



OPERATOR ASSISTED DRIVE TEST REPORT

PAONTA SAHIB AND NAHAN CITY

HP LSA

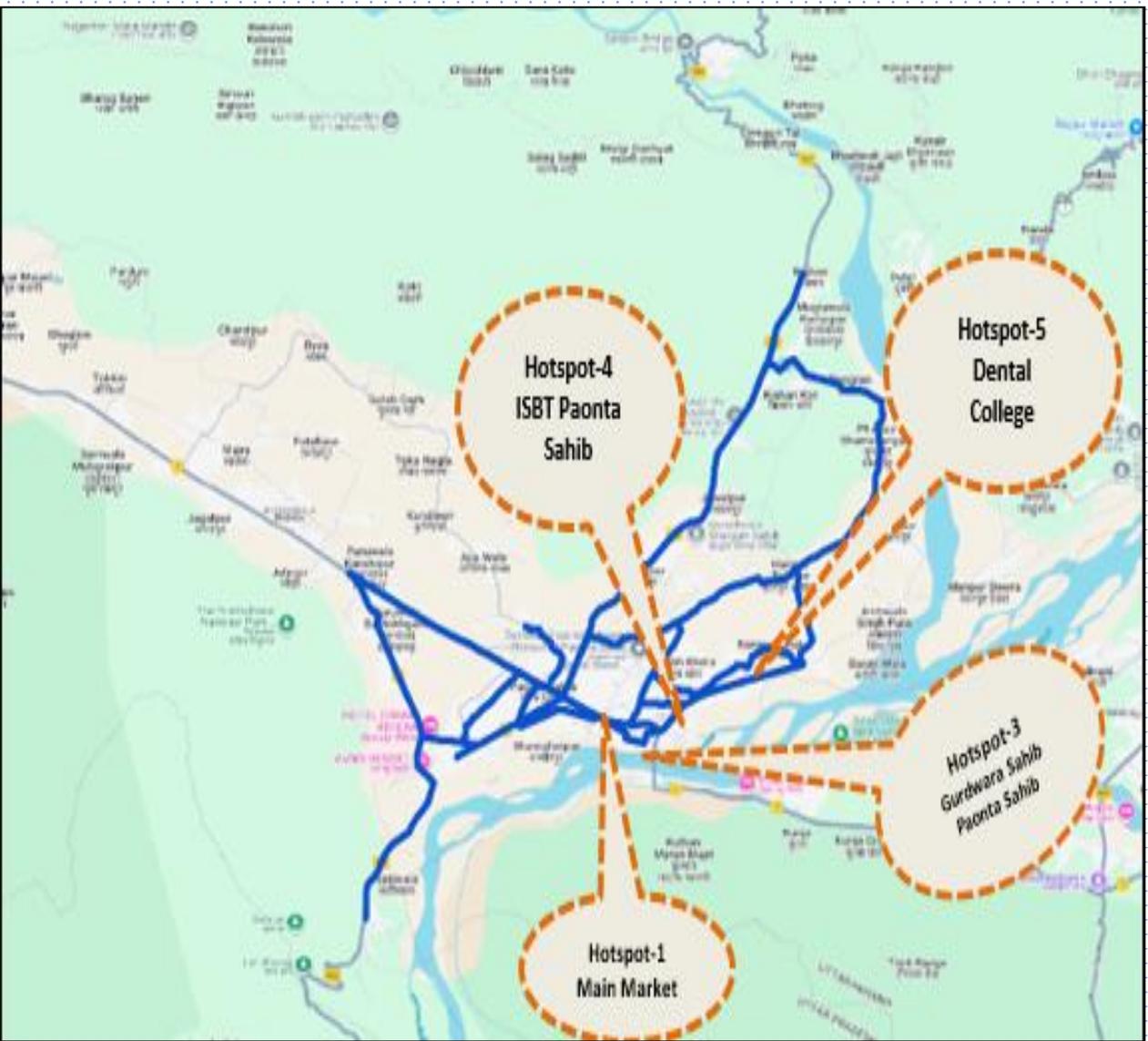
NOVEMBER 2025 (REGIONAL OFFICE, DELHI)

The Operator Assisted Drive Test has been carried out by Regional Office, Delhi with the help of Telecom Service Providers in HP LSA covering **Paonta Sahib and Nahan City** from **26th to 28th November 2025** from 09.30 AM to 07.30 PM. The drive test covered drive route of **142.5 KM (approx.)** over a period of three days, covering hotspot at seven (05) locations. Networks Tested: 3 in 2G, 1 in 3G, 4 in 4G and 2 in 5G.

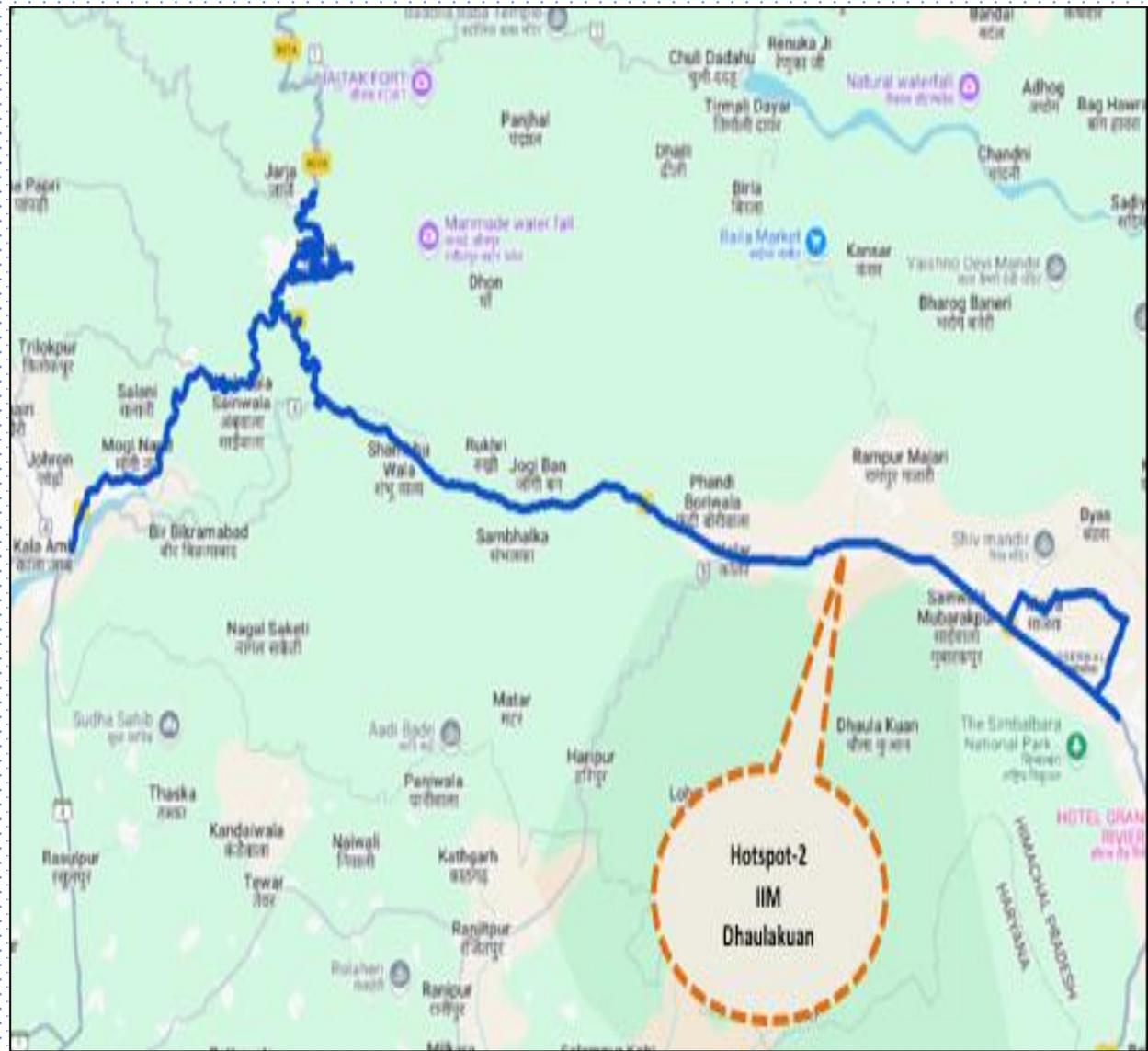
Voice and Dynamic/Static Data Test Route – HP LSA

S.No	Date	Location/Area	Static Hotspot Locations
1	26-11-2025	Paonta Sahib City	NA
2	27-11-2025	Nahan City	NA
3	28-11-2025	NA	Main Market, IIM Dhaulakuan, Gurdwara Sahib Paonta Sahib, ISBT Paonta Sahib, Dental College

DRIVE TEST ROUTE MAP



Paonta Town



Nahan Town

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 in auto mode.
Handover Success Rate%	≥95%	All TSPs achieved the benchmark.

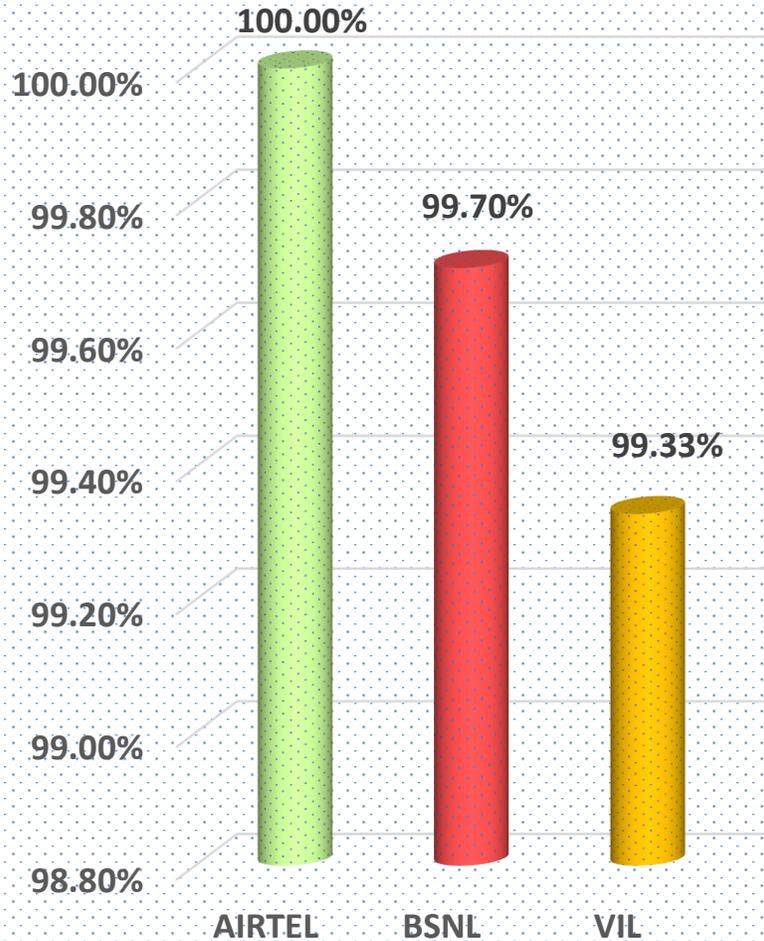
Speech Quality (Average MOS)	VIL	BSNL	Airtel	RJIL
	4.01	-	4.11	4.08

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

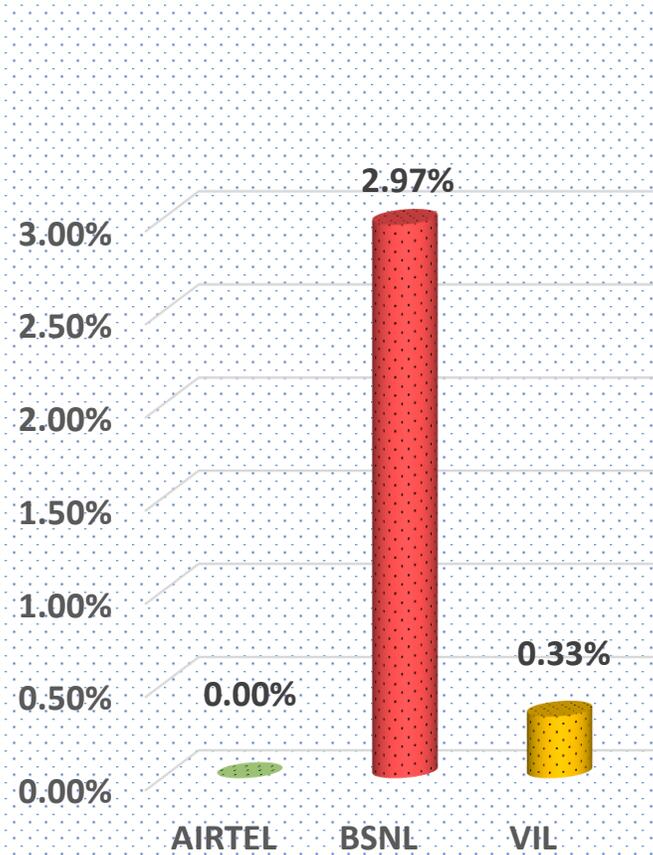
Voice Call	AIRTEL 2G	BSNL 3G/2G	VIL 2G
Call Attempt	275	336	299
Call Established	275	335	297
CSSR% (Accessibility)	100.00%	99.70	99.33%
Drop Call Rate (%)	0.00%	2.97%	0.33%
Handover Success Rate (%)	99.71%	96.67%	96.34%

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

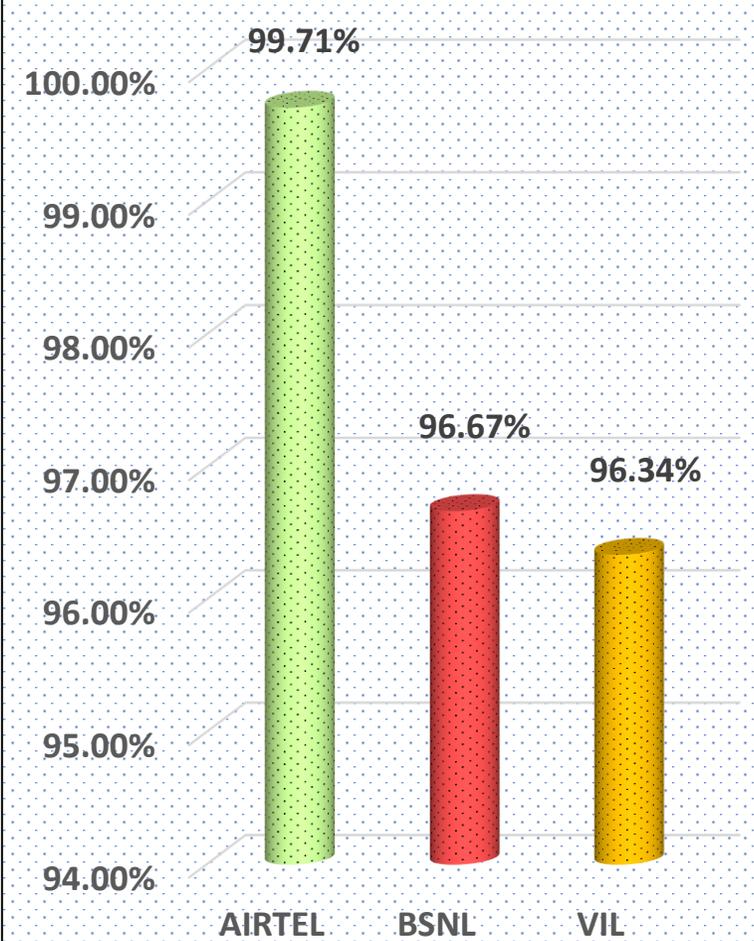
Call Setup Success Rate



Drop Call Rate



Handover Success Rate

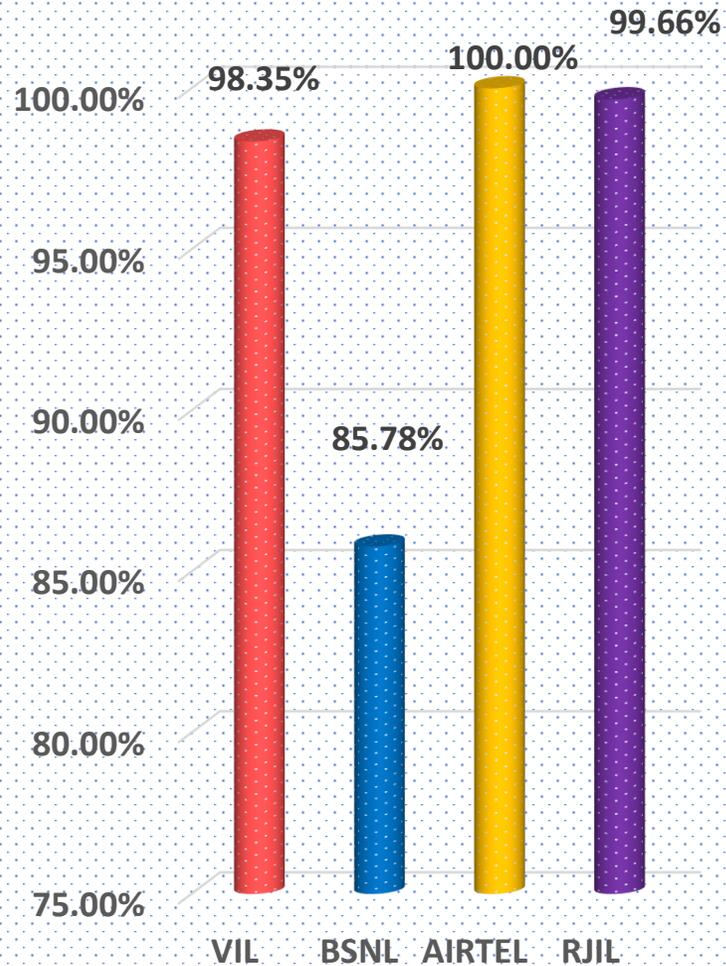


SUMMARY – VOICE CITY DYNAMIC IN 5G/4G/3G/2G (AUTO MODE)

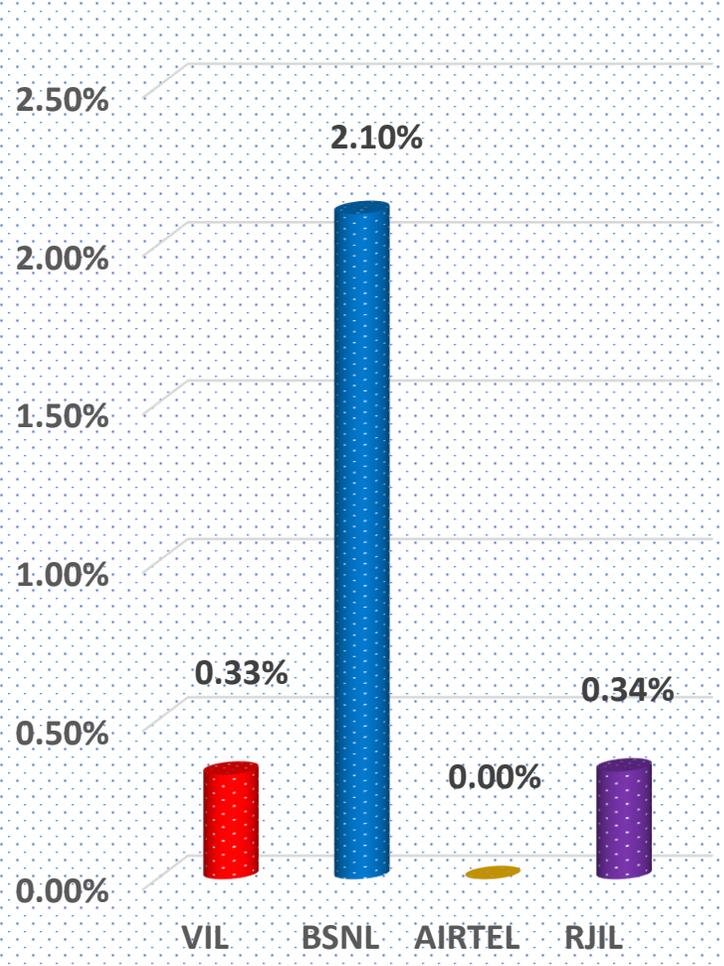
Voice Call	VIL	BSNL	AIRTEL	RJIL
Call Attempt	303	380	275	297
Call Established	298	326	275	296
CSSR% (Accessibility)	98.35%	85.78%	100.00%	99.66%
Drop Call Rate (%)	0.33%	2.10%	0.00%	0.34%
Handover Success Rate (%)	99.84%	99.19%	99.89%	99.29%
Silence Call Rate %	0 %	-	0 %	3.26 %
Speech Quality (Average MOS)	4.01	-	4.11	4.08

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

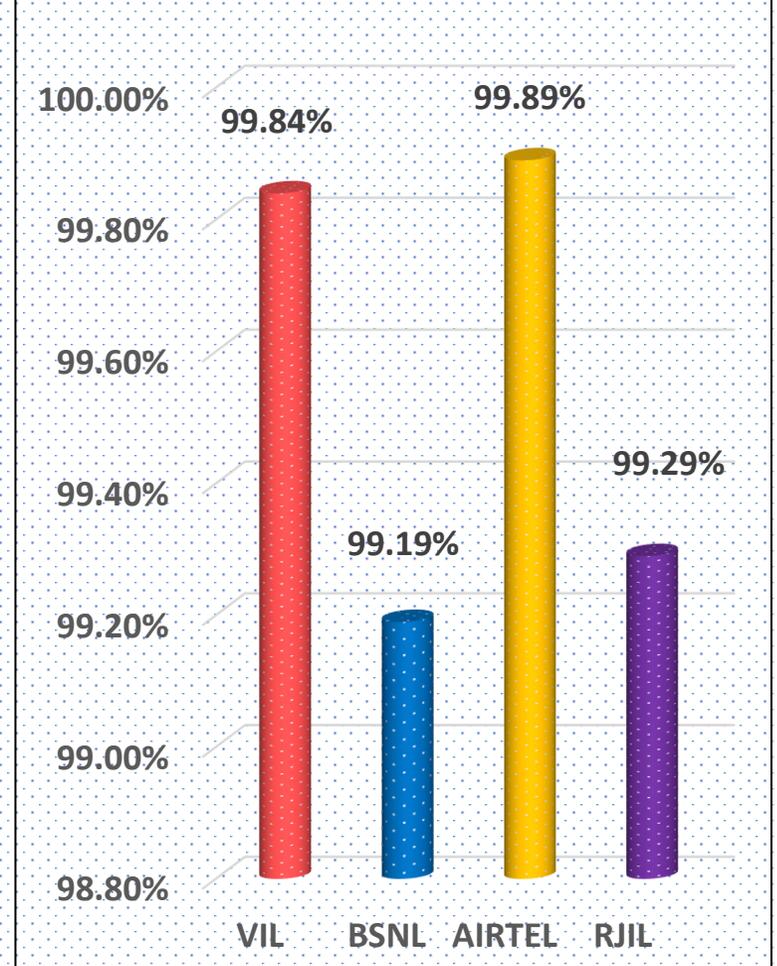
Call Setup Success Rate



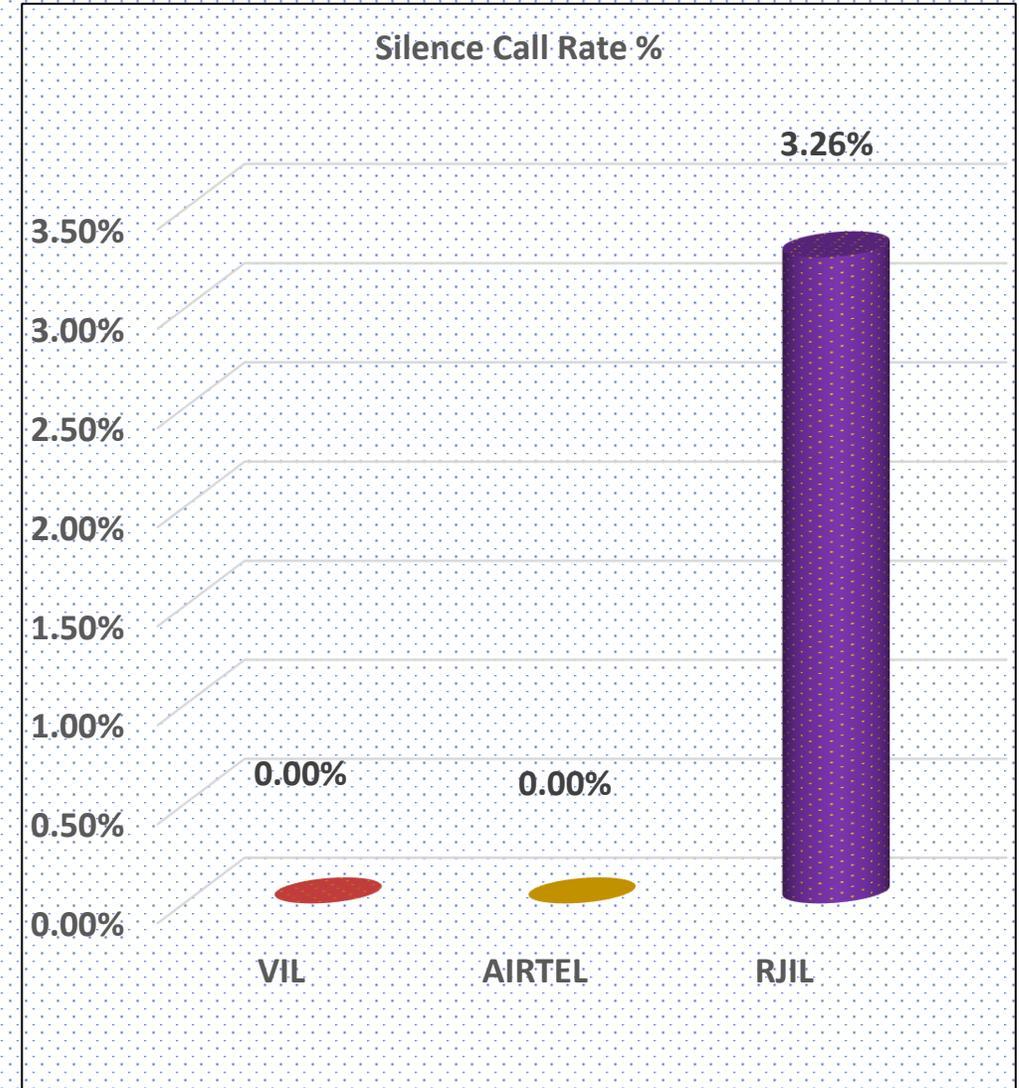
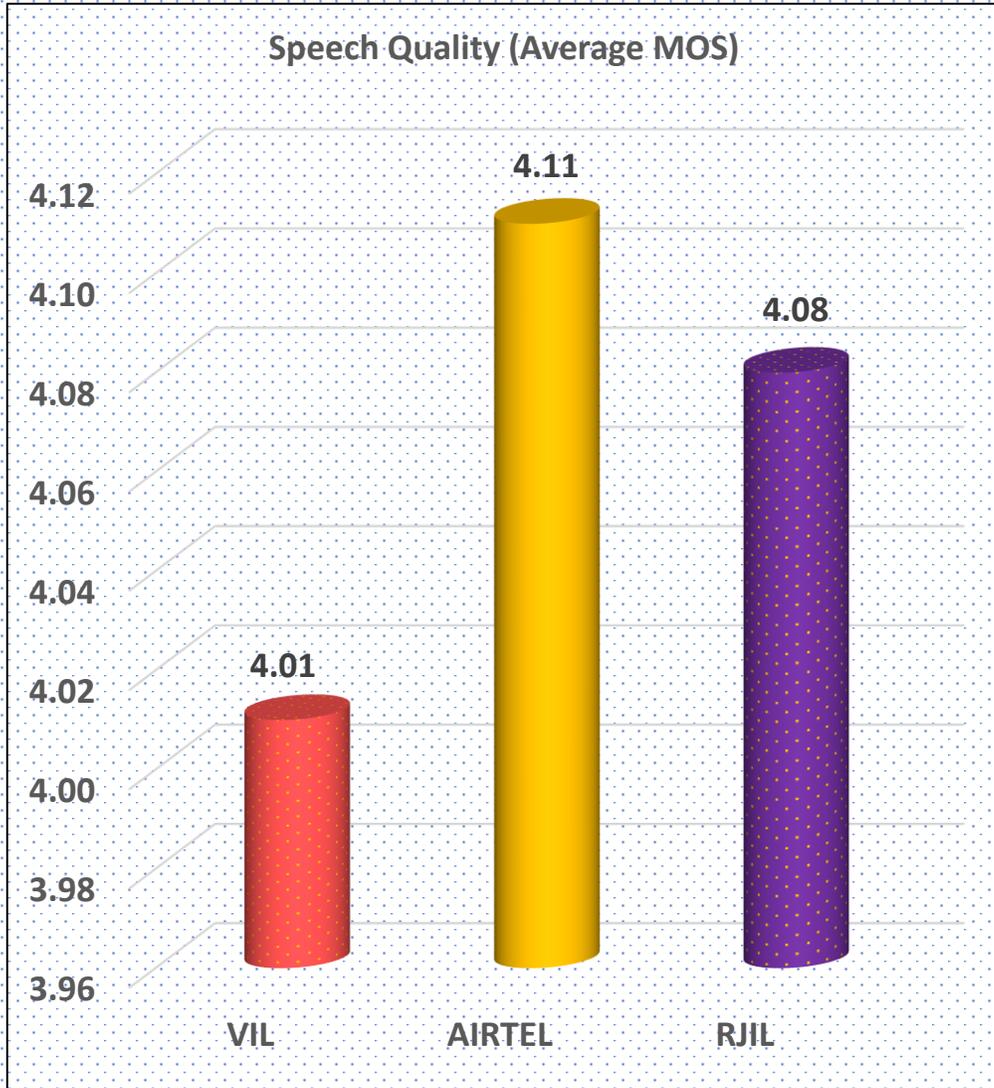
Drop Call Rate



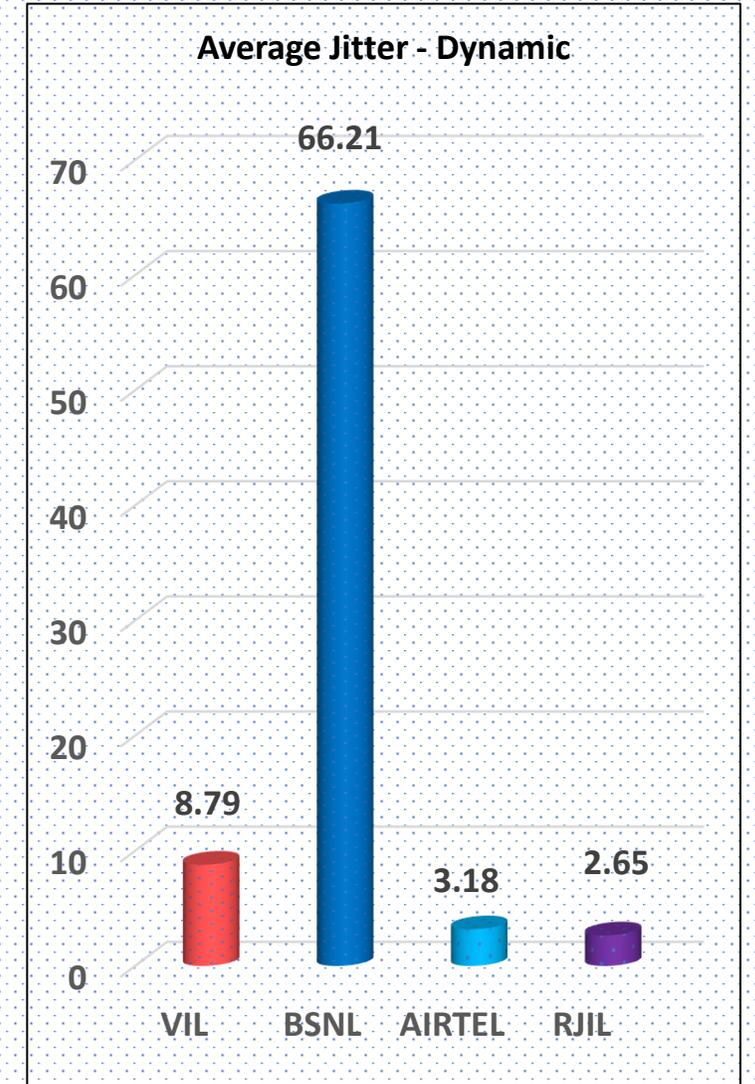
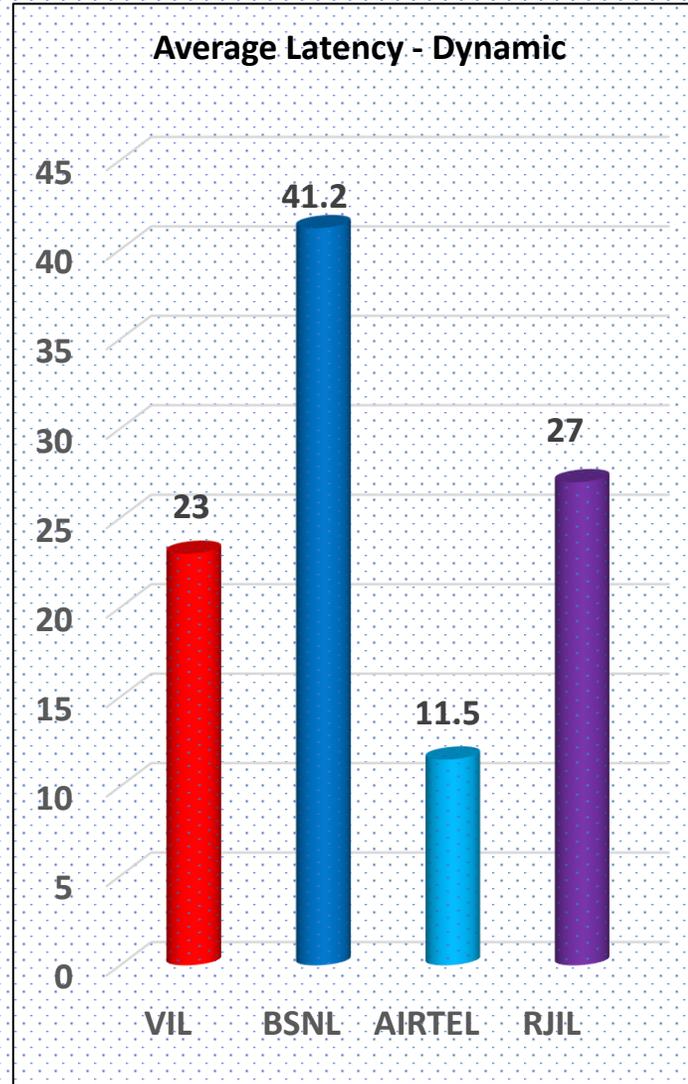
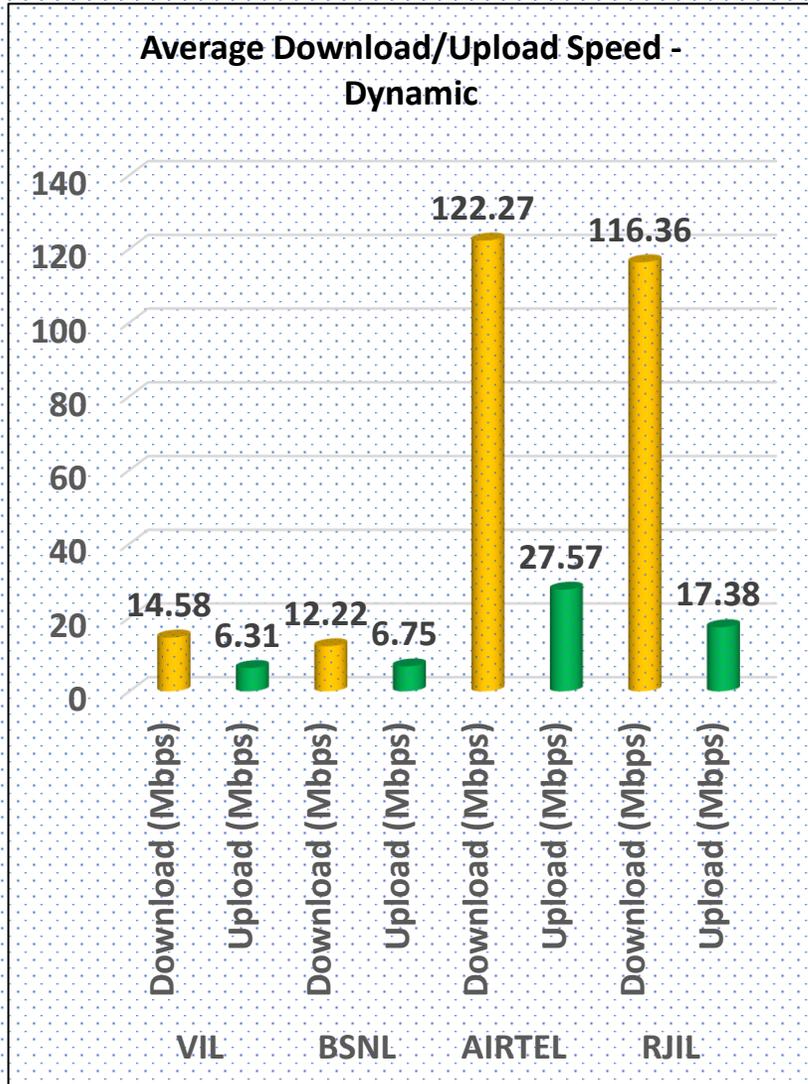
Handover Success Rate



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



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



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

Voice Call	VIL	BSNL	AIRTEL	RJIL
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.)	0.92	1.75	1.27	0.64

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

Data Service	VIL	BSNL	AIRTEL	RJIL
Average Download speed (Mbps)	7.77	12.87	268.89	123.80
Average Upload speed (Mbps)	5.03	7.07	41.53	94.08
Latency 50th percentile (ms)	39.50	41.83	16.5	24
Average Jitter (ms)	9.05	61.65	3.49	-
Packet Drop Rate (%)	2.50 %	0.98 %	0.00 %	0.07 %
Web browsing delay (sec)	2.13	1.02	9.4	1.63
Video Streaming performance for video (sec)	1.44	0.97	1.5	0.36

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.	Paonta Main Market	315.62	21.53	20.67	14.67	103.62	91.58	6.46	7.21
2.	IIM	226.43	56.85	9.38	4.68	388.90	75.36	5.83	8.09
3.	Gurudwara Paonta Sahib	331.20	55.06	25.60	9.98	104.96	71.48	7.66	7.09
4.	Bus Stand Paonta Sahib	326.92	46.67	18.47	7.20	111.02	91.58	15.91	8.99
5.	Dental College	199.71	46.53	30.13	18.97	95.33	136.67	9.49	18.37

COVERAGE – VOICE CALLS

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

TSPs	2G		
	Airtel	VIL	BSNL
Coverage%	93.65%	87.09%	88.18%

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

TSPs	3G
	BSNL
Coverage%	91.22%

COVERAGE – VOICE CALLS (CONTD..)

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

TSPs	4G			
	Airtel	RJIL	VIL	BSNL
Coverage %	97.21%	96.43%	95.71%	93.50%

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

TSPs	5G	
	RJIL	Airtel
Coverage %	99.18%	97.54%

THANK YOU