

Operator Assisted Drive Test Report

For

Raichur

21st to 24th Nov 2023

Raichur to Ballari NH - 165 Kms
(21st Nov 2023)

Raichur & Surrounding Area - 320 Kms
(22nd to 24th Nov 2023)

TRAI RO, Bengaluru

Key Performance Indicators:

- All TSPs have met the 2% QOS benchmark of Drop Call Rate.
- All TSPs have met the 3% QOS benchmark of Call Block Rate.
- All 2G/3G/4G TSPs have met the Rx Quality except Airtel 4G, BSNL 3G & 4G, JIO 4G & VIL 4G.
- All 2G/3G/4G TSPs have met the Mobility HOSR except Airtel 4G & BSNL 2G.

The Operator Assisted Drive Test has been carried out by the Regional Office, Bangalore with the help of Service Providers from **21st to 24th Nov 2023**. The drive test covered the route of **485 Kms** including NH of **165 Kms** & **6** hotspots. Approximately **550** calls were made for each of the **9** networks: three 2G networks, two 3G network, and four LTE networks covering four TSPs.

Overview

Voice
Summary

Data
Summary

Overview

Regional Office, TRAI Bengaluru conducted Operator Assisted Drive Test from **21st to 24th Nov 2023** covering various locations in **Raichur & Surrounding Region**. The performance of Airtel, BSNL, Vodafone Idea and Jio were monitored across various technologies (2G, 3G and 4G/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 **485 KMs** including **NH of 165 Kms** over a period of 4 days from **21st to 24th Nov 2023**. Approximately **550** calls were made for each of the **9** networks: three 2G(Lock Mode) networks, two 3G (Dual mode) networks, and four 4G networks covering 4 unique TSPs.

Data Tests: Dynamic data test (Test Data on Move) was conducted for **485 KMs** including **NH of 165 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, two 3G (Dual mode) networks 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.

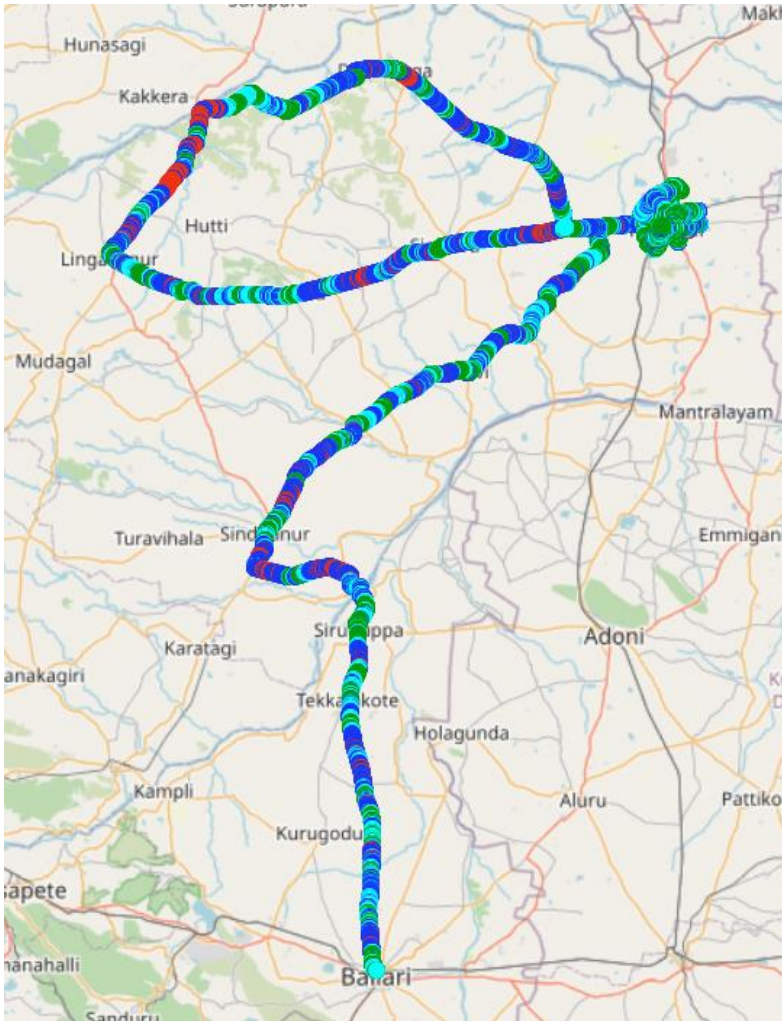
* 3G KPI's which are calculated from UE in Dual Mode (2G & 3G) includes samples and events of 2G.

* 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

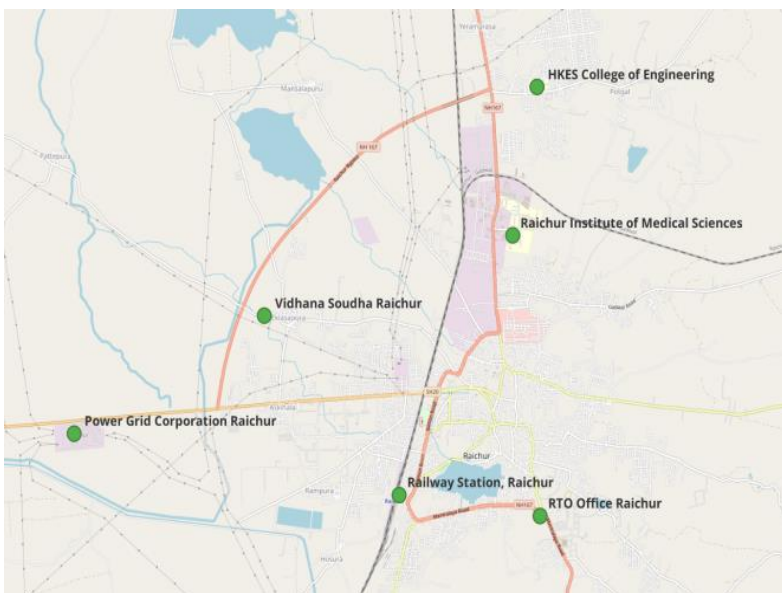
Overview

Voice & Dynamic Data Test (Data Test on Move) Drive Route



Areas covered	
Raichur	Hunsihalhuda
Ballari high way	Manvi
Devadurga	Gabbur
Linsugar	Gurgunta
Kowthai	Malta
Sirwar	Raichur highway
Raichur city	Railway Station

Data Service Test- Static Locations



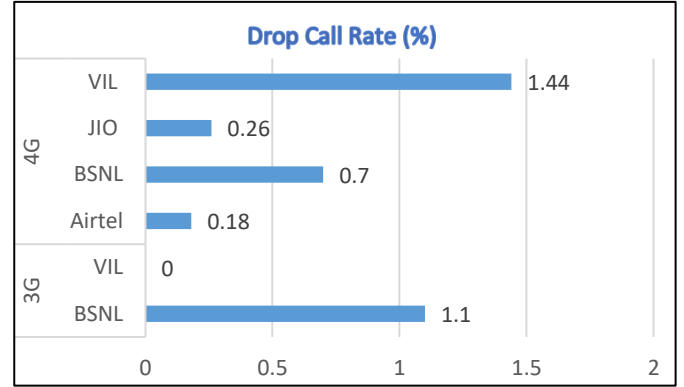
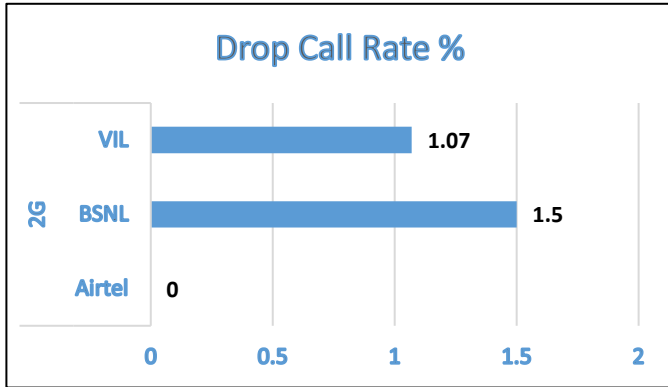
1. Railway Station, Raichur
2. RTO Office Raichur
3. Raichur Institute of Medical Sciences
4. HKES College of Engineering
5. Vidhana Soudha Raichur
6. Power Grid Corporation Raichur

Voice Calls

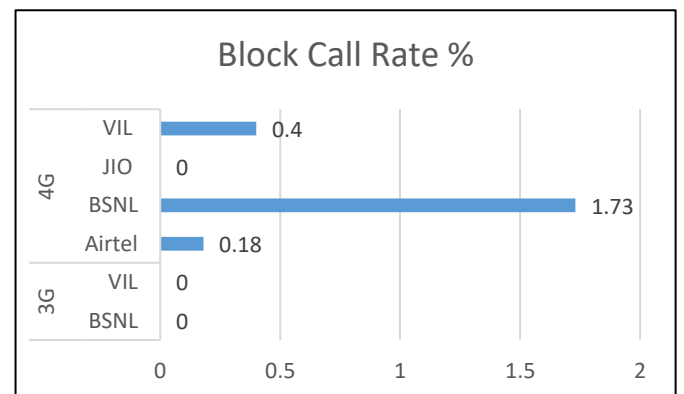
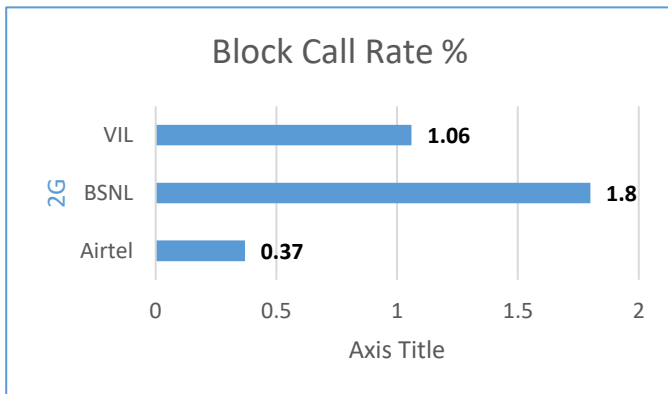
Key Observations

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

Drop Call Rate (%)



Block Call Rate (%)



KPIs	2G			3G		4G			
	Airtel	BSNL	VIL	BSNL	VIL	Airtel	BSNL	RJIL	VIL
Drop Call Rate %	0	1.5	1.07	1.1	0	0.18	0.7	0.26	1.44
Block Call Rate %	0.37	1.8	1.06	0	0	0.18	1.73	0	0.4

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

Voice Calls

Key Observations

Coverage

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

TSPs	2G		
	Airtel	BSNL	VIL
Coverage%	61.50	85.40	73.47

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

TSPs	3G		4G			
	BSNL	VIL	Airtel	BSNL	JIO	VIL
Coverage %	71.30	89.49	98.96	92.60	96.54	79.69

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

TSPs	3G		4G			
	BSNL	VIL	Airtel	BSNL	JIO	VIL
Time Spent on 3G/4G%	26.2	99.8	100	50.5	100	96.42

Summary

City Level Summary

Voice Call	2G		
	Airtel	BSNL	VIL
Call Attempt	548	666	565
Blocked Call Rate (%)	0.37	1.8	1.06
CSSR% (Accessibility)	99.64	98.2	98.94
Drop Call Rate (%)	0	1.5	1.07
Rx Quality (%)	95.16	95.2	96.82
Mobility HOSR (%)	99.89	90.37	98.23

Voice Call	3G		4G			
	BSNL	VIL	Airtel	BSNL	JIO	VIL
Call Attempt	93	201	552	287	771	491
Blocked Call Rate (%)	0	0	0.18	1.73	0	0.4
CSSR% (Accessibility)	100	100	99.82	98.27	98.7	99.6
Drop Call Rate (%)	1.1	0	0.18	0.7	0.26	1.44
Rx Quality (%)	94.2	98.93	92.85	87.1	91.97	88.98
Mobility HOSR (%)	98.83	100	92.88	98.2	98.28	100

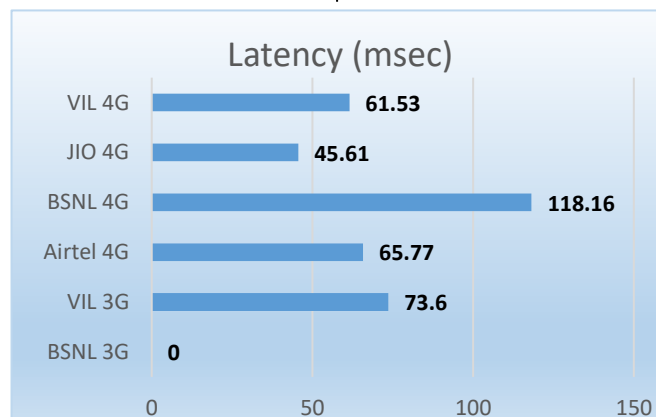
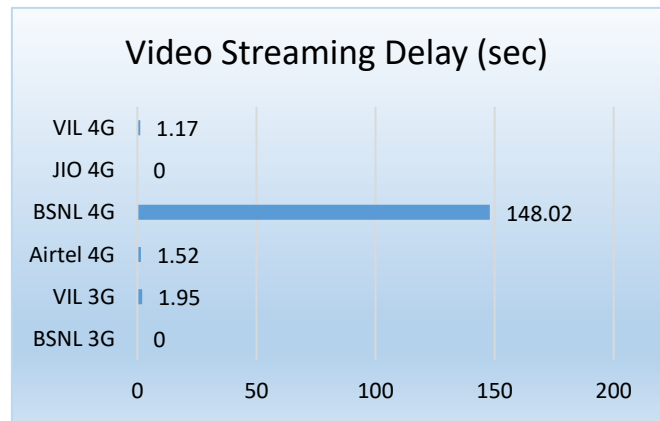
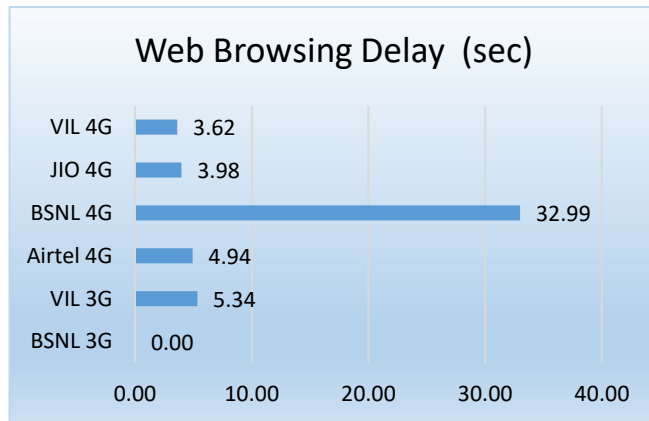
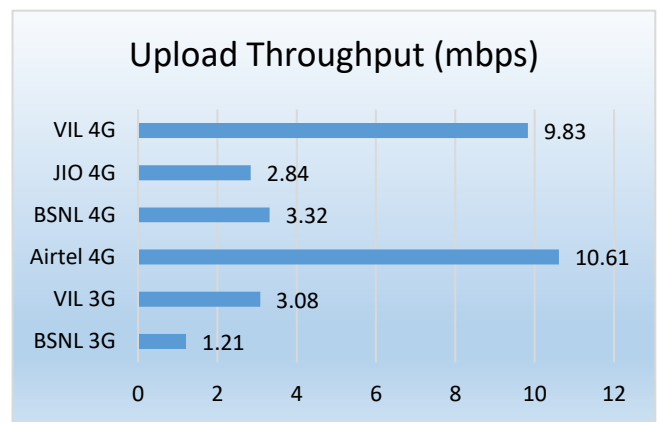
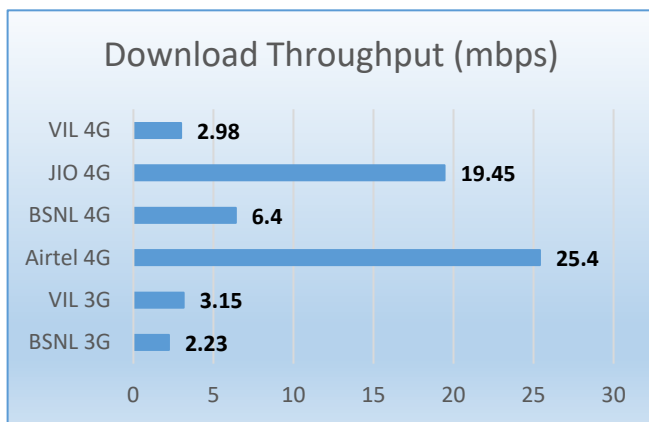
Data Services Static

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)

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

3G/4G/ Network:



Summary

City Level Summary(contd.)

Data Services Static	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	105.8	46.06	100.37
Upload Throughput (kbps)	3	64.84	86
Web Browsing Delay (sec)	131.4	204.423	44.14
Latency (msec)	250.3	214.50	172.67

Data Services Static	3G		4G			
	BSNL	VIL	Airtel	BSNL	JIO	VIL
Download Throughput (mbps)	2.23	3.15	25.4	6.40	19.45	2.98
Upload Throughput (mbps)	1.21	3.08	10.61	3.32	2.84	9.83
Web Browsing Delay (sec)	-	5.34	4.94	32.99	3.98	3.62
Video Streaming Delay (sec)	-	1.95	1.52	148.02	0	1.17
Latency (msec)	0	73.6	65.77	118.16	45.61	61.53

Data Services Dynamic (Data Test on Move)	3G			4G		
	BSNL	VIL	Airtel	BSNL	JIO	VIL
Download Throughput (mbps)	2.23	3.66	9.2	6.4	3.66	4.12
Upload Throughput (mbps)	1.21	3.24	7.78	3.83	3.24	7.48

Summary

City Level Data Services Static(contd.)

Data Services Static – Railway Station Raichur	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	96.82	33.55	150.04
Upload Throughput (kbps)	1.76	44.966	97.64
Web Browsing Delay (sec)	97.9	194.24	41.94
Latency (ms)	254.2	233	159

Data Services Static – Railway Station Raichur	3G/4G				
	VIL 3G	Airtel	BSNL	JIO	VIL
Download Throughput (Mbps)	5.92	13.74	10.03	8.33	5.67
Upload Throughput (Mbps)	3.3	13.19	2.89	2.09	12.48
Web Browsing Delay (sec)	4.83	4.42	64.76	2.42	2.1
Video Streaming Delay (sec)	1.87	0.79	147.59	0	0.72
Latency (ms)	74.6	51.4	128	52.83	49.6

Data Services Static – RTO Raichur	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	73.96	60.74	137.6
Upload Throughput (kbps)	2.84	63.73	97.644
Web Browsing Delay (sec)	210.75	250.86	42.688
Latency (msec)	214.4	255	195

Data Services Static – RTO Raichur	3G/4G				
	VIL 3G	Airtel	BSNL	JIO	VIL
Download Throughput (Mbps)	2.97	45.61	5.55	20.43	2.28
Upload Throughput (Mbps)	2.66	17.8	2.22	3.4	10.8
Web Browsing Delay (sec)	7.21	4.88	28.58	2.87	2.52
Video Streaming Delay (sec)	2.46	2.17	146.4	0	2.14
Latency (ms)	80.40	62.6	124	32	55.4

Summary

City Level Data Services Static(contd.)

Data Services Static – RIMS	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	76	54.02	46.99
Upload Throughput (kbps)	1.02	71.81	95.26
Web Browsing Delay (sec)	116.26	188.12	62.228
Latency (ms)	253	196.20	215

Data Services Static – RIMS	3G/4G				
	VIL 3G	Airtel	BSNL	JIO	VIL
Download Throughput (Mbps)	2.4	20.35	13.12	14.07	3.55
Upload Throughput (Mbps)	4.06	3.97	4.94	2.37	11.56
Web Browsing Delay (sec)	4.56	4.12	21.03	2.54	5.85
Video Streaming Delay (sec)	1.67	0.94	149.29	0	1.31
Latency (ms)	60	73	146.20	55	72.8

Data Services Static – HIKES College of Engg	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	127.38	39.1	107.48
Upload Throughput (kbps)	2.44	84.78	102.616
Web Browsing Delay (sec)	100.27	172.06	32.288
Latency (msec)	264	196	154

Data Services Static – HIKES College of Engg	3G/4G				
	VIL 3G	Airtel	BSNL	JIO	VIL
Download Throughput (Mbps)	2.47	18	4.91	54.39	2.11
Upload Throughput (Mbps)	3.9	5.31	1.77	7.71	12.5
Web Browsing Delay (sec)	4.56	4.55	27.7	2.56	6.31
Video Streaming Delay (sec)	0.88	1.51	147.79	0	0.77
Latency (ms)	54	74	78	34	66.8

Summary

City Level Data Services Static(contd.)

Data Services Static – Vidhanasoudha Raichur	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	67.24	39.50	86.65
Upload Throughput (kbps)	2.46	47.64	60.23
Web Browsing Delay (sec)	119.17	204.78	43.84
Latency (ms)	270	190.60	169

Data Services Static – Vidhanasoudha Raichur	3G/4G				
	VIL 3G	Airtel	BSNL	JIO	VIL
Download Throughput (Mbps)	2.15	25.12	2.18	16.95	1.68
Upload Throughput (Mbps)	0.94	18	4.95	0.95	2.19
Web Browsing Delay (sec)	4.52	4.96	32.35	8.95	2.45
Video Streaming Delay (sec)	2.6	0.88	148.36	0	0.76
Latency (ms)	91	64	120	46	67

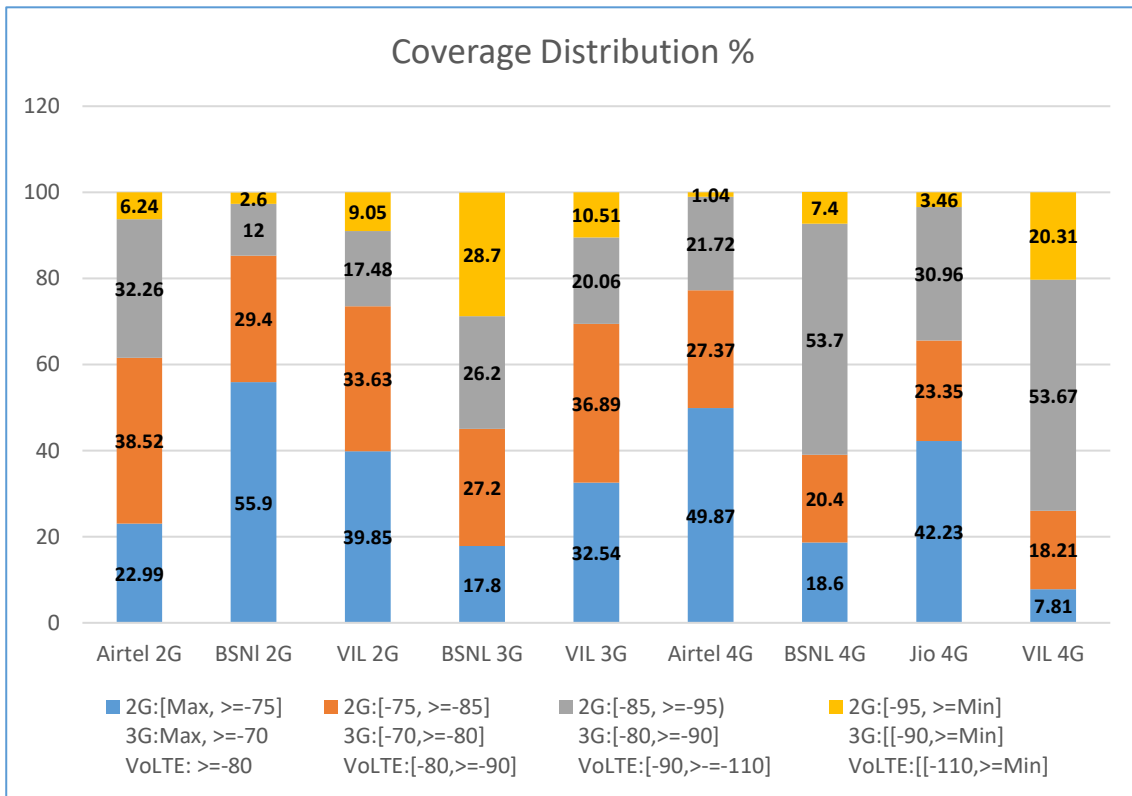
Data Services Static – Near Power Grid Corp	2G		
	Airtel	BSNL	VIL
Download Throughput (kbps)	189	49.37	73.46
Upload Throughput (kbps)	7.22	76.14	62.58
Web Browsing Delay (sec)	143.8	204.78	41.84
Latency (msec)	246	216.00	143

Data Services Static – Near Power Grid Corp	3G/4G				
	VIL 3G	Airtel	BSNL	JIO	VIL
Download Throughput (Mbps)	2.99	29.58	2.66	2.54	2.57
Upload Throughput (Mbps)	3.62	5.4	3.16	0.57	9.43
Web Browsing Delay (sec)	6.34	6.71	23.49	4.23	2.5
Video Streaming Delay (sec)	2.24	2.84	148.87	0	1.35
Latency (ms)	81	70	114	54	57.6

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

TSP	Coverage Rate %
Airtel 2G	61.50
BSNL 2G	85.40
VIL 2G	73.47
BSNL 3 G	71.30
VIL 3G	89.49
Airtel 4G	98.96
BSNL 4 G	92.60
Jio 4G	96.54
VIL 4G	79.69

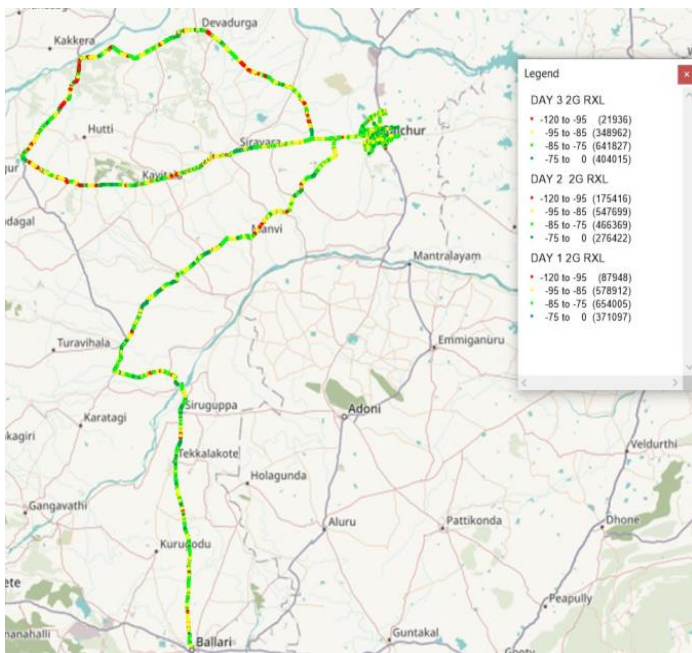


I. Coverage Details

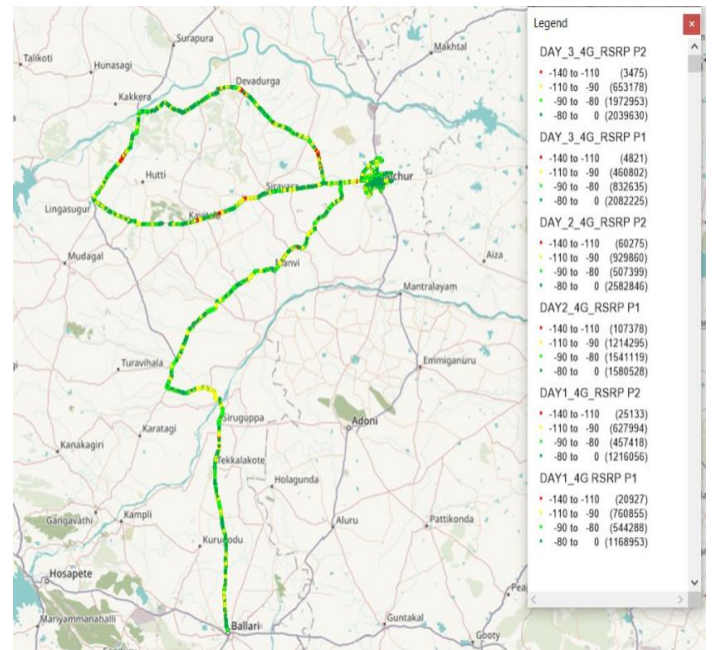
AIRTEL

Technology	Coverage Rate %
2G	61.50
4G	98.96

2G



4G



2G

Overall RxLevel	# Samples	% PDF
[Max, >=-75]	1051534	22.99
[-75, >=-85)	1762201	38.52
[-85, >=-95)	1475573	32.26
[-95, >=Min)	285300	6.24
Total	4574608	100

4G/VoLTE

Overall RSRP	# Samples	% PDF
[Max, >=-80]	10670238	49.87
[-80, >=-90)	5855812	27.37
[-90, >=-110)	4646984	21.72
[-110, >=Min)	222009	1.04
Total	27409421	100

I. Coverage Details

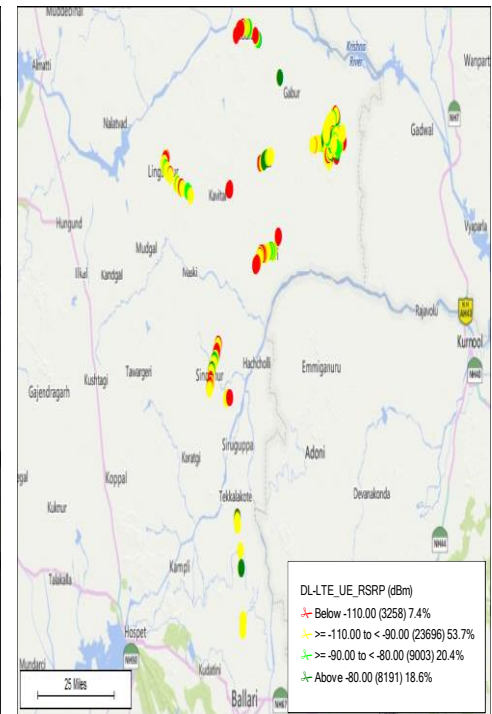
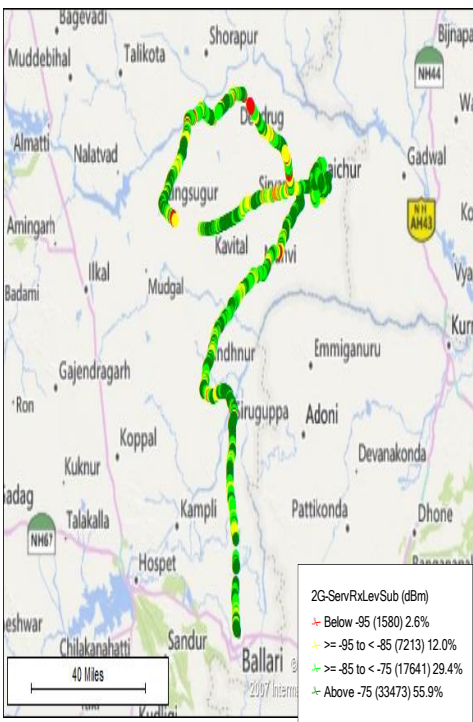
BSNL

Technology	Coverage Rate %
2G	85.40
3G	71.3
4G	92.6

2G

3G

4G



2G		
Overall RxLevel	# Samples	% PDF
[Max, >=-75]	33473	55.9
[-75, >=-85]	17641	29.4
[-85, >=-95]	7213	12
[-95, >=Min)	1580	2.6
Total	59907	100

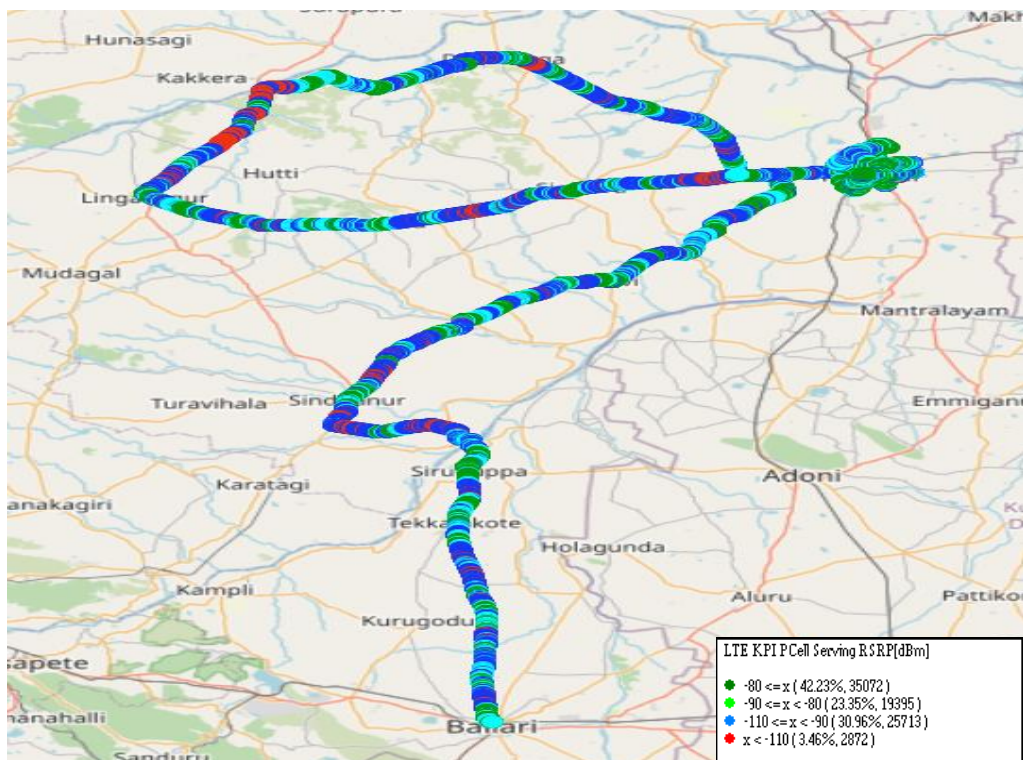
3G		
Overall RSCP	# Samples	% PDF
[Max, >=-70]	1595	17.8
[-70, >=-80]	2434	27.2
[-80, >=-90]	2343	26.2
[-90, >=Min)	2571	28.7
Total	8943	100

4G		
Overall RSRP	# Samples	% PDF
[Max, >=-80]	8191	18.6
[-80, >=-90]	9003	20.4
[-90, >=-110]	23696	53.7
[-110, >=Min)	3258	7.4
Total	44148	100

I. Coverage Details

JIO

Technology	Coverage Rate %
4G	96.54



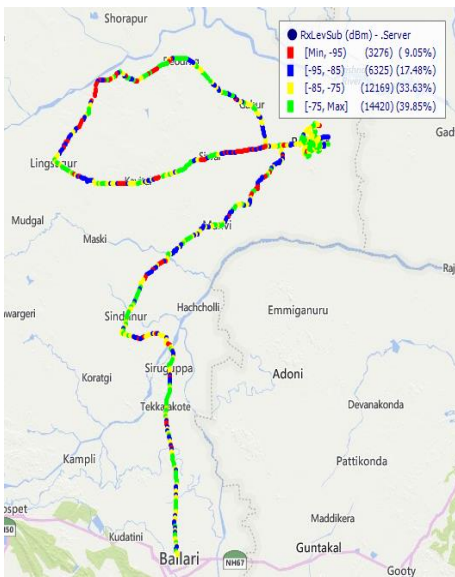
4G/VoLTE		
Overall RSRP	# Samples	% PDF
[Max, >=-80]	35072	42.23
[-80, >=-90)	19395	23.35
[-90, >=-110)	25713	30.96
[-110, >=Min)	2872	3.46
Total	83052	100

I. Coverage Details

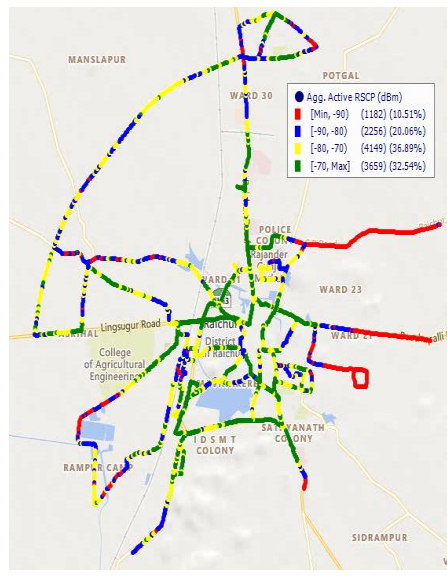
VIL

Technology	Coverage Rate %
2G	73.47
3G	89.49
4G	79.69

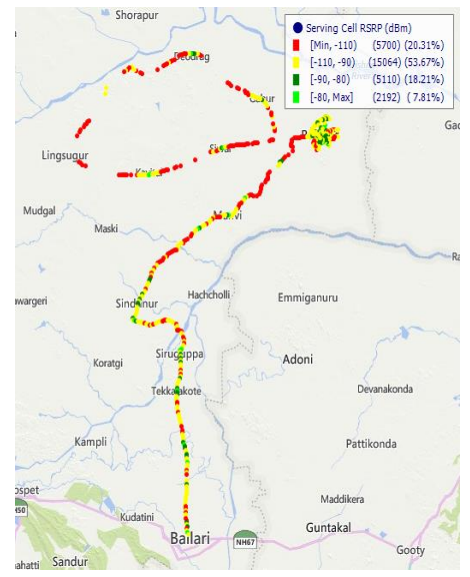
2G



3G



4G



2G		
Overall RxLevel	# Samples	% PDF
[Max, >=-75]	14420	39.85
[-75, >=-85]	12169	33.63
[-85, >=-95]	6325	17.48
[-95, >=Min)	3276	9.05
Total	36190	100

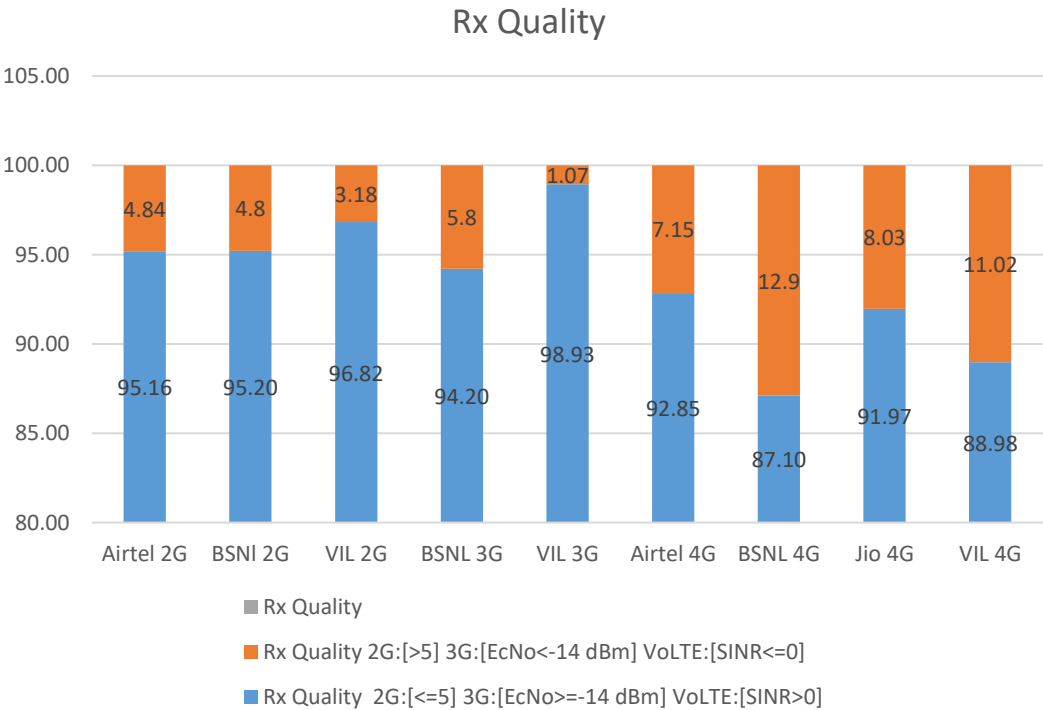
4G/VoLTE		
Overall RSCP	# Samples	% PDF
[Max, >=-70]	3659	32.54
[-70, >=-80]	4149	36.89
[-80, >=-90]	2256	20.06
[-90, >=Min)	1182	10.51
Total	11247	100

4G/VoLTE		
Overall RSRP	# Samples	% PDF
[Max, >=-80]	2192	7.81
[-80, >=-90]	5110	18.21
[-90, >=-110]	15064	53.67
[-110, >=Min)	5700	20.31
Total	28066	100

II. 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 4G 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	95.16
BSNL 2G	95.20
VIL 2G	96.82
BSNL 3 G	94.20
VIL 3G	98.93
Airtel 4G	92.85
BSNL 4 G	87.10
Jio 4G	91.97
VIL 4G	88.98

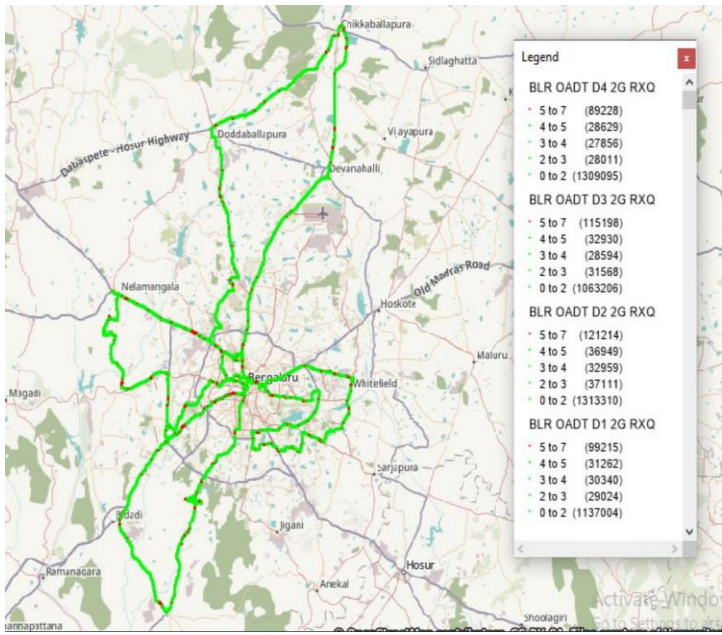


II. Quality Details

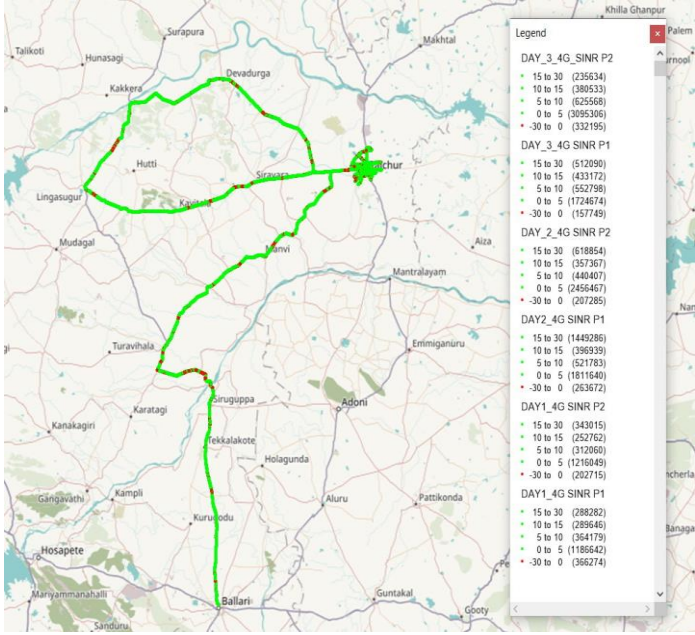
Airtel

Technology	Rx Quality %
2G	95.16
4G	92.85

2G



4G



Overall Rx Quality	# Samples	% PDF
(Min, <=2)	4102732	89.68%
(2, <=3)	78715	1.71%
(3, <=4)	83267	1.82%
(4, <=5)	88394	1.93%
(5, <=Max)	221500	4.84%
Total	4574608	100

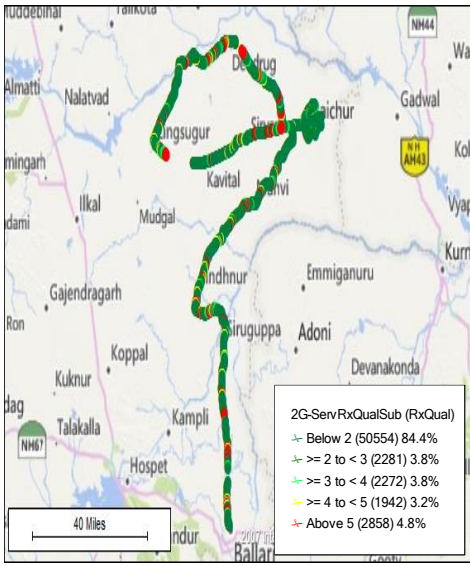
Overall SINR	# Samples	% PDF
(Min, <=0)	1529890	7.15
(0, <=5)	11490778	53.71
(5, <=10)	2816795	13.17
(10, <=15)	2110419	9.86
(15, <=Max)	3447161	16.11
Total	19865153	100

II. Quality Details

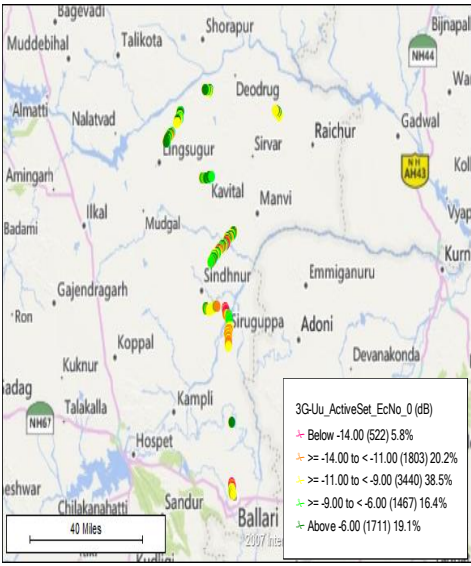
BSNL

Technology	Rx Quality %
2G	95.2
3G	94.2
4G	87.1

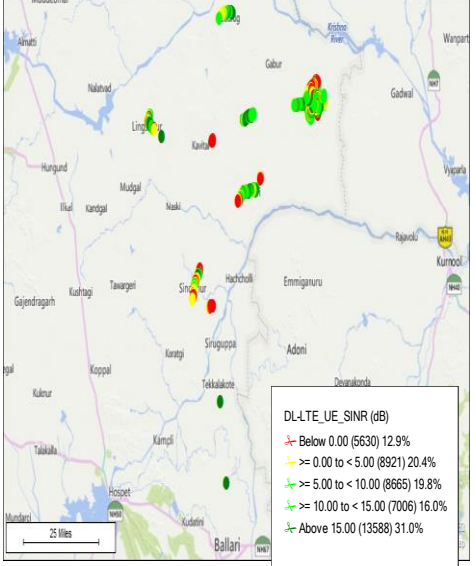
2G



3G



4G



Overall Rx Quality	# Samples	% PDF
(Min, <=2)	50554	84.4
(2, <=3)	2281	3.8
(3, <=4)	2272	3.8
(4, <=5)	1942	3.2
(5, <=Max)	2858	4.8
Total	59907	100

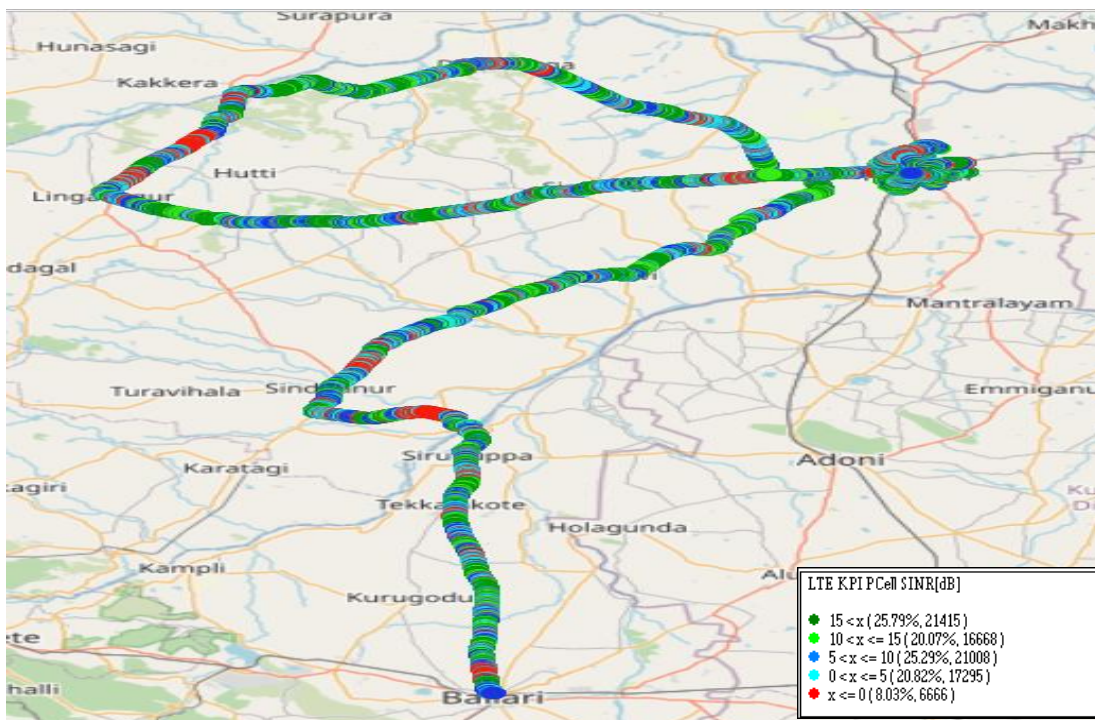
Overall EcNo	# Samples	% PDF
(Max, <=-6)	1711	19.1
(-6, <=-9)	1467	16.4
(-9, <=-11)	3440	38.5
(-11, <=-14)	1803	20.2
(-14, <= Min)	522	5.8
Total	8943	100

Overall SINR	# Samples	% PDF
(Min, <=0)	5630	12.9
(0, <=5)	8921	20.4
(5, <=10)	8665	19.8
(10, <=15)	7006	16
(15, <=Max)	13588	31
Total	43810	100

II. Quality Details

JIO

Technology	Rx Quality (%)
4G/4G	91.97



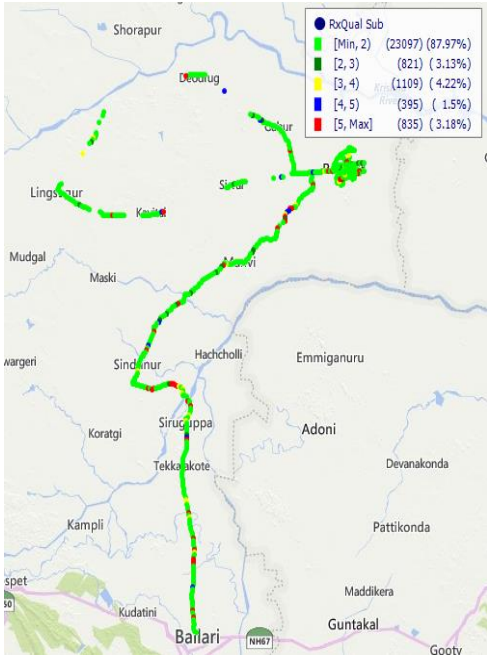
Overall SINR	# Samples	% PDF
(Min, <=0)	6666	8.03
(0, <=5)	17295	20.82
(5, <=10)	21008	25.29
(10, <=15)	16668	20.07
(15, <=Max)	21415	25.79
Total	83052	100

II. Quality Details

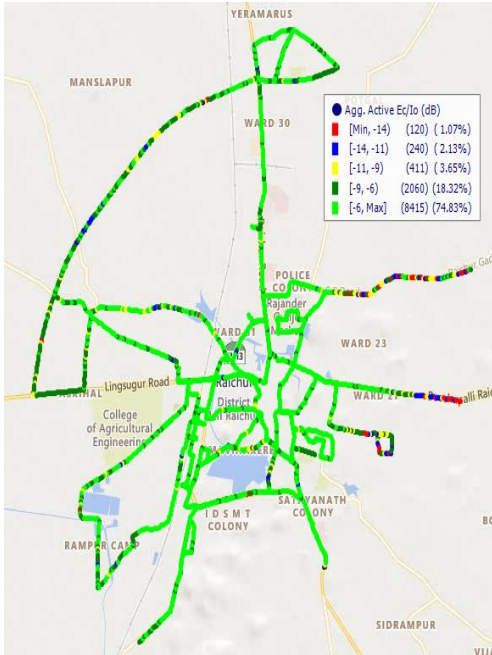
VIL

Technology	Rx Quality %
2G	96.82
3G	98.93
4G	88.98

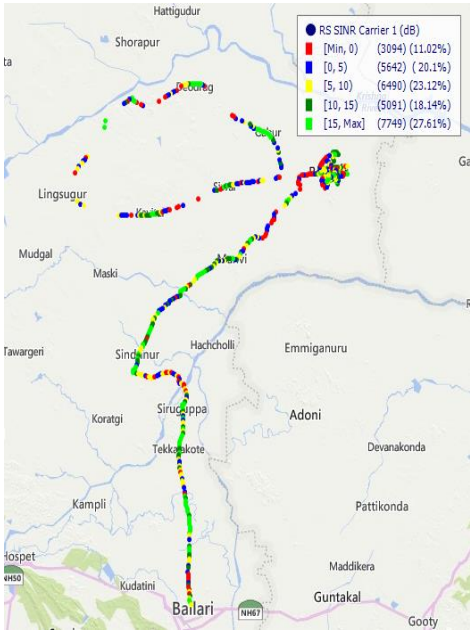
2G



3G



4G



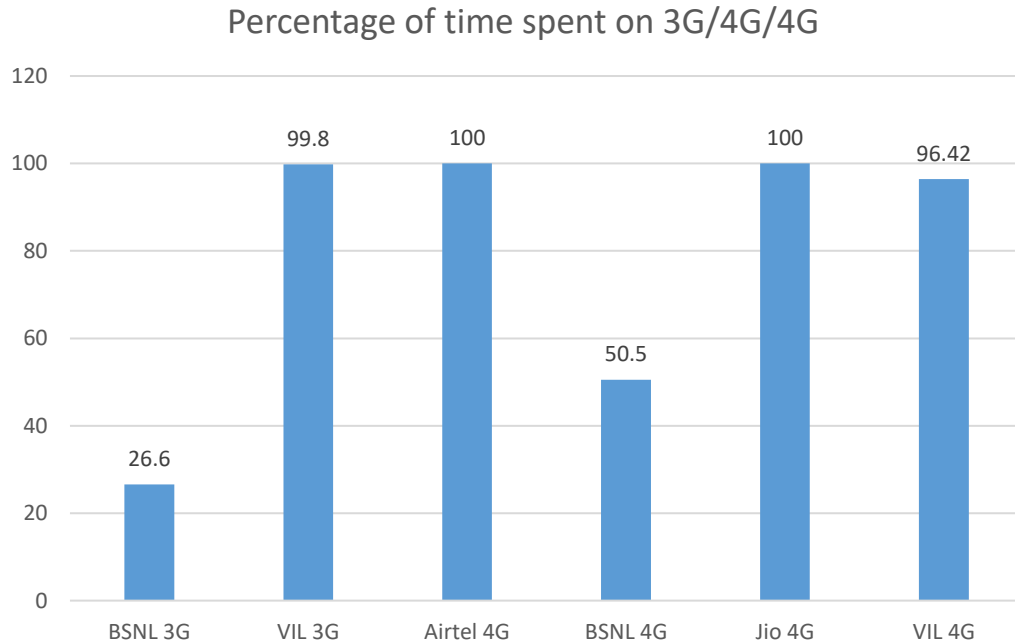
Overall Rx Quality	# Samples	% PDF
(Min, <=2)	23097	87.97
(2, <=3)	821	3.13
(3, <=4)	1109	4.22
(4, <=5)	395	1.5
(5, <=Max)	835	3.18
Total	26257	100

Overall EcNo	# Samples	% PDF
(Max, <=-6)	8415	74.83
(-6, <=-9)	2060	18.32
(-9, <=-11)	411	3.65
(-11, <=-14)	240	2.13
(-14, <= Min)	120	1.07
Total	11246	100

Overall SINR	# Samples	% PDF
(Min, <=0)	3094	11.02
(0, <=5)	5642	20.1
(5, <=10)	6490	23.12
(10, <=15)	5091	18.14
(15, <=Max)	7749	27.61
Total	28066	100

III. Technology Details

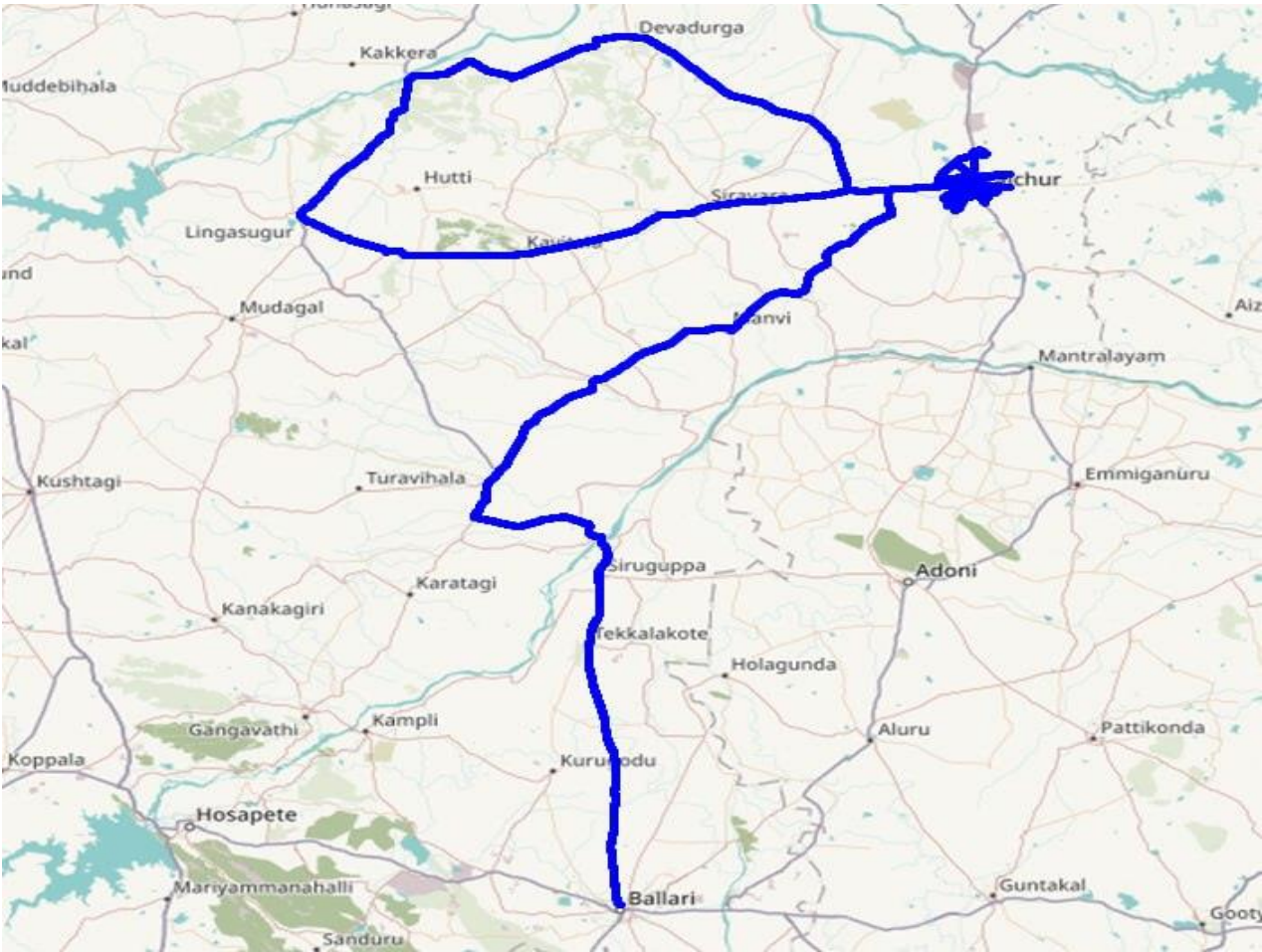
TSP	Time Spent on 3G/4G %
BSNL 3G	26.6
VIL 3G	99.8
Airtel 4G	100
BSNL 4G	50.5
Jio 4G	100
VIL 4G	96.42



III. Technology Details

Airtel

Technology	Time Spent %
4G	100

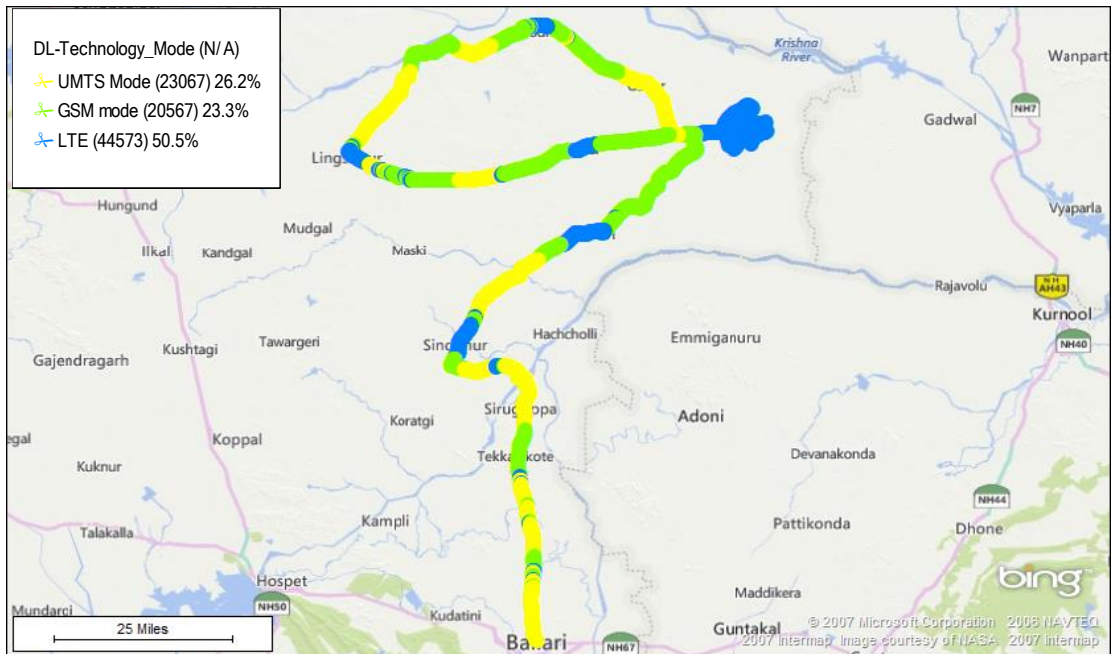


III. Technology Details

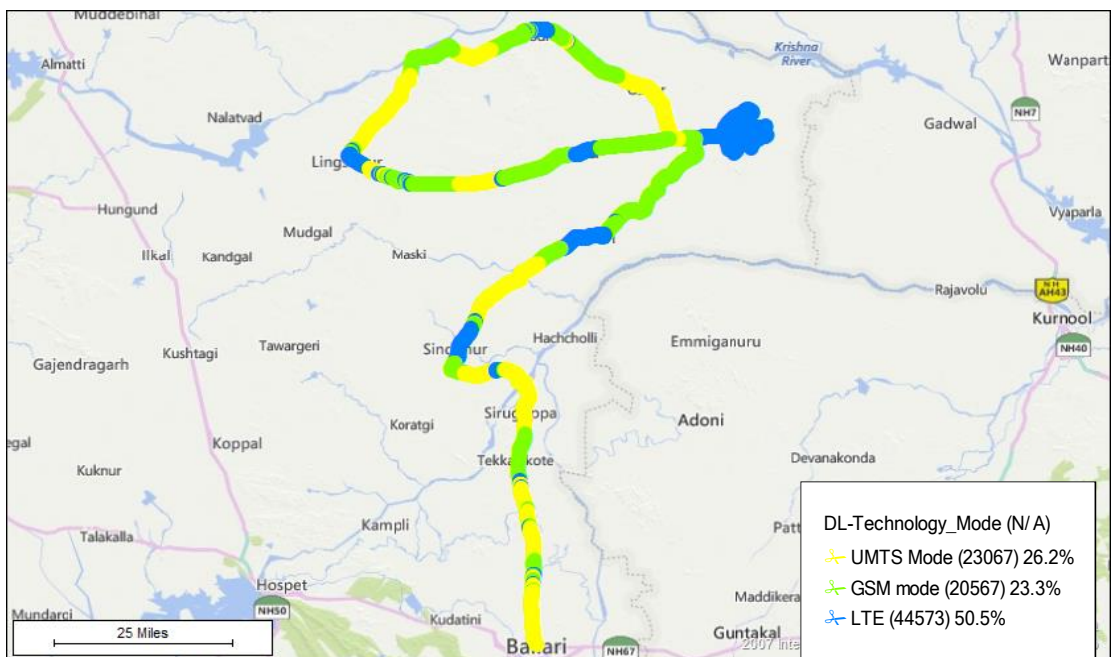
BSNL

Technology	Time Spent %
3G	26.2
4G	50.5

Technology Plot of complete SSA (3G)



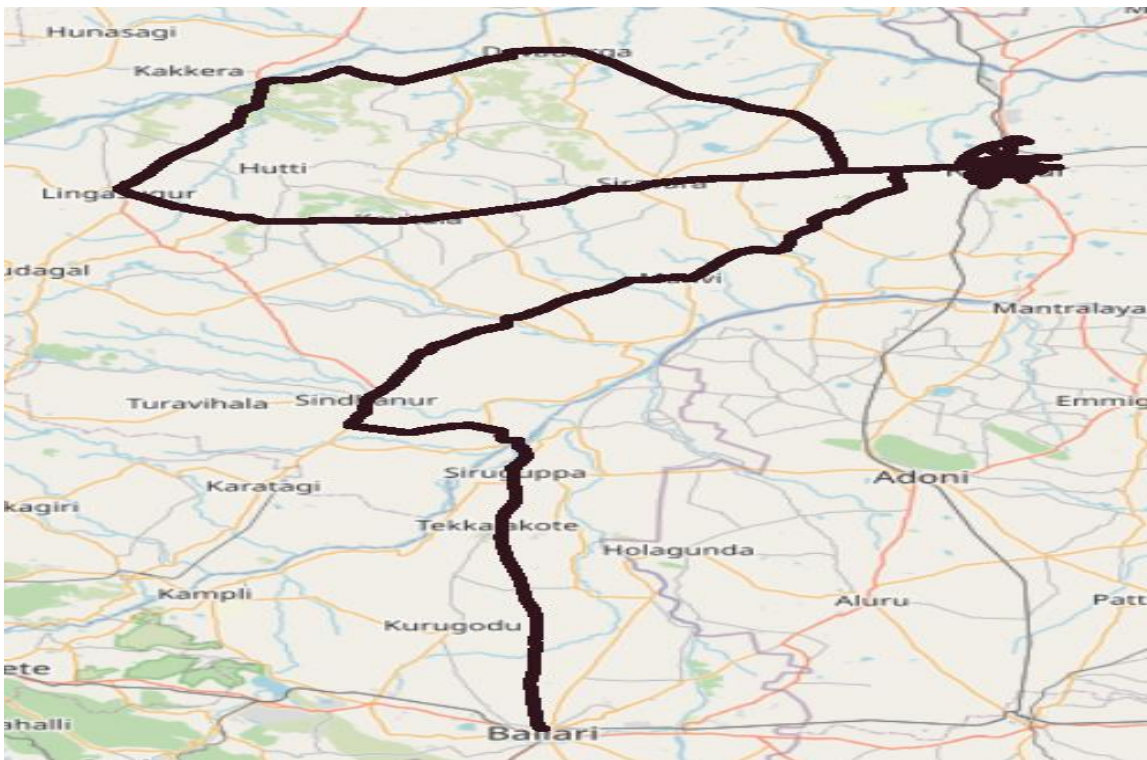
Technology Plot of complete SSA (4G)



III. Technology Details

JIO

Technology	Time Spent %
4G	100

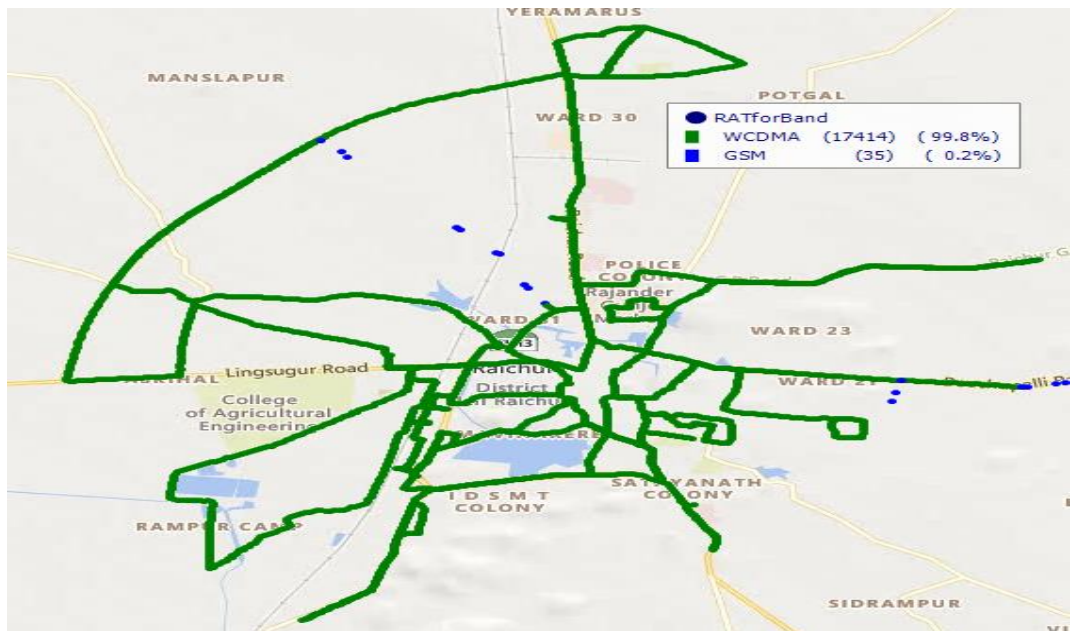


III. Technology Details

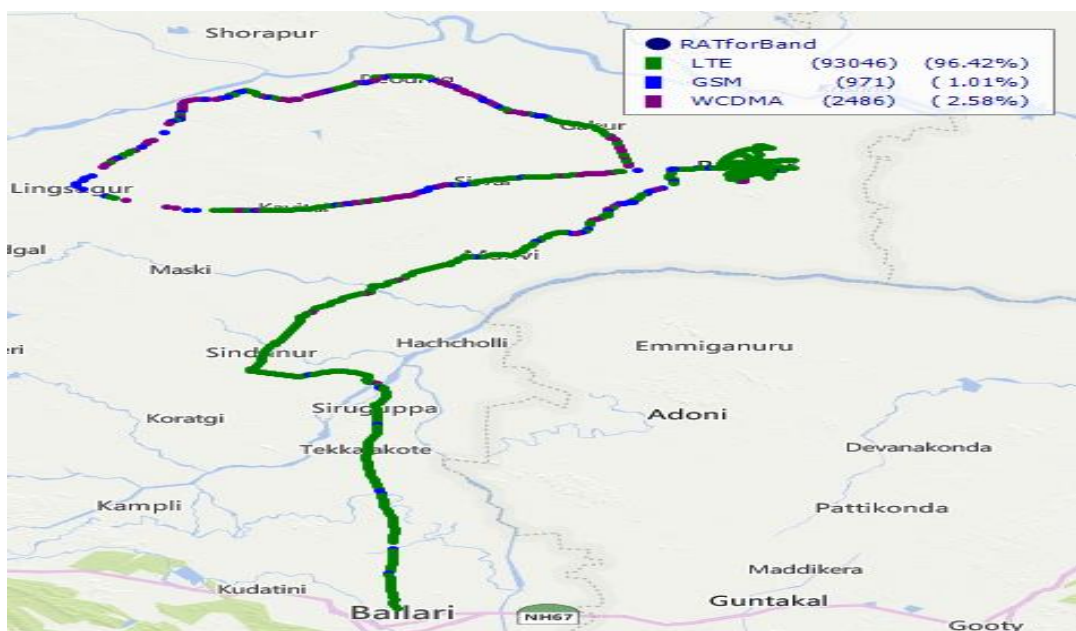
VIL

Technology	Time Spent
3G	99.80
4G	96.42

Technology Plot of complete SSA (3G)

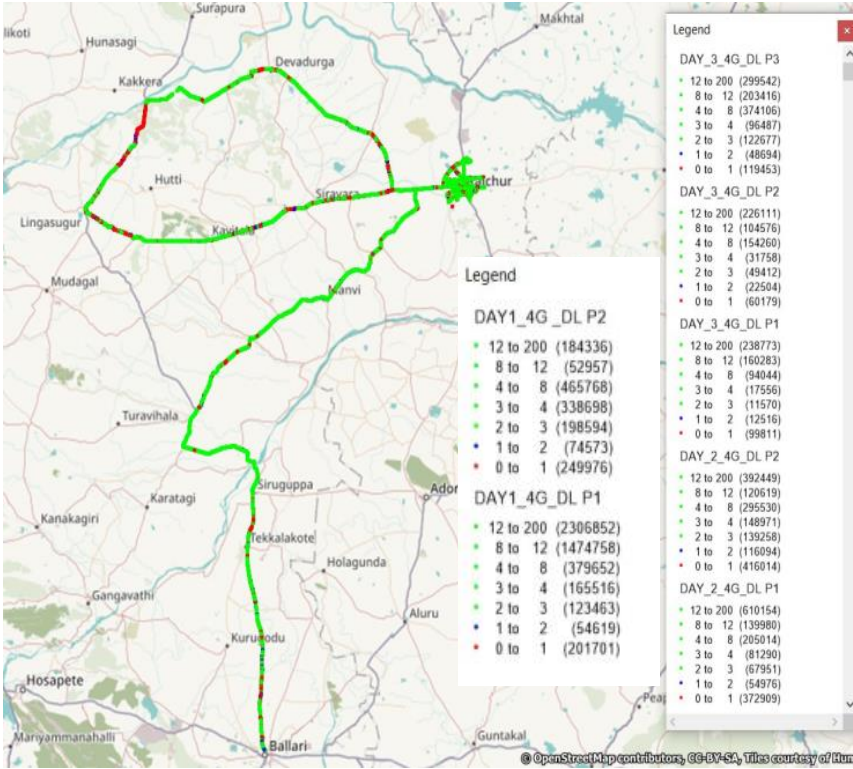


Technology Plot of complete SSA (4G)

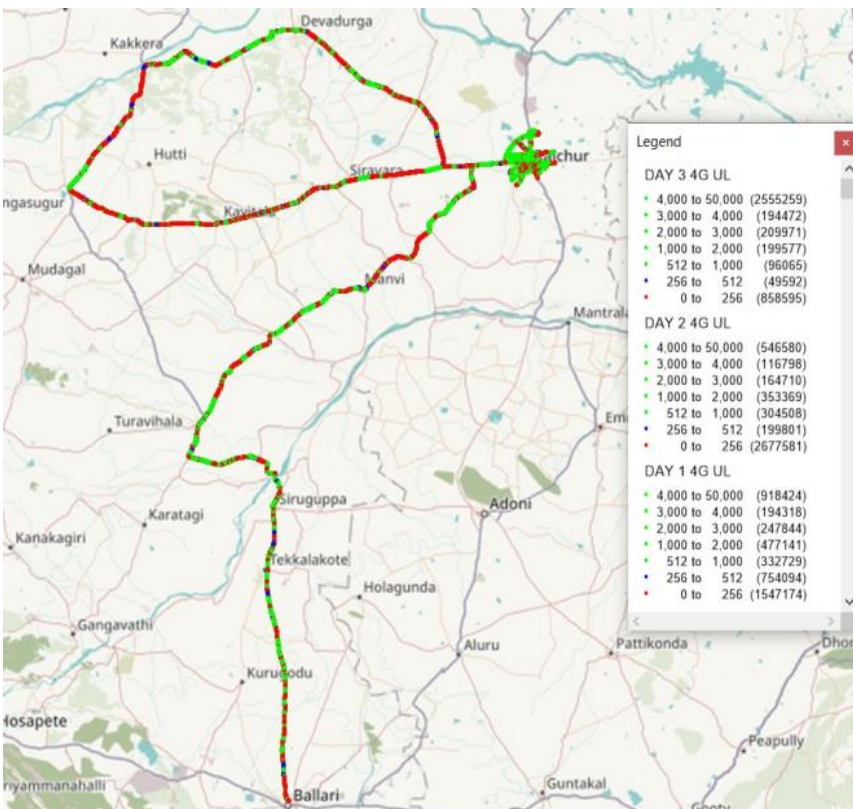


IV. Dynamic Data Test (Data Test on Move) - 4G DL/UL Details

Airtel



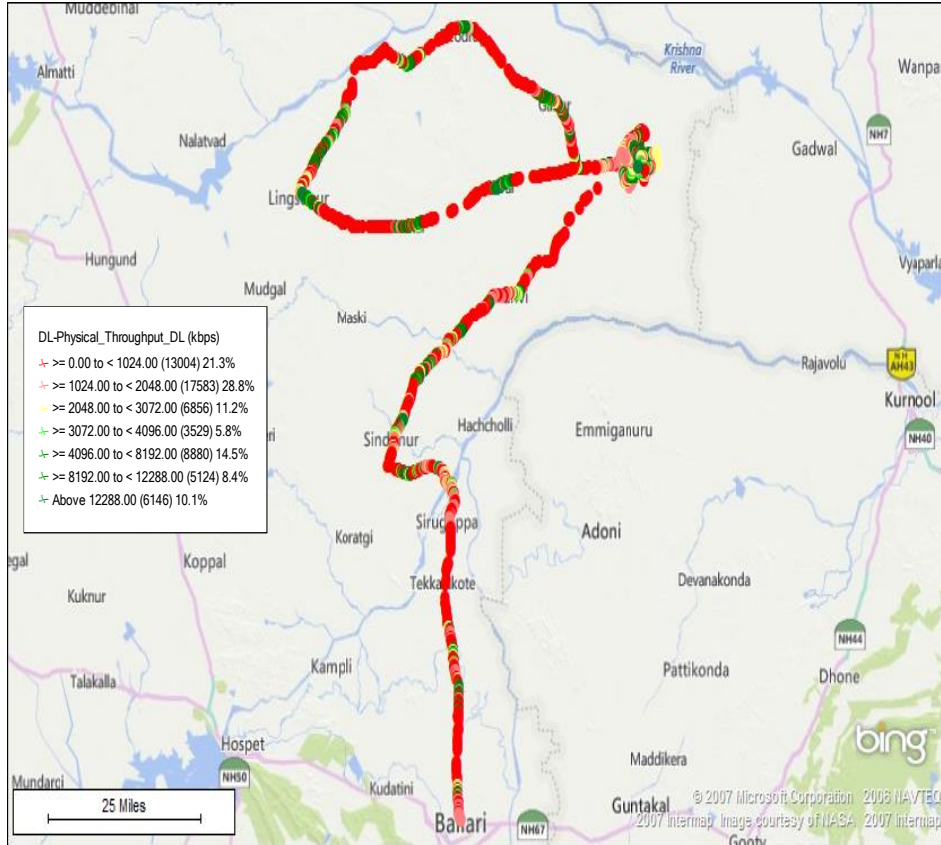
DL throughput	No. of Samples	%
0 to 1 Mbps	1520133	12.69
1 to 2 Mbps	383976	3.21
2 to 3 Mbps	712925	5.95
3 to 4 Mbps	880276	7.35
4 to 8 Mbps	1968374	16.43
8 to 12 Mbps	2256589	18.84
>12 Mbps	4258217	35.54
Total	11980490	100



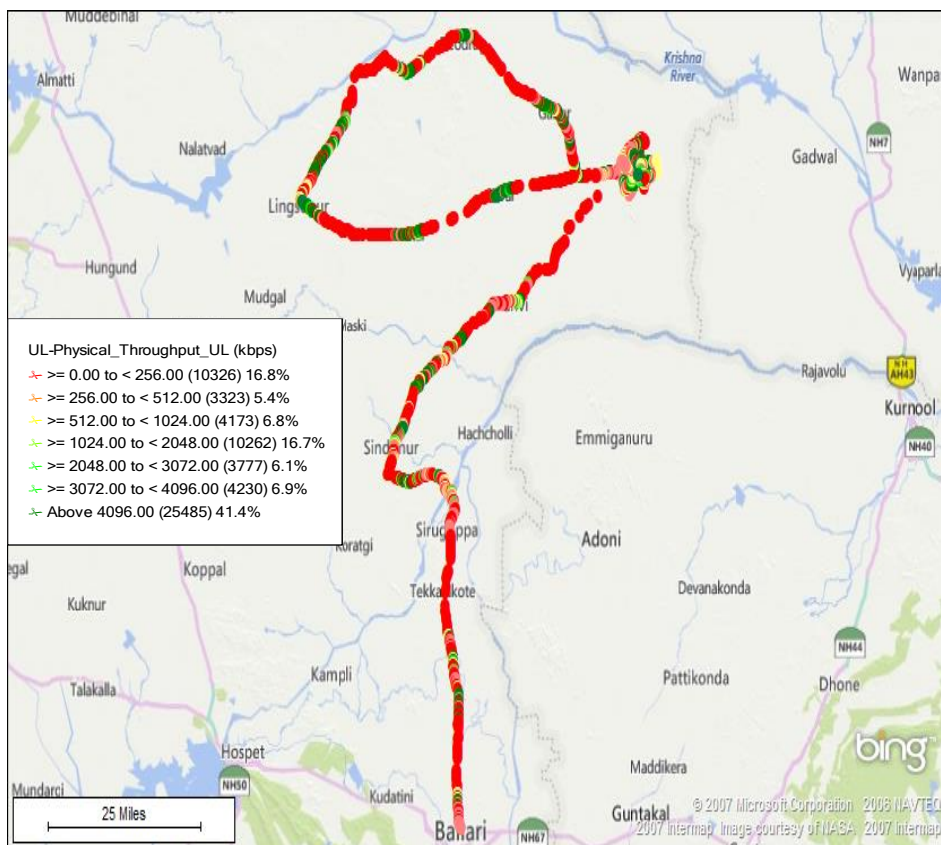
UL throughput	No. of samples	%
0 to 256 Kbps	5083330	39.11
250 to 512 Kbps	1003487	7.72
512 Kbps to 1 Mbps	733302	5.64
1 to 2 Mbps	1030087	7.92
2 to 3 Mbps	622525	4.79
3 to 4 Mbps	505588	3.89
>4 Mbps	4020263	30.93
Total	17333508	100

IV. Dynamic Data Test(Data Test on Move)-3G/4G DL/UL Details

BSNL



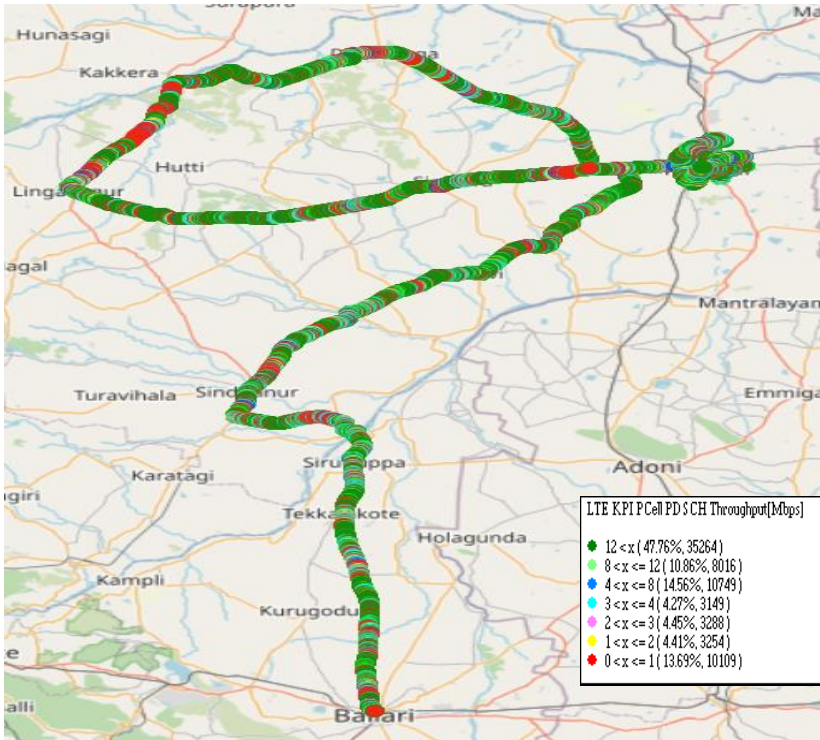
DL throughput	No. of Samples	%
0 to 1 Mbps	13004	21.3
1 to 2 Mbps	17583	28.8
2 to 3 Mbps	6856	11.2
3 to 4 Mbps	3529	5.8
4 to 8 Mbps	8880	14.5
8 to 12 Mbps	5124	8.4
>12 Mbps	6146	10.1
Total	61122	100



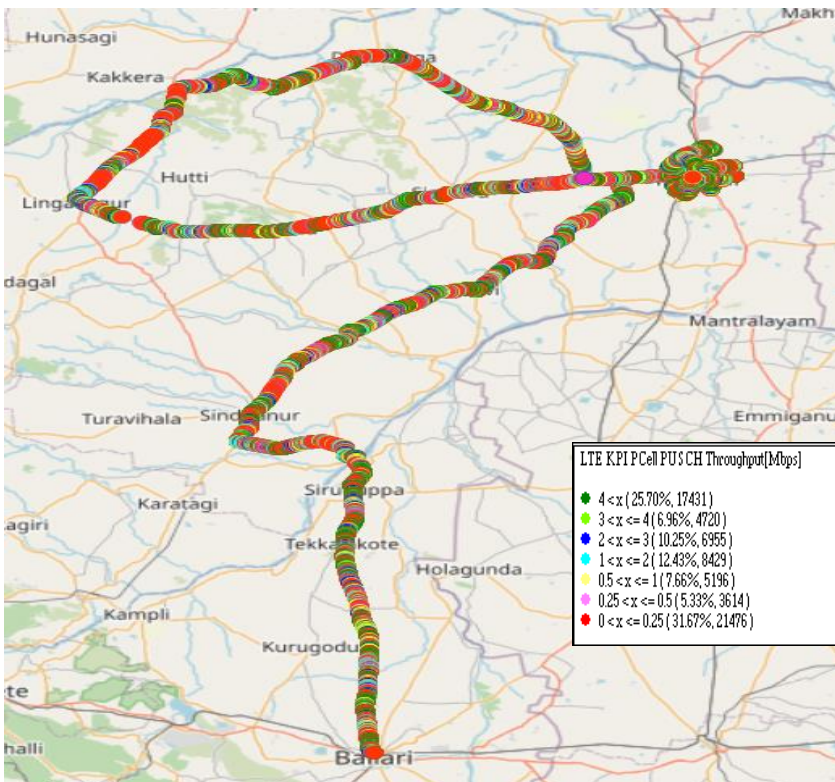
UL throughput	No. of Samples	%
0 to 256 Kbps	10326	16.8
250 to 512 Kbps	3323	5.4
512 Kbps to 1 Mbps	4173	6.8
1 to 2 Mbps	10262	16.7
2 to 3 Mbps	3777	6.1
3 to 4 Mbps	4230	6.9
>4 Mbps	25485	41.4
Total	51576	

IV. Dynamic Data Test(Data Test on Move)- 4G DL/UL Details

JIO



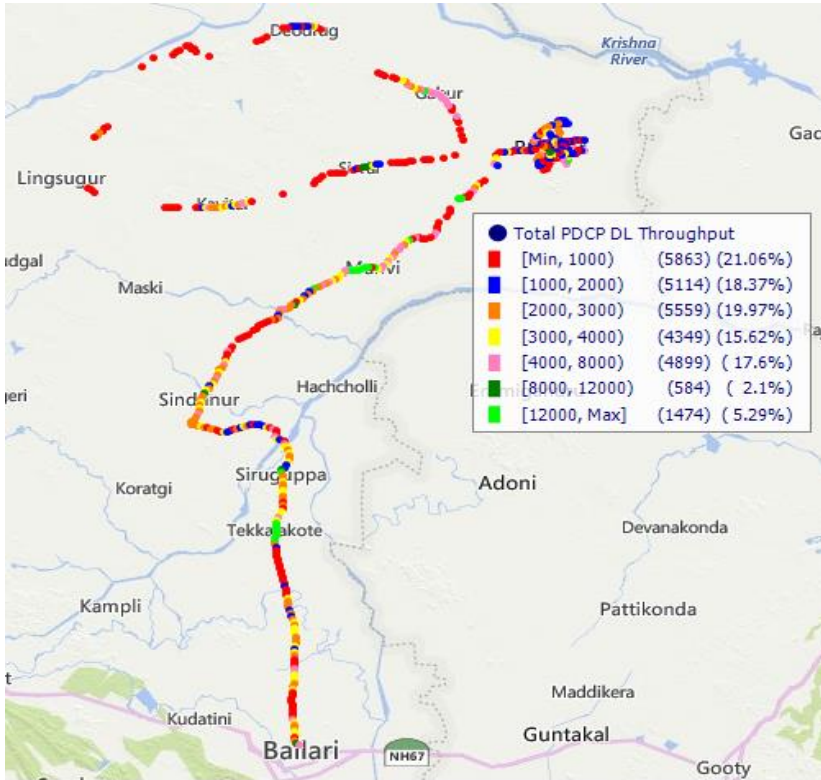
DL throughput	No. of Samples	%
0 to 1 Mbps	10109	13.69
1 to 2 Mbps	3254	4.41
2 to 3 Mbps	3288	4.45
3 to 4 Mbps	3149	4.27
4 to 8 Mbps	10749	14.56
8 to 12 Mbps	8016	10.86
>12 Mbps	35264	47.76
Total	73829	100



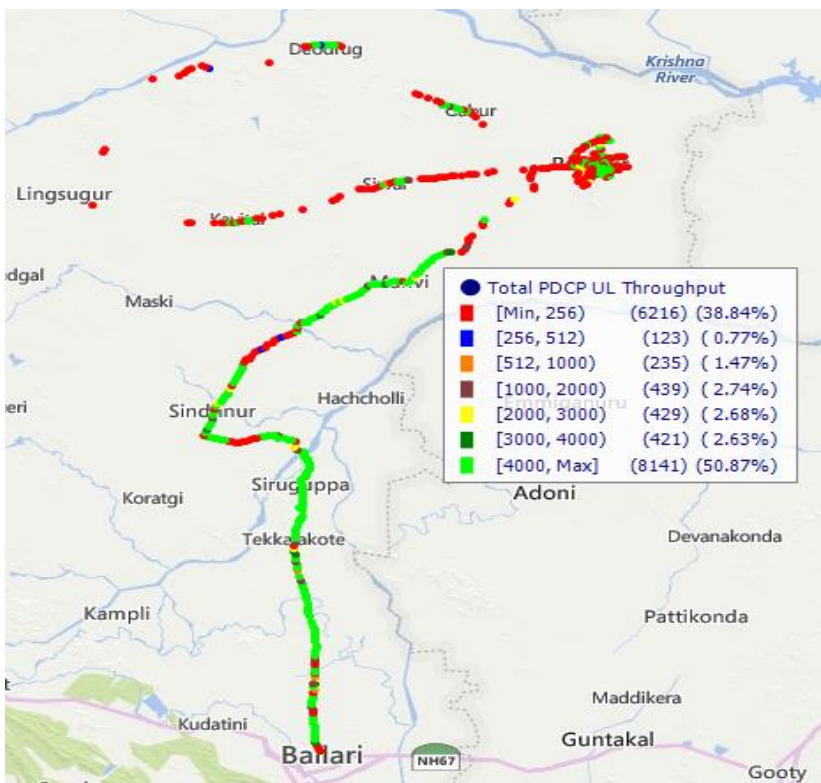
UL throughput	No. of samples	%
0 to 256 kbps Mbps	21476	31.67
256 to 512 kbps	3614	5.33
512 Kbps to 1 Mbps	5196	7.66
1 to 2 Mbps	8429	12.43
2 to 3 Mbps	6955	10.25
3 to 4 Mbps	4720	6.96
>4Mbps	17431	25.70
Total	67821	100

IV. Dynamic Data Test (Data Test on Move)- 4G DL/UL Details

VIL



DL throughput	No. of Samples	%
0 to 1 Mbps	5863	21.06
1 to 2 Mbps	5114	18.37
2 to 3 Mbps	5559	19.97
3 to 4 Mbps	4349	15.62
4 to 8 Mbps	4899	17.6
8 to 12 Mbps	584	2.1
>12 Mbps	1474	5.29
Total	27842	100

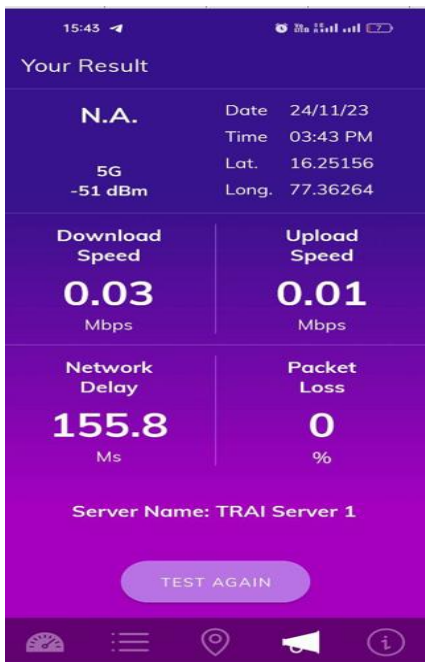


UL throughput	No. of samples	%
0 to 256 Kbps	6216	38.84
250 to 512 Kbps	123	0.77
512 Kbps to 1 Mbps	235	1.47
1 to 2 Mbps	439	2.74
2 to 3 Mbps	429	2.68
3 to 4 Mbps	421	2.63
>4Mbps	8141	50.87
Total	16004	100

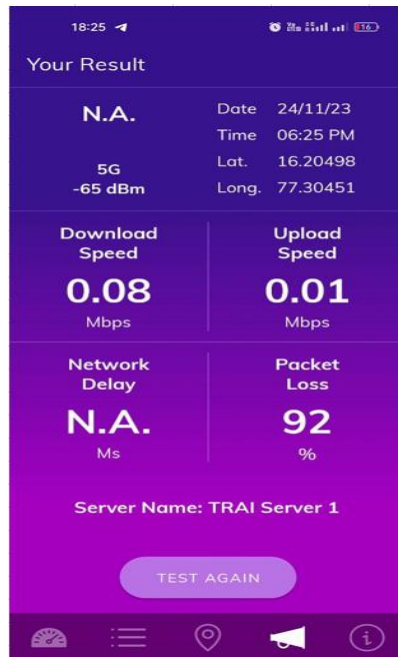
V. TRAI My Speed App Test Details-2G

Techology-2G	Railway Station	RTO Raichur	RIMS	HIKES College of Engg	Vidhanasoudha Raichur	Near Power Grid Corp
Download Speed (Mbps)	0.03	0.08	0.03	0.08	0.13	0.03
Upload Speed (Mbps)	0.01	0.01	0.04	0.02	0.05	0.00
Latency	155.8	0	0	174.0	110.7	130

Railway Station



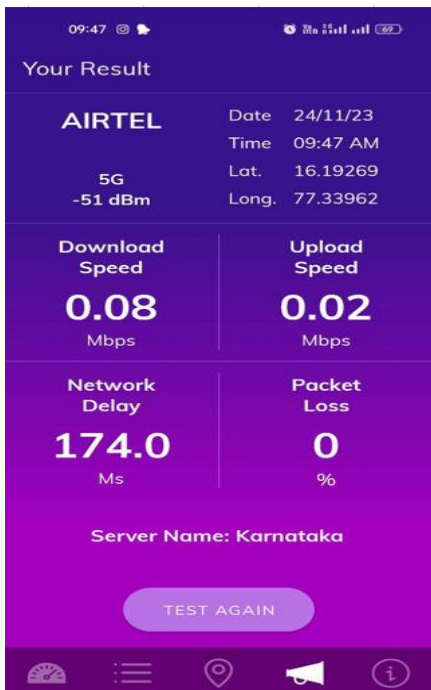
RTO Office Raichur



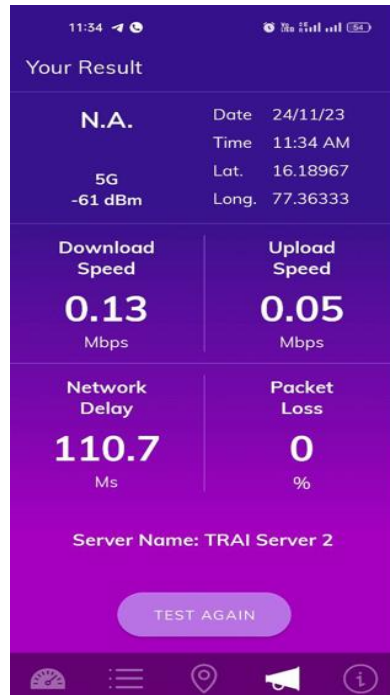
RIMS



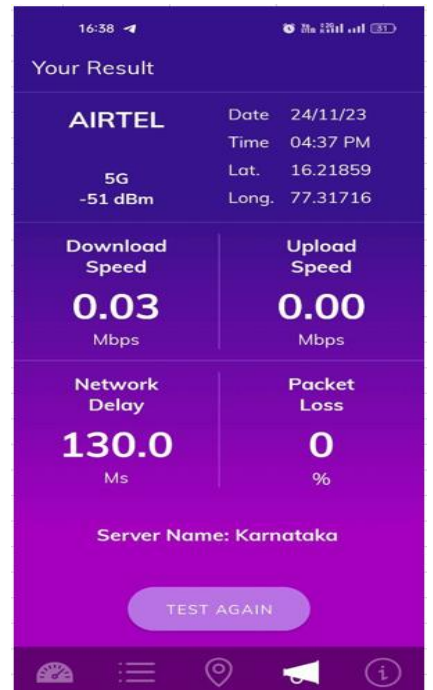
HIKES College of Engg



Vidhanasoudha Raichur



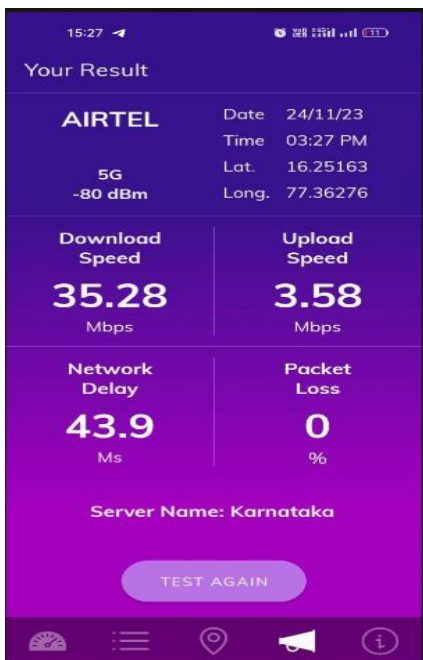
Near Power Grid Corp



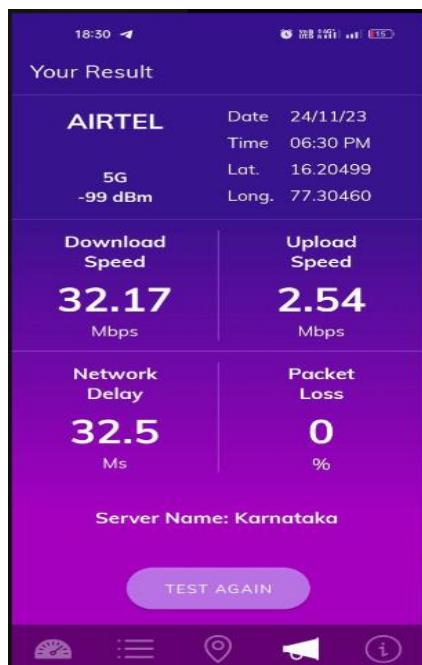
V. TRAI My Speed App Test Details-4G

Techology-4G/VoLTE	Railway Station	RTO Raichur	RIMS	HIKES College of Engg	Vidhanasoudha Raichur	Near Power Grid Corp
Download Speed (Mbps)	35.28	32.17	17.81	30.56	26.12	63.40
Upload Speed (Mbps)	3.58	2.54	3.45	18.19	22.00	7.32
Latency	43.9	32.5	33.1	30.1	33.6	49.0

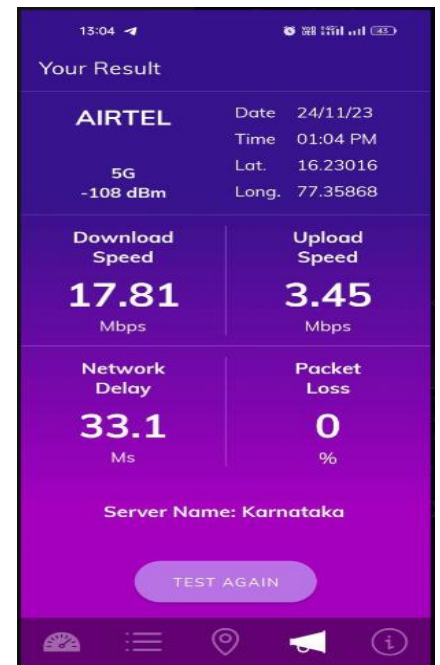
Railway Station



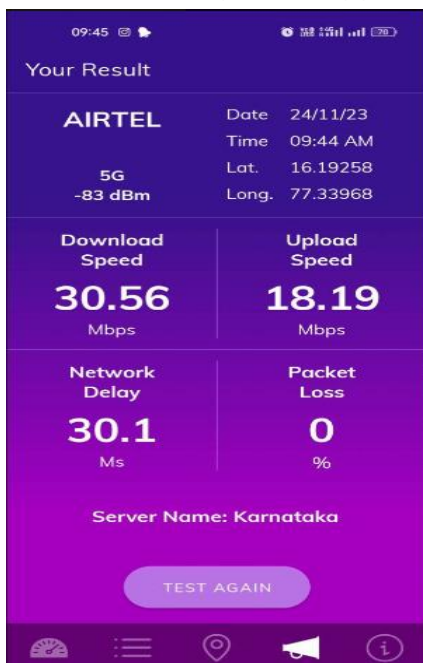
RTO Office Raichur



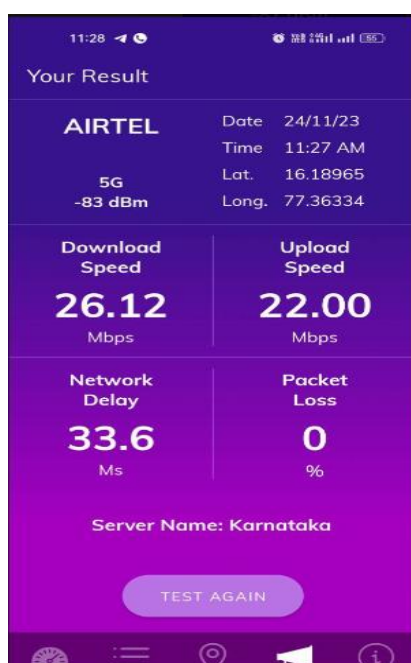
RIMS



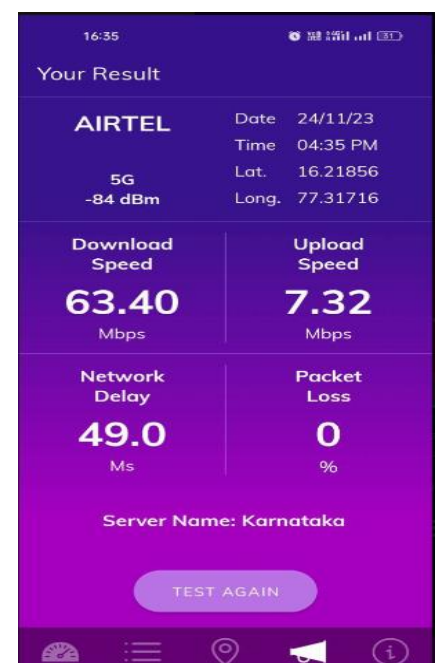
HIKES College of Engg



Vidhanasoudha Raichur



Near Power Grid Corp



V. TRAI MySpeed App Test Details-2G

Techology-2G	Railway Station	RTO Raichur	RIMS	HIKES College of Engg	Vidhanasoudha Raichur	Near Power Grid Corp
Download Speed (Kbps)	0.18	0.15	0.22	0.22	0.19	0.19
Upload Speed (Kbps)	0.04	0.08	0.05	0.09	0.14	0.12
Latency(ms)	204.9	188.9	204.1	174.3	174.3	201.1

Railway Station

RTO Office Raichur

RIMS

HIKES College of Engg

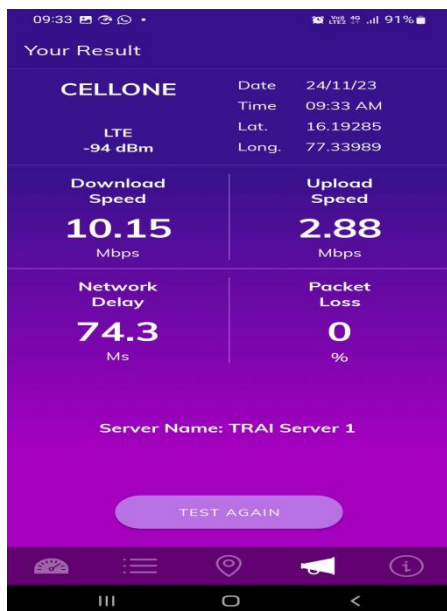
Vidhanasoudha Raichur

Near Power Grid Corp

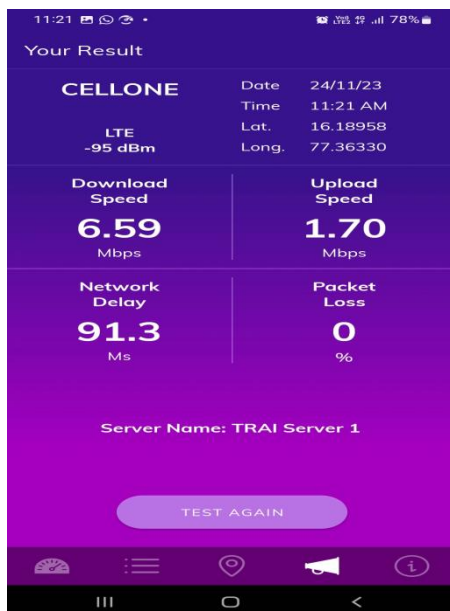
V. TRAI MySpeed App Test Details-3G/4G

Techology-4G/VoLTE	Railway Station	RTO Raichur	RIMS	HIKES College of Engg	Vidhanasoudha Raichur	Near Power Grid Corp
Download Speed (Mbps)	10.15	6.59	11.26	6.39	7.74	10.58
Upload Speed (Mbps)	2.88	1.70	5.58	1.68	5.07	4.74
Latency(ms)	74.3	91.3	84.3	73.1	63.6	73.5

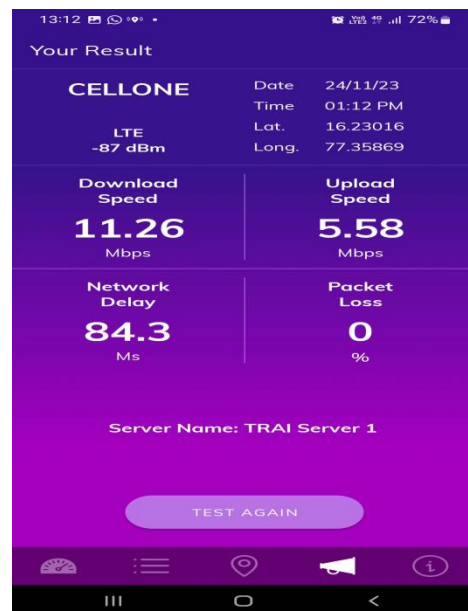
Railway Station



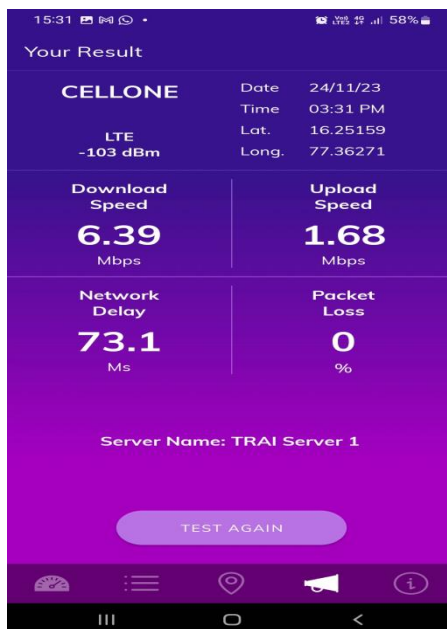
RTO Office Raichur



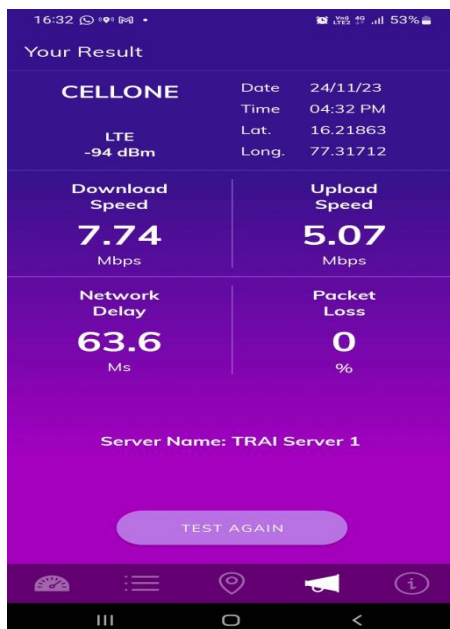
RIMS



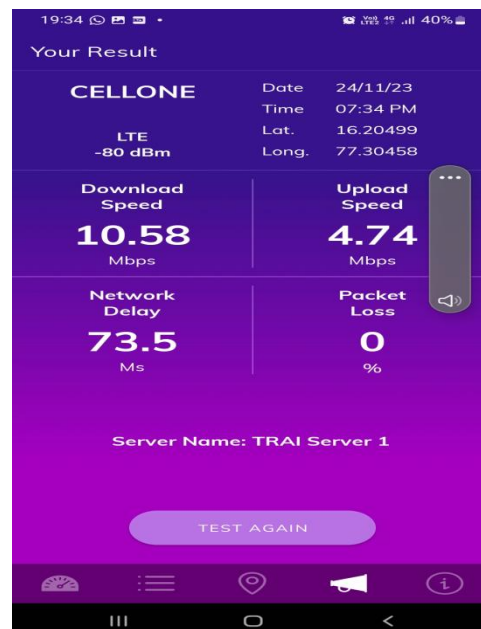
HIKES College of Engg



Vidhanasoudha Raichur



Near Power Grid Corp



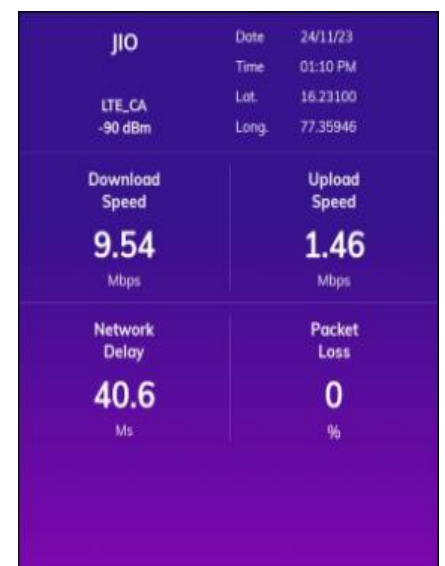
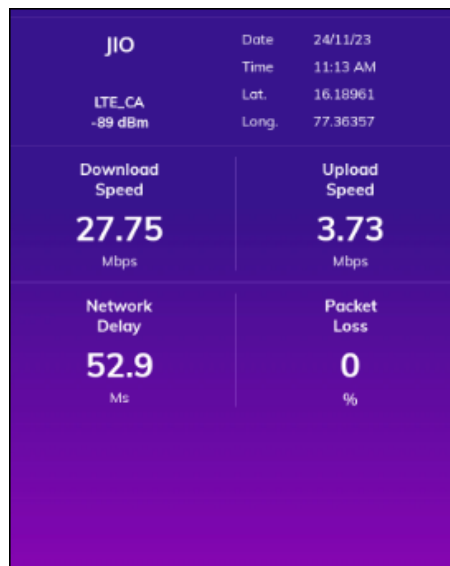
V. TRAI MySpeed App Test Details-4G

Technology-4G	Railway Station	RTO Raichur	RIMS	HIKES College of Engg	Vidhanasoudha Raichur	Near Power Grid Corp
Download Speed (Mbps)	7.34	27.75	9.54	42.91	28.12	4.34
Upload Speed (Mbps)	2.30	3.73	1.46	5.67	1.84	0.50
Latency	41.9	52.9	40.6	60.8	41.2	69.8

Railway Station

RTO Office Raichur

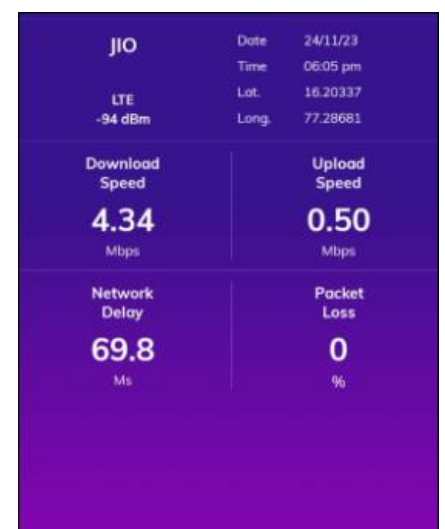
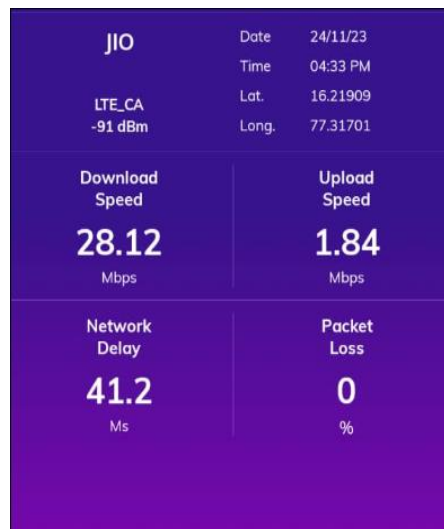
RIMS



HIKES College of Engg

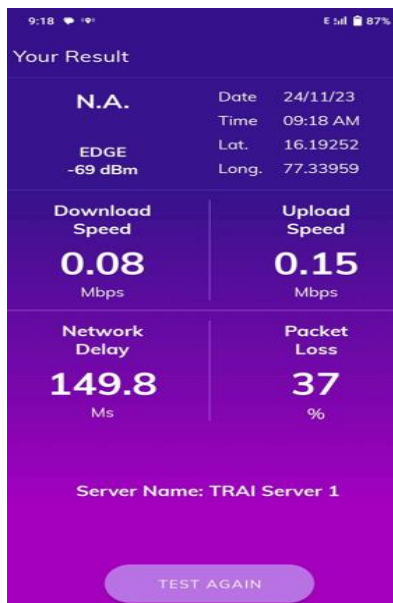
Vidhanasoudha Raichur

Near Power Grid Corp

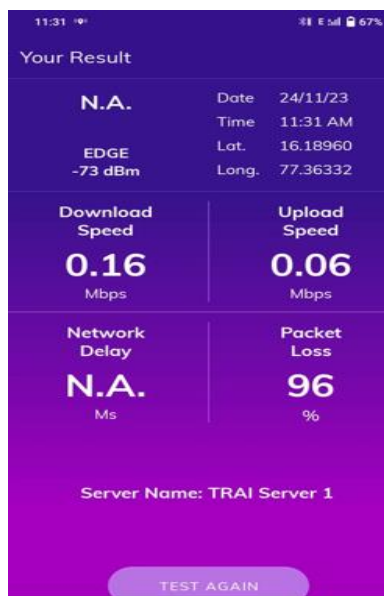


Techology-2G	Railway Station	RTO Raichur	RIMS	HIKES College of Engg	Vidhanasoudha Raichur	Near Power Grid Corp
Download Speed (Mbps)	0.08	0.16	0.11	0.08	0.15	0.13
Upload Speed (Mbps)	0.15	0.06	0.08	0.03	0.02	0.09
Latency	149.8	NA	NA	262.5	128.8	131.7

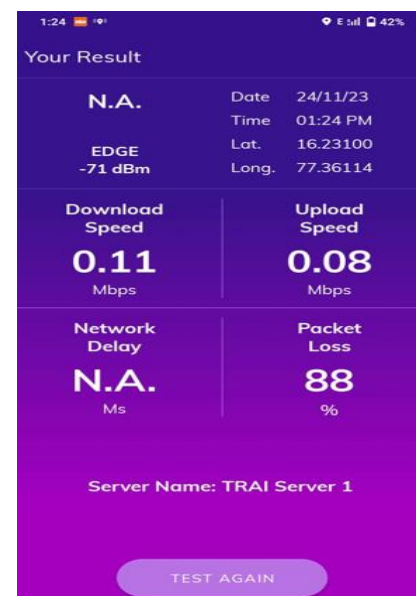
Railway Station



RTO Office Raichur



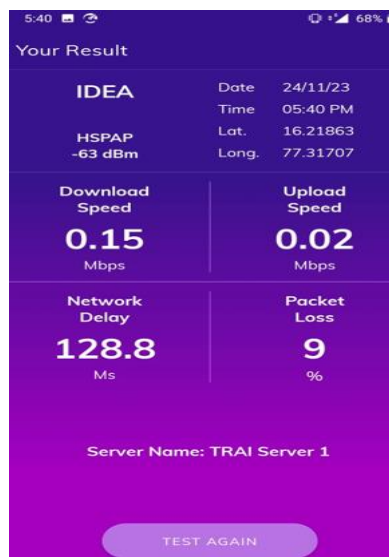
RIMS



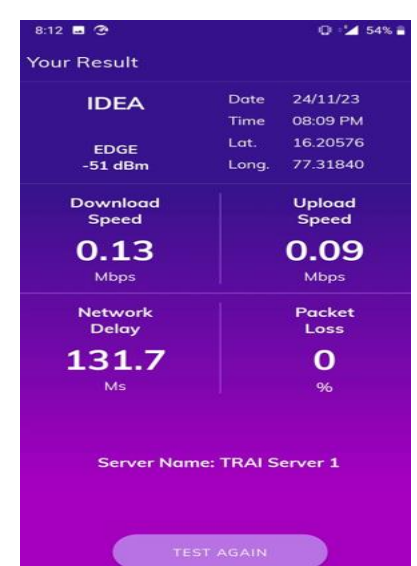
HIKES College of Engg



Vidhanasoudha Raichur

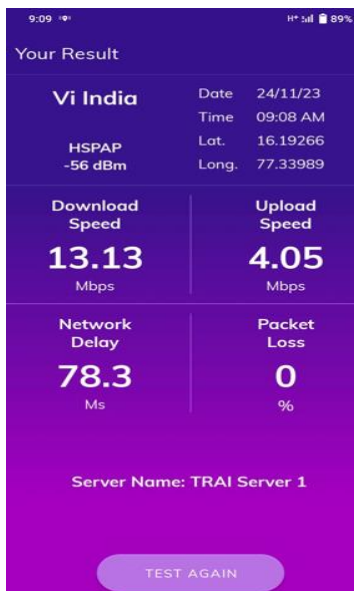


Near Power Grid Corp

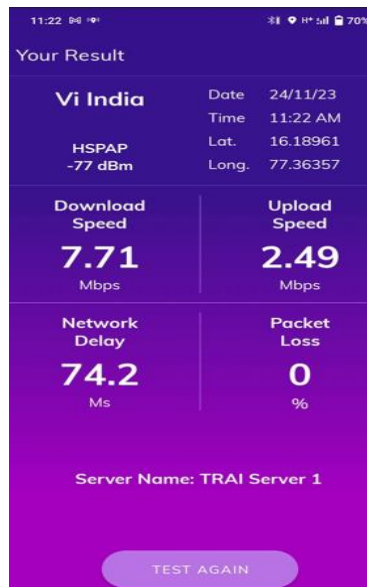


Techology-4G/VoLTE	Railway Station	RTO Raichur	RIMS	HIKES College of Engg	Vidhanasoudha Raichur	Near Power Grid Corp
Download Speed (Mbps)	13.12	7.71	6.62	10.25	9.35	9.21
Upload Speed (Mbps)	4.05	2.49	2.04	1.17	2.82	3.10
Latency	78.3	74.2	88.5	92.6	60.5	67.0

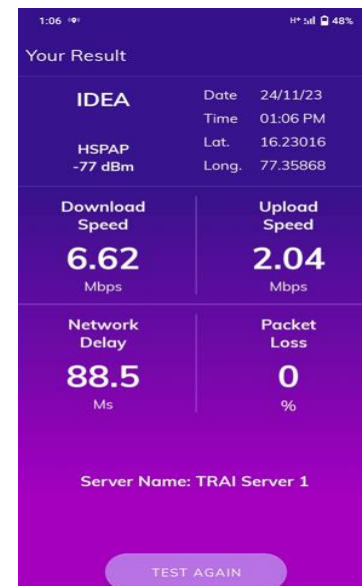
Railway Station



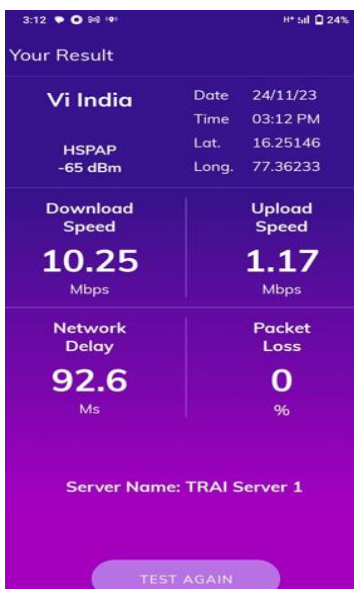
RTO Office Raichur



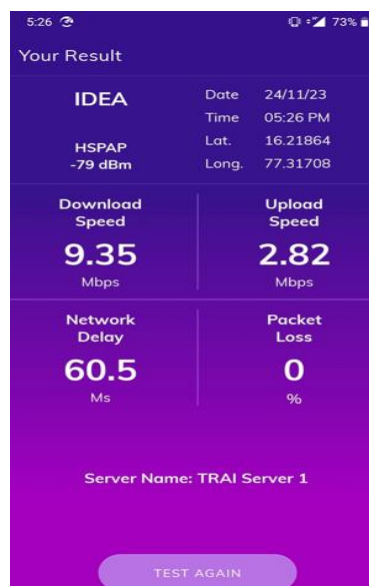
RIMS



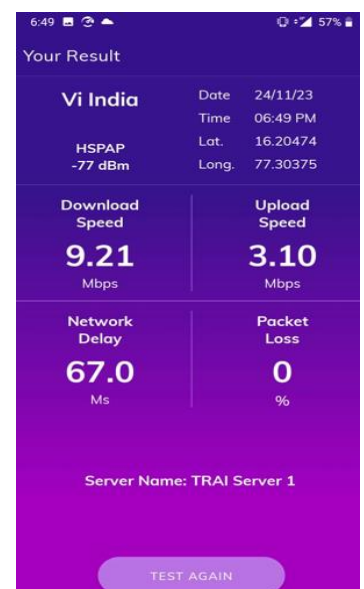
HIKES College of Engg



Vidhanasoudha Raichur



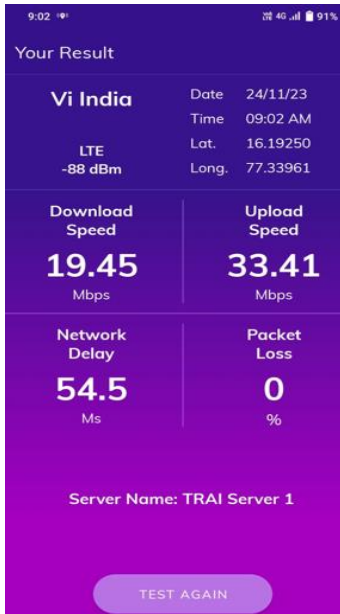
Near Power Grid Corp



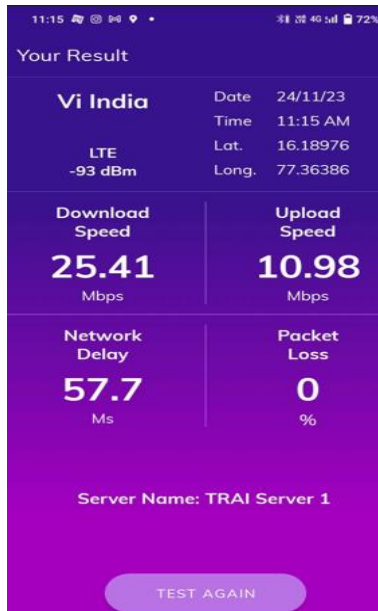
V. TRAI MySpeed App Test Details-4G

Techology-4G/VoLTE	Railway Station	RTO Raichur	RIMS	HIKES College of Engg	Vidhanasoudha Raichur	Near Power Grid Corp
Download Speed (Mbps)	19.45	25.41	31.99	16.30	8.37	14.08
Upload Speed (Mbps)	33.41	10.98	12.39	23.64	11.68	4.29
Latency	54.5	57.7	38.3	48.0	49.9	74.9

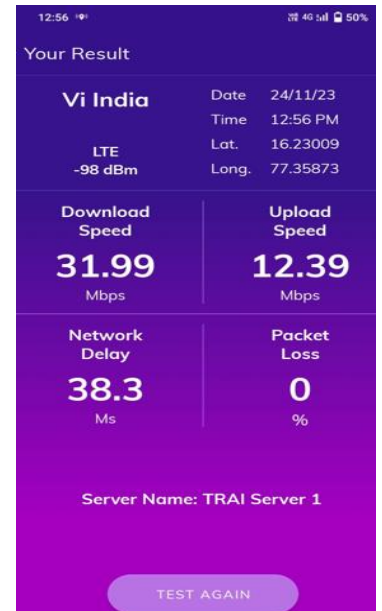
Railway Station



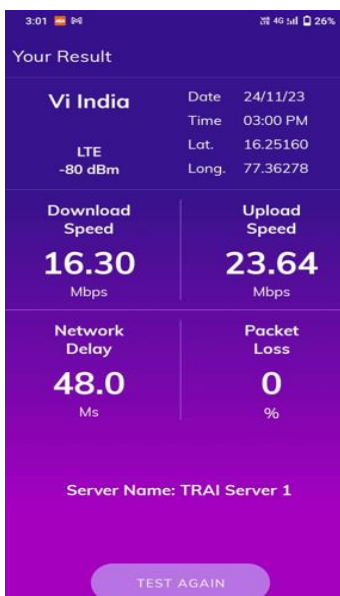
RTO Office Raichur



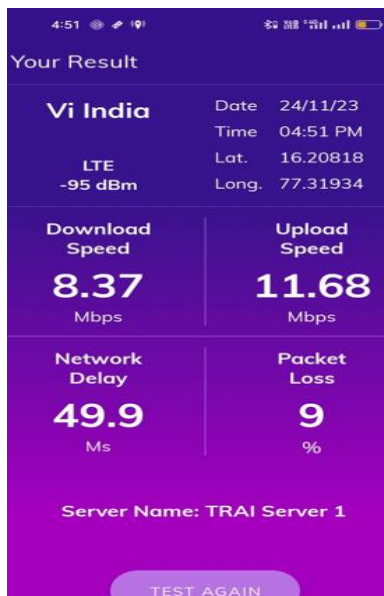
RIMS



HIKES College of Engg



Vidhanasoudha Raichur



Near Power Grid Corp

