



OPERATOR ASSISTED DRIVE TEST REPORT

KATHUA CITY AND NEARBY AREAS

J&K LSA

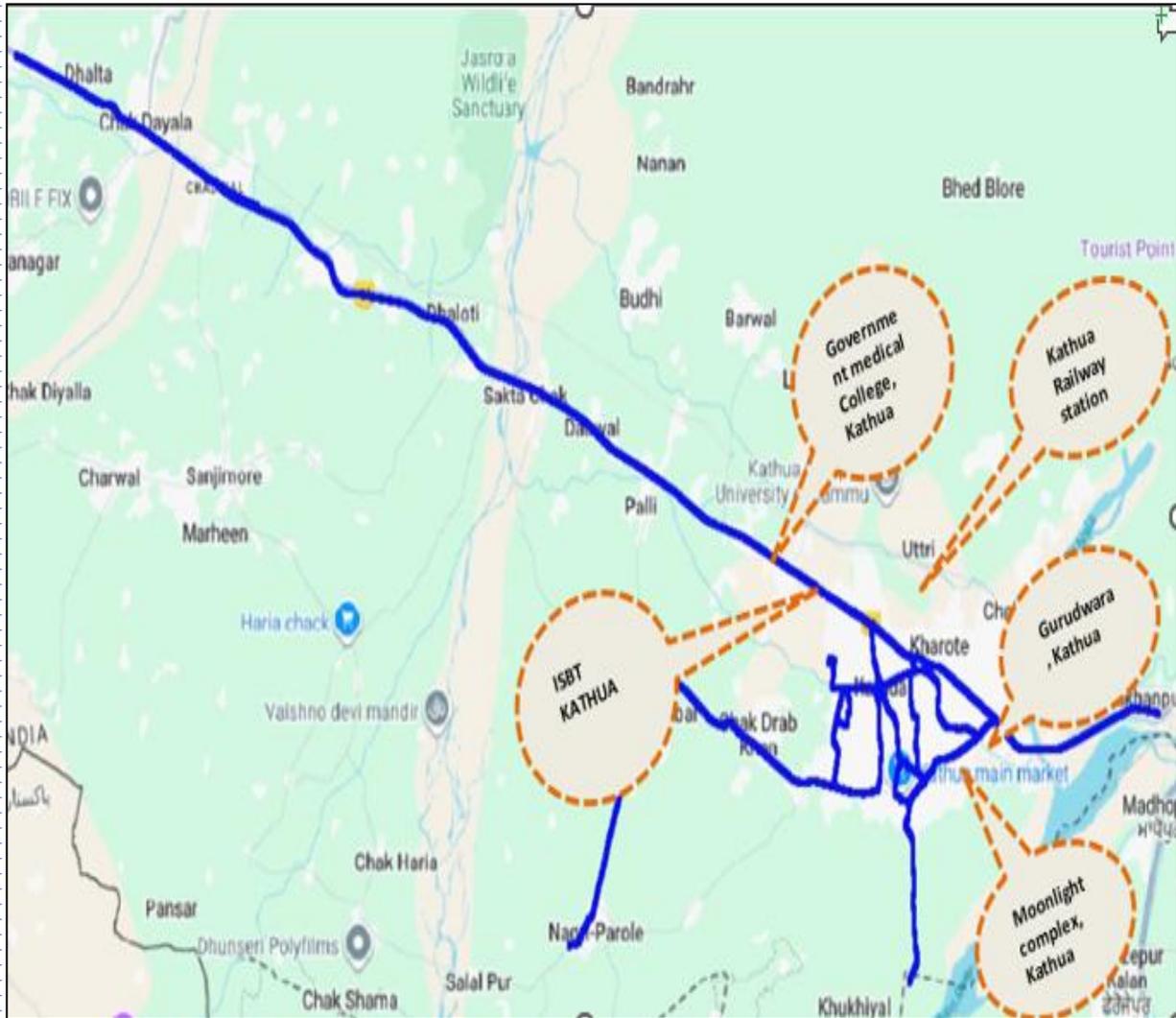
DECEMBER 2025 (REGIONAL OFFICE, DELHI)

The Operator Assisted Drive Test has been carried out by Regional Office, Delhi with the help of Telecom Service Providers in J&K LSA covering Kathua City from 03rd to 04th December 2025 from 09.30 AM to 07.30 PM. The drive test covered drive route of 120 KM (approx.) over a period of two days, covering hotspot at seven (05) locations. Networks Tested: 3 in 2G, 1 in 3G, 4 in 4G and 2 in 5G.

Voice and Dynamic/Static Data Test Route – J&K LSA

S. No	Date	Location/Area	Static Hotspot Locations
1	03-12-2025	Kathua and Hira Nagar City	NA
2	04-12-2025	Dyalachak and Phinter City	Kathua Railway station, Government medical College, Kathua, ISBT KATHUA, Moonlight complex, Kathua, Gurudwara, Kathua

DRIVE TEST ROUTE MAP



Kathua Town to Hira Nagar Town

Dingamamb to Galak and Phinter

KEY OBSERVATIONS FROM DRIVE TEST (VOICE)

TSP	Network tested
Airtel	2G,4G & 5G
BSNL	2G,3G & 4G
RJIO	4G & 5G
VIL	2G & 4G

Calls were made for the **180-sec** duration on the highway route and **90-sec** duration on the city route, with a wait time of **15 sec** between calls in all technologies.

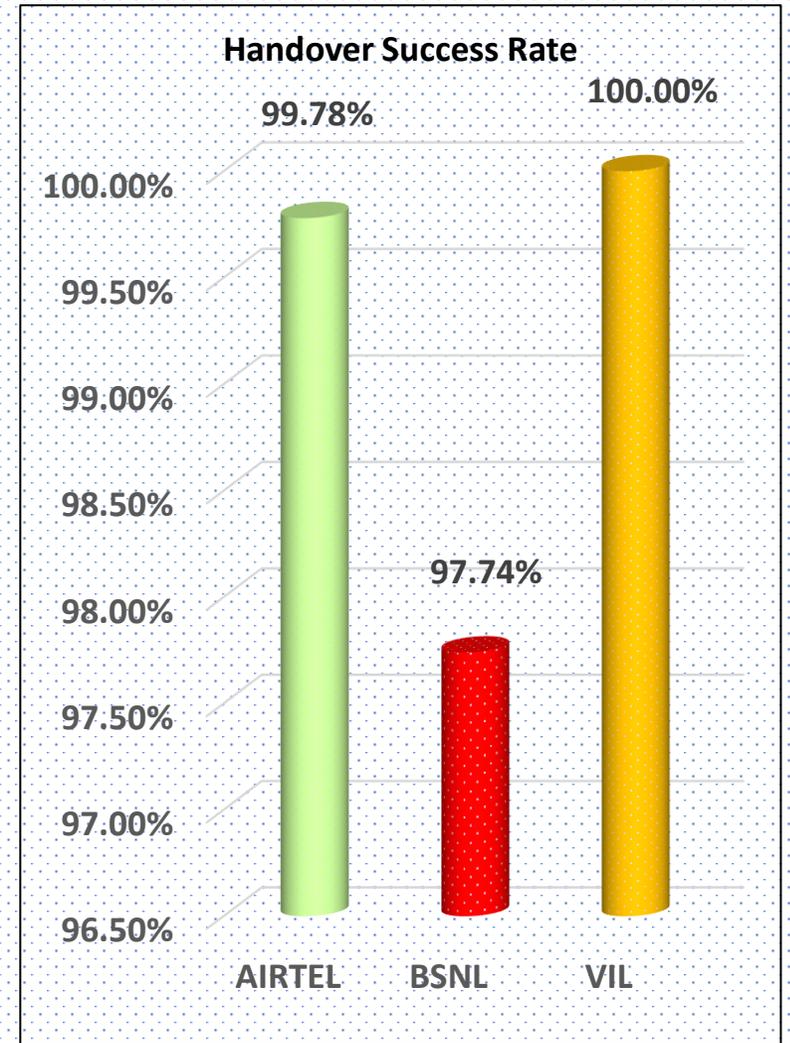
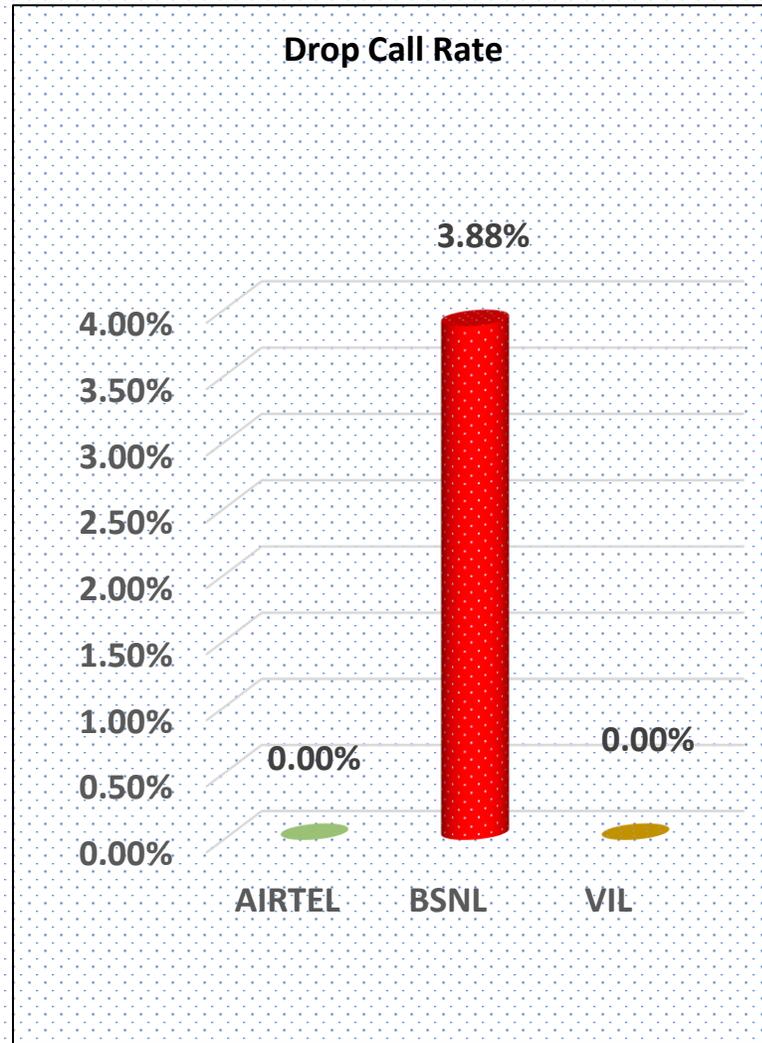
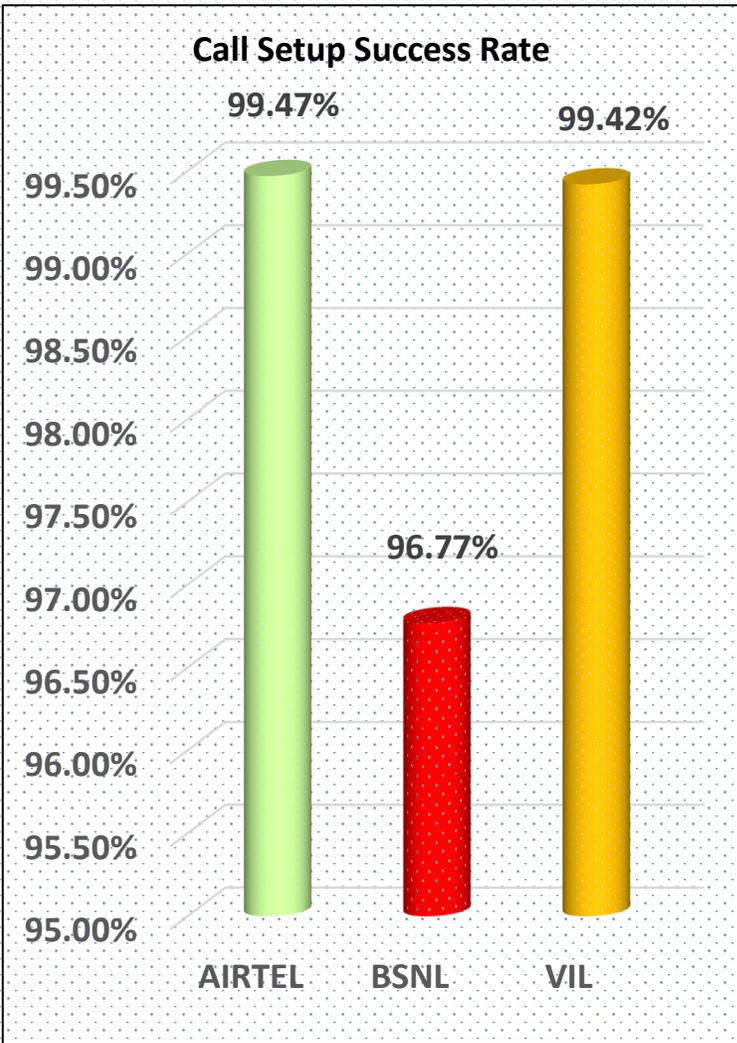
KPI	Benchmark	Observations
Drop call rate %	≤2%	All TSPs achieved the benchmark except BSNL.
CSSR %	≥98 %	All TSPs achieved the benchmark except BSNL.
Handover Success Rate%	≥95%	All TSPs achieved the benchmark.

Speech Quality (Average MOS)	VIL	BSNL	Airtel	RJIL
	4.06	3.10	4.08	4.10

SUMMARY – VOICE CITY DYNAMIC IN 3G/2G (LOCKED MODE)

Voice Call	AIRTEL 2G	BSNL 3G/2G	VIL 2G
Call Attempt	191	186	170
Call Established	191	180	170
CSSR% (Accessibility)	99.47 %	96.77 %	99.42 %
Drop Call Rate (%)	0.00 %	3.88 %	0.00 %
Handover Success Rate (%)	99.78 %	97.74 %	100.00 %

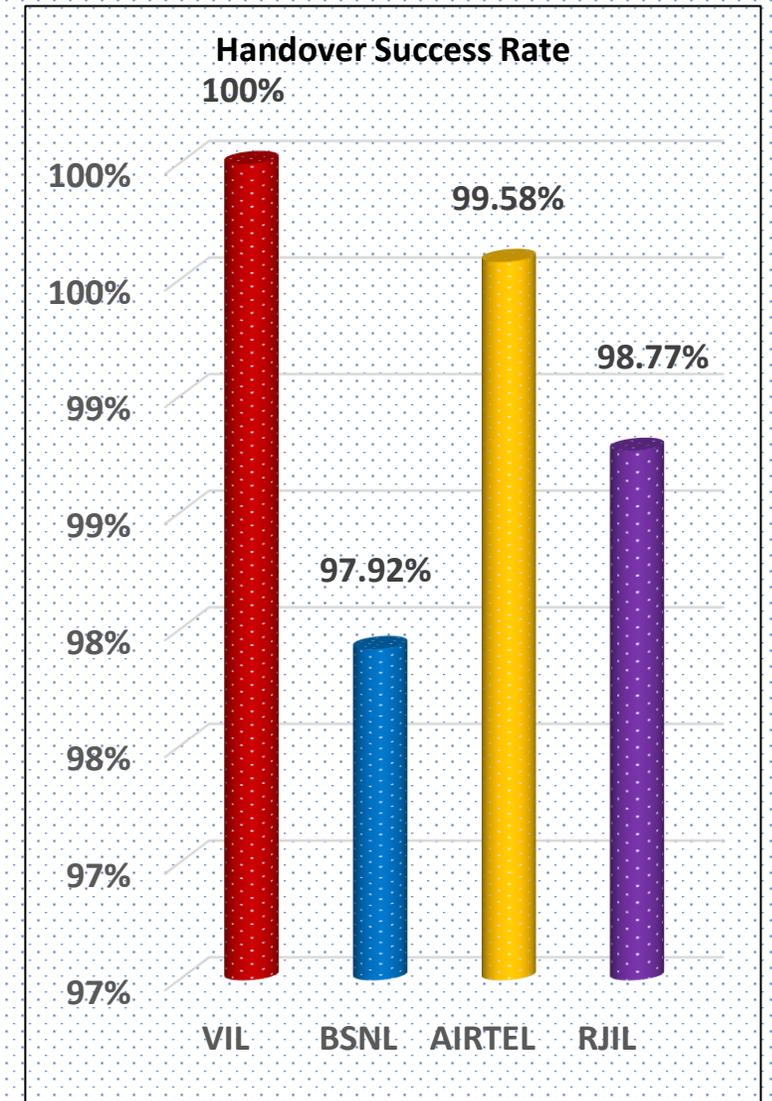
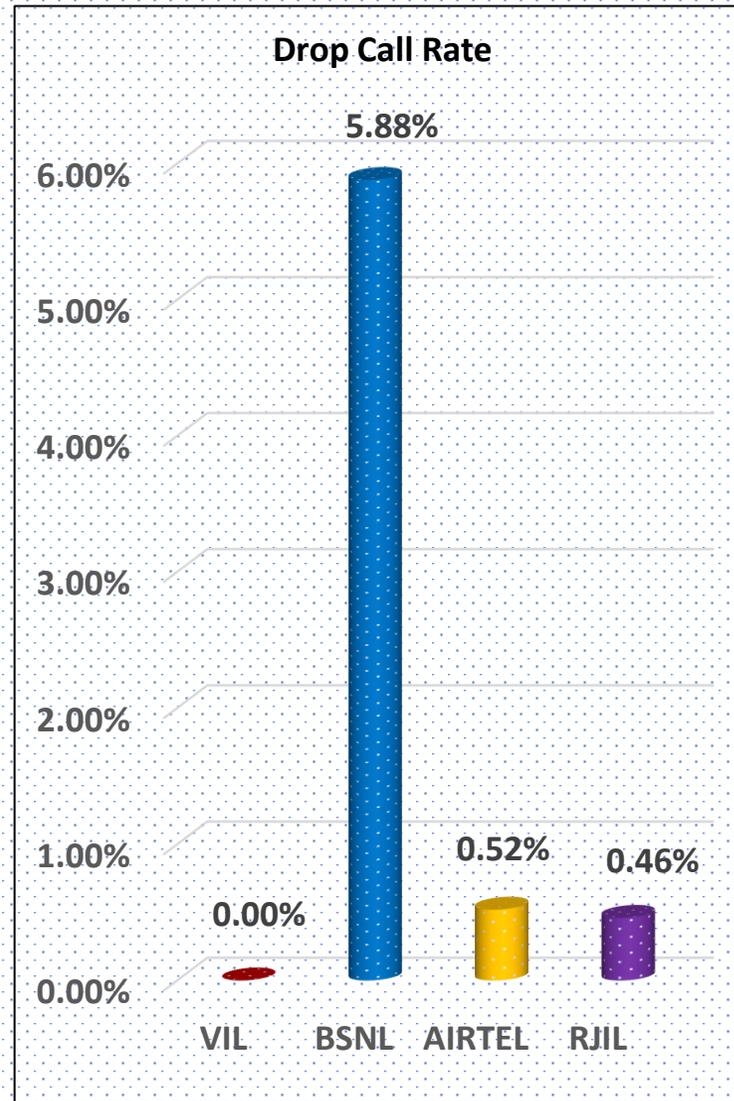
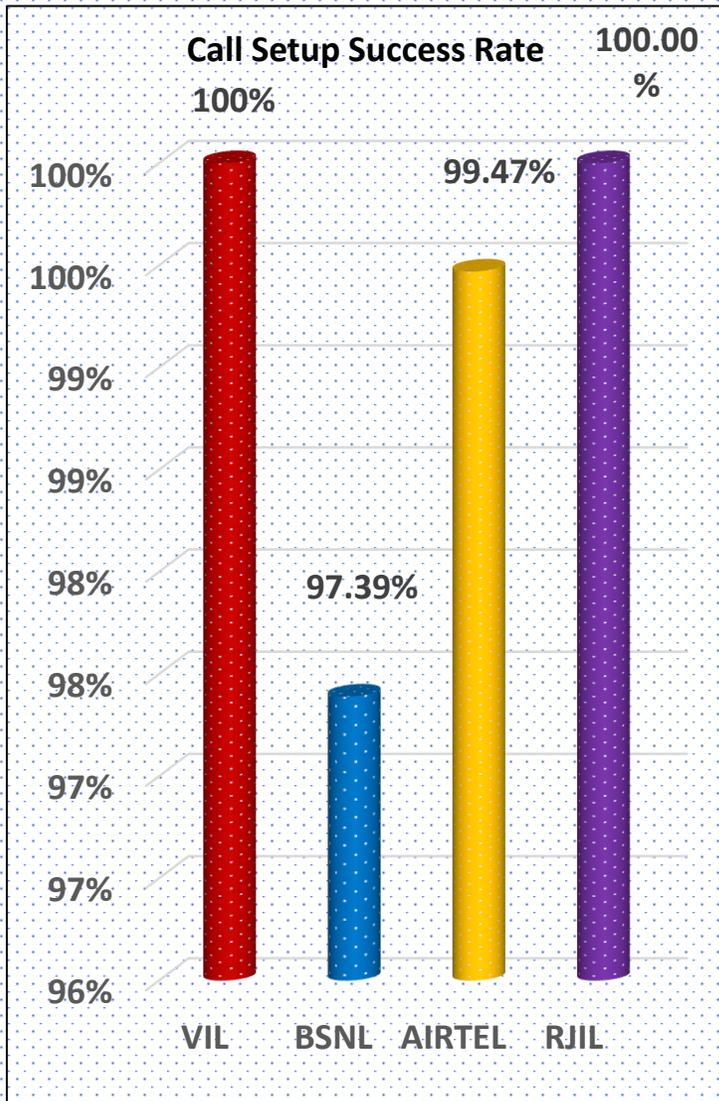
SUMMARY – VOICE CITY DYNAMIC IN 3G/2G (LOCKED MODE)



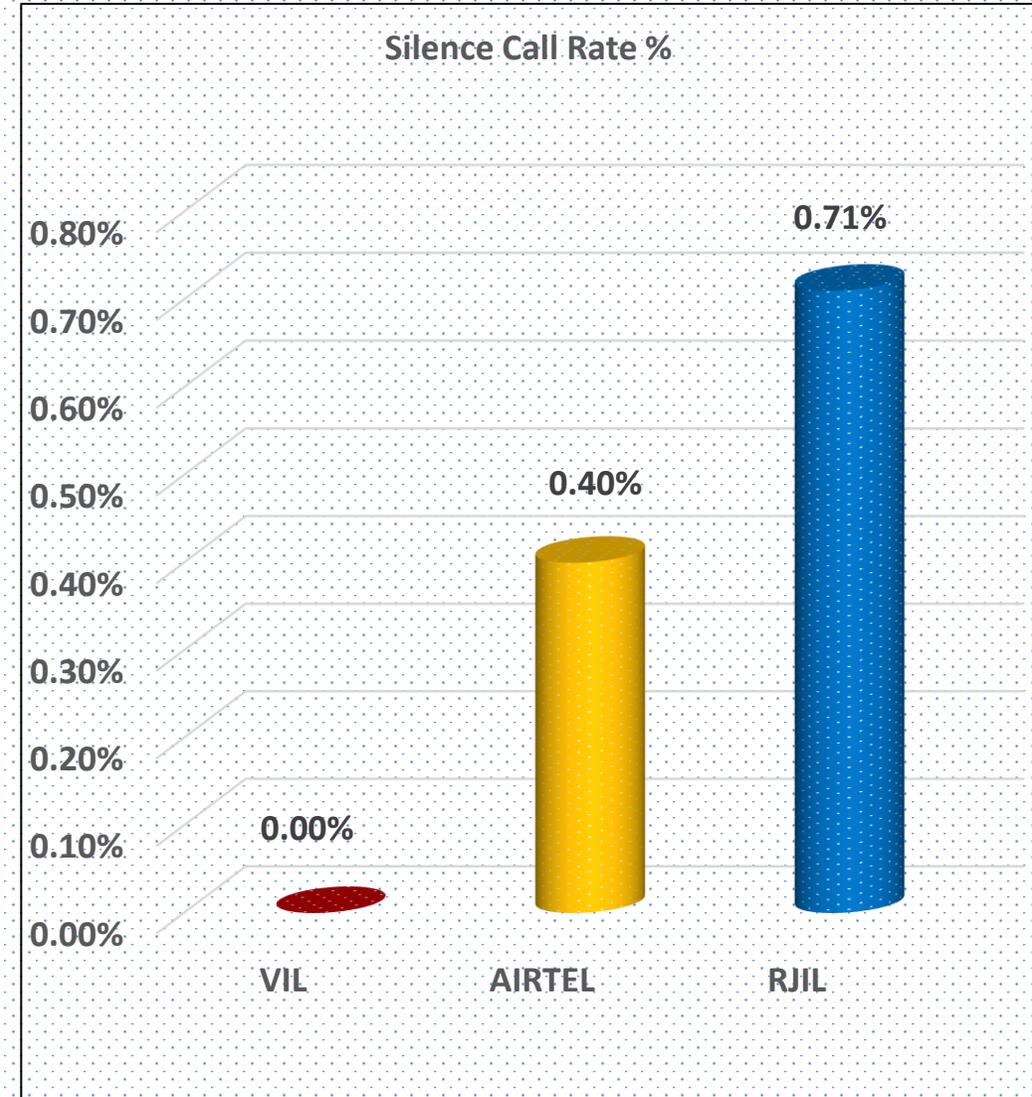
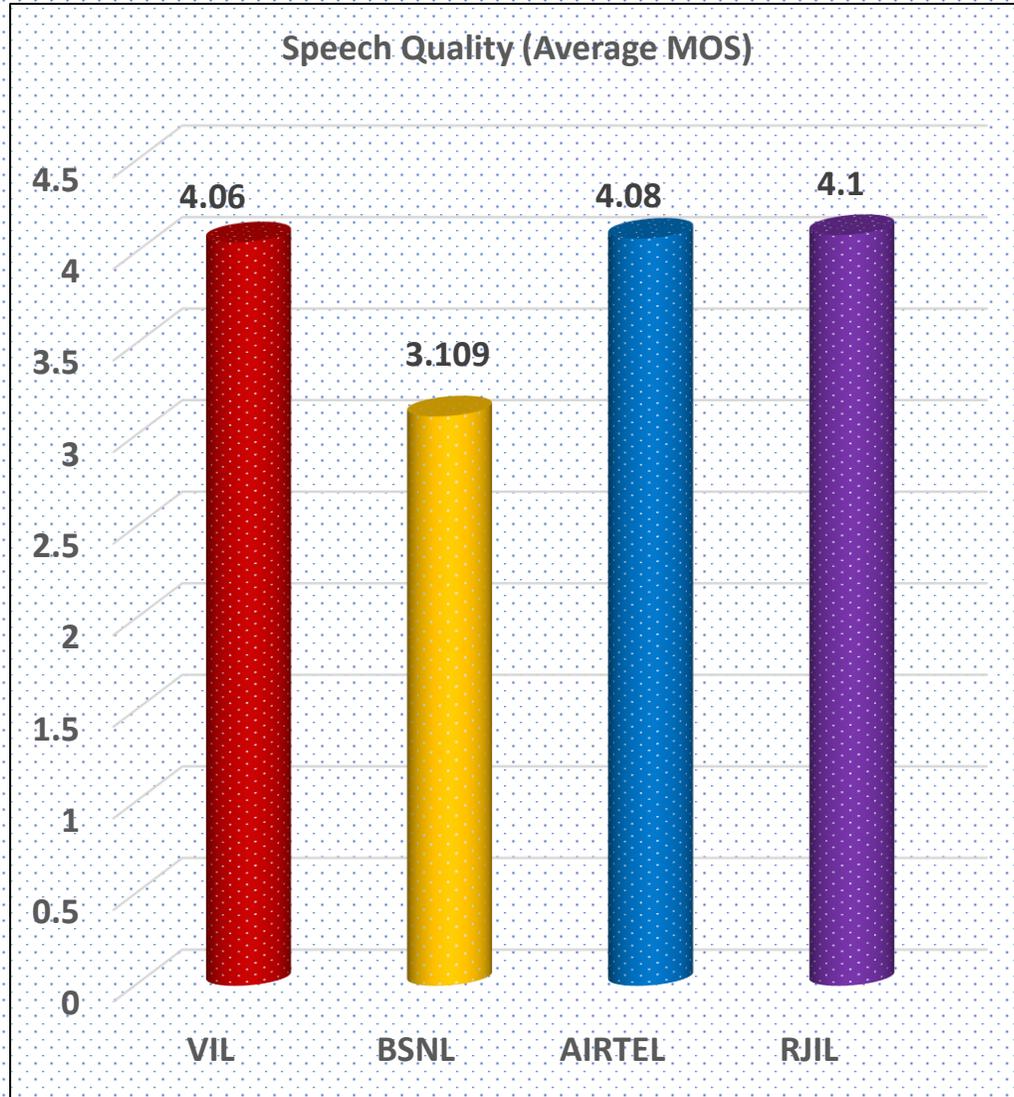
SUMMARY – VOICE CITY DYNAMIC IN 5G/4G/3G/2G (AUTO MODE)

Voice Call	VIL	BSNL	AIRTEL	RJIL
Call Attempt	125	192	191	217
Call Established	125	187	191	217
CSSR% (Accessibility)	100 %	97.39 %	99.47 %	100.00 %
Drop Call Rate (%)	0.00 %	5.88 %	0.52 %	0.46 %
Handover Success Rate (%)	100 %	97.92 %	99.58 %	98.77 %
Silence Call Rate %	0 %	-	0.40 %	0.71 %
Speech Quality (Average MOS)	4.06	3.109	4.08	4.10

SUMMARY – VOICE CITY DYNAMIC IN 5G/4G/3G/2G (AUTO MODE)

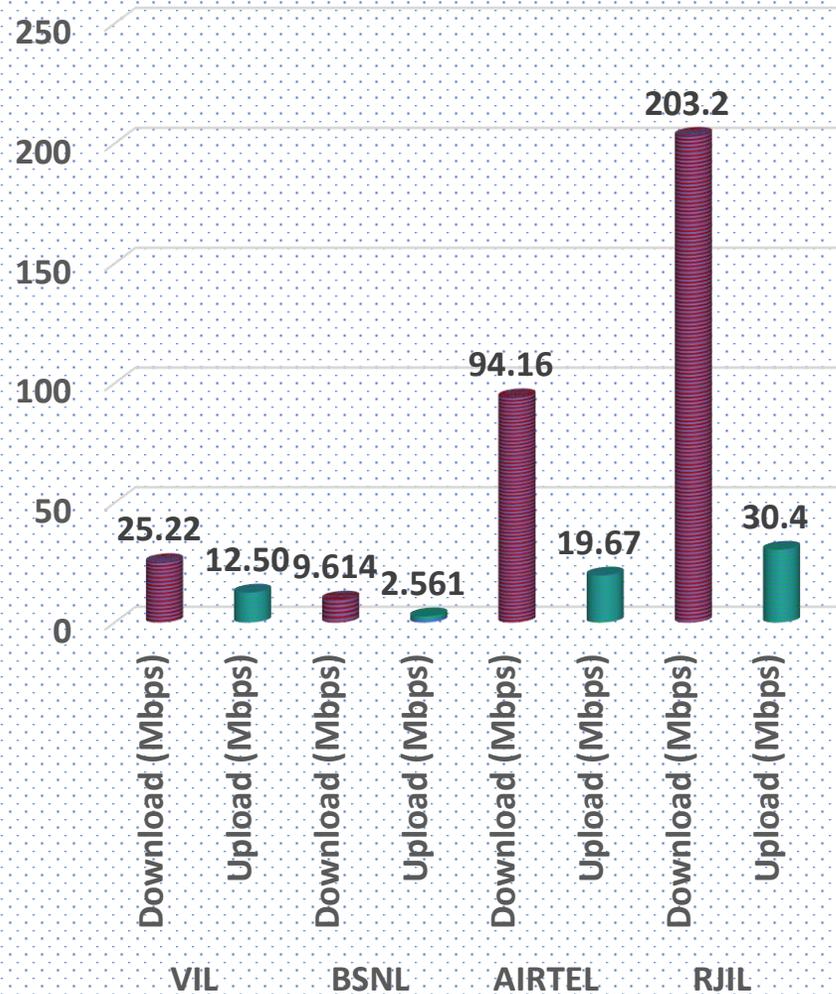


SUMMARY – VOICE CITY DYNAMIC IN 5G/4G/3G/2G (AUTO MODE) (CONTD..)

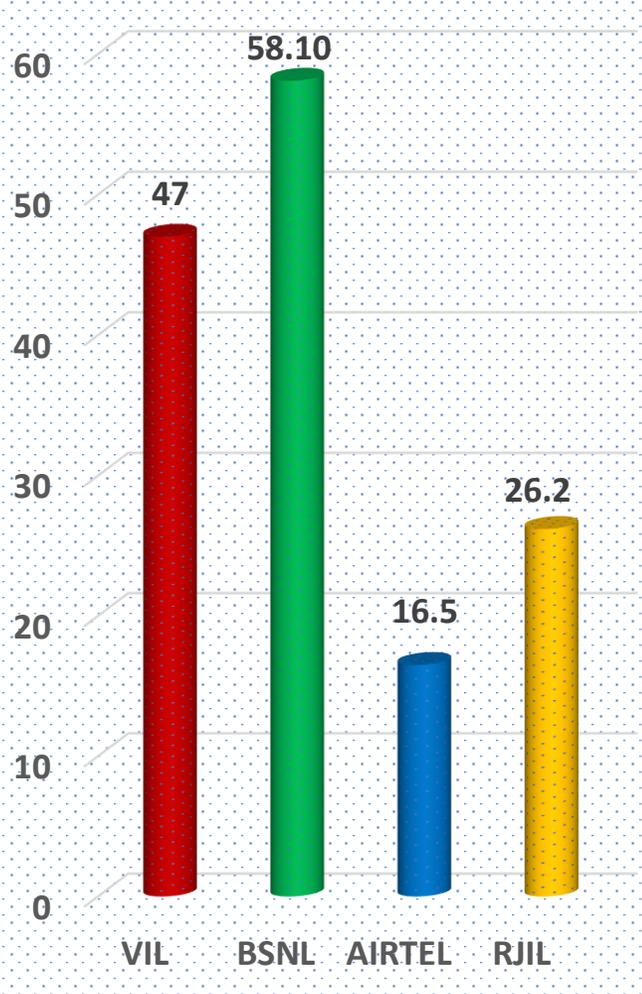


DATA SERVICE PERFORMANCE IN 5G/4G/3G/2G (AUTO MODE) - DYNAMIC

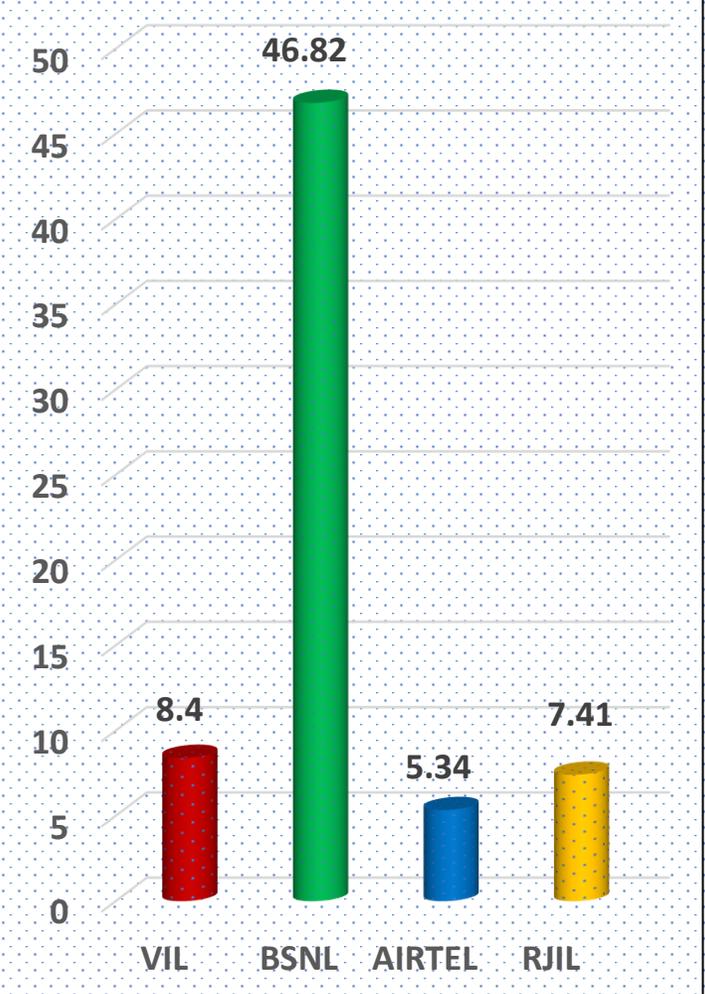
Average Download/Upload Speed - Dynamic



Average Latency - Dynamic



Average Jitter - Dynamic



SUMMARY-VOICE SERVICE PERFORMANCE (5G/ 4G/ 3G/ 2G - AUTO MODE) – OVER ALL (STATIC-HOTSPOT)

Voice Call	AIRTEL	BSNL	RJIL	VIL
Call Attempt	50	50	50	50
Call Established	50	50	50	50
CSSR% (Accessibility)	100 %	100 %	100 %	100 %
No. of Drop Call	0	0	0	0
Drop Call Rate (%)	0 %	0 %	0 %	0 %
Call Setup Time Average (Sec.)	1.48	2.252	1.24	0.45

SUMMARY-DATA SERVICE PERFORMANCE (5G/ 4G/ 3G/ 2G - AUTO MODE) – OVER ALL (STATIC- HOTSPOT)

Data Service	AIRTEL	BSNL	RJIL	VIL
Average Download speed (Mbps)	144.37	21.11	373.91	26.12
Average Upload speed (Mbps)	34.20	8.464	72.91	19.06
Latency 50th percentile (ms)	14.5	52.47	26.1	52.5
Average Jitter (ms)	1.09	40.94	6.02	14.33
Packet Drop Rate (%)	0%	1.29	0.04	0.36
Web browsing delay (sec)	6.3	3.54	1.5	2.35
Video Streaming performance for video (sec)	0.97	-	0.4	1.43

DATA SUMMARY AT HOTSPOT LOCATIONS: DOWNLOAD AND UPLOAD SPEED(IN MBPS)

S.No.	Hotspot Locations	AIRTEL		BSNL		RJIL		VIL	
		Download	Upload	Download	Upload	Download	Upload	Download	Upload
1.	Kathua Railway station	304.60	58.99	26.97	21.78	490.94	116.52	23.34	22.92
2.	Government Medical College, Kathua	114.8	54.56	18.148	5.09	377.61	112.15	29.2	11.32
3.	ISBT , Kathua	139.08	50.28	19.611	5.697	602.38	106.44	20.17	20.71
4.	Moonlight complex, Kathua	158.05	49.68	25.764	5.677	181.38	11.8	40.09	23
5.	Gurudwara, Kathua	112.9	10	15.085	4.091	217.22	17.55	16.97	16.51

COVERAGE – VOICE CALLS

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

TSPs	2G		
	Airtel	VIL	BSNL
Coverage%	86.00%	73.66%	40.94%

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

TSPs	3G
	BSNL
Coverage%	70.41%

COVERAGE – VOICE CALLS (CONTD..)

- Percentage of coverage samples for 4G \geq -110 dBm

TSPs	4G			
	Airtel	RJIL	VIL	BSNL
Coverage %	90.80%	91.19%	91.54%	92.64%

- Percentage of coverage samples for 5G \geq -110 dBm

TSPs	5G	
	RJIL	Airtel
Coverage %	99.48%	93.10%

THANK YOU