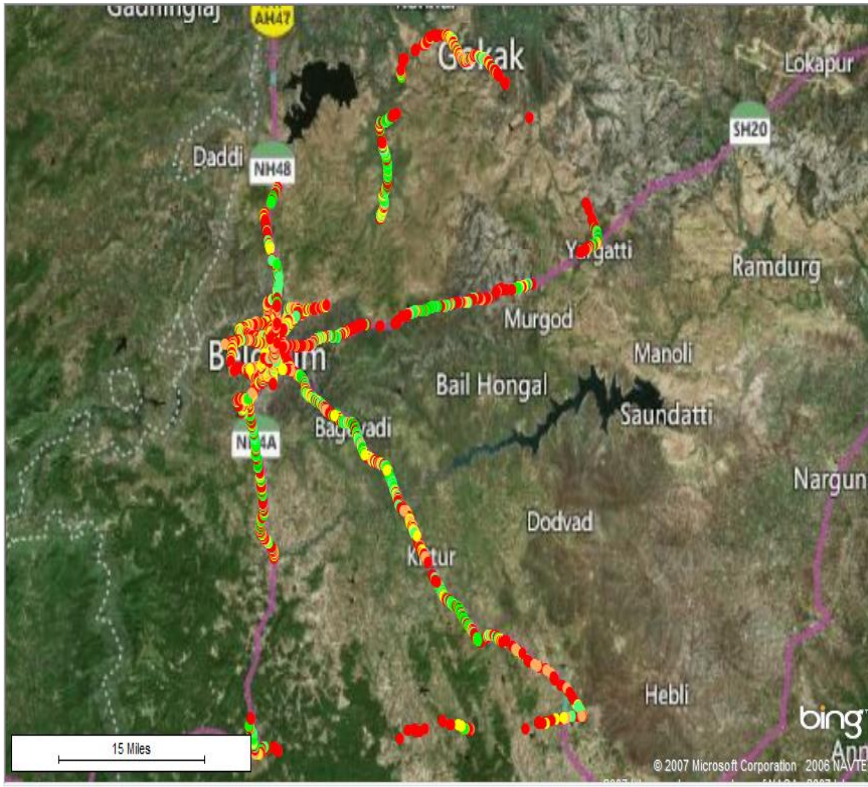
DL throughput	No. of Samples	%
0 to 1 Mbps	22774	49
1 to 2 Mbps	11201	24.1
2 to 3 Mbps	5112	11
3 to 4 Mbps	1859	4
4 to 8 Mbps	4183	9
8 to 12 Mbps	1068	2.3
>12 Mbps	278	0.6
Total	46478	100
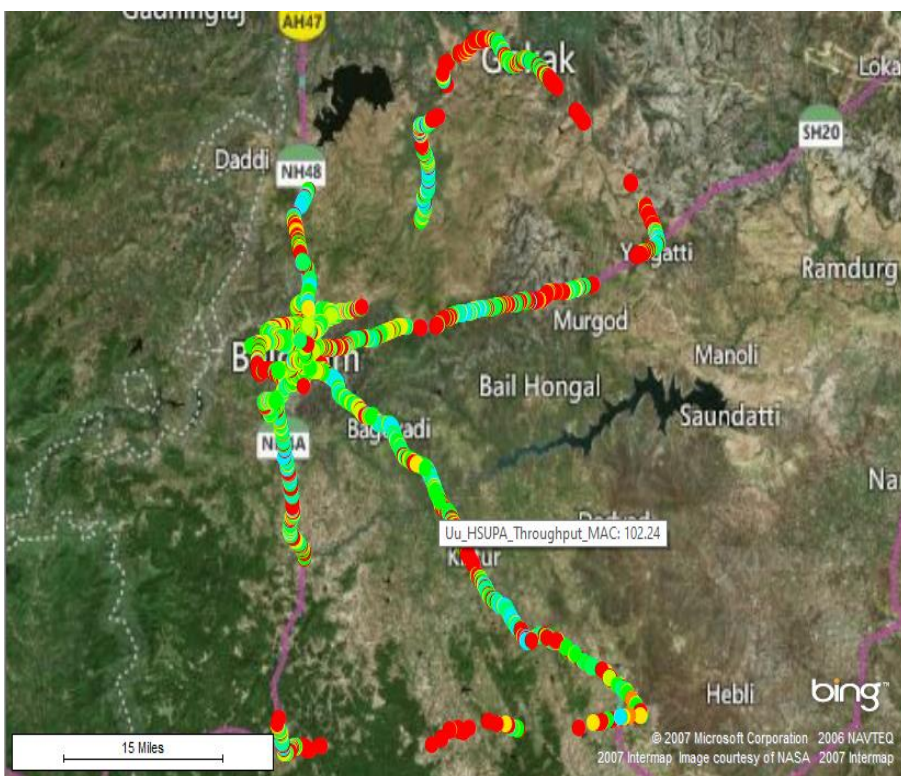
UL throughput	No. of Samples	%
0 to 1 Mbps	48556	89.12
1 to 2 Mbps	3650	6.69
2 to 3 Mbps	1307	2.3
3 to 4 Mbps	533	0.97
4 to 8 Mbps	354	0.64
8 to 12 Mbps	54	0.099
>12 Mbps	16	0.029
Total	54478	100

JIO
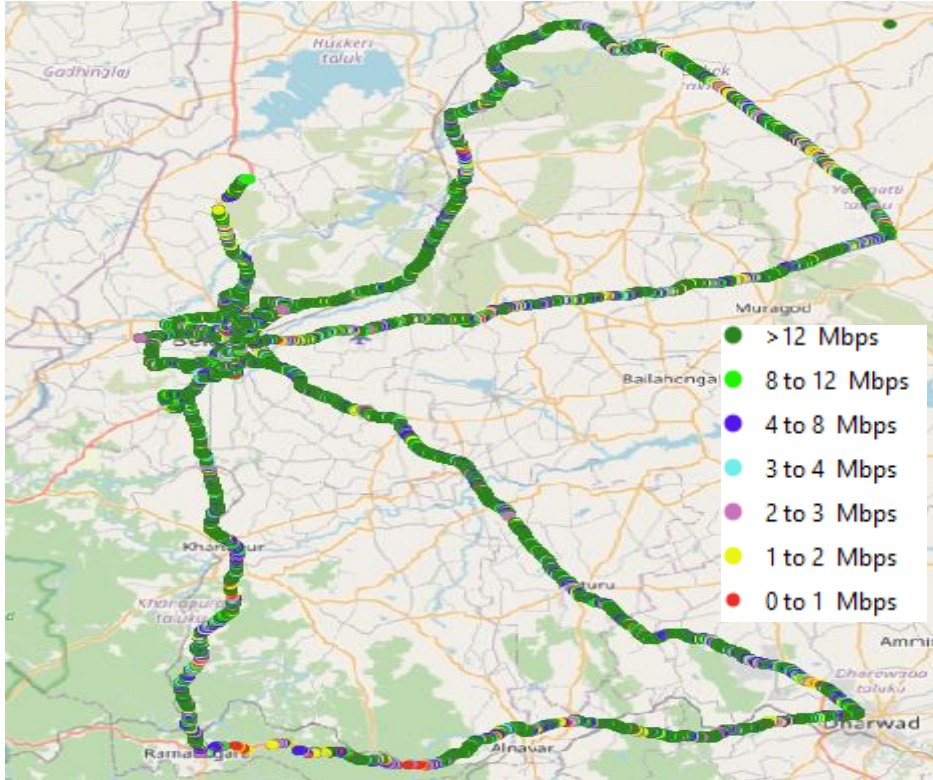
DL throughput	No. of Samples	%
0 to 1 Mbps	2520	6.06
1 to 2 Mbps	2247	5.41
2 to 3 Mbps	2218	5.34
3 to 4 Mbps	2112	5.08
4 to 8 Mbps	6848	16.48
8 to 12 Mbps	4809	11.58
>12 Mbps	20798	50.05
Total	41552	100
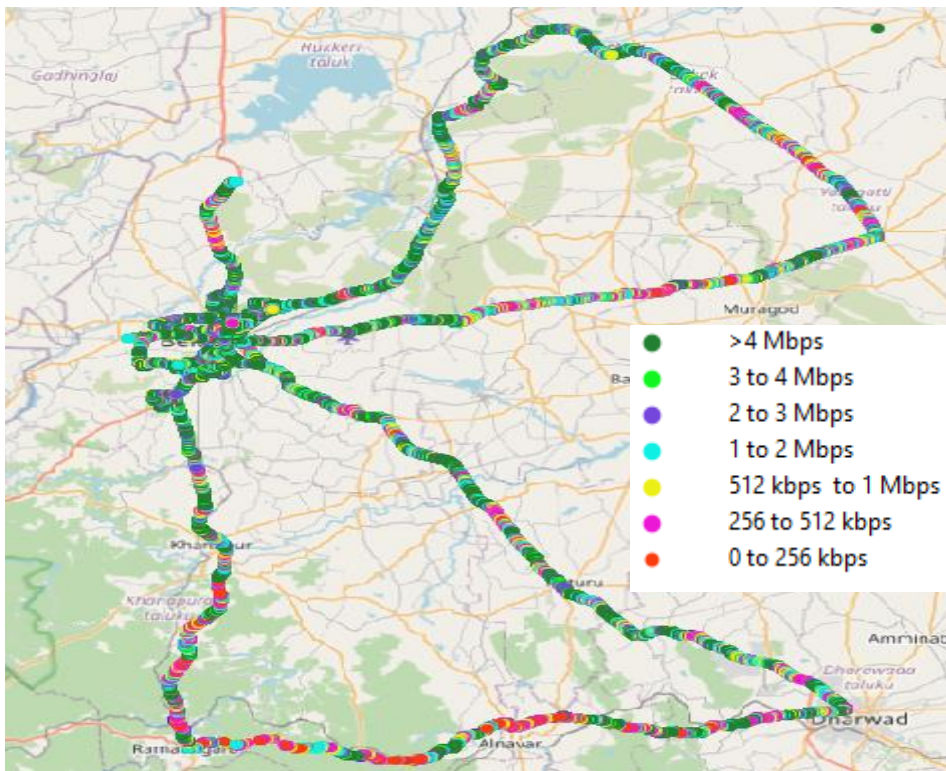
UL throughput	No. of samples	%
0 to 256 kbps Mbps	3503	8.16
256 to 512 kbps	3684	8.58
512 Kbps to 1 Mbps	4960	11.55
1 to 2 Mbps	7395	17.22
2 to 3 Mbps	5367	12.5
3 to 4 Mbps	3921	9.13
>4Mbps	14113	32.86
Total	42943	100

VIL
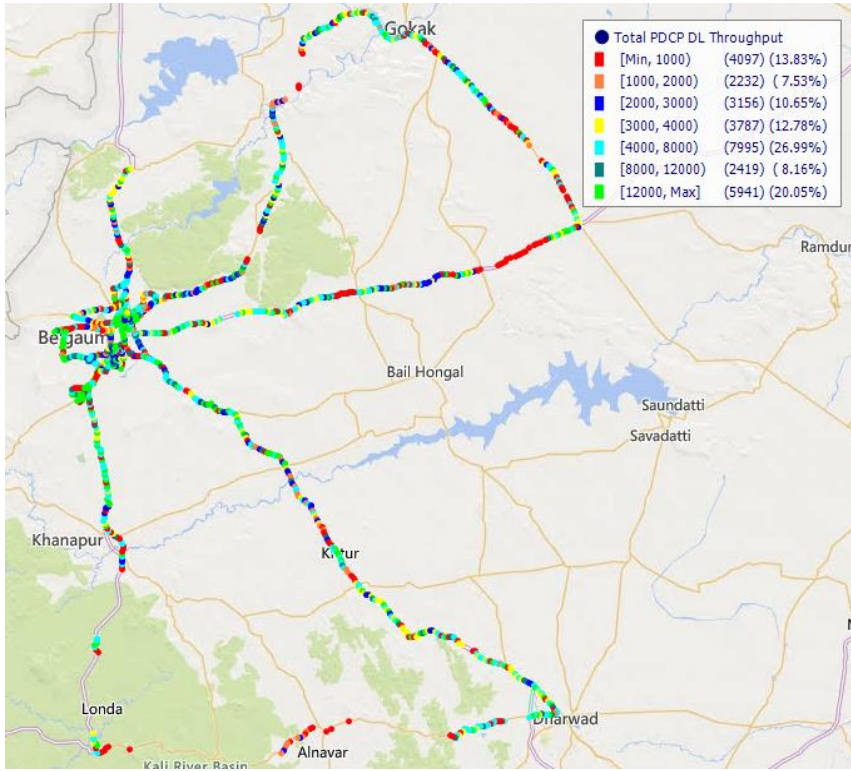
DL throughput	No. of Samples	%
0 to 1 Mbps	4097	13.83
1 to 2 Mbps	2232	7.53
2 to 3 Mbps	3156	10.65
3 to 4 Mbps	3787	12.78
4 to 8 Mbps	7995	26.99
8 to 12 Mbps	2419	8.16
>12 Mbps	5941	20.05
Total	29627	100.00

PLOT NOT AVAILABLE

UL throughput	No. of samples	%
0 to 256 Kbps		
250 to 512 Kbps		
512 Kbps to 1 Mbps		
1 to 2 Mbps		
2 to 3 Mbps		
3 to 4 Mbps		
>4Mbps		
Total		

AIRTEL

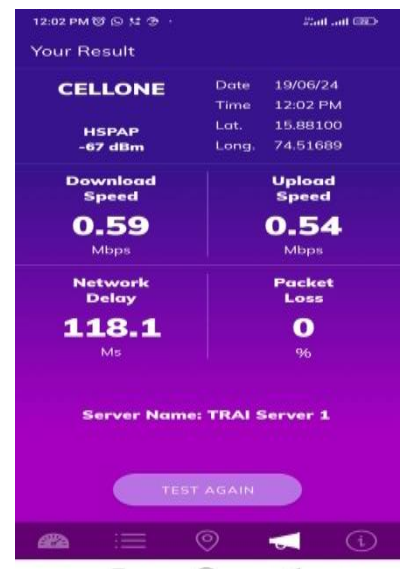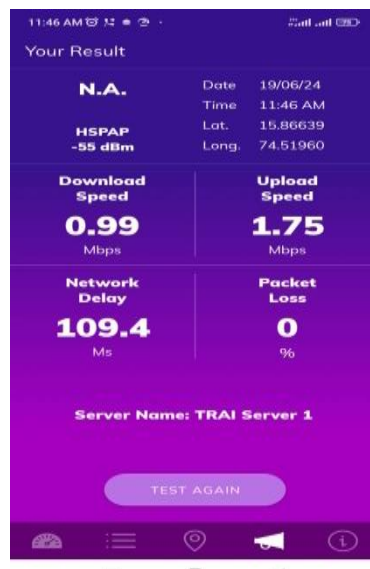| Techology-2G	KLE Centenary Charitable Hospital	Collector Office	Railway Station	Belagavi Fort	RTO Office	ICMR
Download Speed (Mbps)	0.17	0.1	0.17	0.12	0.14	0.1
Upload Speed (Mbps)	0.1	0.03	0.11	0.01	0.06	0.04
Latency(ms)	144.4	3634.8	344.7	1130.3	1395	153.9

KLEC Charitable Hospital
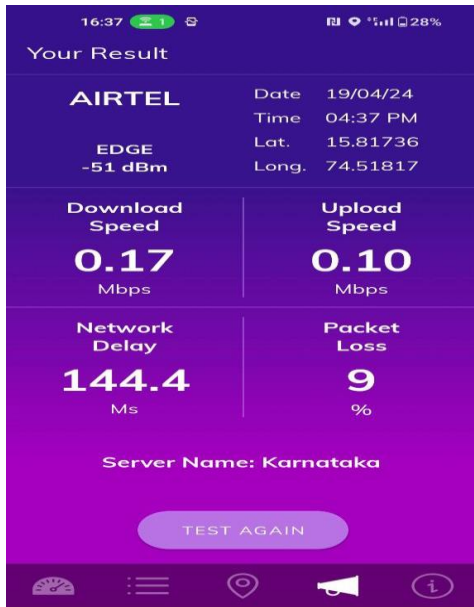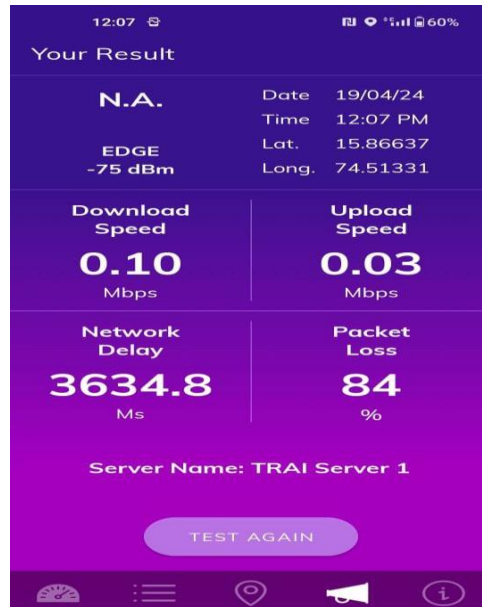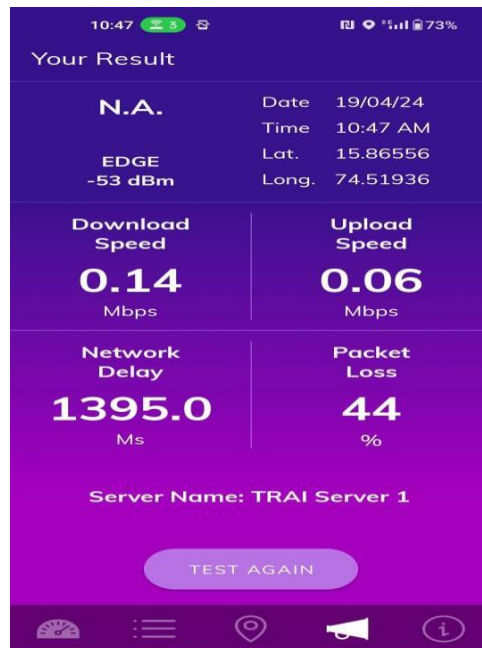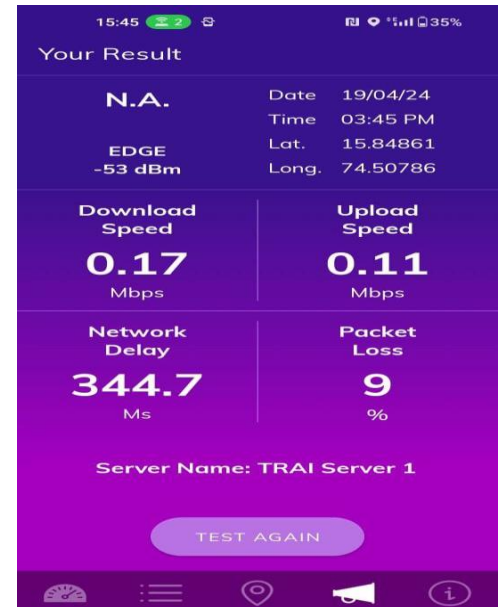
Collector Office

Railway Station

Belagavi Fort
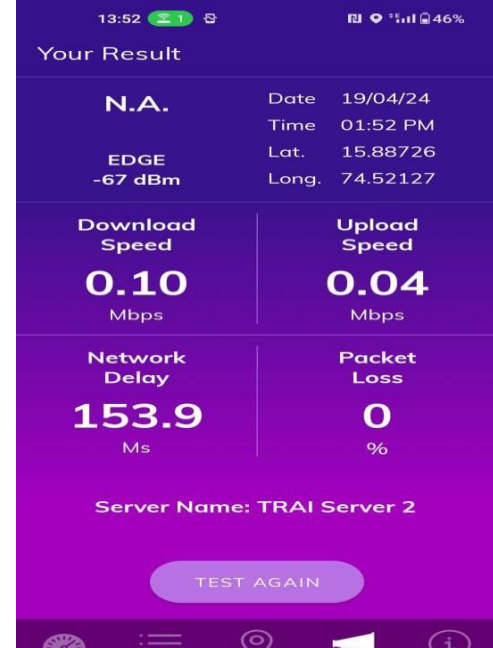
RTO Office

ICMR

Techology-4G	KLE Centenary Charitable Hospital	Collector Office	Railway Station	Belagavi Fort	RTO Office	ICMR
Download Speed (Mbps)	15.83	31.02	30.26	14.89	22.12	34.93
Upload Speed (Mbps)	19.5	17.37	8.08	16.67	20.14	2.53
Latency(ms)	33	46.7	33.9	33.3	30.3	58.6

KLEC Charitable Hospital

Collector Office

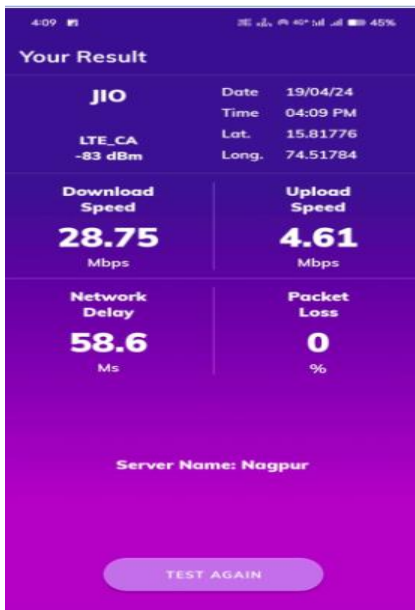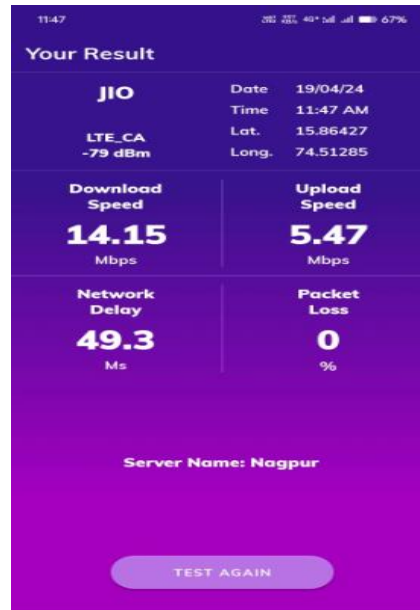**Railway Station**

Belagavi Fort

RTO Office

ICMR

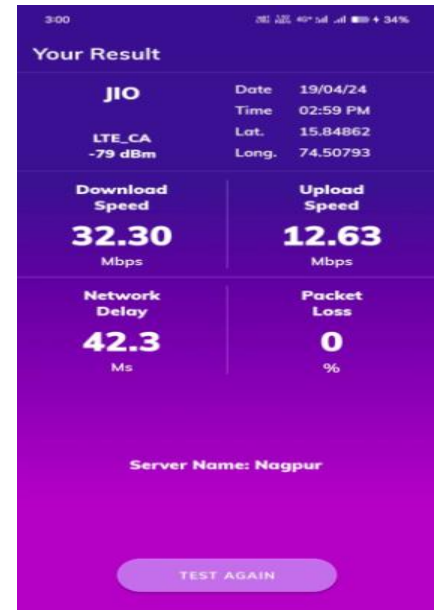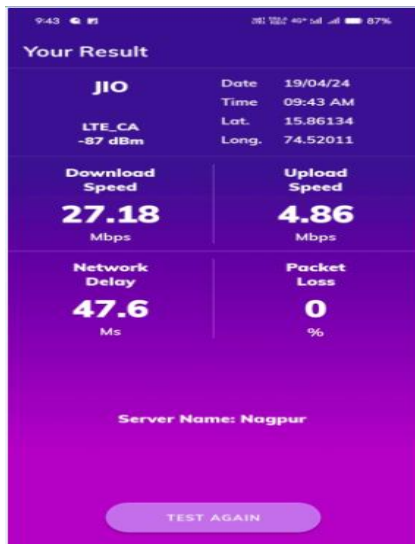| Techology-2G	KLE Centenary Charitable Hospital	Collector Office	Railway Station	Belagavi Fort	RTO Office	ICMR
Download Speed (Mbps)	0.01	0.01	0.06	0.03	0.06	0.02
Upload Speed (Mbps)	0.11	0.01	0.08	0.03	0.01	0.09
Latency(ms)	1072.5	NA	189.4	1690.7	2172.7	223.7

KLEC Charitable Hospital   **Collector Office**   **Railway Station**
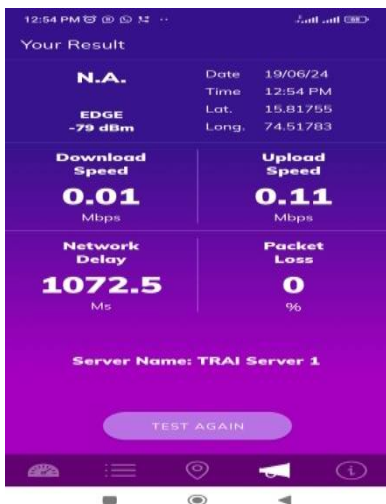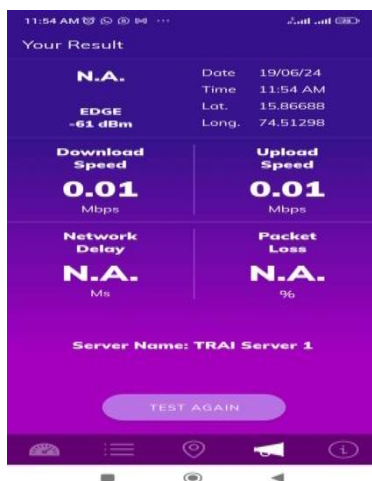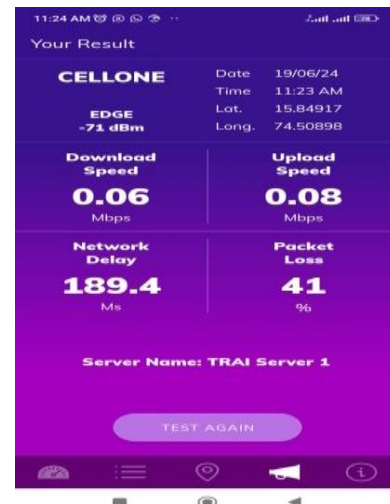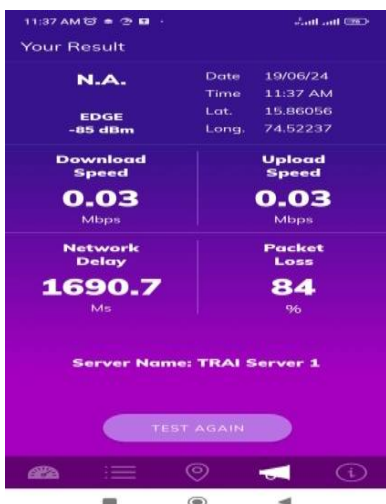
Belagavi Fort   **RTO Office**   **ICMR**
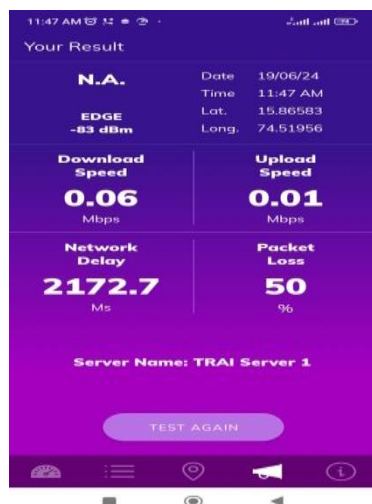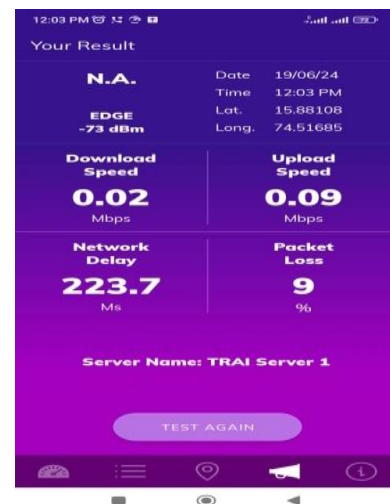
V. TRAI MySpeed App Test Details-3G/4G

Techology-4G	KLE Centenary Charitable Hospital	Collector Office	Railway Station	Belagavi Fort	RTO Office	ICMR
Download Speed (Mbps)	7.35	0.54	1.45	0.86	0.99	0.59
Upload Speed (Mbps)	1.32	0.04	1.60	1.07	1.75	0.54
Latency(ms)	109.6	105.2	74.1	106.4	109.4	118.1

KLEC Charitable Hospital
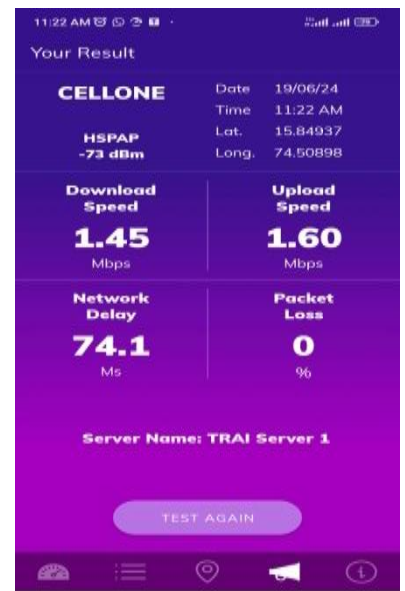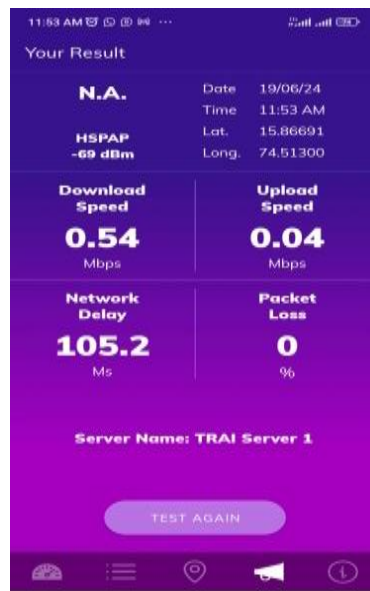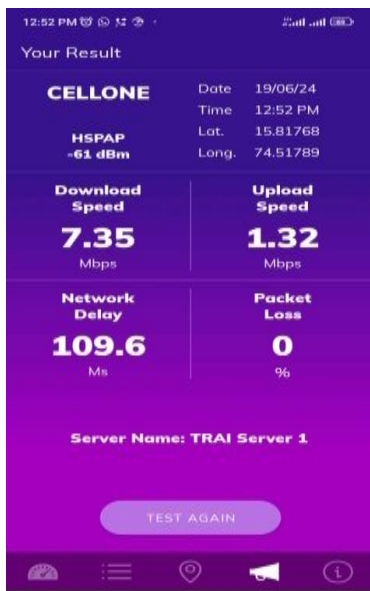
Collector Office
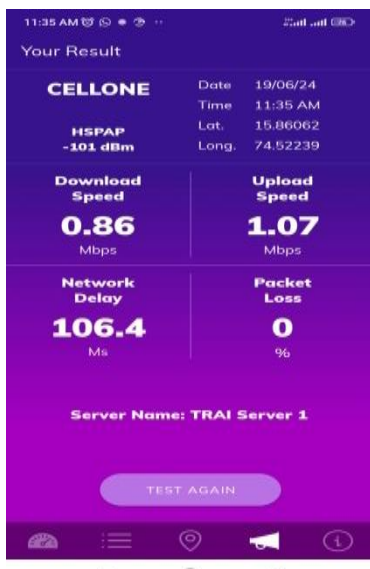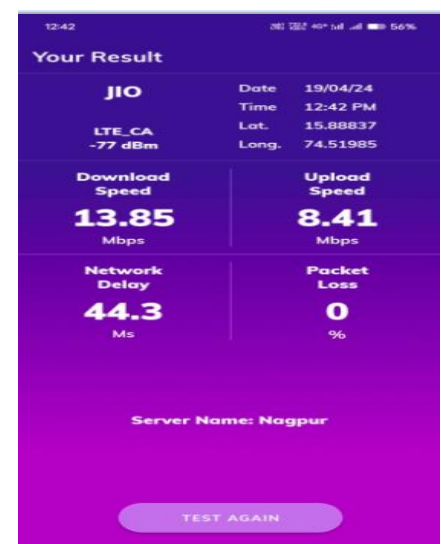
Railway Station

Belagavi Fort

RTO Office

ICMR

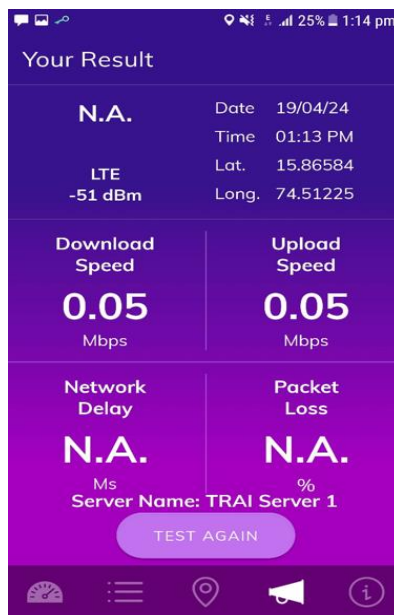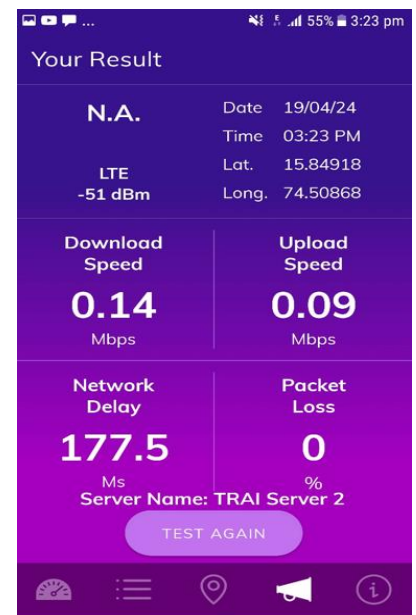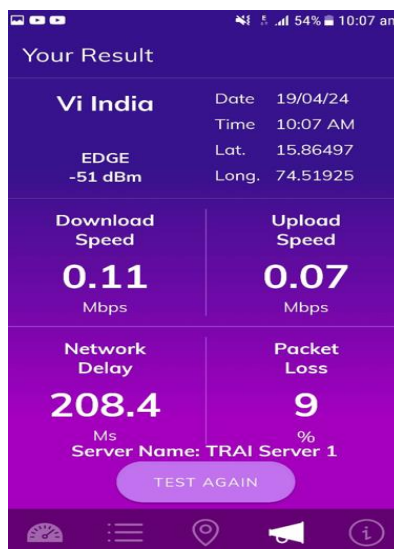| Techology-4G	KLE Centenary Charitable Hospital	Collector Office	Railway Station	Belagavi Fort	RTO Office	ICMR
Download Speed (Mbps)	28.75	14.15	32.30	27.18	22.91	13.85
Upload Speed (Mbps)	4.61	5.47	12.63	4.86	6.49	8.41
Latency(ms)	58.6	49.3	42.3	47.6	41.3	44.3

KLEC Charitable Hospital

Collector Office

Railway Station

Belagavi Fort

RTO Office

ICMR

V. TRAI MySpeed App Test Details-2G

Techology-2G	KLE Centenary Charitable Hospital	Collector Office	Railway Station	Belagavi Fort	RTO Office	ICMR
Download Speed (Mbps)	0.04	0.05	0.14	0.13	0.11	0.05
Upload Speed (Mbps)	0.01	0.05	0.09	0.07	0.07	0.05
Latency(ms)	135.6	NA	177.5	132	208.4	128.1

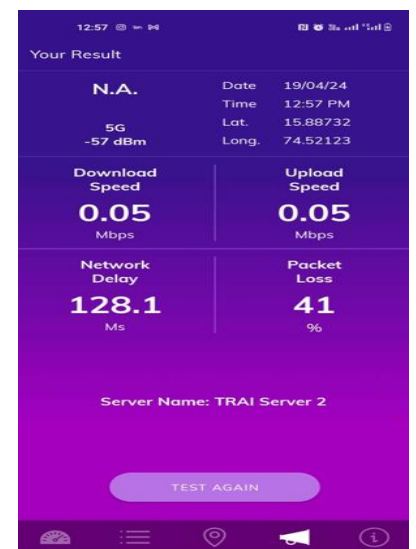### KLEC Charitable Hospital

Collector Office

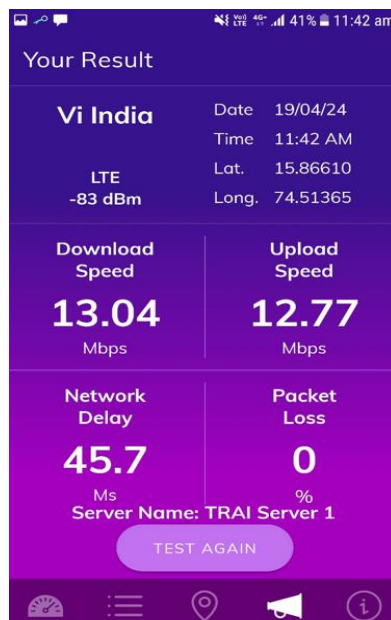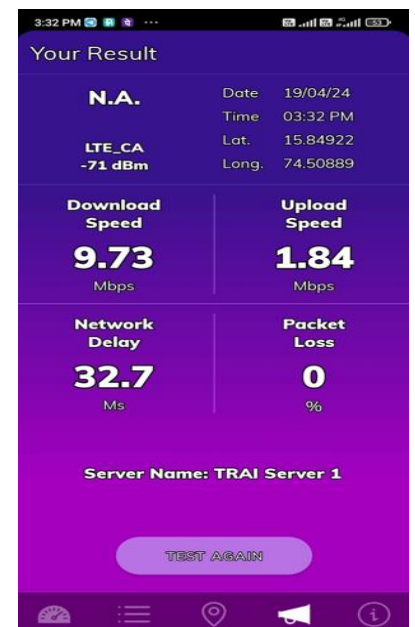### Railway Station

Belagavi Fort

RTO Office

ICMR

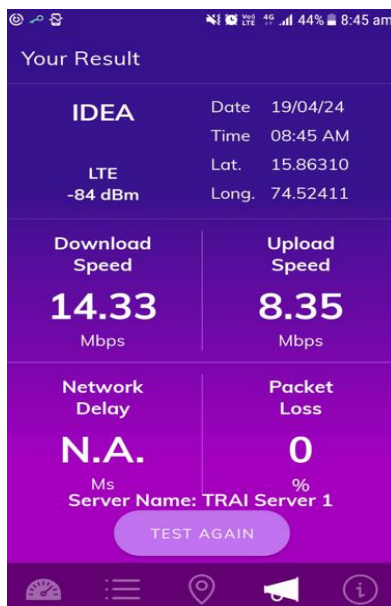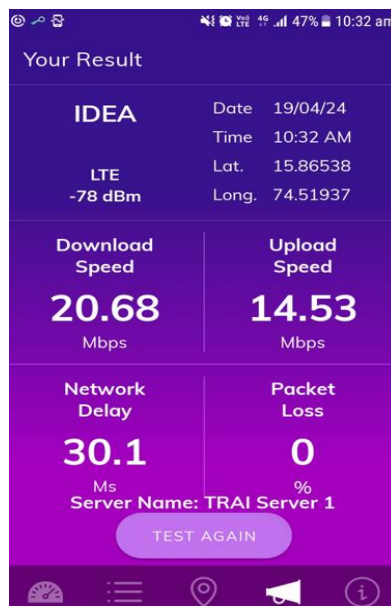| Techology-4G	KLE Centenary Charitable Hospital	Collector Office	Railway Station	Belagavi Fort	RTO Office	ICMR
Download Speed (Mbps)	13.31	13.04	9.73	14.33	20.68	15.45
Upload Speed (Mbps)	6.63	12.77	1.84	8.35	14.53	12.27
Latency(ms)	50.1	45.7	32.7	NA	30.1	31.3

KLEC Charitable Hospital

Collector Office

Railway Station

Belagavi Fort

RTO Office

ICMR