

Seychelles Static Test

District: Bel Air

Date of Testing:- 26th Sep To 30th Sep 2024

Report Date:- 17th Oct 2024

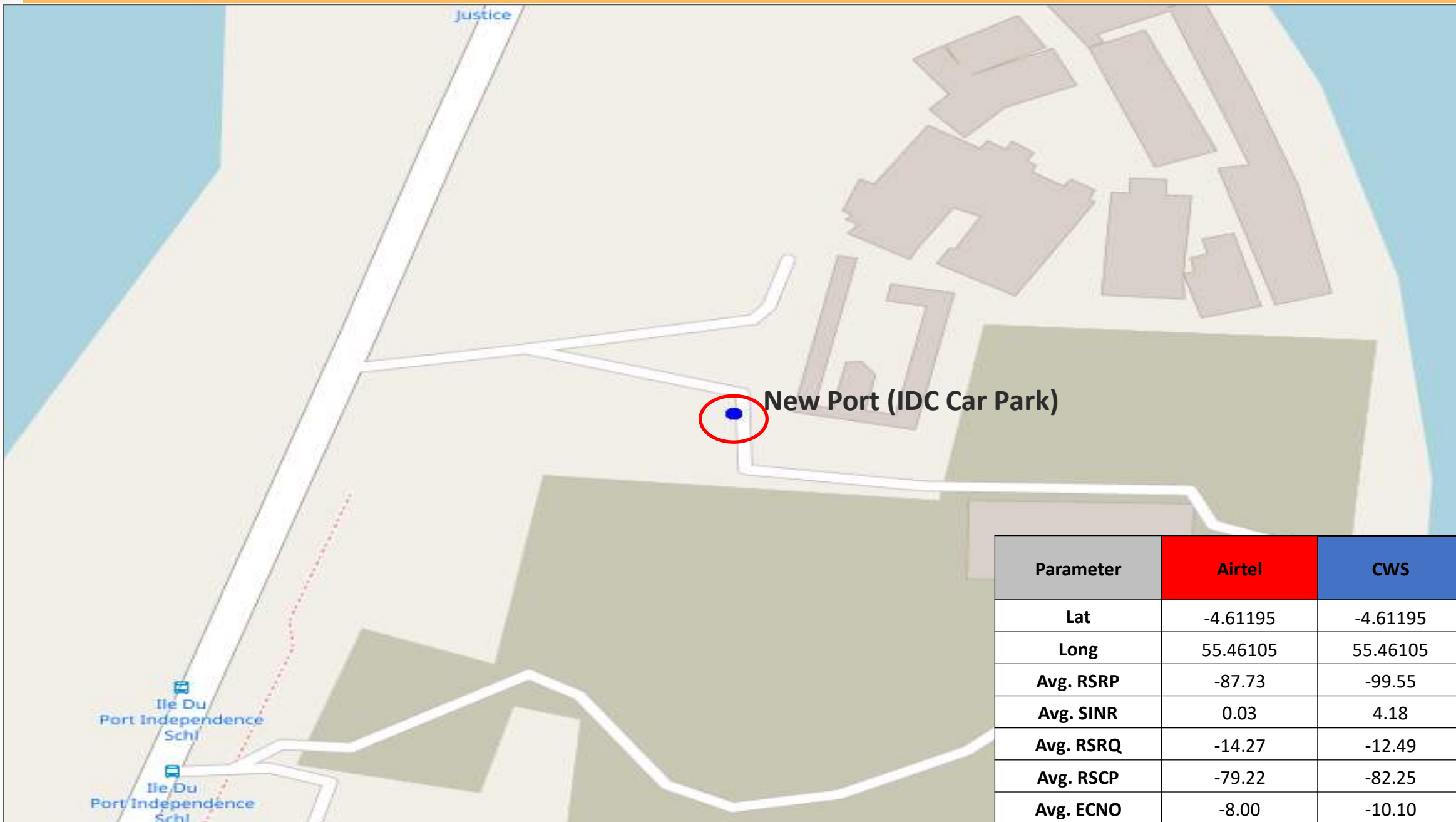
VOICE TEST METHODOLOGY

DATA	Test Type and Timeout	Technology 3G Preferred	Technology 4G Preferred
POP always on. ICMP PAYLOAD PING 800 BYTES			
1	FILE TRANSFER DOWNLOAD 135s	FTP DL (3MB) wait 10s	FTP DL (5MB) wait 10s
2	FILE TRANSFER UPLOAD 135s	FTP UL (1MB) wait 10s	FTP UL (3MB) wait 10s
3	FILE TRANSFER DOWNLOAD 135s	HTTP Get (3MB) wait 10s	HTTP Get (5MB) wait 10s
4	FILE TRANSFER UPLOAD 135s	HTTP Put (1MB) wait 10s	HTTP Put (3MB) wait 10s
5	ICMP PING 32 BYTES	Ping (32 bytes) *5 wait 10s	Ping (32 bytes) *5 wait 10s
6	YOUTUBE STREAMING 95 seconds	Video: YouTube 60sec wait 10s	Video: YouTube 60sec wait 10s
7	KEPLER WEB BROWSING 45s	HTTPS Browsing: Kepler wait 10s	HTTPS Browsing: Kepler wait 10s
8	LIVE WEB BROWSING 45s	www.shein.com, www.nbs.gov.sc, www.sbc.sc wait 10s	www.shein.com, www.nbs.gov.sc, www.sbc.sc wait 10s
9	KEPLER MOBILE WEB BROWSING 45s	HTTPS Browsing: Kepler Mobile wait 10s	HTTPS Browsing: Kepler Mobile wait 10s
10	ICMP PING 32 BYTES	Ping (32 bytes) 5 www.google.com wait 10s	Ping (32 bytes) 5 www.google.com wait 10s
11	FILE TRANSFER-CAPACITY DOWNLOAD 10s fixed duration	HTTP Get (500MB) Multiple files wait 10s	HTTP Get (500MB) Multiple files wait 10s
12	FILE TRANSFER-CAPACITY UPLOAD 10s fixed duration	HTTP Put (500MB)-Multiple Files wait 10s	HTTP Put (500MB)-Multiple Files wait 10s

Static Points Location – Cluster Bel Air



Static Point Location 1 - New Port (IDC Car Park)



4G Preferred Data Findings:

- Airtel SFTP DL is (6.10 Mbps), while SFTP UL is (6.27 Mbps), CWS SFTP DL is (7.23 Mbps), while SFTP UL is (2.34 Mbps)
- Airtel HTTP DL is (10.22 Mbps), HTTP Capacity DL is (7.86 Mbps) ,HTTP UL is (9.62 Mbps) , and HTTP Capacity UL is (14.12 Mbps).
- CWS HTTP DL is (8.33 Mbps), HTTP Capacity DL is (16.31 Mbps) ,HTTP UL is (3.46 Mbps) , and HTTP Capacity UL is (8.89 Mbps).
- On live web page testing for browsing, www.shein.com took (7.47s), www.nbs.gov.sc took (17.38s), and www.sbc.sc took (15.48s) on Airtel.
- On live web page testing for browsing, www.shein.com took (6.75s), www.nbs.gov.sc took (16.15s), and www.sbc.sc took (11.86s) on CWS.
- On static browsing, Kepler Webpage took (3.93s), and Kepler Mobile took (1.68s) on Airtel.
- On static browsing, Kepler Webpage took (4.41s), and Kepler Mobile took (2.67s) on CWS.
- YouTube average resolution in Airtel is (976.12) pixels.
- YouTube average resolution in CWS is (1045.24) pixels.
- Airtel scored 61.76% in Carrier Aggregation (CA).
- CWS scored 48.35% in Carrier Aggregation (CA).

3G Preferred Data Test Findings:

- Airtel SFTP DL is (5.69 Mbps), while SFTP UL is (2.04 Mbps), CWS SFTP DL is (3.49 Mbps), while SFTP UL is (1.01 Mbps)
- Airtel HTTP DL is (4.91 Mbps), HTTP Capacity DL is (7.02 Mbps) ,HTTP UL is (3.03 Mbps) , and HTTP Capacity UL is (5.62 Mbps).
- CWS HTTP DL is (3.31 Mbps), HTTP Capacity DL is (5.34 Mbps) ,HTTP UL is (1.63 Mbps) , and HTTP Capacity UL is (4.62 Mbps).
- On live web page testing for browsing, www.shein.com took (9.46s), www.nbs.gov.sc took (10.70s), and www.sbc.sc took (9.88s) on Airtel.
- On live web page testing for browsing, www.shein.com took (10.35s), www.nbs.gov.sc took (8.20s), and www.sbc.sc took (9.71s) on CWS.
- On static browsing, Kepler Webpage took (3.29s), and Kepler Mobile took (1.50s) on Airtel.
- On static browsing, Kepler Webpage took (5.28s), and Kepler Mobile took (2.35s) on CWS.
- YouTube average resolution in Airtel is (1036.43) pixels.
- YouTube average resolution in CWS is (987.95) pixels.

DRIVE TEST KPI STATISTICS

DATA Scenario		3G Preferred				4G Preferred			
		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	5.69	3.49	1	2	6.10	7.23	2	1
	SFTP UL(Mbps)	2.04	1.01	1	2	6.27	2.34	1	2
	HTTP DL(Mbps)	4.91	3.31	1	2	10.22	8.33	1	2
	HTTP UL(Mbps)	3.03	1.63	1	2	9.62	3.46	1	2
	HTTP Capacity DL(Mbps)	7.02	5.34	1	2	7.83	16.31	2	1
	HTTP Capacity UL(Mbps)	5.62	4.62	1	2	14.12	8.89	1	2
BROWSER	Overall Browser DL Time (s)	7.06	7.26	1	2	9.31	8.47	2	1
	Kepler Webpage DL Time (s)	3.29	5.28	1	2	3.93	4.41	1	2
	Mobile Kepler Webpage DL Time (s)	1.50	2.35	1	2	1.68	2.67	1	2
	www.shein.com Webpage DL Time (s)	9.46	10.35	1	2	7.47	6.75	2	1
	www.nbs.gov.sc Webpage DL Time (s)	10.70	8.20	2	1	17.38	16.15	2	1
	www.sbc.sc Webpage DL Time (s)	9.88	9.71	2	1	15.48	11.86	2	1
LATENCY	Avg Latency (ms)	272.33	182.41	2	1	256.23	172.44	2	1
	Median Latency (ms)	393	141	2	1	144	181	1	2
YOUTUBE	YouTube Access Time (s)	3.15	2.39	2	1	5.61	1.64	2	1
	YouTube Average Resolution (pixels)	1036.43	987.95	1	2	976.12	1045.24	2	1
	YouTube Success Ratio [%]	100.00	80.00	1	2	100.00	100.00	1	1

4G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	12	11	100.00	91.67
	Failure	0	1	0.00	8.33
HTTP DL	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	11	11	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	11	10	100.00	90.91
	Failure	0	1	0.00	9.09

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	6.10	7.23	2	1
	SFTP UL(Mbps)	6.27	2.34	1	2
	HTTP DL(Mbps)	10.22	8.33	1	2
	HTTP UL(Mbps)	9.62	3.46	1	2
	HTTP Capacity DL(Mbps)	7.83	16.31	2	1
	HTTP Capacity UL(Mbps)	14.12	8.89	1	2

4G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	10	11	90.91	100.00
	Failure	1	0	9.09	0.00
Mobile Kepler	Success	10	10	90.91	100.00
	Failure	1	0	9.09	0.00
www.shein.com	Success	11	11	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	11	11	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	10	11	90.91	100.00
	Failure	1	0	9.09	0.00

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
BROWSER	Overall Browser DL Time (s)	9.31	8.47	2	1
	Kepler Webpage DL Time (s)	3.93	4.41	1	2
	Mobile Kepler Webpage DL Time (s)	1.68	2.67	1	2
	www.shein.com Webpage DL Time (s)	7.47	6.75	2	1
	www.nbs.gov.sc Webpage DL Time (s)	17.38	16.15	2	1
	www.sbc.sc Webpage DL Time (s)	15.48	11.86	2	1

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	23	22
	Average Latency [ms]	248.83	174.50
	Median Latency [ms]	137	176
	Ping session status: Successful	23	22
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
www.google.com	Average Latency [ms]	387.09	147.64
	Median Latency [ms]	388	145
	Ping session status: Successful	11	11
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	122.08	201.36
	Median Latency [ms]	120	202
	Ping session status: Successful	12	11
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00

Latency 250ms

LTE YOUTUBE Success Ratio		
KPIs	Airtel Data 4G	CWS Data 4G
Attempt(Count)	12	11
Success(Count)	12	11
Failure(Count)	0	0
YouTube Access Time (s)	5.61	1.64
YouTube Average Resolution (pixels)	976.12	1045.24
YouTube Success Ratio [%]	100.00	100.00

3G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	11	9	100.00	90.00
	Failure	0	1	0.00	10.00
HTTP DL	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	11	7	100.00	70.00
	Failure	0	3	0.00	30.00
HTTP Capacity DL	Success	10	9	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	10	9	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	5.69	3.49	1	2
	SFTP UL(Mbps)	2.04	1.01	1	2
	HTTP DL(Mbps)	4.91	3.31	1	2
	HTTP UL(Mbps)	3.03	1.63	1	2
	HTTP Capacity DL(Mbps)	7.02	5.34	1	2
	HTTP Capacity UL(Mbps)	5.62	4.62	1	2

3G PREFERRED BROWSING COMPARISON

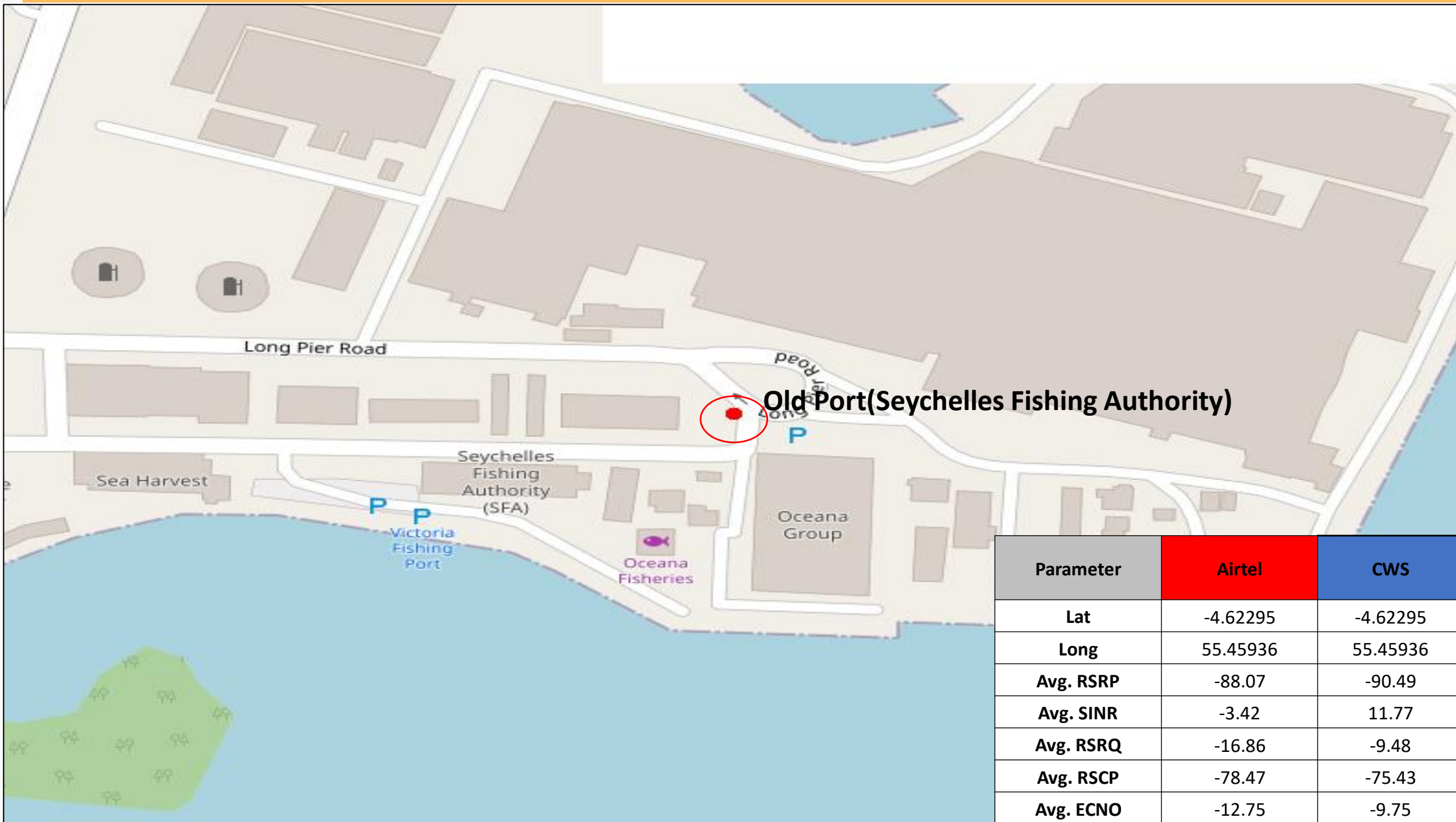
Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kepler	Success	11	9	100.00	100.00
	Failure	0	0	0.00	0.00
Mobile Kepler	Success	10	9	100.00	90.00
	Failure	0	1	0.00	10.00
www.shein.com	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	11	9	100.00	90.00
	Failure	0	1	0.00	10.00

DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
BROWSER	Overall Browser DL Time (s)	7.06	7.26	1	2
	Kepler Webpage DL Time (s)	3.29	5.28	1	2
	Mobile Kepler Webpage DL Time (s)	1.50	2.35	1	2
	www.shein.com Webpage DL Time (s)	9.46	10.35	1	2
	www.nbs.gov.sc Webpage DL Time (s)	10.70	8.20	2	1
	www.sbc.sc Webpage DL Time (s)	9.88	9.71	2	1

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	15	18
	Average Latency [ms]	320.20	172.50
	Median Latency [ms]	410	159
	Ping session status: Successful	15	18
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	5	0
	Packet Loss<1%	25.00	0.00
www.google.com	Average Latency [ms]	417.30	143.10
	Median Latency [ms]	418	139
	Ping session status: Successful	10	10
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	126.00	209.25
	Median Latency [ms]	132	211
	Ping session status: Successful	5	8
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	5	0
	Packet Loss<1%	50.00	0.00

UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	10	10
Success(Count)	10	8
Failure(Count)	0	2
YouTube Access Time (s)	3.15	2.39
YouTube Average Resolution (pixels)	1036.43	987.95
YouTube Success Ratio [%]	100.00	80.00

Static Point Location 2 - Old Port(Seychelles Fishing Authority)



Parameter	Airtel	CWS
Lat	-4.62295	-4.62295
Long	55.45936	55.45936
Avg. RSRP	-88.07	-90.49
Avg. SINR	-3.42	11.77
Avg. RSRQ	-16.86	-9.48
Avg. RSCP	-78.47	-75.43
Avg. ECNO	-12.75	-9.75

4G Preferred Data Findings:

- Airtel SFTP DL is (0.57 Mbps), while SFTP UL is (2.53 Mbps), CWS SFTP DL is (7.37 Mbps), while SFTP UL is (2.66 Mbps)
- Airtel HTTP DL is (1.02 Mbps), HTTP Capacity DL is (1.03 Mbps) ,HTTP UL is (5.02 Mbps) , and HTTP Capacity UL is (10.60 Mbps).
- CWS HTTP DL is (9.52 Mbps), HTTP Capacity DL is (29.45 Mbps) ,HTTP UL is (3.58 Mbps) , and HTTP Capacity UL is (9.33 Mbps).
- On live web page testing for browsing, www.shein.com took (11.10s), www.nbs.gov.sc took (21.90s), and www.sbc.sc took (31.46s) on Airtel.
- On live web page testing for browsing, www.shein.com took (6.08s), www.nbs.gov.sc took (14.96s), and www.sbc.sc took (14.04s) on CWS.
- On static browsing, Kepler Webpage took (4.30s), and Kepler Mobile took (1.96s) on Airtel.
- On static browsing, Kepler Webpage took (4.36s), and Kepler Mobile took (3.12s) on CWS.
- YouTube average resolution in Airtel is (606.33) pixels.
- YouTube average resolution in CWS is (1047.27) pixels.
- Airtel scored 38.13% in Carrier Aggregation (CA).
- CWS scored 100.00% in Carrier Aggregation (CA).

3G Preferred Data Test Findings:

- Airtel SFTP DL is (3.31 Mbps), while SFTP UL is (1.88 Mbps), CWS SFTP DL is (4.12 Mbps), while SFTP UL is (1.00 Mbps)
- Airtel HTTP DL is (2.89 Mbps), HTTP Capacity DL is (3.88 Mbps) ,HTTP UL is (2.96 Mbps) , and HTTP Capacity UL is (13.45 Mbps).
- CWS HTTP DL is (3.05 Mbps), HTTP Capacity DL is (7.59 Mbps) ,HTTP UL is (1.19 Mbps) , and HTTP Capacity UL is (3.79 Mbps).
- On live web page testing for browsing, www.shein.com took (13.62s), www.nbs.gov.sc took (11.78s), and www.sbc.sc took (25.16s) on Airtel.
- On live web page testing for browsing, www.shein.com took (9.72s), www.nbs.gov.sc took (10.43s), and www.sbc.sc took (13.18s) on CWS.
- On static browsing, Kepler Webpage took (4.68s), and Kepler Mobile took (1.07s) on Airtel.
- On static browsing, Kepler Webpage took (7.65s), and Kepler Mobile took (3.88s) on CWS.
- YouTube average resolution in Airtel is (941.20) pixels.
- YouTube average resolution in CWS is (1021.58) pixels.

DRIVE TEST KPI STATISTICS

DATA Scenario		3G Preferred				4G Preferred			
		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	3.31	4.12	2	1	0.57	7.37	2	1
	SFTP UL(Mbps)	1.88	1.00	1	2	2.53	2.66	2	1
	HTTP DL(Mbps)	2.89	3.05	2	1	1.02	9.52	2	1
	HTTP UL(Mbps)	2.96	1.19	1	2	5.02	3.58	1	2
	HTTP Capacity DL(Mbps)	3.38	7.59	2	1	1.03	29.45	2	1
	HTTP Capacity UL(Mbps)	13.45	3.79	1	2	10.60	9.33	1	2
BROWSER	Overall Browser DL Time (s)	10.19	8.86	2	1	12.85	8.50	2	1
	Kepler Webpage DL Time (s)	4.68	7.65	1	2	4.30	4.36	1	2
	Mobile Kepler Webpage DL Time (s)	1.70	3.38	1	2	1.96	3.12	1	2
	www.shein.com Webpage DL Time (s)	13.62	9.72	2	1	11.10	6.08	2	1
	www.nbs.gov.sc Webpage DL Time (s)	11.78	10.43	2	1	21.90	14.96	2	1
	www.sbc.sc Webpage DL Time (s)	25.16	13.18	2	1	31.46	14.04	2	1
LATENCY	Avg Latency (ms)	287.68	190.82	2	1	318.76	178.53	2	1
	Median Latency (ms)	397	196	2	1	402	192	2	1
YOUTUBE	YouTube Access Time (s)	4.10	1.88	2	1	9.62	1.49	2	1
	YouTube Average Resolution (pixels)	941.20	1021.58	2	1	606.33	1047.27	2	1
	YouTube Success Ratio [%]	100.00	80.00	1	2	100.00	100.00	1	1

4G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	5	13	71.43	100.00
	Failure	2	0	28.57	0.00
SFTP UL	Success	8	13	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	5	12	62.50	100.00
	Failure	3	0	37.50	0.00
HTTP UL	Success	8	12	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	8	12	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	8	12	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	0.57	7.37	2	1
	SFTP UL(Mbps)	2.53	2.66	2	1
	HTTP DL(Mbps)	1.02	9.52	2	1
	HTTP UL(Mbps)	5.02	3.58	1	2
	HTTP Capacity DL(Mbps)	1.03	29.45	2	1
	HTTP Capacity UL(Mbps)	10.60	9.33	1	2

4G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	1	12	11.11	100.00
	Failure	8	0	88.89	0.00
Mobile Kepler	Success	8	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	8	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	8	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	2	12	25.00	100.00
	Failure	6	0	75.00	0.00

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
BROWSER	Overall Browser DL Time (s)	12.85	8.50	2	1
	Kepler Webpage DL Time (s)	4.30	4.36	1	2
	Mobile Kepler Webpage DL Time (s)	1.96	3.12	1	2
	www.shein.com Webpage DL Time (s)	11.10	6.08	2	1
	www.nbs.gov.sc Webpage DL Time (s)	21.90	14.96	2	1
	www.sbc.sc Webpage DL Time (s)	31.46	14.04	2	1

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	14	24
	Average Latency [ms]	353.64	178.21
	Median Latency [ms]	404	178
	Ping session status: Successful	14	24
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	2	0
	Packet Loss<1%	12.50	0.00
www.google.com	Average Latency [ms]	416.38	149.25
	Median Latency [ms]	418	152
	Ping session status: Successful	8	12
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	270.00	207.17
	Median Latency [ms]	137	208
	Ping session status: Successful	6	12
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	2	0
	Packet Loss<1%	25.00	0.00

LTE YOUTUBE Success Ratio		
KPIs	Airtel Data 4G	CWS Data 4G
Attempt(Count)	8	12
Success(Count)	8	12
Failure(Count)	0	0
YouTube Access Time (s)	9.62	1.49
YouTube Average Resolution (pixels)	606.33	1047.27
YouTube Success Ratio [%]	100.00	100.00

Latency 250ms

3G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	10	7	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	10	7	100.00	87.50
	Failure	0	1	0.00	12.50
HTTP DL	Success	10	7	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	10	7	100.00	70.00
	Failure	0	3	0.00	30.00
HTTP Capacity DL	Success	10	9	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	10	7	100.00	77.78
	Failure	0	2	0.00	22.22

DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	3.31	4.12	2	1
	SFTP UL(Mbps)	1.88	1.00	1	2
	HTTP DL(Mbps)	2.89	3.05	2	1
	HTTP UL(Mbps)	2.96	1.19	1	2
	HTTP Capacity DL(Mbps)	3.38	7.59	2	1
	HTTP Capacity UL(Mbps)	13.45	3.79	1	2

3G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kepler	Success	10	8	100.00	80.00
	Failure	0	2	0.00	20.00
Mobile Kepler	Success	10	9	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	10	9	100.00	90.00
	Failure	0	1	0.00	10.00
www.nbs.gov.sc	Success	10	9	100.00	90.00
	Failure	0	1	0.00	10.00
www.sbc.sc	Success	6	9	60.00	90.00
	Failure	4	1	40.00	10.00

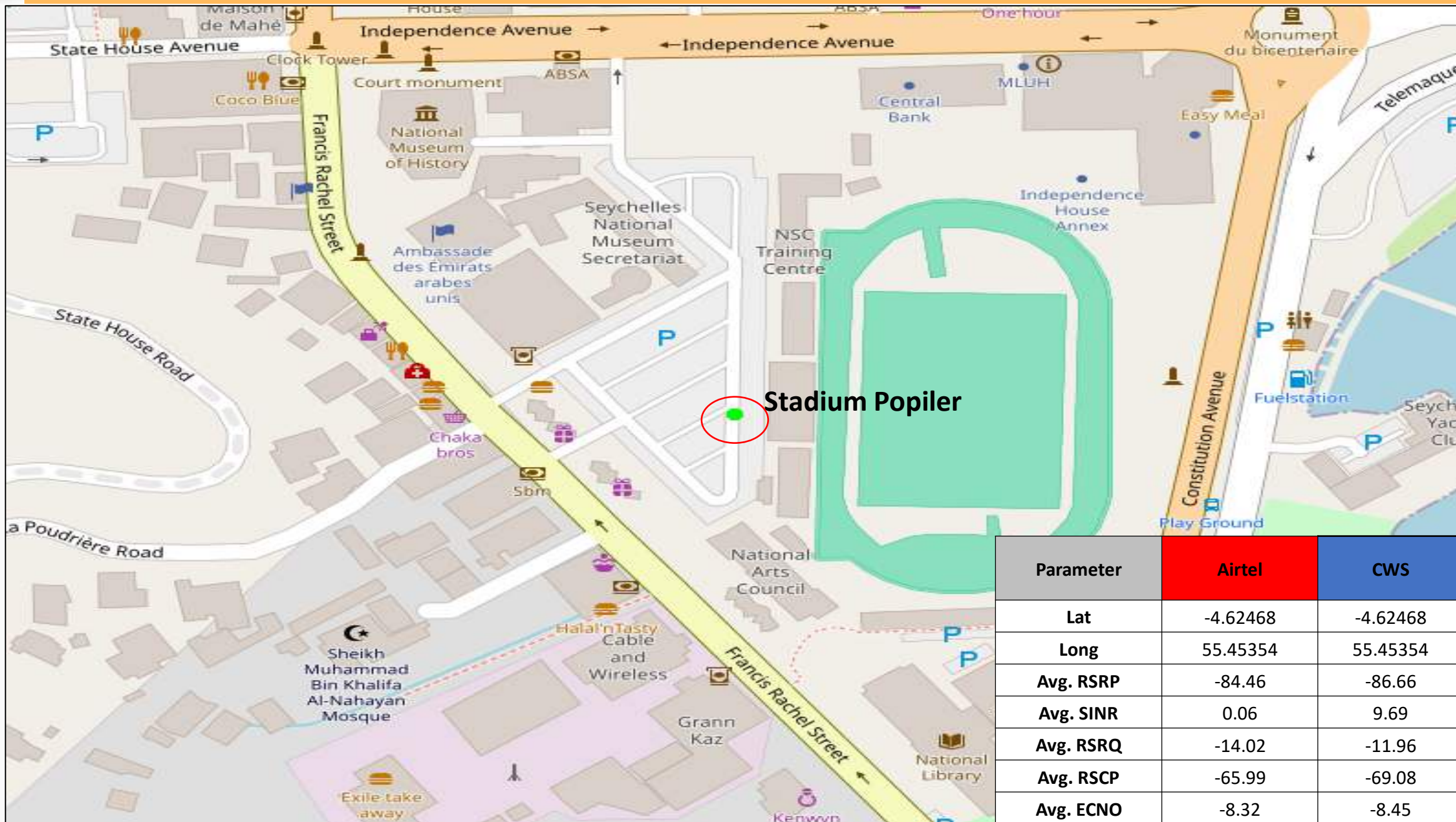
DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
BROWSER	Overall Browser DL Time (s)	10.19	8.86	2	1
	Kepler Webpage DL Time (s)	4.68	7.65	1	2
	Mobile Kepler Webpage DL Time (s)	1.70	3.38	1	2
	www.shein.com Webpage DL Time (s)	13.62	9.72	2	1
	www.nbs.gov.sc Webpage DL Time (s)	11.78	10.43	2	1
	www.sbc.sc Webpage DL Time (s)	25.16	13.18	2	1

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	16	19
	Average Latency [ms]	349.75	187.68
	Median Latency [ms]	411	197
	Ping session status: Successful	16	19
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	3	0
	Packet Loss<1%	15.79	0.00
www.google.com	Average Latency [ms]	419.40	145.11
	Median Latency [ms]	416	141
	Ping session status: Successful	10	9
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	233.67	226.00
	Median Latency [ms]	160	211
	Ping session status: Successful	6	10
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	3	0
	Packet Loss<1%	33.33	0.00

Latency 250ms

UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	10	10
Success(Count)	10	8
Failure(Count)	0	2
YouTube Access Time (s)	4.10	1.88
YouTube Average Resolution (pixels)	941.20	1021.58
YouTube Success Ratio [%]	100.00	80.00

Static Point Location 3 - Stadium Popiler



Parameter	Airtel	CWS
Lat	-4.62468	-4.62468
Long	55.45354	55.45354
Avg. RSRP	-84.46	-86.66
Avg. SINR	0.06	9.69
Avg. RSRQ	-14.02	-11.96
Avg. RSCP	-65.99	-69.08
Avg. ECNO	-8.32	-8.45

4G Preferred Data Findings:

- Airtel SFTP DL is (8.32 Mbps), while SFTP UL is (7.81 Mbps), CWS SFTP DL is (6.31 Mbps), while SFTP UL is (2.85 Mbps)
- Airtel HTTP DL is (9.24 Mbps), HTTP Capacity DL is (12.93 Mbps) ,HTTP UL is (12.11 Mbps) , and HTTP Capacity UL is (19.47 Mbps).
- CWS HTTP DL is (7.04 Mbps), HTTP Capacity DL is (14.86 Mbps) ,HTTP UL is (3.89 Mbps) , and HTTP Capacity UL is (10.12 Mbps).
- On live web page testing for browsing, www.shein.com took (6.83s), www.nbs.gov.sc took (17.32s), and www.sbc.sc took (18.13s) on Airtel.
- On live web page testing for browsing, www.shein.com took (7.56s), www.nbs.gov.sc took (15.59s), and www.sbc.sc took (15.19s) on CWS.
- On static browsing, Kepler Webpage took (4.21s), and Kepler Mobile took (1.69s) on Airtel.
- On static browsing, Kepler Webpage took (4.73s), and Kepler Mobile took (2.84s) on CWS.
- YouTube average resolution in Airtel is (1039.56) pixels.
- YouTube average resolution in CWS is (1042.32) pixels.
- Airtel scored 57.14% in Carrier Aggregation (CA).
- CWS scored 50.00% in Carrier Aggregation (CA).

3G Preferred Data Test Findings:

- **All SFTP UL tests are failing specifically with the 3G connection through the CWS operator.**
- Airtel SFTP DL is (5.23 Mbps), while SFTP UL is (1.77 Mbps), CWS SFTP DL is (3.88 Mbps), while SFTP UL is (0.00 Mbps)
- Airtel HTTP DL is (5.53 Mbps), HTTP Capacity DL is (7.77 Mbps) ,HTTP UL is (2.71 Mbps) , and HTTP Capacity UL is (4.94 Mbps).
- CWS HTTP DL is (2.79 Mbps), HTTP Capacity DL is (7.86 Mbps) ,HTTP UL is (0.80 Mbps) , and HTTP Capacity UL is (3.11 Mbps).
- On live web page testing for browsing, www.shein.com took (8.86s), www.nbs.gov.sc took (10.81s), and www.sbc.sc took (13.64s) on Airtel.
- On live web page testing for browsing, www.shein.com took (15.27s), www.nbs.gov.sc took (13.24s), and www.sbc.sc took (15.63s) on CWS.
- On static browsing, Kepler Webpage took (3.34s), and Kepler Mobile took (1.66s) on Airtel.
- On static browsing, Kepler Webpage took (10.45s), and Kepler Mobile took (3.38s) on CWS.
- YouTube average resolution in Airtel is (1040.39) pixels.
- YouTube average resolution in CWS is (928.72) pixels.

DRIVE TEST KPI STATISTICS

DATA Scenario		3G Preferred				4G Preferred			
		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	5.23	3.88	1	2	8.32	6.31	1	2
	SFTP UL(Mbps)	1.77	0.00	1	2	7.81	2.85	1	2
	HTTP DL(Mbps)	5.53	2.79	1	2	9.24	7.04	1	2
	HTTP UL(Mbps)	2.71	0.80	1	2	12.11	3.89	1	2
	HTTP Capacity DL(Mbps)	7.77	7.86	2	1	12.93	14.89	2	1
	HTTP Capacity UL(Mbps)	4.94	3.11	1	2	19.47	10.12	1	2
BROWSER	Overall Browser DL Time (s)	7.77	11.37	1	2	9.72	9.21	2	1
	Kepler Webpage DL Time (s)	3.34	10.45	1	2	4.21	4.73	1	2
	Mobile Kepler Webpage DL Time (s)	1.66	3.38	1	2	1.69	2.84	1	2
	www.shein.com Webpage DL Time (s)	8.86	15.27	1	2	6.83	7.75	1	2
	www.nbs.gov.sc Webpage DL Time (s)	10.81	13.24	1	2	17.32	15.59	2	1
	www.sbc.sc Webpage DL Time (s)	13.64	15.63	1	2	18.13	15.19	2	1
LATENCY	Avg Latency (ms)	277.04	213.01	2	1	261.82	190.80	2	1
	Median Latency (ms)	395	196	2	1	142	194	1	2
YOUTUBE	YouTube Access Time (s)	3.26	2.43	2	1	5.36	1.94	2	1
	YouTube Average Resolution (pixels)	1040.39	928.72	1	2	1039.56	1042.32	2	1
	YouTube Success Ratio [%]	100.00	66.67	1	2	100.00	100.00	1	1

4G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	13	12	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	13	12	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	13	12	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	13	12	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	8.32	6.31	1	2
	SFTP UL(Mbps)	7.81	2.85	1	2
	HTTP DL(Mbps)	9.24	7.04	1	2
	HTTP UL(Mbps)	12.11	3.89	1	2
	HTTP Capacity DL(Mbps)	12.93	14.89	2	1
	HTTP Capacity UL(Mbps)	19.47	10.12	1	2

4G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	11	12	91.67	100.00
	Failure	1	0	8.33	0.00
Mobile Kepler	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	12	12	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
BROWSER	Overall Browser DL Time (s)	9.72	9.21	2	1
	Kepler Webpage DL Time (s)	4.21	4.73	1	2
	Mobile Kepler Webpage DL Time (s)	1.69	2.84	1	2
	www.shein.com Webpage DL Time (s)	6.83	7.75	1	2
	www.nbs.gov.sc Webpage DL Time (s)	17.32	15.59	2	1
	www.sbc.sc Webpage DL Time (s)	18.13	15.19	2	1

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	25	23
	Average Latency [ms]	256.48	201.78
	Median Latency [ms]	132	198
	Ping session status: Successful	25	23
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
www.google.com	Average Latency [ms]	400.92	185.00
	Median Latency [ms]	401	160
	Ping session status: Successful	12	11
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
	102.133.176.104	Average Latency [ms]	123.15
Median Latency [ms]		122	202
Ping session status: Successful		13	12
Ping session status: Failed [Socket error]		0	0
Ping session status: Failed [Protocol error timeout]		0	0
Packet Loss<1%		0.00	0.00

LTE YOUTUBE Success Ratio		
KPIs	Airtel Data 4G	CWS Data 4G
Attempt(Count)	13	12
Success(Count)	13	12
Failure(Count)	0	0
YouTube Access Time (s)	5.36	1.94
YouTube Average Resolution (pixels)	1039.56	1042.32
YouTube Success Ratio [%]	100.00	100.00

Latency 250ms

3G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	11	2	100.00	66.67
	Failure	0	1	0.00	33.33
SFTP UL	Success	11	0	100.00	0.00
	Failure	0	4	0.00	100.00
HTTP DL	Success	11	4	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	11	2	100.00	22.22
	Failure	0	7	0.00	77.78
HTTP Capacity DL	Success	10	8	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	10	8	100.00	100.00
	Failure	0	0	0.00	0.00

DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	5.23	3.88	1	2
	SFTP UL(Mbps)	1.77	0.00	1	2
	HTTP DL(Mbps)	5.53	2.79	1	2
	HTTP UL(Mbps)	2.71	0.80	1	2
	HTTP Capacity DL(Mbps)	7.77	7.86	2	1
	HTTP Capacity UL(Mbps)	4.94	3.11	1	2

3G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kepler	Success	11	4	100.00	57.14
	Failure	0	3	0.00	42.86
Mobile Kepler	Success	10	8	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	11	7	100.00	87.50
	Failure	0	1	0.00	12.50
www.nbs.gov.sc	Success	11	8	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	11	6	100.00	75.00
	Failure	0	2	0.00	25.00

DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
BROWSER	Overall Browser DL Time (s)	7.77	11.37	1	2
	Kepler Webpage DL Time (s)	3.34	10.45	1	2
	Mobile Kepler Webpage DL Time (s)	1.66	3.38	1	2
	www.shein.com Webpage DL Time (s)	8.86	15.27	1	2
	www.nbs.gov.sc Webpage DL Time (s)	10.81	13.24	1	2
	www.sbc.sc Webpage DL Time (s)	13.64	15.63	1	2

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	11	16
	Average Latency [ms]	404.64	219.69
	Median Latency [ms]	414	182
	Ping session status: Successful	11	16
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	10	0
	Packet Loss<1%	47.62	0.00
www.google.com	Average Latency [ms]	417.90	146.00
	Median Latency [ms]	414	141
	Ping session status: Successful	10	8
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	272.00	293.38
	Median Latency [ms]	272	286
	Ping session status: Successful	1	8
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	10	0
	Packet Loss<1%	90.91	0.00

Latency 250ms

UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	11	9
Success(Count)	11	6
Failure(Count)	0	3
YouTube Access Time (s)	3.26	2.43
YouTube Average Resolution (pixels)	1040.39	928.72
YouTube Success Ratio [%]	100.00	66.67

THANKS