

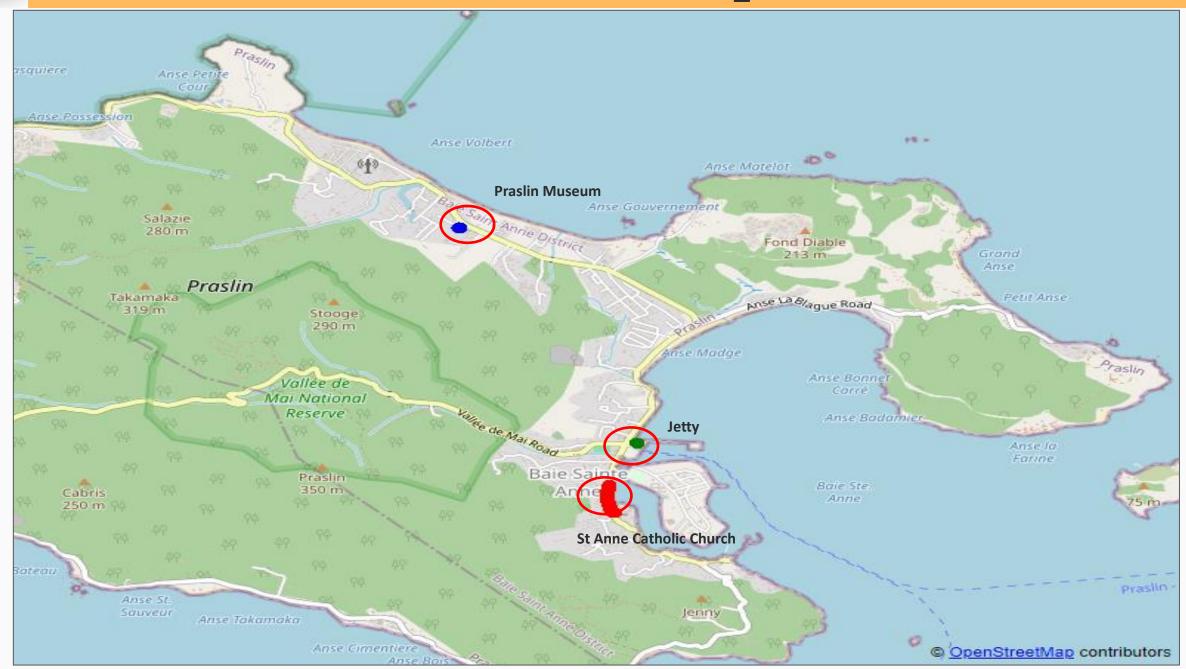


VOICE TEST METHODOLOGY

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



Static Points Location – Cluster Praslin_BaieSte-Anne





Static Point Location 1 - Praslin Museum





4G PREFERRED DATA TEST – EXECUTIVE SUMMARY

4G Preferred Data Findings:

- Airtel SFTP DL is (15.87 Mbps), while SFTP UL is (7.12 Mbps), CWS SFTP DL is (6.04 Mbps), while SFTP UL is (4.42 Mbps)
- Airtel HTTP DL is (17.61 Mbps), HTTP Capacity DL is (92.35 Mbps), HTTP UL is (11.02 Mbps), and HTTP Capacity UL is (20.35 Mbps).
- CWS HTTP DL is (6.20 Mbps), HTTP Capacity DL is (13.19 Mbps), HTTP UL is (8.26 Mbps), and HTTP Capacity UL is (20.28 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (6.12s), <u>www.nbs.gov.sc</u> took (16.67s), and <u>www.sbc.sc</u> took (14.48s) on Airtel.
- On live web page testing for browsing, <u>www.shein.com</u> took (5.30s), <u>www.nbs.gov.sc</u> took (1.52s), and <u>www.sbc.sc</u> took (13.52s) on CWS.
- On static browsing, Kepler Webpage took (3.81s), and Kepler Mobile took (1.73s) on Airtel.
- On static browsing, Kepler Webpage took (5.52s), and Kepler Mobile took (2.79s) on CWS.
- YouTube average resolution in Airtel is (1080.00) pixels.
- YouTube average resolution in CWS is (1080.00) pixels.
- Airtel scored 25.00% in Carrier Aggregation (CA).
- CWS scored 0.00% in Carrier Aggregation (CA).



3G PREFERRED DATA TEST - EXECUTIVE SUMMARY

3G Preferred Data Test Findings:

- Airtel SFTP DL is (5.67 Mbps), while SFTP UL is (2.17 Mbps), CWS SFTP DL is (5.42 Mbps), while SFTP UL is (0.87 Mbps)
- Airtel HTTP DL is (5.81 Mbps), HTTP Capacity DL is (8.26 Mbps), HTTP UL is (2.39 Mbps), and HTTP Capacity UL is (5.92 Mbps).
- CWS HTTP DL is (3.08 Mbps), HTTP Capacity DL is (17.80 Mbps), HTTP UL is (1.08 Mbps), and HTTP Capacity UL is (3.76 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (8.24s), <u>www.nbs.gov.sc</u> took (10.07s), and <u>www.sbc.sc</u> took (10.82s) on Airtel.
- On live web page testing for browsing, <u>www.shein.com</u> took (6.98s), <u>www.nbs.gov.sc</u> took (15.00s), and <u>www.sbc.sc</u> took (13.54s) on CWS.
- On static browsing, Kepler Webpage took (3.48s), and Kepler Mobile took (1.53s) on Airtel.
- On static browsing, Kepler Webpage took (8.02s), and Kepler Mobile took (2.84s) on CWS.
- YouTube average resolution in Airtel is (1080.00) pixels.
- YouTube average resolution in CWS is (1080.00) pixels.



DRIVE TEST KPI STATISTICS

		3G Preferred			4G Preferred				
DATA Scenario		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
	SFTP DL (Mbps)	5.67	5.42	1	2	15.87	6.04	1	2
&	SFTP UL(Mbps)	2.17	0.87	1	2	7.12	4.42	1	2
ANSFI	HTTP DL(Mbps)	5.81	3.08	1	2	17.61	6.20	1	2
FILE TRANSFER	HTTP UL(Mbps)	2.39	1.08	1	2	11.02	8.26	1	2
置	HTTP Capacity DL(Mbps)	8.26	17.80	2	1	92.35	13.19	1	2
	HTTP Capacity UL(Mbps)	5.92	3.76	1	2	20.35	20.28	1	2
	Overall Browser DL Time (s)	6.93	9.27	1	2	8.44	5.72	2	1
	Kepler Webpage DL Time (s)	3.48	8.02	1	2	3.81	5.52	1	2
BROWSER	Mobile Kepler Webpage DL Time (s)	1.53	2.84	1	2	1.73	2.79	1	2
BRO	www.shein.com Webpage DL Time (s)	8.24	6.98	2	1	6.12	5.30	2	1
	www.nbs.gov.sc Webpage DL Time (s)	10.07	15.00	1	2	16.67	1.52	2	1
	www.sbc.sc Webpage DL Time (s)	10.82	13.54	1	2	14.48	13.52	2	1
LATENCY	Avg Latency (ms)	270.39	199.30	2	1	257.18	270.64	1	2
LATE	Median Latency (ms)	397	175	2	1	132	229	1	2
3E	YouTube Access Time (s)	3.26	3.07	2	1	5.15	1.52	2	1
YOUTUBE	YouTube Average Resolution (pixels)	1080.00	1080.00	1	1	1080.00	1080.00	1	1
VO V	YouTube Success Ratio [%]	100.00	80.00	1	2	100.00	91.67	1	2



4G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
CETP DI	Success	13	12	100.00	100.00
SFTP DL	Failure	0	0	0.00	0.00
SFTP UL	Success	13	12	100.00	100.00
SFIP OL	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
HITPOL	Failure	0	0	0.00	0.00
HTTD Canacity DI	Success	12	11	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
HTTD Canacity III	Success	12	11	100.00	100.00
HTTP Capacity UL	Failure	0	0	0.00	0.00

	DATA Scenario	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
	SFTP DL (Mbps)	15.87	6.04	1	2
	SFTP UL(Mbps)	7.12	4.42	1	2
FILE TRANSFER	HTTP DL(Mbps)	17.61	6.20	1	2
FILE TR	HTTP UL(Mbps)	11.02	8.26	1	2
	HTTP Capacity DL(Mbps)	92.35	13.19	1	2
	HTTP Capacity UL(Mbps)	20.35	20.28	1	2



4G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Wanla	Success	13	11	100.00	100.00
Kepler	Failure	0	0	0.00	0.00
Mahila Kaulan	Success	12	11	100.00	100.00
Mobile Kepler	Failure	0	0	0.00	0.00
	Success	13	11	100.00	100.00
www.shein.com	Failure	0	0	0.00	0.00
	Success	12	11	92.31	100.00
www.nbs.gov.sc	Failure	1	0	7.69	0.00
www.sbc.sc	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)
	Overall Browser DL Time (s)	8.44	5.72	2	1
	Kepler Webpage DL Time (s)	3.81	5.52	1	2
BROWSER	Mobile Kepler Webpage DL Time (s)	1.73	2.79	1	2
	www.shein.com Webpage DL Time (s)	6.12	5.30	2	1
	www.nbs.gov.sc Webpage DL Time (s)	16.67	1.52	2	1
	www.sbc.sc Webpage DL Time (s)	14.48	13.52	2	1



4G PREFERRED LATENCY & YOUTUBE COMPARISON

	Latency KPIs	Airtel 4G	CWS 4G
	Sample Count [32 bytes]	25	23
	Average Latency [ms]	255.08	265.74
	Median Latency [ms]	132	225
Average Latency Median Latency [Ping session state Ping session state Packet Loss<1% Average Latency Median Latency [Ping session state Packet Loss<1% Average Latency Median Latency [Ping session state Packet Loss<1% Average Latency Median Latency [Ping session state Packet Loss<1% Average Latency Median Latency [Ping session state	Ping session status: Successful	25	23
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Ping session status: Failed [Socket error] Ping session status: Failed [Protocol error timeout] Packet Loss<1% Average Latency [ms] Median Latency [ms] Ping session status: Successful Ping session status: Failed [Socket error] Ping session status: Failed [Protocol error timeout]	0.00	0.00
Ping session status: Failed [Protocol error tine Packet Loss<1% Average Latency [ms] Median Latency [ms] Ping session status: Successful Ping session status: Failed [Socket error] Ping session status: Failed [Protocol error tine	Average Latency [ms]	400.92	223.45
	Median Latency [ms]	402	178
	Ping session status: Successful	12	11
	Ping session status: Failed [Socket error]	0	0
	Average Latency [ms] Median Latency [ms] Ping session status: Successful Ping session status: Failed [Socket error] Ping session status: Failed [Protocol error timeout] Packet Loss<1% Average Latency [ms] Median Latency [ms] Ping session status: Successful Ping session status: Failed [Socket error] Ping session status: Failed [Protocol error timeout] Packet Loss<1% Average Latency [ms] Median Latency [ms] Median Latency [ms] Median Latency [ms] Ping session status: Successful	0	0
		0.00	0.00
	Average Latency [ms]	120.46	304.50
	Median Latency [ms]	120	236
102.133.176.104 Ping Ping	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	11				
Failure(Count)	0	1				
YouTube Access Time (s)	5.15	1.52				
YouTube Average Resolution (pixels)	1080.00	1080.00				
YouTube Success Ratio [%]	100.00	91.67				



3G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
CETD DI	Success	10	9	100.00	100.00
SFTP DL	Failure	0	0	0.00	0.00
SFTP UL	Success	10	10	100.00	100.00
SFIPUL	Failure	0	0	0.00	0.00
HTTP DL	Success	10	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	10	8	100.00	80.00
HIIPUL	Failure	0	2	0.00	20.00
UTTD Conscitu DI	Success	9	9	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
HTTD Conneity III	Success	9	5	90.00	55.56
HTTP Capacity UL	Failure	1	4	10.00	44.44

	DATA Scenario	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
	SFTP DL (Mbps)	5.67	5.42	1	2
~	SFTP UL(Mbps)	2.17	0.87	1	2
FILE TRANSFER	HTTP DL(Mbps)	5.81	3.08	1	2
	HTTP UL(Mbps)	2.39	1.08	1	2
т.	HTTP Capacity DL(Mbps)	8.26	17.80	2	1
	HTTP Capacity UL(Mbps)	5.92	3.76	1	2



3G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Wantan.	Success	10	8	100.00	88.89
Kepler	Failure	0	1	0.00	11.11
	Success	9	8	100.00	88.89
Mobile Kepler	Failure	0	1	0.00	11.11
	Success	10	8	100.00	100.00
www.shein.com	Failure	0	0	0.00	0.00
	Success	10	8	100.00	100.00
www.nbs.gov.sc	Failure	0	0	0.00	0.00
	Success	10	8	100.00	100.00
www.sbc.sc	Failure	0	0	0.00	0.00

	DATA Scenario	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
	Overall Browser DL Time (s)	6.93	9.27	1	2
	Kepler Webpage DL Time (s)	3.48	8.02	1	2
/SER	Mobile Kepler Webpage DL Time (s)	1.53	2.84	1	2
BROWSER	www.shein.com Webpage DL Time (s)	8.24	6.98	2	1
	www.nbs.gov.sc Webpage DL Time (s)	10.07	15.00	1	2
	www.sbc.sc Webpage DL Time (s)	10.82	13.54	1	2



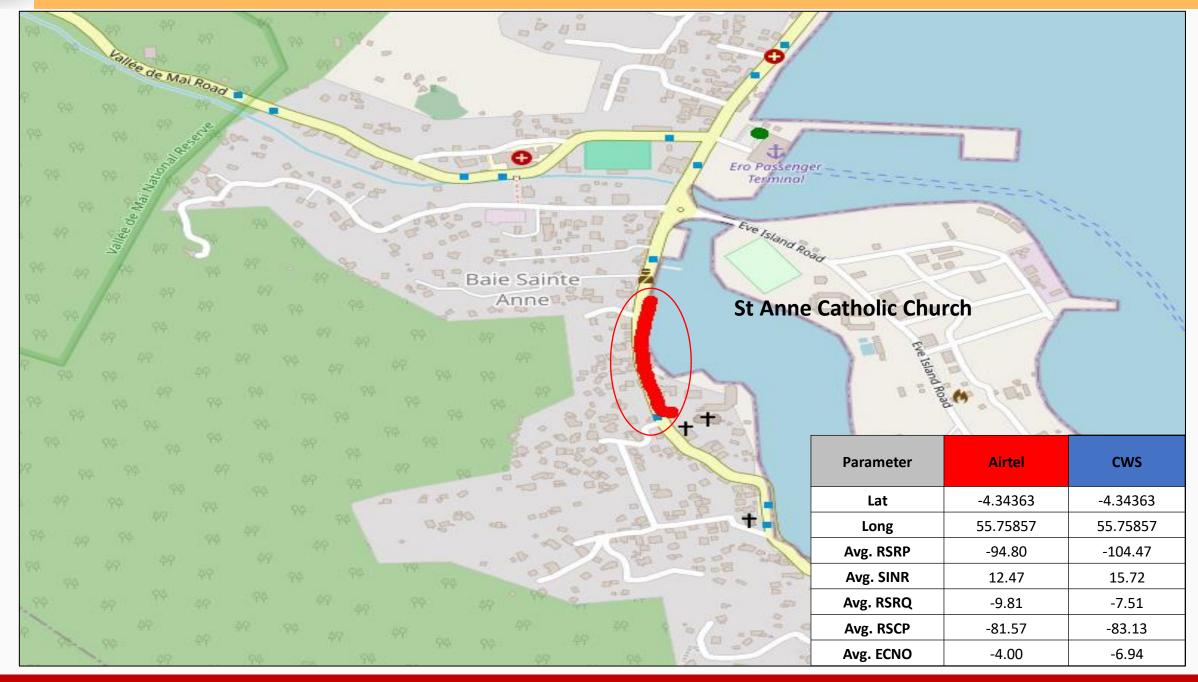
3G PREFERRED LATENCY & YOUTUBE COMPARISON

	Latency KPIs	Airtel 3G	CWS 3G
	Sample Count [32 bytes]	12	17
	Average Latency [ms]	343.25	167.53
	Median Latency [ms]	408	141
Overall Latency	Ping session status: Successful	12	17
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	7	1
	Packet Loss<1%	36.84	5.56
	Average Latency [ms]	413.67	139.33
	Median Latency [ms]	416	140
vanu google som	Ping session status: Successful	9	9
www.google.com	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
	Average Latency [ms]	132.00	199.25
	Median Latency [ms]	138	199
102.133.176.104	Ping session status: Successful	3	8
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	7	1
	Packet Loss<1%	70.00	11.11

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)	3.26	3.07				
YouTube Average Resolution (pixels)	1080.00	1080.00				
YouTube Success Ratio [%]	100.00	80.00				



Static Point Location 2 - St Anne Catholic Church





4G PREFERRED DATA TEST – EXECUTIVE SUMMARY

4G Preferred Data Findings:

- Airtel SFTP DL is (14.51 Mbps), while SFTP UL is (9.77 Mbps), CWS SFTP DL is (9.62 Mbps), while SFTP UL is (3.24 Mbps)
- Airtel HTTP DL is (19.86 Mbps), HTTP Capacity DL is (46.18 Mbps), HTTP UL is (17.68 Mbps), and HTTP Capacity UL is (38.13 Mbps).
- CWS HTTP DL is (12.75 Mbps), HTTP Capacity DL is (90.83 Mbps), HTTP UL is (4.78 Mbps), and HTTP Capacity UL is (10.74 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (5.93s), <u>www.nbs.gov.sc</u> took (17.10s), and <u>www.sbc.sc</u> took (15.18s) on Airtel.
- On live web page testing for browsing, <u>www.shein.com</u> took (4.18s), <u>www.nbs.gov.sc</u> took (14.82s), and <u>www.sbc.sc</u> took (12.10s) on CWS.
- On static browsing, Kepler Webpage took (3.91s), and Kepler Mobile took (1.59s) on Airtel.
- On static browsing, Kepler Webpage took (4.46s), and Kepler Mobile took (2.63s) on CWS.
- YouTube average resolution in Airtel is (1080.00) pixels.
- YouTube average resolution in CWS is (1080.00) pixels.
- Airtel scored 42.86% in Carrier Aggregation (CA).
- CWS scored 25.00% in Carrier Aggregation (CA).



3G PREFERRED DATA TEST - EXECUTIVE SUMMARY

3G Preferred Data Test Findings:

- Airtel SFTP DL is (7.10 Mbps), while SFTP UL is (2.03 Mbps), CWS SFTP DL is (3.48 Mbps), while SFTP UL is (1.07 Mbps)
- Airtel HTTP DL is (7.25 Mbps), HTTP Capacity DL is (11.27 Mbps), HTTP UL is (2.87 Mbps), and HTTP Capacity UL is (6.06 Mbps).
- CWS HTTP DL is (3.00 Mbps), HTTP Capacity DL is (14.37 Mbps), HTTP UL is (1.96 Mbps), and HTTP Capacity UL is (4.82 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (7.50s), <u>www.nbs.gov.sc</u> took (10.21s), and <u>www.sbc.sc</u> took (9.60s) on Airtel.
- On live web page testing for browsing, <u>www.shein.com</u> took (5.74s), <u>www.nbs.gov.sc</u> took (7.43s), and <u>www.sbc.sc</u> took (8.21s) on CWS.
- On static browsing, Kepler Webpage took (3.44s), and Kepler Mobile took (1.58s) on Airtel.
- On static browsing, Kepler Webpage took (5.23s), and Kepler Mobile took (2.29s) on CWS.
- YouTube average resolution in Airtel is (1080.00) pixels.
- YouTube average resolution in CWS is (1080.00) pixels.



DRIVE TEST KPI STATISTICS

		3G Preferred			4G Preferred				
	DATA Scenario	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
	SFTP DL (Mbps)	7.10	3.48	1	2	14.51	9.62	1	2
ER	SFTP UL(Mbps)	2.03	1.07	1	2	9.77	3.24	1	2
ANSF	HTTP DL(Mbps)	7.25	3.00	1	2	19.86	12.75	1	2
FILE TRANSFER	HTTP UL(Mbps)	2.87	1.96	1	2	17.68	4.78	1	2
ᇤ	HTTP Capacity DL(Mbps)	11.27	14.37	2	1	46.18	90.83	2	1
	HTTP Capacity UL(Mbps)	6.06	4.82	1	2	38.13	10.74	1	2
	Overall Browser DL Time (s)	7.55	14.36	1	2	9.21	10.82	1	2
	Kepler Webpage DL Time (s)	3.44	5.23	1	2	3.91	4.46	1	2
BROWSER	Mobile Kepler Webpage DL Time (s)	1.58	2.29	1	2	1.59	2.63	1	2
BROV	www.shein.com Webpage DL Time (s)	7.50	5.74	2	1	5.93	4.18	2	1
	www.nbs.gov.sc Webpage DL Time (s)	10.21	7.43	2	1	17.10	14.82	2	1
	www.sbc.sc Webpage DL Time (s)	9.60	8.21	2	1	15.18	12.10	2	1
NCY	Avg Latency (ms)	256.66	198.14	2	1	253.00	167.68	2	1
LATENCY	Median Latency (ms)	143	154	1	2	131	174	1	2
3E	YouTube Access Time (s)	3.14	1.84	2	1	5.06	1.36	2	1
YOUTUBE	YouTube Average Resolution (pixels)	1080.00	1080.00	1	1	1080.00	1080.00	1	1
YO	YouTube Success Ratio [%]	100.00	100.00	1	1	100.00	100.00	1	1



4G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	14	13	100.00	100.00
2FTP DE	Failure	0	0	0.00	0.00
SFTP UL	Success	14	13	100.00	100.00
SFIF OL	Failure	0	0	0.00	0.00
HTTP DL	Success	14	13	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	14	13	100.00	100.00
HITPOL	Failure	0	0	0.00	0.00
HTTD Canacity DI	Success	13	13	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
	Success	13	12	100.00	100.00
HTTP Capacity UL	Failure	0	0	0.00	0.00

	DATA Scenario	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
	SFTP DL (Mbps)	14.51	9.62	1	2
	SFTP UL(Mbps)	9.77	3.24	1	2
FILE TRANSFER	HTTP DL(Mbps)	19.86	12.75	1	2
FILE TR	HTTP UL(Mbps)	17.68	4.78	1	2
	HTTP Capacity DL(Mbps)	46.18	90.83	2	1
	HTTP Capacity UL(Mbps)	38.13	10.74	1	2



4G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Wanla	Success	12	11	92.31	100.00
Kepler	Failure	1	0	7.69	0.00
Mahila Kaulan	Success	13	11	100.00	100.00
Mobile Kepler	Failure	0	0	0.00	0.00
	Success	13	11	100.00	100.00
www.shein.com	Failure	0	0	0.00	0.00
	Success	13	11	100.00	100.00
www.nbs.gov.sc	Failure	0	0	0.00	0.00
www.sbc.sc	Success	13	11	100.00	100.00
	Failure	0	0	0.00	0.00

	DATA Scenario	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
	Overall Browser DL Time (s)	9.21	10.82	1	2
	Kepler Webpage DL Time (s)	3.91	4.46	1	2
OWS	Mobile Kepler Webpage DL Time (s)	1.59	2.63	1	2
	www.shein.com Webpage DL Time (s)	5.93	4.18	2	1
	www.nbs.gov.sc Webpage DL Time (s)	17.10	14.82	2	1
	www.sbc.sc Webpage DL Time (s)	15.18	12.10	2	1



4G PREFERRED LATENCY & YOUTUBE COMPARISON

	Latency KPIs	Airtel 4G	CWS 4G
	Sample Count [32 bytes]	26	26
	Average Latency [ms]	244.81	170.19
	Median Latency [ms]	137	172
Overall Latency	Ping session status: Successful	26	26
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	0
	Packet Loss<1%	3.70	0.00
	Average Latency [ms]	388.67	144.92
	Median Latency [ms]	390	146
	Ping session status: Successful	12	13
www.google.com	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	0
	Packet Loss<1%	7.69	0.00
	Average Latency [ms]	121.50	195.46
	Median Latency [ms]	120	195
102.133.176.104	Ping session status: Successful	14	13
102.133.176.104	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)	14	13				
Success(Count)	14	13				
Failure(Count)	0	0				
YouTube Access Time (s)	5.06	1.36				
YouTube Average Resolution (pixels)	1080.00	1080.00				
YouTube Success Ratio [%]	100.00	100.00				



3G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
CETD DI	Success	12	11	100.00	100.00
SFTP DL	Failure	0	0	0.00	0.00
SFTP UL	Success	12	11	100.00	100.00
SFIPUL	Failure	0	0	0.00	0.00
HTTP DL	Success	12	11	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	12	10	100.00	90.91
HITPOL	Failure	0	1	0.00	9.09
LITTE Connector DI	Success	11	11	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	11	10	100.00	100.00
	Failure	0	0	0.00	0.00

	DATA Scenario	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
	SFTP DL (Mbps)	7.10	3.48	1	2
	SFTP UL(Mbps)	2.03	1.07	1	2
FILE TRANSFER	HTTP DL(Mbps)	7.25	3.00	1	2
	HTTP UL(Mbps)	2.87	1.96	1	2
	HTTP Capacity DL(Mbps)	11.27	14.37	2	1
	HTTP Capacity UL(Mbps)	6.06	4.82	1	2



3G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Wayley	Success	9	4	100.00	44.44
Kepler	Failure	0	5	0.00	55.56
Makila Kanlan	Success	9	8	100.00	100.00
Mobile Kepler	Failure	0	0	0.00	0.00
	Success	9	9	100.00	100.00
www.shein.com	Failure	0	0	0.00	0.00
	Success	10	7	100.00	87.50
www.nbs.gov.sc	Failure	0	1	0.00	12.50
www.sbc.sc	Success	10	4	100.00	50.00
	Failure	0	4	0.00	50.00

	DATA Scenario	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
	Overall Browser DL Time (s)	7.55	14.36	1	2
	Kepler Webpage DL Time (s)		5.23	1	2
VSER	Mobile Kepler Webpage DL Time (s)	1.58	2.29	1	2
BROWSER	www.shein.com Webpage DL Time (s)	7.50	5.74	2	1
	www.nbs.gov.sc Webpage DL Time (s)	10.21	7.43	2	1
	www.sbc.sc Webpage DL Time (s)	9.60	8.21	2	1



3G PREFERRED LATENCY & YOUTUBE COMPARISON

	Latency KPIs	Airtel 3G	CWS 3G
	Sample Count [32 bytes]	20	20
	Average Latency [ms]	274.00	195.40
	Median Latency [ms]	394	146
Overall Latency	Ping session status: Successful	20	20
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	3	1
	Packet Loss<1%	13.04	4.76
	Average Latency [ms]	400.36	140.00
	Median Latency [ms]	400	139
	Ping session status: Successful	11	11
www.google.com	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
	Average Latency [ms]	119.56	263.11
	Median Latency [ms]	117	202
102.133.176.104	Ping session status: Successful	9	9
102.133.176.104	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	3	1
	Packet Loss<1%	25.00	10.00

UMTS YOUTUBE Success Ratio						
KPIs	Airtel 3G	CWS 3G				
Attempt(Count)	12	11				
Success(Count)	12	11				
Failure(Count)	0	0				
YouTube Access Time (s)	3.14	1.84				
YouTube Average Resolution (pixels)	1080.00	1080.00				
YouTube Success Ratio [%]	100.00	100.00				



Static Point Location 3 - Jetty





4G PREFERRED DATA TEST – EXECUTIVE SUMMARY

4G Preferred Data Findings:

- Airtel SFTP DL is (13.45 Mbps), while SFTP UL is (9.71 Mbps), CWS SFTP DL is (6.55 Mbps), while SFTP UL is (4.57 Mbps)
- Airtel HTTP DL is (20.00 Mbps), HTTP Capacity DL is (35.75 Mbps), HTTP UL is (18.48 Mbps), and HTTP Capacity UL is (49.70 Mbps).
- CWS HTTP DL is (7.78 Mbps), HTTP Capacity DL is (13.81 Mbps), HTTP UL is (9.96 Mbps), and HTTP Capacity UL is (41.76 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (6.00s), <u>www.nbs.gov.sc</u> took (17.63s), and <u>www.sbc.sc</u> took (17.02s) on Airtel.
- On live web page testing for browsing, <u>www.shein.com</u> took (4.96s), <u>www.nbs.gov.sc</u> took (14.43s), and <u>www.sbc.sc</u> took (12.28s) on CWS.
- On static browsing, Kepler Webpage took (4.04s), and Kepler Mobile took (1.67s) on Airtel.
- On static browsing, Kepler Webpage took (4.45s), and Kepler Mobile took (2.64s) on CWS.
- YouTube average resolution in Airtel is (1080.00) pixels.
- YouTube average resolution in CWS is (1080.00) pixels.
- Airtel scored 100.00% in Carrier Aggregation (CA).
- CWS scored 0.00% in Carrier Aggregation (CA).



3G PREFERRED DATA TEST - EXECUTIVE SUMMARY

3G Preferred Data Test Findings:

- Airtel SFTP DL is (6.75 Mbps), while SFTP UL is (2.25 Mbps), CWS SFTP DL is (3.49 Mbps), while SFTP UL is (1.22 Mbps)
- Airtel HTTP DL is (6.41 Mbps), HTTP Capacity DL is (9.33 Mbps), HTTP UL is (3.45 Mbps), and HTTP Capacity UL is (6.27 Mbps).
- CWS HTTP DL is (3.51 Mbps), HTTP Capacity DL is (8.98 Mbps), HTTP UL is (2.26 Mbps), and HTTP Capacity UL is (4.81 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (7.38s), <u>www.nbs.gov.sc</u> took (10.40s), and <u>www.sbc.sc</u> took (9.91s) on Airtel.
- On live web page testing for browsing, <u>www.shein.com</u> took (5.98s), <u>www.nbs.gov.sc</u> took (6.25s), and <u>www.sbc.sc</u> took (9.18s) on CWS.
- On static browsing, Kepler Webpage took (3.40s), and Kepler Mobile took (1.58s) on Airtel.
- On static browsing, Kepler Webpage took (4.97s), and Kepler Mobile took (2.34s) on CWS.
- YouTube average resolution in Airtel is (1080.00) pixels.
- YouTube average resolution in CWS is (1080.00) pixels.



DRIVE TEST KPI STATISTICS

		3G Preferred				4G Preferred			
	DATA Scenario	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
	SFTP DL (Mbps)	6.75	3.49	1	2	13.45	6.55	1	2
&	SFTP UL(Mbps)	2.25	1.22	1	2	9.71	4.57	1	2
ANSFI	HTTP DL(Mbps)	6.41	3.51	1	2	20.00	7.78	1	2
FILE TRANSFER	HTTP UL(Mbps)	3.45	2.26	1	2	18.48	9.96	1	2
€	HTTP Capacity DL(Mbps)	9.33	8.98	1	2	35.75	13.81	1	2
	HTTP Capacity UL(Mbps)	6.27	4.81	1	2	49.70	41.76	1	2
	Overall Browser DL Time (s)	6.53	5.69	2	1	9.34	7.75	2	1
	Kepler Webpage DL Time (s)	3.40	4.97	1	2	4.04	4.45	1	2
BROWSER	Mobile Kepler Webpage DL Time (s)	1.58	2.34	1	2	1.67	2.64	1	2
BRO	www.shein.com Webpage DL Time (s)	7.38	5.98	2	1	6.00	4.96	2	1
	www.nbs.gov.sc Webpage DL Time (s)	10.40	6.25	2	1	17.63	14.43	2	1
	www.sbc.sc Webpage DL Time (s)	9.91	9.18	2	1	17.02	12.28	2	1
NCY	Avg Latency (ms)	255.31	182.10	2	1	256.98	168.34	2	1
LATENCY	Median Latency (ms)	134	155	1	2	133	190	1	2
BE	YouTube Access Time (s)	3.25	1.92	2	1	5.20	1.61	2	1
YOUTUBE	YouTube Average Resolution (pixels)	1080.00	1080.00	1	1	1080.00	1080.00	1	1
) V	YouTube Success Ratio [%]	92.31	91.67	1	2	93.33	100.00	2	1



4G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
	Success	15	14	100.00	100.00
SFTP DL	Failure	0	0	0.00	0.00
SFTP UL	Success	15	14	100.00	100.00
SFIP OL	Failure	0	0	0.00	0.00
	Success	15	14	100.00	100.00
HTTP DL	Failure	0	0	0.00	0.00
HTTP UL	Success	15	14	100.00	100.00
HIIPOL	Failure	0	0	0.00	0.00
HTTD Canacity DI	Success	14	13	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
HTTD Canacity III	Success	14	13	100.00	100.00
HTTP Capacity UL	Failure	0	0	0.00	0.00

	DATA Scenario	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
	SFTP DL (Mbps)	13.45	6.55	1	2
	SFTP UL(Mbps)	9.71	4.57	1	2
ANSFER	HTTP DL(Mbps)	20.00	7.78	1	2
FILE TRANSFER	HTTP UL(Mbps)	18.48	9.96	1	2
	HTTP Capacity DL(Mbps)	35.75	13.81	1	2
	HTTP Capacity UL(Mbps)	49.70	41.76	1	2



4G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Wandari	Success	13	14	92.86	100.00
Kepler	Failure	1	0	7.14	0.00
Mahila Kanlar	Success	14	13	100.00	100.00
Mobile Kepler	Failure	0	0	0.00	0.00
www.shein.com	Success	14	14	100.00	100.00
www.snein.com	Failure	0	0	0.00	0.00
	Success	14	14	100.00	100.00
www.nbs.gov.sc	Failure	0	0	0.00	0.00
www.sbc.sc	Success	14	13	100.00	100.00
	Failure	0	0	0.00	0.00

	DATA Scenario	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
	Overall Browser DL Time (s)	9.34	7.75	2	1
	Kepler Webpage DL Time (s)	4.04	4.45	1	2
VSER	Mobile Kepler Webpage DL Time (s)	1.67	2.64	1	2
BROWSER	www.shein.com Webpage DL Time (s)	6.00	4.96	2	1
	www.nbs.gov.sc Webpage DL Time (s)	17.63	14.43	2	1
	www.sbc.sc Webpage DL Time (s)	17.02	12.28	2	1



4G PREFERRED LATENCY & YOUTUBE COMPARISON

	Latency KPIs	Airtel 4G	CWS 4G
	Sample Count [32 bytes]	29	27
	Average Latency [ms]	259.17	172.30
	Median Latency [ms]	134	189
Overall Latency	Ping session status: Successful	29	27
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
	Average Latency [ms]	404.14	148.00
	Median Latency [ms]	405	146
ununu googlo com	Ping session status: Successful	14	13
www.google.com	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
	Average Latency [ms]	123.87	194.86
	Median Latency [ms]	125	195
102.133.176.104	Ping session status: Successful	15	14
102.133.176.104	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)	15	14				
Success(Count)	14	14				
Failure(Count)	2	2				
YouTube Access Time (s)	5.20	1.61				
YouTube Average Resolution (pixels)	1080.00	1080.00				
YouTube Success Ratio [%]	93.33	100.00				



3G PREFERRED THROUGHPUT COMPARISON

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	13	11	100.00	100.00
2FIP DE	Failure	0	0	0.00	0.00
SFTP UL	Success	13	11	100.00	91.67
SFIPUL	Failure	0	1	0.00	8.33
	Success	13	12	100.00	100.00
HTTP DL	Failure	0	0	0.00	0.00
HTTP UL	Success	13	11	100.00	91.67
HITPOL	Failure	0	1	0.00	8.33
LITTE Connector DI	Success	12	11	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
LITTE Composite LIII	Success	12	10	100.00	90.91
HTTP Capacity UL	Failure	0	1	0.00	9.09

	DATA Scenario	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
	SFTP DL (Mbps)	6.75	3.49	1	2
	SFTP UL(Mbps)	2.25	1.22	1	2
ANSFER	HTTP DL(Mbps)	6.41	3.51	1	2
FILE TRANSFER	HTTP UL(Mbps)	3.45	2.26	1	2
	HTTP Capacity DL(Mbps)	9.33	8.98	1	2
	HTTP Capacity UL(Mbps)	6.27	4.81	1	2



3G PREFERRED BROWSING COMPARISON

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Wanda	Success	13	11	100.00	100.00
Kepler	Failure	0	0	0.00	0.00
Mobile Kepler	Success	13	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	13	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	13	12	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	13	11	100.00	100.00
	Failure	0	0	0.00	0.00

	DATA Scenario	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
BROWSER	Overall Browser DL Time (s)	6.53	5.69	2	1
	Kepler Webpage DL Time (s)	3.40	4.97	1	2
	Mobile Kepler Webpage DL Time (s)	1.58	2.34	1	2
	www.shein.com Webpage DL Time (s)	7.38	5.98	2	1
	www.nbs.gov.sc Webpage DL Time (s)	10.40	6.25	2	1
	www.sbc.sc Webpage DL Time (s)	9.91	9.18	2	1



3G PREFERRED LATENCY & YOUTUBE COMPARISON

	Latency KPIs	Airtel 3G	CWS 3G
	Sample Count [32 bytes]	24	21
Overall Latency	Average Latency [ms]	259.67	166.33
	Median Latency [ms]	259	142
	Ping session status: Successful	24	21
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	2
	Packet Loss<1%	4.00	8.70
www.google.com	Average Latency [ms]	399.58	139.58
	Median Latency [ms]	400	140
	Ping session status: Successful	12	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]	119.75	202.00
	Median Latency [ms]	121	200
	Ping session status: Successful	12	9
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	2
	Packet Loss<1%	7.69	18.18

UMTS YOUTUBE Success Ratio				
KPIs	Airtel 3G	CWS 3G		
Attempt(Count)	13	12		
Success(Count)	12	11		
Failure(Count)	1	1		
YouTube Access Time (s)	3.25	1.92		
YouTube Average Resolution (pixels)	1080.00	1080.00		
YouTube Success Ratio [%]	92.31	91.67		



THANKS