

Operator Assisted Drive Test Report

DHENKANAL SSA MARCH 2024

(RO HYDERABAD)

Key Performance Indicators: All TSPs have met the Drop Call Rate (DCR) benchmark of 2%. All TSPs have met the Call Setup Success Rate (CSSR) of 95%.Rx quality not achieved by BSNL 3G,Airtel VoLTE, Jio VoLTE

The Operator Assisted Drive Test has been carried out by Regional Office, Hyderabad with the help of Service Providers in Dhenkanal City and surrounding areas Angul Town, Talcher Town, Kamakhyanagar, Chaudwar and Chandikhol including important National Highway and State Highways from 9:00 AM to 7:00 PM during 18th March to 21st March 2024. The drive test covered drive route of 441 KMs & 6 hotspots over a period of 4 days. Approximately 400 calls were made for each of the 8 networks: three 2G networks, two 3G networks and Three LTE network covering four TSPs.

Voice Summary

Data Summary

Overview

Regional Office, TRAI conducted Operator Assisted Drive Test from 18th Mar to 21st Mar. 2024 covering various locations in Dhenkanal City & surrounding regions areas Angul Town, Talcher Town, Kamakhyanagar, Chaudwar and Chandikhol. 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, Handover 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 wait time of 10 sec between calls in all technologies. The drive test covered a drive route of approximately 441 KMs over a period of 4 days from 18th Mar to 21st Mar. 2024. Approximately calls 400 were made for 2G (Lock Mode) 3G (Free Mode) and Volte(Free Mode) network.

Data Tests:

- 1. Dynamic data test was conducted for 441 kms over a period of 3 days for download throughput for 4G technologies.
- 2. Data Tests were performed at 6 static locations for 2G ,3G & 4G technologies.
- * For Voice and Data KPI's, 2G measurement is done with UE locked mode ,3G Done With 3G preferred Mode and 4G measurement is done with UE in Free Mode.
- * 4G KPI's which are calculated from the UE in Free Mode included samples and events of 2G & 3G.

events of 2G & 3G.

Service	Specifications
Download	2G (Locked) - 500KB, 3G(Locked) 20MB ,4G (Free) - 40 MB
Upload	2G (Locked) - 100KB, 3G(Locked) 5Mb ,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

Overview Details Page 2 of 37

Overview

Voice & Dynamic Data Test Drive Route



SL.NO	Hot Spot Location name
1	Anugul Railway Station
2	Chandikhol bus stop
3	Talcher bus stop
4	Dhenkanal Railway station
5	Govt Hospital Dhenkanal
6	Dhenkanal bus stop



NH/SH Routes covered in OADT by RJIL							
	No of NH/SH	NH	SH	Distance(
SL.NO	routes	routes	routes	Km)			
	Dhenkanal-	NH55		30			
1	Anugul	NH53		40			
	Anugul-	NH53		30			
2	Talcher	NH149		25			
	Dhenkanl-	NH55		50			
3	Choudwar						
	Choudwar—	NH55		20			
4	Chandikhol	NH16		50			

Area Cove	red -Dhenkanal
District Hospital Dhenkanal	Synergy Institute of Engineering
Dhenkanal Railway station	Rathagada Daily Market
Dhenkanal Stadium	Khemka Mall
Dhenkanal Bus stop	Dakhinakali Road
Autonomous College Dhenkanal	Ganesh Bazar
Area Co	vered- Anugul
Anugul Railway Station	DIC Chowk
Anugul Bus stand	Gandhi Marg Chowk
Railway colony Anugul	Autonomous College Anugul
Anugul Police Station	Anugul Daily Market
Area co	vered –Talcher
Talcher Bus Stand	Hata tota chanka
Greenfield Stadium	ITI Chowk
Rajbati Talcher	Autonomous College Talcher

Area covered -Choudwar

Institute Of Textile	Mundamal
IMFA Thermal Power Plant	OTM Colony

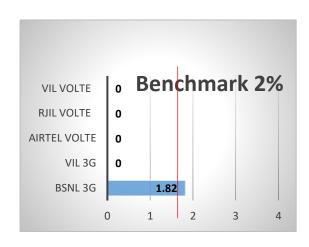
Overview Details Page 3 of 37

Voice Calls

Key Observations

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

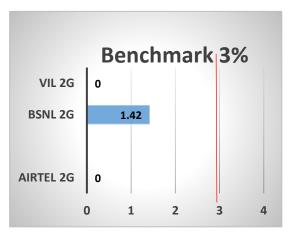
3G/VoLTE Network



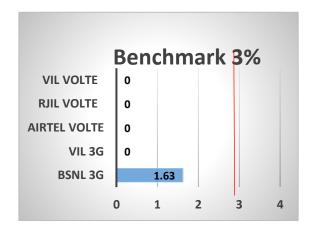
2G Network

2G Network

Block Call Rate (%)



3G / VoLTE Network



KPIs	2G		3G		VoLTE			
	Airtel	BSNL	VIL	BSNL	VIL	Airtel	RJIL	VIL
Drop Call Rate %	0	1.18	0	1.82	0	0	0	0
Block Call Rate %	0	1.42	0	1.63	0	0	0	0

- 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 Summary Page 4 of 37

Voice Calls

Key Observations

Coverage

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

TCDo	2G				
TSPs	Airtel	BSNL	VIL		
Coverage %	98.27	96.50	93.62		

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

TSPs	3	G	VoLTE (≥ -110 dBm)			
	BSNL		Airtel	JIO	VIL	
Coverage %	75.98	94.19	99.25	99.74	95.71	

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

TSPs	3	G	VoLTE			
1313	BSNL	VIL	Airtel	JIO	VIL	
Time spent %	96	67.35	100	100	39.87	

Voice Summary Page 5 of 37

Data Services Static

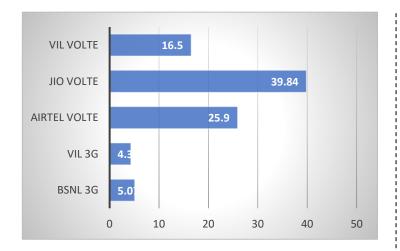
Key Observations(Average of 6 Hotspots

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

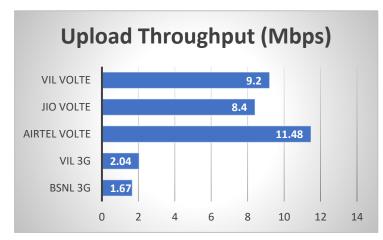
Data Download and Upload Performance (Mbps)

3G/4G Network:

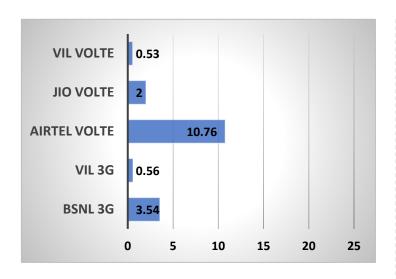
Download Throughput (Mbps)



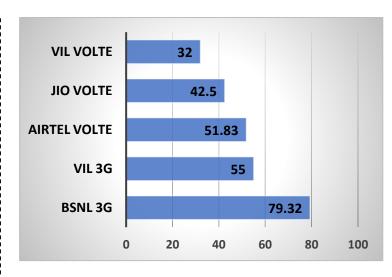
Upload Throughput (Mbps)



Web Browsing delay (Sec)



Latency (ms)



Data Summary Page 6 of 37

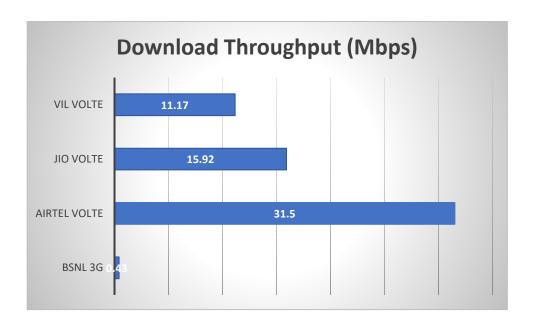
Key Observations

Data Services Dynamic

Dynamic Data was tested for 441 Kms. Download Throughput was tested.

Data Download Performance (Mbps) - Dynamic

3G/4G Network:



Data Services Static	VoLTE					
Dynamic	BSNL 3G	Airtel 4G	JIO 4G	VIL 4G		
Download Throughput (Mbps)	0.43	31.5	15.92	11.17		

Data Summary Page 7 of 37

Summary

SSA Level Summary-Voice

Voice Call			
voice Call	Airtel	BSNL	VIL
Call Attempt	361	438	496
Blocked Call Rate (%)	0.00	1.42	0
CSSR% (Accessibility)	100	98.58	100
Drop Call Rate (%)	0.00	1.18	0
Mobility HOSR (%)	100	96.6	98.90
Rx Quality (%)	96.33	98.06	96.81

Voice Call	3 G		,		
	BSNL	VIL	Airtel VoLTE	JIO VoLTE	VIL VoLTE
Call Attempt	447	283	378	433	239
Blocked Call Rate (%)	1.63	0	0.00	0	0
CSSR% (Accessibility)	98.37	100	100	100	100
Drop Call Rate (%)	1.82	0	0.00	0	0
Mobility HOSR (%)	100	100	100	99.78	100
Rx Quality (%)	87.13	96.96	89.23	91	98.59

Summary Page 8 of 37

Summary

SSA Level Summary-(Average of 6 hotspots)-Data Services

Data Services Static	2G					
Data Services Static	Airtel	BSNL	VIL			
Download Throughput (Kbps)	170.5	166.67	183.22			
Upload Throughput (Kbps)	73.63	106.67	90.17			
Web Browsing Delay (sec)	20.01	45.82	0.69			
Latency (msec)	252.33	327.67	131			

	30	3	Vo	LTE	
Data Services Static	BSNL	VIL	Airtel VoLTE	JIO VoLTE	VIL VoLTE
Download Throughput (Mbps)	5.07	4.31	25.9	39.84	16.5
Upload Throughput (Mbps)	1.67	2.04	11.48	8.4	9.2
Web Browsing Delay (sec)	3.54	0.56	10.76	2	0.53
Latency (msec)	79.32	55	51.83	42.5	32

Summary Page 9 of 37

Data Services Static

SSA Level Summary

Anugul Pailway Station	2G				
Anugul Railway Station	Airtel	BSNL	VIL		
Download Throughput (kbps)	173.6	200	201.19		
Upload Throughput (kbps)	52.7	40	80.2		
Web Browsing Delay (sec)	22.63	35.07	0.75		
Latency (msec)	230	482	135		

Talcher Bus Stand	2G				
Taicher bus Stand	Airtel	BSNL	VIL		
Download Throughput (kbps)	145.8	180	181.34		
Upload Throughput (kbps)	56.7	110	92.2		
Web Browsing Delay (sec)	19.37	45.74	0.61		
Latency (msec)	314	193	139		

Chandikhal Bua Stand	2G				
Chandikhol Bus Stand	Airtel	BSNL	VIL		
Download Throughput (kbps)	97.6	150	184.7		
Upload Throughput (kbps)	35.6	150	88.7		
Web Browsing Delay (sec)	20.46	3492	0.50		
Latency (msec)	312	175	132		

Dhonkanal Bailway Station	2G				
Dhenkanal Railway Station	Airtel	BSNL	VIL		
Download Throughput (kbps)	226.5	160	178.21		
Upload Throughput (kbps)	116.5	120	85.10		
Web Browsing Delay (sec)	19.32	59.63	0.65		
Latency (msec)	188	145	130		

Summary Page 10 of 37

Data Services Static

SSA Level Summary

Dhenkanal Bus stand	2G				
Diferralial Bus Stariu	Airtel	BSNL	VIL		
Download Throughput (kbps)	132.9	160	187.11		
Upload Throughput (kbps)	73.2	110	85.2		
Web Browsing Delay (sec)	21.0	57.95	0.66		
Latency (msec)	170	832	128		

Dhankanal Cavt Hacnital	2G				
Dhenkanal Govt Hospital	Airtel	BSNL	VIL		
Download Throughput (kbps)	246.6	150	191.4		
Upload Throughput (kbps)	101.1	110	97.3		
Web Browsing Delay (sec)	17.29	41.72	0.59		
Latency (msec)	300	139	131		

Summary Page 11 of 37

Data Services static

SSA Level Summary(contd.)

Anugul Pailway Station	3G		4G		
Anugul Railway Station	BSNL	VIL	Airtel	JIO	VIL
Download throughput in Mbps	8.66	4.12	24.78	48.5	15.22
Upload Throughput in Mbps	2.14	2.1	8.39	6.7	7.4
Web browsing delay in second	3.92	0.67	13.53	2	0.59
Latency in (msec)	71	54	47	42	36

Tolohor Puo Stand	3G		4G		
Talcher Bus Stand	BSNL	VIL	Airtel	JIO	VIL
Download throughput in Mbps	4.39	3.88	14.73	45.6	20.3
Upload Throughput in Mbps	1.90	1.9	9.10	6.9	11.1
Web browsing delay in second	3.14	0.90	14.28	2	0.70
Latency in (msec)	73.7	58	52	44	30

Chandikhol Bus Stand	3G		4G		
Chandikhoi Bus Stand	BSNL	VIL	Airtel	JIO	VIL
Download throughput in Mbps	3.81	4.2	34.38	47.8	18.5
Upload Throughput in Mbps	1.27	2.3	18.47	10.4	10.7
Web browsing delay in second	3.19	0.45	10.31	1.8	0.57
Latency in (msec)	76.8	45	54	36	33

Dhenkanal Pailway Station	3G		4G		
Dhenkanal Railway Station	BSNL	VIL	Airtel	JIO	VIL
Download throughput in Mbps	4.89	3.9	29.32	27.8	12.35
Upload Throughput in Mbps	1.71	2.04	11.32	7.9	7.6
Web browsing delay in second	4.71	0.47	6.27	2.1	0.51
Latency in (msec)	86	50	50	42	35

Summary Page 12 of 37

Data Services static

SSA Level Summary(contd.)

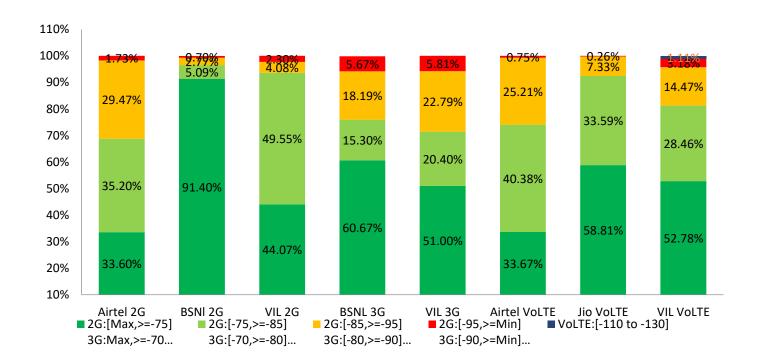
Dhanbanal Dua atand	3G		4G		
Dhenkanal Bus stand	BSNL	VIL	Airtel	JIO	VIL
Download throughput in Mbps	4.31	4.8	15.56	32.2	15.8
Upload Throughput in Mbps	1.61	2.7	4.26	4.9	8.7
Web browsing delay in second	3.41	0.60	7.73	1.7	0.42
Latency in (msec)	84.8	48	49	50	38

Dhankanal Cart Haanital	3G		4G		
Dhenkanal Govt Hospital	BSNL	VIL	Airtel	JIO	VIL
Download throughput in Mbps	4.31	5.1	36.63	36.8	19.55
Upload Throughput in Mbps	1.61	2.8	17.35	13.8	11.7
Web browsing delay in second	3.41	0.55	12.45	1.9	0.44
Latency in (msec)	84.8	58	65	40	30

Summary Page 13 of 37

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	98.27
BSNL 2G	96.5
VIL 2G	93.62
BSNL 3G	75.98
VIL 3G	94.19
Airtel VoLTE	99.25
Jio VoLTE	99.74
VIL VoLTE	95.71



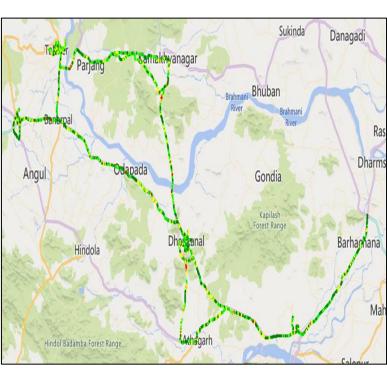
Coverage Details Page 14 of 37

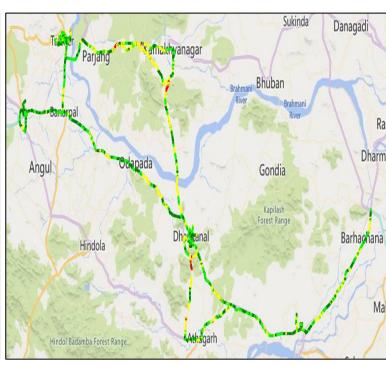
AIRTEL

TSP	Coverage Rate %
Airtel 2G	98.27
Airtel VoLTE	99.25

2G

VoLTE





Overall RxLevel	# Samples	%
[Max, >=-75]	1983619	33.60%
[-75, >=-85]	2078077	35.20%
[-85, >=-95]	1739581	29.47%
[-95, >=Min]	102347	1.73%
Total	5903624	100%

Overall RSRP	# Samples	%
[Max, >=-80]	2788747	33.67%
[-80, >=-90]	3344599	40.38%
[-90, >=-110]	2088444	25.21%
[-110, >=-120]	61995	0.75%
[-120, >=Min]	8283785	100%

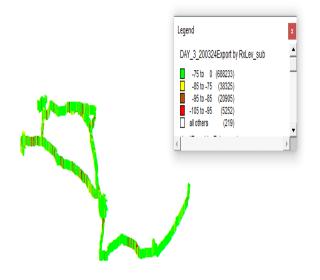
Coverage Details Page 15 of 37

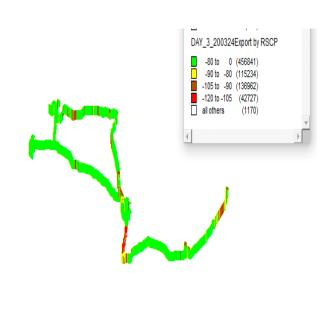
BSNL

Technology	Coverage Rate %
2G	96.5
3G	75.98

2G

3**G**





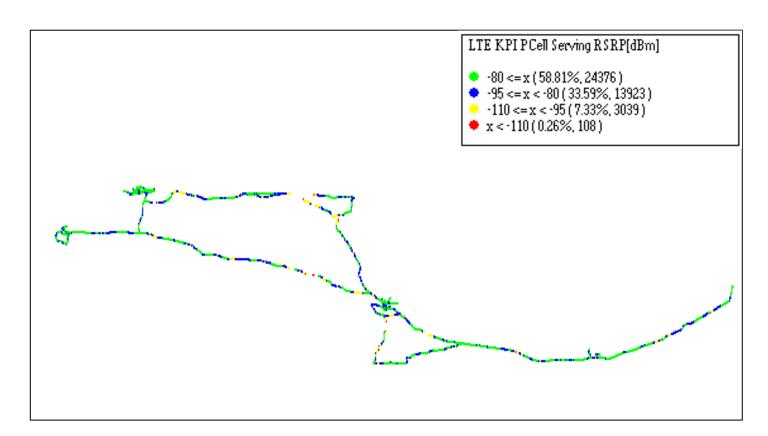
Overall Rx level	samples	%
-75 to 0	688233	91.40
-85 to -75	38325	5.09
-85 to -95	20905	2.77
-105 to -95	5252	0.7
All others	219	0.029

Overall RSCP	samples	%
-80 to 0	456841	60.67
-90 to -80	115234	15.30
-105 to -90	136962	18.19
-105 to -95	42727	5.67
All others	1170	0.15

Coverage Details Page 16 of 37

JIO

Technology	Coverage Rate %
VoLTE	99.74



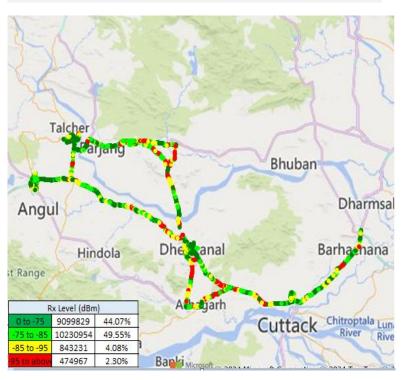
Overall RSRP-Volte	# Samples	%
[Min,>=-80]	24376	58.81
[-80,=-90]	13923	33.59
[-90,<=-110]	3039	7.33
[-110,>=Min]	108	0.26
Total	41446	100

Coverage Details Page 17 of 37

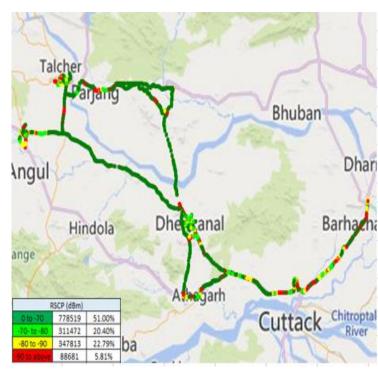
VIL

Technology	Coverage Rate %
2G	93.62
3G	94.19

2G



3G



Overall Rx Level	# Samples	% PDF
[Max, >=-75]	9099829	44.07
[-75, >=-85)	10230954	49.55
[-85, >=-95)	843231	4.08
[-95, >=Min)	474967	2.30
Total	20648981	100

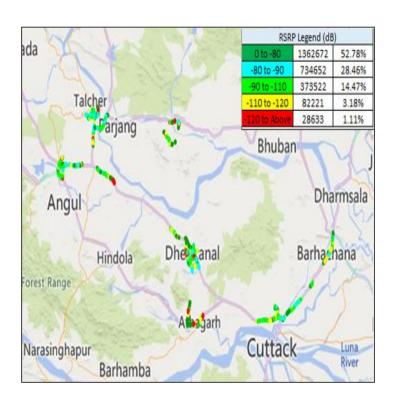
Overall RSRP	# Samples	% PDF
[Max, >=-70]	778519	51.00%
[-70, >=-80)	311472	20.40%
[-80, >=-90)	347813	22.79%
[-90, >=Min)	88681	5.81%
Total	1526485	100.00%

Coverage Details Page 18 of 37

VIL

Technology	Coverage Rate %
VoLTE	95.71

VoLTE

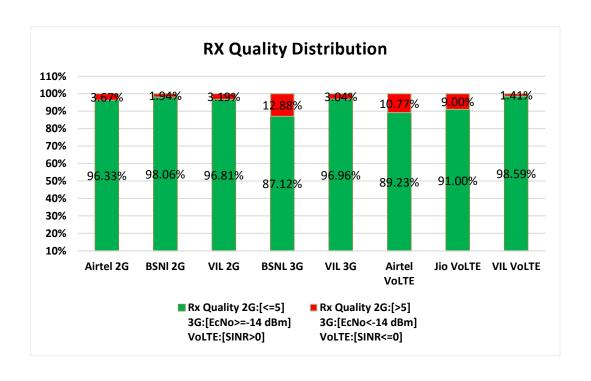


Overall RSRP	# Samples	% PDF
[Max, >=-80]		
	1362672	52.78
[-80, >=-90)		
	724652	28.46
[-90, >=110)		
	373522	14.47
[110, >=120)		
	82221	3.18
[120, >=Min)		
	28633	1.11
Total	2581700	100

Coverage Details Page 19 of 37

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, whereas quality beyond this benchmark is considered to be bad. The benchmark should usually be ≥ 95%.

TSP	Rx Quality %
Airtel 2G	96.33
BSNL 2G	98.06
VIL 2G	96.81
BSNL 3G	87.12
VIL 3G	96.96
Airtel VoLTE	89.23
Jio VoLTE	91.00
VIL VoLTE	98.59



Quality Details Page 20 of 37

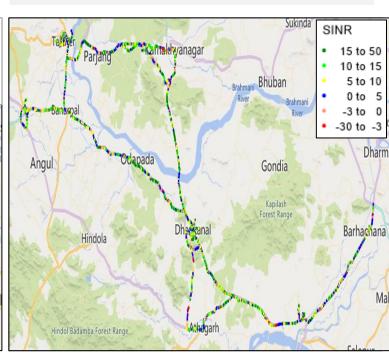
Airtel

Technology	Rx Quality %
2G	96.33
VoLTE	89.23

2G

RXQUAL_SUB Sukinda 5 to 7 anagar 4 to 5 3 to 4 Brahmani Bhuban 2 to 3 -1 to 2 Ra Dharm Angul Gondia Kapilash Forest Range Barhaghana Hindola Ma Hindol Badamba Forest Range

VoLTE



Overall Rx Quality	# Samples	% PDF
(Min, <=2)	5349466	90.61%
(2, <=3)	117824	2.00%
(3 , <=4)	121576	2.06%
(4 , <=5)	98220	1.66%
(5 , <=Max)	216538	3.67%
Total	5903624	100%

Overall SINR	# Samples	%PDF
(Min, <=-3)	286056	3.45%
(-3, <=0)	606621	7.32%
(0, <=5)	1998039	24.12%
(5, <=10)	2458380	29.68%
(10, <=15)	1785603	21.56%
(15,<=Max	1149086	13.87%
Total	8283785	100

Quality Details Page 21 of 37

BSNL

Technology	Rx Quality %
2G	98.06
3G	87.12

2G



Overall Rx Quality	samples	%
(Min,<=2)	682472	91.39
(2,<=3)	30640	4.10
(3,<=4)	25221	3.77
(4,<=5)	6132	0.82
(5,<=Max)	2291	0.31
Total	746756	

3G

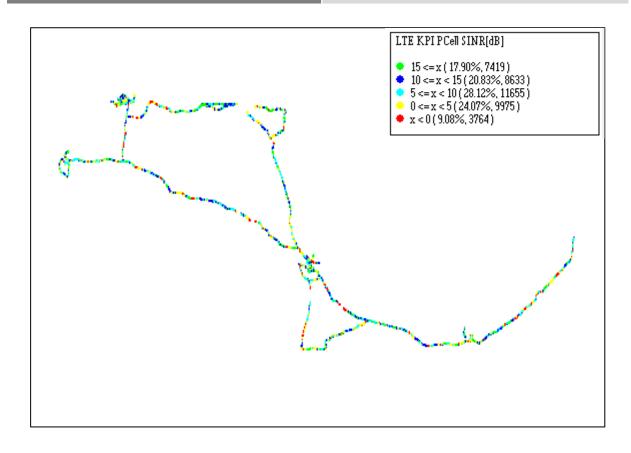


Overall EcNo	samples	%
(Max,<=-6)	479955	64.27
(-6,<=-9)	107653	14.41
(-9,<=-11)	30516	4.09
(-11,<=-14)	32800	4.39
(-14,<=Min)	95832	12.83
Total	746756	

Quality Details Page 22 of 37

JIO

Technology	Rx Quality %
VoLTE	91.00



	VoLTE		
Overall SINR	# Samples	%	
(Min, <=0)	3764	9.08	
(0, <=5)	9975	24.07	
(5, <=10)	11655	28.12	
(10, <=15)	8633	20.83	
(15, <=Max)	7419	17.90	
Total	30807	100%	

Quality Details Page 23 of 37

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

VIL

Technology	Rx Quality %
2G	96.81
3G	96.96

2G







Overall Rx Quality	# Samples	% PDF
(Min, <=2)	4399961	94.64
(2, <=3)	25553	0.55
(3 , <=4)	36479	0.78
(4, <=5)	38470	0.83
(5 , <=Max)	148518	3.19
Total	4648981	100

Overall Ec/No	# Samples	% PDF
[Max, >=-6]	1048258	72.47%
[-6, >=-9]	208153	14.39%
[-9, >=-11]	92234	6.38%
[-11, >=-14]	53746	3.72%
-14, <=Min	44094	3.05%
Total	1446485	100.00%

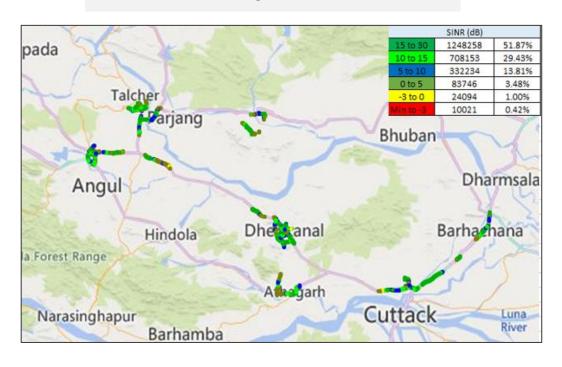
Quality Details Page 24 of 37

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

VIL

Technology	Rx Quality %
VoLTE	98.59

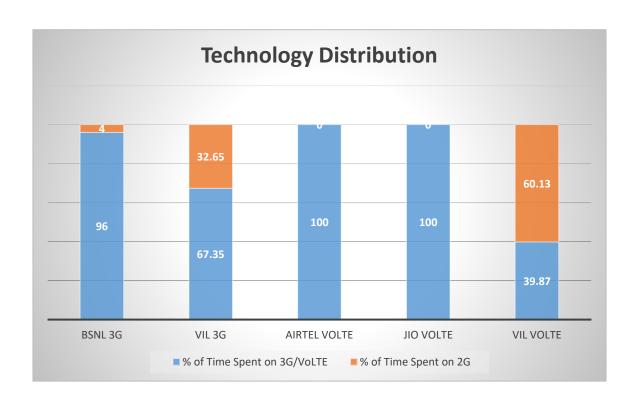
VoLTE



4G		
Overall SINR	# Samples	%
[Min, <=-3]	10021	0.42
[-3, <=0)	24094	1.00
[0, <=5)	83746	3.48
[5, <=10)	332234	13.81
[10, <=15)	708153	29.43
[15, <=Max)	1248258	51.87
Total	2406506	100

Quality Details Page 25 of 37

TSP	% of Time Spent on 3G/VoLTE
BSNL 3G	96
VIL 3G	67.35
Airtel VoLTE	100
Jio VoLTE	100
VIL VoLTE	39.87



Technology Details Page 26 of 37

Airtel

Technology	Time Spent on 4G
4G	100 %

BSNL

Technology	Time Spent on 3G
3G	96.00 %

JIO

Technology	Time Spent on 4G
4G	100 %

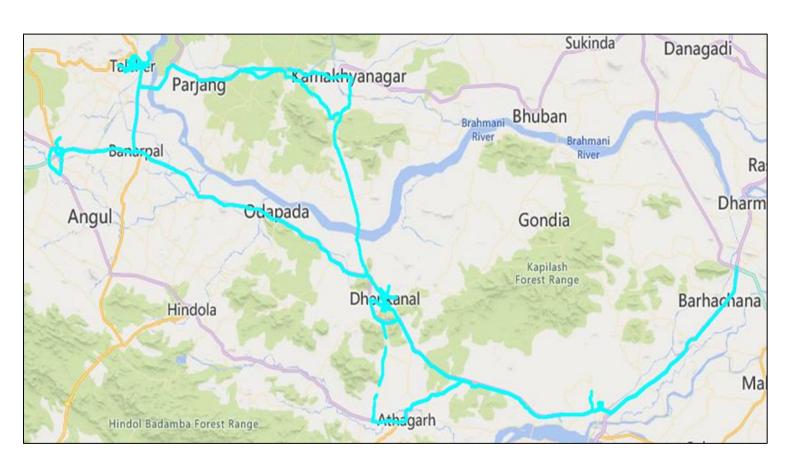
VIL

Technology	Time Spent on 4G
4G	39.87 %

Technology Details Page 27 of 37

Airtel

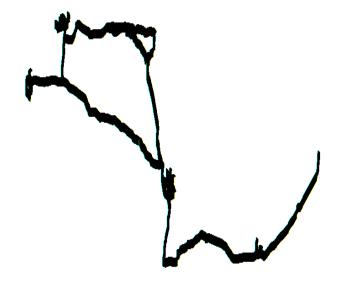
Technology	Time Spent on 4G
4G	100%



Technology Details Page 28 of 37

BSNL

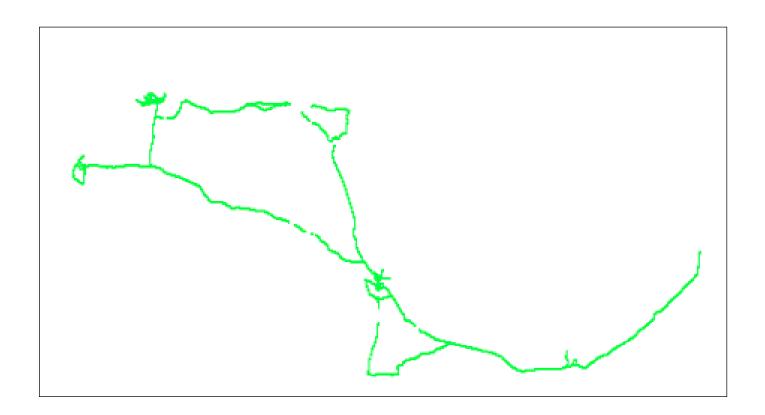
Technology	Time Spent on 3G
3G	96.00 %



Technology Details Page 29 of 37

	0
, ,	

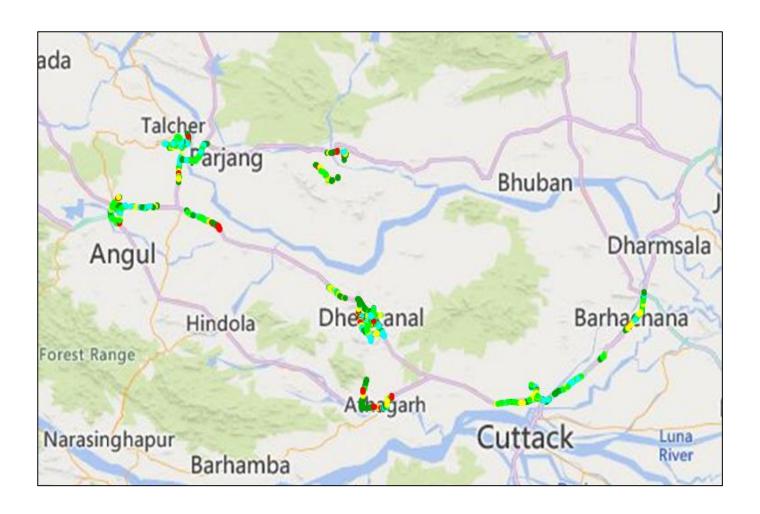
Technology	Time Spent on 4G
4G	100 %



Technology Details Page 30 of 37

VIL

Technology	Time Spent on 4G
4G	39.87 %



Technology Details Page 31 of 37

IV. Dynamic Data Test-4G DL Details

Airtel

Data KPIs – Overall	4G
Download Throughput (Mbps)	31.5

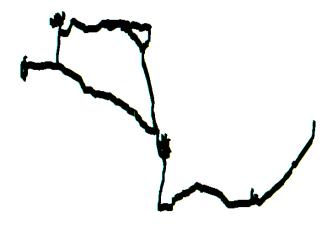


DL throughput	No of Sample	%
0 to 1 Mbps	252143	2.05
1 to 2 Mbps	36851	0.30
2 to 3 Mbps	65389	0.53
3 to 4 Mbps	75536	0.61
4 to 8 Mbps	510731	4.16
8 to 12 Mbps	654913	5.33
>12 Mbps	10789973	87.01
Total	12285536	100

IV. Dynamic Data Test-3G DL Details

BSNL

Data KPIs - Overall	3G
Download Throughput (Mbps)	0.434

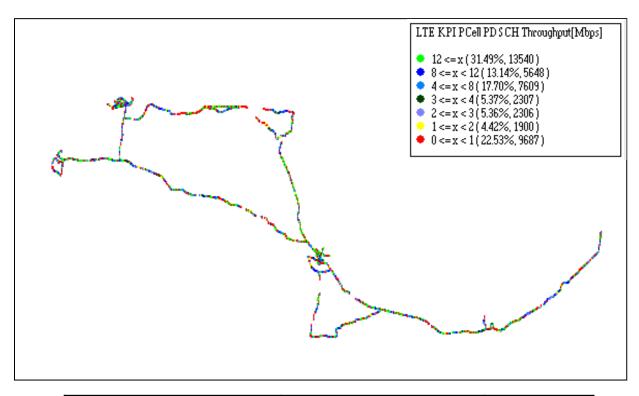


DL throughput	No of Samples	%
0 to 1 Mbps	9529	98.33
1 to 2 Mbps	161	1.66
2 to 3 Mbps	0	
3 to 4 Mbps	0	
4 to 8 Mbps	0	
8 to 12 Mbps	0	
>12 Mbps	0	

IV. Dynamic Data Test-4G DL Details

JIO

Data KPIs - Overall	4G
Download Throughput (Mbps)	15.92

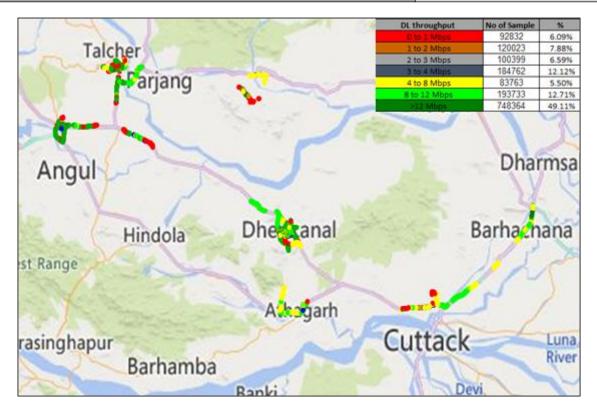


DL Throughput	No of Samples	%
0 to 1Mbps	9687	22.53
1 to 2Mbps	1900	4.42
2 to 3Mbps	2306	5.36
3 to 4Mbps	2307	5.37
4 to 8Mbps	7609	17.70
8 to 12 Mbps	5648	13.14
>12Mbps	13540	31.49

IV. Dynamic Data Test-4G DL Details

VIL

Data KPIs - Overall	4G
Download Throughput (Mbps)	11.17



DL throughput	No of Sample	%
0 to 1 Mbps	92832	6.09
1 to 2 Mbps	120023	7.88
2 to 3 Mbps	100399	6.59
3 to 4 Mbps	184762	12.12
4 to 8 Mbps	83763	5.50
8 to 12 Mbps	193733	12.71
>12 Mbps	748364	49.11
Total	1523876	100

V. TRAI MySpeed App

Airtel

Technology- 4G	Anugul Railway Station	Chandikhol bus stop	Talcher bus stop	Dhenkanal Railway station	Govt Hospital Dhenkanal	Dhenkanal bus stop
Download Speed Mbps	85.04	105.64	99.91	67.54	86.16	35.16
Upload Speed Mbps	36.09	36.26	48.79	32.06	45.61	19.27
Latency ms						

BSNL

Technology- 4G	Anugul Railway Station	Chandikhol bus stop	Talcher bus stop	Dhenkanal Railway station	Govt Hospital Dhenkanal	Dhenkanal bus stop
Download	8.66	3.81	4.39	4.89	4.31	4.38
Speed Mbps						
Upload Speed	2.14	1.27	1.96	1.71	1.61	1.41
Mbps						
Latency ms	71	76.8	73.7	86	84.8	83.6

JIO

Technology- 4G	Anugul Railway Station	Chandikhol bus stop	Talcher bus stop	Dhenkanal Railway station	Govt Hospital Dhenkanal	Dhenkanal bus stop
Download Speed Mbps	25.09	66.92	39.65	29.42	30.81	49.11
Upload Speed Mbps	48.94	25.85	9.05	24.88	22.42	5.45
Latency ms	67.9	72	61.2	55.2	71	91.4

VIL

Technology- 4G	Anugul Railway Station	Chandikhol bus stop	Talcher bus stop	Dhenkanal Railway station	Govt Hospital Dhenkanal	Dhenkanal bus stop
Download Speed Mbps	16.59	27.79	16.61	23.84	14.12	16.49
Upload Speed Mbps	15.89	16.14	14.69	16.21	15.53	16.30
Latency ms						



NH/SH Routes Covered in OADT by Airtel/BSNL/RJIL/VIL						
S.No	No. of NH/SH Routes	NH routes	SH routes	Distance(Km)		
1	Dhenkanal - Anugul	NH-55		30		
		NH-53		40		
2	A	NH-53		30		
	Anugul - Talcher	NH-149		25		
3	Dhenkanal - Choudwar	NH-55		50		
4	Choudwar- Cuttack - Chandikhol	NH-55		20		
		NH-16		50		