## **Seychelles Test Drive**

## **Anse Royale Phase-2 Report**



## **DRIVE TEST ROUTE**

#### Phase-1 Dates- 10<sup>th</sup> Oct to 14<sup>th</sup> Oct 2024



Route Name: Mahe

District Name: Anse Royale

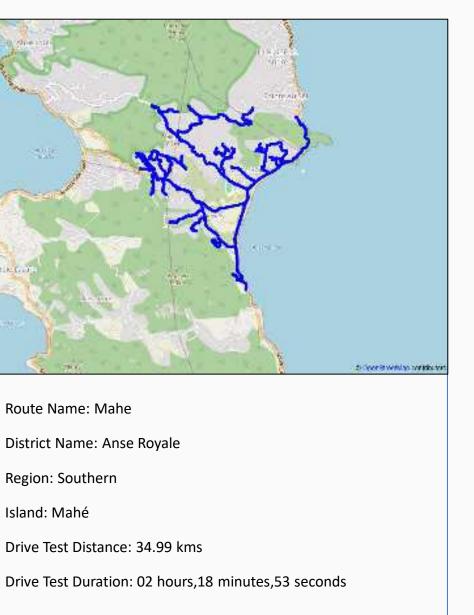
Region: Southern

Island: Mahé

Drive Test Distance: 33.84 kms

Drive Test Duration: 02 hours,18 minutes,54 seconds

#### Phase-2 Dates- 18th Oct 2024





### **VOICE EXECUTIVE SUMMARY**

#### Phase-1

#### Short Call Findings:

- The Call Setup Success Rate for Airtel is (98.87%), while for Operator
   CWS it is (99.43%).
- The Call Setup Time for Airtel is (6.31s), while for Operator CWS it is (6.06s)

#### Long Call Findings :

- The Call Retainability for Airtel is (97.92%), while for CWS it is (97.92%).
- The MOS quality observed for Airtel is (3.46), and for CWS, it is (3.20).

Phase-2

#### Short Call Findings:

- The Call Setup Success Rate for Airtel is (98.87%), while for Operator CWS it is (99.43%).
- The Call Setup Time for Airtel is (6.64s), while for Operator CWS it is (6.44s)

#### Long Call Findings :

- The Call Retainability for Airtel is (95.56%), while for CWS it is (93.48%).
- The MOS quality observed for Airtel is (3.16), and for CWS, it is (3.44).



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

#### Phase-1

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

- Airtel SFTP DL is (12.87 Mbps), while SFTP UL is (6.13 Mbps), CWS SFTP DL is (6.88 Mbps), while SFTP UL is (3.94 Mbps)
- Airtel HTTP DL is (17.24 Mbps), HTTP Capacity DL is (42.87 Mbps) ,HTTP UL is (9.51 Mbps) , and HTTP Capacity UL is (18.17 Mbps).
- CWS HTTP DL is (8.61 Mbps), HTTP Capacity DL is (19.05 Mbps) ,HTTP UL is (7.49 Mbps) , and HTTP Capacity UL is (14.22 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (6.53s), <u>www.nbs.gov.sc</u> took (16.95s), and <u>www.sbc.sc</u> took (17.41s) on Airtel.
- On live web page testing for browsing, <u>www.shein.com</u> took (5.60s), <u>www.nbs.gov.sc</u> took (15.61s), and <u>www.sbc.sc</u> took (14.85s) on CWS.
- On static browsing, Kepler Webpage took (4.22s), and Kepler Mobile took (1.80s) on Airtel.
- On static browsing, Kepler Webpage took (4.53s), and Kepler Mobile took (3.03s) on CWS.
- YouTube average resolution in Airtel is (1080.00) pixels.
- YouTube average resolution in CWS is (1080.00) pixels.
- Airtel scored 50.34% in Carrier Aggregation (CA).
- CWS scored 43.61% in Carrier Aggregation (CA).

#### Phase-2

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

- Airtel SFTP DL is (9.96 Mbps), while SFTP UL is (3.65 Mbps), CWS SFTP DL is (5.68 Mbps), while SFTP UL is (3.57 Mbps)
- Airtel HTTP DL is (13.30 Mbps), HTTP Capacity DL is (39.12 Mbps) ,HTTP UL is (6.61 Mbps) , and HTTP Capacity UL is (19.86 Mbps).
- CWS HTTP DL is (6.89 Mbps), HTTP Capacity DL is (24.68 Mbps), HTTP UL is (6.10 Mbps), and HTTP Capacity UL is (16.10 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (7.54s), <u>www.nbs.gov.sc</u> took (17.39s), and <u>www.sbc.sc</u> took (17.58s) on Airtel.
- On live web page testing for browsing, <u>www.shein.com</u> took (8.36s), <u>www.nbs.gov.sc</u> took (27.23s), and <u>www.sbc.sc</u> took (19.26s) on CWS.
- On static browsing, Kepler Webpage took (6.00s), and Kepler Mobile took (2.85s) on Airtel.
- On static browsing, Kepler Webpage took (5.89s), and Kepler Mobile took (3.36s) on CWS.
- YouTube average resolution in Airtel is (1080.00) pixels.
- YouTube average resolution in CWS is (1071.93) pixels.
- Airtel scored 54.27% in Carrier Aggregation (CA).
- CWS scored 39.83% in Carrier Aggregation (CA).



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

#### Phase-1

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

- Airtel SFTP DL is (3.73 Mbps), while SFTP UL is (1.47 Mbps), CWS SFTP DL is (3.60 Mbps), while SFTP UL is (1.08 Mbps)
- Airtel HTTP DL is (3.92 Mbps), HTTP Capacity DL is (4.99 Mbps) ,HTTP UL is (1.96 Mbps) , and HTTP Capacity UL is (4.09 Mbps).
- CWS HTTP DL is (3.33 Mbps), HTTP Capacity DL is (9.83 Mbps) ,HTTP UL is (2.04 Mbps) , and HTTP Capacity UL is (4.13 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (10.79s), <u>www.nbs.gov.sc</u> took (14.84s), and <u>www.sbc.sc</u> took (18.67s) on Airtel.
- On live web page testing for browsing, <u>www.shein.com</u> took (9.72s), <u>www.nbs.gov.sc</u> took (8.29s), and <u>www.sbc.sc</u> took (11.56s) on CWS.
- On static browsing, Kepler Webpage took (4.61s), and Kepler Mobile took (2.20s) on Airtel.
- On static browsing, Kepler Webpage took (5.45s), and Kepler Mobile took (2.65s) on CWS.
- YouTube average resolution in Airtel is (1030.45) pixels.
- YouTube average resolution in CWS is (1078.06) pixels.

#### Phase-2

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

- Airtel SFTP DL is (2.85 Mbps), while SFTP UL is (1.17 Mbps), CWS SFTP DL is (2.65 Mbps), while SFTP UL is (0.85 Mbps)
- Airtel HTTP DL is (3.10 Mbps), HTTP Capacity DL is (4.22 Mbps), HTTP UL is (1.37 Mbps), and HTTP Capacity UL is (4.07 Mbps).
- CWS HTTP DL is (2.58 Mbps), HTTP Capacity DL is (6.17 Mbps), HTTP UL is (1.30 Mbps), and HTTP Capacity UL is (4.24 Mbps).
- On live web page testing for browsing, <u>www.shein.com</u> took (11.07s), <u>www.nbs.gov.sc</u> took (12.22s), and <u>www.sbc.sc</u> took (13.95s) on Airtel.
- On live web page testing for browsing, <u>www.shein.com</u> took (8.67s), <u>www.nbs.gov.sc</u> took (11.00s), and <u>www.sbc.sc</u> took (11.30s) on CWS.
- On static browsing, Kepler Webpage took (6.03s), and Kepler Mobile took (2.73s) on Airtel.
- On static browsing, Kepler Webpage took (6.02s), and Kepler Mobile took (2.73s) on CWS.
- YouTube average resolution in Airtel is (966.60) pixels.
- YouTube average resolution in CWS is (1024.08) 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
	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



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

### Phase-1

Short Ca	II Statistics							Short Ca	all S	
Short Call Scenario	Operator 1	Ор	erator 2					Short Call Scenario		
Voice KPIs	Airtel		cws					Voice KPIs		
Call Attempt	177		174					Call Attempt		
Call Failed	2		1		CSSR= Call Setup Success rate     USCSR=Unsuccessful call setup ratio	o ratio	Call Failed			
Call Connected	175		173	CST=Call setup time Call Setup Success Ratio >97%				Call Connected		
CSSR[%]	98.87	9	99.43		Call retainal			CSSR[%]		
USCSR[%]	1.13		0.57		Dropped-cal Mean Opini			USCSR		
CST [s] Alerting	6.31		6.06		Call Ratio<2			CST [s] Alerting		
CST [s]Connected	6.59		6.27					CST [s]Connected		
Coll Soture Tim			Oper	ators	tors Rank					
Call Setup Tim	ie (s)		Airtel	CWS	Airtel	CWS		Call Setup Time (s)		
Overall CST (until ringing/alerting	g)		6.31	6.06	2	1	Overall CST (until r	inging/alerting)		
CS calls CST (until ringing/alerting	g)		6.83		1	#N/A	CS calls CST (until I	ringing/alerting)		
CSFB calls CST (until ringing/alert	ting)		6.27	6.06	2	1	CSFB calls CST (unt	il ringing/alerting)		
Overall CST (until Connect/Conne	ect Acknowledge)		6.59	6.27	2	1	Overall CST (until (	Connect/Connect Acknowledge)		
CS calls CST (until Connect/Connect	ect Acknowledge)		7.11		1	#N/A	CS calls CST (until (	CS calls CST (until Connect/Connect Acknowledge)		
CSFB calls CST (until Connect/Cor	nnect Acknowledge	e)	6.55	6.27	2	1	CSFB calls CST (until Connect/Connect Acknowled			

#### Phase-2

	Short Call Statistics							
	Short Call Scenario	0	Operator 1		Operator 2	2		
	Voice KPIs		Airtel		CWS			
	Call Attempt		177		175			
	Call Failed		2		1			
	Call Connected	175			174			
	CSSR[%]	98.87			99.43			
	USCSR	1.13			0.57			
	CST [s] Alerting	6.64			6.44			
	CST [s]Connected		6.95		6.63			
	Call Satur Time (c)		Oper	ators	Ra	ank	nk	
	Call Setup Time (s)		Airtel	CWS	Airtel	C	ws	
until ri	inging/alerting)		6.64	6.44	2		1	
until ringing/alerting)			6.89	14.86	4.86 1		2	
「(until ringing/alerting)		6.52	6.34	2		1		
until C	Connect/Connect Acknowledge)		6.95	6.63	2		1	

7.25

6.82

15.15

6.53

1

2

2

1



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

### Phase-1

Long Call Statistics									
Long Call Sc	enario	Operat	or 1	0	perator 2				
Voice Kl	Pls	Airte	el		CWS				
Call Conne	ected	48			48				
Call Drop	ped	1			1				
Call Comp	leted	47			47				
CRR[%	]	97.9	2		97.92				
DCR[%	5]	2.08	2.08		2.08				
MOS		3.46	3.46		3.20				
	Airtel short call	CWS short call	Airtel cal		CWS long call				
CSFB Calls	165	174	39	)	48				
CS Calls	12	0	9		0				
Hando		Airtel	мо	CWS MO					
Hando		44		98					
Hand		0		0					
Hando	over Success		44		98				
H	IOSR %		100.00 100.00						

### Phase-2

Long Call Statistics								
Long Call Sc	enario	Operate	or 1	O	perator 2			
Voice KI	Pls	Airte	I		CWS			
Call Conne	ected	45			46			
Call Drop	ped	2			3			
Call Comp	leted	43			43			
CRR[%	]	95.50	5		93.48			
DCR[%	DCR[%]			4.44				
MOS		3.16		3.44				
	Airtel short call	CWS short call	Airtel ca		CWS long call			
CSFB Calls	120	173	43	3	45			
CS Calls	57	2	2		1			
Hando	ver Statistics		Airtel	мо	CWS MO			
Hando		43		124				
Hando		0		0				
Hando	ver Success		43		124			
Н	OSR %		100.	100.00				



### 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)	12.87	6.88	1	2	9.96	5.68	1	2
R.	SFTP UL(Mbps)	6.13	3.94	1	2	3.65	3.57	1	2
ANSFI	HTTP DL(Mbps)	17.24	8.61	1	2	13.30	6.89	1	2
FILE TRANSFER	HTTP UL(Mbps)	9.51	7.49	1	2	6.61	6.10	1	2
	HTTP Capacity DL(Mbps)	42.87	19.05	1	2	39.12	24.68	1	2
	HTTP Capacity UL(Mbps)	18.17	14.22	1	2	19.86	16.60	1	2
	Overall Browser DL Time (s)	9.48	8.77	2	1	10.37	12.49	1	2
	Kepler Webpage DL Time (s)	4.22	4.53	1	2	6.00	5.89	2	1
VSER	Mobile Kepler Webpage DL Time (s)	1.80	3.03	1	2	2.85	3.36	1	2
BROWSER	www.shein.com Webpage DL Time (s)	6.53	5.60	2	1	7.54	8.36	1	2
	www.nbs.gov.sc Webpage DL Time (s)	16.95	15.61	2	1	17.39	27.23	1	2
	www.sbc.sc Webpage DL Time (s)	17.41	14.85	2	1	17.58	19.26	1	2
NCY	Avg Latency (ms)	260.80	247.80	2	1	316.71	284.79	2	1
LATENCY	Median Latency (ms)	155.00	221.00	1	2	342	284	2	1
Я	YouTube Access Time (s)	5.20	1.70	2	1	5.26	2.00	2	1
YOUTUBE	YouTube Average Resolution (pixels)	1080.00	1080.00	1	1	1080.00	1071.93	1	2
٨ ٨	YouTube Success Ratio [%]	100.00	100.00	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 (%)
	Success	27	27	96.43	96.43
SFTP DL	Failure	1	1	3.57	3.57
	Success	27	28	93.10	100.00
SFTP UL	Failure	2	0	6.90	0.00
HTTP DL	Success	28	27	96.55	96.43
	Failure	1	1	3.45	3.57
	Success	28	28	96.55	100.00
HTTP UL	Failure	1	0	3.45	0.00
	Success	25	24	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
	Success	23	24	95.83	100.00
HTTP Capacity UL	Failure	1	0	4.17	0.00

#### Phase-2

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
	Success	26	23	96.30	100.00
SFTP DL	Failure	1	0	3.70	0.00
SFTP UL	Success	26	22	100.00	100.00
SFIP OL	Failure	0	0	0.00	0.00
HTTP DL	Success	26	22	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	26	23	100.00	95.83
	Failure	0	1	0.00	4.17
	Success	25	23	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	24	23	100.00	100.00
	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 (%)
_	Success	24	25	88.89	96.15
Kepler	Failure	3	1	11.11	3.85
Mahila Kaplar	Success	24	25	96.00	100.00
Mobile Kepler	Failure	1	0	4.00	0.00
www.shein.com	Success	27	25	100.00	100.00
www.snem.com	Failure	0	0	0.00	0.00
	Success	26	25	100.00	100.00
www.nbs.gov.sc	Failure	0	0	0.00	0.00
	Success	25	26	100.00	100.00
www.sbc.sc	Failure	0	0	0.00	0.00

Phase-2

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kaplar	Success	23	24	88.46	100.00
Kepler	Failure	3	0	11.54	0.00
Mahila Kaulan	Success	24	22	100.00	100.00
Mobile Kepler	Failure	0	0	0.00	0.00
	Success	26	24	100.00	100.00
www.shein.com	Failure	0	0	0.00	0.00
	Success	25	21	96.15	87.50
www.nbs.gov.sc	Failure	1	3	3.85	12.50
	Success	25	22	100.00	91.67
www.sbc.sc	Failure	0	2	0.00	8.33



### **4G PREFERRED LATENCY**

Phase-1				Phase-2			
	Latency KPIs	Airtel 4G	CWS 4G		Latency KPIs	Airtel 4G	CWS 4G
	Sample Count [32 bytes]	54	52		Sample Count [32 bytes]	51	44
	Average Latency [ms]	262.81	251.37		Average Latency [ms]	312.55	280.80
	Median Latency [ms]	148	222		Median Latency [ms]	342	234
Overall Latency	Ping session status: Successful	54	52	<b>Overall Latency</b>	Ping session status: Successful	51	44
	Ping session status: Failed [Socket error]	0	0		Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0		Ping session status: Failed [Protocol error timeout]	0	1
	Packet Loss<1%	0.00	0.00		Packet Loss<1%	0.00	2.22
	Average Latency [ms]	419.32	228.21		Average Latency [ms]	409.28	195.77
	Median Latency [ms]	404	191		Median Latency [ms]	406	179
www.google.com	Ping session status: Successful	25	24		Ping session status: Successful	25	22
www.google.com	Ping session status: Failed [Socket error]	0	0	www.google.com	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0		Ping session status: Failed [Protocol error timeout]	0	1
	Packet Loss<1%	0.00	0.00		Packet Loss<1%	0.00	4.35
	Average Latency [ms]	127.90	271.21		Average Latency [ms]	219.54	365.82
	Median Latency [ms]	126	239		Median Latency [ms]	194	330
102.133.176.104	Ping session status: Successful	29	28	102 122 176 104	Ping session status: Successful	26	22
102.133.170.104	Ping session status: Failed [Socket error]	0	0	102.133.176.104	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0		Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00		Packet Loss<1%	0.00	0.00



### **4G PREFERRED YOUTUBE COMPARISON**

### Phase-1

LTE YOUTUBE Success Ratio						
KPIs	Airtel 4G	CWS 4G				
Attempt(Count)	28	28				
Success(Count)	28	28				
Failure(Count)	0	0				
YouTube Access Time (s)	5.20	1.70				
YouTube Average Resolution (pixels)	1080.00	1080.00				
YouTube Success Ratio [%]	100.00	100.00				

### Phase-2

LTE YOUTUBE Success Ratio						
KPIs	Airtel 4G	CWS 4G				
Attempt(Count)	26	24				
Success(Count)	26	24				
Failure(Count)	0	0				
YouTube Access Time (s)	5.26	2.00				
YouTube Average Resolution (pixels)	1080.00	1071.93				
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)	3.73	3.60	1	2	2.85	2.65	1	2
R.	SFTP UL(Mbps)	1.47	1.08	1	2	1.17	0.85	1	2
ANSFI	HTTP DL(Mbps)	3.92	3.33	1	2	3.10	2.58	1	2
FILE TRANSFER	HTTP UL(Mbps)	1.96	2.04	2	1	1.37	1.30	1	2
Ē	HTTP Capacity DL(Mbps)	4.99	9.83	2	1	4.22	6.17	2	1
	HTTP Capacity UL(Mbps)	4.09	4.13	2	1	4.07	4.24	2	1
	Overall Browser DL Time (s)	10.26	7.45	2	1	9.15	7.92	2	1
	Kepler Webpage DL Time (s)	4.61	5.45	1	2	6.03	6.02	2	1
BROWSER	Mobile Kepler Webpage DL Time (s)	2.20	2.65	1	2	2.73	2.73	2	1
BROV	www.shein.com Webpage DL Time (s)	10.79	9.72	2	1	11.07	8.67	2	1
	www.nbs.gov.sc Webpage DL Time (s)	14.84	8.29	2	1	12.22	11.00	2	1
	www.sbc.sc Webpage DL Time (s)	18.67	11.56	2	1	13.95	11.30	2	1
NCY	Avg Latency (ms)	291.35	222.00	2	1	335.49	227.46	2	1
LATENCY	Median Latency (ms)	393.00	195.00	2	1	398	202	2	1
В	YouTube Access Time (s)	3.57	4.99	1	2	5.36	2.90	2	1
YOUTUBE	YouTube Average Resolution (pixels)	1030.45	1078.06	2	1	966.60	1024.08	2	1
٥,	YouTube Success Ratio [%]	95.24	86.36	1	2	90.48	80.95	1	2



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

### Phase-1

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
	Success	22	20	100.00	95.24
SFTP DL	Failure	0	1	0.00	4.76
	Success	22	20	91.67	90.91
SFTP UL	Failure	2	2	8.33	9.09
HTTP DL	Success	24	22	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	21	20	95.45	90.91
	Failure	1	2	4.55	9.09
	Success	20	21	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
	Success	17	18	89.47	90.00
HTTP Capacity UL	Failure	2	2	10.53	10.00

### Phase-2

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
	Success	19	18	100.00	100.00
SFTP DL	Failure	0	0	0.00	0.00
SFTP UL	Success	19	16	90.48	88.89
SFIP OL	Failure	2	2	9.52	11.11
	Success	20	17	100.00	80.95
HTTP DL	Failure	0	4	0.00	19.05
HTTP UL	Success	20	17	90.91	80.95
	Failure	2	4	9.09	19.05
	Success	20	20	100.00	100.00
HTTP Capacity DL	Failure	0	0	0.00	0.00
	Success	18	19	90.00	95.00
HTTP Capacity UL	Failure	2	1	10.00	5.00



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

### Phase-1

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Konlar	Success	19	21	100.00	95.45
Kepler	Failure	0	1	0.00	4.55
Mahila Karlar	Success	18	20	90.00	90.91
Mobile Kepler	Failure	2	2	10.00	9.09
	Success	19	21	95.00	95.45
www.shein.com	Failure	1	1	5.00	4.55
	Success	20	20	100.00	90.91
www.nbs.gov.sc	Failure	0	2	0.00	9.09
	Success	18	18	90.00	85.71
www.sbc.sc	Failure	2	3	10.00	14.29

#### Phase-2

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kaalar	Success	22	15	100.00	78.95
Kepler	Failure	0	4	0.00	21.05
Mahila Kaulan	Success	22	17	100.00	89.47
Mobile Kepler	Failure	0	2	0.00	10.53
	Success	22	15	100.00	78.95
www.shein.com	Failure	0	4	0.00	21.05
	Success	22	18	100.00	94.74
www.nbs.gov.sc	Failure	0	1	0.00	5.26
	Success	21	15	100.00	83.33
www.sbc.sc	Failure	0	3	0.00	16.67



### **3G PREFERRED LATENCY**

Phase-1				Phase-2			
	Latency KPIs	Airtel 3G	CWS 3G		Latency KPIs	Airtel 3G	CWS 3G
	Sample Count [32 bytes]	23	39		Sample Count [32 bytes]	40	32
	Average Latency [ms]	390.35	220.31		Average Latency [ms]	334.53	234.23
	Median Latency [ms]	417	196		Median Latency [ms]	397	187
Overall Latency	Ping session status: Successful	23	39	Overall Latency	Ping session status: Successful	40	32
	Ping session status: Failed [Socket error]	0	0		Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	16	0		Ping session status: Failed [Protocol error timeout]	1	3
	Packet Loss<1%	41.03	0.00		Packet Loss<1%	2.44	8.57
	Average Latency [ms]	436.22	169.11		Average Latency [ms]	423.14	217.00
	Median Latency [ms]	419	182	-	Median Latency [ms]	415	141
www.google.com	Ping session status: Successful	18	19		Ping session status: Successful	21	20
www.google.com	Ping session status: Failed [Socket error]	0	0	www.google.com	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	0		Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	5.26	0.00		Packet Loss<1%	0.00	0.00
	Average Latency [ms]	225.20	268.95		Average Latency [ms]	236.58	261.50
	Median Latency [ms]	160	212		Median Latency [ms]	237	279
102.133.176.104	Ping session status: Successful	5	20		Ping session status: Successful	19	12
102.133.170.104	Ping session status: Failed [Socket error]	0	0	102.133.176.104	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	15	0		Ping session status: Failed [Protocol error timeout]	1	3
	Packet Loss<1%	75.00	0.00		Packet Loss<1%	5.00	20.00



### **3G PREFERRED YOUTUBE COMPARISON**

### Phase-1

UMTS YOUTUBE Success Ratio						
KPIs	Airtel 3G	CWS 3G				
Attempt(Count)	21	22				
Success(Count)	20	19				
Failure(Count)	1	3				
YouTube Access Time (s)	3.57	4.99				
YouTube Average Resolution (pixels)	1030.45	1078.06				
YouTube Success Ratio [%]	95.24	86.36				

#### Phase-2

UMTS YOUTUBE Success Ratio						
KPIs	Airtel 3G	CWS 3G				
Attempt(Count)	21	21				
Success(Count)	19	17				
Failure(Count)	2	4				
YouTube Access Time (s)	5.36	2.90				
YouTube Average Resolution (pixels)	966.60	1024.08				
YouTube Success Ratio [%]	90.48	80.95				

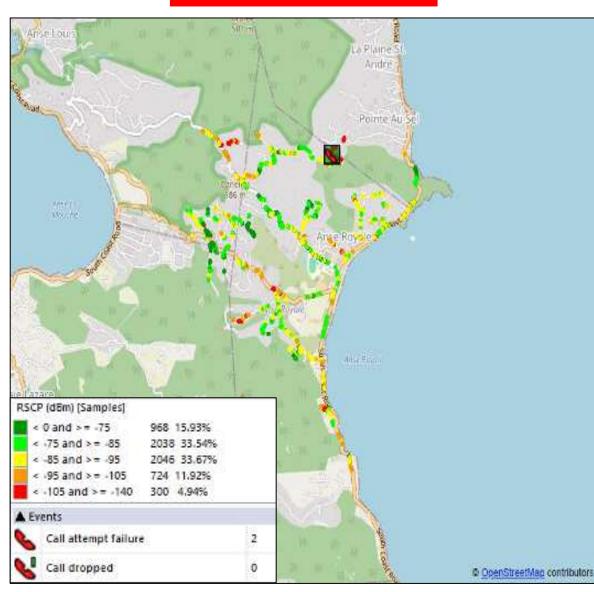


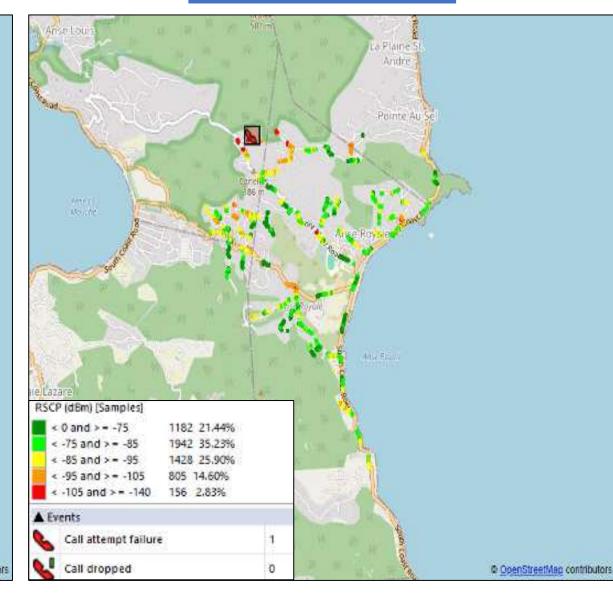
# **Voice Call Events**



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



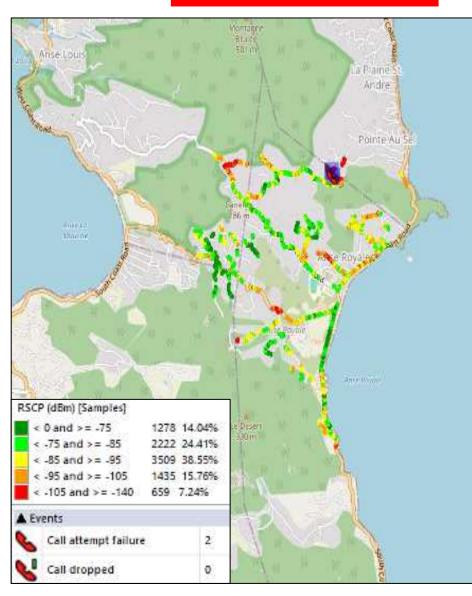


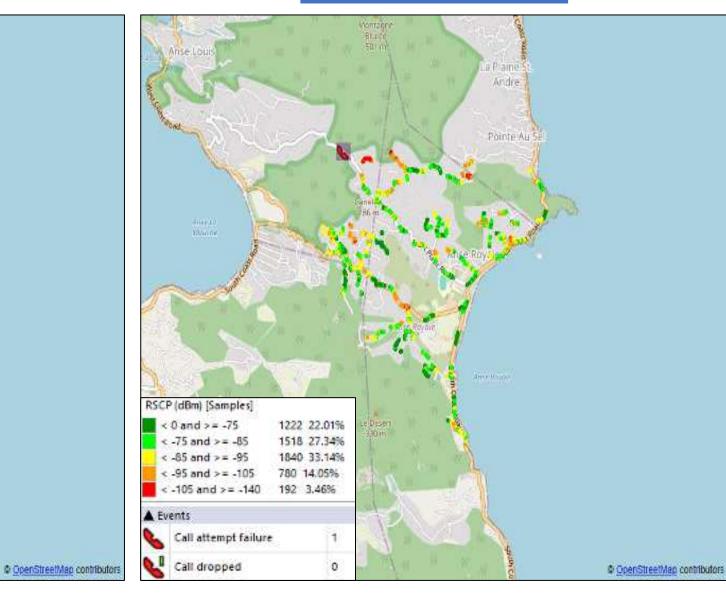




### Phase-2 SHORT CALL FAILURE EVENTS LOCATION vs RSCP



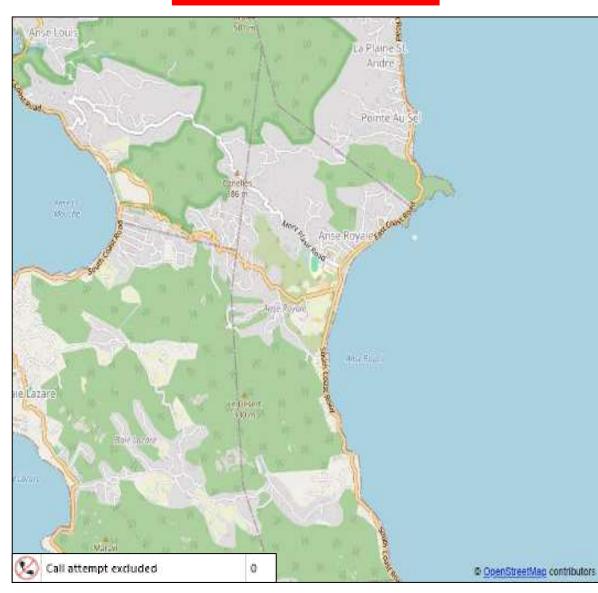


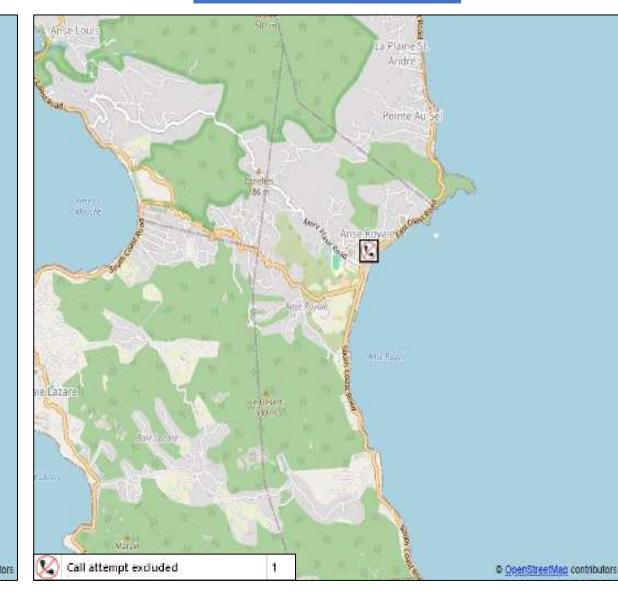




### **Phase-1 SHORT CALL EXCLUDED EVENTS**



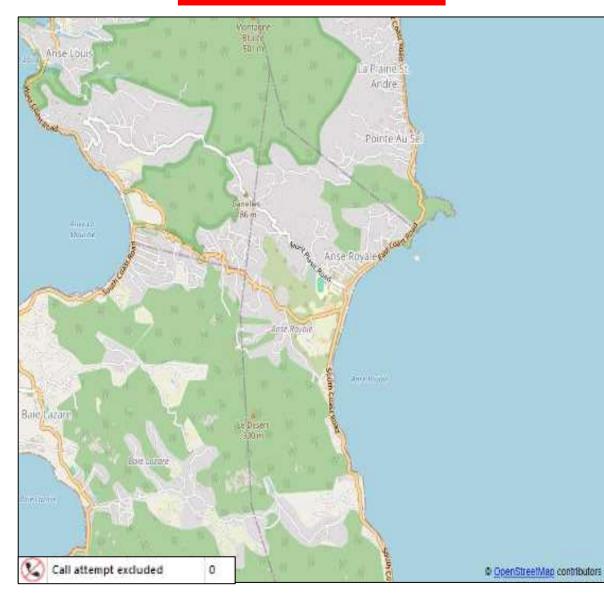


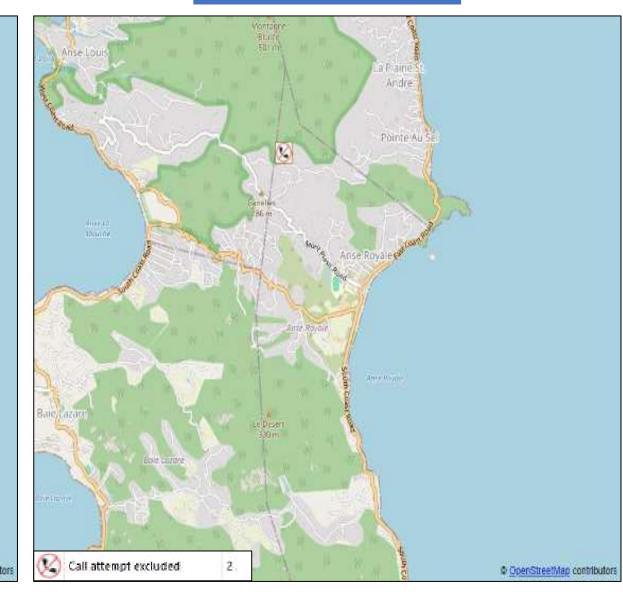




### **Phase-2 SHORT CALL EXCLUDED EVENTS**



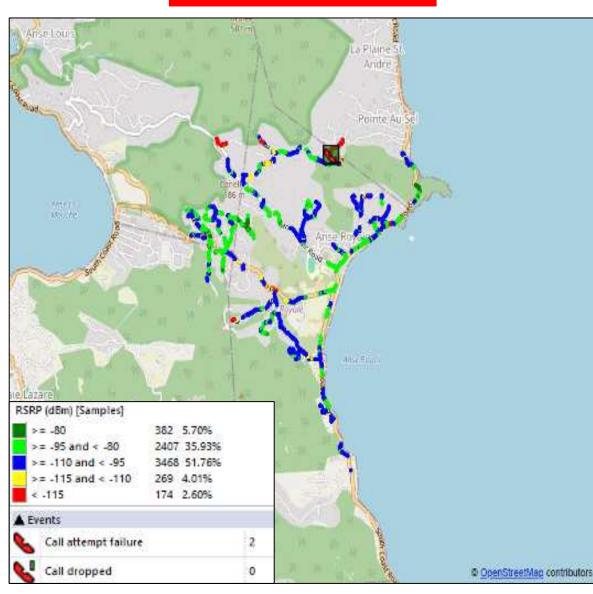


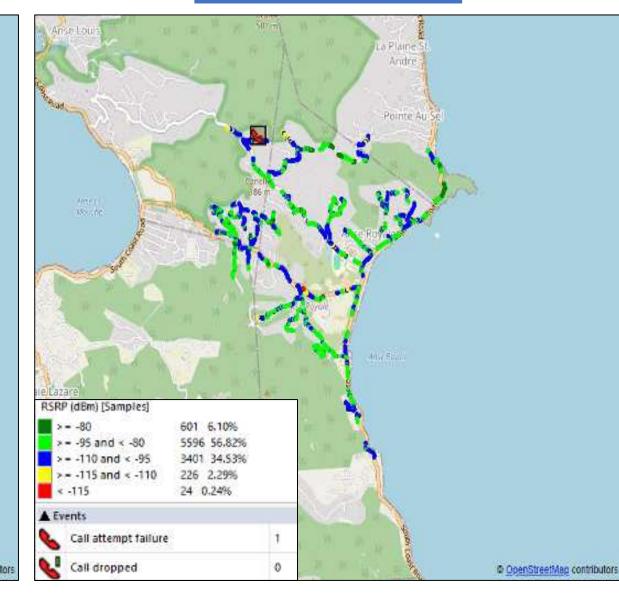




### Phase-1 SHORT CALL FAILURE EVENTS LOCATION vs RSRP



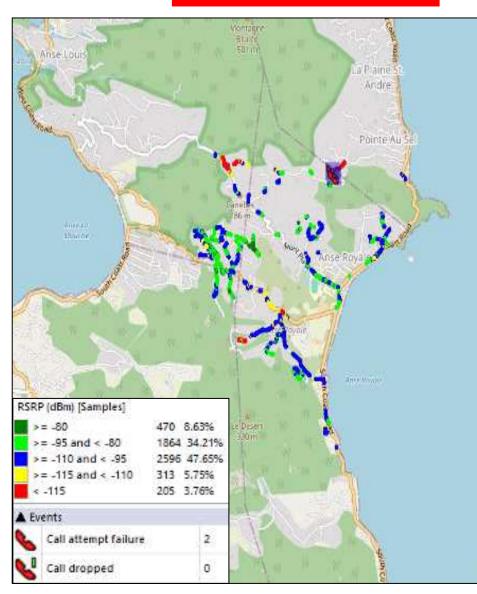


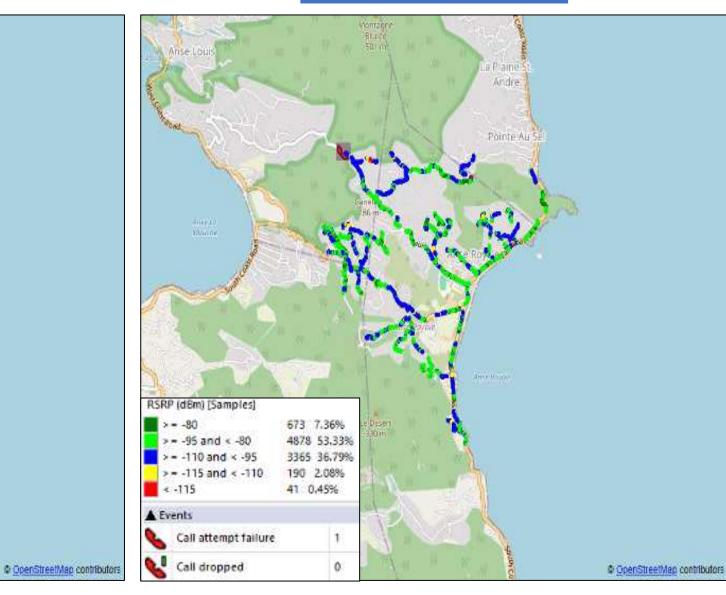




### Phase-2 SHORT CALL FAILURE EVENTS LOCATION vs RSRP



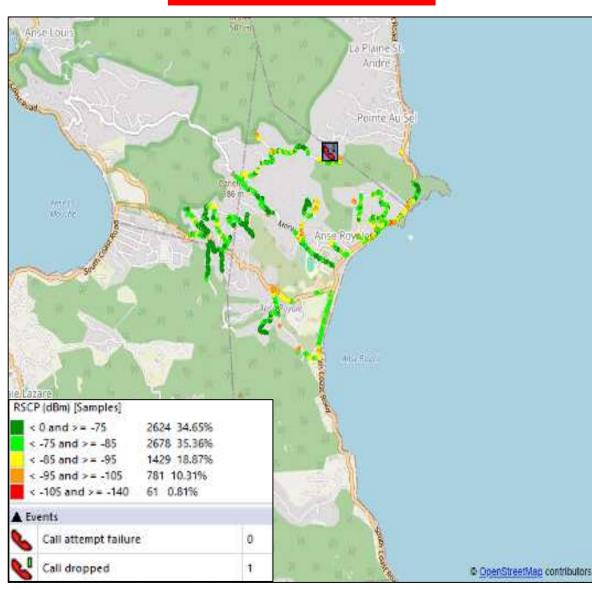


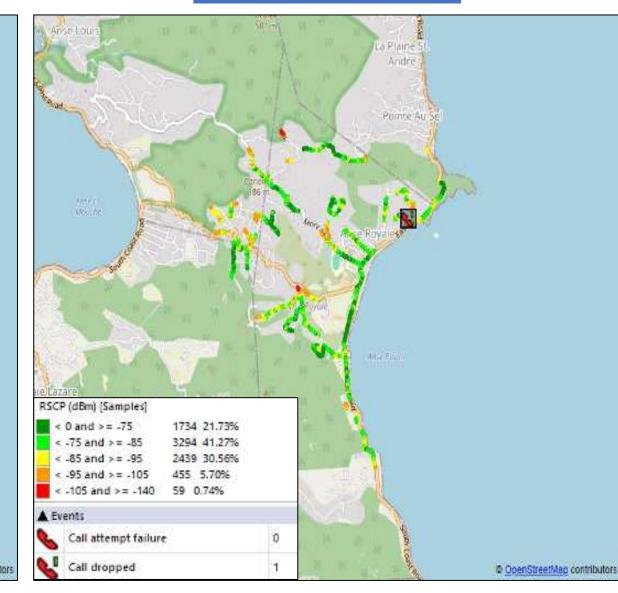




### Phase-1 LONG CALL FAILURE EVENTS LOCATION vs RSCP



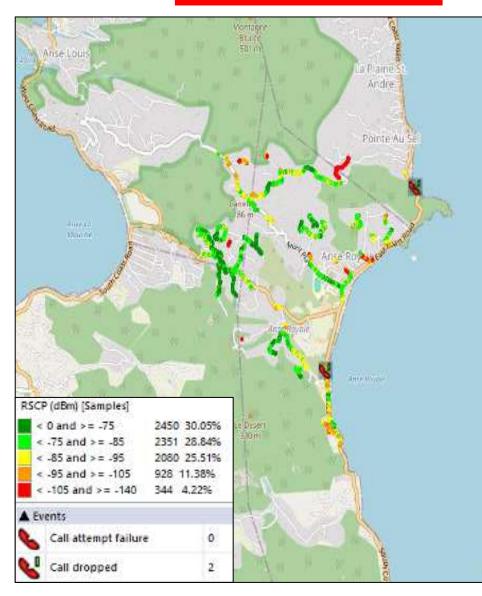


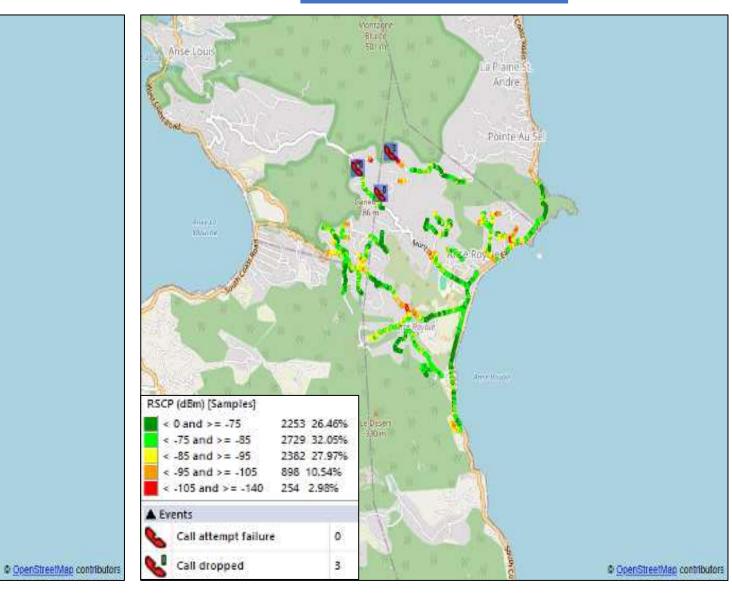




### Phase-2 LONG CALL FAILURE EVENTS LOCATION vs RSCP



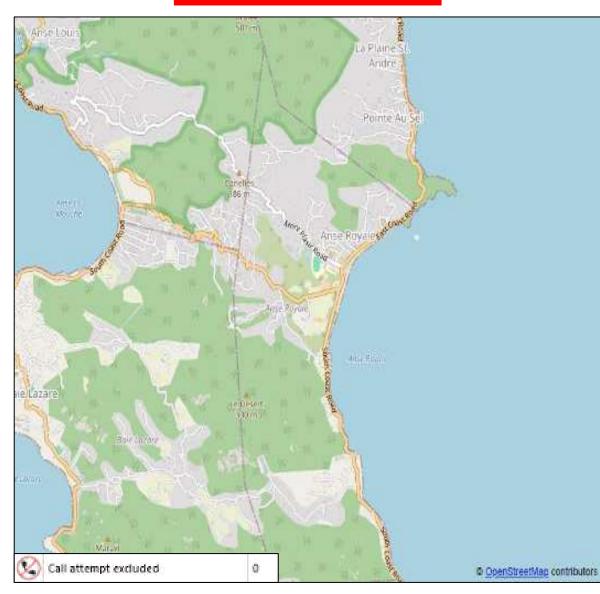


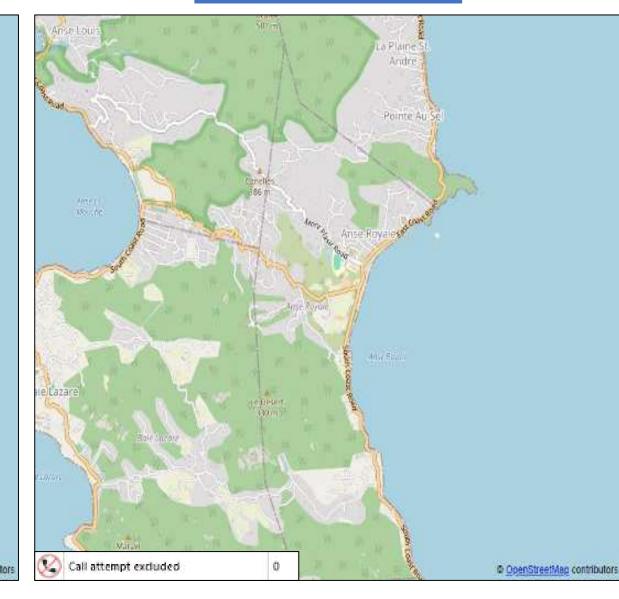




### Phase-1 LONG CALL EXCLUDED EVENTS





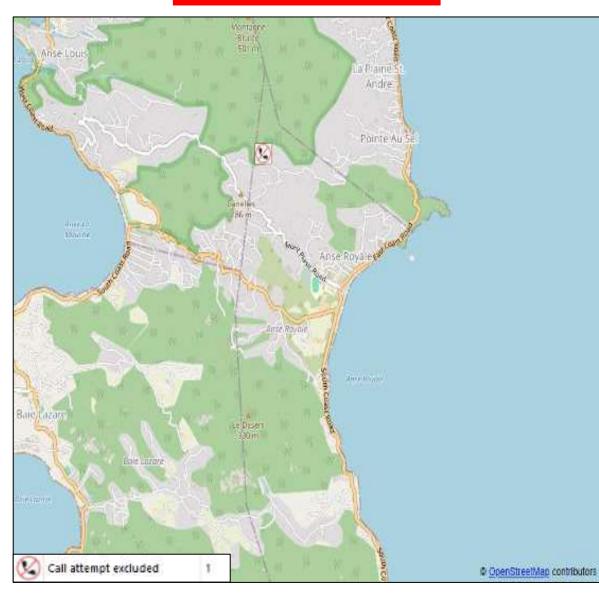


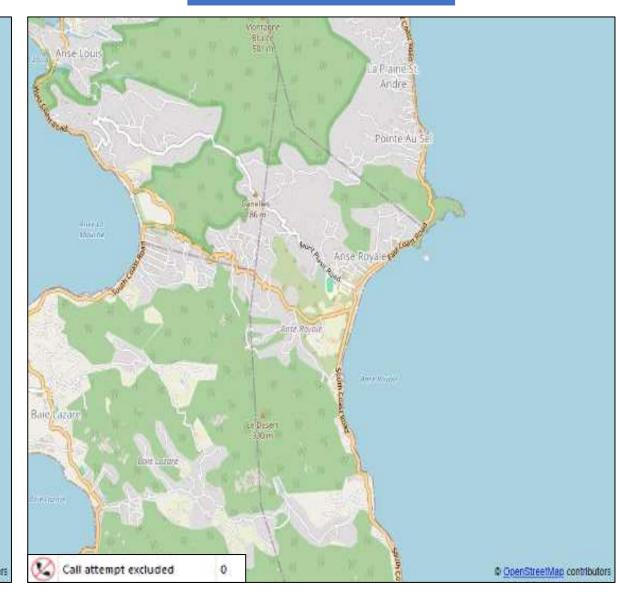


### Phase-2 LONG CALL EXCLUDED EVENTS

### **Airtel LC MO**

### CWS LC MO



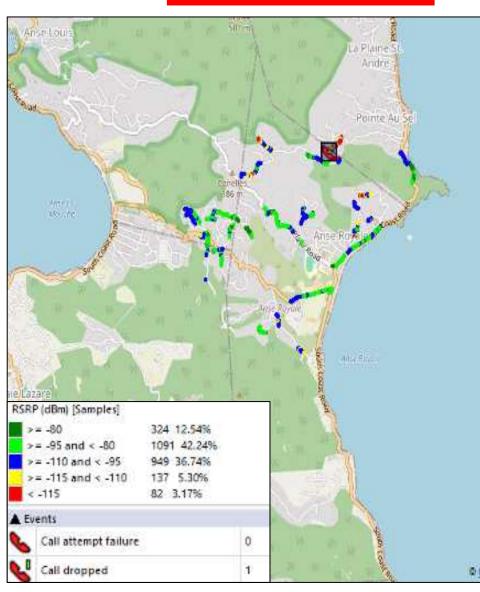


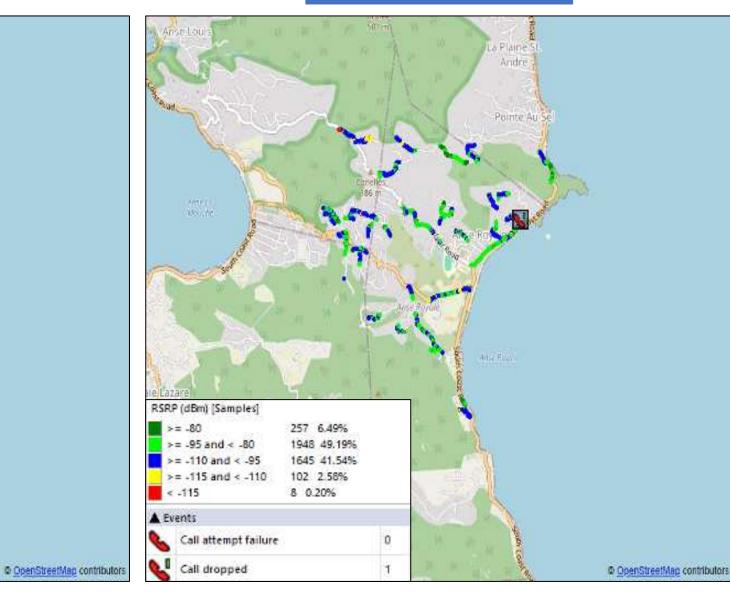


### Phase-1 LONG CALL FAILURE EVENTS LOCATION vs RSRP

#### Airtel LC MO

### **CWS LC MO**

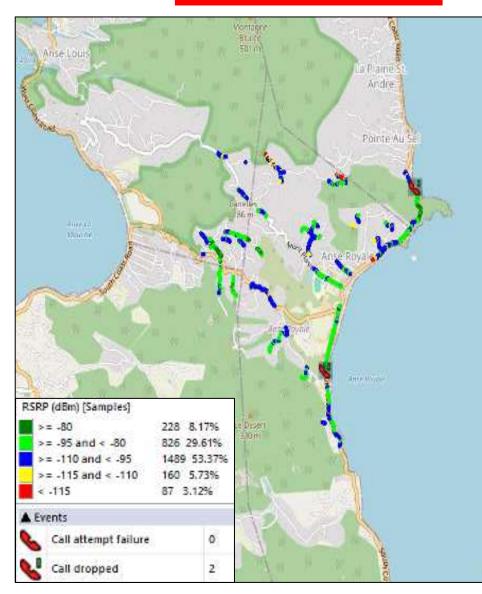


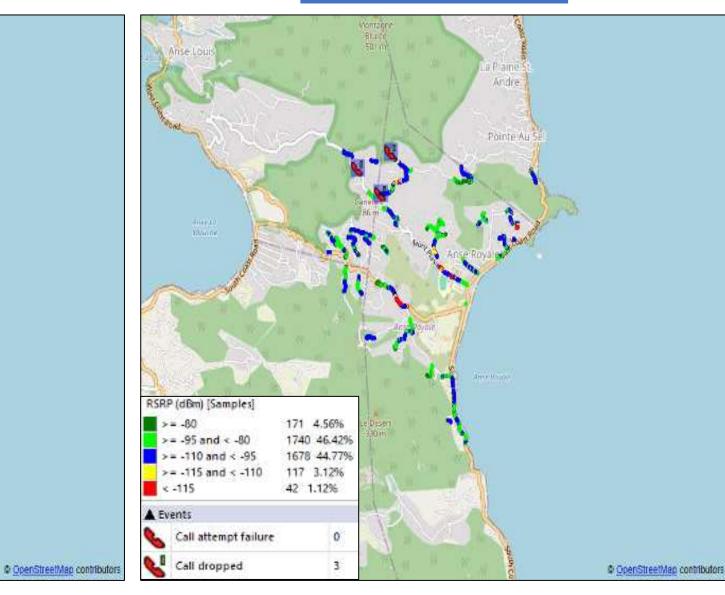




### Phase-2 LONG CALL FAILURE EVENTS LOCATION vs RSRP







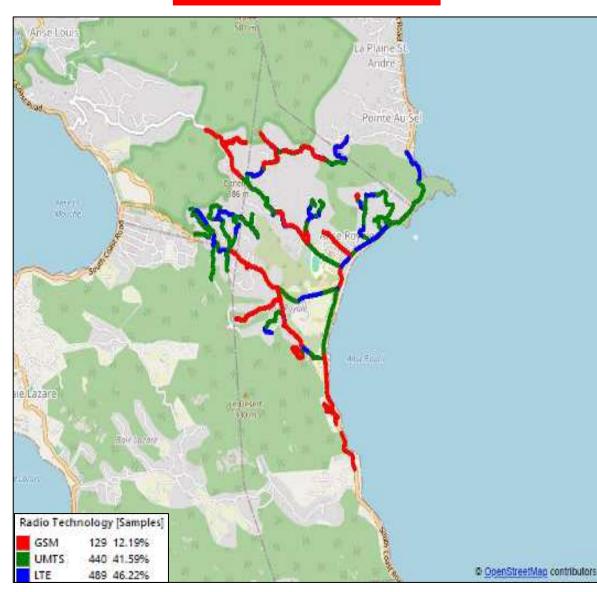


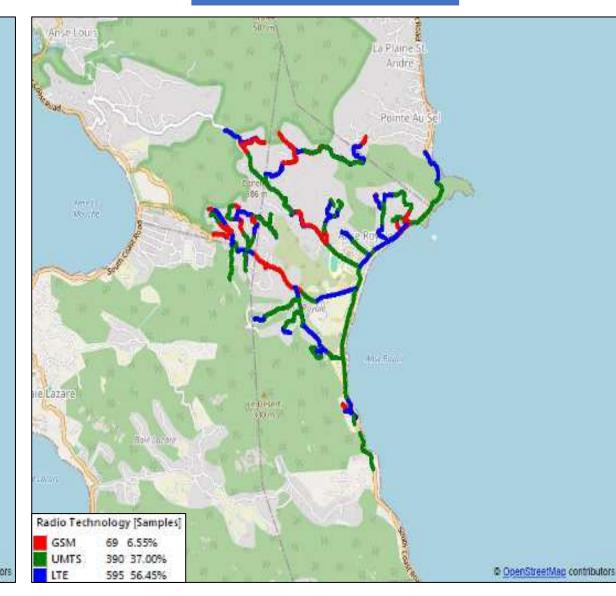
# LONG CALL DRIVE PLOTS

### Phase-1 Long Call RADIO TECHNOLOGY PLOT

### **Airtel LC MO**

**CWS LC MO** 

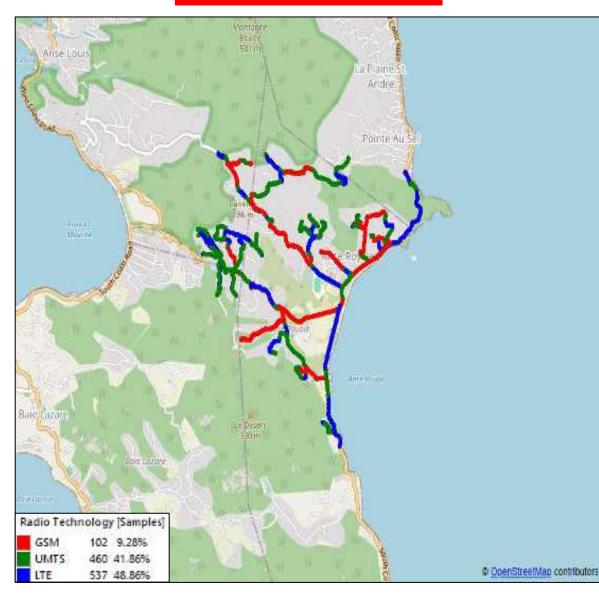


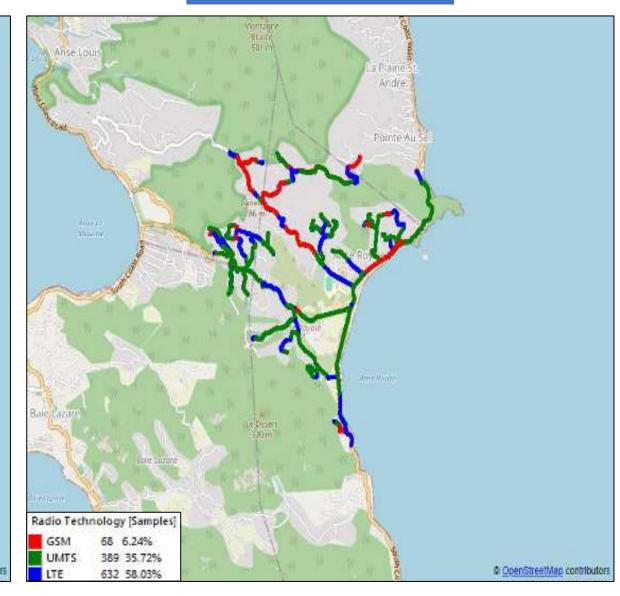




### Phase-2 Long Call RADIO TECHNOLOGY PLOT

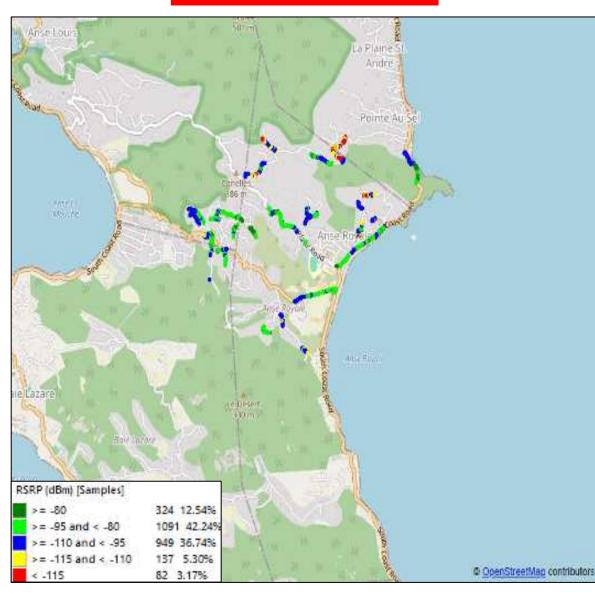


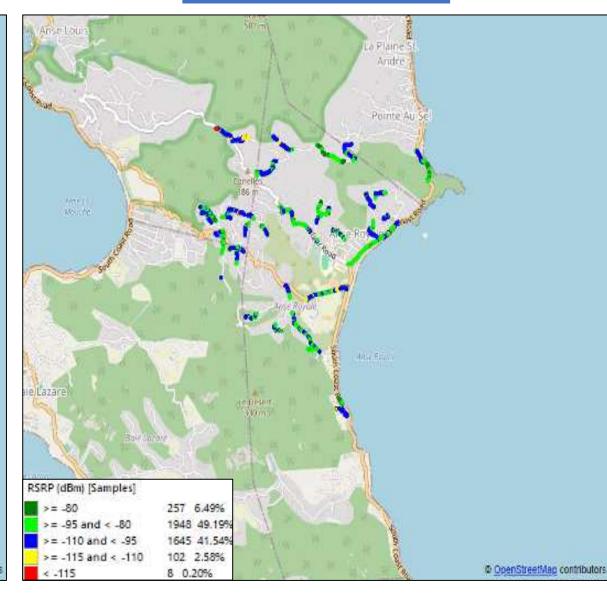




### Phase-1 Long Call RSRP PLOT



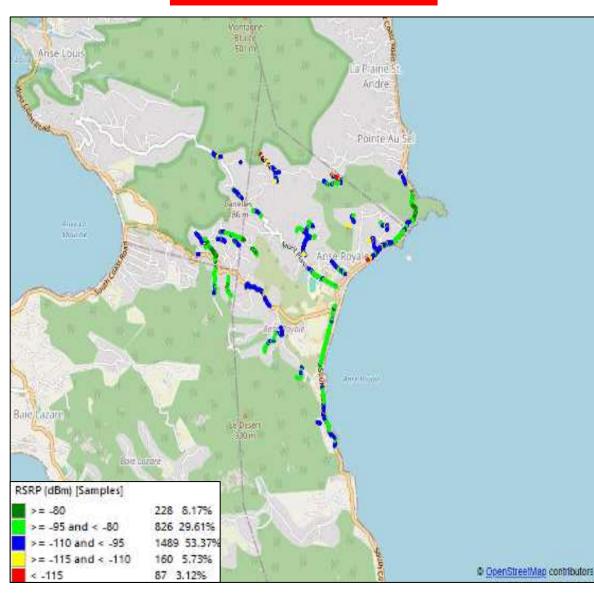


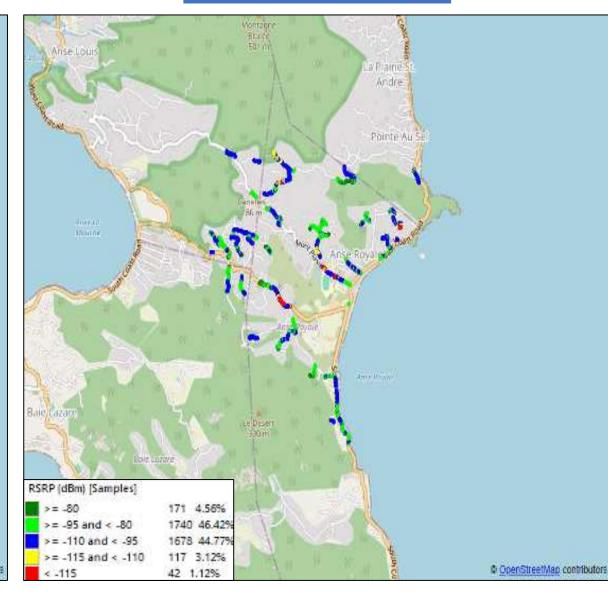




### Phase-2 Long Call RSRP PLOT



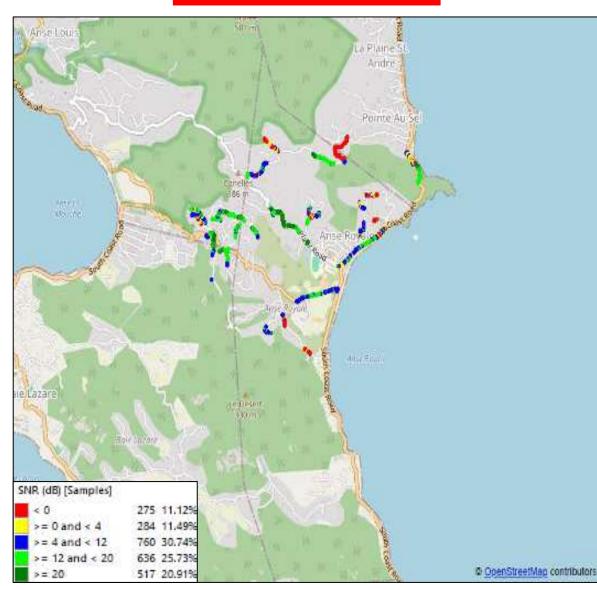


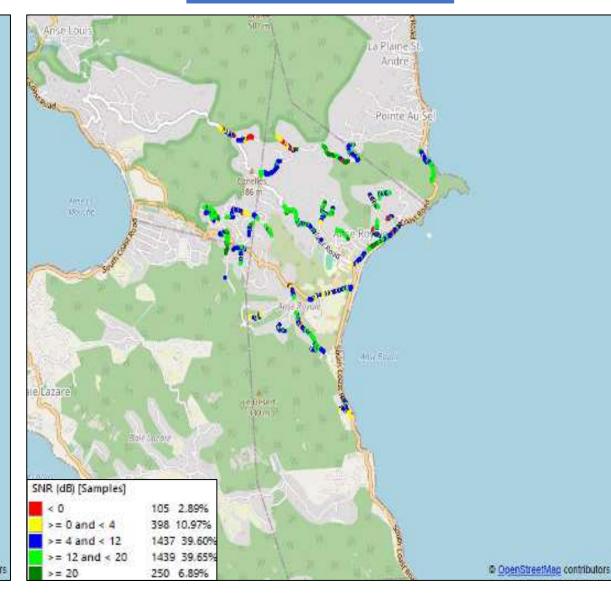




## **Phase-1 Long Call SINR PLOT**

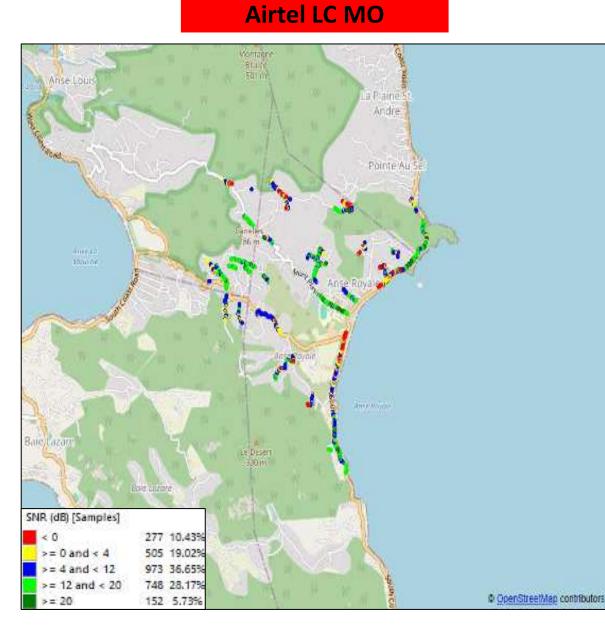


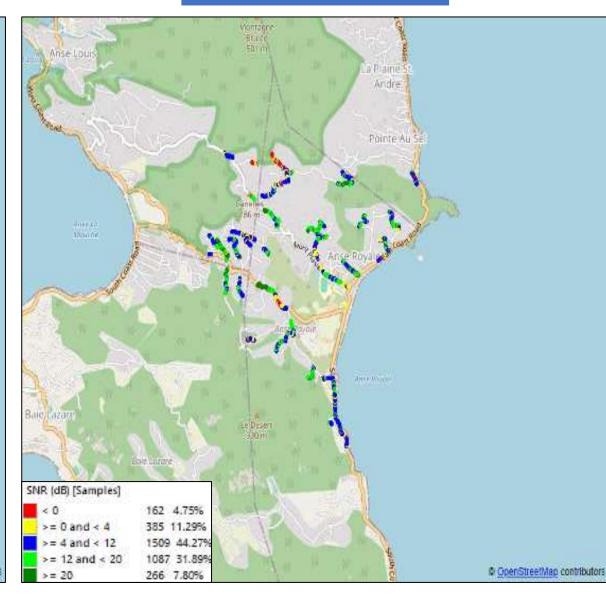






## **Phase-2 Long Call SINR PLOT**



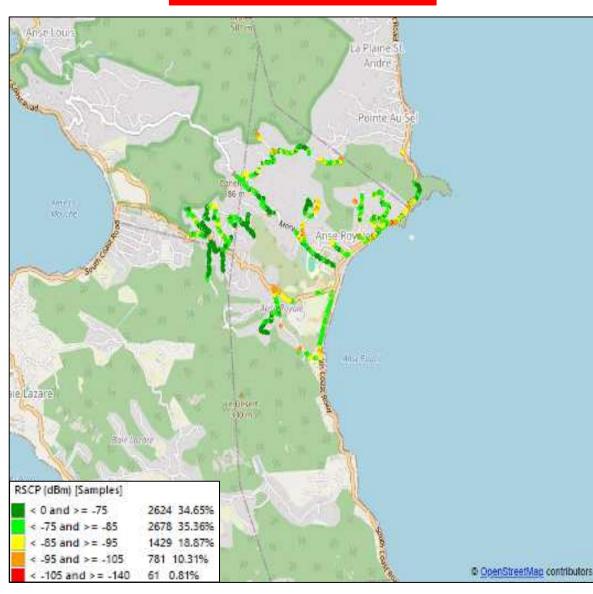


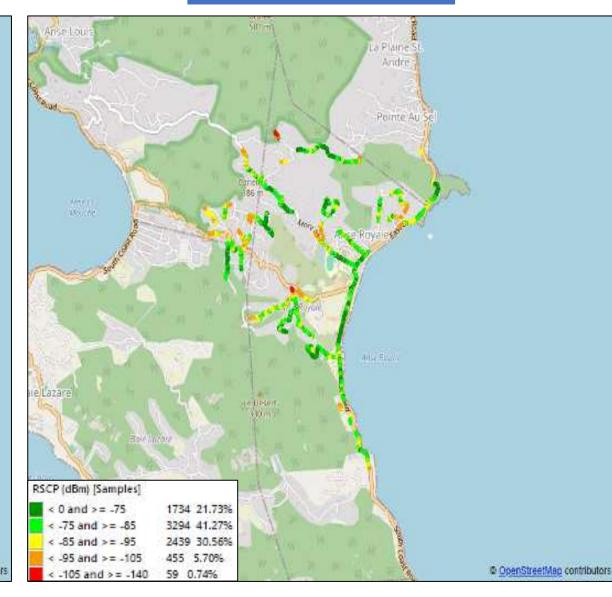
**CWS LC MO** 



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



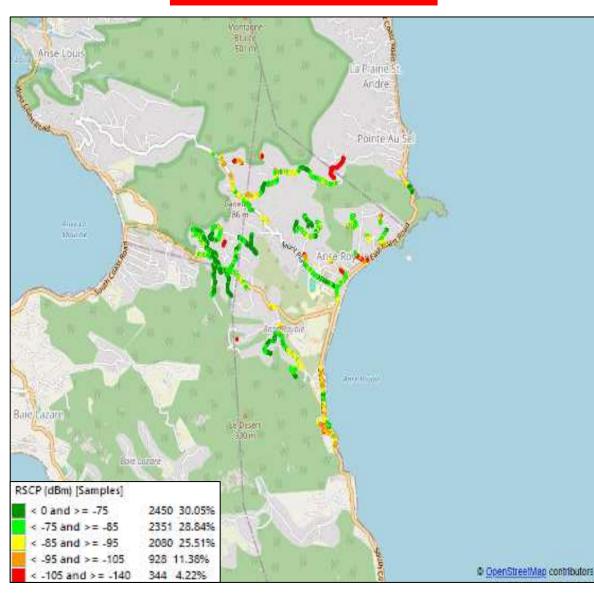


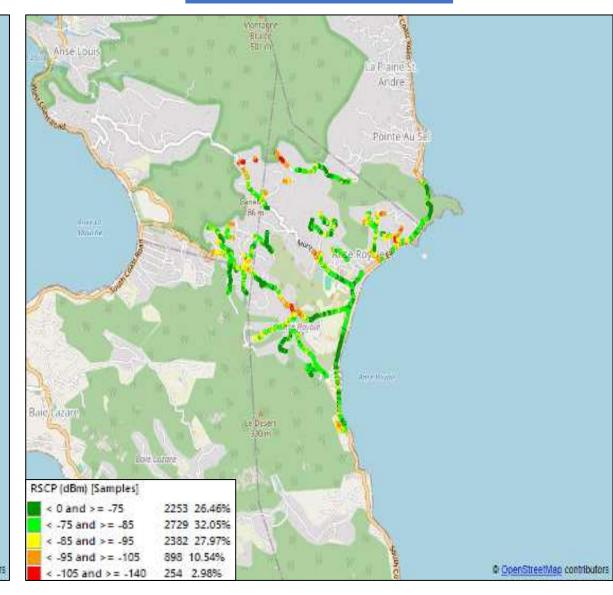




### **Phase-2 Long Call RSCP PLOT**



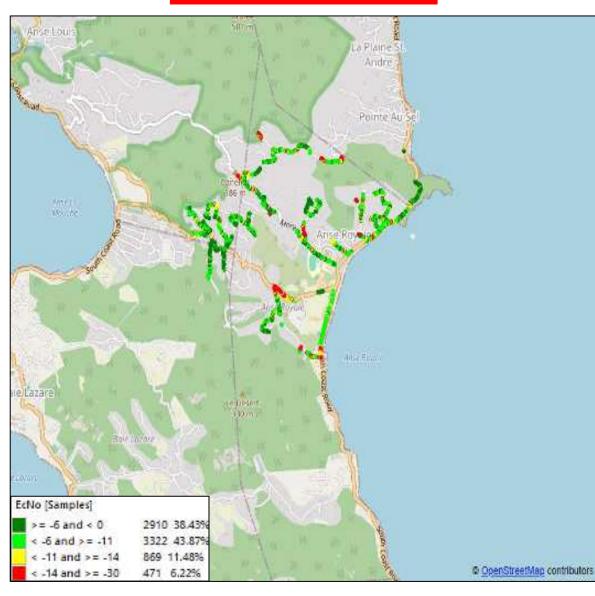


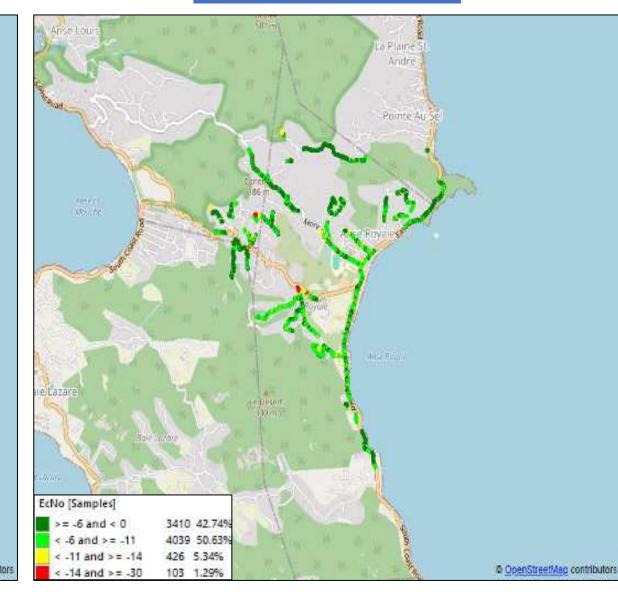




## Phase-1 Long Call EC/NO PLOT



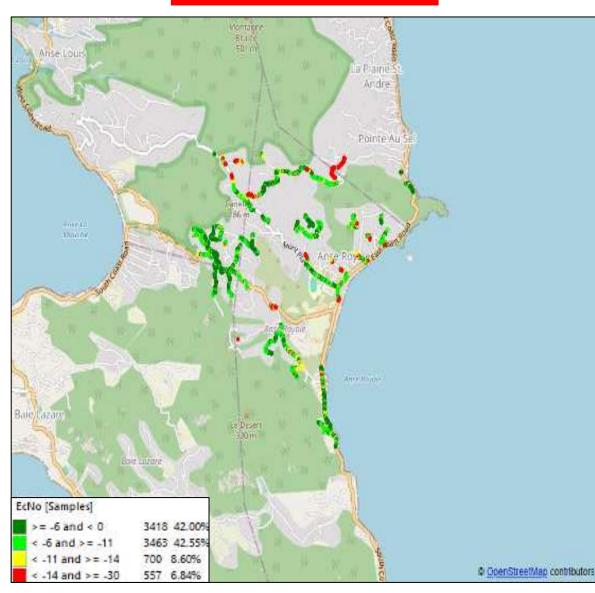


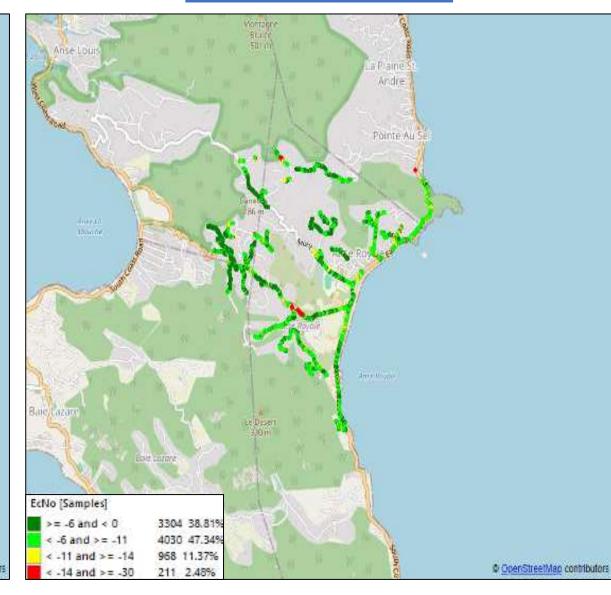




## Phase-2 Long Call EC/NO PLOT



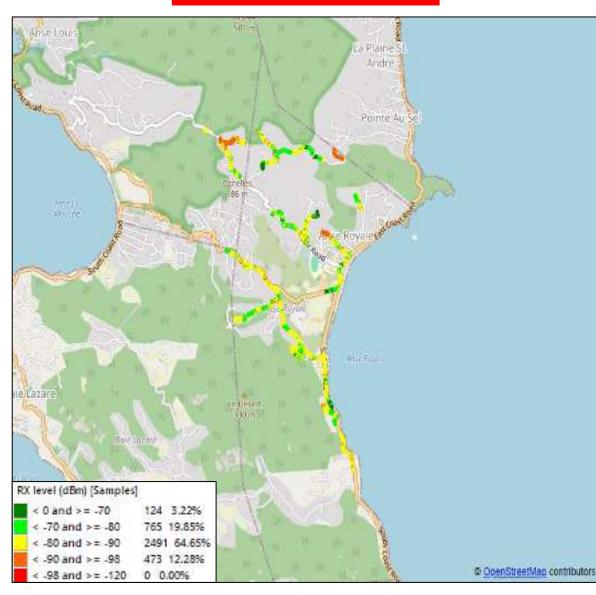


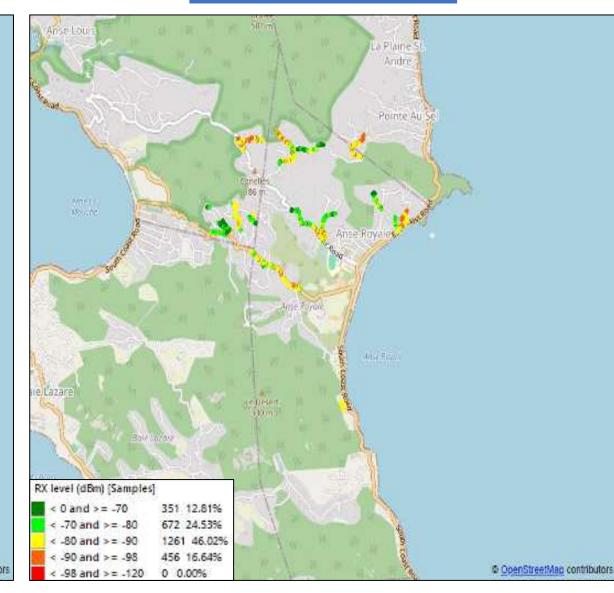




### Phase-1 Long Call RX level sub PLOT



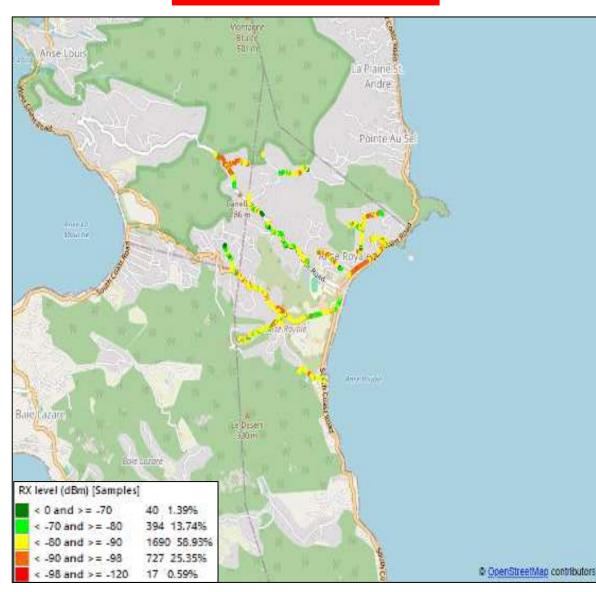


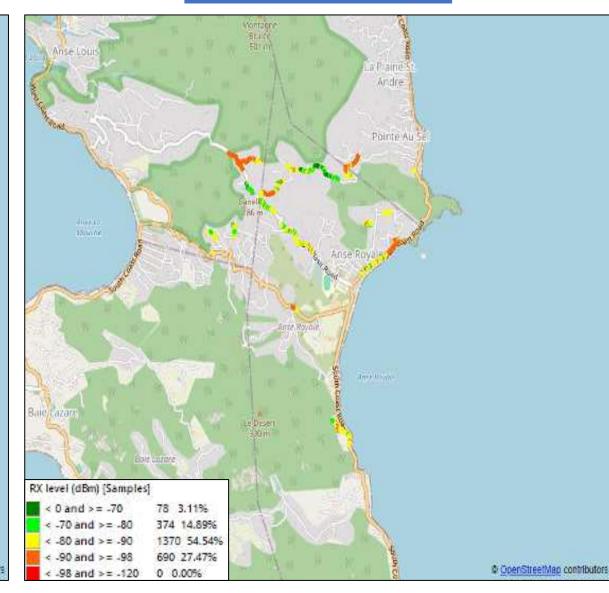




### Phase-2 Long Call RX level sub PLOT



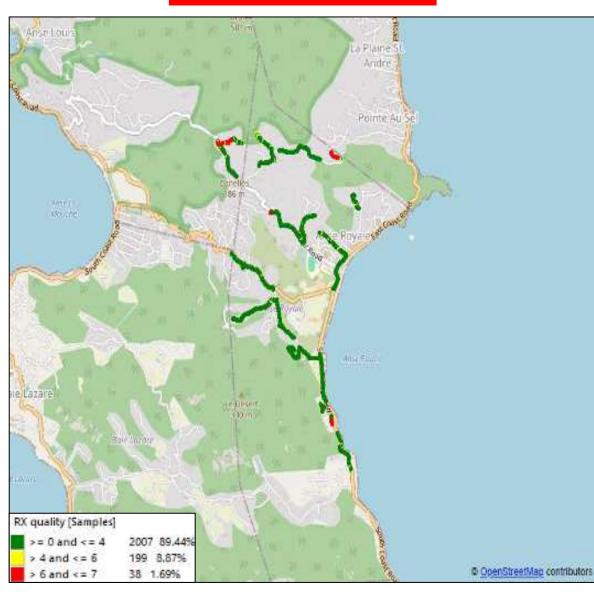


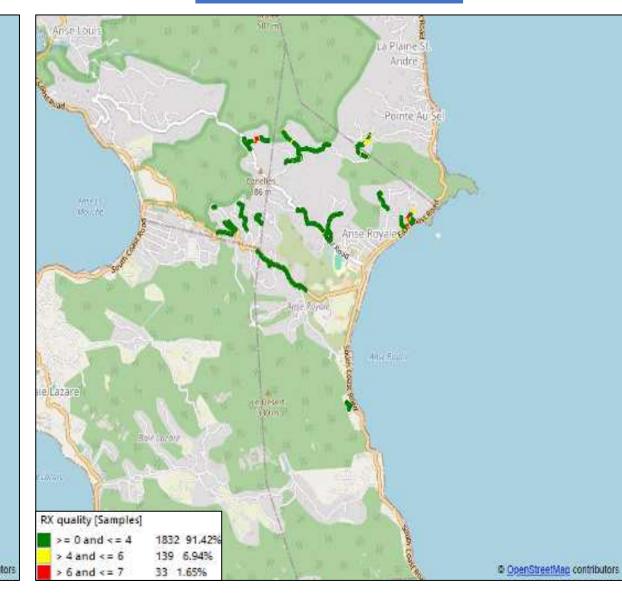




### Phase-1 Long Call RX quality sub PLOT



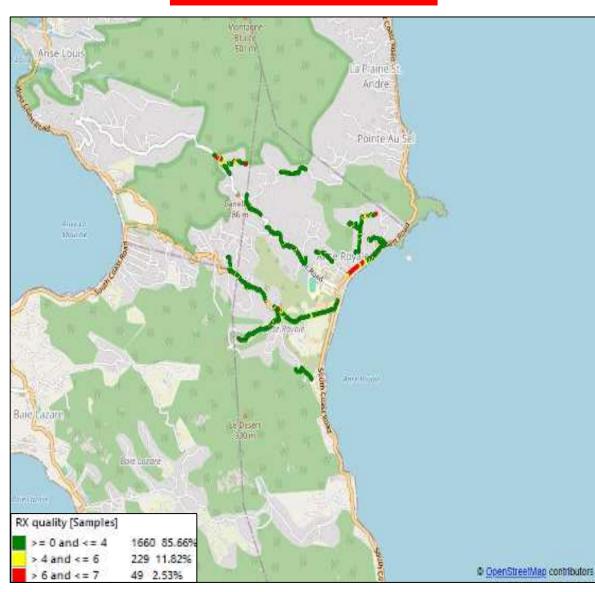


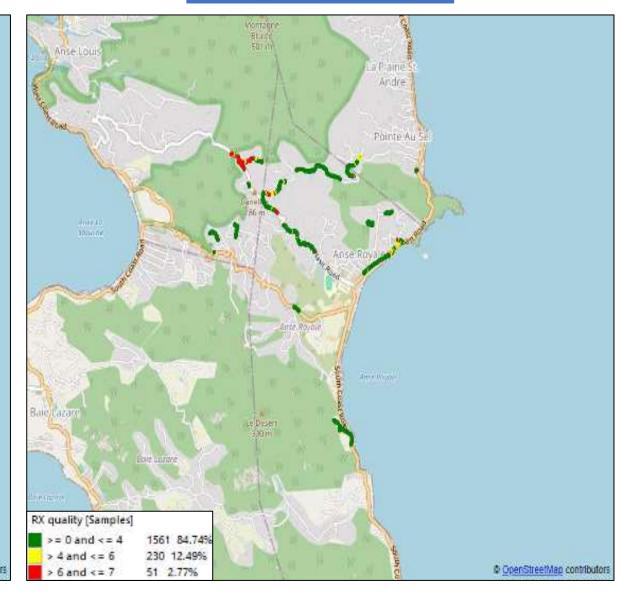




### Phase-2 Long Call RX quality sub PLOT







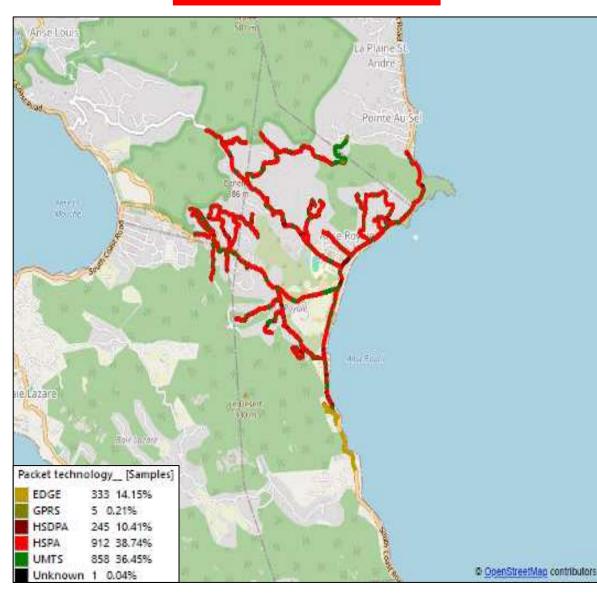


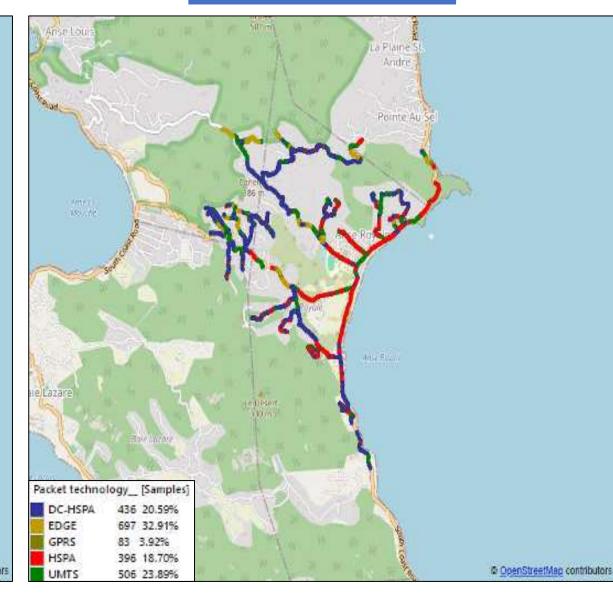
# **3G PREFERRED DATA DRIVE PLOTS**



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



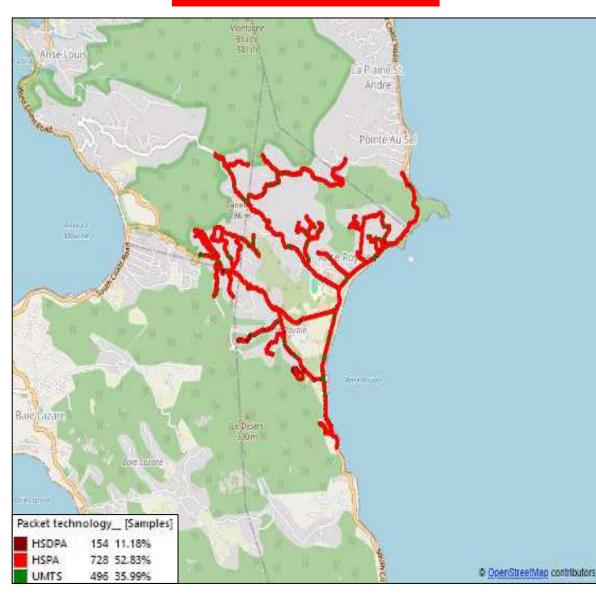


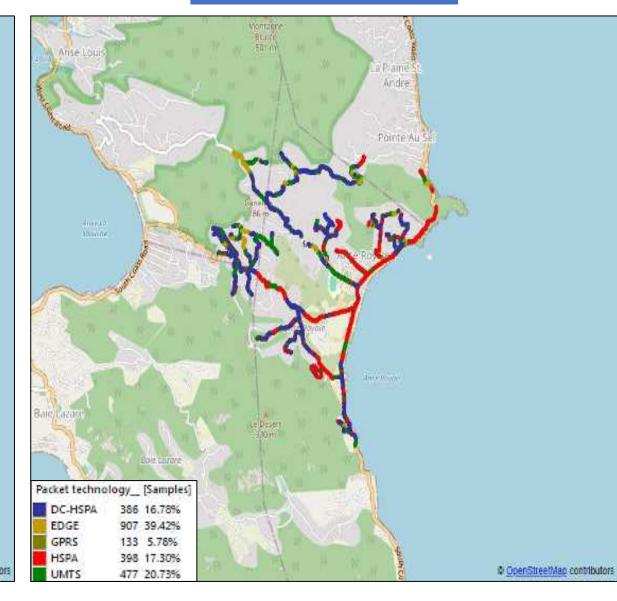




### Phase-2 3G PREFERRED DATA TEST - TECHNOLOGY PLOT



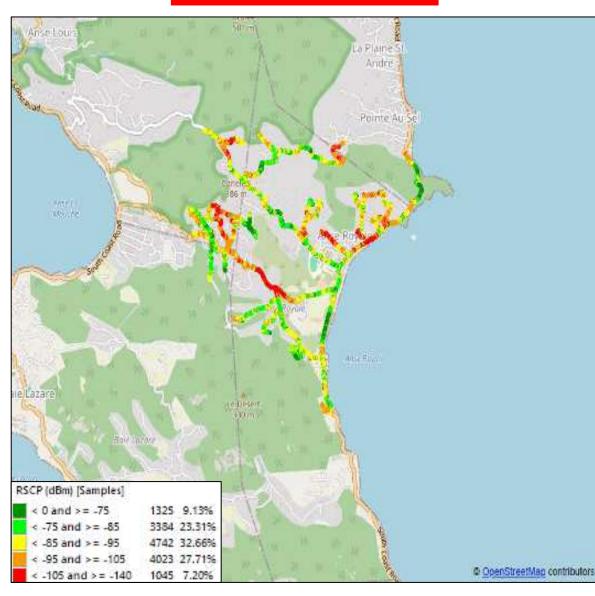


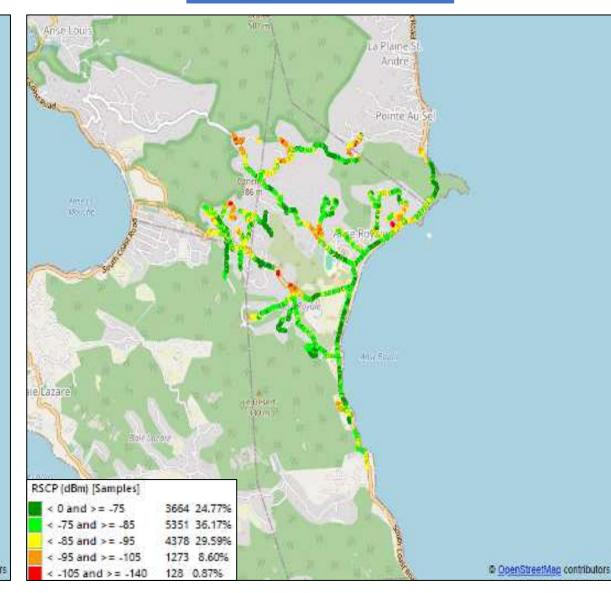




### Phase-1 3G PREFERRED DATA TEST - RSCP PLOT



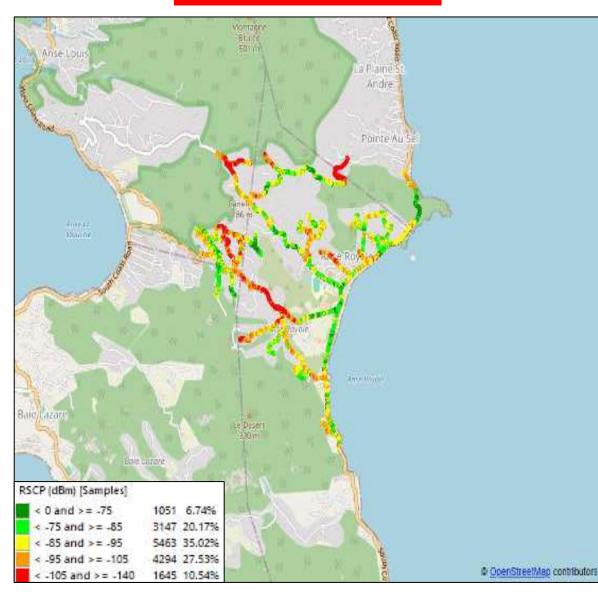


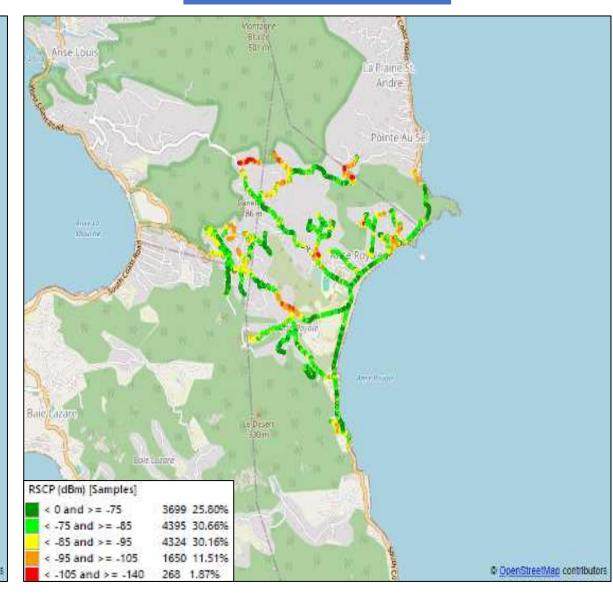




### Phase-2 3G PREFERRED DATA TEST - RSCP PLOT



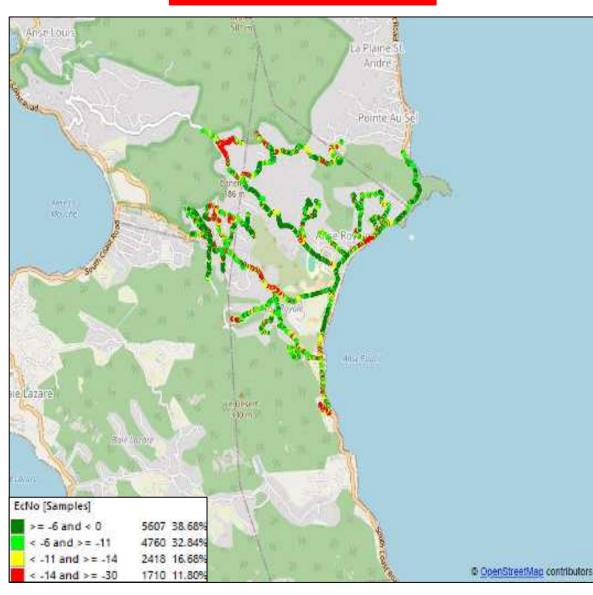


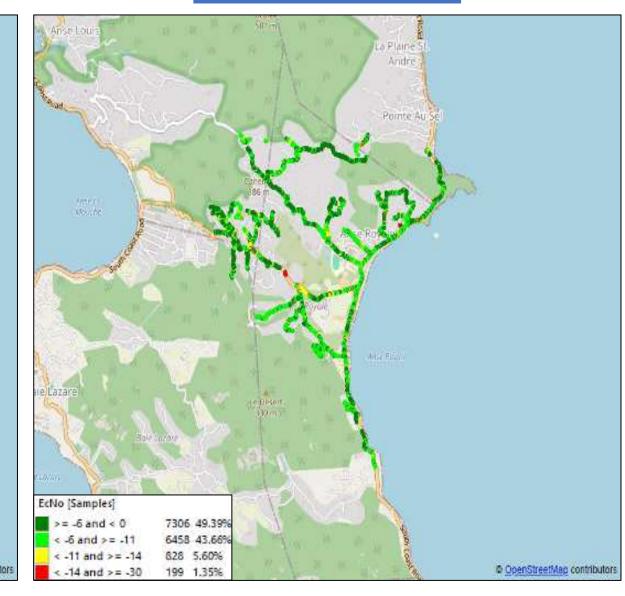




### Phase-1 3G PREFERRED DATA TEST - EC/NO PLOT



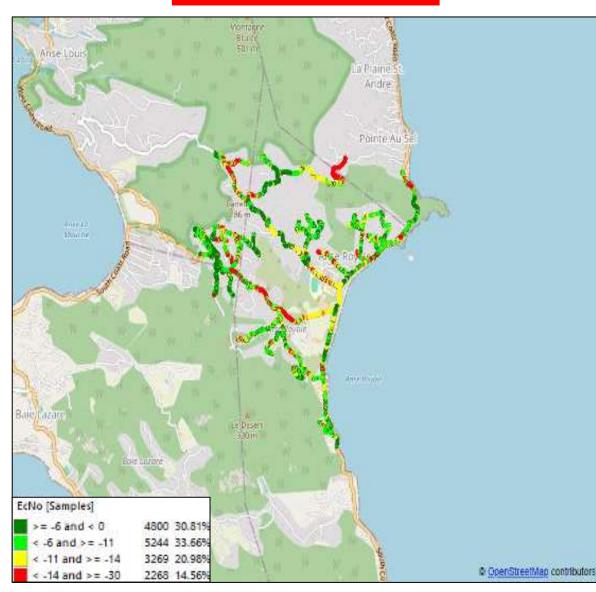


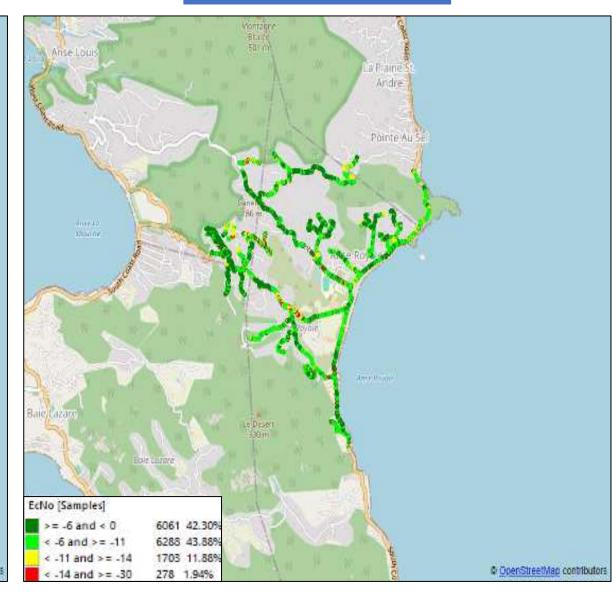




### Phase-2 3G PREFERRED DATA TEST - EC/NO PLOT



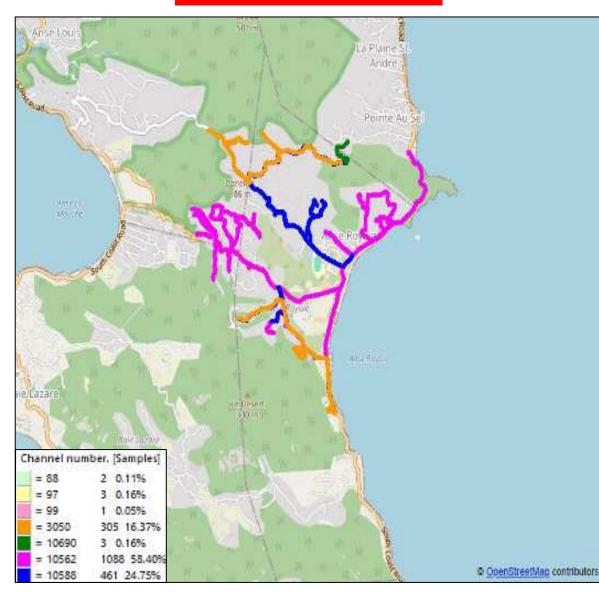


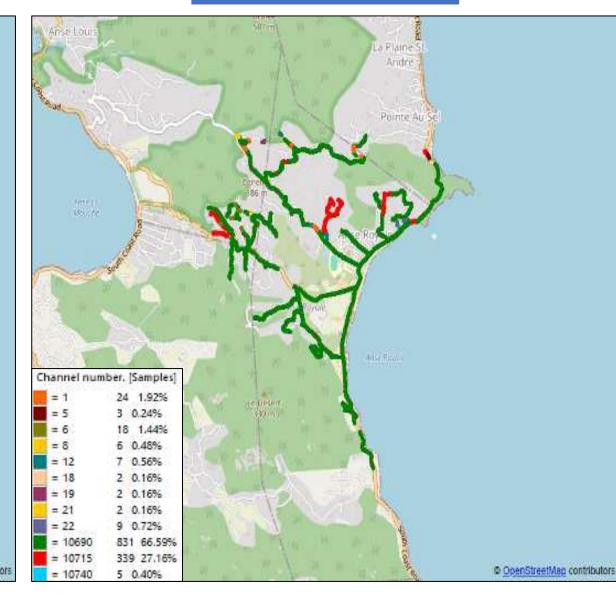




### Phase-1 3G PREFERRED DATA TEST - UARFCN PLOT



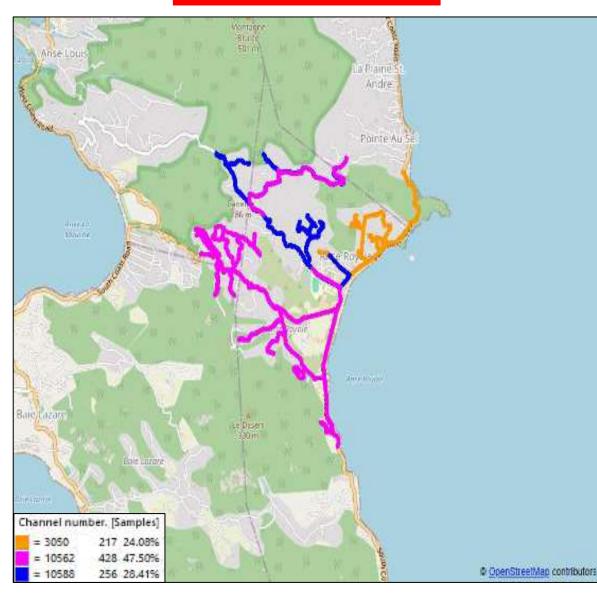


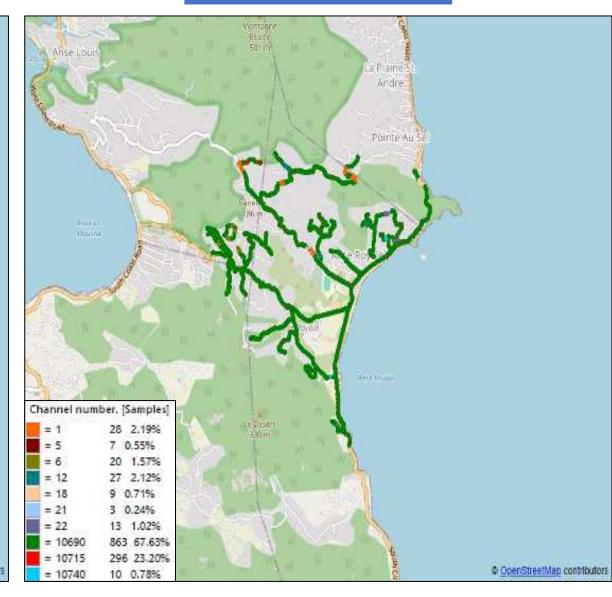




### Phase-2 3G PREFERRED DATA TEST - UARFCN PLOT







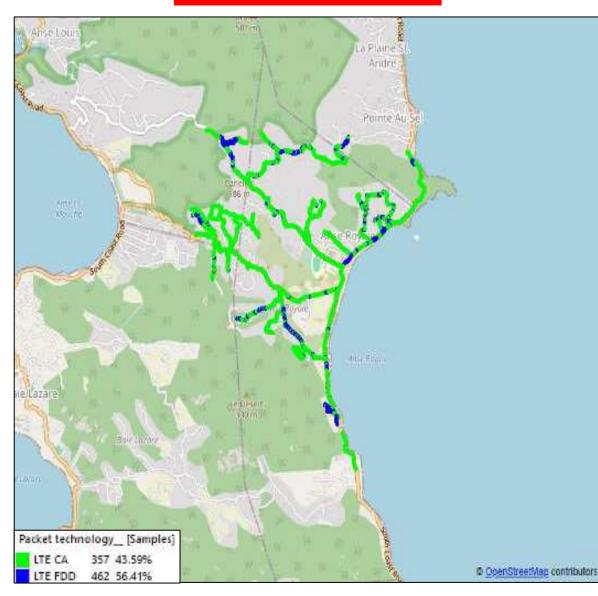


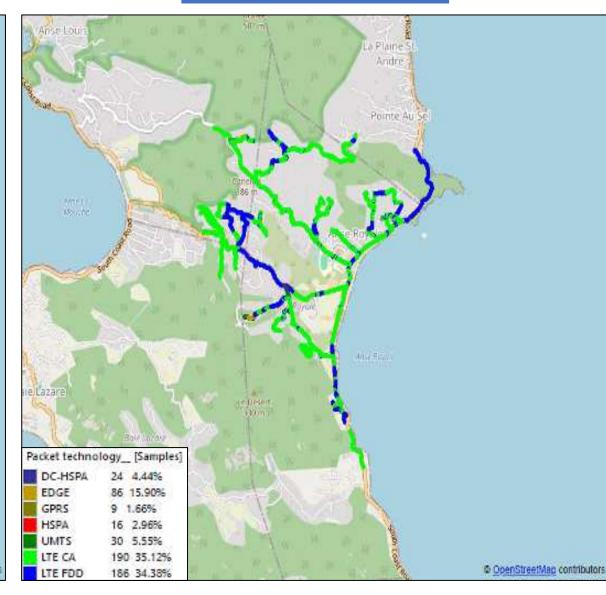
# 4G PREFERRED DATA DRIVE PLOTS



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





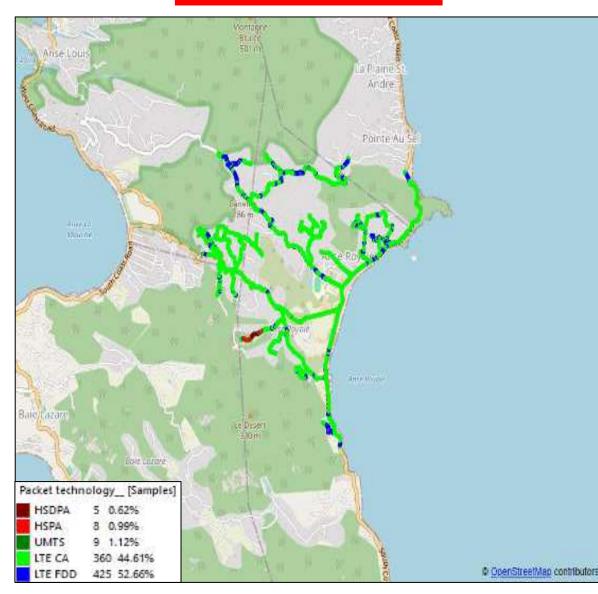


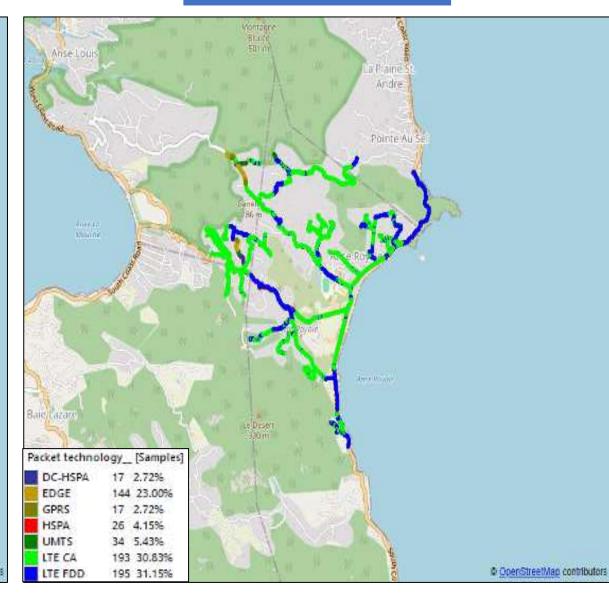


### Phase-2 4G PREFERRED DATA TEST - TECHNOLOGY PLOT

#### Airtel Data 4G

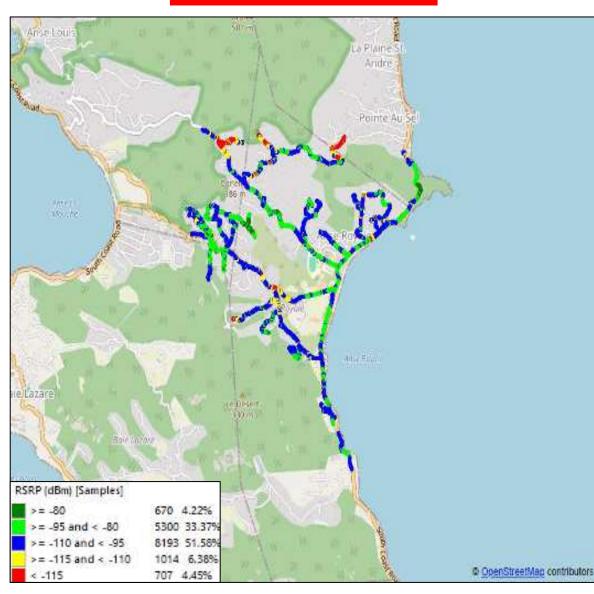
CWS Data 4G

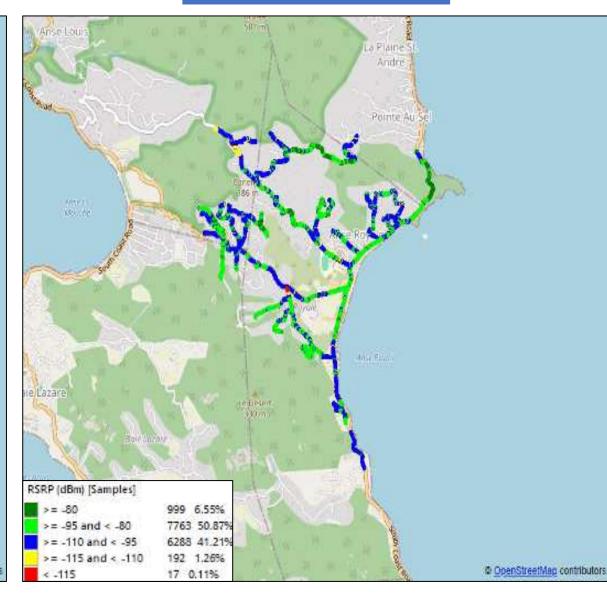




### Phase-1 4G PREFERRED DATA TEST - RSRP PLOT



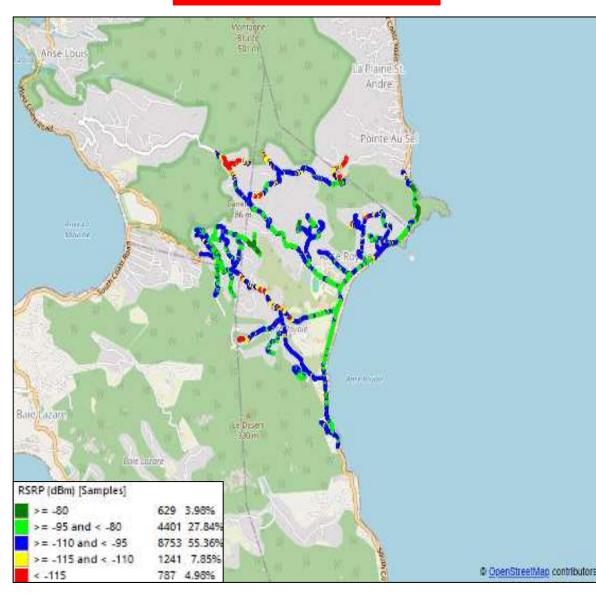


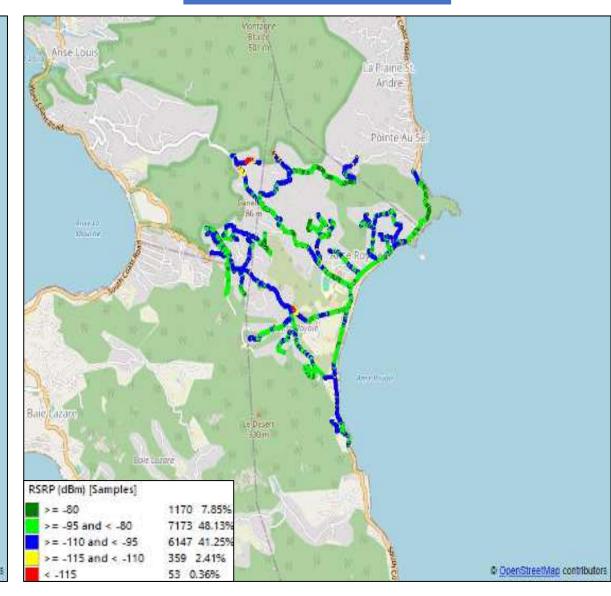




### Phase-2 4G PREFERRED DATA TEST - RSRP PLOT



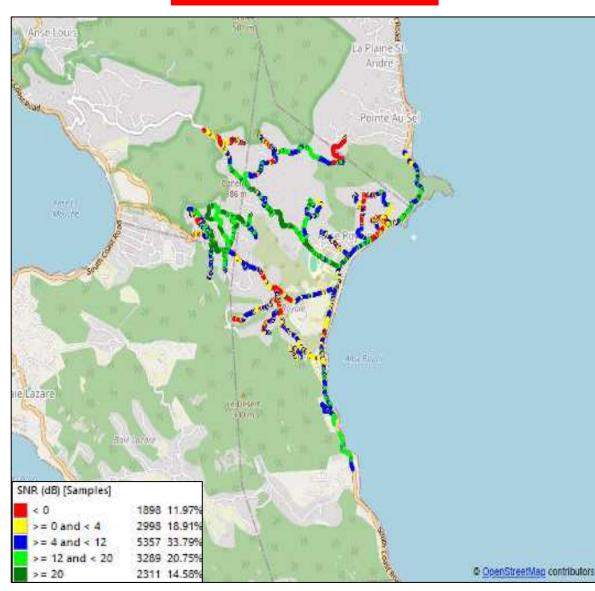


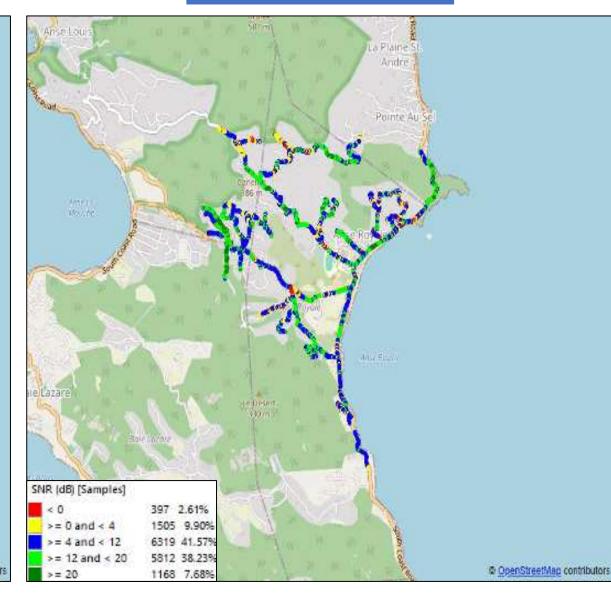




### Phase-1 4G PREFERRED DATA TEST - SINR PLOT



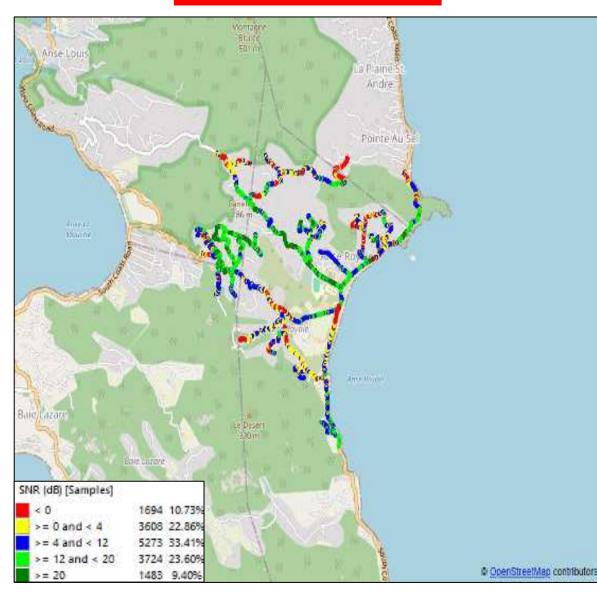


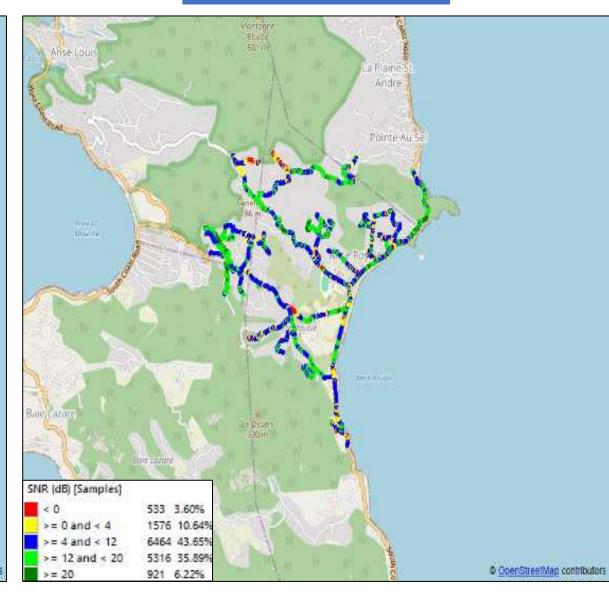




### Phase-2 4G PREFERRED DATA TEST - SINR PLOT



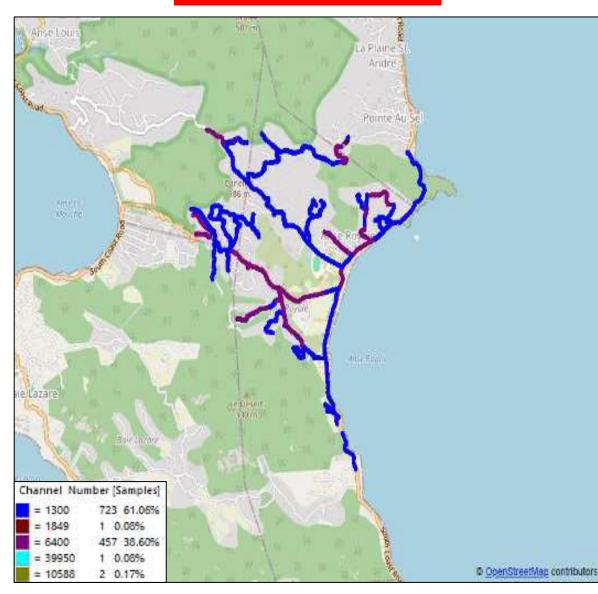


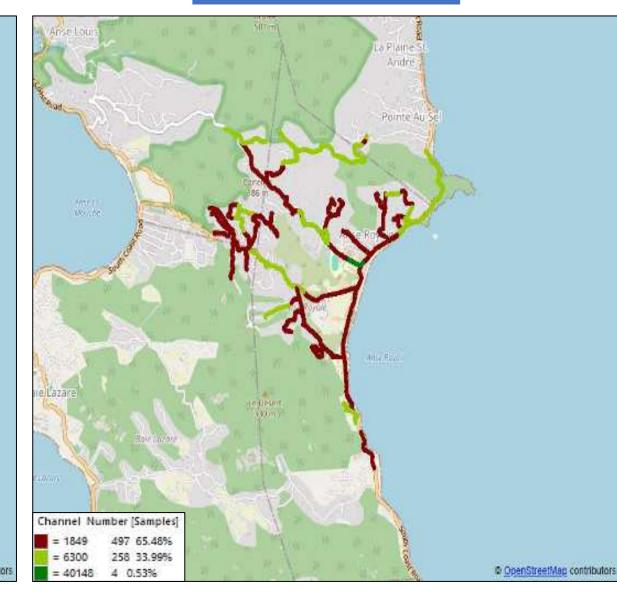




### Phase-1 4G PREFERRED DATA TEST - FREQUENCY BAND PLOT



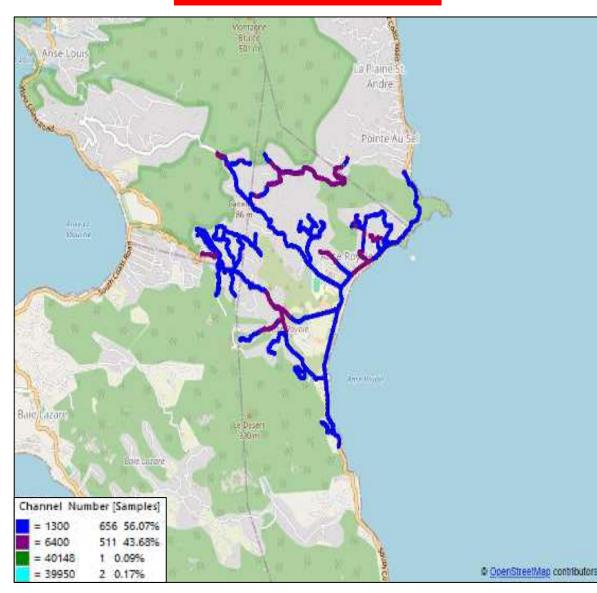


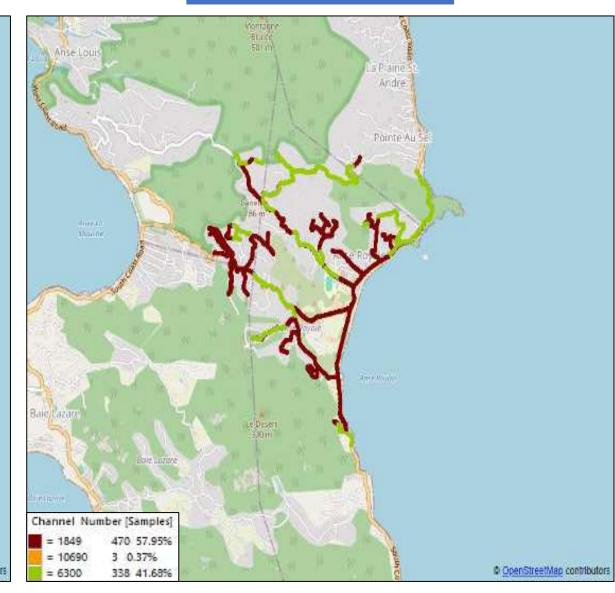




### Phase-2 4G PREFERRED DATA TEST - FREQUENCY BAND PLOT



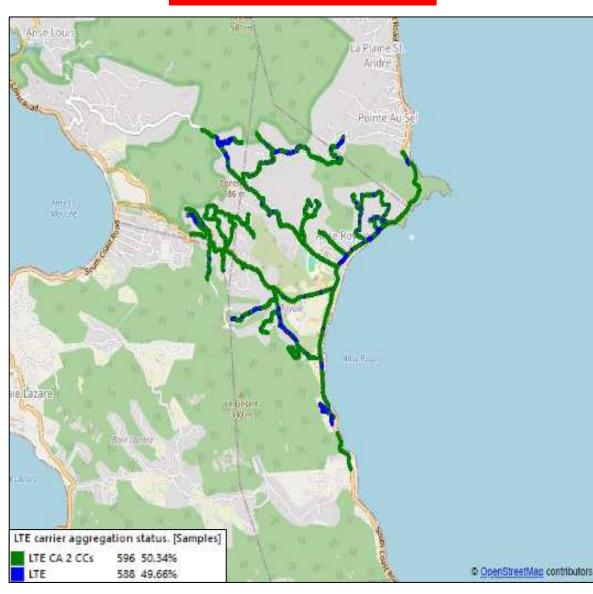


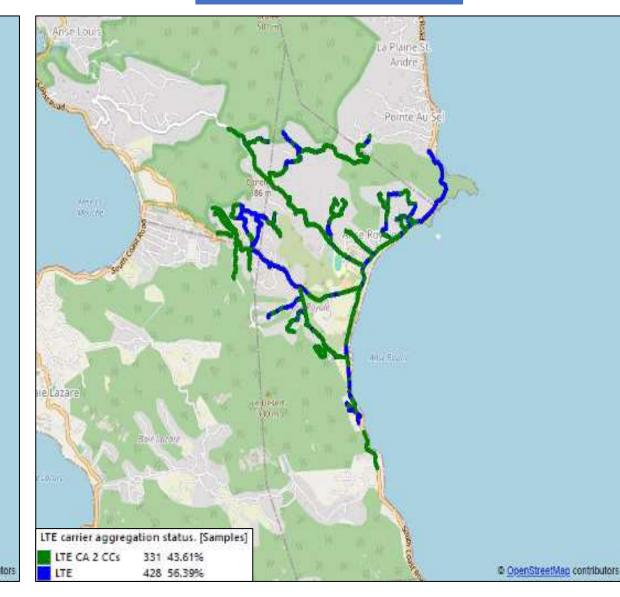




### Phase-1 4G PREFERRED DATA TEST - CARRIER AGGREGATION PLOT

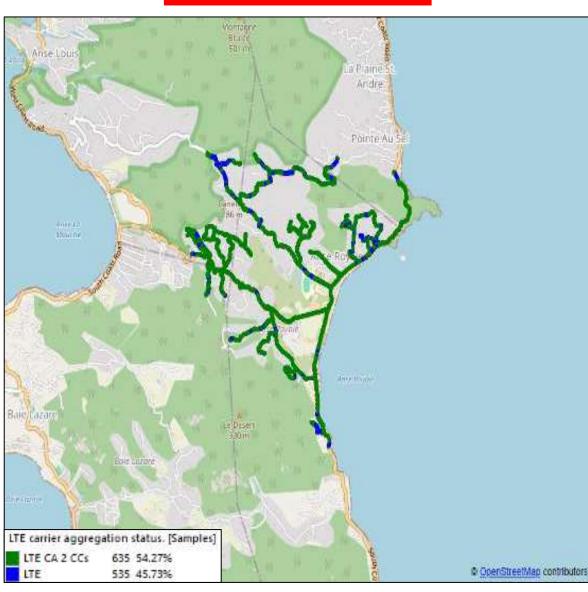


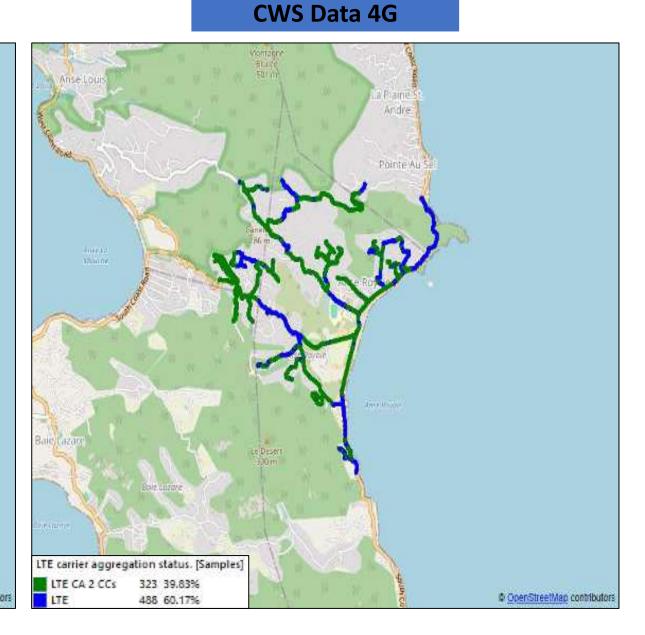






### Phase-2 4G PREFERRED DATA TEST - CARRIER AGGREGATION PLOT



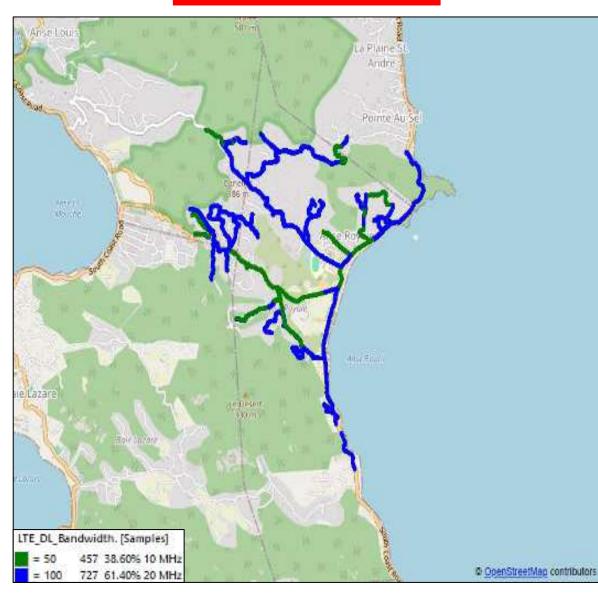


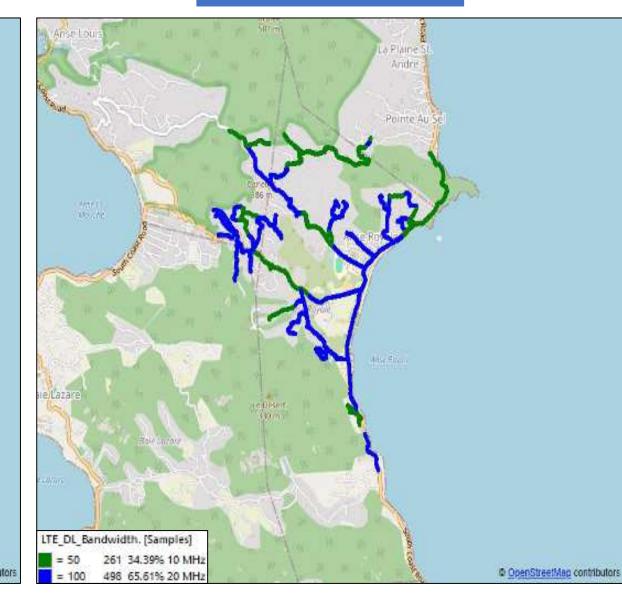


### Phase-1 4G PREFERRED DATA TEST – BANDWIDTH PLOT

#### Airtel Data 4G

CWS Data 4G

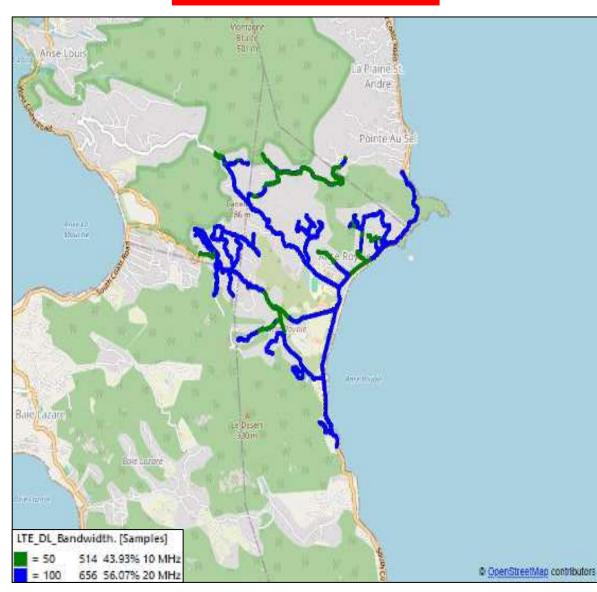


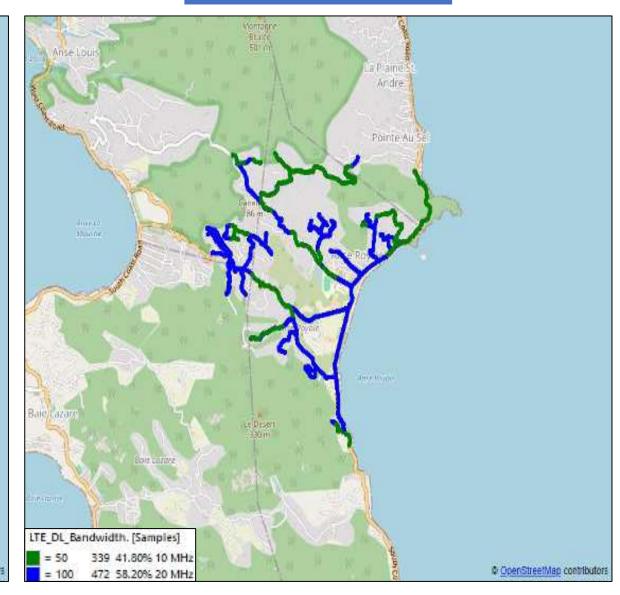




### Phase-2 4G PREFERRED DATA TEST – BANDWIDTH PLOT









# **Negative Event Analysis**

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

Call Attempt Failure cause from CWS	Count
Total Call Attempt Failure	1
Poor Coverage	1

Call Drop cause from Airtel	Count
Total Call Drop	1
Poor Quality	1

Call Drop cause from CWS	Count
Total Call Drop	1
Poor Quality	1

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

	Time	System	Serving ban	d Call		1. best active RSCP	Time	Ch	ŚĆ	1. best active Ec/N0 🔺		System	Transf. dir.	Time	Subchannel	Message name	
17	8:50:15.217	UMTS FDD	2100	Norn	10970.	-116.6	8:50:09.821	10562	88		34133.	UMTS FDD	Uplink	8:49:58.198	DCCH	IDENTITY_RESPONSE	Analysis:
2,	8:52:03.216	UMTS FDD	2100	Norn	10971.		8:50:09.821	10562	88	-15	34134,	UMTS FDD	Uplink	8:49:58.198	DCCH	ACTIVE_SET_UPDATE_COMPLETE	This call failure event occurred on short
					10972.	-121	8:50:10.044	10562	88		34135,	UMTS FDD	Downlink	8:49:58.327	DCCH	MEASUREMENT_CONTROL	call at 08:50:15:217 time when UE was
					10973.	ene-	8:50:10.044	10562	88	-18.8	34136,	UMTS FDD	Downlink	8:49:58.336	DCCH	DOWNLINK_DIRECT_TRANSFER	
					10974.	-120.5	8:50:10.637	10562	2 72		34137.	UMITS FDD	Downlink	8:49:58,336	DCCH	CALL_PROCEEDING	latched with 3G network.
					10975.		8:50:10.637	10562	2 72	-16.7	34138.	UMTS FDD	Uplink	8:49:58.447	DCCH	MEASUREMENT_REPORT	
					property and proved	-122.7	8:50:11.420	10562	88		34139.	UMTS FDD	Uplink	8:49:58.460	DCCH	MEASUREMENT_REPORT	After sending "CM Service Request"
					10977.	1	8:50:11.420			-19.1	34140.	UMTS FDD	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	8:50:03.518		MEASUREMENT_REPORT	message to core network, then core
					10978.	-115	8:50:11.927				34141.	UMTS FDD	Contraction Contraction	8:50:03.921		MEASUREMENT_REPORT	network responds with "Call Proceeding
					10979.	a second s	8:50:11.927	10562	88	-13.4	34142.	UMTS FDD	Downlink	8:50:04.226	DCCH	RADIO_BEARER_SETUP	" message. After that call setup has
					(see a destruction of a loss of the	-117.5	8:50:12.269				34143.	UMTS FDD	the second s	8:50:04.429	- h of e	MEASUREMENT_REPORT	been failed.
					10981,		8:50:12.269		a produced and the second	-15.4	34144.	and the second second second second	and the second se	8:50:04.570	were dependent of	RADIO_BEARER_SETUP_COMPLETE	
					10982.	-113	8:50:12.920				34145.	<ul> <li>A statistic statistic statistics</li> </ul>		8:50:04.857		RADIO_BEARER_RECONFIGURATION	• During the failure, UE was latched with
					10983.		8:50:12.920			-11.4	34146,	UMTS FDD	and the second second	8:50:04.861		MEASUREMENT_REPORT	PSC 88 and RF condition RSCP -120
					State of a local second	-116.7	8:50:13.276	a second second			34147.	and the present product of the Property	the set of the set of the set	8:50:04.897		DOWNLINK_DIRECT_TRANSFER	dBm and Ec/No -18.5 dB are very poor.
					10985.		8:50:13.276	and a property of the		-13.1	34148,	and the second strength of the second strengt	a provide the other scheme provided with	8:50:04.897		PROGRESS	
					Second Carlestonics	-116.7	8:50:13.511				34149,	UMTS FDD	1 - 1 - 1 - 1 - 1	8:50:04.899	1	RADIO_BEARER_RECONFIGURATION_COMPLETE	• As per the analysis call failed happened
					10987.	141443	8:50:13.511			-13.1	34150.			8:50:05.257		ACTIVE_SET_UPDATE	
					10988.	-122.3	8:50:13.925				34151.	UMTS FDD		8:50:05.268		ACTIVE_SET_UPDATE_COMPLETE	due to poor coverage of the network.
					10989.		8:50:13.925			-18.5		مرسارية الراجع والبابية ليترجى او	and the second sec	8:50:05.411	and a set of the state of the second s	MEASUREMENT_REPORT	
						-118.7	8:50:14:400			124	34153.	and shares a state of the state of the		8:50:05.657		MEASUREMENT_CONTROL	
					10991.		8:50:14.400			-15.8	34154.	(introduction to a state of the state of		8:50:05.737		PHYSICAL_CHANNEL_RECONFIGURATION	
					Present Courses (1)	-118.7	8:50:14.639				34155.	A CONTRACTOR OF A CONTRACT OF		8:50:05.779		PHYSICAL_CHANNEL_RECONFIGURATION_COMPLETE	
					10993.	00000	8:50:14.639			-15.8		and the second second property	terres and a literative fill and the	8:50:06.006		MEASUREMENT_REPORT	
					Service in the local sectors of	-120,1	8:50:15.003		and the second second	/)	34157.	<ul> <li>Control of Adding 10 Lines Cont</li> </ul>		8:50:06.323		MEASUREMENT_REPORT	
					10995.		8:50:15.003			-18.5	34158,	and some the part of the part of the second	the second se	8:50:06.478	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	MEASUREMENT_REPORT	
					particular and a second se	-115.3	8:50:15.319			12	34159,	UMTS FDD	the state of the second s	8:50:06.655		MEASUREMENT_REPORT	
					10997.		8:50:15.319			-13	34160.	<ul> <li>Contraction and the second seco</li></ul>		8:50:06.737		MEASUREMENT_CONTROL	
					Second Second	-118.4	8:50:15.722				34161.	UMTS FDD	Contraction and Contraction of Contr	8:50:07.020	and the set of the set	MEASUREMENT_REPORT	
					10999.		8:50:15.722			-14.0	34162.	and the second s		8:50:07.371		MEASUREMENT_REPORT	
					11000.	-125.1	8:50:16.397			40.1	34163.	UMTS FDD	a part of the state of the stat	8:50:07.450		MEASUREMENT_REPORT	
					11001.		8:50:16.397			-16.4	34164.	a the first of the product of the product		8:50:07.737		ACTIVE_SET_UPDATE	
					11002.	-125.7	8:50:17.257			100	34165.	UMTS FDD		8:50:07.778		ACTIVE_SET_UPDATE_COMPLETE	
					11003.	1017	8:50:17.257			-1478	34166.	UMTS FDD		and the set of		SYSTEM_INFORMATION_BCH	
					(where we have a second s	-124.7	8:50:17.934			22.6	34167.	UMTS FDD		a state and a state of the state of the		SYSTEM_INFORMATION_BCH	
					11005.		8:50:17.934	10562	41	-22.6	54168.	UMIS FDD	Downlink	8:50:07.869	BUCH	SYSTEM_INFORMATION_BLOCK_TYPE_12	

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

	Time	System	Serving band	í Call		1. best active RSCP	Time	Ch	SC	1. best active Ec/N0 🔺		System	Transf, dir	Time	Subchannel	Message name	
1,	8:50:15.217	UMTS FDD	2100	Norn	11157.	-126.6	8:51:56.999	1056	2 88	tentenen er en	34756.	UMTS FDD	Downlink	8:51:46.308	DCCH	DOWNLINK_DIRECT_TRANSFER	Analysis:
2.	8:52:03.216	UMTS FDD	2100	Norn	11158.		8:51:56.999	1056	2 88	-21	34757.	UMTS FDD	Downlink	8:51:46.308	DCCH	IDENTITY_REQUEST	This call failure event occurred on short
					11159.	-128.9	8:51:57.364	1056	2 88		34758.	UMTS FDD	Uplink	8:51:46.309	DCCH	UPLINK_DIRECT_TRANSFER	call at 08:52:03:216 time when UE was
					11160.	a needed to	8:51:57.364	1056	2 88	-23.1	34759.	UMTS FDD	Uplink	8:51:46.309	DCCH	IDENTITY_RESPONSE	latched with 3G network.
					11161.	-128.1	8:51:58.006	1056	2 72		34760.	UMTS FDD	Uplink	8:51:46.381	DCCH	MEASUREMENT_REPORT	latened with 5G network.
					11162.		8:51:58,006	1056	2 72	-22.5	34761,	UMTS FDD	Downlink	8:51:46.428	DCCH	DOWNLINK_DIRECT_TRANSFER	
					11163.	-128	8:51:58.179	1056	2 88		34762.	UMTS FDD	Downlink	8:51:46.428	DCCH	CALL_PROCEEDING	After sending "CM Service Request"
					11164.		8:51:58.179	1056	2 88	-22.2	34763.	UMTS FDD	Downlink	8:51:46.488	DCCH	ACTIVE_SET_UPDATE	message to core network, then core
					11165.	-129.5	8:51:59.007	1056	2 72		34764,	UMTS FDD	Uplink	8:51:46.500	DCCH	ACTIVE_SET_UPDATE_COMPLETE	network responds with "Call Proceeding
					11166,		8:51:59.007	1056	2 72	-23.7	34765.	UMTS FDD	Uplink	8:51:46.574	DCCH	MEASUREMENT_REPORT	" message. After that call setup has
					11167.	-124.8	8:51:59.299	1056	2 72		34766.	UMTS FDD	Downlink	8:51:46.608	DCCH	MEASUREMENT_CONTROL	been failed.
					11168.	11 m m	8:51:59.299	1056	2 72	-21	34767.	UMTS FDD	Uplink	8:51:46.801	DCCH	MEASUREMENT_REPORT	
					11169.	-129	8:52:00.004	1056	2 88		34768.	UMTS FDD	Uplink	8:51:47.119	DCCH	MEASUREMENT_REPORT	• During the failure, UE was latched with
					11170.		8:52:00.004	1056	2 88	-23.2	34769.	UMTS FDD	Uplink	8:51:48.812	DCCH	MEASUREMENT_REPORT	PSC 88 and RF condition RSCP -118.4
					11171.	-130.1	8:52:00.319				34770.	UMTS FDD	Uplink	8:51:49.803	DCCH	MEASUREMENT_REPORT	dBm and Ec/No -20 dB are very poor.
					11172.		8:52:00.319			-24.3	34771.	UMTS FDD	Uplink	8:51:51.129	DCCH	MEASUREMENT_REPORT	
						-127.7	8:52:01.006	1056	2 88		34772.	UMTS FDD	Uplink	8:51:51.222	DCCH	MEASUREMENT_REPORT	• As parthe analysis call failed happened
					11174.		8:52:01.006			-23.1	34773.	UMTS FDD	Downlink	8:51:51.318	DCCH	ACTIVE_SET_UPDATE	As per the analysis call failed happened
					11175,	-121	8:52:01.557				Service Section and the second section in the	UMTS FDD	and sold prive into a community	8:51:51,350	and the second s	ACTIVE_SET_UPDATE_COMPLETE	due to poor coverage of the network.
					11176.		8:52:01.557			-17.3		<ul> <li>Personal statements and an and a statement sta statement statement stat statement statement statem statement statement stat statement</li></ul>		8:51:51,458	O test share	MEASUREMENT_CONTROL	
					11177.	-124.4	8:52:02.057					UMTS FDD	the second second second second	8:51:52.111		MEASUREMENT_REPORT	
					11178.		8:52:02.057		2 72	-24	<ul> <li>Encloyed enclosed</li> </ul>	Concernation of the State		8:51:52.248		RADIO_BEARER_SETUP	
					and the state of the second	-118.3	8:52:02.579					UMTS FDD		8:51:52.291		MEASUREMENT_REPORT	
					11180.		8:52:02.579			-18.4		UMTS FDD		8:51:52.572	10000000	RADIO_BEARER_SETUP_COMPLETE	
					11181.	-118.4	8:52:03.066			1	- induction in the second	UMTS FDD	and a fight of the standard sector	8:51:52.691	and the of the bolic of the	MEASUREMENT_REPORT	
					11182.	and the second sec	8:52:03.066	the second second		-20		NAME OF COMPANY OF THE OWNER OF THE		8:51:52.859		RADIO_BEARER_RECONFIGURATION	
					11183.	-118.1	8:52:03.571				and the second s	UMTS FDD	No. Control of the Province	8:51:52.900		RADIO_BEARER_RECONFIGURATION_COMPLETE	
					11184.		8:52:03.577		2 41	-16				8:51:52.938		DOWNLINK_DIRECT_TRANSFER	
					11185,	-118.1	8:52:04.192					the sea and sea for him is search of	and the second second second second second	8:51:52.938	10000000CC	PROGRESS	
					11186.		8:52:04.192			-16		Contraction of the second		8:51:53.139		ACTIVE_SET_UPDATE	
					11187.	-119.8	8:52:07.010					UMTS FDD	In this state.	8:51:53.150		ACTIVE_SET_UPDATE_COMPLETE	
					11188.	7/2/01/05	8:52:07.010			-15.2	CONTRACTOR OF STREET,	0.010203044000		8:51:53.458		MEASUREMENT_CONTROL	
					The contract of the party of th	-125.8	8:52:08.282					and the second second second second		8:51:53.538		PHYSICAL_CHANNEL_RECONFIGURATION	
					11190.	2	8:52:08.282		· · · · · · · · · · · · · · · · · · ·	-20.2		UMTS FDD		8:51:53.578	1	PHYSICAL_CHANNEL_RECONFIGURATION_COMPLETE	
					11191.	-125.2	8:52:09.758	Contraction (19)				a sector of particular in the last	1.	8:51:54.416	19 19 19 19 19 19 19 19 19 19 19 19 19 1	MEASUREMENT_CONTROL	
					11192.		8:52:09.758	1058	8 72	-24.3	34791,	UMTS FDD	Downlink	8:51:55.576	DCCH	SECURITY_MODE_COMMAND	

## Phase-1 Call Attempt Failure Analysis 2 From MS7 CWS MO

Time System Serving band Call failu	Time	RxLev sub	ARECN BSIC	LAC RA	C RXQ sub 🔺		Event ID	System	Transf. dir.	Time	Subchannel	Message name	
1. 9:01:27.712 GSM 900 Dropped 265.	9:01:16.315	-92	1 19	1 0		31951.	L3SM	GSM	Uplink	9:01:13.287	SACCH	MEASUREMENT_REPORT	Analysis:
266.	9:01:16.583				4	31952.	L3SM	G5M	Downlink	9:01:13.403	SACCH	MEASUREMENT_INFORMATION	This call failure event occurred on short
267.	9:01:17.053	-95	1 19	1 0		31953.	L3SM	GSM	Downlink	9:01:13.726	DCCH	CALL_PROCEEDING	call at 09:01:27:712 time when UE was
268.	9:01:17.053				4	31954.	L3SM	GSM	Uplink	9:01:13.758	SACCH	MEASUREMENT_REPORT	
269.	9:01:17.524				2	31955.	L3SM	GSM	Downlink	9:01:13.873	SACCH	MEASUREMENT_INFORMATION	latched with 2G network.
270.	9:01:17.639	-93	1 19	1 0		31956,	L3SM	GSM	Uplink	9:01:14.229	SACCH	MEASUREMENT_REPORT	
271.	9:01:17.995				6	31957.	L3SM	GSM	Downlink	9:01:14.344	SACCH	MEASUREMENT_INFORMATION	After sending "CM Service Request"
272.	9:01:18.161	-94	1 19	1 0		31958.	L3SM	GSM	Uplink	9:01:14,700	SACCH	MEASUREMENT_REPORT	message to core network, then core
273.	9:01:18.466				5	31959,	L3SM	GSM	Downlink	9:01:14.815	SACCH	MEASUREMENT_INFORMATION	network responds with "Call Proceeding "
274.	9:01:18.581	-92	1 19	1 0		31960.	L3SM	GSM	Uplink	9:01:15.171	SACCH	MEASUREMENT_REPORT	message. After that call setup has been
275.	9:01:18.937				0	31961.	L3SM	GSM	Downlink	9:01:15.286	SACCH	MEASUREMENT_INFORMATION	failed.
276.	9:01:19.139	-93	1 19	1 0		31962.	L3SM	GSM	Uplink	9:01:15.641	SACCH	MEASUREMENT_REPORT	
277.	9:01:19.407				1	31963.	L3SM	GSM	Downlink	9:01:15.757	SACCH	SYSTEM_INFORMATION_TYPE_5	During the session UE was latched with
278.	9:01:19.523	-95	1 19	1 0		31964.		GSM	Uplink	9:01:16.112	SACCH	MEASUREMENT_REPORT	ARFCN 1. RF Conditions found during
279.	9:01:19.878				0	31965.		GSM	Downlink	9:01:16.227	SACCH	SYSTEM_INFORMATION_TYPE_STER	session also seemed OK.(Rx Lev : -96, Rx
280.	9:01:20.125	-92	1 19	1 0		31966.	L3SM	GSM	Uplink	9:01:16.583	SACCH	MEASUREMENT_REPORT	Qual= 7)
281.	9:01:20.349				3	31967.	L3SM	G5M	Downlink	9:01:16.698	SACCH	SYSTEM_INFORMATION_TYPE_6	Qual- 7)
282.	9:01:20.561	-92	1 19	1 0		- inful (b) a bright a second		GSM	Uplink	9:01:17.053	SACCH	MEASUREMENT_REPORT	and the second second standard second s
283.	9:01:20.820				0	31969,		GSM	Downlink	9:01:17.169	SACCH	MEASUREMENT_INFORMATION	As per the Analysis the call setup failure
284.	9:01:21.022	-91	1 19	1 0		31970,	L3SM	GSM	Uplink	9:01:17.524	SACCH	MEASUREMENT_REPORT	event occurred due to poor coverage in
	9:01:21.291				S	31971.		GSM	and the second sec	9:01:17.639	11.000	MEASUREMENT_INFORMATION	the network.
286,	9:01:21.761				7	31972.		GSM	Uplink	9:01:17,995		MEASUREMENT_REPORT	
287.	9:01:22.005	-96	1 19	1 0		31973.		GSM	Downlink	9:01:18.110	SACCH	MEASUREMENT_INFORMATION	
288.	9:01:22.232				4	31974,		GSM	Uplink	9:01:18.466		MEASUREMENT_REPORT	
289.	9:01:22.365	-95	1 19	1 0		31975,		GSM	and the second second second second	9:01:18.581	ومحصوبة مرتابة المترازيقين ال	MEASUREMENT_INFORMATION	
290.	9:01:22.703				6	31976,	the set of	G5M	Uplink	9:01:18.937	and the second sec	MEASUREMENT_REPORT	
	9:01:23.173				4	31977.		GSM	and the second s	9:01:19.052	1 A 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	MEASUREMENT_INFORMATION	
	9:01:23.289	-94	1 19	1 0		31978.		GSM	Uplink	9:01:19.407		MEASUREMENT_REPORT	
293.	9:01:23.644				5 -	C Increasing and a second	A started by the star	GSM		9:01:19.523		SYSTEM_INFORMATION_TYPE_5	
294.	9:01:24.115	-96	1 19	1 0				GSM	Uplink	9:01:19.878		MEASUREMENT_REPORT	
295.	9:01:24.115				6	Initial distantia		GSM	Downlink	9:01:19.993		SYSTEM_INFORMATION_TYPE_STER	
296.	9:01:24.605	-95	1 19	1 0		31982.		GSM	Uplink	9:01:20.349	(h) construction in the second	MEASUREMENT_REPORT	
	9:01:25.057				6	31983,		GSM	a particular de la parte de la propertación particular	9:01:20.464	and the second s	SYSTEM_INFORMATION_TYPE_6	
	9:01:25.259	-95	1 19	1 0		31984.	A Design of the second s	GSM	Uplink	9:01:20.820		MEASUREMENT_REPORT	
299.	9:01:25.527				6	31985.		GSM		9:01:20.935		MEASUREMENT_INFORMATION	
300.	9:01:25.998				6	31986.	L3SM	GSM	Uplink	9:01:21.291	SACCH	MEASUREMENT_REPORT	

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

	Time	System Serving band		Time	RxLe	v sub ARFCN	BSIC	LAC	RAC RXQ	ub 🔺 .	î.	Event ID	System	Transf. dir.	Time	Subchannel	Message name	
1.	8:50:20.753	GSM 900	4781.	8:42:36.180	.75	97	56	50000	1	3	22917.	L3SM	UMTS FDD	Downlink	8:49:57.546	DCCH	AUTHENTICATION_AND_CIPHERING_REQUEST	Analysis:
100		National Patrick Control of State	4782.	8:42:36.657	-75	97	56	50000	1		22918.	RRCSM	UMTS FDD	Uplink	8:49:57.687	DCCH	MEASUREMENT_REPORT	This call drop event occurred on long call
			4783.	8:42:37.248	-75	97	56	50000	1		22919,	RRCSM	UMTS FDD	Uplink	8:49:57.689	DCCH	UPLINK_DIRECT_TRANSFER	at 08:50:20:381 time when UE was
			4784.	8:42:37.737	-74	97	56	50000	1		22920,	L3SM	UMTS FDD	Uplink	8:49:57.689	DCCH	AUTHENTICATION_AND_CIPHERING_RESPONSE	latched with 2G network.
			4785.	8:42:38.041	-75	97	56	50000	t .		22921,	RRCSM	UMTS FDD	Downlink	8:49:58.066	DCCH	SECURITY_MODE_COMMAND	
			4786.	8:42:38.604	-74	97	56	50000	1		22922.	RRCSM	UMTS FDD	Uplink	8:49:58.066	DCCH	SECURITY_MODE_COMPLETE	After getting Alerting message at
			4787.	8:42:39.204	-73	97	56	50000	1		22923,	RRCSM	UMTS FDD	Uplink	8:49:58.119	DCCH	MEASUREMENT_REPORT	08:49:36:507 time than Call drop
			4788.	8:42:39.795	-73	97	56	50000	1		22924.	RRCSM	UMTS FDD	Downlink	8:49:58.466	DCCH	HANDOVER_FROM_UTRAN_COMMAND_GSM	happened.
			4789.	8:42:40.188	-73	97	56	50000	1		22925,	L3SM	UMTS FDD	Downlink	8:49:58.466	DCCH	HANDOVER_COMMAND	
			4790.	8:42:40.605	-73	97	56	50000	1		22926.	L3SM	GSM	Downlink	8:49:58.484	DCCH	HANDOVER_COMMAND	• During the session UE was latched with
			4791.	8:42:41.006	-85	97	56	50000	1		22927.	L3SM	GSM	Downlink	8:49:58.627	DCCH	PHYSICAL_INFORMATION	ARFCN 103 and RF condition Rx lev -92
			4792,	8:42:43.209				50000	1		22928.	L3SM	GSM	Uplink	8:49:58.627	DCCH	HANDOVER_COMPLETE	dBm is good and Rx qual 7 dB was very
			4793.	8:42:45.318	-71	97		50000	1		22929,	L3SM	GSM	Downlink	8:49:58.687	DCCH	PHYSICAL_INFORMATION	
			4794.	8:49:58.941	and the second				2		22930.	L3SM	GSM	Uplink	8:49:58.757	DCCH	GPRS_SUSPENSION_REQUEST	poor.
			4795.	8:49:59.004	-90	103	61	62000	4		22931.	L3SM	GSM	Uplink	8:49:58.941	SACCH	MEASUREMENT_REPORT	• As partha Applysis the call satur drap
			4796.	8:49:59.421					б		22932.	L3SM	GSM	Downlink	8:49:59.375	SACCH	MEASUREMENT_INFORMATION	As per the Analysis the call setup drop
			4797,	8:49:59.858	-92	103	61	50000	4		22933,	L3SM	GSM	Uplink	8:49:59.421	SACCH	MEASUREMENT_REPORT	event occurred due to poor quality in the
			4798.	8:50:00.381		100000	1		7		22934.	L3SM	GSM	Downlink	8:49:59.855	SACCH	SYSTEM_INFORMATION_TYPE_6	network.
			4799.	8:50:00.686	-93	103	61	50000	4		22935.	L3SM	GSM	Uplink	8:49:59.901	SACCH	MEASUREMENT_REPORT	
			4800.	8:50:00.861					5	3	22936,	L3SM	GSM	Downlink	8:50:00.335	SACCH	SYSTEM_INFORMATION_TYPE_5	
			4801.	8:50:01.105	-92	103	61	50000	4		22937,	L35M	GSM	Uplink	8:50:00.381	SACCH	MEASUREMENT_REPORT	
			4802.	8:50:01.341					6		22938.	L3SM	GSM	Downlink	8:50:00.815	SACCH	MEASUREMENT_INFORMATION	
			4803.	8:50:01.821					7		22939.	L3SM	GSM	Uplink	8:50:00.861	SACCH	MEASUREMENT_REPORT	
			4804.	8:50:01.937	-93	103	61	50000	4		22940.	L3SM	GSM	Downlink	8:50:01.295	SACCH	SYSTEM_INFORMATION_TYPE_6	
			4805.	8:50:02.827	-94	103	61	50000	4		22941.	L3SM	GSM	Uplink	8:50:01.341	SACCH	MEASUREMENT_REPORT	
			4806.	8:50:03.307	-94	103	61	50000	4		22942.	L3SM	GSM	Downlink	8:50:01.775	SACCH	SYSTEM_INFORMATION_TYPE_5	
			4807.	8:50:04.001	-94	103	61	50000	4		22943.	L3SM	GSM	Uplink	8:50:01.821	SACCH	MEASUREMENT_REPORT	
			4808.	8:50:04.221	-94	103	61	50000	4	_	22944,	L3SM	GSM	Uplink	8:50:02.301	SACCH	MEASUREMENT_REPORT	
			4809.	8:50:05.004	-94	103	61	50000	4		22945.	L3SM	GSM	Uplink	8:50:02.781	SACCH	MEASUREMENT_REPORT	
			4810.	8:50:05.282	-94	103	61	50000	4		22946,	L3SM	GSM	Uplink	8:50:03.261	SACCH	MEASUREMENT_REPORT	
			4811.	8:50:06.002	-93	103	61	50000	4		22947.	L3SM	GSM	Uplink	8:50:03.741	SACCH	MEASUREMENT_REPORT	
			4812.	8:50:06.229	-94	103	61	50000	4		22948.	L3SM	GSM	Uplink	8:50:04.221	SACCH	MEASUREMENT_REPORT	
			4813.	8:50:07.004	-94	103	61	50000	4		22949.	L3SM	GSM	Uplink	8:50:04.701	SACCH	MEASUREMENT_REPORT	
			4814	8:50:07.249	-94	103	61	50000	4	1	22950.	L3SM	GSM	Uplink	8:50:05.181	SACCH	MEASUREMENT REPORT	

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## Phase-1 Call Drop Analysis 1 From MS11 CWS MO

Time System Serving band Call type Cal	Time	RxLev sub	ARFCN	BSIC L	AC R	AC R	WQ sub 🔺		Event ID	System	Transf. dir.	Time	Subchannel	Message name	
1. 12:37:39.795 GSM 900 Voice call Orig 110.	12:35:39.673	-77	25	13 1	1	0		1436.	RRCSM	UMTS FDD	Downlink	12:37:16.552	DCCH	MEASUREMENT_CONTROL	Analysi
111.	12:35:40.033	-81	25	13 1	1	0	-	1437,	RRCSM	UMTS FDD	Uplink	12:37:16.723	DCCH	MEASUREMENT_REPORT	• This
112.	12:35:40.769	.77	25	13 1	1	0		1438.	RRCSM	UMTS FDD	Downlink	12:37:16.792	DCCH	MEASUREMENT_CONTROL	
113.	12:35:41.215	-78	25	13 1	1	0		1439.	RRCSM	UMTS FDD	Downlink	12:37:16.992	DCCH	HANDOVER_FROM_UTRAN_COMMAND_G	at 12
114.	12:35:41.769	-78	25	13 1	1	0		1440,	L3SM	UMTS FDD	Downlink	12:37:16.992	DCCH	HANDOVER_COMMAND	latch
115.	12:35:41.769					0	1	1441,	L3SM	GSM	Downlink	12:37:17.011	DCCH	HANDOVER_COMMAND	
115.	12:35:42.156	-78	25	13 1	1	0		1442.	L3SM	GSM	Downlink	12:37:17.123	DCCH	PHYSICAL_INFORMATION	Afte
117.	12:35:42.387							1443.	L3SM	GSM	Uplink	12:37:17.123	DCCH	HANDOVER_COMPLETE	12:3
118.	12:37:17.776	-89	25	13 1	10 1	0		1444.	L3SM	GSM	Downlink	12:37:17.183	DCCH	PHYSICAL_INFORMATION	happ
119.	12:37:17.776					0	6	1445,	L3SM	GSM	Uplink	12:37:17,231	DCCH	GPRS_SUSPENSION_REQUEST	
120.	12:37:17.980	-87	25	13 1	10 1	0		1446.	L3SM	GSM	Downlink	12:37:17.362	DCCH	IDENTITY_REQUEST	• Duri
121.	12:37:17.980					0		1447.	L3SM	GSM	Uplink	12:37:17.362	DCCH	IDENTITY_RESPONSE	
122.	12:37:18.873					2		1448.	L3SM	GSM	Downlink	12:37:17.431	SACCH	SYSTEM_INFORMATION_TYPE_5	ARF
123.	12:37:18.876	-87	25	13 1	1	0		1449.	L3SM	GSM	Uplink	12:37:17.478	SACCH	MEASUREMENT_REPORT	is go
124.	12:37:18.918					2		1450,	L3SM	GSM	Downlink	12:37:17.911	SACCH	SYSTEM_INFORMATION_TYPE_5	
125.	12:37:19.398					4		1451.	L3SM	GSM	Uplink	12:37:17.958	SACCH	MEASUREMENT_REPORT	• As p
126.	12:37:19.462	-89	25	13 1	1	0		1452.	L3SM	GSM	Downlink	12:37:18.391	SACCH	SYSTEM_INFORMATION_TYPE_STER	ever
127.	12:37:19.878					4	1 <sup>6</sup> - 1	1453.	L3SM	GSM	Uplink	12:37:18.438	SACCH	MEASUREMENT_REPORT	netv
128.	12:37:20.358	-89	25	13 1	1	0		1454.	L3SM	GSM	Downlink	12:37:18.871	SACCH	SYSTEM_INFORMATION_TYPE_6	
129.	12:37:20.358					5	i)	1455,	L3SM	GSM	Uplink	12:37:18.918	SACCH	MEASUREMENT_REPORT	
130.	12:37:20.838	-89	25	13 1	1	0		1456.	L3SM	GSM	Downlink	12:37:19.351	SACCH	MEASUREMENT_INFORMATION	
131.	12:37:20.838					5		1457.	L3SM	GSM	Uplink	12:37:19.398	SACCH	MEASUREMENT_REPORT	
132.	12:37:21.318	-92	25	13 1	1	0		1458.	L3SM	GSM	Downlink	12:37:19.831	SACCH	MEASUREMENT_INFORMATION	
133.	12:37:21.318					5		1459.	L3SM	GSM	Uplink	12:37:19.878	SACCH	MEASUREMENT_REPORT	
134,	12:37:21.798					6	i/	1460,	L3SM	GSM	Downlink	12:37:20.311	SACCH	MEASUREMENT_INFORMATION	
135.	12:37:21.885	-93	25	13 1	1	0		1461.	L3SM	GSM	Uplink	12:37:20.358	SACCH	MEASUREMENT_REPORT	
136.	12:37:22.278					6		1462.	L3SM	GSM	Downlink	12:37:20.791	SACCH	MEASUREMENT_INFORMATION	
137.	12:37:22.342	-94	25	13 1	1	0		1463.	L3SM	GSM	Uplink	12:37:20.838	SACCH	MEASUREMENT_REPORT	
138.	12:37:22.757					7		1464.	L3SM	GSM	Downlink	12:37:21.271	SACCH	MEASUREMENT_INFORMATION	
139.	12:37:22.775	-94	25	13 1	1	0		1465,	L3SM	GSM	Uplink	12:37:21.318	SACCH	MEASUREMENT_REPORT	
140.	12:37:23.237	58-11. · · ·				7	9	1466.	L3SM	GSM	Downlink	12:37:21.751	SACCH	SYSTEM_INFORMATION_TYPE_5	
141.	12:37:23.717	-93	25	13 1	1	0		1467.	L3SM	GSM	Uplink	12:37:21.798	SACCH	MEASUREMENT_REPORT	
142.	12:37:23.717					6	1	1468.	L3SM	GSM	Downlink	12:37:22.231	SACCH	SYSTEM_INFORMATION_TYPE_STER	
143.	12:37:24.197					7	9	1469.	L3SM	GSM	Uplink	12:37:22.278	SACCH	MEASUREMENT_REPORT	
144.	12:37:24.224	-96	25	13 1	1	0		1470,	L3SM	GSM	Uplink	12:37:22.757	SACCH	MEASUREMENT_REPORT	
145.	12:37:24.677	-94	25	13 1	1	0		1471.	L3SM	GSM	Uplink	12:37:23.237	SACCH	MEASUREMENT_REPORT	
146.	12:37:24.677					7		1472.	L3SM	GSM	Downlink	12:37:23.670	SACCH	MEASUREMENT_INFORMATION	

#### /sis:

- is call drop event occurred on long call 12:37:39:795 time when UE was ched with 2G network.
- ter getting Alerting message at :36:42:626 time than Call drop ppened.
- ring the session UE was latched with FCN 25 and RF condition Rx lev -94 dBm good and Rx qual 6 dB was very poor.
- per the Analysis the call setup drop ent occurred due to poor quality in the twork.

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

Call Attempt Failure cause from CWS	Count
Total Call Attempt Failure	1
Poor Quality	1

Call Drop cause from Airtel	Count
Total Call Drop	2
Poor Quality	2

Call Drop cause from CWS	Count	
Total Call Drop	3	
Poor Coverage	2	
Poor Quality	1	

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

	Time	System	Serving band	i Cal		1. best active RSCP	Time	Ch	SC	1. best active Ec/NO		Transf, dir.	Time	Subchannel	Message name
1,	15:06:31,122	UMTS FDD	2100	Nor	10623.	Participation of the second second	15:06:02.137	10562	342	-17.8	26623.	Downlink	15:06:14.452	DCCH	MEASUREMENT_CONTROL
2.	15:08:23.452	UMTS FDD	2100	Nor	10624.	-119.3	15:06:02.677	10562	342		26624.	Downlink	15:06:14.452	DCCH	DOWNLINK_DIRECT_TRANSFER
					10625.		15:06:02.677	10562	342	-17.2	26625.	Downlink	15:06:14.452	DCCH	AUTHENTICATION_REQUEST
					10626.	-120.8	15:06:03.058	10562	342		26626.	Uplink	15:06:14.453	DCCH	UPLINK_DIRECT_TRANSFER
					10627.		15:06:03.058	10562	342	-17.1	26627.	Uplink	15:06:14.453	DCCH	AUTHENTICATION_RESPONSE
					10628.	-122.6	15:06:03.680	10562	342		26628.	Downlink	15:06:14.761	DCCH	SECURITY_MODE_COMMAND
					10629.	er en	15:06:03.680	10562	342	-20.4	26629.	Uplink	15:06:14.761	DCCH	SECURITY_MODE_COMPLETE
					10630.	-119.6	15:06:04.170	10562	342		26630.	Uplink	15:06:14.761	DCCH	UPLINK_DIRECT_TRANSFER
					10631.		15:06:04.170	10562	342	-17.4	26631.	Uplink	15:06:14,761	DCCH	SETUP
					10632.	-117,6	15:06:04.590	10562	342		26632.	Downlink	15:06:14.761	DCCH	DOWNLINK_DIRECT_TRANSFER
					10633.		15:06:04.590	10562	342	-15.4	26633.	Downlink	15:06:14.761	DCCH	IDENTITY_REQUEST
					10634,	-121.8	15:06:05.128	10562	88		26634.	Uplink	15:06:14.761	DCCH	UPLINK_DIRECT_TRANSFER
					10635.	e annes	15:06:05.128	10562	88	-21,9	26635.	Uplink	15:06:14.761	DCCH	IDENTITY_RESPONSE
					10636.	-119,6	15:06:05.677	10562	342		26636.	Downlink	15:06:14.761	DCCH	DOWNLINK_DIRECT_TRANSFER
					10637,		15:06:05.677	10562	342	-21,4	26637.	Downlink	15:06:14.761	DCCH	CALL_PROCEEDING
					10638.	-120.9	15:06:06.287	10562	342		26638.	Uplink	15:06:15.100	DCCH	MEASUREMENT_REPORT
					10639.		15:06:06.287	10562	342	-21	26639.	Uplink	15:06:15.100	DCCH	MEASUREMENT_REPORT
					10640.	-119.5	15:06:06.918	10562	88		26640.	Uplink	15:06:15.761	DCCH	MEASUREMENT_REPORT
					10641.		15:06:06.918	10562	88	-19.6	26641.	Uplink	15:06:17.462	DCCH	MEASUREMENT_REPORT
					10642.	-114.5	15:06:07,344	10562	88		26642,	Uplink	15:06:18.461	DCCH	MEASUREMENT_REPORT
					10643.		15:06:07.344	10562	88	-14.1	26643.	Uplink	15:06:19.902	DCCH	MEASUREMENT_REPORT
					10644.	-112.1	15:06:07.904	10562	88		26644.	Downlink	15:06:19.902	DCCH	ACTIVE_SET_UPDATE
					10645.		15:06:07.904	10562	88	-12.2	26645.	Uplink	15:06:20.231	DCCH	ACTIVE_SET_UPDATE_COMPLETE
					10646.	-115,4	15:06:08.463	10562	88		26646.	Uplink	15:06:20.231	DCCH	MEASUREMENT_REPORT
					10647.		15:06:08.463	10562	88	-15.6	26647.	Downlink	15:06:20.232	DCCH	MEASUREMENT_CONTROL
					10648.	-113.7	15:06:08.972	10562	88		26648.	Downlink	15:06:20.316	DCCH	RADIO_BEARER_SETUP
					10649.		15:06:08.972	10562	88	-19.3	26649.	Uplink	15:06:20.724	DCCH	RADIO_BEARER_SETUP_COMPLETE
					10650,	-107	15:06:13.572	10588	72		26650.	Downlink	15:06:20.977	DCCH	RADIO_BEARER_RECONFIGURATION
					10651.		15:06:13.572	10588	72	-16.5	26651.	Downlink	15:06:20.977	DCCH	DOWNLINK_DIRECT_TRANSFER
					10652.	-111.2	15:06:14.232	10588	72		26652.	Downlink	15:06:20.977	DCCH	PROGRESS
					10653.		15:06:14:232	10588	72	-19.1	26653.	Uplink	15:06:20.978	DCCH	RADIO_BEARER_RECONFIGURATION_COMPLETE
					10654.	-113.7	15:06:14.762	10588	72		26654.	Downlink	15:06:21.319	DCCH	PHYSICAL_CHANNEL_RECONFIGURATION
					10655.		15:06:14.762	10588	72	-19.9	26655.	Uplink	15:06:21.511	DCCH	PHYSICAL_CHANNEL_RECONFIGURATION_COMPLETE
					10656.	-113.3	15:06:15.101	10588	72		26656.	Downlink	15:06:22.494	DCCH	MEASUREMENT_CONTROL
					10657.		15:06:15.101	10588	72	-19.1	26657.	Downlink	15:06:23.632	DCCH	SECURITY_MODE_COMMAND
					10658.	-111.9	15:06:15.765	10588	72	103000	26658.	Uplink	15:06:23.632	DCCH	SECURITY MODE COMPLETE

- This call failure event occurred on short call at 15:06:31:122 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 72 and RF condition RSCP -111.2 dBm and Ec/No -19.1 dB are very poor.
- As per the analysis call failed happened due to poor coverage of the network.

1. 2.

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

	Time	System	Serving band	Cal		1. best active RSCP	Time	Ch	SC	1. best active Ec/N0			Transf. dir.	Time	Subchannel	Message name
1,	15:06:31.122	UMTS FDD	2100	Not	10907.		15:08:15.783	10588	88	-19.4	Π	27261.	Downlink	15:08:06.613	DCCH	DOWNLINK_DIRECT_TRANSFER
Ζ,	15:08:23:452	UMTS FDD	2100	Nor	10908,	-117.1	15:08:16.114	10588	72			27262,	Downlink,	15:08:06.613	DCCH	CALL_PROCEEDING
					10909.		15:08:16.114	10588	72	-14.8		27263.	Uplink	15:08:06.613	DCCH	MEASUREMENT_REPORT
					10910.	-120.9	15:08:16.866	10588	72			27264.	Downlink	15:08:06.613	DCCH	ACTIVE_SET_UPDATE
					10911.		15:08:16.866	10588	72	-17,2		27265.	Uplink	15:08:06.613	DCCH	ACTIVE_SET_UPDATE_COMPLETE
					10912.	-120.2	15:08:17.366	10588	72			27266.	Uplink	15:08:06.982	DCCH	MEASUREMENT_REPORT
					10913.		15:08:17.366	10588	72	-17,4		27267.	Downlink	15:06:06.982	DCCH	MEASUREMENT_CONTROL
					10914.	-124.3	15:08:17.845	10588	72			27268.	Uplink	15:08:08.036	DCCH	MEASUREMENT_REPORT
					10915.		15:08:17.845	10588	72	-21.4		27269.	Uplink	15:08:09.031	DCCH	MEASUREMENT_REPORT
					10916.	-117	15:08:18.425	10588	72			27270.	Uplink	15:08:09.031	DCCH	MEASUREMENT_REPORT
					10917.		15:08:18.425	10588	72	-14.1		27271.	Uplink	15:08:10.626	DCCH	MEASUREMENT_REPORT
					10918.	-124.3	15:08:18.928	10588	72			27272.	Uplink	15:08:12.005	DCCH	MEASUREMENT_REPORT
					10919.		15:08:18.928	10588	72	-21.5		27273.	Downlink	15:08:12.565	DCCH	RADIO_BEARER_SETUP
					10920.	-123.5	15:08:19.230	10588	88			27274.	Uplink	15:08:12.974	DCCH	RADIO_BEARER_SETUP_COMPLETE
					10921.		15:08:19.230	10588	88	-19.7		27275.	Downlink	15:08:12.974	DCCH	RADIO_BEARER_RECONFIGURATION
					10922.	-122.5	15:08:20.026	10588	72			27276.	Downlink	15:08:12.975	DCCH	DOWNLINK_DIRECT_TRANSFER
					10923.	and the state of the	15:08:20.026			-19.6		27277.	Downlink	15:08:12.975	DCCH	PROGRESS
					10924.	-118.4	15:08:20.426					27278.	Uplink	15:08:12.975	DCCH	RADIO_BEARER_RECONFIGURATION_COMPLETE
					10925.		15:08:20.426	10588	72	-16.2		27279.	Downlink	15:08:13.542	DCCH	PHYSICAL_CHANNEL_RECONFIGURATION
					10926.	-124.6	15:08:21.035	10588	88			27280.	Uplink	15:08:13.543	DCCH	PHYSICAL_CHANNEL_RECONFIGURATION_COMPLETE
					10927.	0.0.0	15:08:21.035			-22.4		27281.		15:08:14.554		MEASUREMENT_CONTROL
					10928.	-118.2	15:08:21.526		10000			27282.	All and a second second second	15:08:15.557		SECURITY_MODE_COMMAND
					10929.		15:08:21.526	10588	72	-16.1	-	27283.	Uplink	15:08:15.557	DCCH	SECURITY MODE_COMPLETE
					10930.	-116.4	15:08:22.034	10588	72			27284.	Downlink	15:08:16.027	DCCH	RADIO_BEARER_SETUP
					10931.		15:08:22.034			-15.4		27285.	and the second se	15:08:16.383	100000000000000000000000000000000000000	RADIO_BEARER_SETUP_COMPLETE
					International Society of Statistics	-111.5	15:08:22.597					27286,	and the second second	15:08:18.928		MEASUREMENT_REPORT
					10933.	ANO CONTRACTOR OF A	15:08:22.597	10588	72	-11.6		27287.	Downlink	15:08:20.425	DCCH	DOWNLINK_DIRECT_TRANSFER
					10934.	-115.2	15:08:23.069					27288.	The State of the S	15:08:20.425		PROGRESS
					10935.		15:08:23.069	10588	41	-14.3		212010104/04/01	Uplink	15:08:20.665		MEASUREMENT_REPORT
					10936.	-116.5	15:08:23.614	10588	72			- Includes and the second second	Uplink	15:08:21.033		MEASUREMENT_REPORT
					10937.		15:08:23.614			-14.4		27291.	and the second se	15:08:21.165		ACTIVE_SET_UPDATE
					10938.	-118.2	15:08:24.227					27292.	100 /0 /0 /0 /0 /0	15:08:21.324		ACTIVE_SET_UPDATE_COMPLETE
					10939.		15:08:24.227			-17.2		strend previously		15:08:21.526		PHYSICAL CHANNEL RECONFIGURATION
					10940.	-112.4	15:08:24.614					##10000000000	Uplink	15:08:21.526		PHYSICAL CHANNEL RECONFIGURATION COMPLETE
					10941.		15:08:24.614			-12.4		27295.		15:08:21.973		MEASUREMENT_CONTROL
					10942.	-118.6	15:08:25.103	(hora) ( (a) a ( a)				-		15:08:22.033		MEASUREMENT_CONTROL

- This call failure event occurred on short call at 15:08:23:069 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 41 and RF condition RSCP -115.2 dBm and Ec/No -14.3 dB are very poor.
- As per the analysis call failed happened due to poor coverage of the network.

## Phase-2 Call Attempt Failure Analysis 2 From MS7 CWS MO

Time System Serving band		Time	RxLev sub	ARFCN	BSIC	LAC	RAC	RX 🔺		System	Transf. dir.	Time	Subchannel	Message name
1. 14:50:10.363 G5M 900 Call wa	28.	14:49:48.251	and the second sec					1	11740,	GSM	Uplink	14:49:51.546	a to all the all produces of the state of the	MEASUREMENT_REPORT
	29.	14:49:48.366	-93	1	19	1	0	1	11741.	GSM	Downlink	14:49:51.661	and the second sec	MEASUREMENT_INFORMATION
	30.	14:49:48.722						5	11742.	GSM	Downlink	14:49:51.984	DCCH	CIPHERING_MODE_COMMAND
	31.	14:49:48.958	-96	1	19	1	0		11743.	GSM	Uplink	14:49:51.989	DCCH	CIPHERING_MODE_COMPLETE
	32.	14:49:49.192						5	11744.	GSM	Uplink	14:49:52.017	SACCH	MEASUREMENT_REPORT
	33.	14:49:49.307	-97	1	19	1	0		11745.	GSM	Downlink	14:49:52.132	SACCH	MEASUREMENT_INFORMATION
	34.	14:49:49.663						б	11746.	GSM	Downlink	14:49:52.455	DCCH	LOCATION_UPDATING_ACCEPT
	35,	14:49:50.134	-92	1	19	1	0		11747.	GSM	Uplink	14:49:52.456	DCCH	TMSI_REALLOCATION_COMPLETE
	36.	14:49:50,134						2	11748.	GSM	Uplink	14:49:52,456	DCCH	CM_SERVICE_REQUEST
	37.	14:49:50.604						7	11749,	GSM	Uplink	14:49:52.487	SACCH	MEASUREMENT_REPORT
	38,	14:49:51.028	-96	1	19	1	0		11750,	GSM	Downlink	14:49:52.603	SACCH	MEASUREMENT_INFORMATION
	39.	14:49:51.075						5	11751.	GSM	Downlink	14:49:52.926	DCCH	CM_SERVICE_ACCEPT
	40,	14:49:51.546	-98	1	19	1	0		11752.	GSM	Uplink	14:49:52.926	DCCH	SETUP
	41.	14:49:51.546						3	11753.	GSM	Uplink	14:49:52.958	SACCH	MEASUREMENT_REPORT
	42.	14:49:52.017						6	11754,	GSM	Uplink	14:49:53.429	SACCH	MEASUREMENT_REPORT
	43,	14:49:52.027	-95	1	19	1	0		11755,	GSM	Downlink	14:49:53.867	DCCH	CALL_PROCEEDING
	44.	14:49:52.487						2	11756.	GSM	Uplink	14:49:53.900	SACCH	MEASUREMENT_REPORT
	45.	14:49:52.603	-96	1	19	1	0		11757.	GSM	Downlink	14:49:54.015	SACCH	SYSTEM_INFORMATION_TYPE_5
	46.	14:49:52.958						6	11758.	GSM	Uplink	14:49:54.371	SACCH	MEASUREMENT_REPORT
	47.	14:49:53.093	-97	1	19	1	0		11759.	GSM	Downlink	14:49:54.486	SACCH	SYSTEM_INFORMATION_TYPE_STER
	48.	14:49:53.429						7	11760.	GSM	Uplink	14:49:54.842	SACCH	MEASUREMENT_REPORT
	49.	14:49:53.632	-98	1	19	1	0	11	11761.	GSM	Downlink	14:49:54.957	SACCH	SYSTEM_INFORMATION_TYPE_6
	50.	14:49:54.103	-98	1	19	1	0		11762.	GSM	Uplink	14:49:55.312	SACCH	MEASUREMENT_REPORT
	51.	14:49:54.371						1	11763.	GSM	Downlink	14:49:55.427	SACCH	MEASUREMENT_INFORMATION
	52.	14:49:54.486	-96	1	19	1	0	64	11764.	GSM	Uplink	14:49:55.783	SACCH	MEASUREMENT_REPORT
	53.	14:49:54.842						6	11765.	GSM	Uplink	14:49:56.254	SACCH	MEASUREMENT_REPORT
	54,	14:49:55.312	-97	1	19	1	0		11766.	GSM	Downlink	14:49:56.369	SACCH	MEASUREMENT_INFORMATION
	55.	14:49:55.312						5	11767.	GSM	Uplink	14:49:56.724	SACCH	MEASUREMENT_REPORT
	56,	14:49:55,783						3	11768,	GSM	Uplink	14:49:57.195	SACCH	MEASUREMENT_REPORT
	57.	14:49:56.221	-97	1	19	1	0		11769.	GSM	Uplink	14:49:57.666	SACCH	MEASUREMENT_REPORT
	58.	14:49:56.254						7	11770.	GSM	Uplink	14:49:58.137	SACCH	MEASUREMENT_REPORT
	59.	14:49:56.692	-97	1	19	1	0		11771.	GSM	Downlink	14:49:58.252	SACCH	SYSTEM_INFORMATION_TYPE_STER
	60.	14:49:56.724						4	11772.	GSM	Uplink	14:49:58.608	SACCH	MEASUREMENT_REPORT
	61.	14:49:57.195						7	11773.	GSM	Downlink	14:49:58.723	SACCH	SYSTEM_INFORMATION_TYPE_6
	62.	14:49:57.310	-98	1	19	1	0		11774.	GSM	Uplink	14:49:59.078	SACCH	MEASUREMENT_REPORT
	63.	14:49:57.666				-		7	11775.	GSM	Uplink	14:49:59.549	SACCH	MEASUREMENT_REPORT

- This call failure event occurred on short call at 14:45:10:363 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 1. RF Conditions found during session also seemed OK.(Rx Lev : -98, Rx Qual= 7)
- As per the Analysis the call setup failure event occurred due to poor quality in the network.

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

	Time	System Serv	ving band Call type		1. best active RSCP	Time	Ch S	1. best active Ec/NO	<b>•</b>	1	Event ID	System	Transf. dir.	Time	Subchannel	Message name	
1.	14:11:56.078	UMTS FDD 2100	0 Voice call	2000.		14:11:48.067	10588 28	8 -5.8	- 3	999.	L3SM	UMTS FDD	Uplink	14:11:48.720	DCCH	CONNECT_ACKNOWLEDGE	Analysis:
2.	16:18:52.316	UMTS FDD 2100	0 Voice call	2001.	-96.6	14:11:48.721	10588 28	8	1	1000.	RRCSM	UMTS FDD	Downlink	14:11:48.811	DCCH	MEASUREMENT_CONTROL	-
				2002.		14:11:48.721	10588 28	8 -10.1	1	1001.	RRCSM	UMTS FDD	Uplink	14:11:48.912	DCCH	MEASUREMENT_REPORT	This call drop event occurred on long call
				2003.	-96.7	14:11:49.208	10588 28	8		1002.	RRCSM	UMTS FDD	Downlink	14:11:48.931	DCCH	SECURITY_MODE_COMMAND	at 14:11:56:078 time when UE was
				2004.		14:11:49.208	10588 28	8 -10.3		1003.	RRCSM	UMTS FDD	Uplink	14:11:48.932	DCCH	SECURITY_MODE_COMPLETE	latched with 3G network.
				2005.	-87.7	14:11:49.718	10588 28	8		1004,	RRCSM	UMTS FDD	Uplink	14:11:49.109	DCCH	MEASUREMENT_REPORT	
				2006.		14:11:49.718	10588 28	8 -5.5		1005.	RRCSM	UMTS FDD	Downlink	14:11:49.278	DCCH	DOWNLINK_DIRECT_TRANSFER	After getting Alerting message at
				2007.	-92.1	14:11:50.142	10588 28	8		1006.	L3SM	UMTS FDD	Downlink	14:11:49.278	DCCH	ROUTING_AREA_UPDATE_ACCEPT	14:11:48:311 time than Call drop
				2008.		14:11:50.142	10588 28	8 -7.3		1007.	RRCSM	UMTS FDD	Uplink	14:11:49.281	DCCH	UPLINK_DIRECT_TRANSFER	happened.
				2009,	-89.6	14:11:50.481	10588 28	8		1008.	L3SM	UMTS FDD	Uplink	14:11:49.281	DCCH	ROUTING_AREA_UPDATE_COMPLETE	
				2010.	a contra de la contra	14:11:50.481	10588 28	8 -7.4		1009.	RRCSM	UMTS FDD	Downlink	14:11:49.558	DCCH	DOWNLINK_DIRECT_TRANSFER	• During the failure, UE was latched with
				2011.	-87.5	14:11:51.035	10588 28	8		1010.	L3SM	UMTS FDD	Downlink	14:11:49.558	DCCH	GMM_INFO	PSC 74.5 and RF condition RSCP -288 dBm
				2012.		14:11:51.035	10588 28	8 -5.9		1011.	RRCSM	UMTS FDD	Downlink	14:11:49.718	DCCH	SIGNALLING_CONNECTION_RELEASE	
				2013.	-90.2	14:11:51.719	10588 28	8		1012.	RRCSM	UMTS FDD	Uplink	14:11:53.247	DCCH	MEASUREMENT_REPORT	good but Ec/No -3.1 dB are very good.
				2014,		14:11:51.719	10588 28	8 -5		1013.	RRCSM	UMTS FDD	Downlink	14:11:53.518	DCCH	ACTIVE_SET_UPDATE	
				2015.	-87.5	14:11:52.034	10588 28	8		1014.	RRCSM	UMTS FDD	Uplink	14:11:53.540	DCCH	ACTIVE_SET_UPDATE_COMPLETE	Need to check MT.
				2016.		14:11:52.034	10588 28	8 -3.6		1015.	RRCSM	UMTS FDD	Downlink	14:11:53.959	DCCH	MEASUREMENT_CONTROL	
				2017.	-95.5	14:11:52.720	10588 28	8		1016.	RRCSM	UMTS FDD	Uplink	14:11:54.610	DCCH	MEASUREMENT_REPORT	
				2018.	2000	14:11:52.720	10588 28	8 -9.8		1017.	RRCSM	UMTS FDD	Downlink	14:11:54.837	DCCH	ACTIVE_SET_UPDATE	
				2019.	-87.4	14:11:53.039	10588 28	8		1018.	RRCSM	UMTS FDD	Uplink	14:11:54.869	DCCH	ACTIVE_SET_UPDATE_COMPLETE	
				2020.		14:11:53.039	10588 28	8 -12.1	3	1019.	RRCSM	UMTS FDD	Downlink	14:11:55.117	DCCH	MEASUREMENT_CONTROL	
				2021.	-95.7	14:11:53.719	10588 28	8		1020.	RRCSM	UMTS FDD	Downlink	14:11:56.077	DCCH	DOWNLINK_DIRECT_TRANSFER	
				2022.		14:11:53.719	10588 28	8 -8.6		1021.	L3SM	UMITS FDD	Downlink	14:11:56.077	DCCH	DISCONNECT	
				2023.	-81	14:11:54.039	10588 28	8		1022,	RRCSM	UMTS FDD	Uplink	14:11:56.078	DCCH	UPLINK_DIRECT_TRANSFER	
				2024,		14:11:54.039	10588 28	8 -2.9		1023,	L3SM	UMTS FDD	Uplink	14:11:56.078	DCCH	RELEASE	
				2025.	-74.6	14:11:54.901	10588 28	8		1024.	RRCSM	UMTS FDD	Downlink	14:11:56.317	DCCH	DOWNLINK_DIRECT_TRANSFER	
				2026.		14:11:54.901	10588 28	8-3		1025.	L3SM	UMTS FDD	Downlink	14:11:56.317	DCCH	RELEASE_COMPLETE	
				2027.	-79.4	14:11:55.209	10588 28	8		1026,	RRCSM	UMTS FDD	Downlink	14:11:56,477	DCCH	RRC_CONNECTION_RELEASE	
				2028.	and a construction	14:11:55.209	10588 28	8 -4.3		1027.	RRCSM	UMTS FDD	Uplink	14:11:56.478	DCCH	RRC_CONNECTION_RELEASE_COMPLET	
				- Consideration and a second	-74.5	14:11:55.786	THE PARTY AND A DRIVEN AND A			1028.	RRCSM	UMTS FDD	Downlink	14:11:56,517	DCCH	RRC_CONNECTION_RELEASE	
				2030.		14:11:55.786	10588 28	8 -3.1		1029.	RRCSM	UMTS FDD	Uplink	14:11:56.518	DCCH	RRC_CONNECTION_RELEASE_COMPLET	
				distant in particular internation	-73,8	14:11:56.340	10588 28	8		1030.	RRCSM	UMTS FDD	Downlink	14:11:56.557	DCCH	RRC_CONNECTION_RELEASE	
				2032.		14:11:56.340	10588 28	8 -2.7		1031.	RRCSM	UMTS FDD	Downlink	14:11:56.709	BCCH_BCH	SYSTEM_INFORMATION_BCH	
				2033.	-71	14:11:56.723				1032.	RRCSM	UMTS FDD	Downlink	14:11:56.709	BCCH	MASTER_INFORMATION_BLOCK	
				2034.		14:11:56.723		Contraction of the second seco		1033,	CONTRACTOR AND				An One Control of the second	MASTER_INFORMATION_BLOCK	
				2035.	-68.2	14:11:57.320				1034.	the second se					SCHEDULING_BLOCK_1	
				2036.		14:11:57.320	10588 28	8 -2.6		1035,	RRCSM	UMTS FDD	Downlink	14:11:56,709	BCCH BCH	SYSTEM_INFORMATION_BLOCK_TYPE_1	

## Phase-2 Call Drop Analysis 1 From MS10 Airtel MT

	1. best active RSCP	Time	Ch	SC	1. best active Ec/NO			Event ID	System	Transf. dir.	Time	Subchannel	Message name
1942.		14:11:48.053	10562	40	-14.3	T ê	100	0. RRCSM	UMTS FDD	Downlink	14:11:49.781	DCCH	DOWNLINK_DIRECT_TRANSFER
1943.	-103.6	14:11:48.533	10562	40			100	1. L3SM	UMTS FDD	Downlink	14:11:49.781	DCCH	ROUTING_AREA_UPDATE_ACCEPT
1944.		14:11:48.533	10562	40	-14.9		100	2. RRCSM	UMTS FDD	Uplink	14:11:49.784	DCCH	UPLINK_DIRECT_TRANSFER
1945.	-94.7	14:11:49.026	10562	40	10000		100	3. L3SM	UMTS FDD	Uplink	14:11:49.784	DCCH	ROUTING_AREA_UPDATE_COMPLETE
1946.		14:11:49.026	10562	40	-10.5		100	4. RRCSM	UMTS FDD	Downlink	14:11:50.181	DCCH	DOWNLINK_DIRECT_TRANSFER
1947.	-100.9	14:11:49.545	10562	40			100	5. 13SM	UMTS FDD	Downlink	14:11:50.181	DCCH	GMM_INFO
1948.		14:11:49.545	10562	40	-15.8		100	6. RRCSM	UMTS FDD	Downlink	14:11:50.382	DCCH	SIGNALLING_CONNECTION_RELEASE
1949.	-103.5	14:11:50.045	10562	40			100	7. RRCSM	UMTS FDD	Uplink	14:11:50.657	DCCH	MEASUREMENT_REPORT
1950.	0.000400	14:11:50.045	10562	40	-13		100	8. RRCSM	UMTS FDD	Uplink	14:11:51.497	DCCH	MEASUREMENT_REPORT •
1951.	-97	14:11:50.511	10562	40			100	9. RRCSM	UMTS FDD	Uplink	14:11:51.649	DCCH	MEASUREMENT_REPORT
1952.		14:11:50.511	10562	40	-11.9		101	0. RRCSM	UMTS FDD	Uplink	14:11:52.657	DCCH	MEASUREMENT_REPORT
1953.	-94.8	14:11:51.071	10562	40			101	1. RRCSM	UMTS FDD	Uplink	14:11:53.656	DCCH	MEASUREMENT_REPORT
1954.		14:11:51.071	10562	40	-10.5		101	2. RRCSM	UMTS FDD	Uplink	14:11:53.796	DCCH	MEASUREMENT_REPORT
1955.	-103.7	14:11:51.591	10562	40	AD SHOL		101	3. RRCSM	UMTS FDD	Uplink	14:11:54.656	DCCH	MEASUREMENT_REPORT
1956.		14:11:51.591	10562	40	-24.5		101	4. RRCSM	UMTS FDD	Uplink	14:11:55.626	DCCH	MEASUREMENT_REPORT
1957.	-95.4	14:11:52.111	10562	40			101	5. RRCSM	UMTS FDD	Uplink	14:11:55.647	DCCH	MEASUREMENT_REPORT
1958.		14:11:52.111	10562	40	-12.9		101	6. RRCSM	UMTS FDD	Uplink	14:11:55.796	DCCH	MEASUREMENT_REPORT
1959.	-96.6	14:11:52.611	10562	40			101	7. RRCSM	UMTS FDD	Uplink	14:11:55.857	DCCH	MEASUREMENT_REPORT
1960.		14:11:52.611	10562	40	-14.4		101	8. RRCSM	UMTS FDD	Downlink	14:11:56.021	DCCH	RRC_CONNECTION_RELEASE
1961.	-93.4	14:11:53.271	10562	40		-	101	9. RRCSM	UMTS FDD	Uplink	14:11:56.022	DCCH	RRC_CONNECTION_RELEASE_COMPLETI
1962.		14:11:53.271	10562	40	-15.2		102	0. RRCSM	UMTS FDD	Downlink	14:11:56.061	DCCH	RRC_CONNECTION_RELEASE
1963,	-98.1	14:11:53.796	10562	40	C. C. C.		102	1. RRCSM	UMTS FDD	Uplink	14:11:56.062	DCCH	RRC_CONNECTION_RELEASE_COMPLET
1964.		14:11:53.796	10562	40	-17.1		102	2. RRCSM	UMTS FDD	Downlink	14:11:56.101	DCCH	RRC_CONNECTION_RELEASE
1965.	-90	14:11:54.071	10562	40			102	3. RRCSM	UMTS FDD	Downlink	14:11:56.571	BCCH_BCH	SYSTEM_INFORMATION_BCH
1966.		14:11:54.071	10562	40	-13.1		102	4. RRCSM	UMTS FDD	Downlink	14:11:56.571	BCCH	MASTER_INFORMATION_BLOCK
1967.	-85.6	14:11:54.851	10562	40			102	5. RRCSM	UMTS FDD	Downlink	14:11:56.571	BCCH_BCH	MASTER_INFORMATION_BLOCK
1968.	1.000	14:11:54.851	10562	40	-7.4		102	6. RRCSM	UMTS FDD	Downlink	14:11:56.571	BCCH_BCH	SCHEDULING_BLOCK_1
1969.	-92.7	14:11:55.211	10562	40			102	7. RRCSM	UMTS FDD	Downlink	14:11:56.571	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_1
1970.		14:11:55.211	10562	40	-14		102	8. RRCSM	UMTS FDD	Downlink	14:11:56.571	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_3
1971.	-95.5	14:11:55.851	10562	40			102	9. RRCSM	UMTS FDD	Downlink	14:11:56.571	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_5
1972.		14:11:55.851	10562	40	-24		103	0. RRCSM	UMTS FDD	Downlink	14:11:56.571	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_11
1973.	-103.2	14:11:56.321	10562	40	1000		103	1. RRCSM	UMTS FDD	Downlink	14:11:56.571	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_12
1974.		14:11:56.321	10562	40	-25.6		103	2. RRCSM	UMTS FDD	Downlink	14:11:56.571	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_18
1975.	-76.5	14:11:56.969	10562	288			103	3, RRCSM	UMTS FDD	Downlink	14:11:56,573	BCCH_BCH	SYSTEM_INFORMATION_BCH
1976.	A LOID	14:11:56.969	10562	288	-3.3		103	4. RRCSM	UMTS FDD	Downlink	14:11:56.573	BCCH	MASTER_INFORMATION_BLOCK
1977.	-75.4	14:11:57.320	10562	288			103	5. RRCSM	UMTS FDD	Downlink	14:11:56.573	BCCH_BCH	SYSTEM_INFORMATION_BCH
1978.	1. 19 ( 19 ( 19 ( 19 ( 19 ( 19 ( 19 ( 19	14:11:57.320	10562	288	-2.7		103	6. RRCSM	UMTS FDD	Downlink	14:11:56.573	BCCH	SYSTEM INFORMATION BLOCK TYPE 3

- On the MT end, during the call drop, the UE was latched to PSC 40 with an RF condition of RSCP at -95.5 dBm and EC/NO at -24, both of which indicate poor signal quality.
- Call drop occurred on the MT end due to poor network coverage. The terminating device experienced low signal strength, leading to the call drop.

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

-	Time	System	Serving band	Call type		1. best active RSCP	Time	Ch SC	1, best active Ec/N0			Event ID	System	Transf. dir.	Time	Subchannel	Message name		
1.	14:11:56.078	UMTS FDD	2100	Voice call	16254.	-92.5	16:18:46.956	contract to be a series of the barry of the	and an operation of the second se		23085.	RRCSM	UMTS FDD	Uplink	16:18:43.956	DCCH	SECURITY_MODE_COMPLETE	Analysis:	
2.	16:18:52.316	UMTS FDD	2100	Voice call	16255.		16:18:46.956	10588 80	-7.4		23086,	RRCSM	UMTS FDD	Uplink	16:18:44.281	DCCH	MEASUREMENT_REPORT	This call drop event occurred on long call	
			_		16256.	-93.4	16:18:47.486	10588 80			23087,	RRCSM	UMTS FDD	Downlink	16:18:44.476	DCCH	RADIO_BEARER_SETUP	at 16:18:52:316 time when UE was	
					16257.	5.87R(R)	16:18:47.486	10588 80	-6.8		23088.	RRCSM	UMTS FDD	Uplink	16:18:44.879	DCCH	RADIO_BEARER_SETUP_COMPLETE		
					16258.	-95.4	16:18:48.030	10588 80			23089.	RRCSM	UMTS FDD	Downlink	16:18:45.116	DCCH	DOWNLINK_DIRECT_TRANSFER	latched with 3G network.	
					16259.		16:18:48.030	10588 80	-11.1		23090.	L3SM	UMTS FDD	Downlink	16:18:45.116	DCCH	MODIFY_PDP_CONTEXT_REQUEST		
					16260.	-94.3	16:18:48.386	10588 80	INVASED.		23091.	RRCSM	UMTS FDD	Uplink	16:18:45.118	DCCH	UPUNK_DIRECT_TRANSFER	<ul> <li>After getting Alerting message at</li> </ul>	
					16261.		16:18:48.386	10588 80	-10.6		23092	L3SM	UMTS FDD	Uplink	16:18:45.118	DCCH	MODIFY_PDP_CONTEXT_ACCEPT	16:18:26:316 time than Call drop	
					16262.	-102.2	16:18:49.110	10588 80			23093,	RRCSM	UMTS FDD	Uplink	16:18:45,280	DCCH	MEASUREMENT_REPORT	happened.	
					16263.	or color of	16:18:49.110	10588 80	-15.7		23094,	RRCSM	UMTS FDD	Uplink	16:18:46.279	DCCH	MEASUREMENT_REPORT		
					16264.	-91.5	16:18:49.486	10588 80			23095,	RRCSM	UMTS FDD	Downlink	16:18:46.476	DCCH	RADIO_BEARER_RECONFIGURATION	• During the failure, UE was latched with	
					16265.		16:18:49.486	10588 80	-24.5		23096.	RRCSM	UMTS FDD	Uplink	16:18:46.869	DCCH	RADIO_BEARER_RECONFIGURATION_C	PSC 80 and RF condition RSCP -104.4 dBm	
					16266.	-96.7	16:18:50.031	10588 80			23097,	RRCSM	UMTS FDD	Uplink	16:18:47.449	DCCH	MEASUREMENT_REPORT	good but Ec/No -23.3 dB are very poor.	
					16267.		16:18:50.031	10588 80	-17.5		23098,	RRCSM	UMTS FDD	Uplink	16:18:48.450	DCCH	MEASUREMENT_REPORT		
					16268.	-94.4	16:18:50.686	10588 80			23099.	RRCSM	UMTS FDD	Uplink	16:18:49.453	DCCH	MEASUREMENT_REPORT	<ul> <li>According to the analysis, the call drop</li> </ul>	
					16269.		16:18:50.686	10588 80	-16.5		23100,	RRCSM	UMTS FDD	Uplink	16:18:49.970	DCCH	MEASUREMENT_REPORT	event occurred due to poor network	
					16270.	-95.6	16:18:51.126	10588 80			23101.	- months and a state of the	RRCSM	UMTS FDD	Downlink	16:18:50.356	DCCH	PHYSICAL_CHANNEL_RECONFIGURATIO	· · · · · · · · · · · · · · · · · · ·
					16271.		16:18:51.126	10588 80	-21.5		23102.	RRCSM	UMTS FDD	Uplink	16:18:50.398	DCCH	PHYSICAL_CHANNEL_RECONFIGURATIC	quality.	
					16272.	-98.9	16:18:51.526	10588 80			23103.	RRCSM	UMTS FDD	Uplink	16:18:50.470	DCCH	MEASUREMENT_REPORT		
					16273.		16:18:51.526	10588 80	-15.2	-	23104,	RRCSM	UMTS FDD	Downlink	16:18:51.036	DCCH	MEASUREMENT_CONTROL		
					16274.	-104.4	16:18:52.186	10588 80		13	23105.	RRCSM	UMTS FDD	Uplink	16:18:51.161	DCCH	MEASUREMENT_REPORT		
					16275.		16:18:52.186	10588 80	-23,3		23106.	RRCSM	UMTS FDD	Uplink	16:18:51.217	DCCH	MEASUREMENT_REPORT		
					16276.	-104.5	16:18:52.570	10588 80			23107,	RRCSM	UMTS FDD	Uplink	16:18:51.451	DCCH	MEASUREMENT_REPORT		
					16277.		16:18:52.570	10588 80	-14.3						16:18:52.316	DCCH	RRC_CONNECTION_RELEASE		
					16278.	-103.7	16:18:52.984	10588 80			23109.	RRCSM	UMITS FDD	Uplink	16:18:52.316	DCCH	RRC_CONNECTION_RELEASE_COMPLET		
					16279,		16:18:52.984	10588 80	-12.7		23110.	RRCSM	UMTS FDD	Downlink	16:18:52.356	DCCH	RRC_CONNECTION_RELEASE		
					16280.	-103	16:18:53.794	10588 80			23111.	RRCSM	UMTS FDD	Uplink	16:18:52.356	DCCH	RRC_CONNECTION_RELEASE_COMPLET		
					16281.		16:18:53.794	10588 80	-18,7		23112.	RRCSM	UMTS FDD	Downlink	16:18:52.396	DCCH	RRC_CONNECTION_RELEASE		
					16282.	-98.2	16:18:54,031	10588 80			23113.	RRCSM	UMTS FDD	Downlink	16:18:52.549	BCCH_BCH	SYSTEM_INFORMATION_BCH		
					16283.	1993 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	16:18:54.031	10588 80	-11.4		23114.	RRCSM	UMTS FDD	Downlink	16:18:52.549	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_1		
					16284.	-98.3	16:18:55.031	10588 80			23115.	RRCSM	UMTS FDD	Downlink	16:18:52.569	BCCH_BCH	SYSTEM_INFORMATION_BCH		
					16285,	1.855	16:18:55.031	10588 80	-10,9		23116,	RRCSM	UMTS FDD	Downlink	16:18:52.569	BCCH	MASTER_INFORMATION_BLOCK		
					16286.	-98.3	16:18:55.271	10588 80			23117.	AND INCOME INCOME.				<ul> <li>Independent Contraction</li> </ul>	MASTER_INFORMATION_BLOCK		
					16287.		16:18:55.271	10588 80	-10.9		23118,	RRCSM	UMTS FDD	Downlink	16:18:52.570	BCCH_BCH	SCHEDULING_BLOCK_1		
					16288.	-88.3	16:18:56.227	10588 80			23119.	RRCSM	UMTS FDD	Downlink	16:18:52.570	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_1		
					16289.	C1.53625	16:18:56.227	10588 80	-4.6		23120.	RRCSM	UMTS FDD	Downlink	16:18:52.570	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_3		

## Phase-2 Call Drop Analysis 1 From MS11 CWS MO

	Time	System	Serving ban	nd Call type		Time	RxLev sub	b ARFCN	BSIC	LAC RA	AC RXQ sub 🔺			System	Transf. dir.	. Time	Subchannel	Message name	
1.	14:55:59.653		900	A state while the second state of the	2098.	14:55:03.266		24		1 10	and the second s	a la	8092.	GSM	Downlink	14:55:03.220	SACCH	MEASUREMENT_INFORMATION	Analysis:
2.	14:57:48.102 L	UMTS FDD	2100	Voice call	2099.	14:55:03.266					4	4	8093.	GSM	Uplink	14:55:03.266		MEASUREMENT_REPORT	This call drop event occurred on long call
3.	15:01:11.926 U	UMTS FDD	2100	Voice call	2100,	14:55:04.030	-92	24	13	1 10	1			GSM	- Contract of the second s	and the second se	President a Contraction of the	MEASUREMENT_INFORMATION	at 14:55:59:653 time when UE was
1.8.16A				04503 0783	2101.	14:55:04.226					6		- and experimental control	GSM	Uplink	14:55:03.746		MEASUREMENT_REPORT	
					2102.	14:55:04,227	-94	24	13	1 10			100000000000000000000000000000000000000	GSM	Downlink	14:55:04.180	SACCH	MEASUREMENT_INFORMATION	latched with 2G network.
1					2103.	14:55:04.706					5		- market better	GSM	Uplink	14:55:04.226		MEASUREMENT_REPORT	
					2104,	14:55:04.707	-95	24	13	1 10			C and carbon and a second	GSM		and the second second second processing		MEASUREMENT_INFORMATION	After getting Alerting message at
					2105,	14:55:05.186					6			GSM	Uplink	14:55:04.706		MEASUREMENT_REPORT	14:54:02:455 time than Call drop
					2106.	14:55:05.394	-95	24	13	1 10			Contract and a result	GSM				MEASUREMENT_INFORMATION	happened.
					2107.	14:55:05.666					6		100000000000000000000000000000000000000	GSM	Uplink	14:55:05.186	Contraction of the second second	MEASUREMENT_REPORT	
					2108.	14:55:06.028	-96	24	13	1 10	1		C	GSM	manufactory and the second second second	سابحر بارتبع كالخصر الاستراد		SYSTEM_INFORMATION_TYPE_5	During the call failure UE, was latched with
				18	2109.	14:55:06.147					4		(	GSM	Uplink	14:55:05.666	100000000000000000000000000000000000000	MEASUREMENT_REPORT	ARFCN 24 and RF condition Rxlev -96 dBm
				10	2110.	14:55:06.626	11.0	1			0		Contractive and a particular	GSM				SYSTEM_INFORMATION_TYPE_STER	is good and Rxqual 7 which is good.
				118	2111.	14:55:06.654	-89	24	13	1 10			The second se	GSM	Uplink	14:55:06.147		MEASUREMENT_REPORT	
					2112.	14:55:07.586					3		- minimper phases	GSM				SYSTEM_INFORMATION_TYPE_6	According to the analysis, the call drop
				1.18	2113.	14:55:07.587		24	-	1 10			Contraction of the local distance	GSM	Uplink	14:55:06.626	N - 505 (51)	MEASUREMENT_REPORT	event occurred due to poor network
					2114,			24	13	1 10			· · · · · · · · · · · · · · · · · · ·	GSM	and the second se	And a second	Sector Country Country	MEASUREMENT_INFORMATION	quality.
				10	2115.	14:55:08.066					4	1	Contractor (contractor)	the state from the solution	Uplink	14:55:07.106		MEASUREMENT_REPORT	quality.
				18	2116.	14:55:08.546					1		U.S. A.	GSM				MEASUREMENT_INFORMATION	
				118	2117.	14:55:08.547		24	1.5	1 10		1	C	GSM	Uplink	14:55:07.586		MEASUREMENT_REPORT	
					2118.	14:55:09.031		24		1 10		17	() (spinster and see all see a					MEASUREMENT_INFORMATION	
				12	2119,	14:55:09.507		24	10.00	1 10			8113.	GSM		14:55:08.066		MEASUREMENT_REPORT	
					2120,	14:55:10.189		24	1.	1 10			Contractive Contractive (1.4)	GSM	Uplink	14:55:08.546		MEASUREMENT_REPORT	
				18	2121.	14:55:10.471		24	-	1 10				GSM				MEASUREMENT_INFORMATION	
				118	2122.	14:55:11.191		24		1 10			C Included and the second	GSM	Uplink	14:55:09.027	a second a being second as	MEASUREMENT_REPORT	
				18	2123,	14:55:11.906		24	13					GSM	and the second se	other particular and and in the particular	1 20270 02	SYSTEM_INFORMATION_TYPE_5	
					2124.	14:55:12.866		24		1 10			deal April and the print of	GSM	Uplink	14:55:09.506		MEASUREMENT_REPORT	
					2125.	14:55:13.346		24		1 10			0.0000000000000000000000000000000000000	GSM				SYSTEM_INFORMATION_TYPE_STER	
				19	2126.	14:55:13.965		24	100	1 10				GSM	Uplink	14:55:09.986		MEASUREMENT_REPORT	
				1.00	2127.	14:55:14.306		24	13					GSM	and the second se		01000000	SYSTEM_INFORMATION_TYPE_6	
					2128,	14:55:15.012		24	13				<ul> <li>Interference and a second secon</li></ul>	GSM	Uplink	14:55:10.466	1.	MEASUREMENT_REPORT	
					2129.	14:55:15.271		24	13				Contracting and the second	GSM	Uplink	14:55:10.946		MEASUREMENT_REPORT	
					2130,	14:55:16.027		24	13				Contraction Manual	GSM	Uplink	14:55:11.426		MEASUREMENT_REPORT	
				118	2131.	14:55:16.494		24		1 10			Contract of the local state of the local	GSM	Uplink	14:55:11.906	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MEASUREMENT_REPORT	
				1.28	2132.	14:55:17.029	(14(9))	24	-	1 10				GSM	Uplink	14:55:12.386		MEASUREMENT_REPORT	
					2133.	14:55:17.532	-97	24	13	1 10			8127.	GSM	Downlink	14:55:12.820	SACCH	MEASUREMENT_INFORMATION	

## Phase-2 Call Drop Analysis 2 From MS11 CWS MO

	Time	System	Serving	band Call type		1. best active RSCP	Time	Ch S	SC 1. best a	active Ec/N 🔺 🔒		Event ID	System	Transf. dir.	Time	Subchannel	Message name	
3.	14:55:59.653	All the second second	900	Voice call	6991.		14:57:46.558	10690 1	45 -4.1		8457.	RRCSM	UMTS FDD	Downlink	14:57:02.296	DCCH	RADIO_BEARER_SETUP	Analysis:
2.	14:57:48.102	UMTS FDD	2100	Voice call	6992,	-95.2	14:57:47.028	10690 1	45		8458,	RRCSM	UMTS FDD	Uplink	14:57:02.559	DCCH	RADIO_BEARER_SETUP_COMPLE	This call drop event occurred on long call
З,	15:01:11.926	UMTS FDD	2100	Voice call	6993.		14:57:47.028	10690 1	45 -8.3		8459.	RRCSM	UMTS FDD	Downlink	14:57:02,806	DCCH	MEASUREMENT_CONTROL	at 14:57:48:102 time when UE was
1 22 -					6994,	-94.6	14:57:47.556	10690 1	45		8460.	RRCSM	UMTS FDD	Downlink	14:57:02.846	DCCH	MEASUREMENT_CONTROL	
					6995,		14:57:47.556	10690 1	45 -7.1		8461.	RRCSM	UMTS FDD	Downlink	14:57:02.886	DCCH	MEASUREMENT_CONTROL	latched with 3G network.
					6996.	-101.9	14:57:48.029				8462.	RRCSM	UMTS FDD	Downlink	14:57:02.926	DCCH	MEASUREMENT_CONTROL	
					6997,		14:57:48.029	10690 1	45 -8.2		8463.	RRCSM	UMTS FDD	Downlink	14:57:02.966	DCCH	DOWNLINK_DIRECT_TRANSFER	<ul> <li>After getting Alerting message at</li> </ul>
					6998.	-95.9	14:57:48.707	10690 1	45		8464.	L3SM	UMTS FDD	Downlink	14:57:02.966	DCCH	ALERTING	14:57:02:966 time than Call drop
					6999.		14:57:48.707	10690 1	45 -5.4		8465.	RRCSM	UMTS FDD	Downlink	14:57:03.086	DCCH	DOWNLINK_DIRECT_TRANSFER	happened.
					7000,	-114.4	15:00:42.548	10690 1	58		8466.	L3SM	UMTS FDD	Downlink	14:57:03.086	DCCH	AUTHENTICATION_AND_CIPHER	
					7001.		15:00:42.548	10690 1	58 -20.3		8467.	RRCSM	UMTS FDD	Uplink	14:57:03.123	DCCH	UPLINK_DIRECT_TRANSFER	• During the failure, UE was latched with
					7002.	-106.8	15:00:42.928	10690 1	58		8468.	L3SM	UMTS FDD	Uplink	14:57:03.123	DCCH	AUTHENTICATION_AND_CIPHER	PSC 145 and RF condition RSCP -101.9
					7003,		15:00:42.928	10690 1	58 -10		8469,	RRCSM	UMTS FDD	Downlink	14:57:03.606	DCCH	SECURITY_MODE_COMMAND	dBm good but Ec/No -8.2 dB are very poor.
					7004,	-108.8	15:00:43.349	10690 1	58		8470.	RRCSM	UMTS FDD	Uplink	14:57:03.606	DCCH	SECURITY_MODE_COMPLETE	
					7005.		15:00:43.349	10690 1	58 -11.9	- H	8471.	RRCSM	UMTS FDD	Uplink	14:57:04.109	DCCH	MEASUREMENT_REPORT	A coording to the evolution the coll dress
					7006,	-108.3	15:00:43.928	10690 1	58	1	8472,	RRCSM	UMTS FDD	Uplink	14:57:04.149	DCCH	MEASUREMENT_REPORT	According to the analysis, the call drop
					7007.		15:00:43.928	10690 1	58 -10.6		8473.	RRCSM	UMTS FDD	Downlink	14:57:04.206	DCCH	DOWNLINK_DIRECT_TRANSFER	event occurred due to poor network
					7008.	-105.3	15:00:44.430	10690 1	58		8474,	L3SM	UMTS FDD	Downlink	14:57:04.206	DCCH	ROUTING_AREA_UPDATE_ACCE	Coverage .
					7009.		15:00:44.430	10690 1	58 -8.4		8475.	RRCSM	UMTS FDD	Uplink	14:57:04.208	DCCH	UPLINK_DIRECT_TRANSFER	
					7010,	-113.9	15:00:44.956	10690 1	58	13	8476.	L3SM	UMTS FDD	Uplink	14:57:04.208	DCCH	ROUTING_AREA_UPDATE_COM	
					7011,		15:00:44.956	10690 1	58 -17.5	-	8477.	RRCSM	UMTS FDD	Downlink	14:57:14.446	DCCH	SIGNALLING_CONNECTION_REL	
					7012.	-107.5	15:00:45,450	10690 1	58		8478.	RRCSM	UMTS FDD	Uplink	14:57:14.727	DCCH	MEASUREMENT_REPORT	
					7013.		15:00:45.450	10690 1	58 -11		8479.	RRCSM	UMTS FDD	Uplink	14:57:26,727	DCCH	MEASUREMENT_REPORT	
					7014,	-105.8	15:00:46.029	10690 1	58		8480.	RRCSM	UMTS FDD	Uplink	14:57:38.727	DCCH	MEASUREMENT_REPORT	
					7015.		15:00:46.029	10690 1	58 -9.2		8481.	RRCSM	UMTS FDD	Downlink	14:57:47.805	DCCH	DOWNLINK_DIRECT_TRANSFER	
					7016.	-105.1	15:00:46.430	10690 1	58		8482.	L3SM	UMTS FDD		14:57:47.805	DCCH	DISCONNECT	
					7017.	2	15:00:46.430	10690 1	58 -8.6		8483.	RRCSM	UMTS FDD	Uplink	14:57:48.102	DCCH	UPLINK_DIRECT_TRANSFER	
					7018,	-104.9	15:00:47.124	10690 1	58		8484.	L3SM	UMITS FDD	Uplink	14:57:48:102	DECH	RELEASE	
					7019,		15:00:47.124	10690 1	58 -8.8		8485.	RRCSM	UMTS FDD	Downlink	14:57:48.285	DCCH	DOWNLINK_DIRECT_TRANSFER	
					7020,	-105	15:00:47.545	10690 1	58		8486,	L3SM	UMTS FDD	Downlink	14:57:48.285	DCCH	RELEASE_COMPLETE	
					7021.		15:00:47.545	10690 1	58 -8.2		8487.	RRCSM	UMTS FDD	Downlink	14:57:48.485	DCCH	RRC_CONNECTION_RELEASE	
					7022,	-104	15:00:48.030	10690 1	58		8488,	RRCSM	UMTS FDD	Uplink	14:57:48,486	DCCH	RRC_CONNECTION_RELEASE_CO	
					7023,		15:00:48.030	10690 1	58 -7.5		8489.	RRCSM	UMTS FDD	Uplink	14:57:48.526	DCCH	RRC_CONNECTION_RELEASE_CO	
					7024.	-103.7	15:00:48.430	10690 1	58		8490,	RRCSM	LTE FDD	Downlink	14:57:48.839	BCCH-BCH	MasterInformationBlock	
					7025,		15:00:48.430	10690 1	58 -9,1		8491.	RRCSM	LTE FDD	Downlink	14:57:48.853	BCCH-SCH	SystemInformationBlockType1	
					7026.	-106.7	15:00:49.030	10690 1	58		8492.	RRCSM	LTE FDD	Downlink	14:57:48.853	BCCH-SCH	SystemInformation - SIB2, SIB3	

## Phase-2 Call Drop Analysis 3 From MS11 CWS MO

	Time	Contraction of the second s	Serving band	Call type		1. best active RSCP	a second s	Contract of the local division of the local		1. best active Ec/N	•		Event ID	Contract Contract Contracts	Transf. dir.	Time	Subchannel	Message name	
1,	14:55:59.653	GSM	900	Voice call	7089,		15:01:05.383	10690	158	-11.3		8844.	RRCSM	UMTS FDD	Uplink	15:00:57.341	DCCH	MEASUREMENT_REPORT	Analysis:
2,	14:57:48.102		0101120112	Voice call	7.090,	-109.5	15:01:05.944	10690	158	and a	4	8845.	RRCSM	UMTS FDD	Uplink	15:00:58.221	DCCH	MEASUREMENT_REPORT	This call drop
3.	15:01:11.926	UMTS FDD	2100	Voice call	7091.		15:01:05.944	10690	158	-10.1	. 4	8846.	RRCSM	UMTS FDD	Uplink	15:00:58,281	DCCH	MEASUREMENT_REPORT	at 15:01:11:9
					7092.	-107.5	15:01:06.410	10690	158			8847.	RRCSM	UMTS FDD	Uplink	15:00:58.342	DCCH	MEASUREMENT_REPORT	latched with
					7093,		15:01:06.410	10690	158	-10.3		8848.	RRCSM	UMTS FDD	Uplink	15:00:58.503	DCCH	MEASUREMENT_REPORT	
					7094,	-111.1	15:01:07.028	10690	158			8849.	RRCSM	UMTS FDD	Uplink	15:00:59.341	DCCH	MEASUREMENT_REPORT	
					7095.	1.0000	15:01:07.028	10690	158	-12.6		8850.	RRCSM	UMTS FDD	Uplink	15:00:59.935	DCCH	MEASUREMENT_REPORT	<ul> <li>During the fa</li> </ul>
					7095,	-109.1	15:01:07.431	10690	158			8851.	RRCSM	UMTS FDD	Uplink	15:01:00.342	DCCH	MEASUREMENT_REPORT	PSC 158 and
					7097.		15:01:07.431	10690	158	-11.1		8852.	RRCSM	UMTS FDD	Uplink	15:01:01.342	DCCH	MEASUREMENT_REPORT	good but Ec/
					7098.	-107.6	15:01:08.030	10690	158			8853.	RRCSM	UMTS FDD	Uplink	15:01:02.342	DCCH	MEASUREMENT_REPORT	
					7099,		15:01:08.030	10690	158	-10		8854,	RRCSM	UMTS FDD	Uplink	15:01:03.342	DCCH	MEASUREMENT_REPORT	<ul> <li>According to</li> </ul>
					7100,	-109.2	15:01:08.431	10690	158	100		8855.	RRCSM	UMTS FDD	Uplink	15:01:04.281	DCCH	MEASUREMENT_REPORT	event occurr
					7101,		15:01:08.431	10690	158	-10.7		8856.	RRCSM	UMTS FDD	Uplink	15:01:04.342	DCCH	MEASUREMENT_REPORT	Coverage .
					7102.	-108.6	15:01:09.030	10690	158			8857.	RRCSM	UMTS FDD	Uplink	15:01:05.342	DCCH	MEASUREMENT_REPORT	Coverage.
					7103.		15:01:09.030	10590	158	-10.1		8858.	RRCSM	UMTS FDD	Uplink	15:01:06.342	DCCH	MEASUREMENT_REPORT	
					7104,	-111	15:01:09.564	10690	158		-	8859.	RRCSM	UMTS FDD	Uplink	15:01:07.342	DCCH	MEASUREMENT_REPORT	
					7105.		15:01:09.564	10690	158	-12		8860.	RRCSM	UMTS FDD	Uplink	15:01:08.342	DCCH	MEASUREMENT_REPORT	
					7106.	-109.2	15:01:10.029	10690	158			8861.	RRCSM	UMTS FDD	Uplink	15:01:09.342	DCCH	MEASUREMENT_REPORT	
					7107,		15:01:10.029	10690	158	-11.1		8862	RRCSM	UMTS FDD	Uplink	15:01:10.221	DCCH	MEASUREMENT_REPORT	
					7108.	-109.7	15:01:10.583	10690	158			8863.	RRCSM	UMTS FDD	Uplink	15:01:10.291	DCCH	MEASUREMENT_REPORT	
					7109.		15:01:10.583	10690	158	-11.3		8864.	RRCSM	UMTS FDD	Uplink	15:01:10.342	DCCH	MEASUREMENT_REPORT	
					7110,	-107.7	15:01:11.163	10690	158			8865.	RRCSM	UMTS FDD	Uplink	15:01:11.342	DCCH	MEASUREMENT_REPORT	
					7111,		15:01:11.163	10690	158	-9.7		8866.	RRCSM	UMTS FDD	Downlink	15:01:12.057	BCCH_BCH	SYSTEM_INFORMATION_BCH	
					7112.	-119	15:01:11.911	10690	158			8867.	RRCSM	UMTS FDD	Downlink	15:01:12.077	BCCH_BCH	SYSTEM_INFORMATION_BCH	
					7113.	10000	15:01:11.911	10590	158	-21.4		8868.	RRCSM	UMTS FDD	Downlink	15:01:12.097	BCCH_BCH	SYSTEM_INFORMATION_BCH	
					7114.	-109.1	15:01:12.226	10690	158			8869.	RRCSM	UMTS FDD	Downlink	15:01:12.097	BCCH	MASTER_INFORMATION_BLOCK	
					7115.		15:01:12.226	10690	158	-11.1		8870.	RRCSM	UMTS FDD	Downlink	15:01:12.097	BCCH	SYSTEM_INFORMATION_BLOCK_	
					7116.	-113.6	15:01:12.731	10690	158			8871.	RRCSM	UMTS FDD	Downlink	15:01:12.197	BCCH_BCH	SYSTEM_INFORMATION_BCH	
					7117.		15:01:12.731	10690	158	-14.2		8872.	RRCSM	UMTS FDD	Downlink	15:01:12.197	BCCH	SYSTEM_INFORMATION_BLOCK	
					7118.	-106.8	15:01:13.204	10690	158			8873.	RRCSM	UMTS FDD	Downlink	15:01:12.197	BCCH	SYSTEM_INFORMATION_BLOCK	
					7119.		15:01:13.204	10690	158	-11.6		8874.	RRCSM	UMTS FDD	Downlink	15:01:12.537	BCCH_BCH	SYSTEM_INFORMATION_BCH	
					7120.	-108.4	15:01:13.660	10690	158			8875.	RRCSM	UMTS FDD	Downlink	15:01:12.557	BCCH_BCH	SYSTEM_INFORMATION_BCH	
					7121,		15:01:13.660	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		-14		8876.	The second s			15:01:12.577	Contraction of the local distance	SYSTEM_INFORMATION_BCH	
					7122,	-110.7	15:01:14.440		17 100			8877.				15:01:12.577	a second s	MASTER_INFORMATION_BLOCK	
					7123.	DAVIS NO.	15:01:14.440		1000	-13.1		8878.	the state of the s		10111111111	15:01:12.577	100 C 100 C	SYSTEM_INFORMATION_BLOCK	
					7124,	-107.5	15:01:14.962		10000			8879.				15:01:12.597		SYSTEM_INFORMATION_BCH	
					7125	en de la de la dela de la dela del de la dela de	15:01:14.962	10590	158	-10.7	-1	8880	RRCSM	UMTS EDD	Downlink	15:01-12:597	BCCH	SYSTEM INFORMATION BLOCK	

- This call drop event occurred on long call at 15:01:11:926 time when UE was latched with 3G network.
- During the failure, UE was latched with
   PSC 158 and RF condition RSCP -119 dBm
   good but Ec/No -21.4 dB are very poor.
- According to the analysis, the call drop event occurred due to poor network Coverage.



# THANKS