



## **DRIVE TEST ROUTE**

Phase-1 Dates- 08<sup>th</sup> Oct 2024



Route Name: Mahe

District Name: Plaisance

Region: Central

Island: Mahé

Drive Test Distance: 18.68 kms

Drive Test Duration: 00 hours,50 minutes,48 seconds

Phase-2 Dates- 21st Oct 2024



Route Name: Mahe

District Name: Plaisance

Region: Central

Island: Mahé

Drive Test Distance: 16.32 kms

Drive Test Duration: 00 hours,53 minutes,40 seconds



#### **VOICE EXECUTIVE SUMMARY**

#### Phase-1

#### **Short Call Findings:**

- The Call Setup Success Rate for Airtel is (96.77%), while for Operator CWS it is (100.00%).
- The Call Setup Time for Airtel is (6.80s), while for Operator CWS it is (7.16s)

#### **Long Call Findings:**

- The Call Retainability for Airtel is (100.00%), while for CWS it is (100.00%).
- The MOS quality observed for Airtel is (3.15), and for CWS, it is (3.21).

#### Phase-2

#### **Short Call Findings:**

- The Call Setup Success Rate for Airtel is (100.00%), while for Operator CWS it is (100.00%).
- The Call Setup Time for Airtel is (7.00s), while for Operator CWS it is (7.66s)

#### **Long Call Findings:**

- The Call Retainability for Airtel is (94.44%), while for CWS it is (100.00%).
- The MOS quality observed for Airtel is (3.10), and for CWS, it is (3.46).



#### **4G PREFERRED DATA TEST – EXECUTIVE SUMMARY**

#### Phase-1

#### **4G Preferred Data Findings:**

- Airtel SFTP DL is (12.46 Mbps), while SFTP UL is (6.01 Mbps), CWS SFTP DL is (5.53 Mbps), while
   SFTP UL is (3.15 Mbps)
- Airtel HTTP DL is (19.01 Mbps), HTTP Capacity DL is (24.56 Mbps), HTTP UL is (12.19 Mbps), and
   HTTP Capacity UL is (19.00 Mbps).
- CWS HTTP DL is (7.28 Mbps), HTTP Capacity DL is (22.48 Mbps), HTTP UL is (6.63 Mbps), and HTTP Capacity UL is (15.76 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (8.89s), <u>www.nbs.gov.sc</u> took
   (21.03s), and www.sbc.sc took (23.13s) on Airtel.
- On live web page testing for browsing, <a href="www.shein.com">www.shein.com</a> took (8.74s), <a href="www.nbs.gov.sc">www.nbs.gov.sc</a> took (16.68s), and <a href="www.sbc.sc">www.sbc.sc</a> took (17.32s) on CWS.
- On static browsing, Kepler Webpage took (3.39s), and Kepler Mobile took (2.01s) on Airtel.
- On static browsing, Kepler Webpage took (5.81s), and Kepler Mobile took (2.85s) on CWS.
- YouTube average resolution in Airtel is (1050.46) pixels.
- YouTube average resolution in CWS is (1043.27) pixels.
- Airtel scored 58.19% in Carrier Aggregation (CA).
- CWS scored 26.64% in Carrier Aggregation (CA).

#### Phase-2

#### **4G Preferred Data Findings:**

- Airtel SFTP DL is (9.85 Mbps), while SFTP UL is (5.18 Mbps), CWS SFTP DL is (4.89 Mbps), while
   SFTP UL is (4.18 Mbps)
- Airtel HTTP DL is (10.93 Mbps), HTTP Capacity DL is (21.69 Mbps), HTTP UL is (6.14 Mbps), and
   HTTP Capacity UL is (15.53 Mbps).
- CWS HTTP DL is (7.25 Mbps), HTTP Capacity DL is (21.21 Mbps), HTTP UL is (6.67 Mbps), and
   HTTP Capacity UL is (10.99 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (8.58s), <u>www.nbs.gov.sc</u> took
   (18.49s), and <u>www.sbc.sc</u> took (20.67s) on Airtel.
- On live web page testing for browsing, <a href="www.shein.com">www.shein.com</a> took (8.78s), <a href="www.nbs.gov.sc">www.nbs.gov.sc</a> took (16.98s), and <a href="www.sbc.sc">www.sbc.sc</a> took (19.22s) on CWS.
- On static browsing, Kepler Webpage took (4.45s), and Kepler Mobile took (1.90s) on Airtel.
- On static browsing, Kepler Webpage took (5.93s), and Kepler Mobile took (2.83s) on CWS.
- YouTube average resolution in Airtel is (1031.30) pixels.
- YouTube average resolution in CWS is (1037.43) pixels.
- Airtel scored 54.32% in Carrier Aggregation (CA).
- CWS scored 12.70% in Carrier Aggregation (CA).



#### **3G PREFERRED DATA TEST - EXECUTIVE SUMMARY**

#### Phase-1

#### **3G Preferred Data Test Findings:**

- Airtel SFTP DL is (5.16 Mbps), while SFTP UL is (1.85 Mbps), CWS SFTP DL is (2.97 Mbps), while
   SFTP UL is (1.03 Mbps)
- Airtel HTTP DL is (4.14 Mbps), HTTP Capacity DL is (5.69 Mbps), HTTP UL is (1.92 Mbps), and HTTP
   Capacity UL is (4.65 Mbps).
- CWS HTTP DL is (3.37 Mbps), HTTP Capacity DL is (7.08 Mbps), HTTP UL is (1.40 Mbps), and HTTP
  Capacity UL is (3.67 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (12.05s), <u>www.nbs.gov.sc</u> took
   (14.28s), and <u>www.sbc.sc</u> took (17.59s) on Airtel.
- On live web page testing for browsing, <u>www.shein.com</u> took (10.91s), <u>www.nbs.gov.sc</u> took
   (8.30s), and <u>www.sbc.sc</u> took (11.36s) on CWS.
- On static browsing, Kepler Webpage took (4.03s), and Kepler Mobile took (1.64s) on Airtel.
- On static browsing, Kepler Webpage took (5.81s), and Kepler Mobile took (2.33s) on CWS.
- YouTube average resolution in Airtel is (985.58) pixels.
- YouTube average resolution in CWS is (926.60) pixels.

#### Phase-2

#### **3G Preferred Data Test Findings:**

- Airtel SFTP DL is (4.04 Mbps), while SFTP UL is (1.83 Mbps), CWS SFTP DL is (2.76 Mbps), while SFTP UL is (1.20 Mbps)
- Airtel HTTP DL is (5.19 Mbps), HTTP Capacity DL is (5.79 Mbps), HTTP UL is (2.08 Mbps), and HTTP Capacity UL is (4.86 Mbps).
- CWS HTTP DL is (2.69 Mbps), HTTP Capacity DL is (4.36 Mbps), HTTP UL is (1.91 Mbps), and HTTP
  Capacity UL is (4.66 Mbps).
- On live web page testing for browsing, <a href="https://www.shein.com">www.shein.com</a> took (9.30s), <a href="https://www.nbs.gov.sc">www.nbs.gov.sc</a> took (15.07s), and <a href="https://www.sbc.sc">www.sbc.sc</a> took (13.80s) on Airtel.
- On live web page testing for browsing, <a href="www.shein.com">www.shein.com</a> took (11.59s), <a href="www.nbs.gov.sc">www.nbs.gov.sc</a> took (9.41s), and <a href="www.sbc.sc">www.sbc.sc</a> took (14.17s) on CWS.
- On static browsing, Kepler Webpage took (4.79s), and Kepler Mobile took (1.78s) on Airtel.
- On static browsing, Kepler Webpage took (7.51s), and Kepler Mobile took (4.18s) on CWS.
- YouTube average resolution in Airtel is (971.76) pixels.
- YouTube average resolution in CWS is (989.43) pixels.



## **TESTING METHODOLOGY**

Short Call			
Call Duration	10 Seconds		
Setup and Release phase	30 seconds		
Minimum pause between calls	30 seconds		

Long Call			
Call Duration	120 Seconds		
Setup and Release phase	30 seconds		
Minimum between calls	30 seconds		

DATA	Test Type and Timeout	Technology 3G Preferred	Technology 4G Preferred
		n. ICMP PAYLOAD PING 800 BYTES	10311110108/
1	FILE TRANSFER DOWNLOAD	FTP DL (3MB)	FTP DL (5MB)
<b>T</b>		, ,	, ,
_	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



## **VOICE TEST KPI STATISTICS (Short Call)**

#### Phase-1

<b>Short Call Statistics</b>				
Short Call Scenario	Operator 2			
Voice KPIs	Airtel	cws		
Call Attempt	62	59		
Call Failed	2	0		
Call Connected	60	59		
CSSR[%]	96.77	100.00		
USCSR[%]	3.23	0.00		
CST [s] Alerting	6.80	7.16		
CST [s]Connected	7.08	7.38		

CSSR= Call Setup Success rate
USCSR=Unsuccessful call setup ratio
CST=Call setup time
Call Setup Success Ratio >97%
CRR= Call retainability ratio
DCR=Dropped-call rate
MOS=Mean Opinion Score
Drop Call Ratio<2

Coll Satura Time (a)		Operators		Rank	
Call Setup Time (s)		Airtel	cws	Airtel	cws
Overall CST (until ringing/alerting)		6.80	7.16	1	2
CS calls CST (until ringing/alerting)		6.45	#N/A	1	#N/A
CSFB calls CST (until ringing/alerting)		6.82	7.16	1	2
Overall CST (until Connect/Connect Acknowle	edge)	7.08	7.38	1	2
CS calls CST (until Connect/Connect Acknowle	edge)	6.84	#N/A	1	#N/A
CSFB calls CST (until Connect/Connect Acknow	wledge)	7.09	7.38	1	2

Short Call Statistics				
Short Call Scenario	Operator 2			
Voice KPIs	Airtel	cws		
Call Attempt	66	65		
Call Failed	0	0		
Call Connected	66	65		
CSSR[%]	100.00	100.00		
USCSR[%]	0.00	0.00		
CST [s] Alerting	7.00	7.66		
CST [s]Connected	7.24	7.86		

Call Setup Time (s)		Operators		Rank	
		cws	Airtel	cws	
Overall CST (until ringing/alerting)	7.00	7.66	1	2	
CS calls CST (until ringing/alerting)	7.44	N/A	1	N/A	
CSFB calls CST (until ringing/alerting)	6.98	7.66	1	2	
Overall CST (until Connect/Connect Acknowledge)	7.24	7.86	1	2	
CS calls CST (until Connect/Connect Acknowledge)	7.81	N/A	1	N/A	
CSFB calls CST (until Connect/Connect Acknowledge)	7.22	7.86	1	2	



## **VOICE TEST KPI STATISTICS (Long Call)**

## Phase-1

Long Call Statistics						
Long Call Scenario Operator 1 Operator 2						
Voice KPIs	Airtel	cws				
Call Connected	18	18				
Call Dropped	0	0				
Call Completed	18	18				
CRR[%]	100.00	100.00				
DCR[%]	0.00	0.00				
MOS	3.15	3.21				

	Airtel short call	CWS short call	Airtel long call	CWS long call
CSFB Calls	58	59	18	18
CS Calls	4	0	0	0

Handover Statistics	Airtel MO	CWS MO
Handover Attempt	20	75
Handover Failure	0	1
Handover Success	20	74
HOSR %	100.00	98.67

## **Long Call Statistics**

Long Call Scenario	Operator 1	Operator 2
Voice KPIs	Airte	cws
Call Connected	18	17
Call Dropped	1	0
Call Completed	17	17
CRR[%]	94.44	100.00
DCR[%]	5.56	0.00
MOS	3.10	3.46

	Airtel short call	CWS short call	Airtel long call	CWS long call
CSFB Calls	63	65	17	16
CS Calls	3	0	1	1

Handover Statistics	Airtel MO	CWS MO
Handover Attempt	15	64
Handover Failure	3	1
Handover Success	12	63
HOSR %	80.00	98.44



# **DATA TEST KPI STATISTICS(4G Preferred)**

		Phase-1			Phase-2				
	DATA Scenario	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
	SFTP DL (Mbps)	12.46	5.53	1	2	9.85	4.89	1	2
<b>&amp;</b>	SFTP UL(Mbps)	6.01	3.15	1	2	5.18	4.18	1	2
ANSFI	HTTP DL(Mbps)	19.01	7.28	1	2	10.93	7.25	1	2
FILE TRANSFER	HTTP UL(Mbps)	12.19	6.63	1	2	6.14	6.67	2	1
臣	HTTP Capacity DL(Mbps)	24.56	22.48	1	2	21.69	12.21	1	2
	HTTP Capacity UL(Mbps)	19	15.76	1	2	15.53	10.99	1	2
	Overall Browser DL Time (s)	12.71	10.28	2	1	11.07	10.55	2	1
	Kepler Webpage DL Time (s)	3.99	5.81	1	2	4.45	5.93	1	2
BROWSER	Mobile Kepler Webpage DL Time (s)	2.01	2.85	1	2	1.90	2.83	1	2
BROV	www.shein.com Webpage DL Time (s)	8.89	8.74	2	1	8.58	8.78	1	2
	www.nbs.gov.sc Webpage DL Time (s)	21.03	16.68	2	1	18.49	16.98	2	1
	www.sbc.sc Webpage DL Time (s)	23.13	17.32	2	1	20.67	19.22	2	1
NCY	Avg Latency (ms)	257.06	310.39	1	2	267.35	206.02	2	1
LATENCY	Median Latency (ms)	140	299	1	2	152	207	1	2
3E	YouTube Access Time (s)	5.12	1.85	2	1	7.24	2.04	2	1
YOUTUBE	YouTube Average Resolution (pixels)	1050.46	1043.27	1	2	1031.30	1037.43	2	1
, AC	YouTube Success Ratio [%]	100	100	1	1	100.00	100.00	1	1



## 4G PREFERRED THROUGHPUT FILE ACCESS

### Phase-1

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
CETT DI	Success	10	10	100.00	100.00
SFTP DL	Failure	0	0	0.00	0.00
SFTP UL	Success	10	10	100.00	100.00
SFIP OL	Failure	0	0	0.00	0.00
HTTP DL	Success	10	10	100.00	100.00
HITPUL	Failure	0	0	0.00	0.00
HTTP UL	Success	10	10	100.00	100.00
HITPOL	Failure	0	0	0.00	0.00
UTTD Consoity DI	Success	8	8	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
UTTD Canacity III	Success	8	6	100.00	100.00
HTTP Capacity UL	Failure	0	0	0.00	0.00

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	9	10	90.00	100.00
SFIPDL	Failure	1	0	10.00	0.00
SFTP UL	Success	9	9	100.00	100.00
SFIF OL	Failure	0	0	0.00	0.00
HTTP DL	Success	10	10	100.00	100.00
HIIF DL	Failure	0	0	0.00	0.00
HTTP UL	Success	9	10	90.00	100.00
HIIPUL	Failure	1	0	10.00	0.00
HTTD Canacity D	Success	9	9	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
HTTD Conneith: III	Success	9	9	100.00	100.00
HTTP Capacity UL	Failure	0	0	0.00	0.00



## 4G PREFERRED BROWSING FILE ACCESS

### Phase-1

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kanlari	Success	6	9	60.00	100.00
Kepler	Failure	4	0	40.00	0.00
Mahila Kanlar	Success	8	8	100.00	100.00
Mobile Kepler	Failure	0	0	0.00	0.00
	Success	8	9	88.89	100.00
www.shein.com	Failure	1	0	11.11	0.00
	Success	9	9	100.00	100.00
www.nbs.gov.sc	Failure	0	0	0.00	0.00
www.cho.co	Success	9	8	100.00	88.89
www.sbc.sc	Failure	0	1	0.00	11.11

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Vanlar	Success	8	9	80.00	100.00
Kepler	Failure	2	0	20.00	0.00
Mahila Kanlar	Success	9	9	100.00	100.00
Mobile Kepler	Failure	0	0	0.00	0.00
www.shein.com	Success	10	9	100.00	100.00
www.snem.com	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	10	9	100.00	100.00
www.iibs.gov.sc	Failure	0	0	0.00	0.00
www.sbc.sc	Success	9	8	90.00	88.89
www.suc.sc	Failure	1	1	10.00	11.11



## **4G PREFERRED LATENCY**

## Phase-1

	Latency KPIs	Airtel 4G	CWS 4G
	Sample Count [32 bytes]	18	18
	Average Latency [ms]	257.11	298.17
	Median Latency [ms]	144	249
Overall Latency	Ping session status: Successful	18	18
	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]	420.00	255.75
	Median Latency [ms]	423	178
www.google.com	Ping session status: Successful	8	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
	Average Latency [ms]	126.80	332.10
	Median Latency [ms]	125	324
102 122 176 104	Ping session status: Successful	10	10
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

	Latency KPIs	Airtel 4G	CWS 4G
	Sample Count [32 bytes]	19	18
	Average Latency [ms]	260.79	215.44
	Median Latency [ms]	150	216
Overall Latency	Ping session status: Successful	19	18
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	1
	Packet Loss<1%	0.00	5.26
	Average Latency [ms]	405.33	184.44
	Median Latency [ms]	399	170
www.google.com	Ping session status: Successful	9	9
www.googie.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]	130.70	246.44
	Median Latency [ms]	129	231
102.133.176.104	Ping session status: Successful	10	9
102.133.170.104	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	1
	Packet Loss<1%	0.00	10.00



## **4G PREFERRED YOUTUBE COMPARISON**

### Phase-1

LTE YOUTUBE Success Ratio							
KPIs	Airtel 4G	CWS 4G					
Attempt(Count)	10	10					
Success(Count)	10	10					
Failure(Count)	0	0					
YouTube Access Time (s)	5.12	1.85					
YouTube Average Resolution (pixels)	1050.46	1043.27					
YouTube Success Ratio [%]	100.00	100.00					

LTE YOUTUBE Success Ratio							
KPIs	Airtel 4G	CWS 4G					
Attempt(Count)	10	10					
Success(Count)	10	10					
Failure(Count)	0	0					
YouTube Access Time (s)	7.24	2.04					
YouTube Average Resolution (pixels)	1031.30	1037.43					
YouTube Success Ratio [%]	100.00	100.00					



# **DATA TEST KPI STATISTICS (3G Preferred)**

		Phase-1				Phase-2			
	DATA Scenario	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
	SFTP DL (Mbps)	5.16	2.97	1	2	4.04	2.76	1	2
8	SFTP UL(Mbps)	1.85	1.03	1	2	1.83	1.20	1	2
ANSFI	HTTP DL(Mbps)	4.14	3.37	1	2	5.19	2.69	1	2
FILE TRANSFER	HTTP UL(Mbps)	1.92	1.4	1	2	2.08	1.91	1	2
분	HTTP Capacity DL(Mbps)	5.69	7.08	2	1	5.79	4.36	1	2
	HTTP Capacity UL(Mbps)	4.65	3.67	1	2	4.86	4.66	1	2
	Overall Browser DL Time (s)	9.82	3.59	2	1	8.94	9.25	1	2
	Kepler Webpage DL Time (s)	4.03	5.81	1	2	4.79	7.51	1	2
BROWSER	Mobile Kepler Webpage DL Time (s)	1.64	2.33	1	2	1.78	4.18	1	2
BROV	www.shein.com Webpage DL Time (s)	12.05	10.91	2	1	9.30	11.59	1	2
	www.nbs.gov.sc Webpage DL Time (s)	14.28	8.3	2	1	15.07	9.41	2	1
	www.sbc.sc Webpage DL Time (s)	17.59	11.36	2	1	13.80	14.17	1	2
NCY	Avg Latency (ms)	258.51	218.57	2	1	304.00	197.06	2	1
LATENCY	Median Latency (ms)	152	198	1	2	393.5	197	2	1
36	YouTube Access Time (s)	3.52	2.26	2	1	3.63	2.16	2	1
YOUTUBE	YouTube Average Resolution (pixels)	985.58	926.6	1	2	971.76	989.43	2	1
, Q	YouTube Success Ratio [%]	100	80	1	2	100.00	88.89	1	2



## **3G PREFERRED THROUGHPUT FILE ACCESS**

### Phase-1

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	10	7	100.00	87.50
SFIP DL	Failure	0	1	0.00	12.50
SFTP UL	Success	10	8	100.00	100.00
SFIP OL	Failure	0	0	0.00	0.00
	Success	10	9	100.00	90.00
HTTP DL	Failure	0	1	0.00	10.00
HTTP UL	Success	10	10	100.00	100.00
HIIPOL	Failure	0	0	0.00	0.00
LITTE Compaigns DI	Success	6	6	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
HTTD Conneith: III	Success	6	6	100.00	100.00
HTTP Capacity UL	Failure	0	0	0.00	0.00

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
CETP DI	Success	10	8	100.00	100.00
SFTP DL	Failure	0	0	0.00	0.00
CETDIU	Success	10	7	100.00	87.50
SFTP UL	Failure	0	1	0.00	12.50
HTTP DL	Success	9	8	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	9	9	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	9	8	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	9	8	100.00	100.00
	Failure	0	0	0.00	0.00



## **3G PREFERRED BROWSING FILE ACCESS**

### Phase-1

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Konlor	Success	8	6	100.00	85.71
Kepler	Failure	0	1	0.00	14.29
Mobile Kepler	Success	6	6	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	8	6	100.00	85.71
	Failure	0	1	0.00	14.29
www.nbs.gov.sc	Success	7	5	87.50	83.33
	Failure	1	1	12.50	16.67
www.sbc.sc	Success	6	5	100.00	100.00
	Failure	0	0	0.00	0.00

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kanlar	Success	9	8	100.00	100.00
Kepler	Failure	0	0	0.00	0.00
Mobile Kepler	Success	9	7	100.00	87.50
	Failure	0	1	0.00	12.50
www.shein.com	Success	8	8	88.89	100.00
	Failure	1	0	11.11	0.00
www.nbs.gov.sc	Success	9	7	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	9	6	100.00	75.00
	Failure	0	2	0.00	25.00



## **3G PREFERRED LATENCY**

## Phase-1

	Latency KPIs	Airtel 3G	CWS 3G
	Sample Count [32 bytes]	11	15
Overall Latency	Average Latency [ms]	363.55	209.13
	Median Latency [ms]	406	209
	Ping session status: Successful	11	15
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	4	1
	Packet Loss<1%	26.67	6.25
	Average Latency [ms]	417.67	158.50
	Median Latency [ms]	418	140
	Ping session status: Successful	6	6
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]	298.60	242.89
102.133.176.104	Median Latency [ms]	309	214
	Ping session status: Successful	5	9
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	4	1
Packet Loss<1%		44.44	10.00

	Latency KPIs	Airtel 3G	CWS 3G
	Sample Count [32 bytes]	16	16
	Average Latency [ms]	342.69	183.81
	Median Latency [ms]	399	197
Overall Latency	Ping session status: Successful	16	17
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	2	0
	Packet Loss<1%	11.11	0.00
	Average Latency [ms]	437.78	144.88
	Median Latency [ms]	417	141
www.google.com	Ping session status: Successful	9	8
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
102.133.176.104	Average Latency [ms]	220.43	222.75
	Median Latency [ms]	128	202
	Ping session status: Successful	7	8
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	2	0
	Packet Loss<1%	22.22	0.00



## **3G PREFERRED YOUTUBE COMPARISON**

### Phase-1

UMTS YOUTUBE Success Ratio				
KPIs	Airtel 3G	CWS 3G		
Attempt(Count)	10	10		
Success(Count)	10	9		
Failure(Count)	0	1		
YouTube Access Time (s)	3.52	2.26		
YouTube Average Resolution (pixels)	985.58	926.60		
YouTube Success Ratio [%]	100.00	80.00		

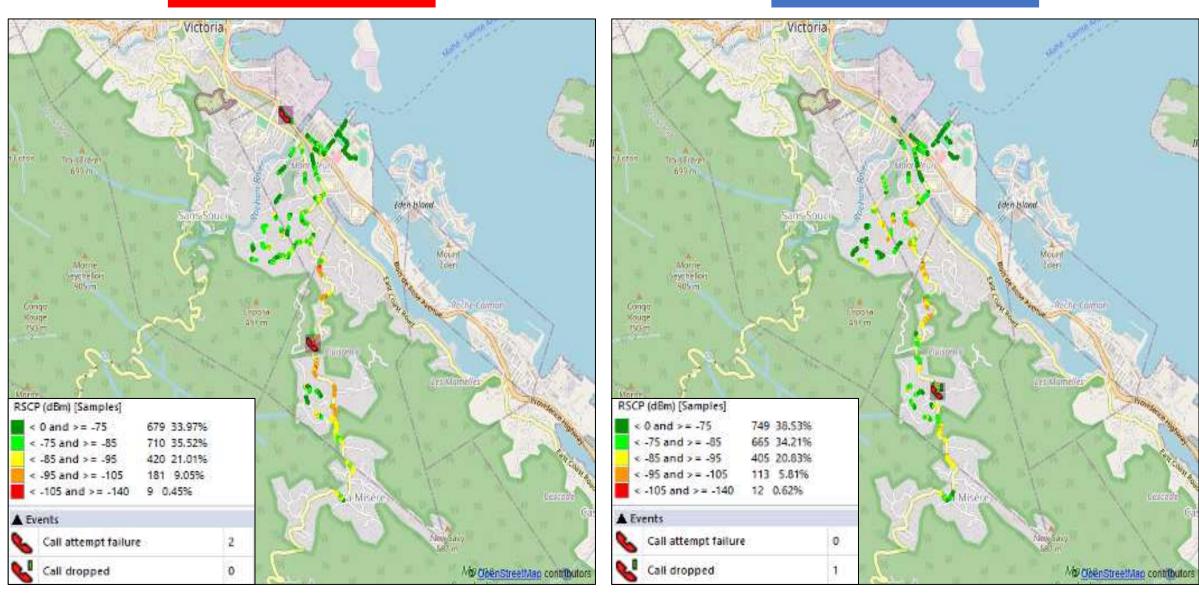
UMTS YOUTUBE Success Ratio				
KPIs	Airtel 3G	CWS 3G		
Attempt(Count)	9	9		
Success(Count)	9	8		
Failure(Count)	0	1		
YouTube Access Time (s)	3.63	2.16		
YouTube Average Resolution (pixels)	971.76	989.43		
YouTube Success Ratio [%]	100.00	88.89		



# **Voice Call Events**

### Phase-1 SHORT CALL FAILURE EVENTS LOCATION vs RSCP

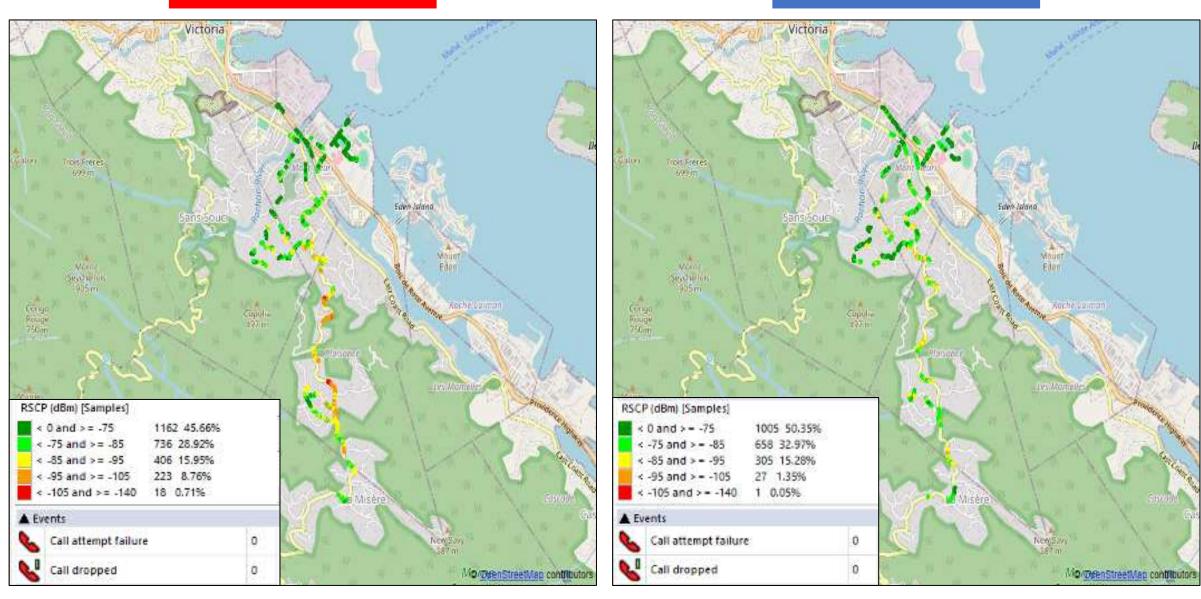
#### **Airtel SC MO**





### Phase-2 SHORT CALL FAILURE EVENTS LOCATION vs RSCP

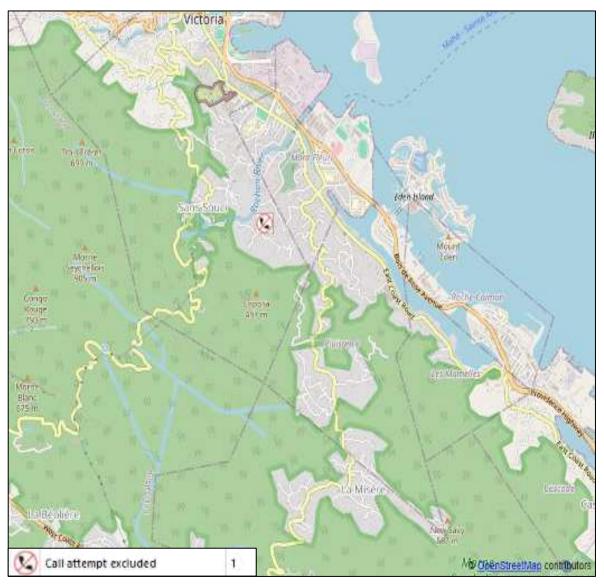
#### **Airtel SC MO**





## **Phase-1 SHORT CALL EXCLUDED EVENTS**

### **Airtel SC MO**

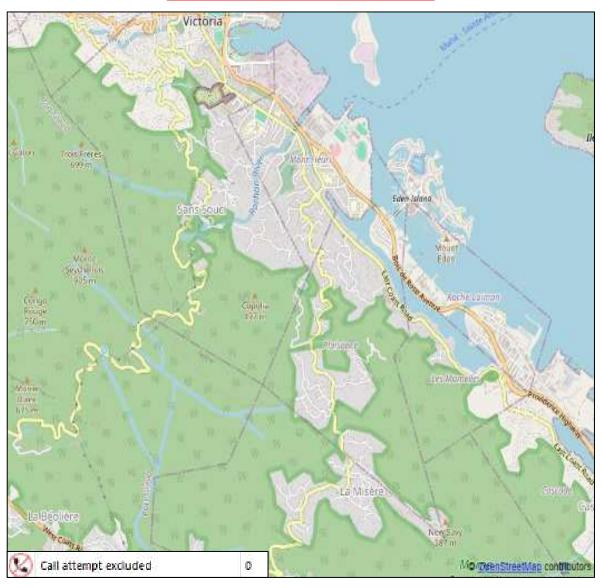


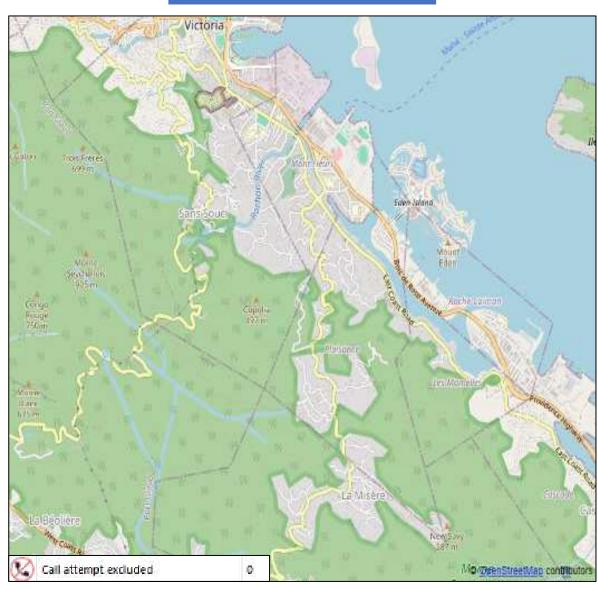




## **Phase-2 SHORT CALL EXCLUDED EVENTS**

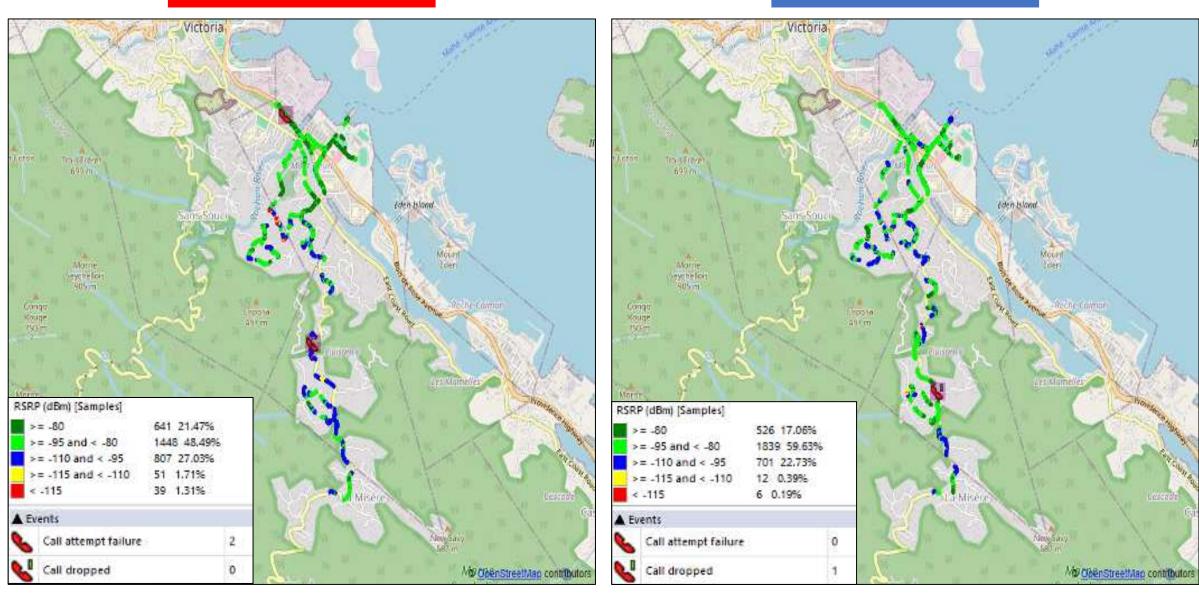
### **Airtel SC MO**





## Phase-1 SHORT CALL FAILURE EVENTS LOCATION vs RSRP

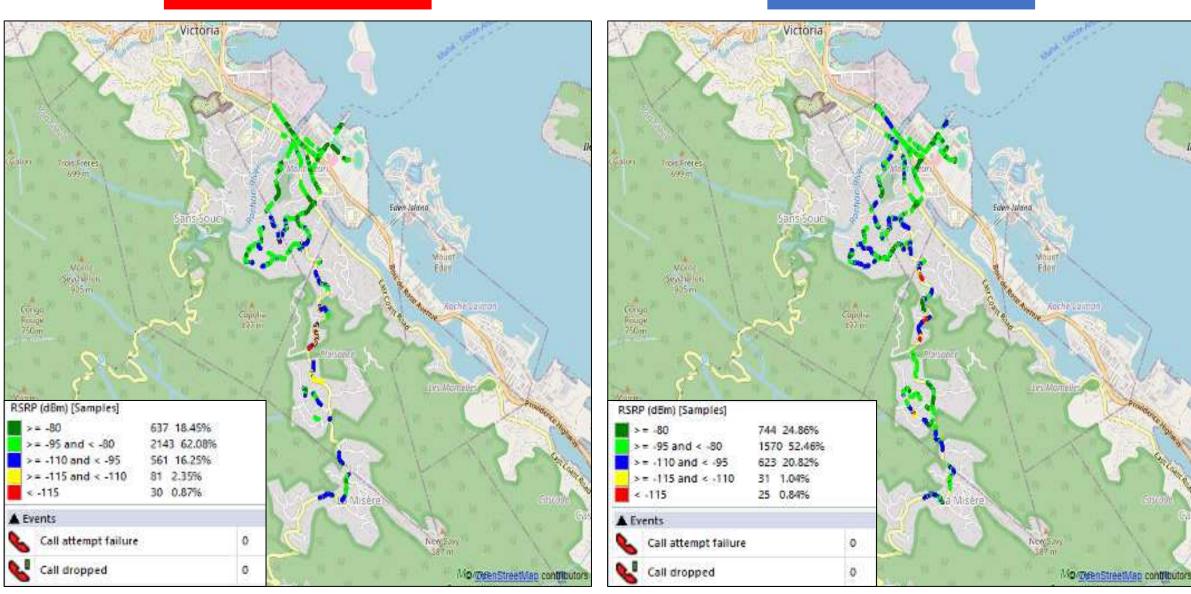
#### **Airtel SC MO**





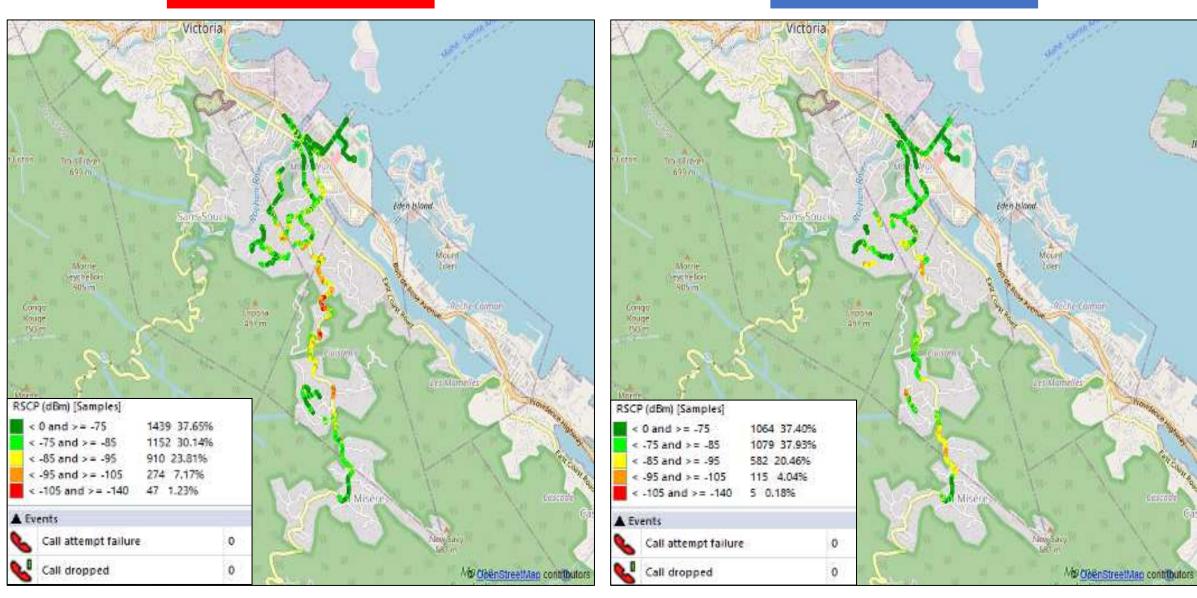
## Phase-2 SHORT CALL FAILURE EVENTS LOCATION vs RSRP

#### **Airtel SC MO**



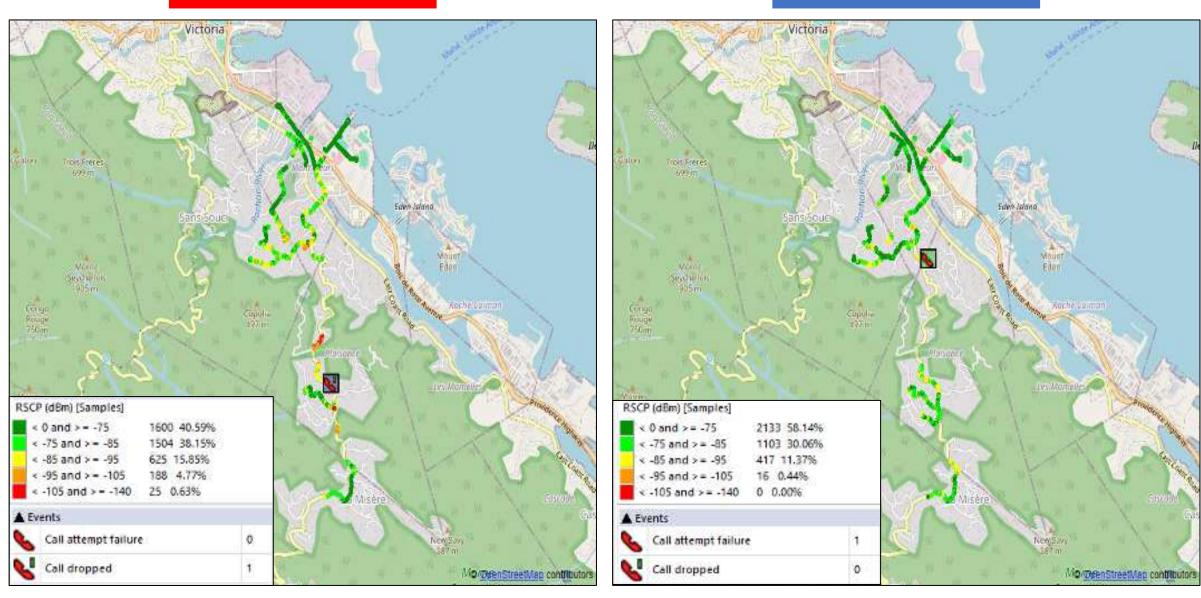
### Phase-1 LONG CALL FAILURE EVENTS LOCATION vs RSCP

#### **Airtel LC MO**



### Phase-2 LONG CALL FAILURE EVENTS LOCATION vs RSCP

#### **Airtel LC MO**





## **Phase-1 LONG CALL EXCLUDED EVENTS**

### **Airtel LC MO**







## **Phase-2 LONG CALL EXCLUDED EVENTS**

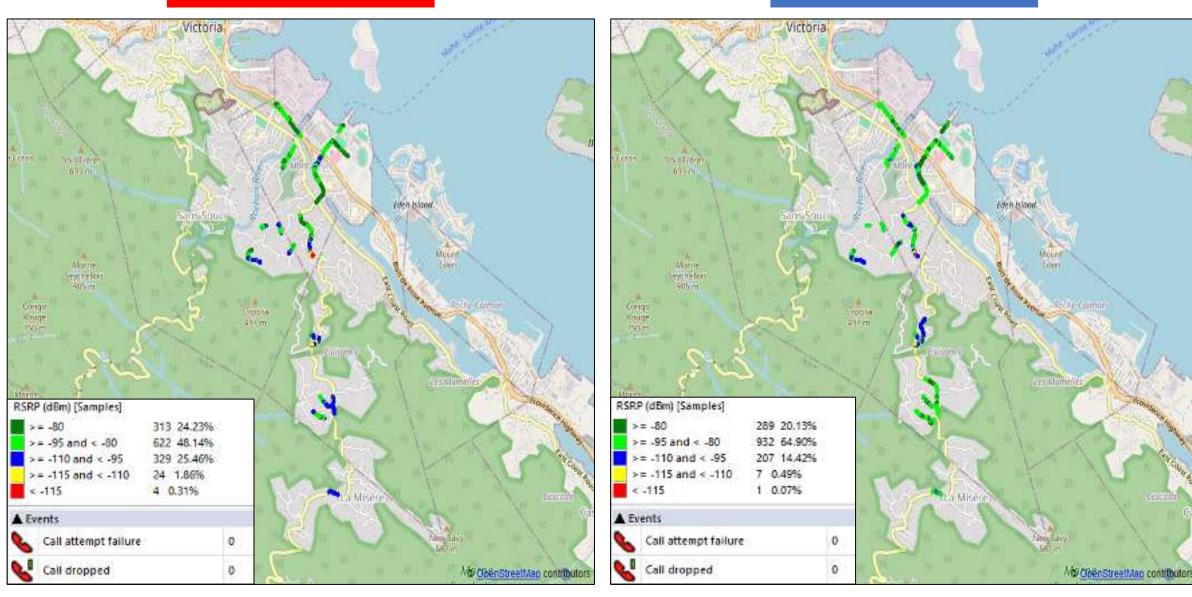
### **Airtel LC MO**





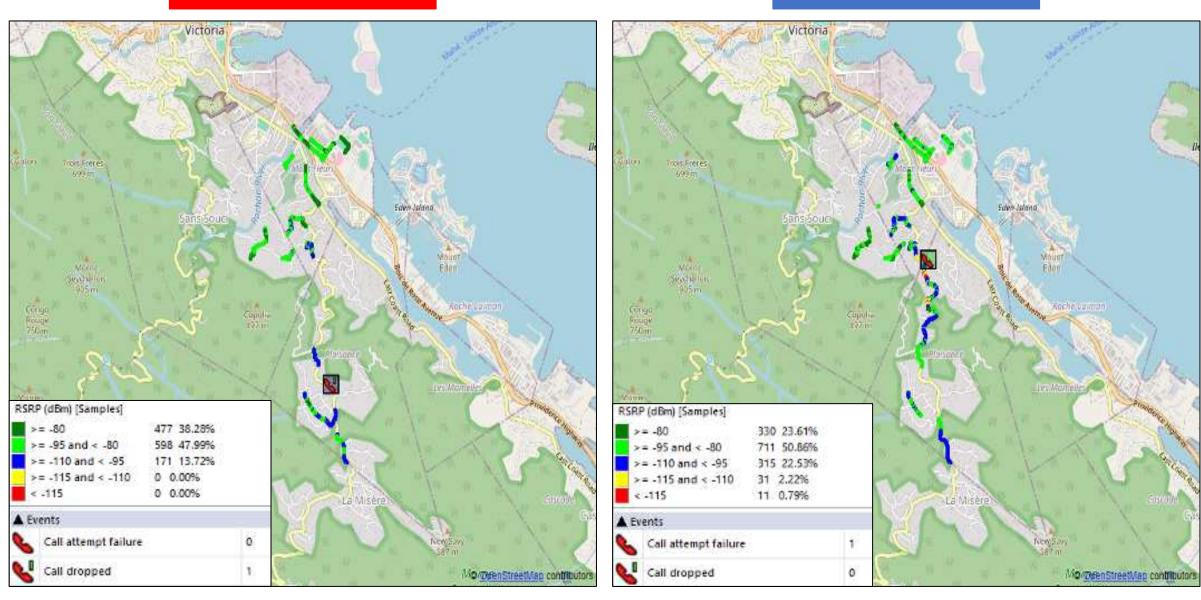
### Phase-1 LONG CALL FAILURE EVENTS LOCATION vs RSRP

#### **Airtel LC MO**



## Phase-2 LONG CALL FAILURE EVENTS LOCATION vs RSRP

#### **Airtel LC MO**

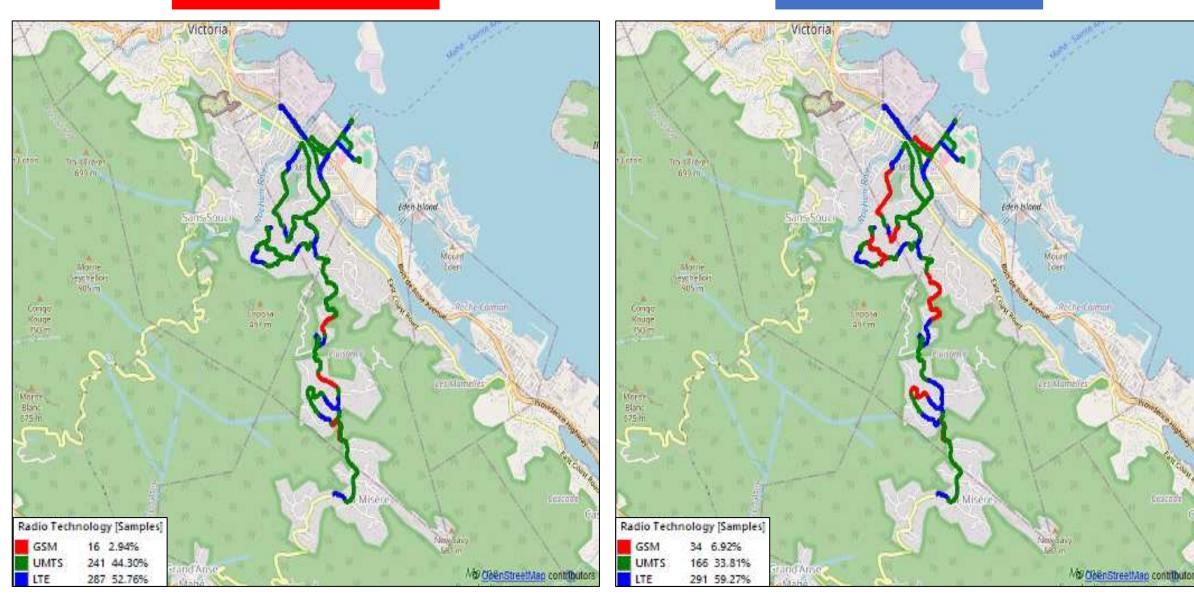




# **LONG CALL DRIVE PLOTS**

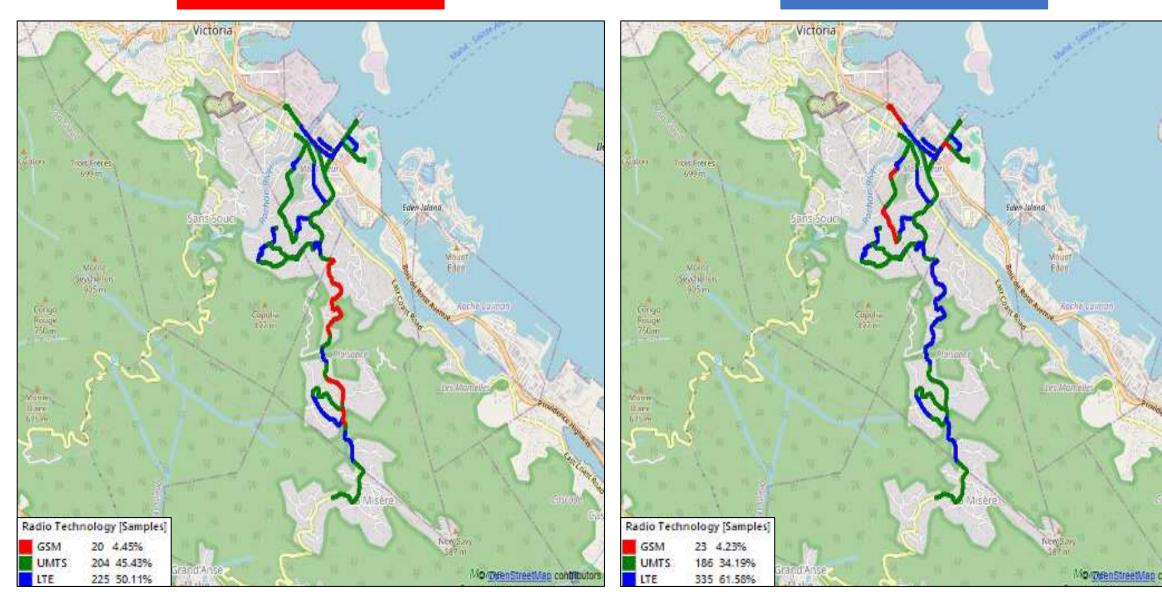
## **Phase-1 Long Call RADIO TECHNOLOGY PLOT**

### **Airtel LC MO**



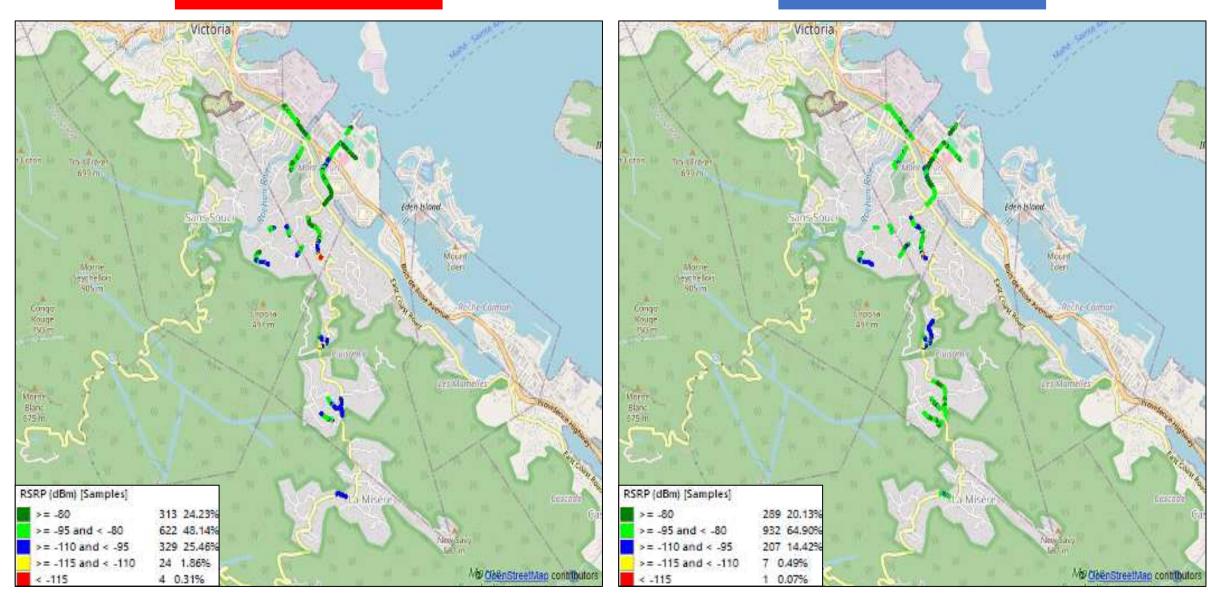
## **Phase-2 Long Call RADIO TECHNOLOGY PLOT**

### **Airtel LC MO**



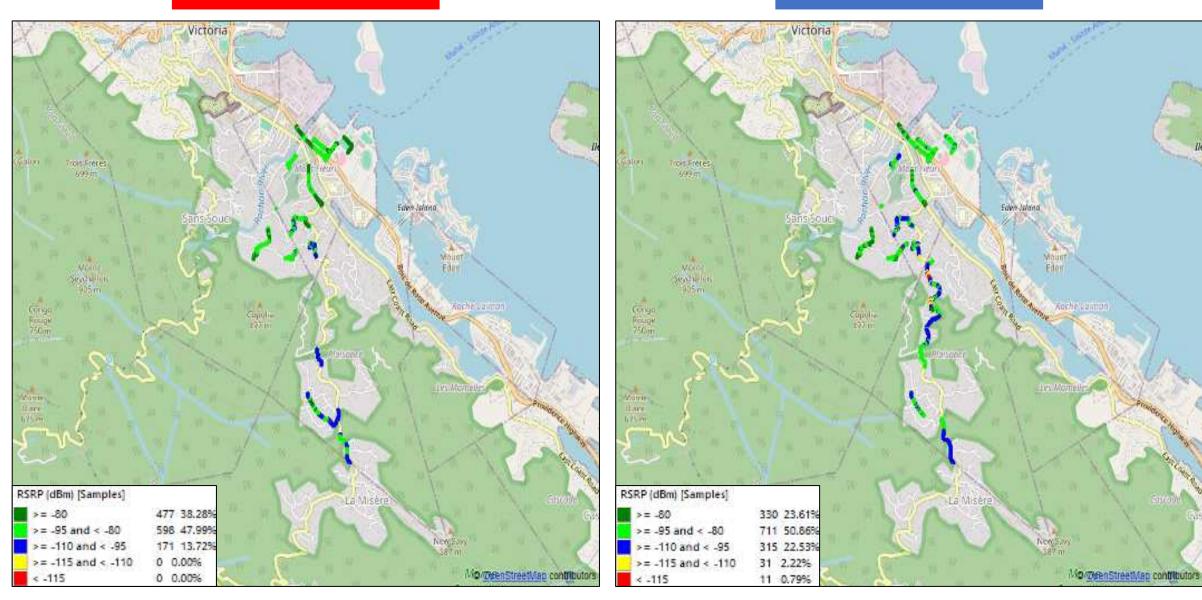
## **Phase-1 Long Call RSRP PLOT**

#### **Airtel LC MO**



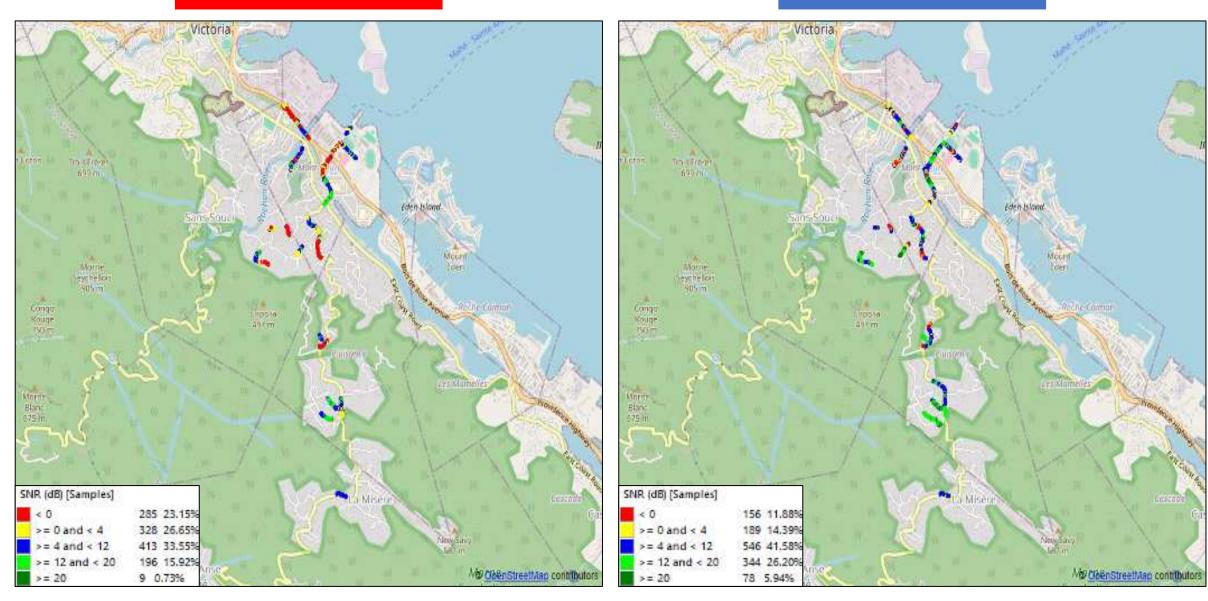
## **Phase-2 Long Call RSRP PLOT**

#### **Airtel LC MO**



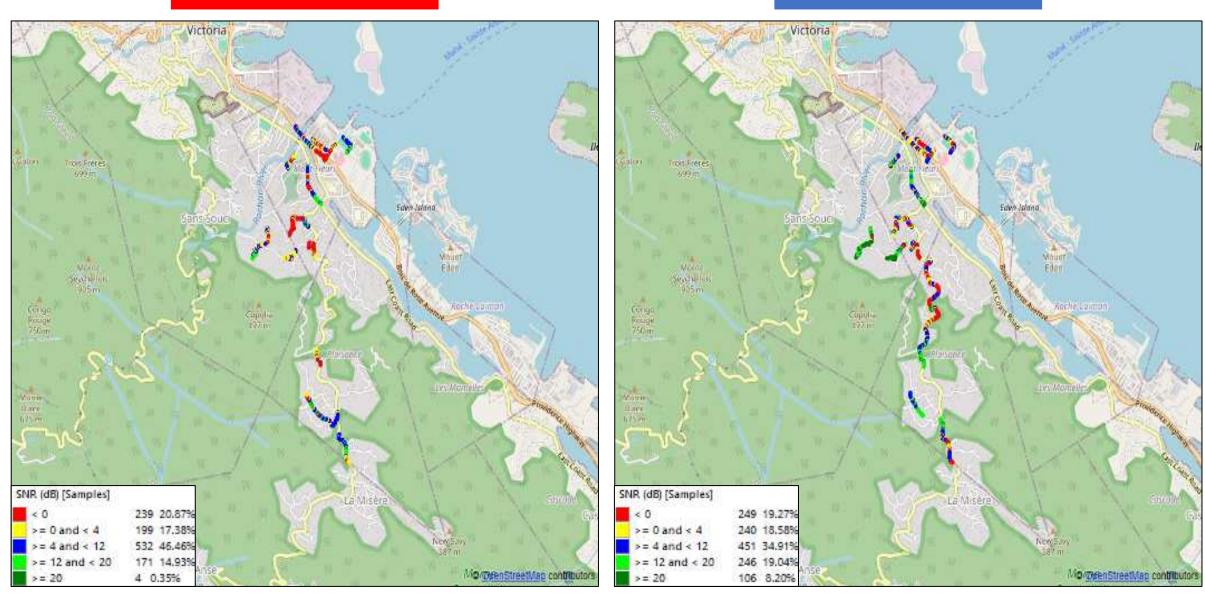
# **Phase-1 Long Call SINR PLOT**

#### **Airtel LC MO**



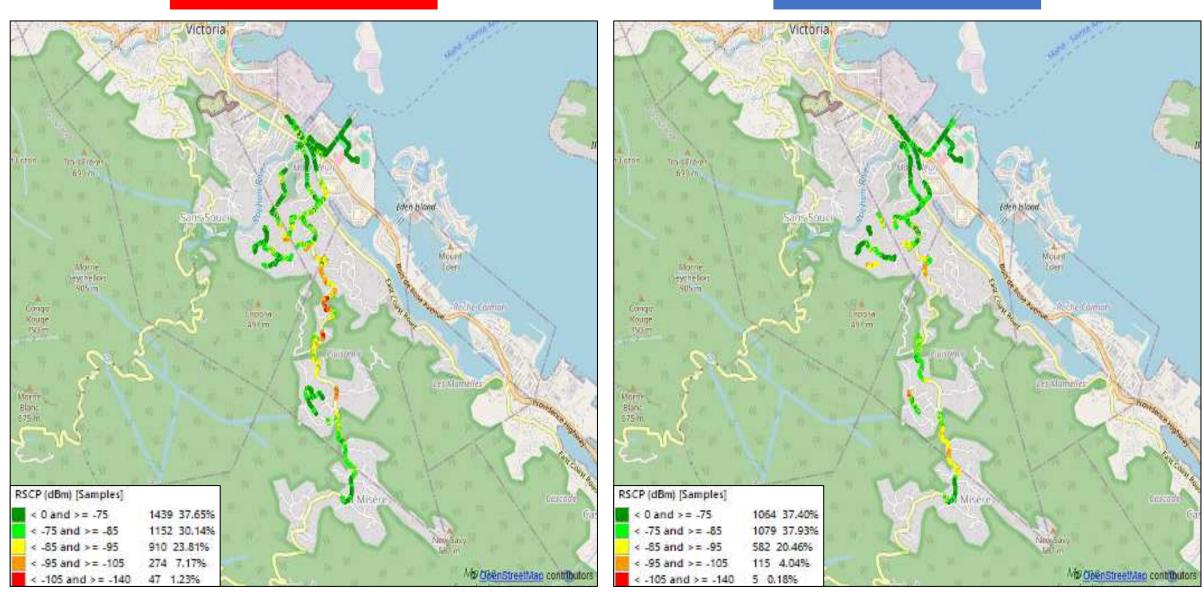
# **Phase-2 Long Call SINR PLOT**

#### **Airtel LC MO**



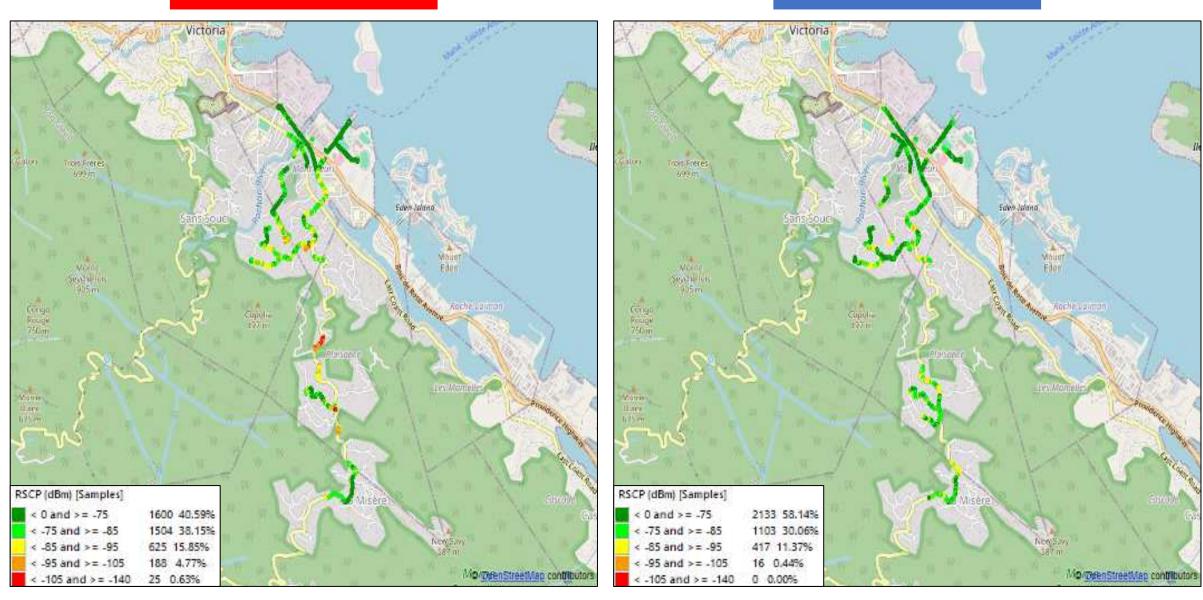
# **Phase-1 Long Call RSCP PLOT**

#### **Airtel LC MO**



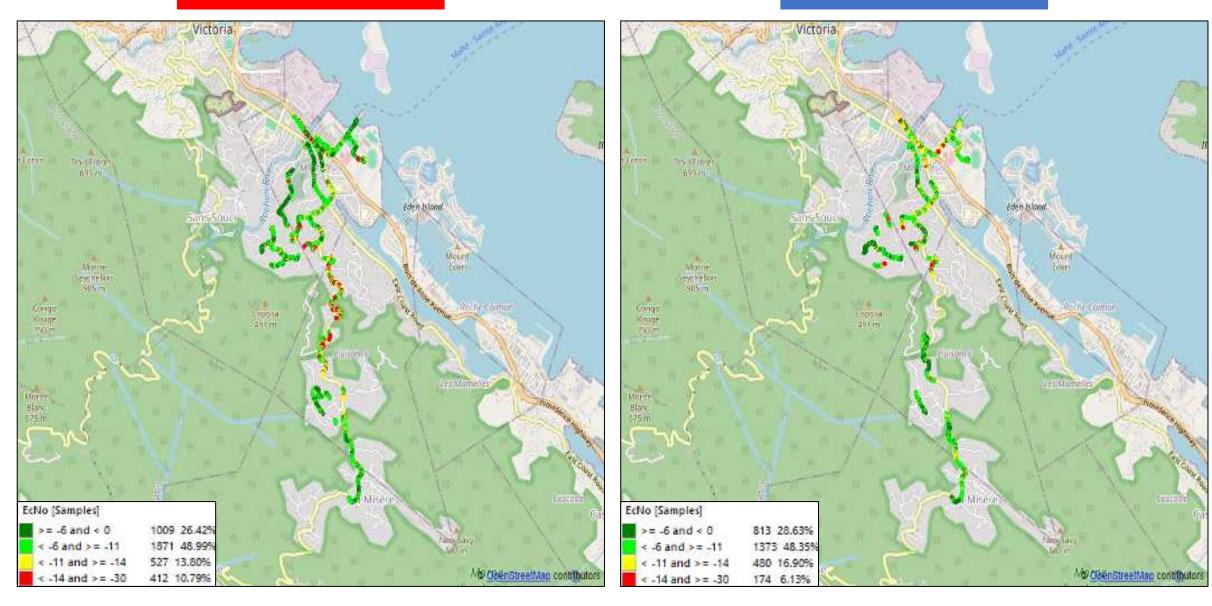
# **Phase-2 Long Call RSCP PLOT**

#### **Airtel LC MO**



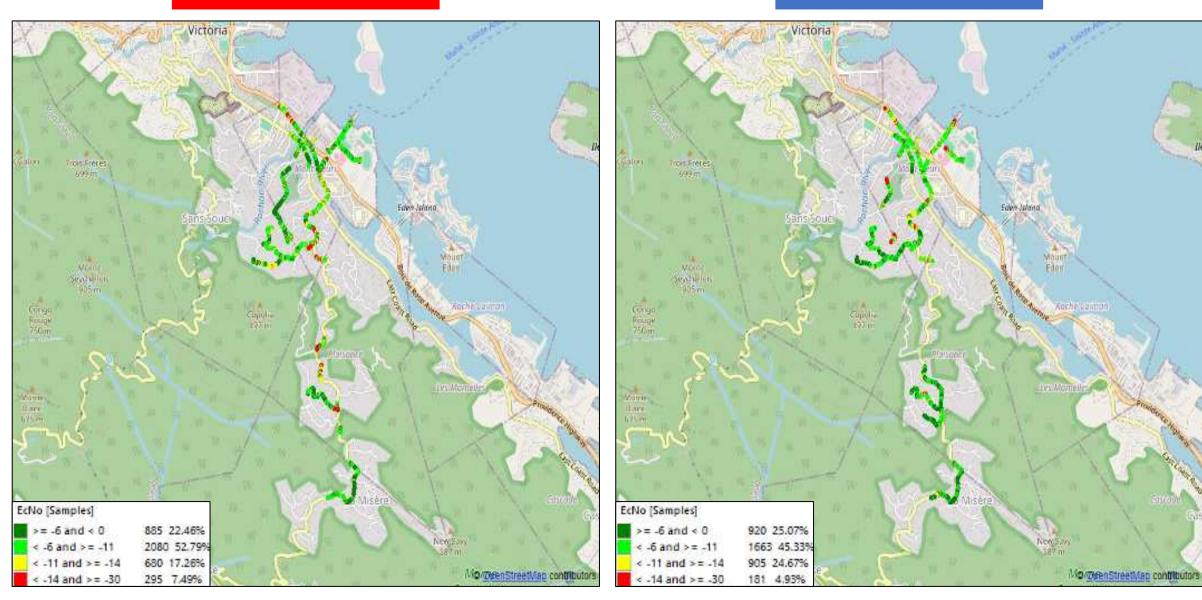
# Phase-1 Long Call EC/NO PLOT

#### **Airtel LC MO**



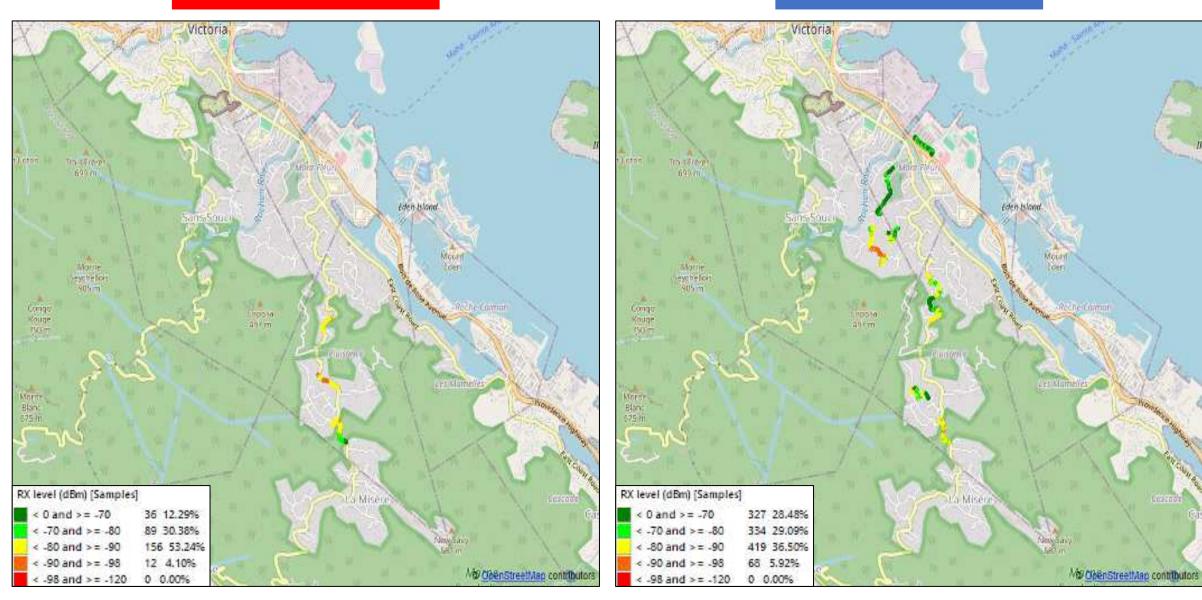
# Phase-2 Long Call EC/NO PLOT

#### **Airtel LC MO**



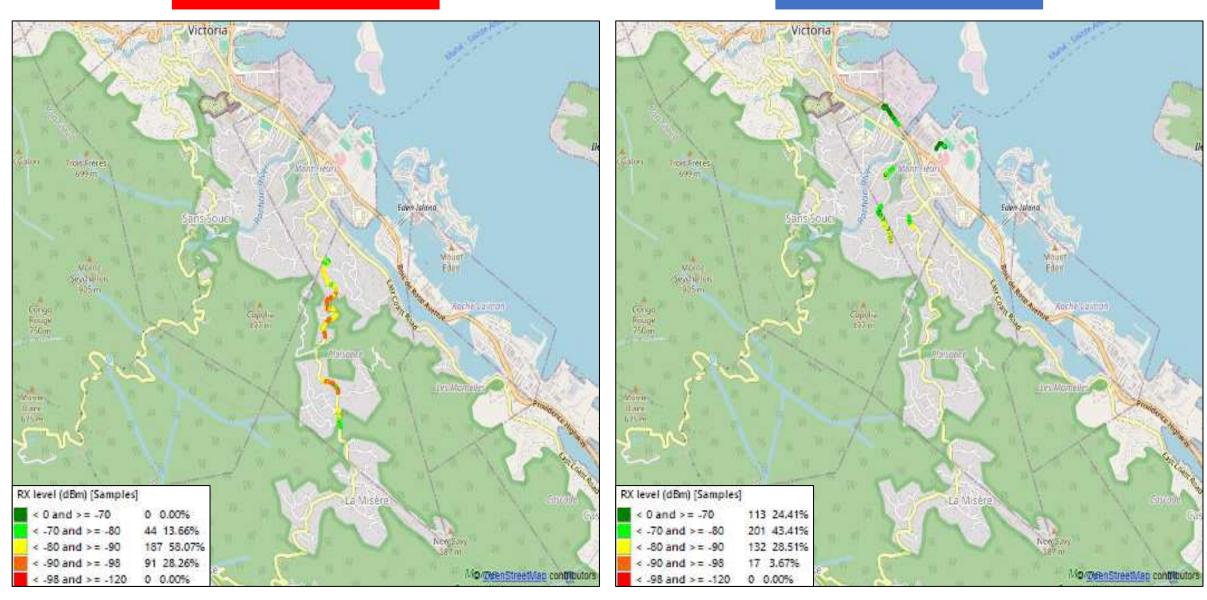
# **Phase-1 Long Call RX level sub PLOT**

#### **Airtel LC MO**



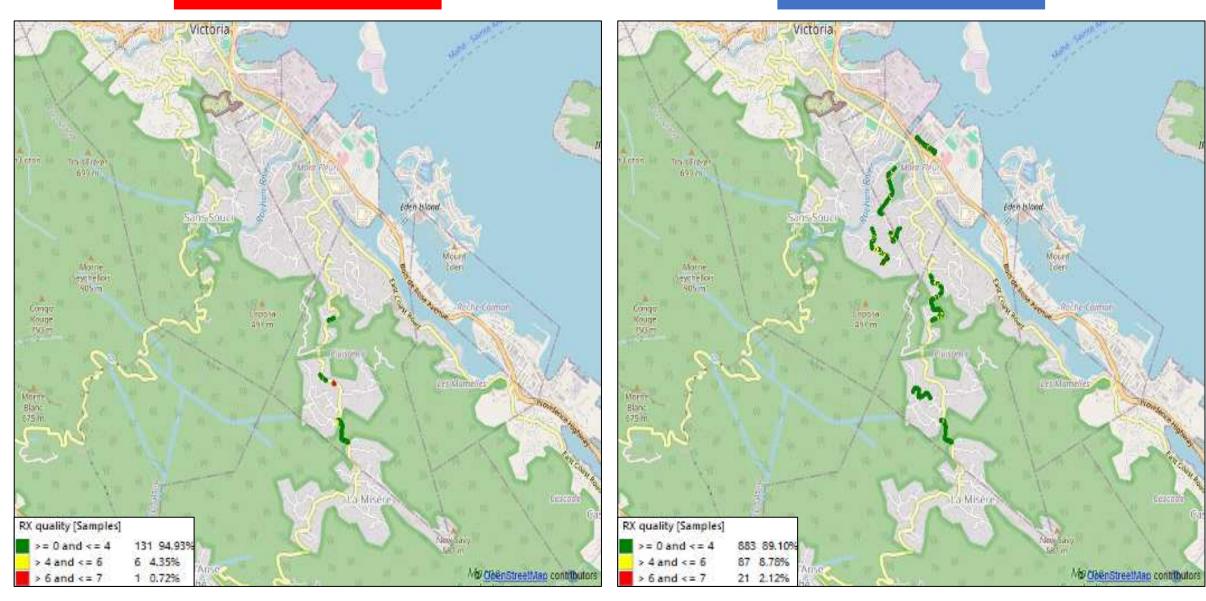
# **Phase-2 Long Call RX level sub PLOT**

#### **Airtel LC MO**



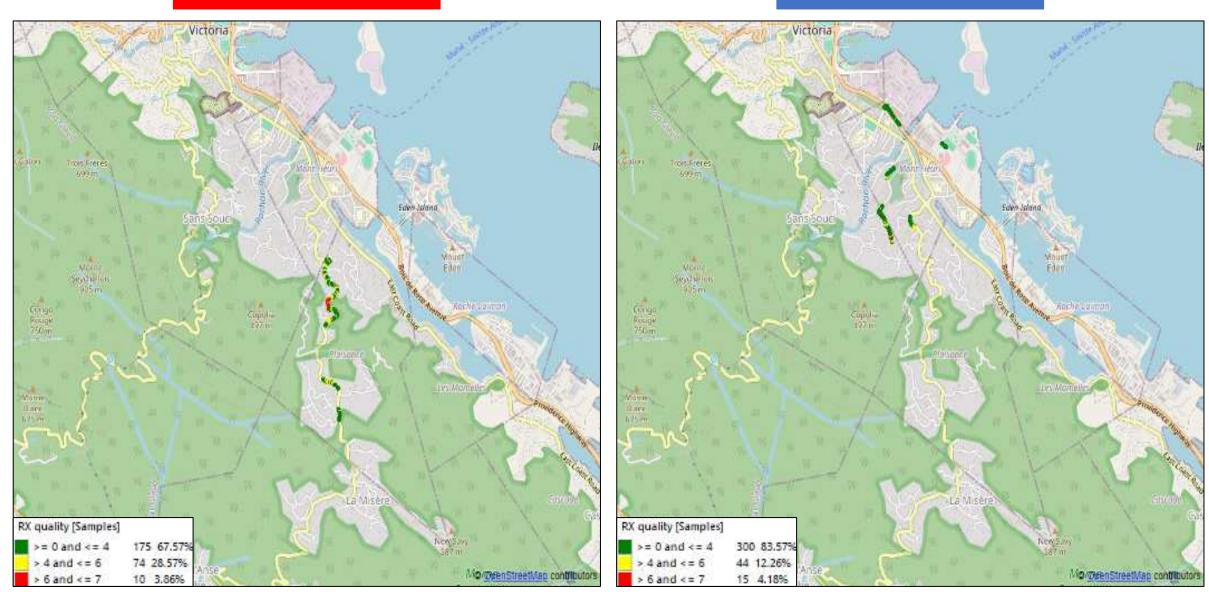
# **Phase-1 Long Call RX quality sub PLOT**

#### **Airtel LC MO**



# **Phase-2 Long Call RX quality sub PLOT**

#### **Airtel LC MO**

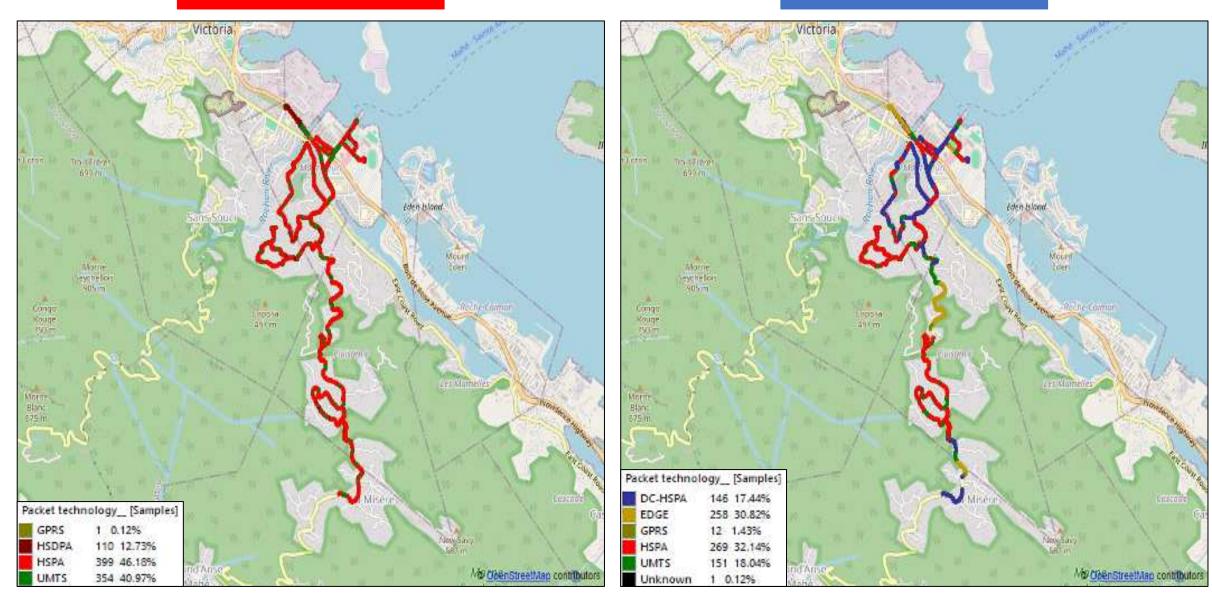




# **3G PREFERRED DATA DRIVE PLOTS**

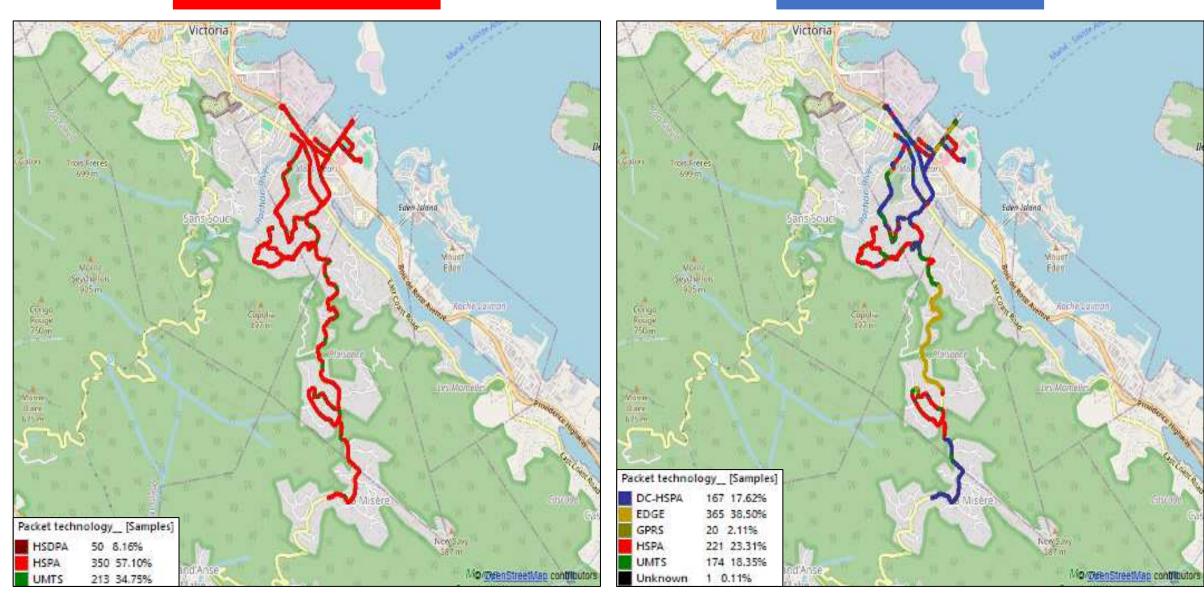
## Phase-1 3G PREFERRED DATA TEST - TECHNOLOGY PLOT

**Airtel Data 3G** 



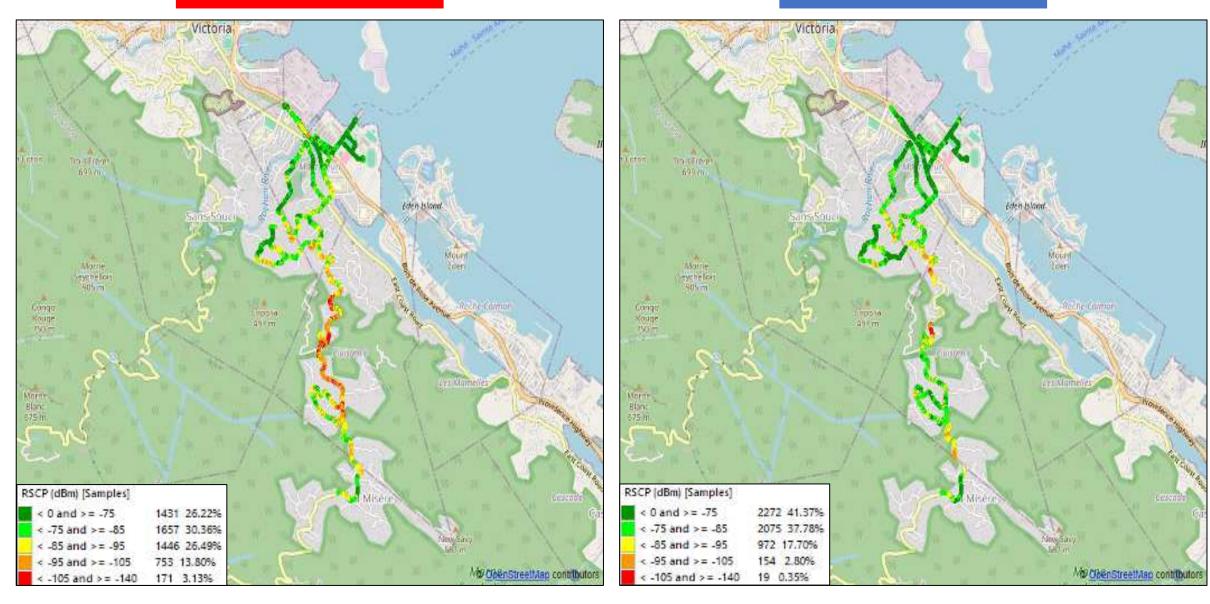
## Phase-2 3G PREFERRED DATA TEST - TECHNOLOGY PLOT

#### **Airtel Data 3G**



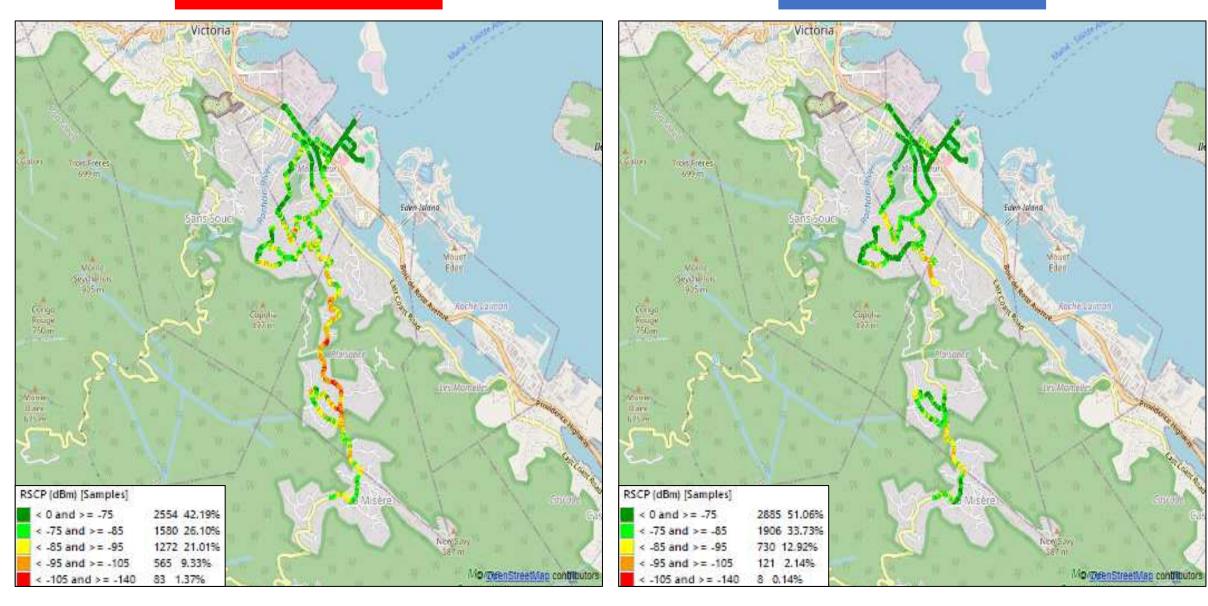
## Phase-1 3G PREFERRED DATA TEST - RSCP PLOT

#### **Airtel Data 3G**



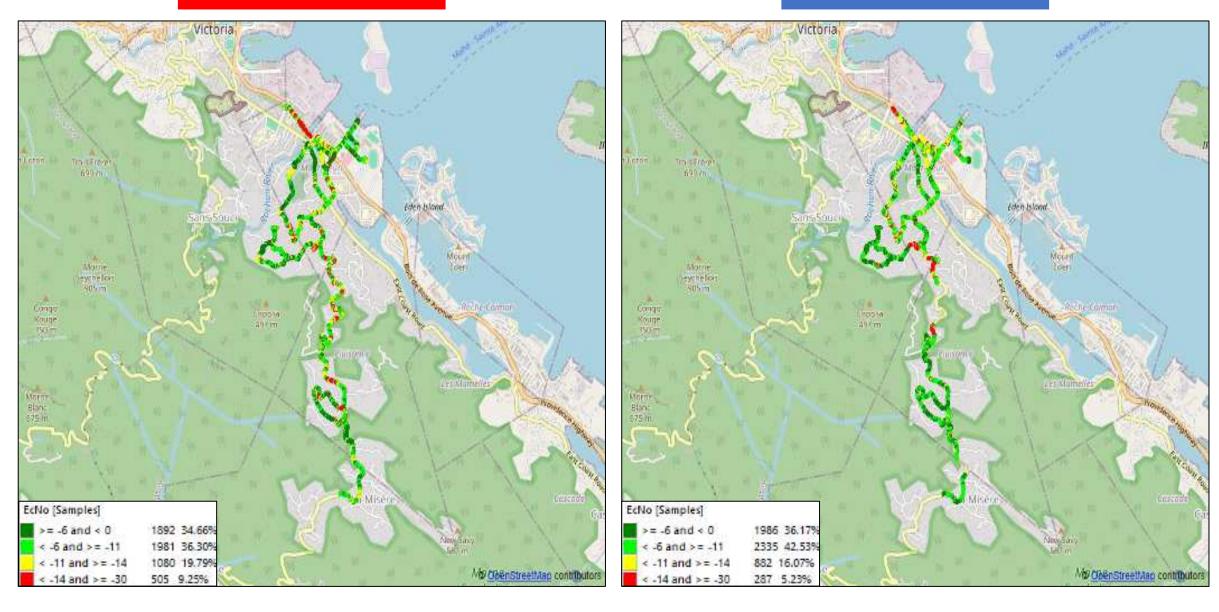
## Phase-2 3G PREFERRED DATA TEST - RSCP PLOT

#### **Airtel Data 3G**



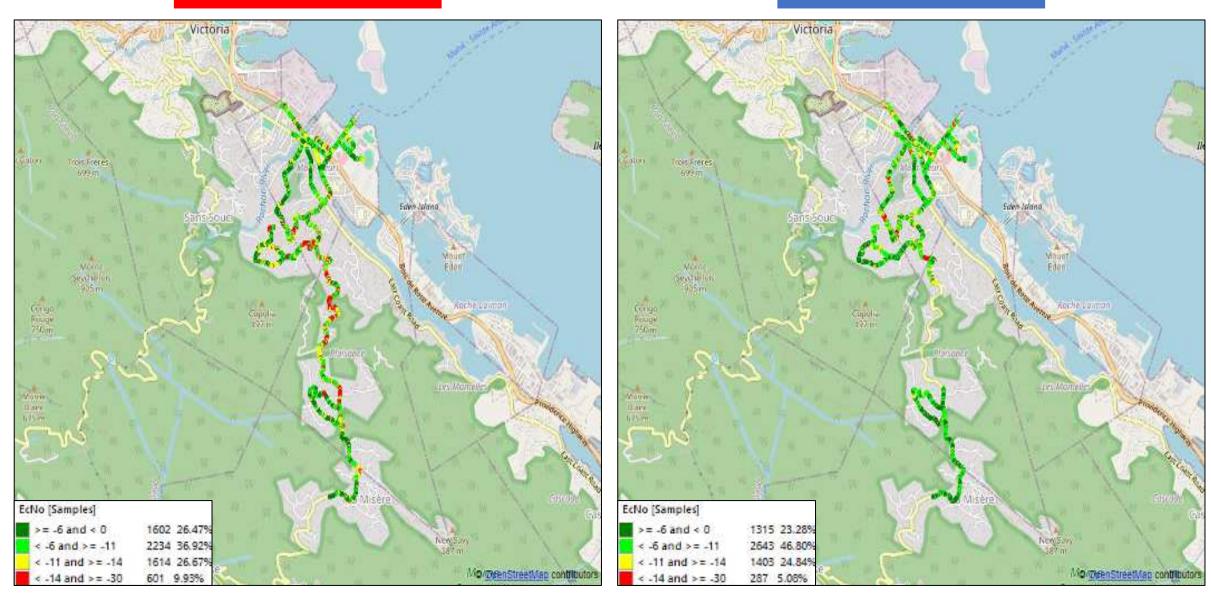
# Phase-1 3G PREFERRED DATA TEST - EC/NO PLOT

**Airtel Data 3G** 



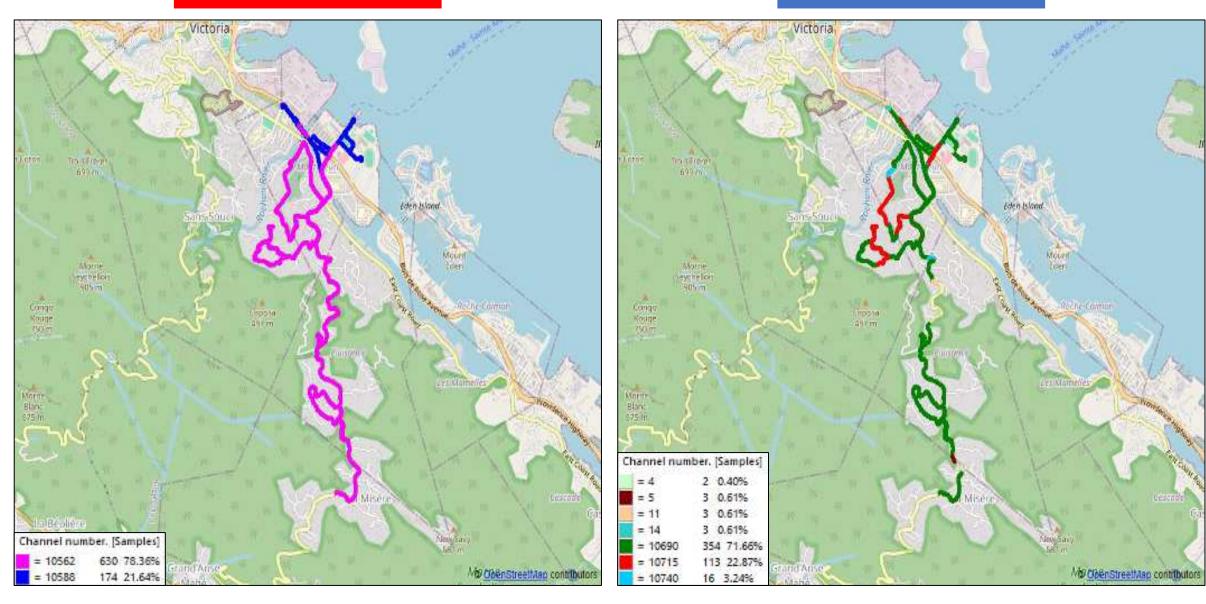
# Phase-2 3G PREFERRED DATA TEST - EC/NO PLOT

**Airtel Data 3G** 



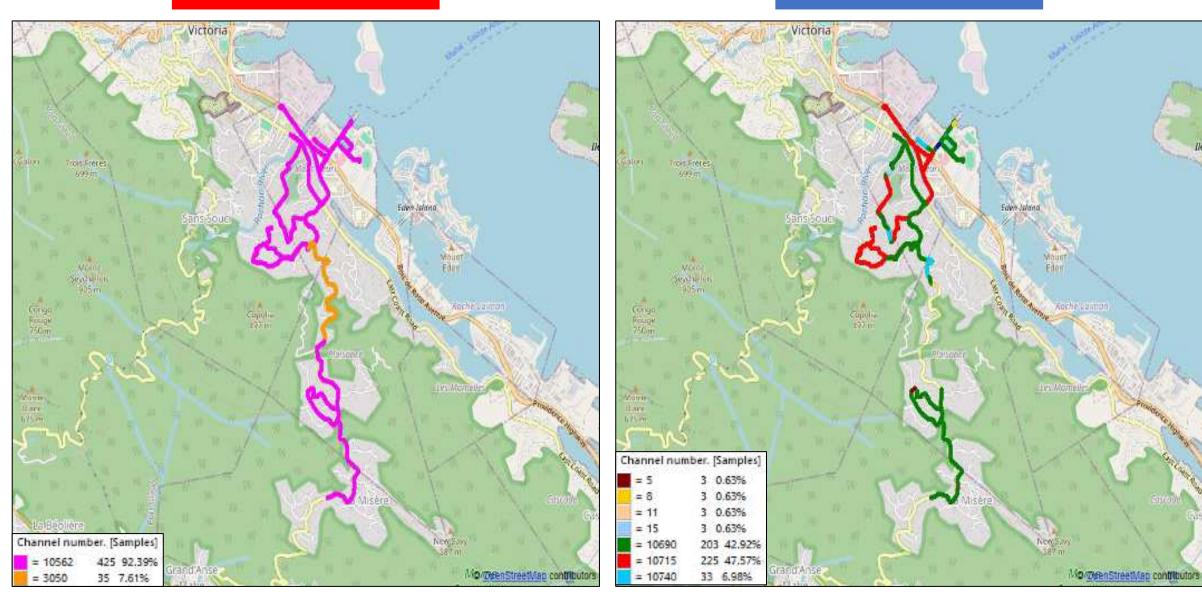
## Phase-1 3G PREFERRED DATA TEST - UARFCN PLOT

#### **Airtel Data 3G**



## Phase-2 3G PREFERRED DATA TEST - UARFCN PLOT

#### **Airtel Data 3G**



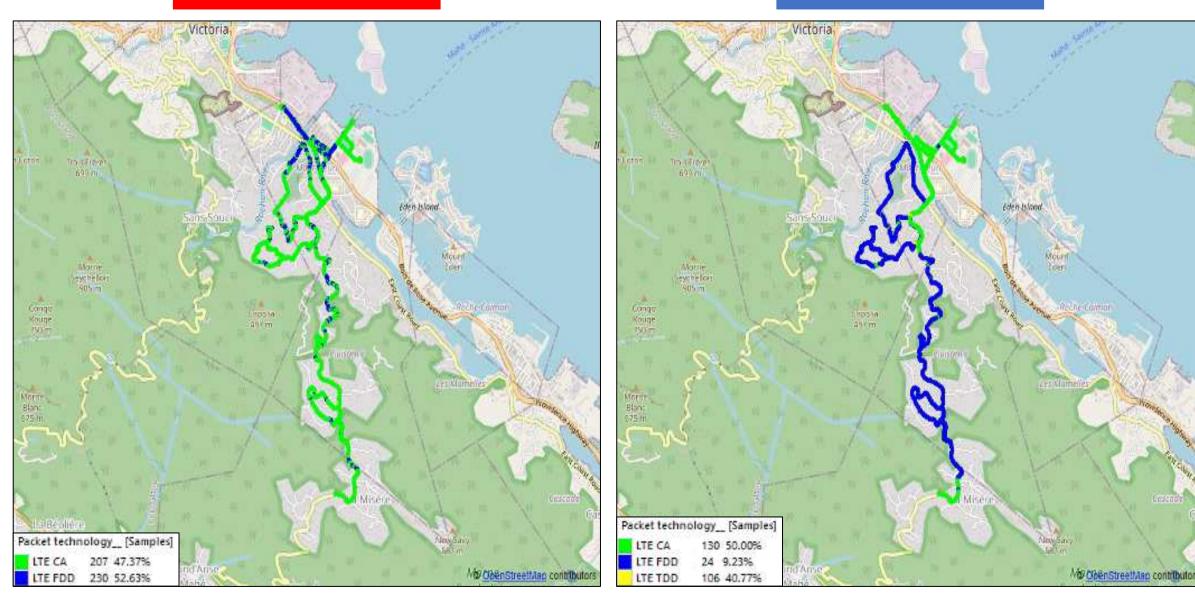


# 4G PREFERRED DATA DRIVE PLOTS



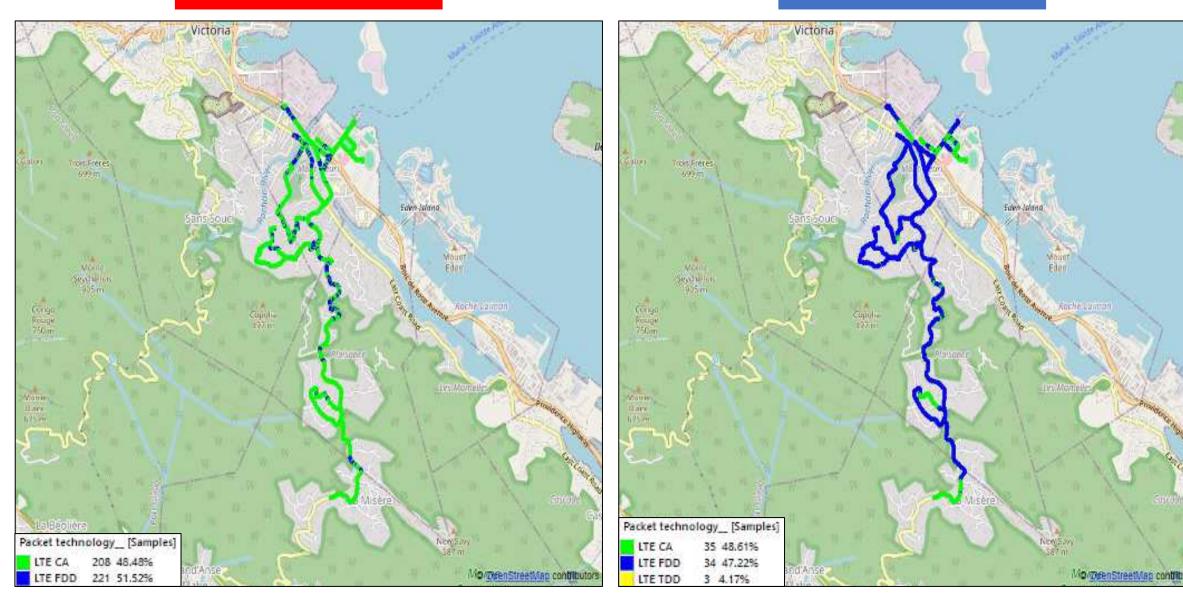
## Phase-1 4G PREFERRED DATA TEST - TECHNOLOGY PLOT

#### **Airtel Data 4G**



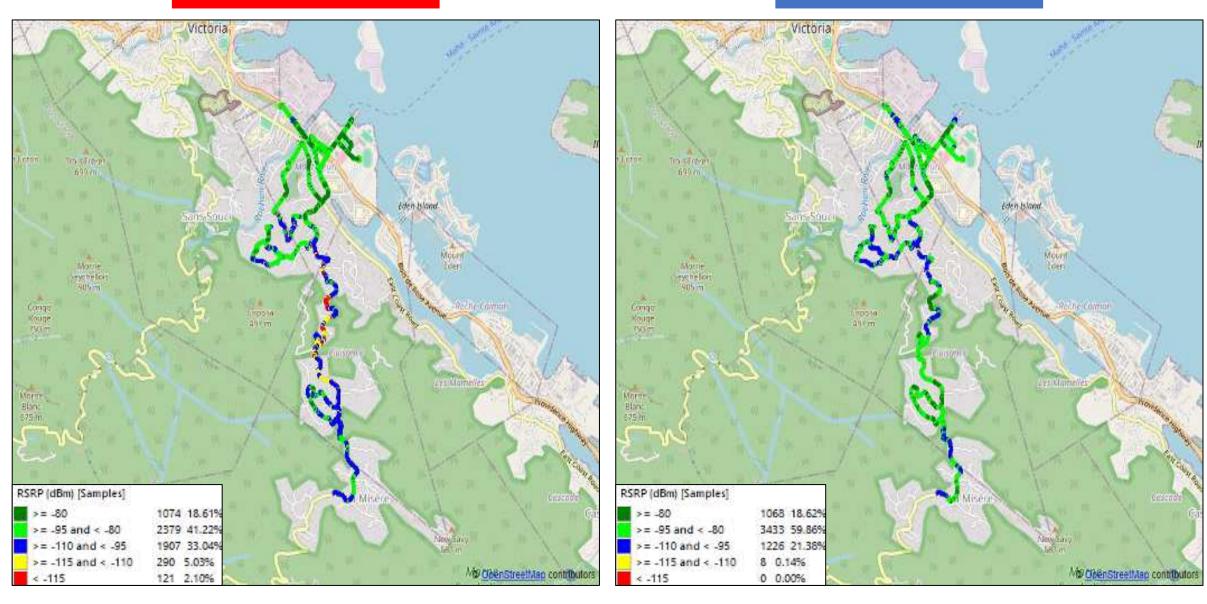
## Phase-2 4G PREFERRED DATA TEST - TECHNOLOGY PLOT

#### **Airtel Data 4G**



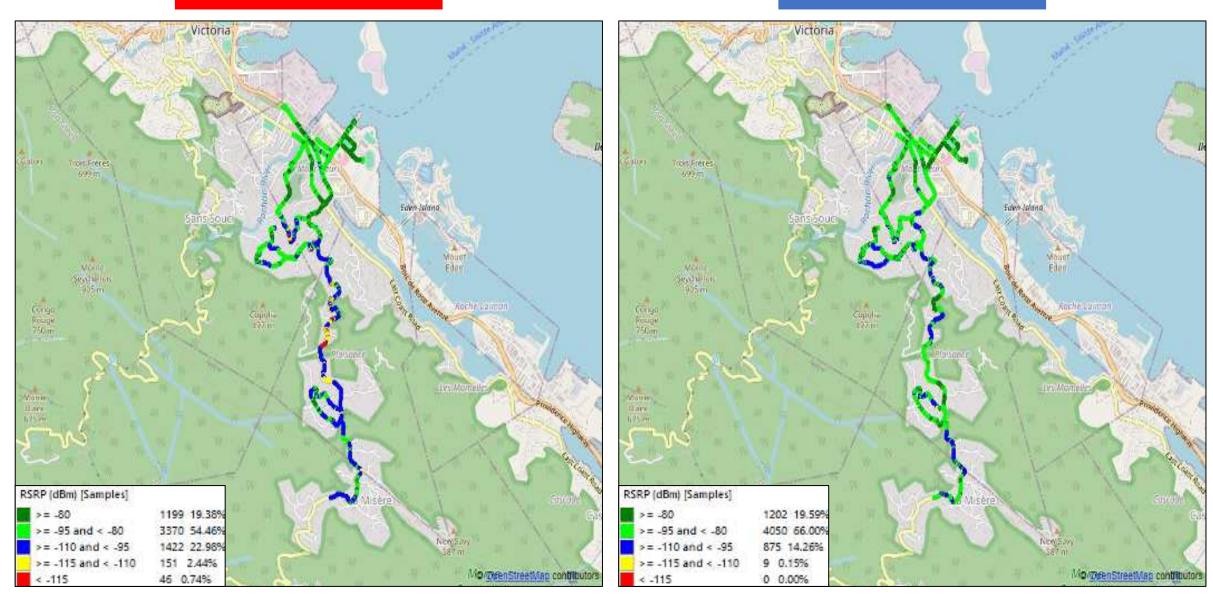
## Phase-1 4G PREFERRED DATA TEST - RSRP PLOT

#### **Airtel Data 4G**



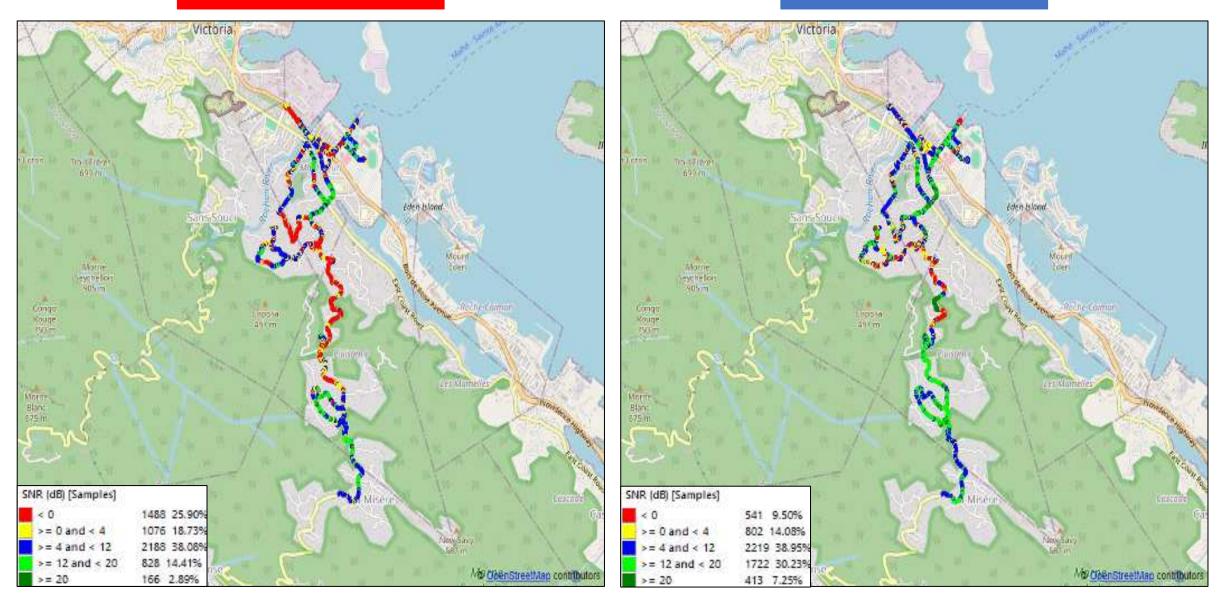
## Phase-2 4G PREFERRED DATA TEST - RSRP PLOT

#### **Airtel Data 4G**



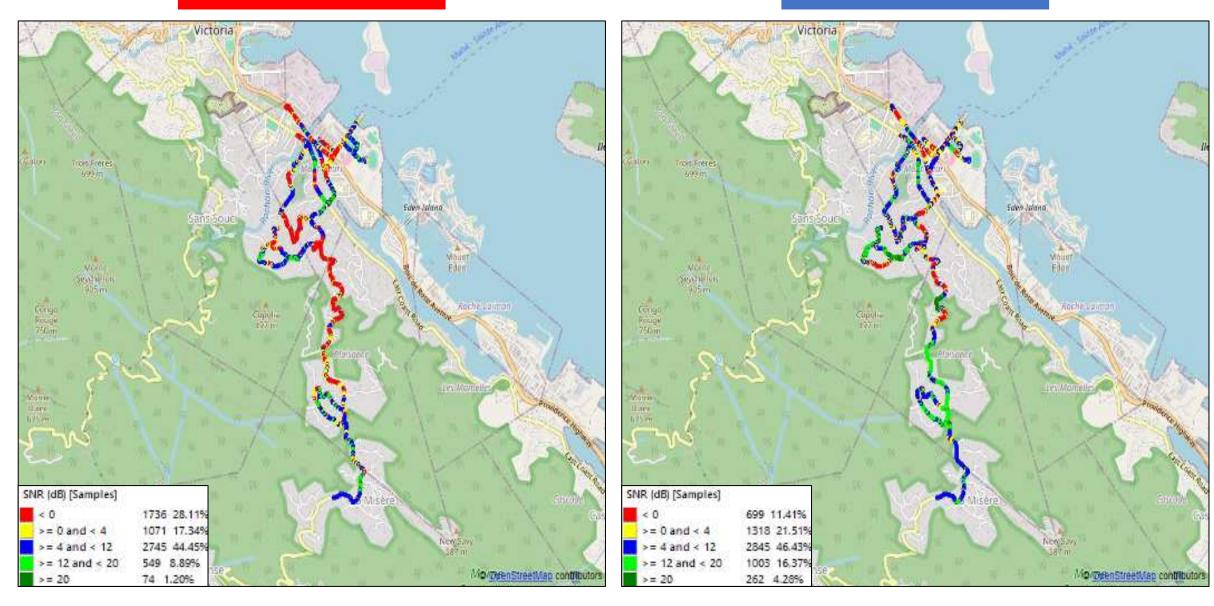
## Phase-1 4G PREFERRED DATA TEST - SINR PLOT

#### **Airtel Data 4G**



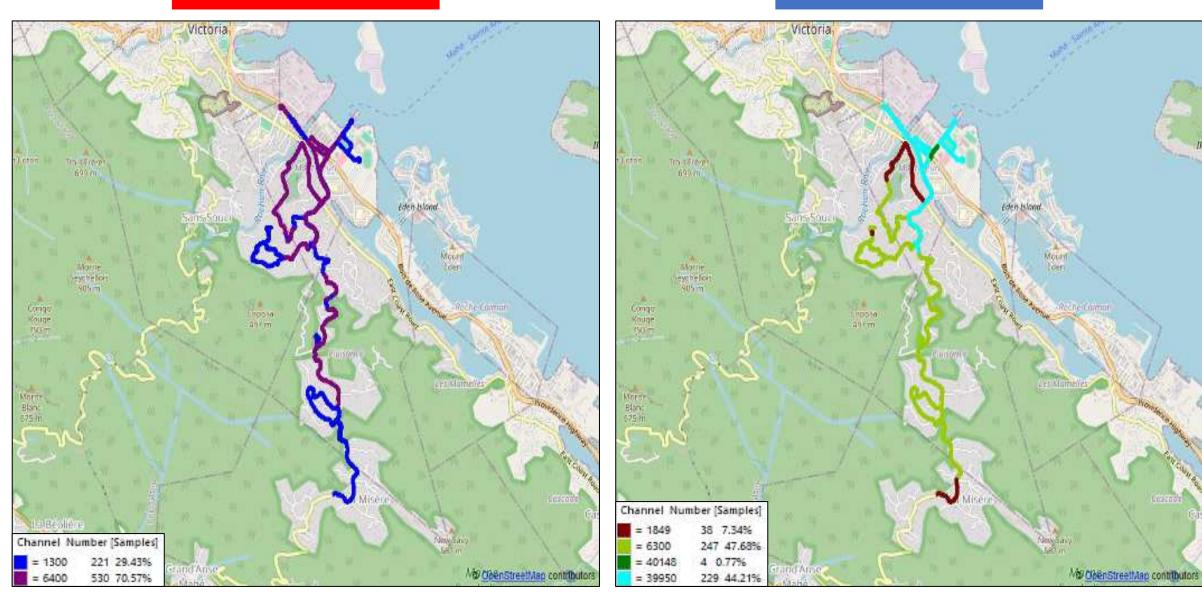
## Phase-2 4G PREFERRED DATA TEST - SINR PLOT

#### **Airtel Data 4G**



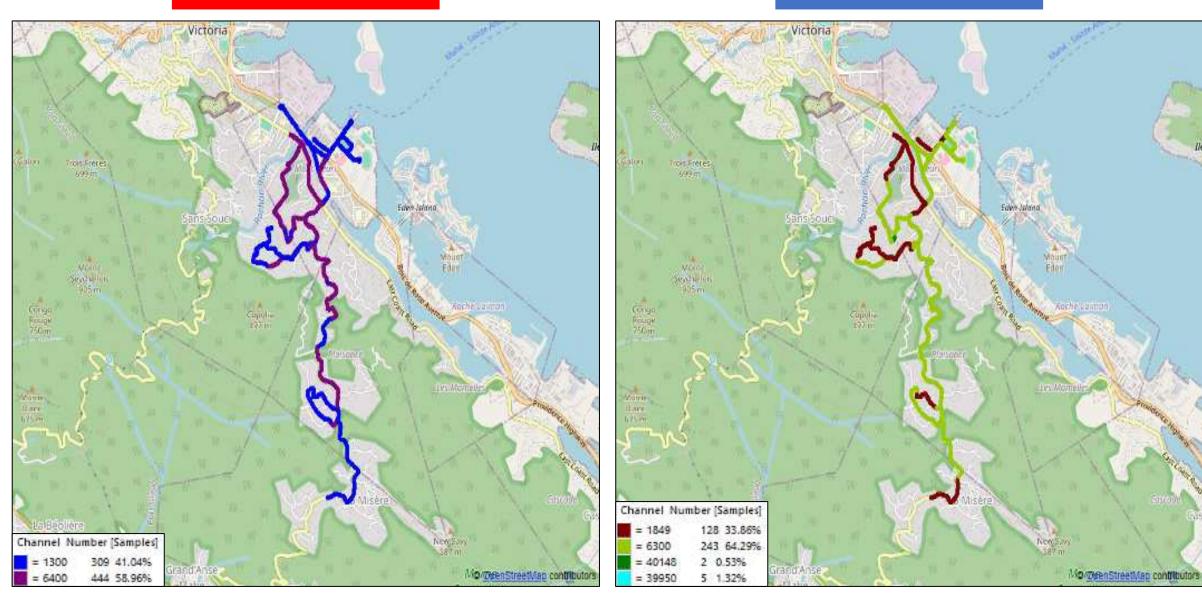
# Phase-1 4G PREFERRED DATA TEST - FREQUENCY BAND PLOT

#### **Airtel Data 4G**



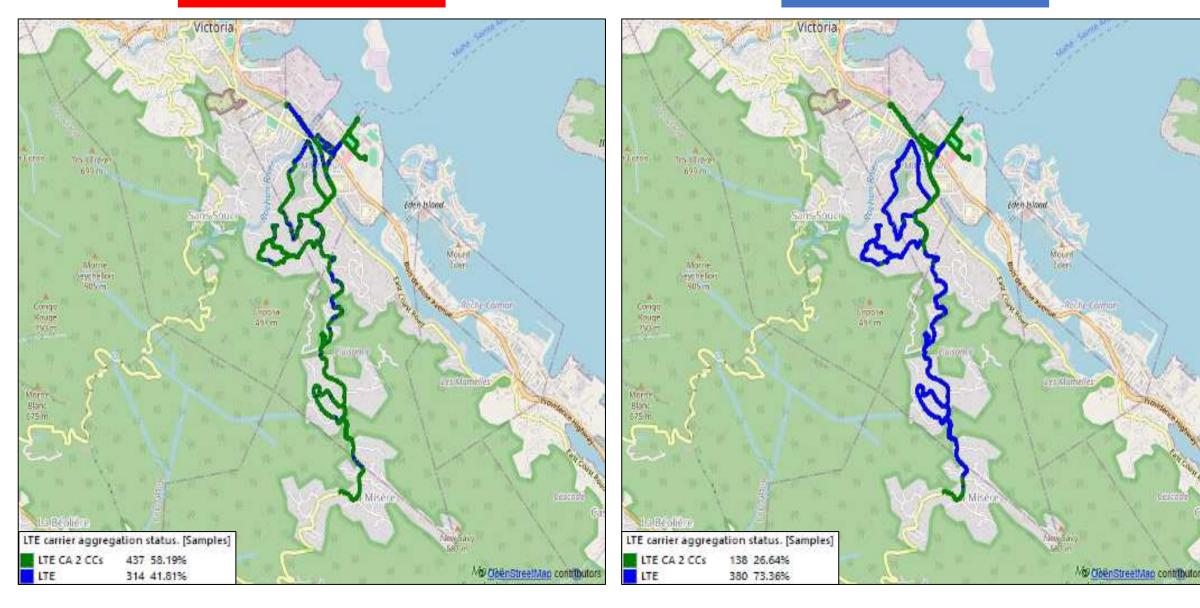
# Phase-2 4G PREFERRED DATA TEST - FREQUENCY BAND PLOT

#### **Airtel Data 4G**



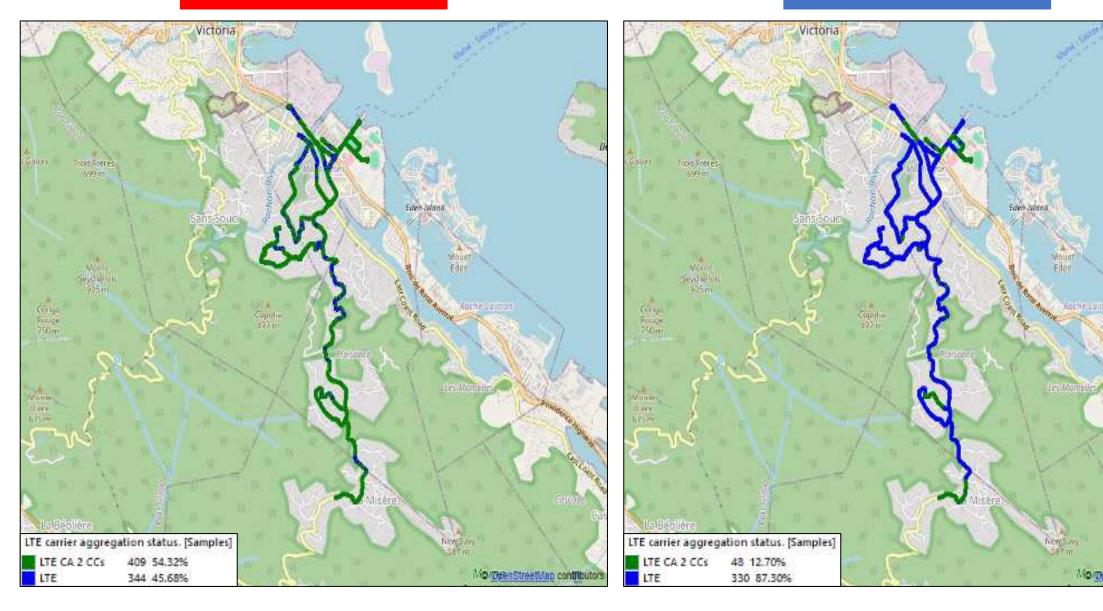
## Phase-1 4G PREFERRED DATA TEST - CARRIER AGGREGATION PLOT

#### **Airtel Data 4G**



## Phase-2 4G PREFERRED DATA TEST - CARRIER AGGREGATION PLOT

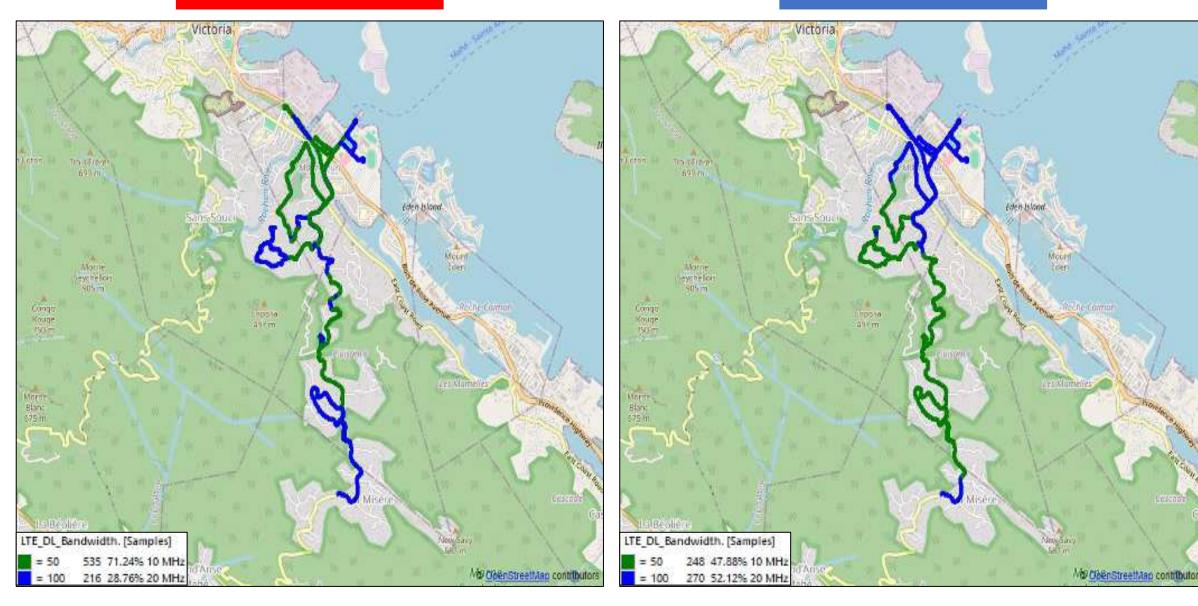
#### **Airtel Data 4G**





# Phase-1 4G PREFERRED DATA TEST – BANDWIDTH PLOT

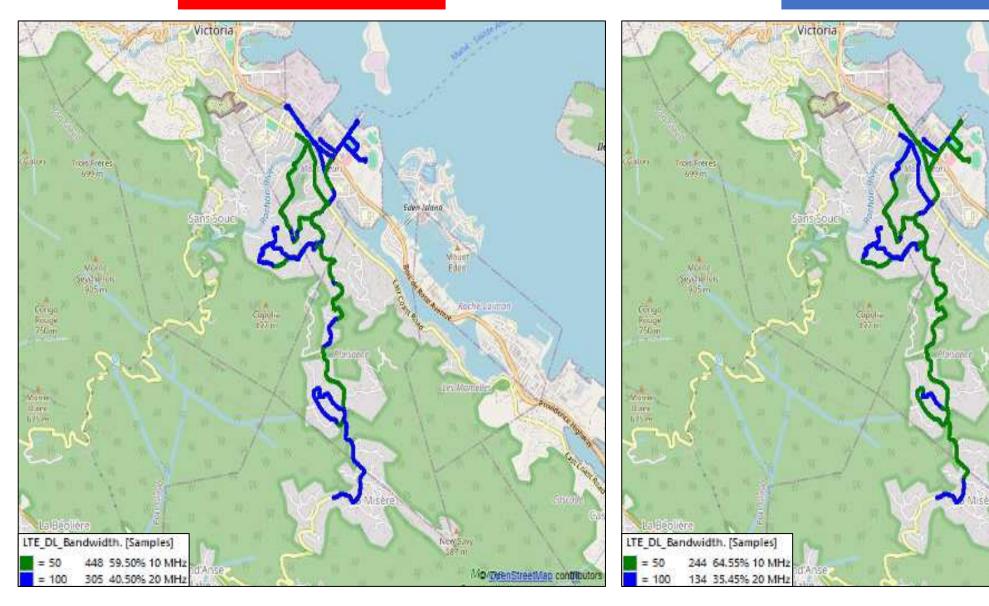
#### **Airtel Data 4G**





# Phase-2 4G PREFERRED DATA TEST – BANDWIDTH PLOT

#### **Airtel Data 4G**





# **Negative Event Analysis**



# Phase-1 Call Drop & Call Attempt Failure Airtel, CWS Summary

Call Attempt Failure cause from Airtel	Count
Total Call Attempt Failure	2
Poor quality	2

Call Attempt Failure cause from CWS	Count
Total Call Attempt Failure	0

Call Drop cause from Airtel	Count
Total Call Drop	0

Call Drop cause from CWS	Count
Total Call Drop	0



# Phase-1 Call Attempt Failure Analysis 1 From MS5 Airtel MO

	Time	System	Serving band	-		1. best active RSCP	Time	Ch	SC	1. best i	*		Event ID	System	Transf. dir.	Time	Subchannel	Message name
1,	9:36:05.051	UMTS FDD	a constant and a second and	Cal	918.	-67.3	9:35:28.527	3050	144	OUR SES		3888.	IN THE PROPERTY AND ADDRESS OF THE	UMTS FDD	Downlink	9:36:03.253	BCCH_BCH	SYSTEM_INFORMATION_BCH
2.	10:09:35.502	GSM	900	Call	919.		9:35:28.527	3050	144	4.7		3889.	RRCSM	UMTS FDD	Downlink	9:36:03.273	BCCH_BCH	SYSTEM_INFORMATION_BCH
		and the same			920.	-73.3	9:35:29.039	3050	144			3890,	RRCSM	UMTS FDD	Downlink	9:36:03.293	BCCH_BCH	SYSTEM_INFORMATION_BCH
					921.	nitrae.	9:35:29.039	3050	144	-6.5		3891.	RRCSM	UMTS FDD	Downlink	9:36:03.293	BCCH	MASTER_INFORMATION_BLOCK
					922.	-72.8	9:35:29.527	5:29.527 3050 144 3892. RRCSM UMTS FDD Down	Downlink	9:36:03.313	CCCH	RRC_CONNECTION_SETUP						
					923.		9:35:29.527	3050	144	-7,3		3893.	RRCSM	UMTS FDD	Downlink	9:36:03.315	BCCH_BCH	SYSTEM_INFORMATION_BCH
					924.	-70.2	9:35:30.400	3050	144	1000		3894.	RRCSM	UMTS FDD	Downlink	9:36:03.315	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_3
					925.		9:35:30.400	3050	144	-9.6		3895.	RRCSM	UMTS FDD	Downlink	9:36:03.315	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_7
					926.	-70.9	9:35:30,787	3050	144			3896.	RRCSM	UMTS FDD	Uplink	9:36:03.369	DCCH	RRC_CONNECTION_SETUP_COMPLETE
					927.	01/44/60	9:35:30.787	3050	144	-5.1		3897.	RRCSM	UMTS FDD	Uplink	9:36:03.369	DCCH	INITIAL_DIRECT_TRANSFER
					928.	-68	9:35:31.387	3050	144			3898.	L3SM	UMTS FDD	Uplink	9:36:03.369	DCCH	CM_SERVICE_REQUEST
					929.	2007	9:35:31.387	3050	144	-5.1		3899.	RRCSM	UMTS FDD	Uplink	9:36:03.369	DCCH	INITIAL_DIRECT_TRANSFER
					930.	-64	9:35:31,887	3050	144			3900.	L3SM	UMTS FDD	Uplink	9:36:03.369	DCCH	ROUTING_AREA_UPDATE_REQUEST
					931.		9:35:31,887	3050	144	-6.8		3901.	RRCSM	UMTS FDD	Downlink	9:36:03.602	DCCH	MEASUREMENT_CONTROL
					932.	-76.6	9:36:03.104	10562	416			3902.	RRCSM	UMTS FDD	Downlink	9:36:03.672	DCCH	MEASUREMENT_CONTROL
					933.		9:36:03.104	10562	416	-10.2		3903.	RRCSM	UMTS FDD	Downlink	9:36:03.682	DCCH	MEASUREMENT_CONTROL
					934.	-74.1	9:36:03.845	10562	416			3904.	RRCSM	UMTS FDD	Downlink	9:36:03.692	DCCH	MEASUREMENT_CONTROL
					935.		9:36:03.845	10562	416	-12.1		3905.	RRCSM	UMTS FDD	Downlink	9:36:03.702	DCCH	MEASUREMENT_CONTROL
					936.	-72.3	9:36:04.335	10562	416			3906.	RRCSM	UMTS FDD	Downlink	9:36:03.742	DCCH	DOWNLINK_DIRECT_TRANSFER
					937.		9:36:04.335	10562	416	-13		3907.	L3SM	UMTS FDD	Downlink	9:36:03.742	DCCH	AUTHENTICATION_REQUEST
					938.	-74.5	9:36:04.539	10562	416			3908.	RRCSM	UMTS FDD	Uplink	9:36:03.871	DCCH	UPLINK_DIRECT_TRANSFER
					939.		9:36:04.539	10562	416	-7.9		3909,	L3SM	UMTS FDD	Uplink	9:36:03.871	DCCH	AUTHENTICATION_RESPONSE
					940,	-80.4	9:36:05.384	10562	416			3910,	RRCSM	UMTS FDD	Downlink	9:36:03.962	DCCH	SECURITY_MODE_COMMAND
					941.		9:36:05.384	10562	416	-16.2		3911.	RRCSM	UMTS FDD	Uplink	9:36:03.962	DCCH	SECURITY_MODE_COMPLETE
					942.	-76.6	9:36:05.823	10562	416			3912.	RRCSM	UMTS FDD	Uplink	9:36:04.053	DCCH	UPLINK_DIRECT_TRANSFER
					943.		9:36:05.823	10562	416	-10.6		3913.	L3SM	UMTS FDD	Uplink	9:36:04.053	DCCH	SETUP
					944.	-75.9	9:36:06.245	10562	416			3914.	RRCSM	UMTS FDD	Downlink	9:36:04.062	DCCH	DOWNLINK_DIRECT_TRANSFER
					945.		9:36:06.245	10562	416	-7.7		3915.	L3SM	UMTS FDD	Downlink	9:36:04.062	DCCH	IDENTITY_REQUEST
					946.	-76.8	9:36:06,662	10562	416			3916.	RRCSM	UMTS FDD	Uplink	9:36:04.062	DCCH	UPLINK_DIRECT_TRANSFER
					947.		9:36:06.662	10562	416	-8.6		3917.	L3SM	UMTS FDD	Uplink	9:36:04.062	DCCH	IDENTITY_RESPONSE
					948.	-78.3	9:36:07.466	10562	416			3918.				9:36:04.182		DOWNLINK_DIRECT_TRANSFER
					949,		9:36:07.466	10562	416	-8.9		3919,	L3SM	UMTS FDD	Downlink	9:36:04.182	DCCH	CALL_PROCEEDING
					950.	-82.3	9:36:07.614	10562	416			3920.	RRCSM	UMTS FDD	Uplink	9:36:04.883	DCCH	MEASUREMENT_REPORT
					951.		9:36:07.614	10562	416	-11.1		3921.	RRCSM	UMTS FDD	Uplink	9:36:04.995	DCCH	MEASUREMENT_REPORT
					952.	-84.3	9:36:07.917	10562	416			3922.	RRCSM	UMTS FDD	Uplink	9:36:05.024	DCCH	MEASUREMENT_REPORT
					953.	- 11 E	9:36:07.917	10562	416	-13.9		3923,	RRCSM	UMTS FDD	Uplink	9:36:05.051	DCCH	UPLINK_DIRECT_TRANSFER

- This call failure event occurred on short call at 09:36:05:051 time when UE was latched with 3G network.
- After sending "CM Service Request" message to core network, then core network responds with "Call Proceeding" message. After that call setup has been failed.
- During the failure, UE was latched with PSC 416 and RF condition RSCP -74.1 dBm and Ec/No -12.1 dB are very good.
- Need to check MT End.



# Phase-1 Call Attempt Failure Analysis 1 From MS6 Airtel MT

	Time	Band (MHz)	Ch	PCI	RSRP	SNR	•		Event ID	System	Transf. dir.	Time	Subchannel	Message name
1430.	9:35:52.716	800	6400	6	-83.2			3006.	RRCSM	LTE FDD	Downlink	9:35:42.038	PCCH	Paging
1431.	9:35:52.716					-3.8		3007.	RRCSM	LTE FDD	Uplink	9:35:46.550	DCCH	MeasurementReport
1432.	9:35:53.046	800	6400	6	-86.3			3008.	RRCSM	LTE FDD	Downlink	9:35:46,588	DCCH	RRCConnectionReconfiguration
1433.	9:35:53.046					-5.6		3009.	RRCSM	LTE FDD	Uplink	9:35:46.598	DCCH	RRCConnectionReconfigurationComplete
1434.	9:35:53.965	800	6400	6	-83.4			3010.	RRCSM	LTE FDD	Downlink	9:35:48.438	PCCH	Paging
1435.	9:35:53.965					-2.1		3011.	RRCSM	LTE FDD	Downlink	9:35:48.596	DCCH	RRCConnectionReconfiguration
1436.	9:35:54.927	800	6400	6	-83			3012.	RRCSM	LTE FDD	Uplink	9:35:48.606	DCCH	RRCConnectionReconfigurationComplete
1437.	9:35:54.927					0.6		3013.	RRCSM	LTE FDD	Uplink	9:35:48.750	DCCH	MeasurementReport
1438.	9:35:55.450	800	6400	6	-83		_	3014.	RRCSM	LTE FDD	Downlink	9:35:48.785	DCCH	RRCConnectionReconfiguration
1439.	9:35:56.450	800	6400	6	-83.2			3015.	RRCSM	LTE FDD	Uplink	9:35:48.787	DCCH	RRCConnectionReconfigurationComplete
1440.	9:35:56.450					3		3016.	RRCSM	LTE FDD	Uplink	9:35:48.790	DCCH	MeasurementReport
1441.	9:35:57.509	800	6400	6	-75.3			3017.	RRCSM	LTE FDD	Downlink	9:35:48.809	DCCH	RRCConnectionReconfiguration
1442.	9:35:57.509					8.4		3018.	RRCSM	LTE FDD	Uplink	9:35:48.818	DCCH	RRCConnectionReconfigurationComplete
1443.	9:35:58.116	800	6400	6	-76,3			3019.	RRCSM	LTE FDD	Downlink	9:35:50.835	DCCH	RRCConnectionReconfiguration
1444.	9:35:58.763	800	6400	6	-73.3			3020.	RRCSM	LTE FDD	Uplink	9:35:50.847	DCCH	RRCConnectionReconfigurationComplete
1445.	9:35:58.763					12.2		3021.	RRCSM	LTE FDD	Uplink	9:35:50.992	DCCH	MeasurementReport
1446.	9:36:00.394	800	6400	6	-80.5			3022.	RRCSM	LTE FDD	Downlink	9:35:51.018	DCCH	RRCConnectionReconfiguration
1447.	9:36:00.394					-2.6		3023.	RRCSM	LTE FDD	Uplink	9:35:51.019	DCCH	RRCConnectionReconfigurationComplete
1448.	9:36:01.383	800	6400	6	-86.1			3024.	RRCSM	LTE FDD	Downlink	9:35:52.995	DCCH	RRCConnectionRelease
1449.	9:36:01.383					-18.1		3025.	RRCSM	LTE FDD	Downlink	9:36:05.158	PCCH	Paging
1450.	9:36:02.599	800	6400	6	-84.9			3026.	L3SM	LTE FDD	Uplink	9:36:05.159		EXTENDED_SERVICE_REQUEST
1451.	9:36:02,599					-3.2		3027.	RRCSM	LTE FDD	Uplink	9:36:05.159	CCCH	RRCConnectionRequest
1452.	9:36:02.614	800	6400	6	-84.9			3028.	RRCSM	LTE FDD	Downlink	9:36:05.208	CCCH	RRCConnectionSetup
1453.	9:36:04.450	800	6400	6	-82.4			3029.	RRCSM	LTE FDD	Uplink	9:36:05.212	DCCH	RRCConnectionSetupComplete
1454.	9:36:04.450			4		-2.1		3030.	RRCSM	LTE FDD	Downlink	9:36:05.262	DCCH	RRCConnectionRelease
1455.	9:36:05.278	800	6400	6	-88.3			3031.	RRCSM	UMTS FDD	Downlink	9:36:05.714	BCCH_BCH	SYSTEM_INFORMATION_BCH
1456.	9:36:05.278					-7.1		3032.	RRCSM	UMTS FDD	Downlink	9:36:05.714	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_3
1457.	9:36:05.448	800	6400	6	-88.4			3033.	RRCSM	UMTS FDD	Downlink	9:36:05.714	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_7
1458.	9:36:05.448					-8.2		3034.	RRCSM	UMTS FDD	Downlink	9:36:05.734	BCCH_BCH	SYSTEM_INFORMATION_BCH
1459.	9:36:14.283	1800	1300	63	-93.4	Jack Mary		3035.	RRCSM	UMTS FDD	Downlink	9:36:05.754	BCCH_BCH	SYSTEM_INFORMATION_BCH
1460.	9:36:14.283							3036.	RRCSM	UMTS FDD	Downlink	9:36:05.774	BCCH_BCH	SYSTEM_INFORMATION_BCH
1461.	9:36:14.587	1800	1300	54	-87.8			3037.	RRCSM	UMTS FDD	Downlink	9:36:05.774	BCCH	MASTER_INFORMATION_BLOCK
1462.	9:36:14.587					-7.9		3038.	RRCSM	UMTS FDD	Downlink	9:36:05.874	BCCH_BCH	SYSTEM_INFORMATION_BCH
1463.	9:36:14.804	1800	1300	54	-87.8			3039.	RRCSM	UMTS FDD	Downlink	9:36:05.874	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_3
1464.	9:36:16.005	1800	1300	54	-87.8			3040.	RRCSM	UMTS FDD	Downlink	9:36:05.874	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_7

- On MT End, During the setup fail, UE was latched with PCI 6 and RF condition RSRP -82.4 dBm is good but SINR -2.1 dB was poor.
- As per the analysis call failure happened due to Poor quality of the network.



# Phase-1 Call Attempt Failure Analysis 2 From MS5 Airtel MO

	Time	System	Serving band	1000	Time	RxLev sub	ARFCN	LAC	RAC	RXQ sub	*		System	Transf. dir.	Time	Subchannel	Message name
1.	9:36:05.051	UMTS FDD	2100	155.	10:09:08.432	-94	114	50000	1			11509.	GSM	Uplink	10:09:15.050	DCCH	CIPHERING_MODE_COMPLETE
2.	10:09:35.502	GSM	900	156.	10:09:08.649	-94	114	50000	1			11510.	GSM.	Uplink	10:09:15.05	DCCH	SETUP
	The state of the s			157.	10:09:09.429	-94	114	50000	1			11511.	GSM	Uplink	10:09:15.295	SACCH	MEASUREMENT_REPORT
				158,	10:09:09.604	-94	114	50000	1			11512.	GSM	Uplink	10:09:15.768	SACCH	MEASUREMENT_REPORT
				159.	10:09:10.435	-94	114	50000	1			11513.	GSM	Uplink	10:09:16.23	SACCH	MEASUREMENT_REPORT
				160.	10:09:11.105	-95	114	50000	1			11514.	GSM	Uplink	10:09:16.70	SACCH	MEASUREMENT_REPORT
				161.	10:09:11.600	-96	114	50000	1			11515.	GSM	Uplink	10:09:17.178	SACCH	MEASUREMENT_REPORT
				162.	10:09:11.823	-96	114	50000	1			11516.	GSM	Uplink	10:09:17.649	SACCH	MEASUREMENT_REPORT
				163.	10:09:12.941	-93	114	50000	1			11517.	GSM	Uplink	10:09:18.119	SACCH	MEASUREMENT_REPORT
				164.	10:09:12.941					7		11518.	GSM	Downlink	10:09:18.25	SACCH	SYSTEM_INFORMATION_TYPE_5
				165.	10:09:13.478	-92	114	50000	1			11519.	GSM	Downlink	10:09:18.57	DCCH	IDENTITY_REQUEST
				166.	10:09:13.478					7		11520.	GSM	Uplink	10:09:18.57	DCCH	IDENTITY_RESPONSE
				167.	10:09:13.883					3		11521.	GSM	Uplink	10:09:18,590	SACCH	MEASUREMENT_REPORT
				168.	10:09:14.016	-93	114	50000	1			11522.	GSM	Uplink	10:09:19.06	SACCH	MEASUREMENT_REPORT
				169.	10:09:14.353					7		11523.	GSM	Uplink	10:09:19.532	SACCH	MEASUREMENT_REPORT
				170.	10:09:14.479	-93	114	50000	1			11524.	GSM	Downlink	10:09:19.989	DCCH	CALL_PROCEEDING
				171,	10:09:14,824					6	-1	11525.	GSM	Uplink	10:09:20.003	SACCH	MEASUREMENT_REPORT
				172.	10:09:15.051	-94	114	50000	1			11526.	GSM	Uplink	10:09:20.47	SACCH	MEASUREMENT_REPORT
				173.	10:09:15.295					3		11527.	GSM	Downlink	10:09:20.607	SACCH	SYSTEM_INFORMATION_TYPE_6
				174.	10:09:15.516	-93	114	50000	1			11528.	GSM	Uplink	10:09:20,944	SACCH	MEASUREMENT_REPORT
				175.	10:09:15.766					7	_	11529.	GSM	Uplink	10:09:21,415	SACCH	MEASUREMENT_REPORT
				176,	10:09:15.899	-94	114	50000	1			11530.	GSM	Uplink	10:09:21.886	SACCH	MEASUREMENT_REPORT
				177.	10:09:16.458	-93	114	50000	1			11531.	GSM	Uplink	10:09:22.358	SACCH	MEASUREMENT_REPORT
				178.	10:09:17.106	-93	114	50000	1			11532.	GSM	Uplink	10:09:22.823	SACCH	MEASUREMENT_REPORT
				179.	10:09:17.649			50000	1			11533.	GSM	Uplink	10:09:23.290	SACCH	MEASUREMENT_REPORT
				180.	10:09:18.120	-93	114	50000	1			11534.	GSM	Uplink	10:09:23.769	SACCH	MEASUREMENT_REPORT
				181.	10:09:18.590					7		11535.	GSM	Uplink	10:09:24.239	SACCH	MEASUREMENT_REPORT
				182.	10:09:19.061	-92	114	50000	1			11536.	GSM	Uplink	10:09:24,710	SACCH	MEASUREMENT_REPORT
				183.	10:09:19.061					7		11537.	GSM	Uplink	10:09:25.18	SACCH	MEASUREMENT_REPORT
				184.	10:09:19.665	-92	114	50000	1			11538.	GSM	Uplink	10:09:25.652	SACCH	MEASUREMENT_REPORT
				185,	10:09:20.003	-92	114	50000	1			11539.	GSM	Uplink	10:09:26.122	SACCH	MEASUREMENT_REPORT
				186.	10:09:20.607	-93	114	50000	1			11540.	GSM	Uplink	10:09:26.59	SACCH	MEASUREMENT_REPORT
				187.	10:09:20.944					5		11541.	GSM	Uplink	10:09:27.064	SACCH	MEASUREMENT_REPORT
				188.	10:09:21.133	-93	114	50000	1			11542.	GSM	Uplink	10:09:27.535	SACCH	MEASUREMENT_REPORT
				189.	10:09:21.415					7		11543.	GSM	Uplink	10:09:28.006	SACCH	MEASUREMENT_REPORT
				190.	10:09:21.872	-93	114	50000	1			11544.	GSM	Uplink	10:09:28,476	SACCH	MEASUREMENT_REPORT

- This call failure event occurred on short call at 10:09:35:502 time when UE was latched with 2G network.
- After sending "CM Service Request"
   message to core network, then core
   network responds with "Call Proceeding"
   message. After that call setup has been
   failed.
- During the session UE was latched with ARFCN 114. RF Conditions found during session also seemed OK.(Rx Lev: -92, Rx Qual= 7)
- As per the Analysis the call setup failure event occurred due to poor quality in the network.



# Phase-2 Call Drop & Call Attempt Failure Airtel, CWS Summary

Call Attempt Failure cause from Airtel	Count
Total Call Attempt Failure	0

Call Attempt Failure cause from CWS	Count
Total Call Attempt Failure	0

Call Drop cause from Airtel								
Total Call Drop	1							
Poor Coverage	1							

Call Drop cause from CWS	Count
Total Call Drop	0



# Phase-2 Call Drop Analysis 1 From MS9 Airtel MO

1. 1 25346 630 650 90 4 253 5000 4 923 535 0000 4 923 535 6500 4 923 535 6500 650 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Time Sy	stem Serving band		Time	RxLev sub	ARFCN	BSIC	LAC	RAC	RXQ sub 4		Event ID	System	Transf. dir.	Time	Subchannel	Message name	
480.   123-340-487   96   53   50000   4   9231   135M   GSM   Downlink   123-34-0861   34GCH   SYSTEM_INFORMATION_TYPE_5     481.   123-340-481   96   53   50000   4   9231   135M   GSM   Downlink   123-34-0861   34GCH   SYSTEM_INFORMATION_TYPE_5     483.   123-34-183   34   96   53   50000   4   9231   135M   GSM   Downlink   123-34-183   SACCH   MEASUREMENT_REPORT     485.   123-34-187   34   96   53   50000   4   9231   135M   GSM   Downlink   123-34-183   SACCH   MEASUREMENT_REPORT     486.   123-34-287   96   53   50000   4   9231   135M   GSM   Downlink   123-34-187   SACCH   MEASUREMENT_REPORT     486.   123-34-287   96   53   50000   4   9238   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     486.   123-34-287   96   53   50000   4   9238   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     486.   123-34-287   96   53   50000   4   9238   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     486.   123-34-287   96   53   50000   4   9238   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     487.   123-34-287   96   53   50000   4   9238   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     488.   123-34-287   96   53   50000   4   9234   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     489.   123-34-287   96   53   50000   4   9234   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     489.   123-34-287   96   53   50000   4   9234   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     489.   123-34-287   96   53   50000   4   9234   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     489.   123-34-287   96   53   50000   4   9234   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     489.   123-34-287   96   53   50000   4   9234   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     489.   123-34-287   96   53   50000   4   9234   135M   GSM   Downlink   123-34-287   SACCH   MEASUREMENT_REPORT     489.   123-34-287   95   95	1.	12:53:46.035 6:	SM 900	478.	12:53:39.947						3	9228	L3SM	GSM	Downlink	12:53:40.381	SACCH	MEASUREMENT_INFORMATION	
### 49.1   12-53-40-007   54-CCH   MEASUREMENT PEPORT   ### 12-53-40-007   54-CCH   ME				479.	12:53:39.981	-90	96	53	50000	4		9229	L3SM	GSM	Uplink	12:53:40.427	SACCH	MEASUREMENT_REPORT	
482.   2-35-40-0907   4   9232.   83M   GSM   Downlink   12-53-41-387   SACCH   MESUREMENT REPORT   483.   12-53-41-187   96   53   5000   4   92-33.   83M   GSM   Uplink   12-53-41-887   SACCH   MESUREMENT REPORT   486.   12-53-42-187   96   53   5000   4   92-35.   83M   GSM   Uplink   12-53-41-887   SACCH   MESUREMENT REPORT   487.   12-53-42-187   96   53   5000   4   92-35.   83M   GSM   Downlink   12-53-42-367   SACCH   MESUREMENT REPORT   488.   12-53-42-287   96   95   35   5000   4   92-35.   83M   GSM   Downlink   12-53-42-367   SACCH   MESUREMENT REPORT   489.   12-53-42-37   96   97   98   99   99   99   99   99   99				480.	12:53:40.427						5	9230	L3SM	GSM	Downlink	12:53:40.861	SACCH	SYSTEM_INFORMATION_TYPE_6	
483, 12534.187   39   96   53   5000   4   9238, 125M   GSM   Downlink   12534.187   SACCH   MEASUREMENT, REPORT     484, 12534.1873   49   69   53   5000   4   9236, 125M   GSM   Downlink   12534.187   SACCH   MEASUREMENT, REPORT     486, 12534.254   49   50   53   5000   4   9236, 125M   GSM   Downlink   12534.254   TSACCH   MEASUREMENT, REPORT     487, 12534.254   49   50   53   5000   4   9236, 125M   GSM   Downlink   12534.254   TSACCH   MEASUREMENT, REPORT     488, 12534.254   49   50   53   5000   4   9238, 125M   GSM   Downlink   12534.254   TSACCH   MEASUREMENT, REPORT     490, 12534.3377   5   50   53   5000   4   9240, 125M   GSM   Downlink   12534.261   SACCH   MEASUREMENT, REPORT     491, 12534.3377   5   5   9231, 125M   GSM   Downlink   12534.261   SACCH   MEASUREMENT, REPORT     492, 12534.3377   5   5   9241, 125M   GSM   Downlink   12534.261   SACCH   MEASUREMENT, REPORT     493, 12534.3377   5   5   9241, 125M   GSM   Downlink   12534.261   SACCH   MEASUREMENT, REPORT     494, 12534.377   5   5   9241, 125M   GSM   Downlink   12534.341   SACCH   MEASUREMENT, REPORT     495, 12534.3777   5   6   53   5000   4   9242, 125M   GSM   Downlink   12534.341   SACCH   MEASUREMENT, REPORT     496, 12534.3777   5   6   9243, 125M   GSM   Downlink   12534.341   SACCH   MEASUREMENT, REPORT     497, 12534.5277   8   6   53   5000   4   9244, 125M   GSM   Downlink   12534.341   SACCH   MEASUREMENT, REPORT     498, 12534.5777   5   6   9240, 125M   GSM   Downlink   12534.341   SACCH   MEASUREMENT, REPORT     499, 12534.5277   8   6   93   5000   4   9241, 125M   GSM   Downlink   12534.341   SACCH   MEASUREMENT, REPORT     499, 12534.5777   5   6   9240, 125M   GSM   Downlink   12534.341   SACCH   MEASUREMENT, REPORT     499, 12534.5771   8   6   9240, 125M   GSM   Downlink   12534.3451   SACCH   MEASUREMENT, REPORT     490, 12534.5771   8   6   9240, 125M   GSM   Downlink   12534.3451   SACCH   MEASUREMENT, REPORT     490, 12534.5771   8   6   9250, 125M   GSM   Downlink   12534.3451   SACCH   MEASUREMENT,				481.	12:53:40.491	-91	96	53	50000	4		9231	L3SM	GSM	Uplink	12:53:40.907	SACCH	MEASUREMENT_REPORT	
484. 12534-187				482.	12:53:40.907						4	9232	L3SM	GSM	Downlink	12:53:41.341	SACCH	SYSTEM_INFORMATION_TYPE_5	
485. 12-53-41-613 -84 96 53 50000 4 92.35. LISSM GSM Uplink 12-53-42-615 SACCH MEASUREMENT REPORT  486. 12-53-42-627 9 4 96 53 50000 4 92.35. LISSM GSM Uplink 12-53-42-615 SACCH SISTEM INFORMATION TYPE 6  487. 12-53-42-627 9 96 53 50000 4 92.35. LISSM GSM Uplink 12-53-42-615 SACCH MEASUREMENT REPORT  488. 12-53-42-627 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-42-627 SACCH MEASUREMENT REPORT  490. 12-53-43-307 95 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-42-625 SACCH MEASUREMENT INFORMATION TO PE 6  492. 12-53-43-787 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-43-307 SACCH MEASUREMENT INFORMATION IN PE 6  493. 12-53-43-787 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-43-307 SACCH MEASUREMENT INFORMATION IN PE 6  494. 12-53-44-787 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-43-307 SACCH MEASUREMENT INFORMATION IN PE 6  495. 12-53-45-787 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-43-307 SACCH MEASUREMENT REPORT  496. 12-53-45-787 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-44-78 SACCH MEASUREMENT REPORT  497. 12-53-45-227 95 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-44-78 SACCH MEASUREMENT REPORT  498. 12-53-45-797 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-44-78 SACCH MEASUREMENT REPORT  498. 12-53-45-797 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-44-78 SACCH MEASUREMENT REPORT  498. 12-53-45-797 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-44-78 SACCH MEASUREMENT REPORT  499. 12-53-45-797 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-45-707 SACCH MEASUREMENT REPORT  499. 12-53-45-797 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-45-707 SACCH MEASUREMENT REPORT  499. 12-53-45-707 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-45-707 SACCH MEASUREMENT REPORT  499. 12-53-45-707 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-45-707 SACCH MEASUREMENT REPORT  490. 12-53-46-707 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-45-707 SACCH MEASUREMENT REPORT  490. 12-53-46-707 9 96 53 50000 4 92.40. LISSM GSM Uplink 12-53-46-708 DACCH MEASUREMENT REPORT  490. 12-53-46-707 9 96 53 50000 4 92.40. LISSM				483.	12:53:41.133	-93	96	53	50000	4		9233	L3SM	GSM	Uplink	12:53:41.387	SACCH	MEASUREMENT_REPORT	
486, 12534.208				484.	12:53:41.387						5	9234	L3SM	GSM	Downlink	12:53:41.821	SACCH	MEASUREMENT_INFORMATION	
487. 125342,347				485.	12:53:41.613	-94	96	53	50000	4		9235	L3SM	GSM	Uplink	12:53:41.867	SACCH	MEASUREMENT_REPORT	
488. 12:53:42:554 -94 96 53 5000 4 9238. 135M G5M Downlink 12:53:42:781 SACCH SYSTEM_INFORMATION_TIPE_5  489. 12:53:42:07 96 95 53 5000 4 9240. 135M G5M Uplink 12:53:42:07 SACCH MEASUREMENT_REPORT  491. 12:53:43:307 96 53 5000 4 9240. 135M G5M Uplink 12:53:43:07 SACCH MEASUREMENT_REPORT  492. 12:53:43:787 97 96 53 5000 4 9240. 135M G5M Uplink 12:53:43:787 SACCH MEASUREMENT_REPORT  494. 12:53:43:787 97 96 53 5000 4 9240. 135M G5M Uplink 12:53:43:787 SACCH MEASUREMENT_REPORT  495. 12:53:44:787 98 96 95 5000 4 9245. 135M G5M Uplink 12:53:44:787 SACCH MEASUREMENT_REPORT  496. 12:53:44:787 98 96 95 35 5000 4 9245. 135M G5M Uplink 12:53:44:787 SACCH MEASUREMENT_REPORT  496. 12:53:45:227 95 96 53 5000 4 9246. 135M G5M Uplink 12:53:44:707 SACCH MEASUREMENT_REPORT  497. 12:53:45:227 95 96 53 5000 4 9246. 135M G5M Uplink 12:53:42:53 185 SACCH MEASUREMENT_REPORT  498. 12:53:45:707 96 53 5000 4 9246. 135M G5M Uplink 12:53:42:53 185 SACCH MEASUREMENT_REPORT  499. 12:53:45:707 96 53 5000 4 9246. 135M G5M Uplink 12:53:45:34-85 SACCH MEASUREMENT_REPORT  499. 12:53:45:707 96 53 5000 4 9246. 135M G5M Uplink 12:53:45:05 SACCH MEASUREMENT_REPORT  501. 12:53:46:31 95 96 53 5000 4 9246. 135M G5M Uplink 12:53:45:05 SACCH MEASUREMENT_REPORT  502. 12:53:46:31 95 96 53 5000 4 9246. 135M G5M Uplink 12:53:45:05 SACCH MEASUREMENT_REPORT  503. 12:53:46:31 95 96 53 5000 4 9246. 135M G5M Uplink 12:53:45:05 SACCH MEASUREMENT_REPORT  504. 12:53:46:31 95 96 53 5000 4 9245. 135M G5M Downlink 12:53:46:035 DCCH RELASE  505. 12:53:46:31 95 96 53 5000 1 9255. 135M G5M Downlink 12:53:46:035 DCCH SISTEM_INFORMATION_TIPE_5  506. 12:53:46:31 95 96 53 5000 1 9255. 135M G5M Downlink 12:53:46:035 DCCH SISTEM_INFORMATION_TIPE_5  507. 12:53:46:31 95 96 53 5000 1 9255. 135M G5M Downlink 12:53:46:035 DCCH SISTEM_INFORMATION_TIPE_3  508. 12:53:50:625 97 112 1 50000 1 9255. 135M G5M Downlink 12:53:46:235 DCCH SISTEM_INFORMATION_TIPE_3  509. 12:53:51:525 92 112 1 50000 1 9256. 135M G5M Downlink 12:53:46:235 DCCH SISTEM_INFORMATION_TIPE_3  510. 12:53:51:525 92 112				486.	12:53:42.088	-94	96	53	50000	4		9236	L3SM	GSM	Downlink	12:53:42.301	SACCH	SYSTEM_INFORMATION_TYPE_6	
499. 125342.827 96 96 53 5000 4 9240. 135M G5M Downlink 125342.827 SACCH MEASUREMENT_REPORT  490. 125343.307 97 96 95 35 5000 4 9241. 135M G5M Downlink 125343.207 SACCH MEASUREMENT_REPORT  492. 125343.787 96 95 35 5000 4 9242. 135M G5M Downlink 125343.207 SACCH MEASUREMENT_REPORT  494. 125344.787 96 96 53 5000 4 9245. 135M G5M Downlink 125343.707 SACCH MEASUREMENT_REPORT  495. 125344.787 96 96 53 5000 4 9245. 135M G5M Downlink 125343.707 SACCH MEASUREMENT_REPORT  496. 125345.227 96 96 53 5000 4 9245. 135M G5M Downlink 125343.707 SACCH MEASUREMENT_REPORT  497. 125345.227 97 96 53 5000 4 9246. 135M G5M Downlink 125343.707 SACCH MEASUREMENT_REPORT  498. 125345.707 9 96 53 5000 4 9246. 135M G5M Downlink 125344.707 SACCH MEASUREMENT_REPORT  499. 125345.707 9 96 53 5000 4 9246. 135M G5M Downlink 125344.707 SACCH MEASUREMENT_REPORT  499. 125345.707 9 96 53 5000 4 9246. 135M G5M Downlink 125344.707 SACCH MEASUREMENT_REPORT  499. 125345.707 9 96 53 5000 4 9246. 135M G5M Downlink 125345.708 SACCH MEASUREMENT_REPORT  499. 125345.707 9 96 53 5000 4 9249. 135M G5M Downlink 125345.708 SACCH MEASUREMENT_REPORT  499. 125346.707 9 96 53 5000 4 9249. 135M G5M Downlink 125345.708 SACCH MEASUREMENT_REPORT  500. 125346.407 9 96 53 5000 4 9249. 135M G5M Downlink 125345.708 SACCH MEASUREMENT_REPORT  501. 125346.407 9 96 53 5000 4 9249. 135M G5M Downlink 125345.707 SACCH MEASUREMENT_REPORT  502. 125346.407 9 96 53 5000 1 9253. 135M G5M Downlink 125346.007 DCCH RELEASE  503. 125346.407 9 96 53 5000 1 9253. 135M G5M Downlink 125346.007 DCCH RELEASE  504. 125346.007 DCCH RELEASE  505. 125346.407 DCCH RELEASE SACCH MEASUREMENT_REPORT  506. 125346.407 DCCH RELEASE SACCH MEASUREMENT_REPORT  507. 125346.407 DCCH RELEASE SACCH MEASUREMENT_REPORT  508. 125346.407 DCCH RELEASE SACCH MEASUREMENT_REPORT  509. 125346.407 DCCH RELEASE SACCH MEASUREMENT_REPORT  509. 125346.407 DCCH RELEASE SACCH MEASUREMENT_REPORT  500. 125346.407 DCCH RELEASE SACCH MEASUREMENT_REPORT  500. 125346.407 DCCH RELEASE SACCH MEASUREMENT_REPORT  500. 125346.407 DCCH RELEA				487.	12:53:42.347						4	9237	L3SM	GSM	Uplink	12:53:42.347	SACCH	MEASUREMENT_REPORT	
490. 12:53:43.307 95 96 53 50000 4 5 9241. 135M GSM Downlink 12:53:43.207 SACCH MEASUREMENT, IRPORT  492. 12:53:43.307 97 96 93 50000 4 9242. 135M GSM Downlink 12:53:43.207 SACCH MEASUREMENT, IRPORT  494. 12:53:43.787 96 96 93 50000 4 9244. 135M GSM Uplink 12:53:43.787 SACCH MEASUREMENT, IRPORT  495. 12:53:43.787 96 96 93 50000 4 9245. 135M GSM Uplink 12:53:44.787 SACCH MEASUREMENT, IRPORT  496. 12:53:45.227 95 96 93 50000 4 9246. 135M GSM Uplink 12:53:44.787 SACCH MEASUREMENT, IRPORT  497. 12:53:45.227 95 96 93 50000 4 9246. 135M GSM Uplink 12:53:44.787 SACCH MEASUREMENT, IRPORT  498. 12:53:45.707 9 6 9247. 135M GSM Uplink 12:53:45.8181 SACCH SISTEM, INFORMATION TYPE 6  499. 12:53:45.707 9 6 9248. 135M GSM Uplink 12:53:45.8181 SACCH SISTEM, INFORMATION, TYPE 6  499. 12:53:45.707 9 6 9248. 135M GSM Uplink 12:53:45.8181 SACCH SISTEM, INFORMATION, TYPE 6  499. 12:53:45.707 9 6 9249. 135M GSM Uplink 12:53:45.601 SACCH SISTEM, INFORMATION, TYPE 6  499. 12:53:45.707 9 6 9249. 135M GSM Uplink 12:53:45.601 SACCH SISTEM, INFORMATION, TYPE 5  500. 12:53:46.431 95 96 53 50000 4 9249. 135M GSM Uplink 12:53:45.605 DCCH MEASUREMENT, IRPORT  501. 12:53:46.431 95 96 53 50000 4 9249. 135M GSM Uplink 12:53:45.605 DCCH MEASUREMENT, IRPORT  502. 12:53:46.431 95 96 53 50000 1 9253. 135M GSM Uplink 12:53:45.605 DCCH MEASUREMENT, IRPORT  503. 12:53:46.431 95 96 53 50000 1 9253. 135M GSM Uplink 12:53:45.707 SACCH MEASUREMENT, IRPORT  504. 12:53:46.431 95 96 53 50000 1 9253. 135M GSM Uplink 12:53:45.707 SACCH MEASUREMENT, IRPORT  505. 12:53:50.487 95 96 96 97 97 97 97 97 97 97 97 97 97 97 97 97				488.	12:53:42,554	-94	96	53	50000	4		9238	L3SM	GSM	Downlink	12:53:42.781	SACCH	SYSTEM_INFORMATION_TYPE_5	
491. 125343307   96   53   5000   4   9241.   135M   GSM   Uplink   125343307   SACCH   MEASUREMENT REPORT   492. 12534787   96   96   9243.   135M   GSM   Uplink   125344747   SACCH   MEASUREMENT REPORT   494. 125344793   95   96   53   5000   4   9244.   135M   GSM   Uplink   125344701   SACCH   MEASUREMENT REPORT   495. 125344793   95   96   53   5000   4   9245.   135M   GSM   Uplink   125344701   SACCH   MEASUREMENT REPORT   496. 125345227   95   96   53   5000   4   9246.   135M   GSM   Uplink   125344701   SACCH   MEASUREMENT REPORT   497. 125345227   95   96   53   5000   4   9246.   135M   GSM   Uplink   125344701   SACCH   MEASUREMENT REPORT   498. 125345711   95   96   53   5000   4   9248.   135M   GSM   Uplink   125345227   SACCH   MEASUREMENT REPORT   499. 125345711   95   96   53   5000   4   9249.   135M   GSM   Uplink   125345227   SACCH   MEASUREMENT REPORT   499. 125345711   95   96   53   5000   4   9249.   135M   GSM   Uplink   125345227   SACCH   MEASUREMENT REPORT   500. 1253464511   95   96   53   5000   4   9250.   135M   GSM   Uplink   125345061   SACCH   SYSTEM, INFORMATION, TIPE 5   501. 125346491   95   96   53   5000   4   9251.   135M   GSM   Uplink   125345035   DCCH   MEASUREMENT REPORT   503. 125346491   95   96   53   5000   4   9252.   135M   GSM   Uplink   125346035   DCCH   MEASUREMENT REPORT   504. 125346491   95   96   53   5000   1   9254.   135M   GSM   Uplink   125346035   DCCH   RELEASE   505. 12535052   75   112   1   5000   1   9255.   135M   GSM   Uplink   125346035   DCCH   RELEASE   506. 125350.687   DOWNINK   125346939   DCCH   RELEASE   507. 125350.587   90   112   1   5000   1   9258.   135M   GSM   Downink   125347.688   BCCH   SYSTEM, INFORMATION, TIPE 3   508. 125351.123   92   112   1   5000   1   9258.   135M   GSM   Downink   125347.688   BCCH   SYSTEM, INFORMATION, TIPE 3   509. 12535.1254   92   112   1   5000   1   9258.   135M   GSM   Downink   125347.688   BCCH   SYSTEM, INFORMATION, TIPE 3   509. 12535.1254   92   112   1   5000   1   9258.   135M				489.	12:53:42.827						5	9239	L3SM	GSM	Uplink	12:53:42.827	SACCH	MEASUREMENT_REPORT	
492.   12:5343:787   97   96   53   5000   4   9242.   135M   GSM   Uplink   12:5343:787   SACCH   MEASUREMENT REPORT				490,	12:53:43,307	-95	96	53	50000	4		9240	L3SM	GSM	Downlink	12:53:43.261	SACCH	MEASUREMENT_INFORMATION	
493. 125343,787  494. 125344,747  495. 125344,747  496. 125344,747  497. 125345,227  996. 53 50000 4  9248. 135M GSM Uplink 125344,267 SACCH MEASUREMENT REPORT  497. 125345,227  996. 53 50000 4  9248. 135M GSM Downlink 125344,781 SACCH MEASUREMENT INFORMATION  497. 125345,227  996. 53 50000 4  99248. 135M GSM Downlink 125345,181 SACCH STSTEM, INFORMATION TYPE, 6  498. 125345,717  499. 125345,717  996. 53 50000 4  99248. 135M GSM Uplink 125345,181 SACCH MEASUREMENT, REPORT  499. 125345,711  995. 96 53 50000 4  99249. 135M GSM Downlink 125345,181 SACCH MEASUREMENT, REPORT  499. 125346,711  995. 96 53 50000 4  99249. 135M GSM Downlink 125345,181 SACCH STSTEM, INFORMATION, TYPE, 5  500. 125346,481  501. 125346,481  502. 125346,481  503. 125346,481  504. 125349,961  505. 1253546,930  506. 125350,542  507. 125350,542  508. 125350,542  509. 125350,542  509. 125350,542  509. 125350,542  509. 125350,542  509. 125350,542  509. 1253525,549  112 1 50000 1  9250. 135M GSM Downlink 125346,693 DCCH RELEASE  509. 1253525,549  112 1 50000 1  9250. 135M GSM Downlink 125346,693 DCCH MEASUREMENT, REPORT  509. 125350,542  509. 125350,642  509. 125350,642  509. 125350,642  509. 125350,642  509. 1253				491.	12:53:43.307						5	9241	L3SM		Uplink	12:53:43.307	SACCH	MEASUREMENT_REPORT	
494. 12:53:44.747				492.	12:53:43.787	-97	96	53	50000	4		9242	L3SM		Downlink	12:53:43.741	SACCH	SYSTEM_INFORMATION_TYPE_6	
495. 12:53:44.793 -95 96 53 50000 4 9245. L3SM GSM Downlink 12:53:44.701 SACCH MEASUREMENT_INFORMATION 9246. L3SM GSM Uplink 12:53:44.747 SACCH MEASUREMENT_REPORT 9247. L3SM GSM Uplink 12:53:45.277 SACCH MEASUREMENT_REPORT 9248. L3SM GSM Uplink 12:53:45.181 SACCH SYSTEM_INFORMATION_TYPE_6 9248. L3SM GSM Uplink 12:53:45.181 SACCH SYSTEM_INFORMATION_TYPE_6 9249. L3SM GSM Uplink 12:53:45.618 SACCH SYSTEM_INFORMATION_TYPE_5 9249. L3SM GSM Uplink 12:53:45.618 SACCH SYSTEM_INFORMATION_TYPE_5 9249. L3SM GSM Uplink 12:53:45.661 SACCH SYSTEM_INFORMATION_TYPE_5 9250. L3SM GSM Uplink 12:53:45.603 DCCH SYSTEM_INFORMATION_TYPE_5 9250. L3SM GSM Uplink 12:53:45.603 DCCH DISCONNECT 9250. L3SM GSM Uplink 12:53:46.035 DCCH RELEASE 9250. L3SM GSM Downlink 12:53:46.035 DCCH RELEASE 9250. L3SM GSM Downlink 12:53:46.035 DCCH SYSTEM_INFORMATION_TYPE_3 9250. L3SM GSM Downlink 12:53:47.551 BCCH SYSTEM_INFORMATION_TYPE_3 9250. L3SM GSM Downlink 12:53:47.551 BCCH SYSTEM_INFORMATION_TYPE_2 9250. L3SM GSM Downlink 12:53:48.286 CCCH SYSTEM_INFORMATION_TYPE_4 9250. L3SM GSM Downlink 12:53:48.				493,	12:53:43.787						6	9243	L3SM	GSM	Uplink	12:53:43.787	SACCH	MEASUREMENT_REPORT	
496. 12:53:45.227 -95 96 53 50000 4 9246. L3SM GSM Uplink 12:53:45.181 SACCH SYSTEM_INFORMATION_TYPE_6 498. 12:53:45.277				494.	12:53:44.747						4	9244	L3SM	GSM	Uplink	12:53:44.267	SACCH	MEASUREMENT_REPORT	
497. 12:53:45:227				495.	12:53:44,793	-95	96	53	50000	4		9245	L3SM	GSM	Downlink	12:53:44.701	SACCH	MEASUREMENT_INFORMATION	
498. 12:53:45:707				496.	12:53:45.227	-95	96	53	50000	4		9246	L3SM	GSM	Uplink	12:53:44.747	SACCH	MEASUREMENT_REPORT	
499, 12:53:45.711 -95 96 53 5000 4 9249, L3SM GSM Downlink 12:53:45.661 SACCH SYSTEM_INFORMATION_TYPE_5 500. 12:53:46.187 96 53 5000 4 9250, L3SM GSM Uplink 12:53:45.707 SACCH MEASUREMENT_REPORT 501. 12:53:46.431 95 96 53 5000 4 9251, L3SM GSM Downlink 12:53:46.035 DCCH DISCONNECT 502. 12:53:46.431 92 5000 1 9253, L3SM GSM Downlink 12:53:46.035 DCCH RELEASE 503. 12:53:49.340 0 0 9254, L3SM GSM Downlink 12:53:46.187 SACCH MEASUREMENT_REPORT 505. 12:53:50.052 -75 112 1 50000 1 9255, L3SM GSM Downlink 12:53:46.293 DCCH CHANNEL_RELEASE 506. 12:53:50.487 92 5000 1 9258, L3SM GSM Downlink 12:53:46.947 BCCH SYSTEM_INFORMATION_TYPE_3 507. 12:53:50.542 92 5000 1 9258, L3SM GSM Downlink 12:53:47.567 BCCH SYSTEM_INFORMATION_TYPE_4 508. 12:53:51.525 92 112 1 50000 1 9258, L3SM GSM Downlink 12:53:47.657 BCCH SYSTEM_INFORMATION_TYPE_3 509. 12:53:51.525 92 112 1 50000 1 9259, L3SM GSM Downlink 12:53:46.969 BCCH SYSTEM_INFORMATION_TYPE_2 510. 12:53:52.554 93 112 1 50000 1 9250, L3SM GSM Downlink 12:53:48.126 BCCH SYSTEM_INFORMATION_TYPE_4 512. 12:53:53.599 92 112 1 50000 1 9262, L3SM GSM Downlink 12:53:48.226 CCCH PAGING_REQUEST_TYPE_1				497.	12:53:45.227						5	9247	L3SM		Downlink	12:53:45.181	SACCH	SYSTEM_INFORMATION_TYPE_6	
500.         12:53:46.187         6         9250.         L3SM         GSM         Uplink         12:53:45.707         SACCH         MEASUREMENT_REPORT           501.         12:53:46.431         95         96         53         5000         4         9251.         L3SM         GSM         Downlink         12:53:46.035         DCCH         DISCONNECT           502.         12:53:49.051         5000         1         9253.         L3SM         GSM         Downlink         12:53:46.035         DCCH         RELEASE           504.         12:53:49.340         0         9254.         L3SM         GSM         Uplink         12:53:46.187         SACCH         MEASUREMENT_REPORT           505.         12:53:50:052         -75         112         1         5000         1         9255.         L3SM         GSM         Downlink         12:53:46.187         SACCH         MEASUREMENT_REPORT           506.         12:53:49.340         0         9255.         L3SM         GSM         Downlink         12:53:46.187         SACCH         MEASUREMENT_REPORT           506.         12:53:40.340         0         9255.         L3SM         GSM         Downlink         12:53:46.187         SACCH         MEASUREMENT_REPORT<				498.	12:53:45.707						6	9248	L3SM	GSM	Uplink	12:53:45.227	SACCH	MEASUREMENT_REPORT	
501.         12:53:46.431         96         53         5000         4         9251.         L3SM         GSM         Downlink         12:53:46.035         DCCH         DISCONNECT           502.         12:53:46.431         9252.         L3SM         GSM         Uplink         12:53:46.035         DCCH         RELEASE           503.         12:53:49.340         0         9253.         L3SM         GSM         Uplink         12:53:46.173         DCCH         RELEASE           505.         12:53:50.052         75         112         1         5000         1         9255.         L3SM         GSM         Uplink         12:53:46.173         DCCH         RELEASE           506.         12:53:50.052         75         112         1         5000         1         9255.         L3SM         GSM         Downlink         12:53:46.173         DCCH         CHANNEL_RELEASE           506.         12:53:50.0542         10         9255.         L3SM         GSM         Downlink         12:53:46.93         DCCH         CHANNEL_RELEASE           507.         12:53:50.542         5000         1         9257.         L3SM         GSM         Downlink         12:53:46.93         BCCH         SYSTEM_INFOR				499.	12:53:45.711	-95	96	53	50000	4		9249	L3SM	Action Control	Downlink	12:53:45.661	SACCH	SYSTEM_INFORMATION_TYPE_5	
502.   12:53:46.431   9252.   135M   G5M   Uplink   12:53:46.035   DCH   RELEASE				500.	12:53:46.187						6	9250	L3SM	GSM	Uplink	12:53:45.707	SACCH	MEASUREMENT_REPORT	
503. 12:53:49.051				501.	12:53:46.431	-95	96	53	50000	4		9251	L3SM	GSM	Downlink	12:53:46.035	DCCH	DISCONNECT	
504. 12:53:49,340				502.	12:53:46.431							9252	and the second	GSM	Uplink	12:53:46.035	DCCH	RELEASE	
505. 12:53:50.052 -75				503.	12:53:49.051				50000	1		9253	L3SM	GSM	Downlink	12:53:46.173	DCCH	RELEASE_COMPLETE	
506. 12:53:50.487				504.	## http://doi.org/10.000/						0	Charles Services	-11/10/00	100707	Uplink	12:53:46.187	SACCH	MEASUREMENT_REPORT	
507. 12:53:50.542				505.	The state of the s	-75	112	1	50000	1			0.0000000		Downlink	12:53:46.293	DCCH	CHANNEL_RELEASE	
508. 12:53:51.123 -92 112 1 50000 1 9258. L3SM GSM Downlink 12:53:47.520 BCCH SYSTEM_INFORMATION_TYPE_3 509. 12:53:51.525 -92 112 1 50000 1 9259. L3SM GSM Downlink 12:53:47.651 BCCH SYSTEM_INFORMATION_TYPE_2 510. 12:53:52.143 -92 112 1 50000 1 9260. L3SM GSM Downlink 12:53:47.669 BCCH SYSTEM_INFORMATION_TYPE_2QUATER 511. 12:53:52.554 -93 112 1 50000 1 9261. L3SM GSM Downlink 12:53:48.126 BCCH SYSTEM_INFORMATION_TYPE_4 512. 12:53:53.099 -92 112 1 50000 1 9262. L3SM GSM Downlink 12:53:48.228 CCCH PAGING_REQUEST_TYPE_1												1004049049	100000000000000000000000000000000000000	19999911	Downlink	12:53:46.947	BCCH	SYSTEM_INFORMATION_TYPE_3	
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511. 12:53:52.554 -93				509.	12:53:51.525	-92	112	1	50000	1		9259			Downlink	12:53:47.651	BCCH	SYSTEM_INFORMATION_TYPE_2	
512. 12:53:53:099 -92 112 1 50000 1 9262. L3SM GSM Downlink 12:53:48.228 CCCH PAGING_REQUEST_TYPE_1				510.	12:53:52.143	-92		1				9260			Downlink	12:53:47.669	BCCH	SYSTEM_INFORMATION_TYPE_2QUATER	
				511.	The state of the s			1				9261			Downlink	12:53:48.126	BCCH	SYSTEM_INFORMATION_TYPE_4	
513. 12:53:53.597 -92 112 1 50000 1 9263. L3SM GSM Downlink 12:53:48.357 BCCH SYSTEM_INFORMATION_TYPE_1				512.	and an experience of the second			1				- mondataly in the							
				513.	12:53:53.597	-92	112	1	50000	1		9263	L3SM	GSM	Downlink	12:53:48.357	BCCH	SYSTEM_INFORMATION_TYPE_1	

- This call drop event occurred on long call at 12:53:46:035 time when UE was latched with 2G network.
- After getting Alerting message at 12:53:17:459 time than Call drop happened.
- During the session UE was latched with ARFCN 96 and RF condition Rx Level -97 dBm and Rx Qual 6 dB both are poor.
- As per the analysis call drop happened due to poor coverage of the network.



# **THANKS**