

Seychelles Test Drive

Bel Ombre Phase-2 Report



Phase-1 Dates- 04th Oct 2024



Phase 1 is okay in the same area, but Phase 2 is missing. We are unable to access this road as it's blocked due to a crane-mounted truck being used to remove a boat.

Route Name: Mahe

District Name: Bel Ombre

Region: Northern

Island: Mahé

Drive Test Distance: 10.57 kms

Drive Test Duration: 00 hours,44 minutes,06 seconds

Phase-2 Dates- 18th Oct 2024



Route Name: Mahe

District Name: Bel Ombre

Region: Northern

Island: Mahé

Drive Test Distance: 10.94 kms

Drive Test Duration: 00 hours,53 minutes,19 seconds

Phase-1**Short Call Findings:**

- The Call Setup Success Rate for Airtel is (98.25%), while for Operator CWS it is (98.15%).
- The Call Setup Time for Airtel is (6.31s) , while for Operator CWS it is (7.70s)

Long Call Findings :

- The Call Retainability for Airtel is (93.33%), while for CWS it is (100.00%).
- The MOS quality observed for Airtel is (3.09), and for CWS, it is (2.83).

Phase-2**Short Call Findings:**

- The Call Setup Success Rate for Airtel is (100.00%), while for Operator CWS it is (98.44%).
- The Call Setup Time for Airtel is (7.88s), while for Operator CWS it is (8.86s)

Long Call Findings :

- The Call Retainability for Airtel is (100.00%), while for CWS it is (100.00%).
- The MOS quality observed for Airtel is (2.98), and for CWS, it is (2.87).

Phase-1

4G Preferred Data Findings:

- Airtel SFTP DL is (10.67 Mbps), while SFTP UL is (2.94 Mbps), CWS SFTP DL is (1.76 Mbps), while SFTP UL is (2.16 Mbps)
- Airtel HTTP DL is (11.04 Mbps), HTTP Capacity DL is (16.48 Mbps) ,HTTP UL is (4.76 Mbps) , and HTTP Capacity UL is (12.52 Mbps).
- CWS HTTP DL is (1.72 Mbps), HTTP Capacity DL is (6.84 Mbps) ,HTTP UL is (5.96 Mbps) , and HTTP Capacity UL is (8.74 Mbps).
- On live web page testing for browsing, www.shein.com took (8.97s), www.nbs.gov.sc took (18.32s), and www.sbc.sc took (19.93s) on Airtel.
- On live web page testing for browsing, www.shein.com took (13.14s), www.nbs.gov.sc took (22.38s), and www.sbc.sc took (18.27s) on CWS.
- On static browsing, Kepler Webpage took (5.34s), and Kepler Mobile took (1.90s) on Airtel.
- On static browsing, Kepler Webpage took (5.27s), and Kepler Mobile took (4.00s) on CWS.
- YouTube average resolution in Airtel is (912.50) pixels.
- YouTube average resolution in CWS is (1047.11) pixels.
- Airtel scored 57.06% in Carrier Aggregation (CA).
- CWS scored 18.28% in Carrier Aggregation (CA).

Phase-2

4G Preferred Data Findings:

- **All tests for webpage DL time (s) on www.sbc.sc failed for the LTE SWS operator. The issue may be related to network performance.**
- Airtel SFTP DL is (8.21 Mbps), while SFTP UL is (4.10 Mbps), CWS SFTP DL is (0.50 Mbps), while SFTP UL is (1.52 Mbps)
- Airtel HTTP DL is (6.92 Mbps), HTTP Capacity DL is (18.08 Mbps) ,HTTP UL is (6.75 Mbps) , and HTTP Capacity UL is (11.65 Mbps).
- CWS HTTP DL is (1.63 Mbps), HTTP Capacity DL is (1.74 Mbps) ,HTTP UL is (1.72 Mbps) , and HTTP Capacity UL is (6.94 Mbps).
- On live web page testing for browsing, www.shein.com took (8.80s), www.nbs.gov.sc took (21.72s), and www.sbc.sc took (28.62s) on Airtel.
- On live web page testing for browsing, www.shein.com took (14.16s), www.nbs.gov.sc took (21.05s), and www.sbc.sc took (0.00s) on CWS.
- On static browsing, Kepler Webpage took (5.69s), and Kepler Mobile took (2.27s) on Airtel.
- On static browsing, Kepler Webpage took (7.31s), and Kepler Mobile took (2.65s) on CWS.
- YouTube average resolution in Airtel is (989.06) pixels.
- YouTube average resolution in CWS is (736.43) pixels.
- Airtel scored 56.23% in Carrier Aggregation (CA).
- CWS scored 16.14% in Carrier Aggregation (CA).

Phase-1

3G Preferred Data Test Findings:

- Airtel SFTP DL is (2.45 Mbps), while SFTP UL is (0.68 Mbps), CWS SFTP DL is (3.87 Mbps), while SFTP UL is (1.19 Mbps)
- Airtel HTTP DL is (3.12 Mbps), HTTP Capacity DL is (3.61 Mbps) ,HTTP UL is (0.88 Mbps) , and HTTP Capacity UL is (2.99 Mbps).
- CWS HTTP DL is (2.02 Mbps), HTTP Capacity DL is (3.11 Mbps) ,HTTP UL is (1.53 Mbps) , and HTTP Capacity UL is (3.42 Mbps).
- On live web page testing for browsing, www.shein.com took (14.57s), www.nbs.gov.sc took (12.90s), and www.sbc.sc took (29.02s) on Airtel.
- On live web page testing for browsing, www.shein.com took (10.78s), www.nbs.gov.sc took (15.17s), and www.sbc.sc took (13.46s) on CWS.
- On static browsing, Kepler Webpage took (4.87s), and Kepler Mobile took (3.95s) on Airtel.
- On static browsing, Kepler Webpage took (5.73s), and Kepler Mobile took (2.64s) on CWS.
- YouTube average resolution in Airtel is (908.16) pixels.
- YouTube average resolution in CWS is (967.59) pixels.

Phase-2

3G Preferred Data Test Findings:

- Airtel SFTP DL is (4.24 Mbps), while SFTP UL is (1.38 Mbps), CWS SFTP DL is (3.10 Mbps), while SFTP UL is (1.23 Mbps)
- Airtel HTTP DL is (3.82 Mbps), HTTP Capacity DL is (3.12 Mbps) ,HTTP UL is (2.10 Mbps) , and HTTP Capacity UL is (3.78 Mbps).
- CWS HTTP DL is (2.14 Mbps), HTTP Capacity DL is (1.81 Mbps) ,HTTP UL is (1.34 Mbps) , and HTTP Capacity UL is (2.90 Mbps).
- On live web page testing for browsing, www.shein.com took (14.39s), www.nbs.gov.sc took (12.70s), and www.sbc.sc took (17.74s) on Airtel.
- On live web page testing for browsing, www.shein.com took (12.61s), www.nbs.gov.sc took (11.94s), and www.sbc.sc took (12.25s) on CWS.
- On static browsing, Kepler Webpage took (6.58s), and Kepler Mobile took (4.22s) on Airtel.
- On static browsing, Kepler Webpage took (12.43s), and Kepler Mobile took (2.47s) on CWS.
- YouTube average resolution in Airtel is (823.15) pixels.
- YouTube average resolution in CWS is (1080.00) pixels.

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

VOICE TEST KPI STATISTICS (Short Call)

Phase-1

Short Call Statistics		
Short Call Scenario	Operator 1	Operator 2
Voice KPIs	Airtel	CWS
Call Attempt	57	54
Call Failed	1	1
Call Connected	56	53
CSSR[%]	98.25	98.15
USCSR[%]	1.75	1.85
CST [s] Alerting	6.31	7.70
CST [s]Connected	6.58	7.91

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

Call Setup Time (s)	Operators		Rank	
	Airtel	CWS	Airtel	CWS
Overall CST (until ringing/alerting)	6.31	7.70	1	2
CS calls CST (until ringing/alerting)	6.20	9.76	1	2
CSFB calls CST (until ringing/alerting)	6.34	7.49	1	2
Overall CST (until Connect/Connect Acknowledge)	6.58	7.91	1	2
CS calls CST (until Connect/Connect Acknowledge)	6.45	9.99	1	2
CSFB calls CST (until Connect/Connect Acknowledge)	6.60	7.70	1	2

Phase-2

Short Call Statistics		
Short Call Scenario	Operator 1	Operator 2
Voice KPIs	Airtel	CWS
Call Attempt	65	64
Call Failed	0	1
Call Connected	65	63
CSSR[%]	100.00	98.44
USCSR[%]	0.00	1.56
CST [s] Alerting	7.82	8.86
CST [s]Connected	8.12	9.13

Call Setup Time (s)	Operators		Rank	
	Airtel	CWS	Airtel	CWS
Overall CST (until ringing/alerting)	7.82	8.86	1	2
CS calls CST (until ringing/alerting)	9.26	8.51	2	1
CSFB calls CST (until ringing/alerting)	7.35	8.89	1	2
Overall CST (until Connect/Connect Acknowledge)	8.12	9.13	1	2
CS calls CST (until Connect/Connect Acknowledge)	9.67	8.75	2	1
CSFB calls CST (until Connect/Connect Acknowledge)	7.61	9.16	1	2

Phase-1

Long Call Statistics				
Long Call Scenario	Operator 1		Operator 2	
Voice KPIs	Airtel		CWS	
Call Connected	15		14	
Call Dropped	1		0	
Call Completed	14		14	
CRR[%]	93.33		100.00	
DCR[%]	6.67		0.00	
MOS	3.09		2.83	
	Airtel short call	CWS short call	Airtel long call	CWS long call
CSFB Calls	48	49	13	12
CS Calls	9	5	2	2
Handover Statistics		Airtel MO	CWS MO	
Handover Attempt		24	101	
Handover Failure		1	1	
Handover Success		23	100	
HOSR %		95.83	99.01	

Phase-2

Long Call Statistics				
Long Call Scenario	Operator 1		Operator 2	
Voice KPIs	Airtel		CWS	
Call Connected	17		16	
Call Dropped	0		0	
Call Completed	17		16	
CRR[%]	100.00		100.00	
DCR[%]	0.00		0.00	
MOS	2.98		2.87	
	Airtel short call	CWS short call	Airtel long call	CWS long call
CSFB Calls	49	60	12	14
CS Calls	16	4	5	2
Handover Statistics		Airtel MO	CWS MO	
Handover Attempt		27	86	
Handover Failure		0	0	
Handover Success		27	86	
HOSR %		100.00	100.00	



DATA TEST KPI STATISTICS(4G Preferred)

DATA Scenario		Phase-1				Phase-2			
		Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)	Airtel 4G	CWS 4G	Airtel 4G (Rank)	CWS 4G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	10.67	1.76	1	2	8.21	0.55	1	2
	SFTP UL(Mbps)	2.94	2.16	1	2	4.10	1.52	1	2
	HTTP DL(Mbps)	11.04	1.72	1	2	6.92	1.63	1	2
	HTTP UL(Mbps)	4.76	5.96	2	1	6.75	1.72	1	2
	HTTP Capacity DL(Mbps)	16.48	6.84	1	2	18.08	1.74	1	2
	HTTP Capacity UL(Mbps)	12.52	8.74	1	2	11.65	6.94	1	2
BROWSER	Overall Browser DL Time (s)	10.64	11.74	1	2	14.04	11.99	2	1
	Kepler Webpage DL Time (s)	5.34	5.27	2	1	5.69	7.31	1	2
	Mobile Kepler Webpage DL Time (s)	1.90	4.00	1	2	2.27	2.65	1	2
	www.shein.com Webpage DL Time (s)	8.97	13.14	1	2	8.80	14.16	1	2
	www.nbs.gov.sc Webpage DL Time (s)	18.32	22.38	1	2	21.72	21.05	2	1
	www.sbc.sc Webpage DL Time (s)	19.93	18.27	2	1	28.62	0.00	1	2
LATENCY	Avg Latency (ms)	267.18	198.83	2	1	298.46	189.00	2	1
	Median Latency (ms)	161.50	204.50	1	2	372	191	2	1
YOUTUBE	YouTube Access Time (s)	5.96	1.66	2	1	6.58	4.88	2	1
	YouTube Average Resolution (pixels)	912.50	1047.11	2	1	989.06	736.43	1	2
	YouTube Success Ratio [%]	100.00	100.00	1	1	100.00	83.33	1	2

Phase-1

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	6	6	85.71	85.71
	Failure	1	1	14.29	14.29
SFTP UL	Success	6	5	85.71	83.33
	Failure	1	1	14.29	16.67
HTTP DL	Success	7	6	87.50	100.00
	Failure	1	0	12.50	0.00
HTTP UL	Success	7	6	87.50	100.00
	Failure	1	0	12.50	0.00
HTTP Capacity DL	Success	7	6	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	6	6	85.71	100.00
	Failure	1	0	14.29	0.00

Phase-2

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	7	5	100.00	83.33
	Failure	0	1	0.00	16.67
SFTP UL	Success	7	3	87.50	60.00
	Failure	1	2	12.50	40.00
HTTP DL	Success	7	4	77.78	80.00
	Failure	2	1	22.22	20.00
HTTP UL	Success	8	5	88.89	83.33
	Failure	1	1	11.11	16.67
HTTP Capacity DL	Success	8	5	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	3	5	37.50	100.00
	Failure	5	0	62.50	0.00

Phase-1

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	8	6	100.00	100.00
	Failure	0	0	0.00	0.00
Mobile Kepler	Success	7	6	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	8	6	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	8	6	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	6	2	75.00	33.33
	Failure	2	4	25.00	66.67

Phase-2

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	5	4	62.50	66.67
	Failure	3	2	37.50	33.33
Mobile Kepler	Success	8	4	100.00	80.00
	Failure	0	1	0.00	20.00
www.shein.com	Success	8	5	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	8	5	100.00	83.33
	Failure	0	1	0.00	16.67
www.sbc.sc	Success	8	5	100.00	83.33
	Failure	0	1	0.00	16.67

Phase-1

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	14	10
	Average Latency [ms]	257.57	193.10
	Median Latency [ms]	152	191
	Ping session status: Successful	14	10
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	1
	Packet Loss<1%	6.67	9.09
www.google.com	Average Latency [ms]	422.00	159.60
	Median Latency [ms]	425	163
	Ping session status: Successful	6	5
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	1
	Packet Loss<1%	14.29	16.67
102.133.176.104	Average Latency [ms]	134.25	226.60
	Median Latency [ms]	134	223
	Ping session status: Successful	8	5
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00

Phase-2

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	16	9
	Average Latency [ms]	290.75	186.38
	Median Latency [ms]	336	193
	Ping session status: Successful	16	9
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	1
	Packet Loss<1%	0.00	10.00
www.google.com	Average Latency [ms]	420.50	173.00
	Median Latency [ms]	422	165
	Ping session status: Successful	8	5
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	161.00	199.75
	Median Latency [ms]	133	196
	Ping session status: Successful	8	4
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	1
	Packet Loss<1%	0.00	20.00

Phase-1

LTE YOUTUBE Success Ratio		
KPIs	Airtel 4G	CWS 4G
Attempt(Count)	8	6
Success(Count)	8	6
Failure(Count)	0	0
YouTube Access Time (s)	5.96	1.66
YouTube Average Resolution (pixels)	912.50	1047.11
YouTube Success Ratio [%]	100.00	100.00

Phase-2

LTE YOUTUBE Success Ratio		
KPIs	Airtel 4G	CWS 4G
Attempt(Count)	9	6
Success(Count)	9	5
Failure(Count)	0	1
YouTube Access Time (s)	6.58	4.88
YouTube Average Resolution (pixels)	989.06	736.43
YouTube Success Ratio [%]	100.00	83.33

DATA TEST KPI STATISTICS (3G Preferred)

DATA Scenario		Phase-1				Phase-2			
		Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)	Airtel 3G	CWS 3G	Airtel 3G (Rank)	CWS 3G (Rank)
FILE TRANSFER	SFTP DL (Mbps)	2.45	3.87	2	1	4.24	3.13	1	2
	SFTP UL(Mbps)	0.68	1.19	2	1	1.38	1.23	1	2
	HTTP DL(Mbps)	3.12	2.02	1	2	3.82	2.14	1	2
	HTTP UL(Mbps)	0.88	1.53	2	1	2.10	1.34	1	2
	HTTP Capacity DL(Mbps)	3.61	3.11	1	2	3.12	1.81	1	2
	HTTP Capacity UL(Mbps)	2.99	3.42	2	1	3.78	2.90	1	2
BROWSER	Overall Browser DL Time (s)	12.21	9.76	2	1	11.10	10.92	2	1
	Kepler Webpage DL Time (s)	4.87	5.73	1	2	6.58	12.43	1	2
	Mobile Kepler Webpage DL Time (s)	3.95	2.64	2	1	4.22	2.47	2	1
	www.shein.com Webpage DL Time (s)	14.57	10.78	2	1	14.39	12.61	2	1
	www.nbs.gov.sc Webpage DL Time (s)	12.90	15.17	1	2	12.70	11.94	2	1
	www.sbc.sc Webpage DL Time (s)	29.02	13.46	2	1	17.74	14.25	2	1
LATENCY	Avg Latency (ms)	289.70	236.31	2	1	301.40	218.67	2	1
	Median Latency (ms)	296.50	199.00	2	1	305	205	2	1
YOUTUBE	YouTube Access Time (s)	4.03	2.57	2	1	5.07	19.52	1	2
	YouTube Average Resolution (pixels)	908.16	967.59	2	1	823.15	1080.00	2	1
	YouTube Success Ratio [%]	100.00	50.00	1	2	100.00	14.29	1	2

Phase-1

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	3	2	100.00	66.67
	Failure	0	1	0.00	33.33
SFTP UL	Success	5	3	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	7	4	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	5	5	71.43	83.33
	Failure	2	1	28.57	16.67
HTTP Capacity DL	Success	6	3	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	5	4	83.33	80.00
	Failure	1	1	16.67	20.00

Phase-2

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	5	2	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	6	1	100.00	33.33
	Failure	0	2	0.00	66.67
HTTP DL	Success	7	2	100.00	66.67
	Failure	0	1	0.00	33.33
HTTP UL	Success	7	4	77.78	57.14
	Failure	2	3	22.22	42.86
HTTP Capacity DL	Success	7	6	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	6	5	85.71	83.33
	Failure	1	1	14.29	16.67

Phase-1

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kepler	Success	6	3	100.00	75.00
	Failure	0	1	0.00	25.00
Mobile Kepler	Success	5	1	83.33	33.33
	Failure	1	2	16.67	66.67
www.shein.com	Success	6	1	100.00	20.00
	Failure	0	4	0.00	80.00
www.nbs.gov.sc	Success	6	2	100.00	40.00
	Failure	0	3	0.00	60.00
www.sbc.sc	Success	4	2	66.67	66.67
	Failure	2	1	33.33	33.33

Phase-2

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kepler	Success	6	3	75.00	42.86
	Failure	2	4	25.00	57.14
Mobile Kepler	Success	8	3	100.00	60.00
	Failure	0	2	0.00	40.00
www.shein.com	Success	8	4	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	6	4	85.71	57.14
	Failure	1	3	14.29	42.86
www.sbc.sc	Success	7	3	87.50	50.00
	Failure	1	3	12.50	50.00

Phase-1

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	12	6
	Average Latency [ms]	344.92	202.33
	Median Latency [ms]	412	197
	Ping session status: Successful	12	6
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	2
	Packet Loss<1%	7.69	25.00
www.google.com	Average Latency [ms]	427.17	143.00
	Median Latency [ms]	426	143
	Ping session status: Successful	6	2
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	1
	Packet Loss<1%	0.00	33.33
102.133.176.104	Average Latency [ms]	262.67	232.00
	Median Latency [ms]	136	208
	Ping session status: Successful	6	4
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	1
	Packet Loss<1%	14.29	20.00

Phase-2

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	16	9
	Average Latency [ms]	300.19	224.89
	Median Latency [ms]	336	196
	Ping session status: Successful	16	10
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
www.google.com	Average Latency [ms]	427.63	243.00
	Median Latency [ms]	427	154
	Ping session status: Successful	8	6
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	172.75	202.25
	Median Latency [ms]	140	202
	Ping session status: Successful	8	4
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00

Phase-1

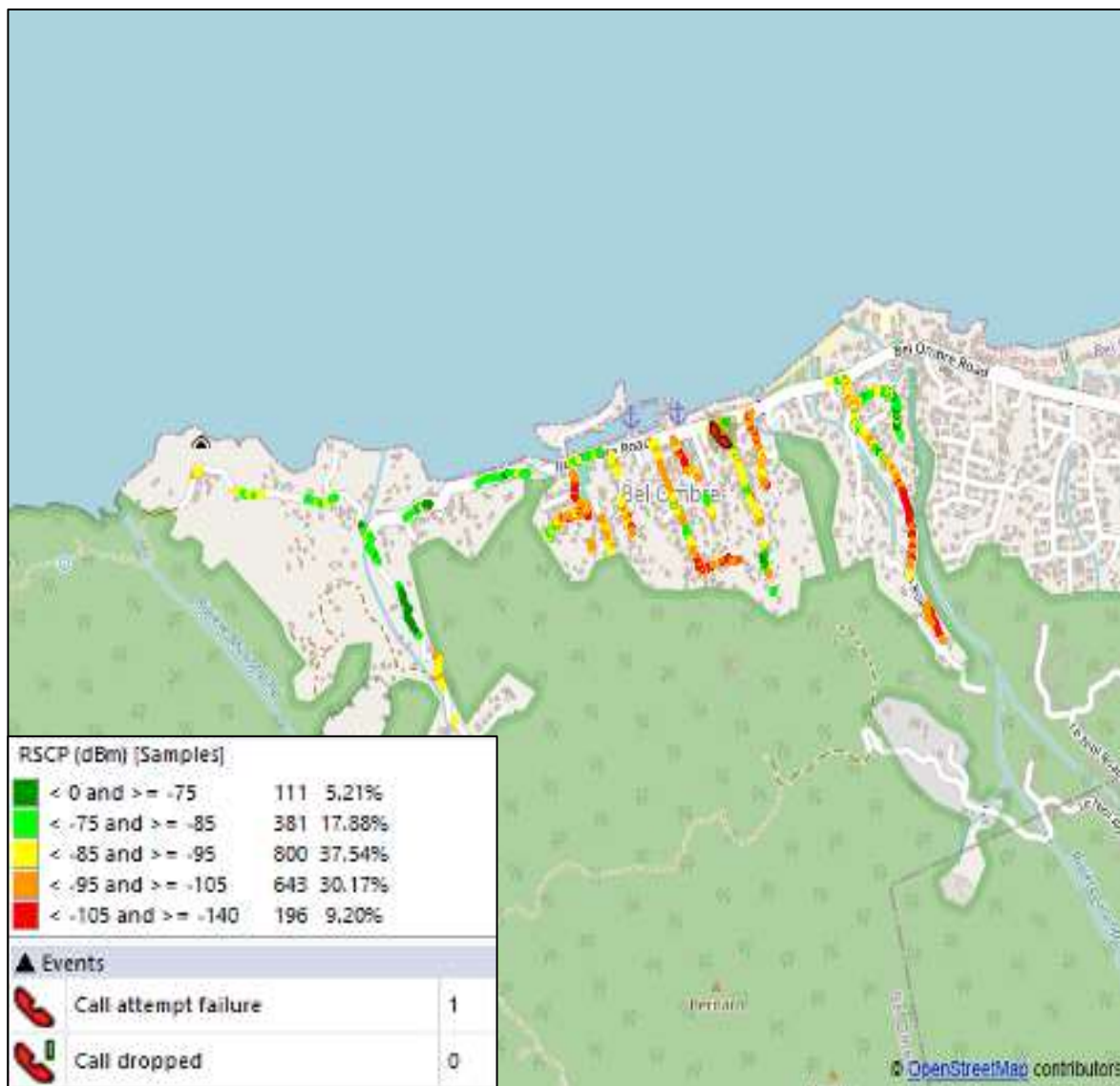
UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	7	6
Success(Count)	7	3
Failure(Count)	0	3
YouTube Access Time (s)	4.03	2.57
YouTube Average Resolution (pixels)	908.16	967.59
YouTube Success Ratio [%]	100.00	50.00

Phase-2

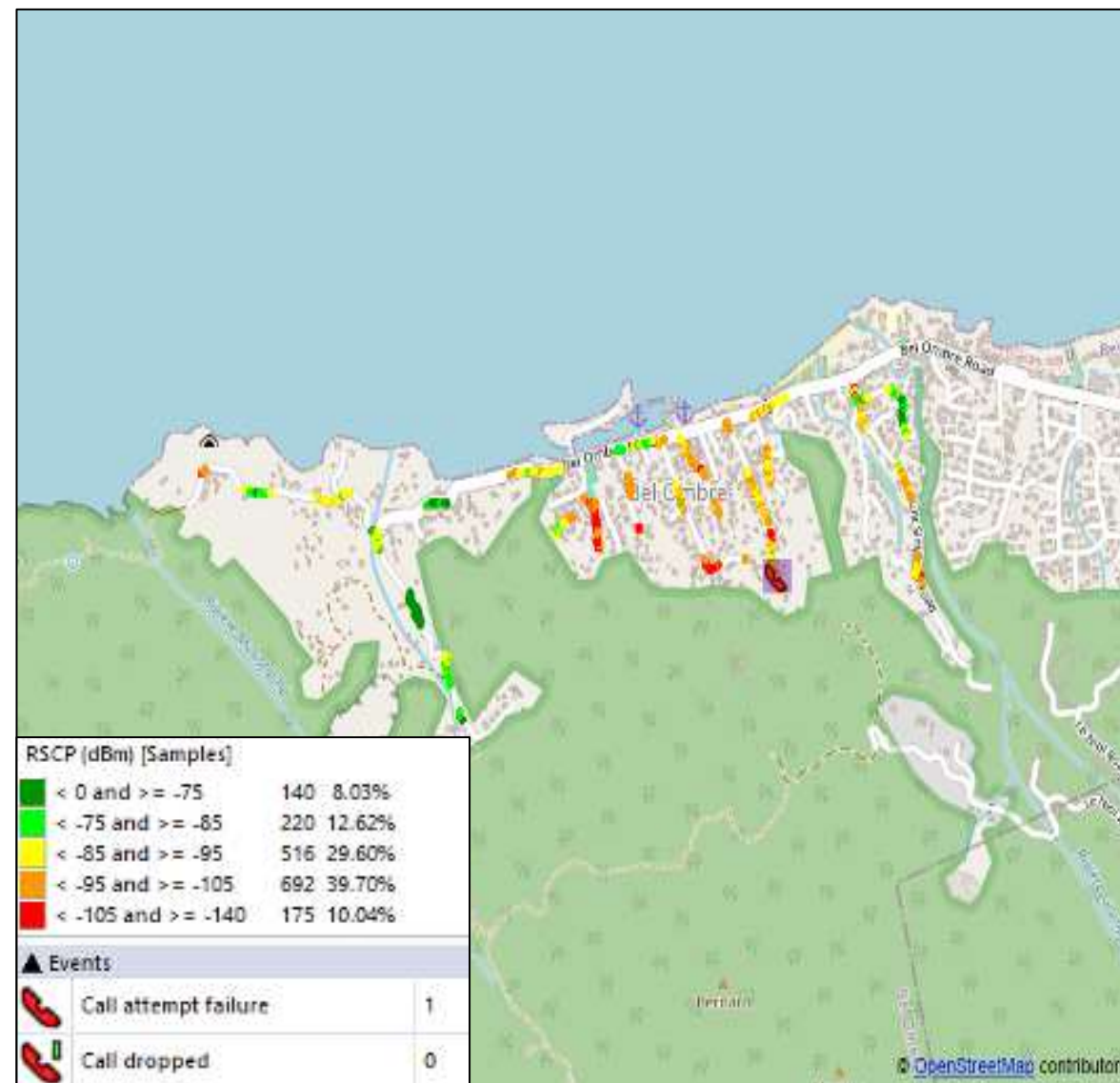
UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	8	7
Success(Count)	8	1
Failure(Count)	0	6
YouTube Access Time (s)	5.07	19.52
YouTube Average Resolution (pixels)	823.15	1080.00
YouTube Success Ratio [%]	100.00	14.29

Voice Call Events

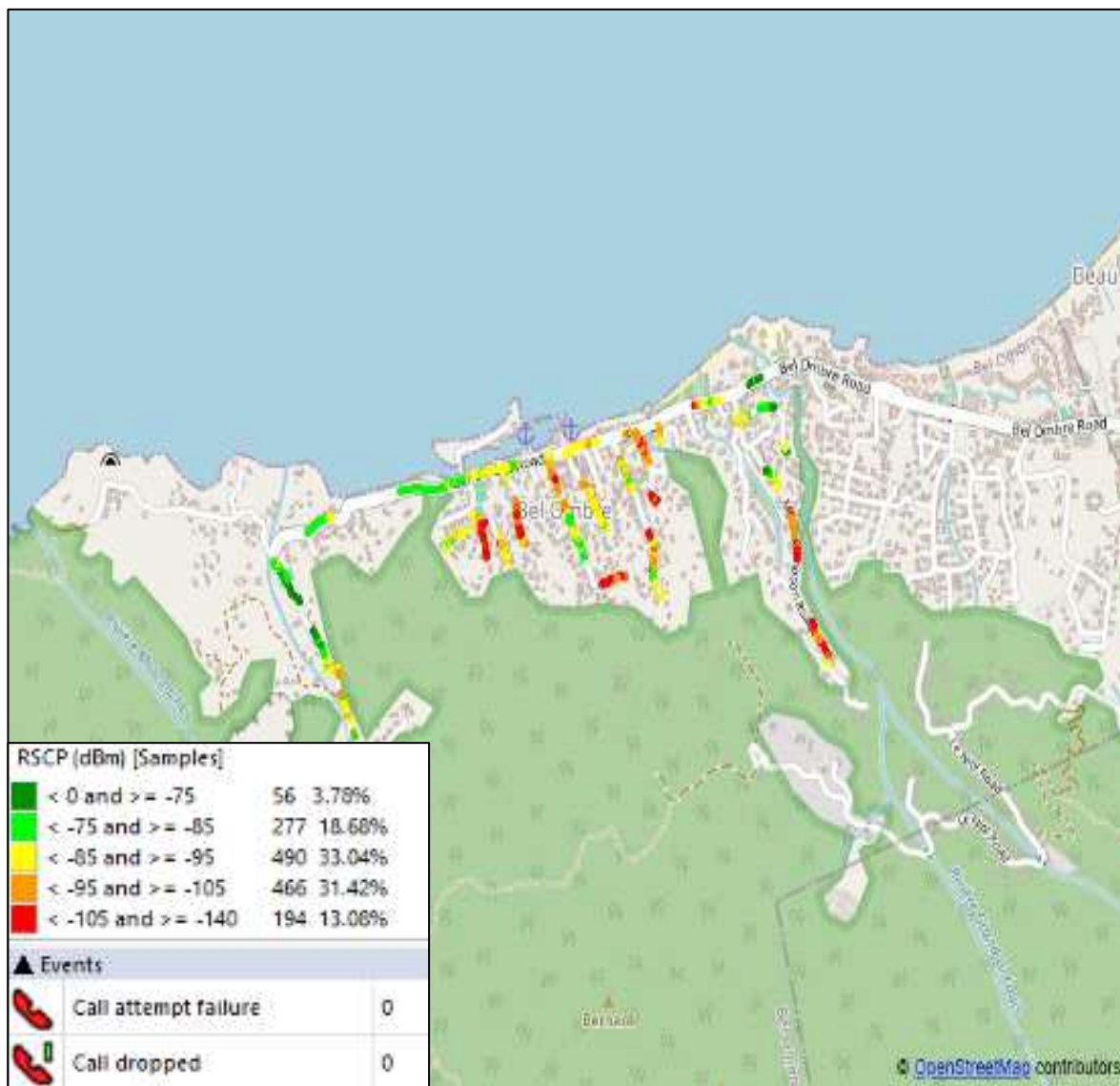
Airtel SC MO



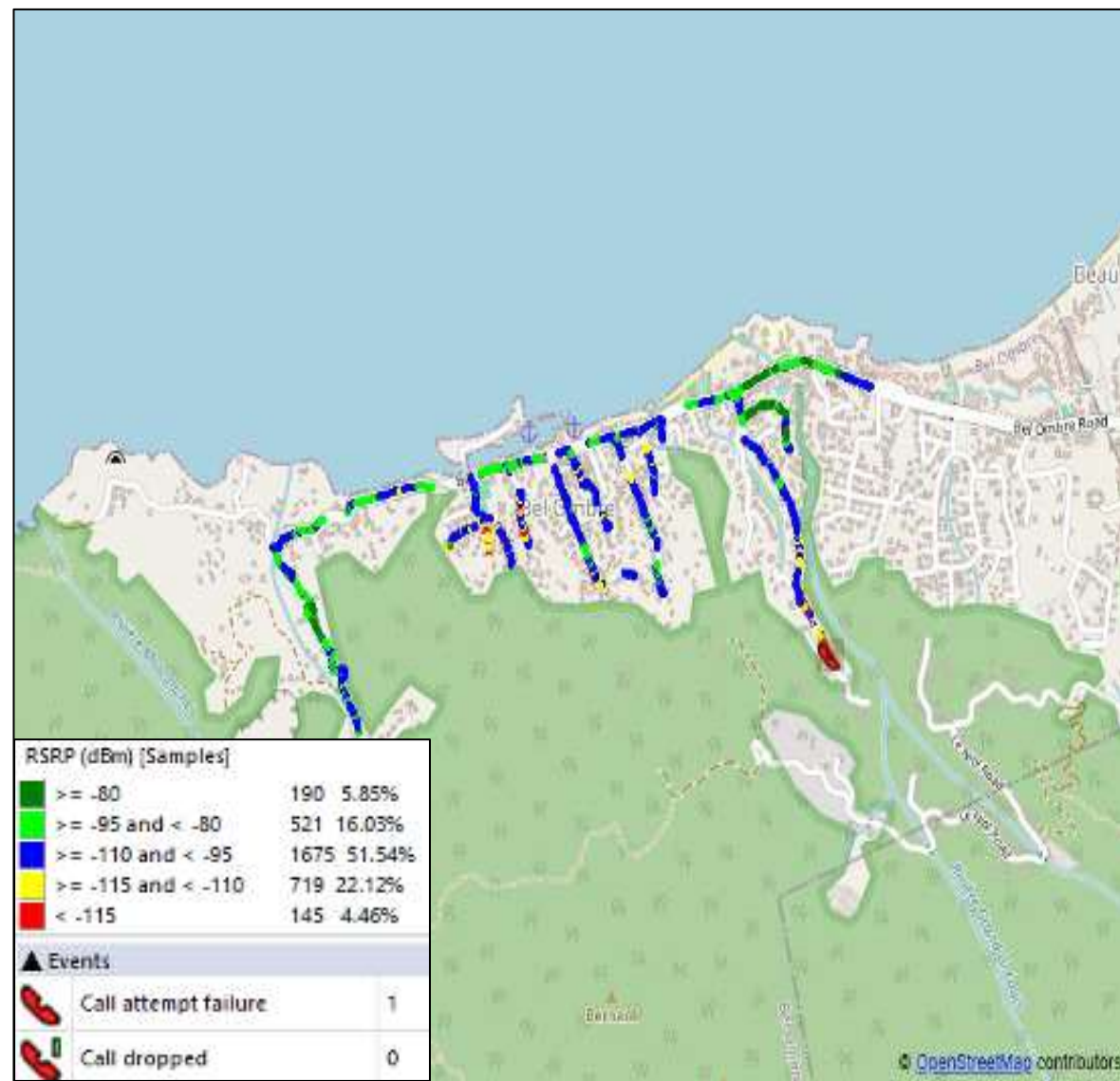
CWS SC MO



Airtel SC MO

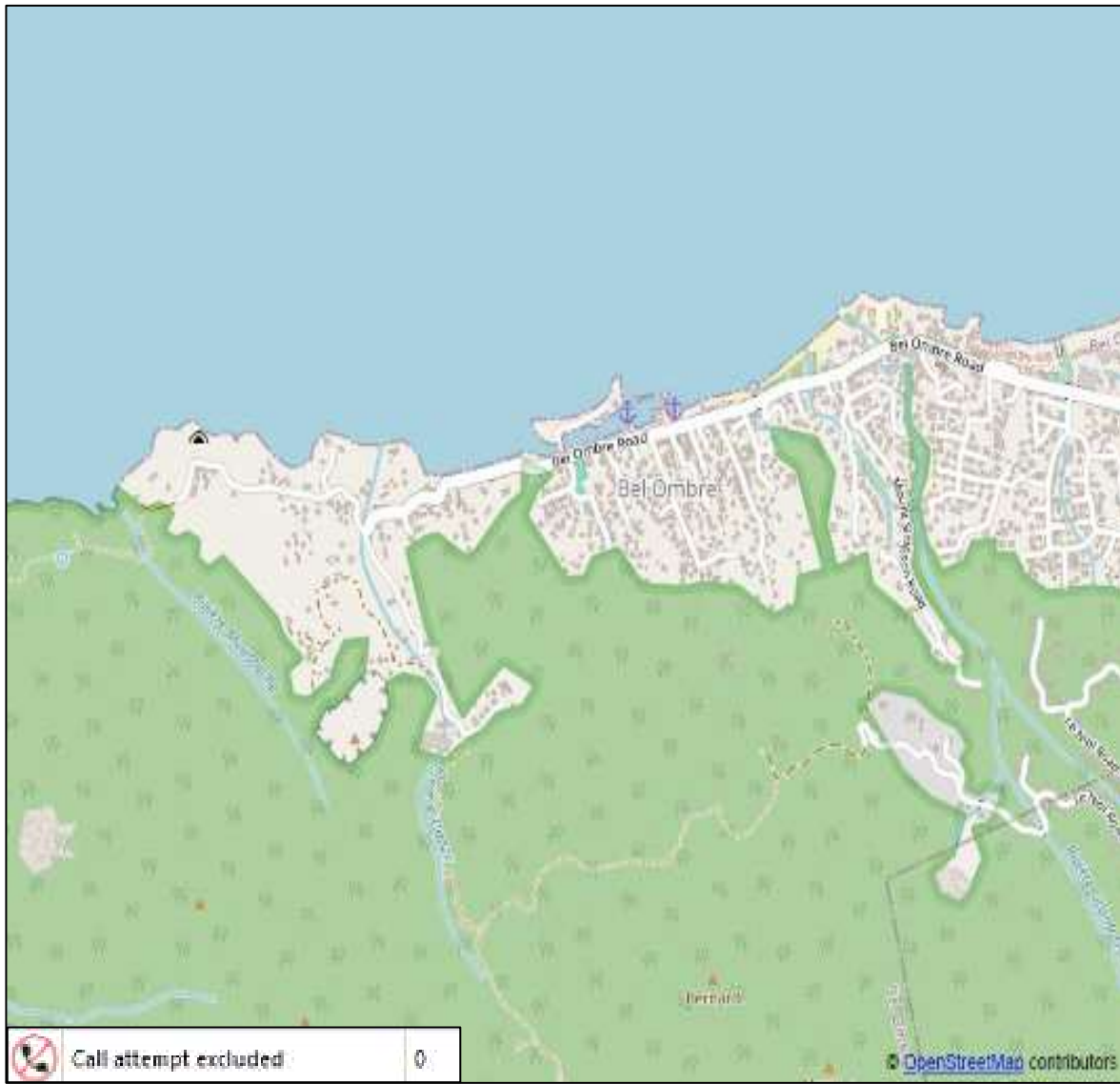


CWS SC MO

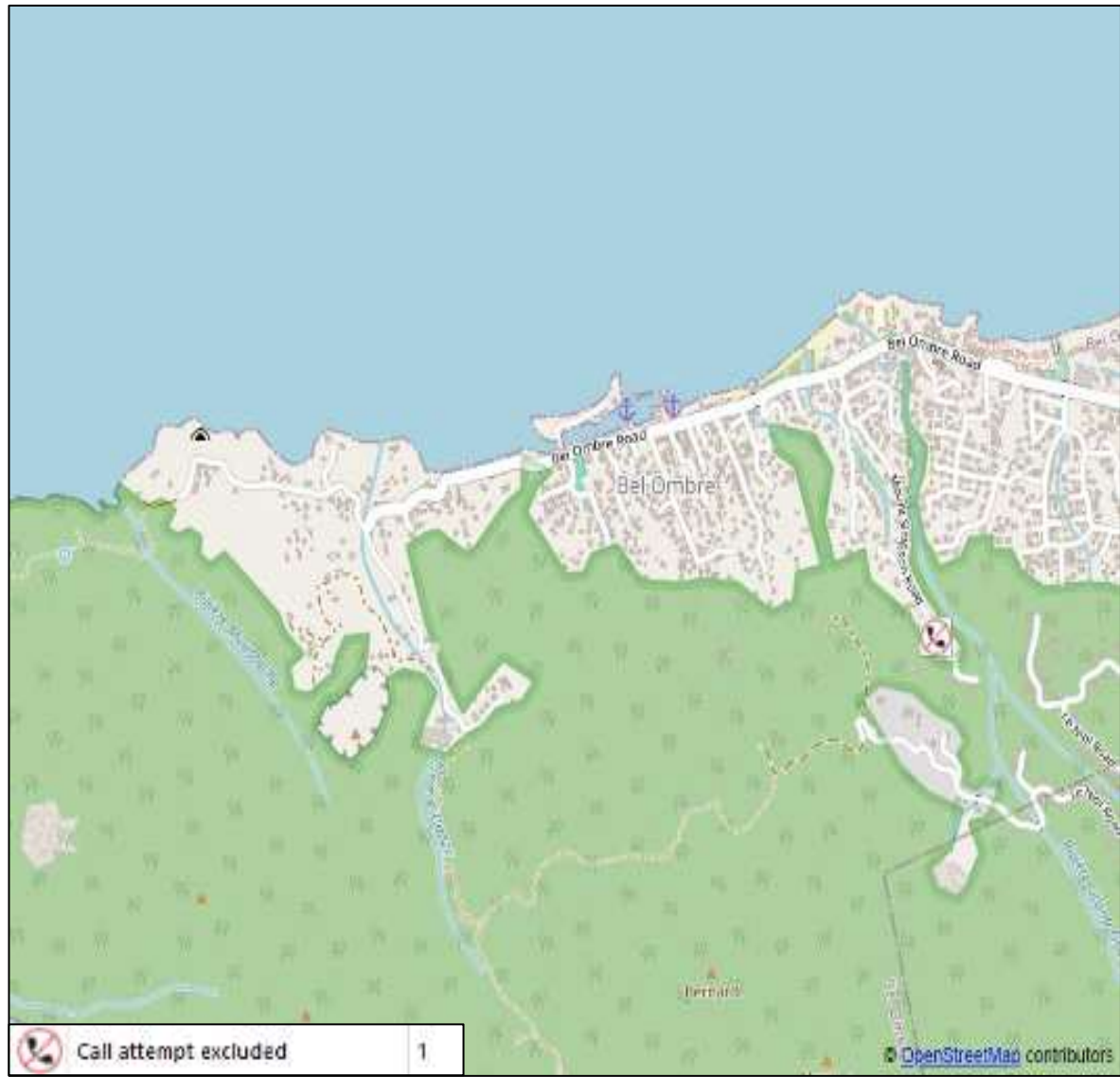


Phase-1 SHORT CALL EXCLUDED EVENTS

Airtel SC MO



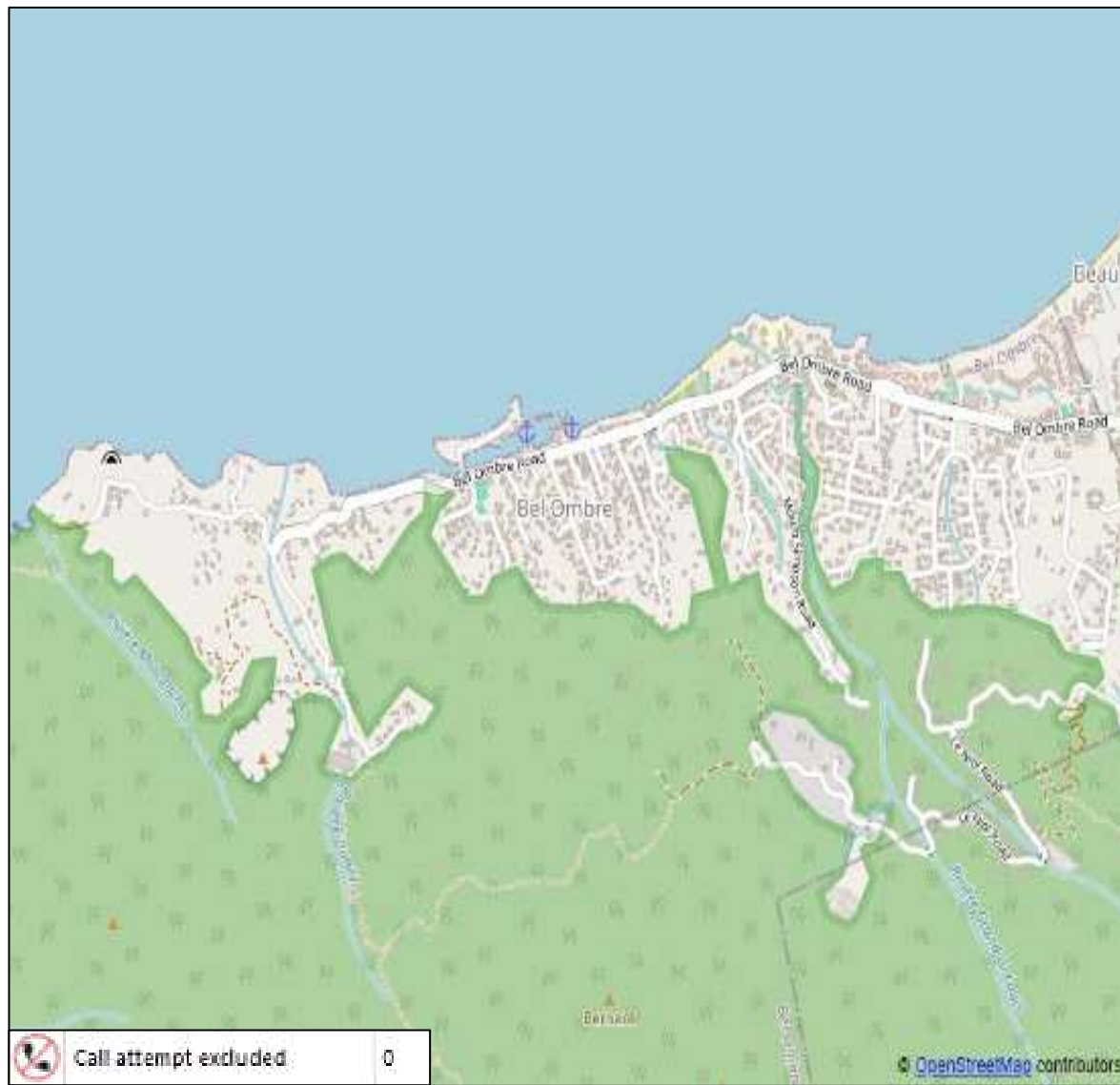
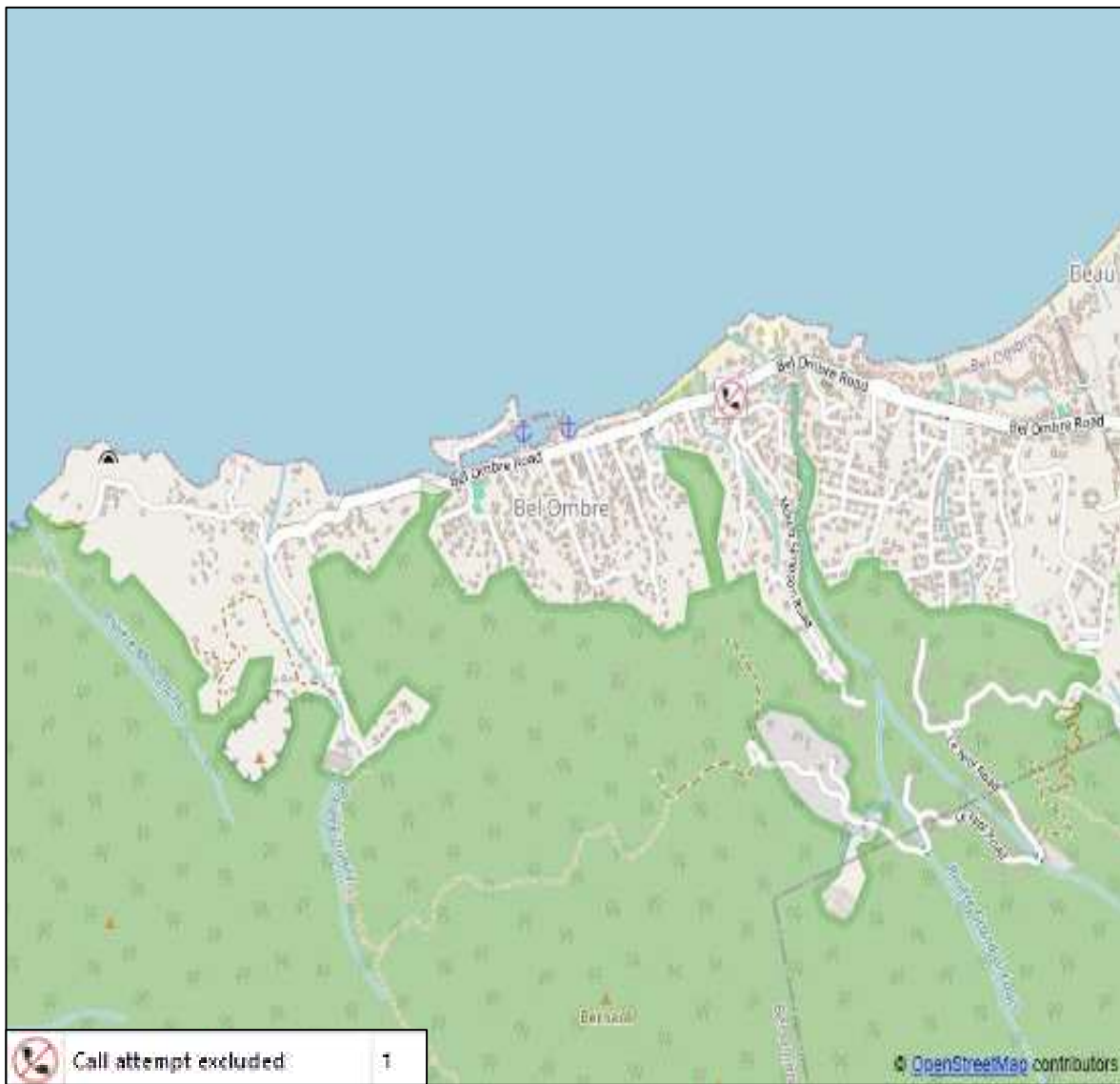
CWS SC MO



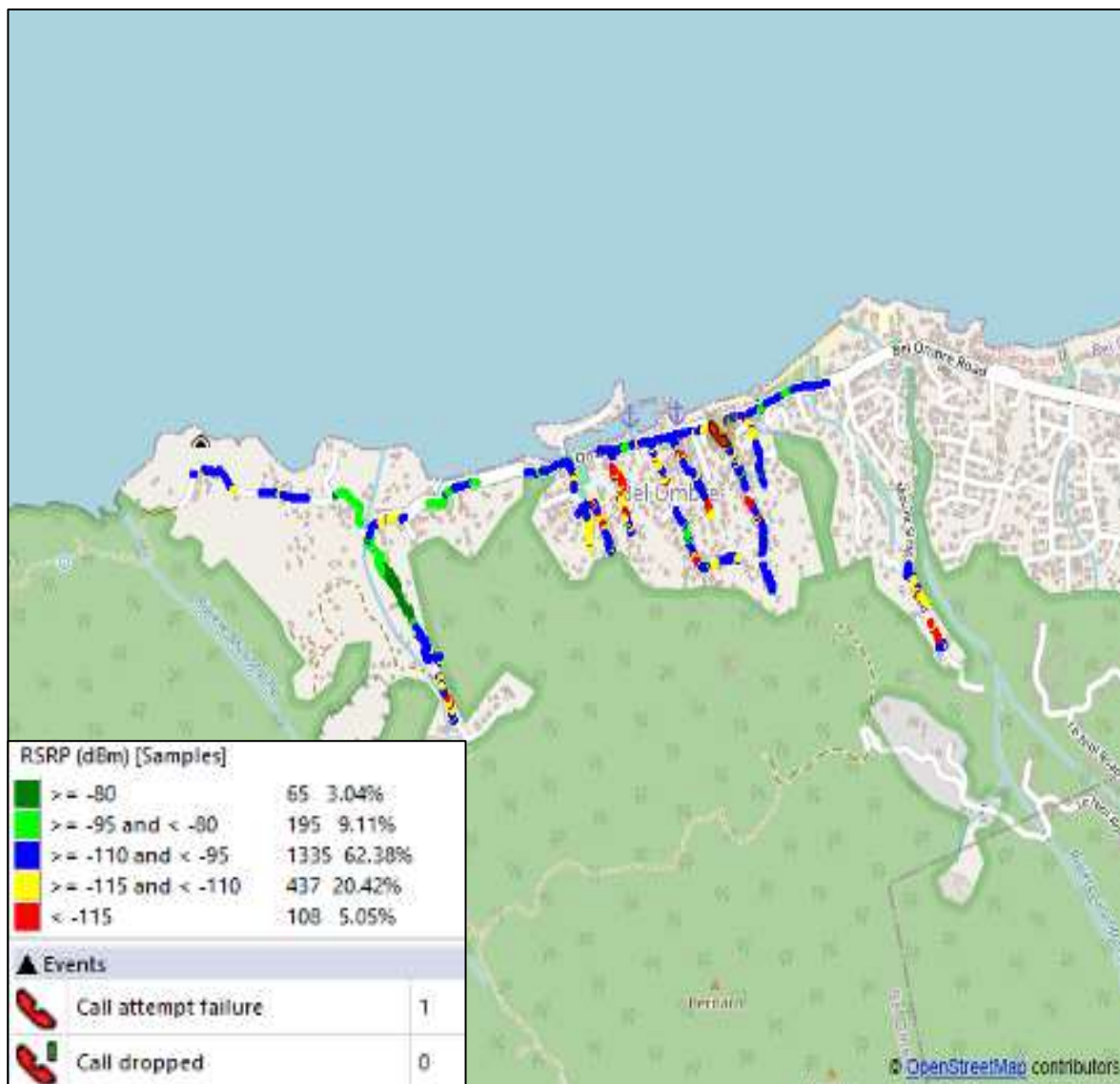
Phase-2 SHORT CALL EXCLUDED EVENTS

Airtel SC MO

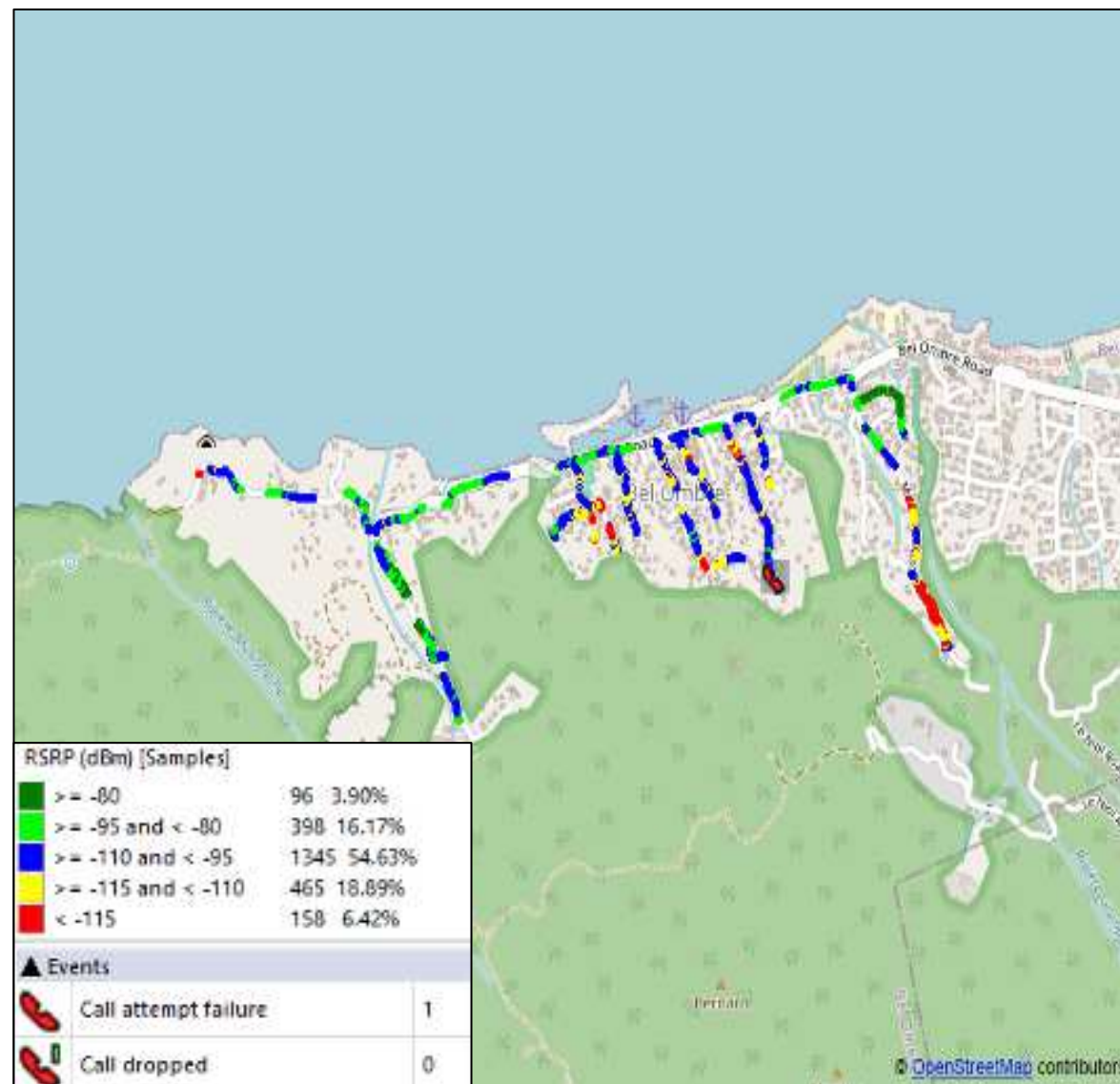
CWS SC MO



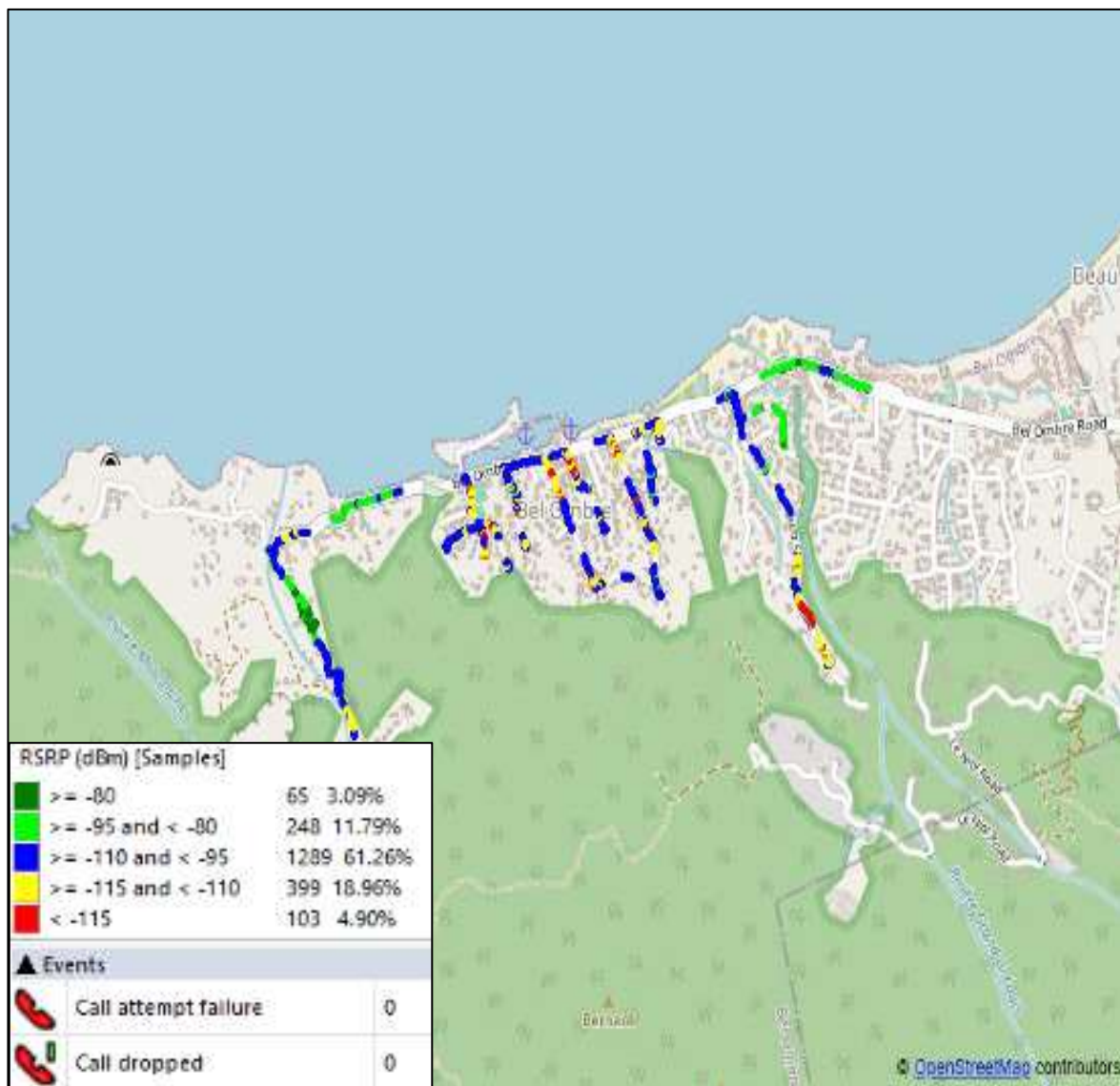
Airtel SC MO



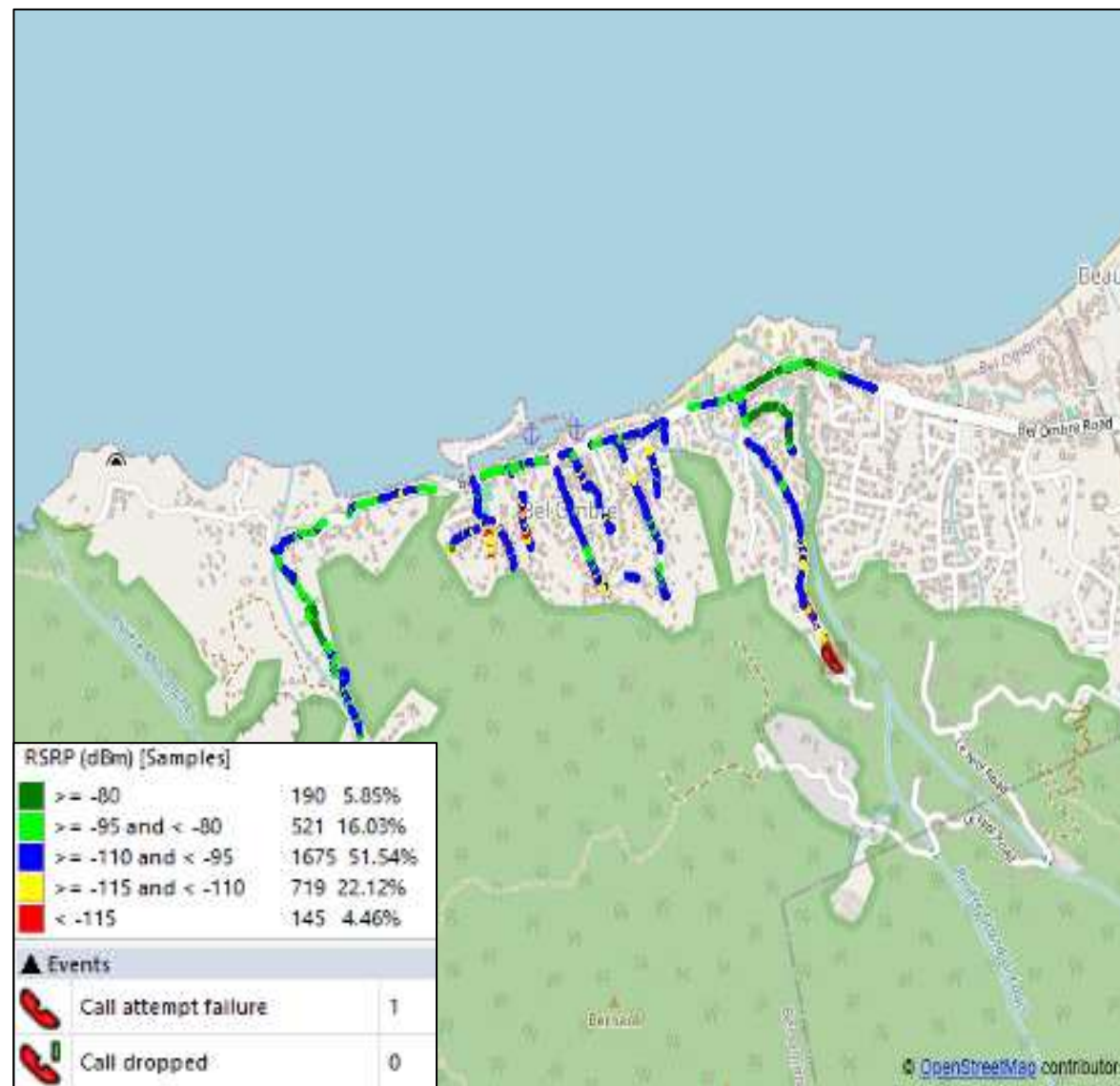
CWS SC MO



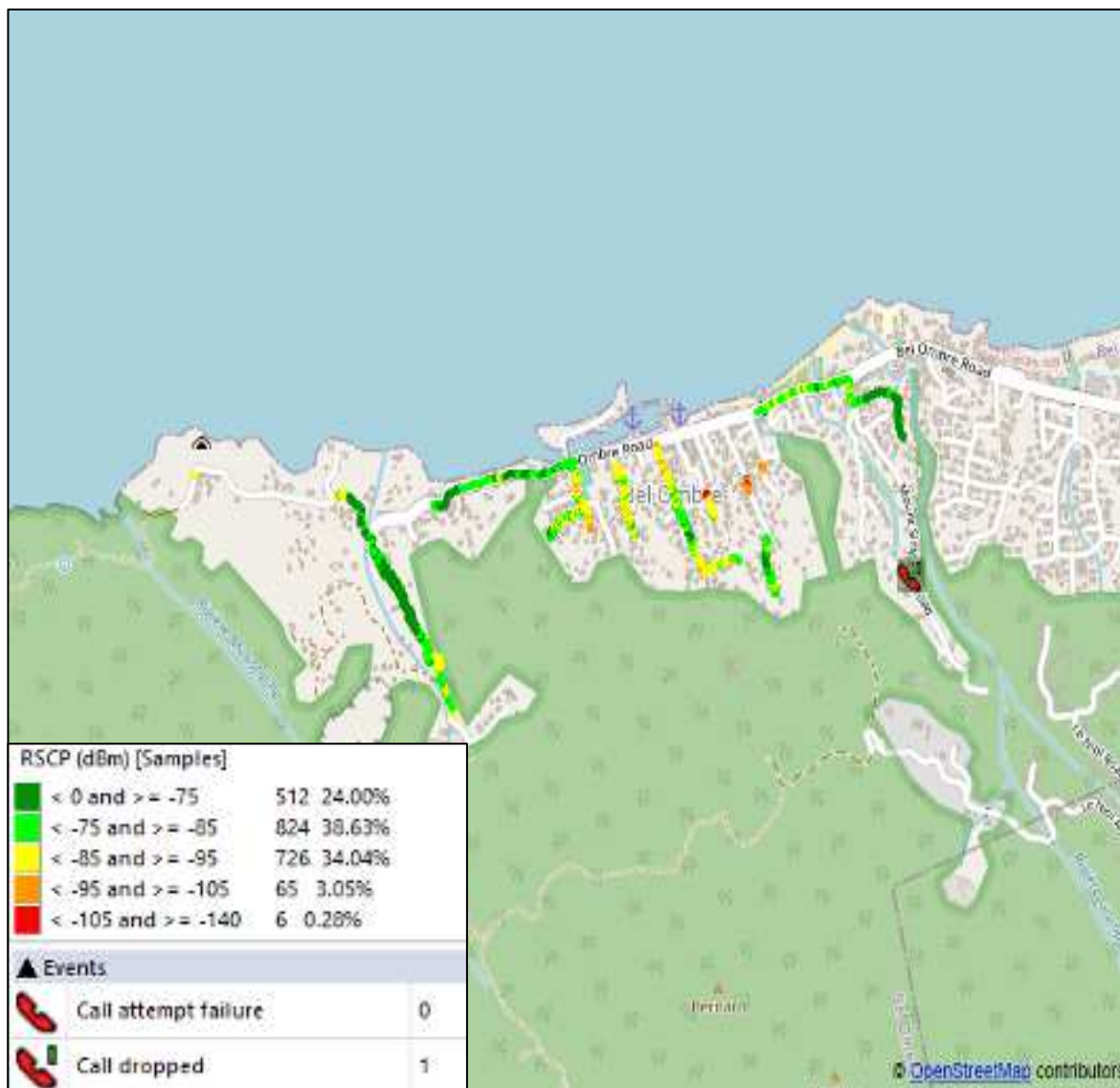
Airtel SC MO



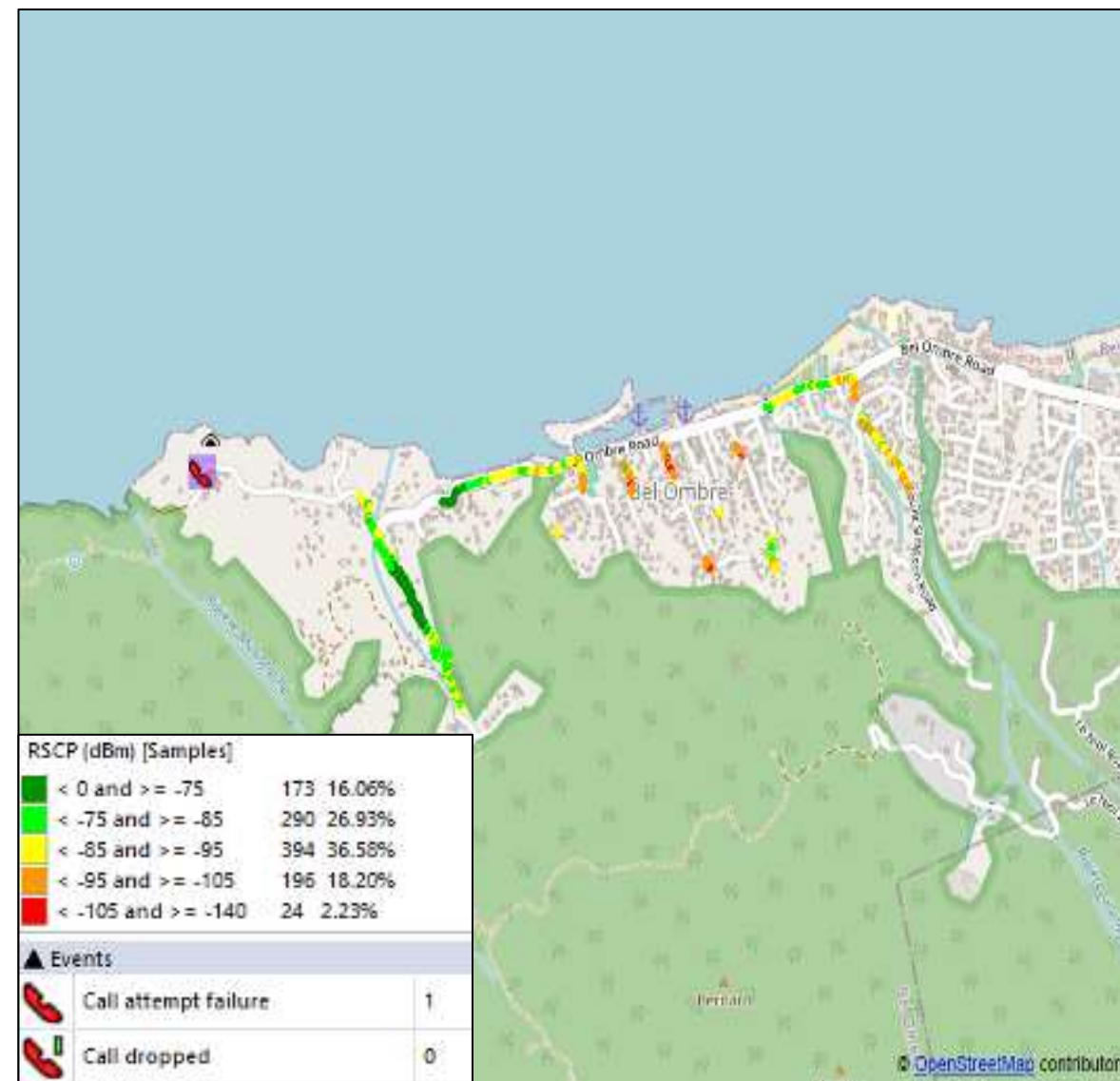
CWS SC MO



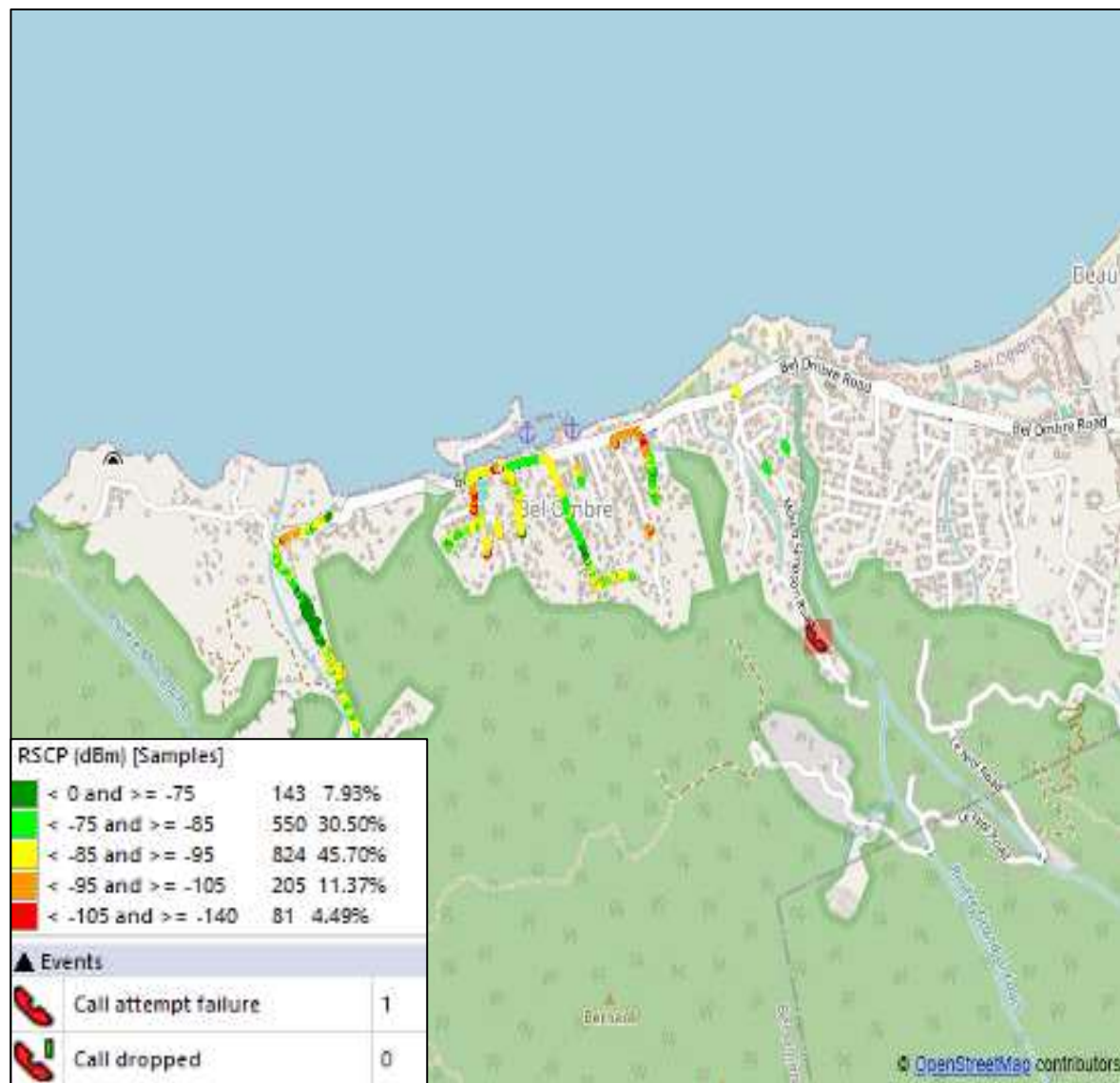
Airtel LC MO



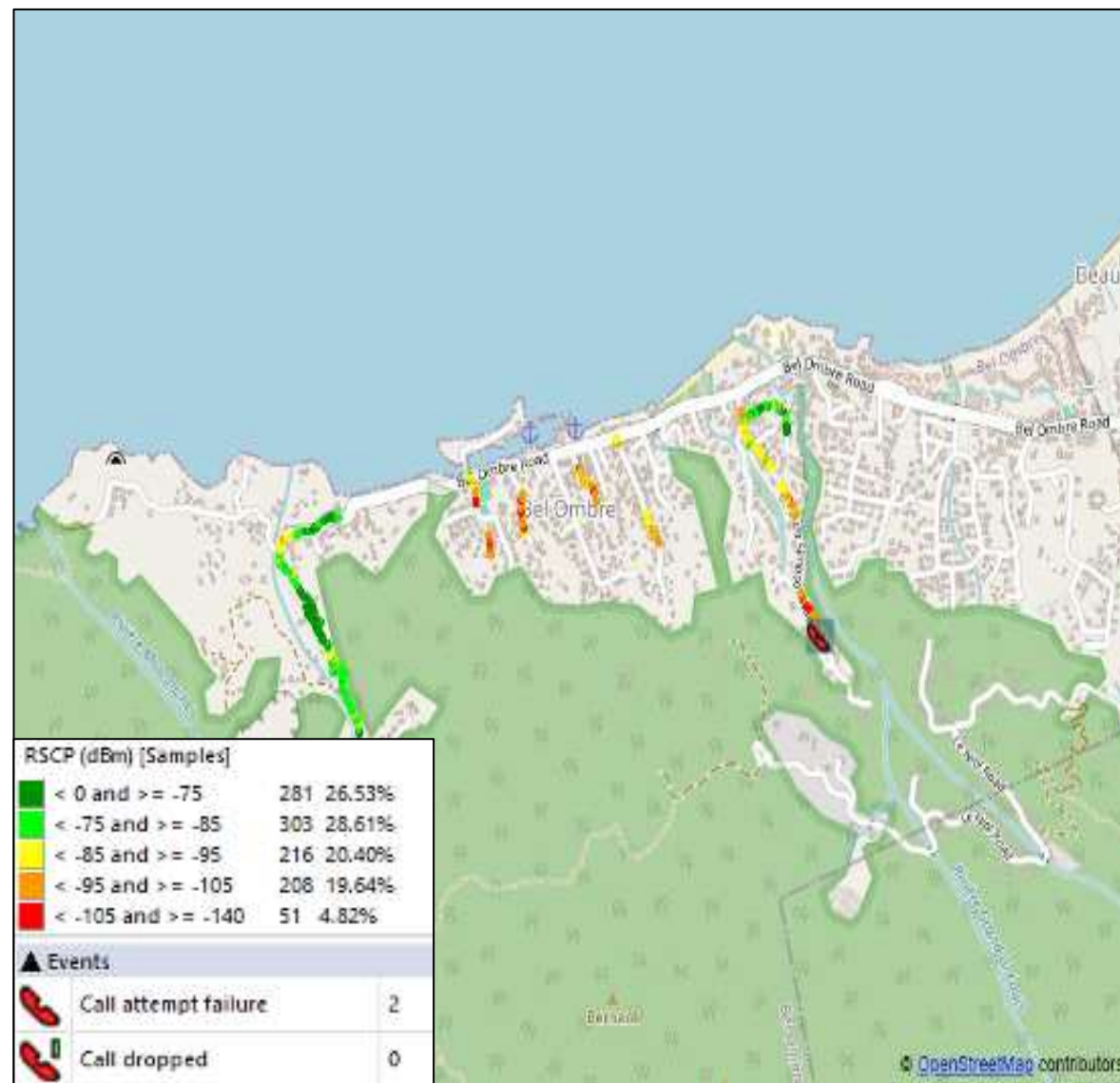
CWS LC MO



Airtel LC MO

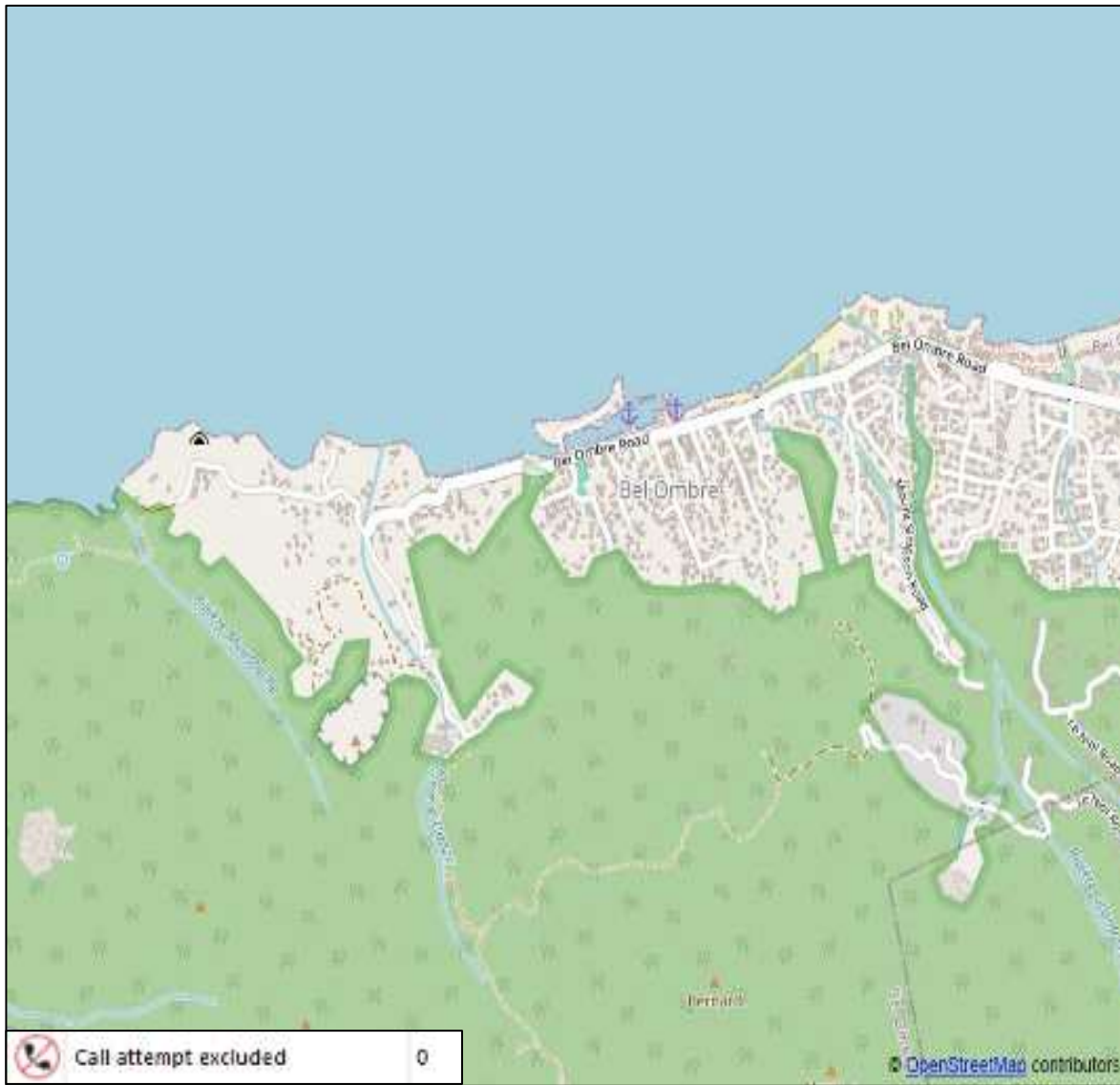


CWS LC MO

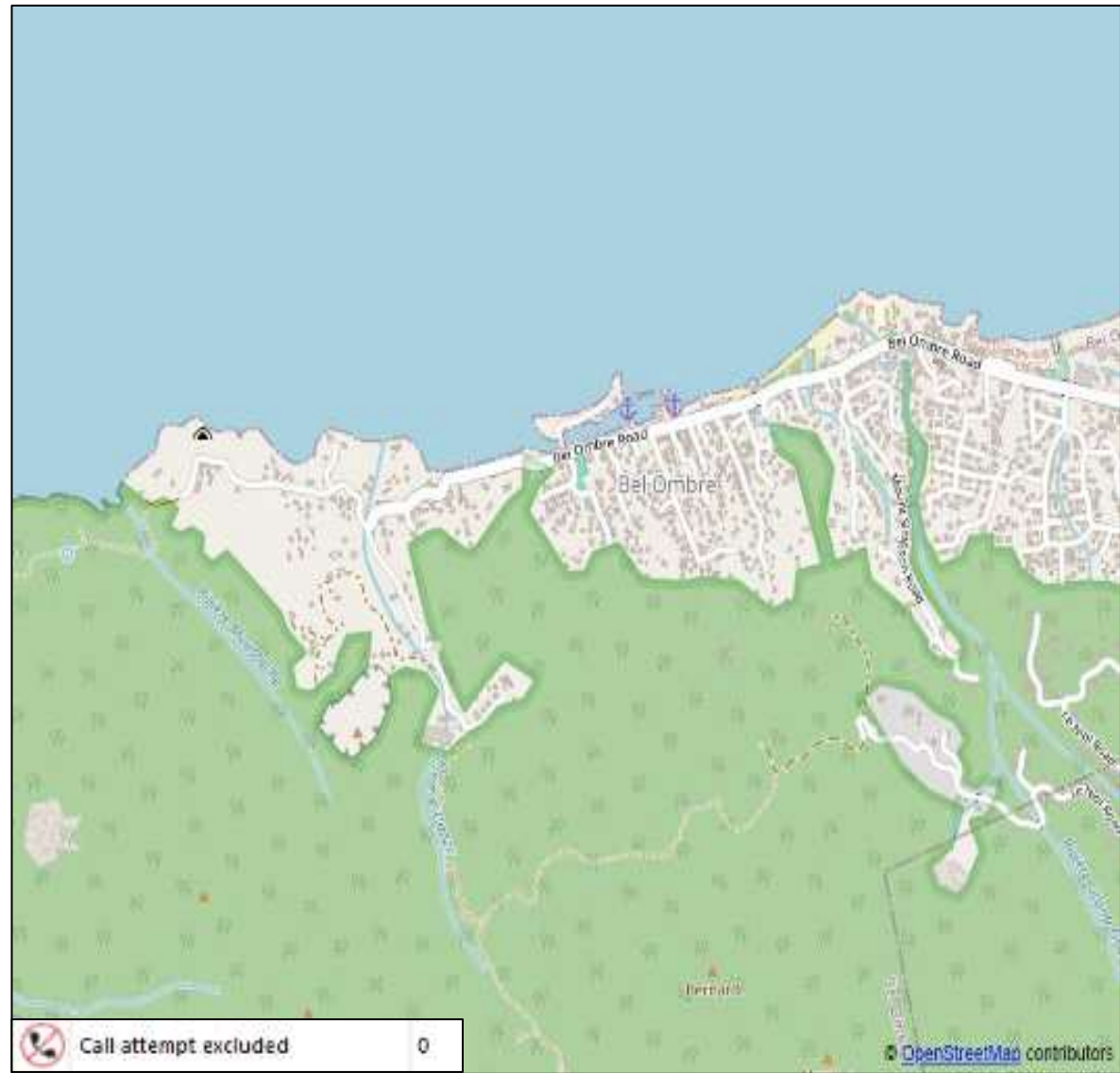


Phase-1 LONG CALL EXCLUDED EVENTS

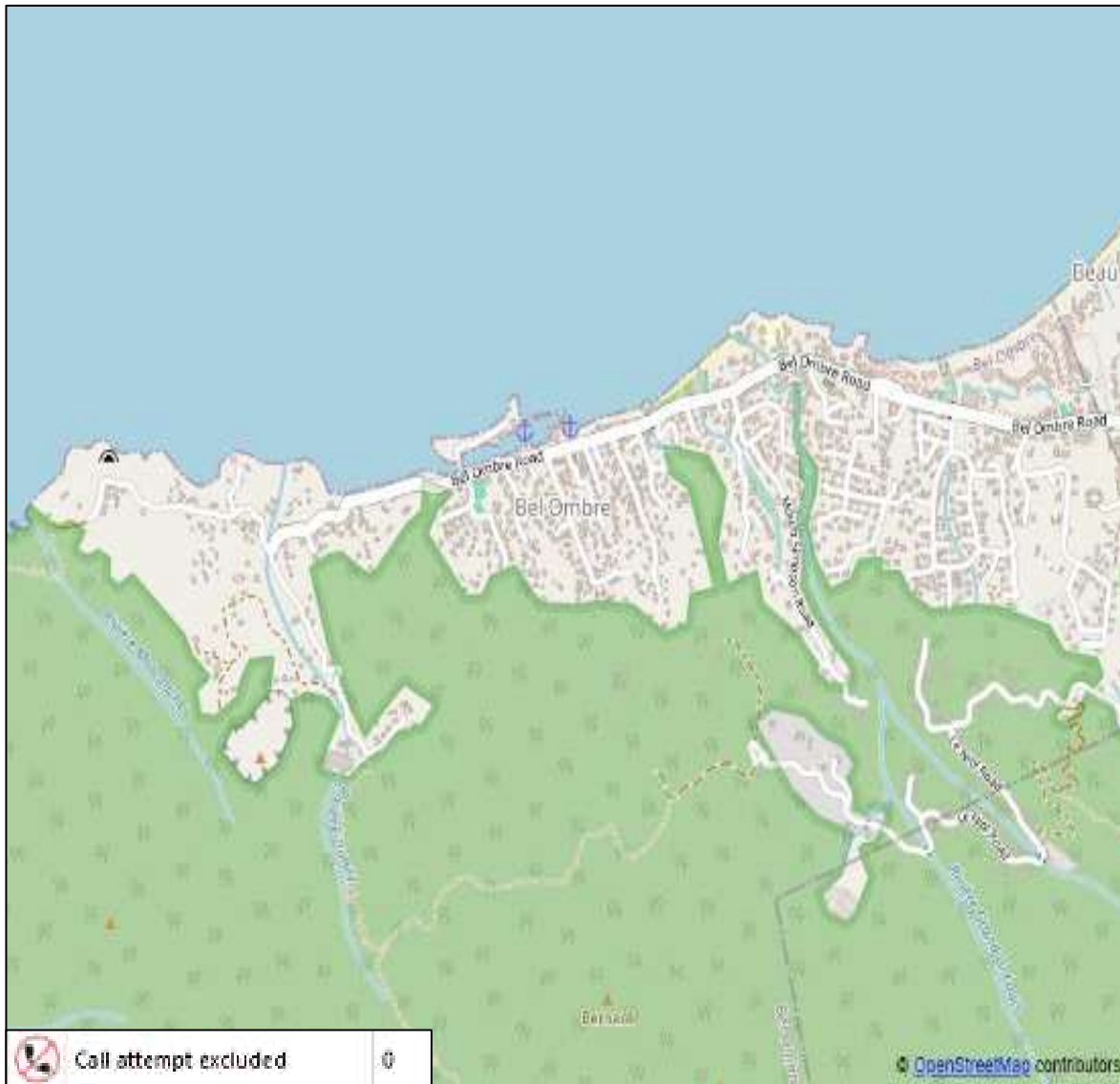
Airtel LC MO



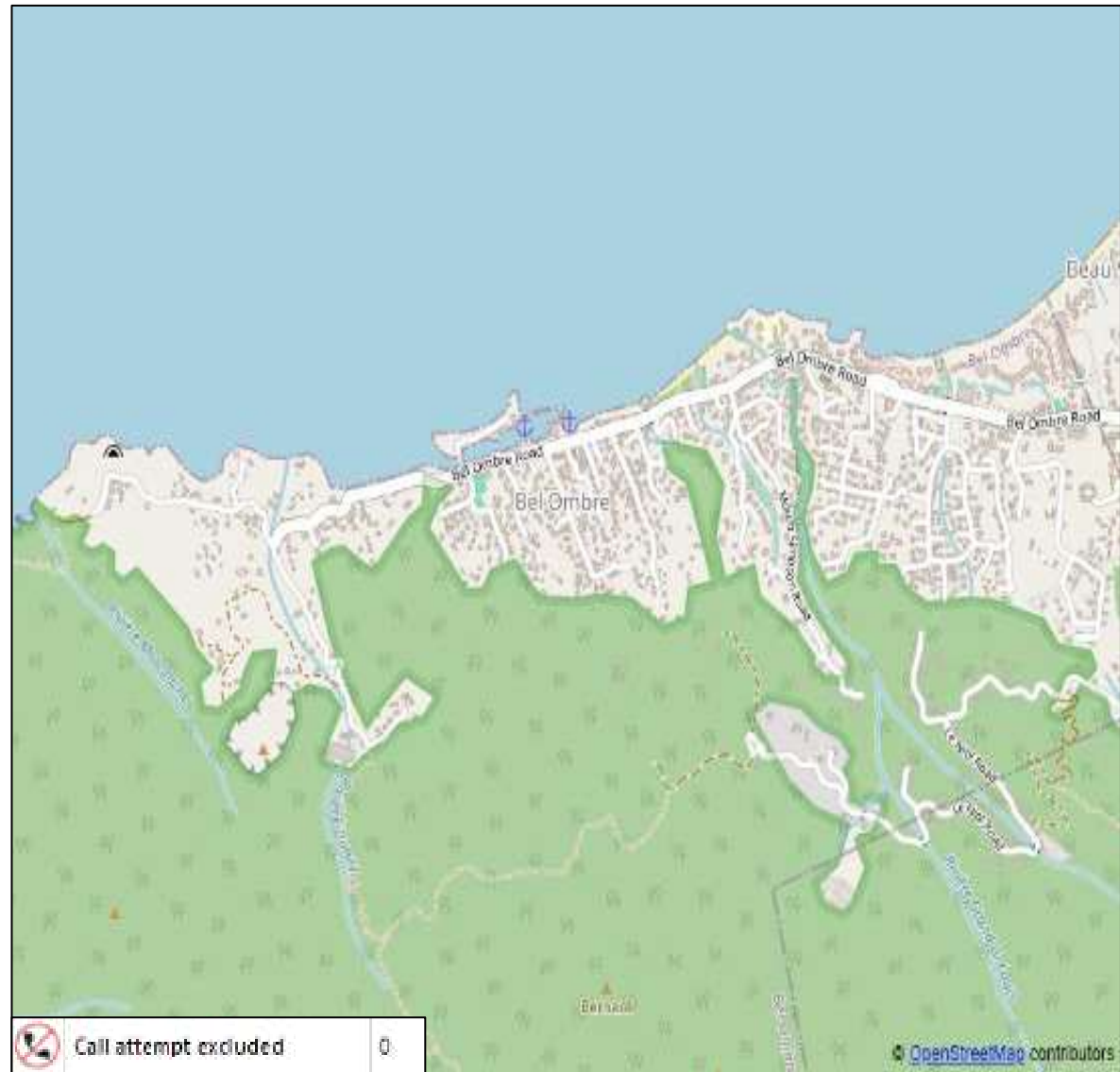
CWS LC MO



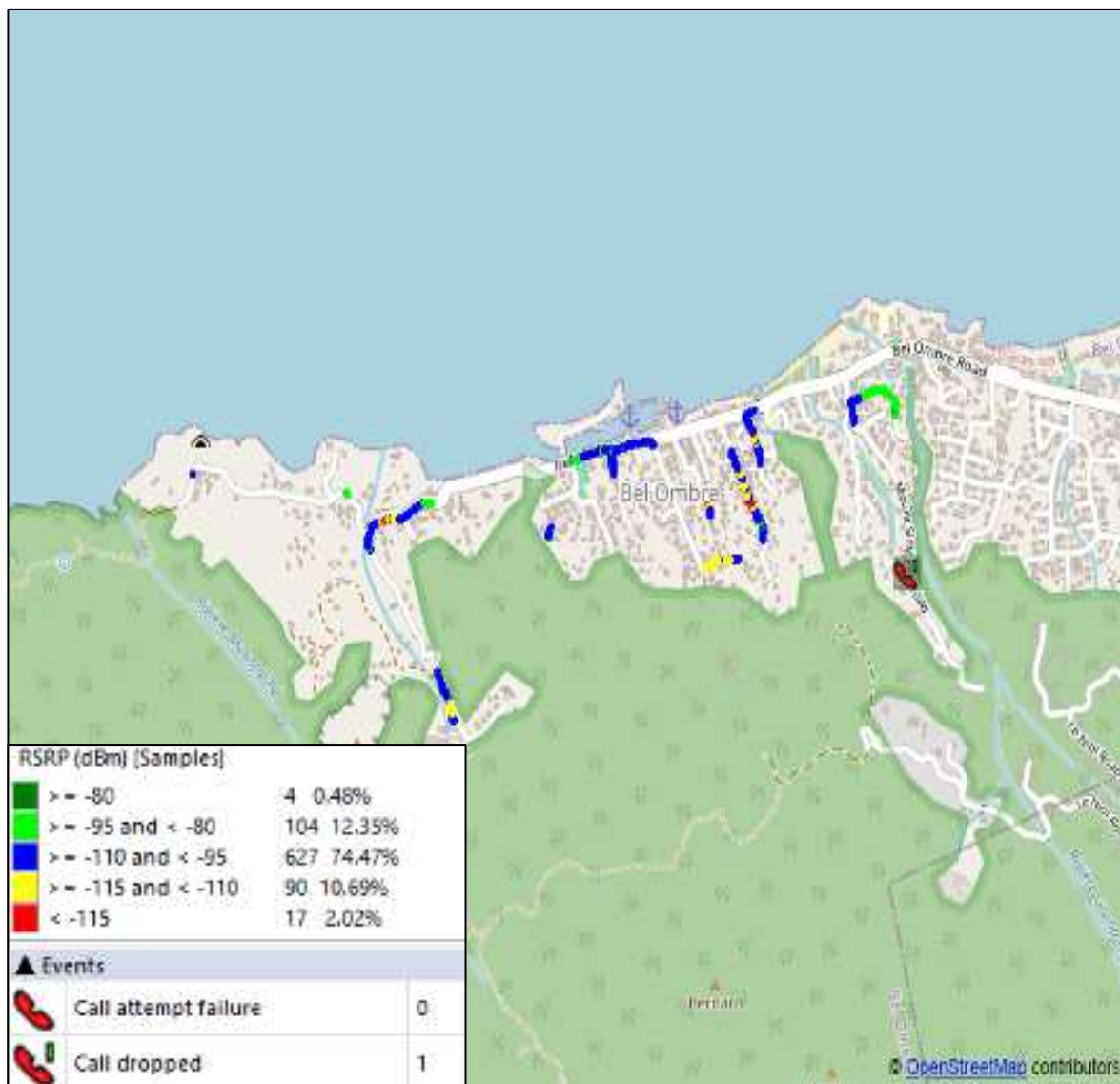
Airtel LC MO



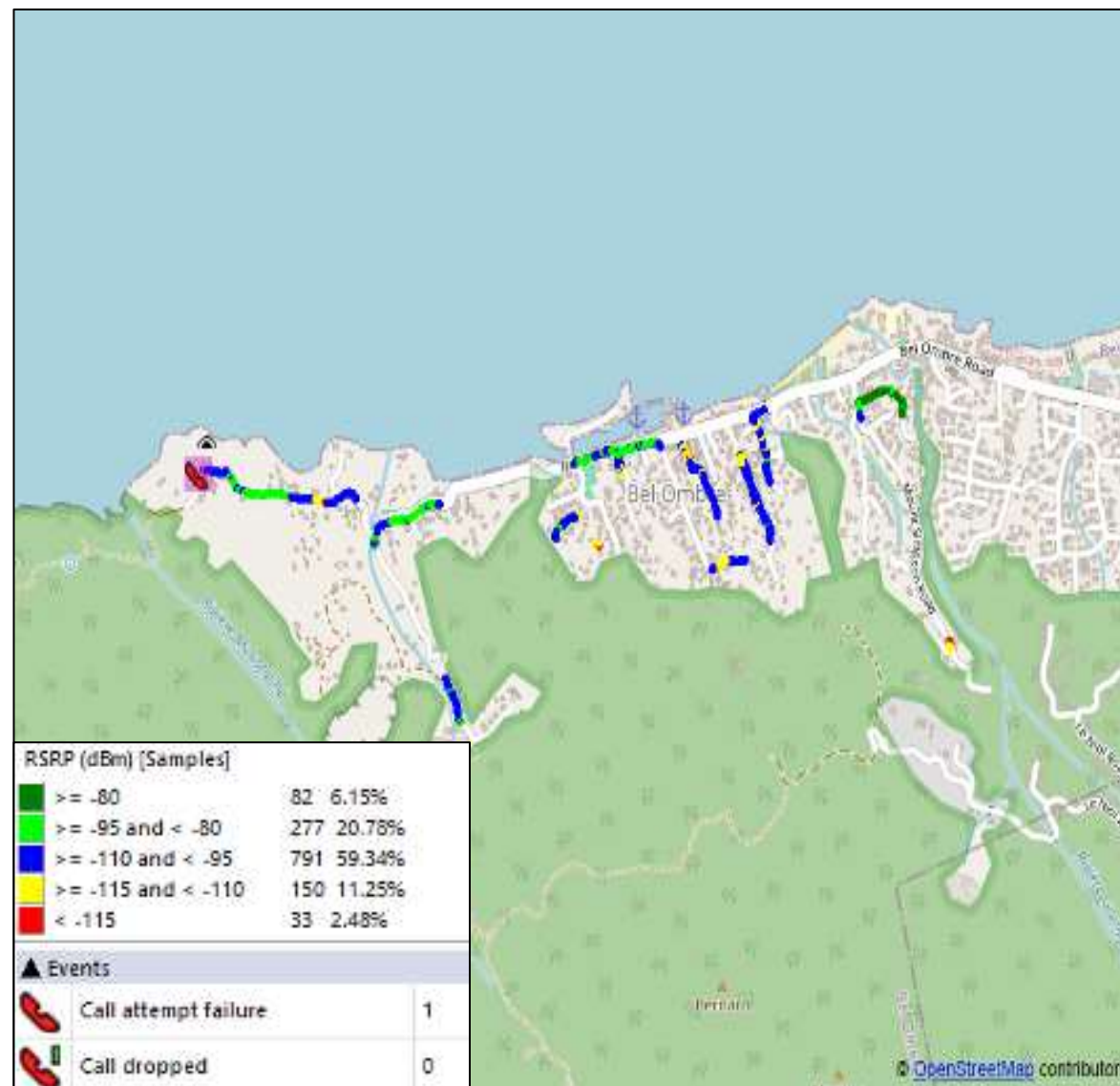
CWS LC MO



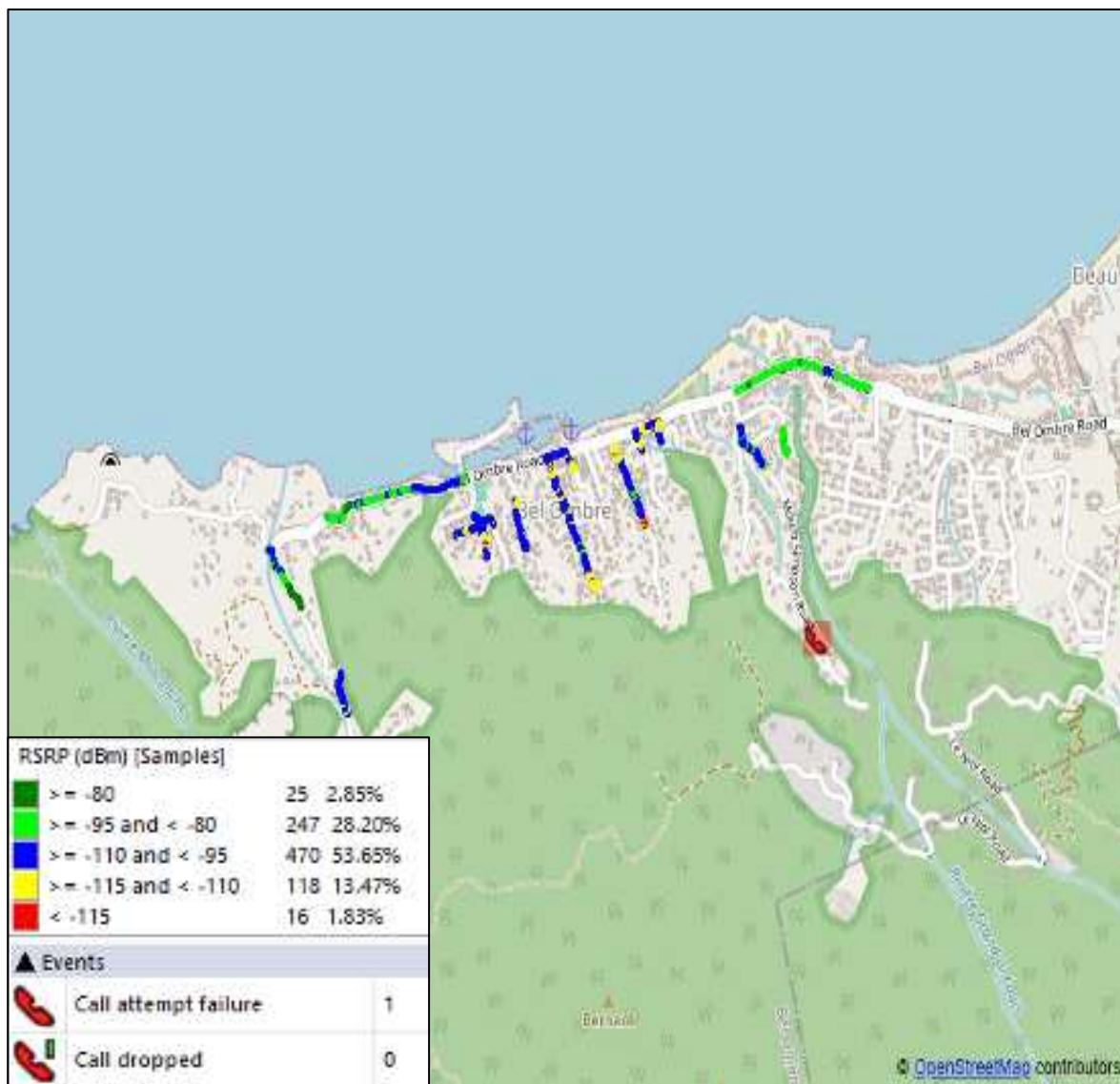
Airtel LC MO



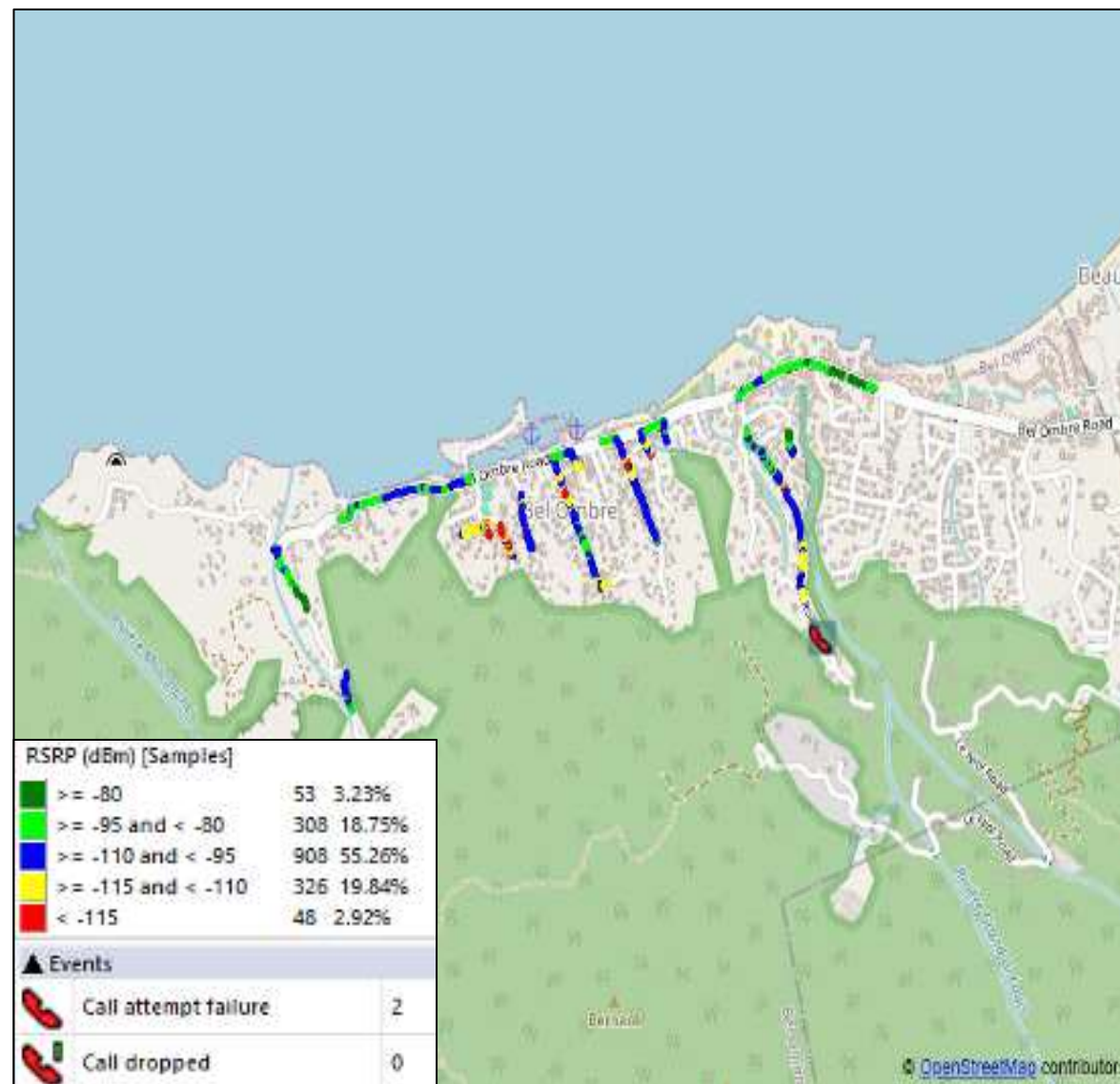
CWS LC MO



Airtel LC MO

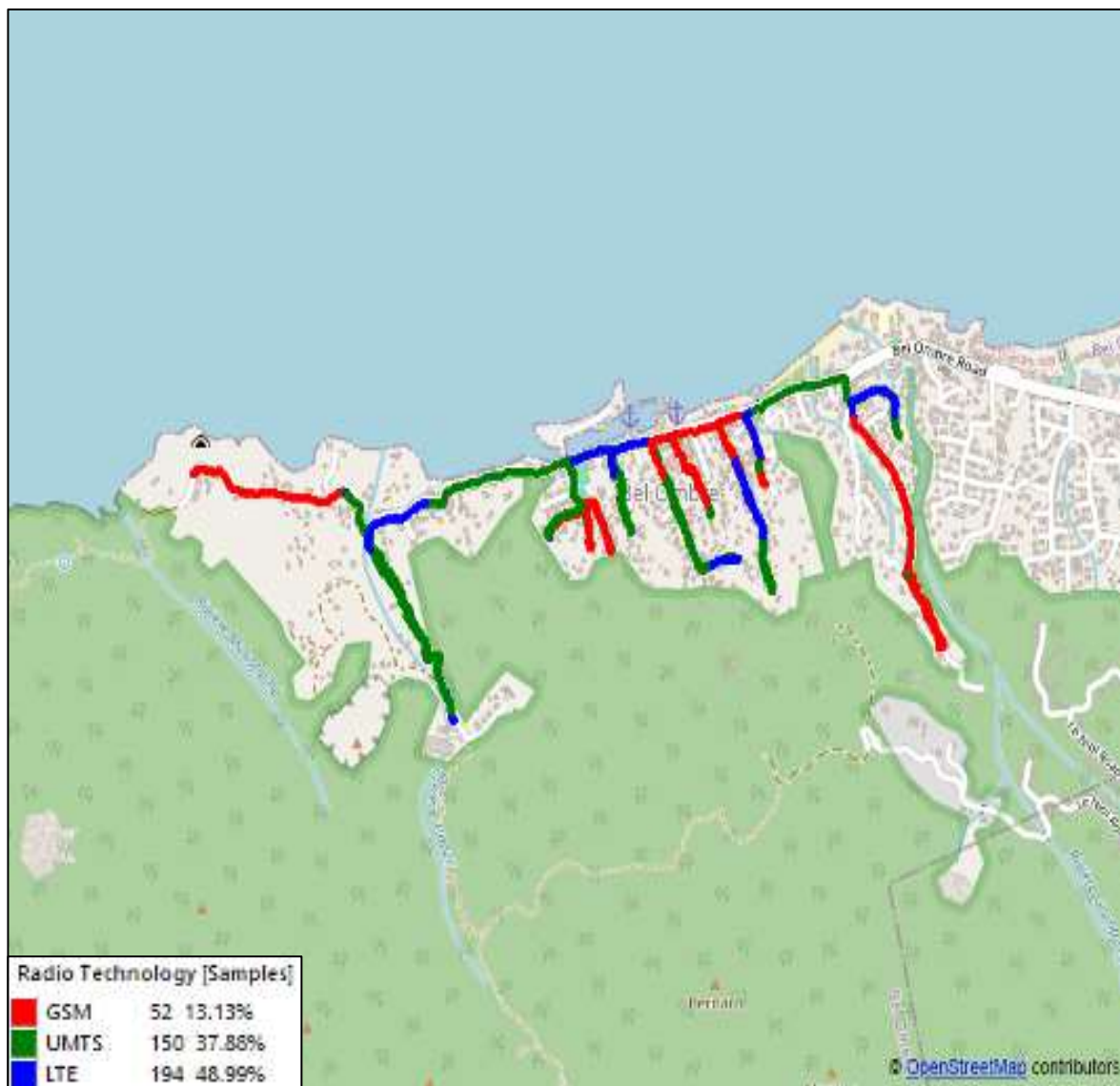


CWS LC MO



LONG CALL DRIVE PLOTS

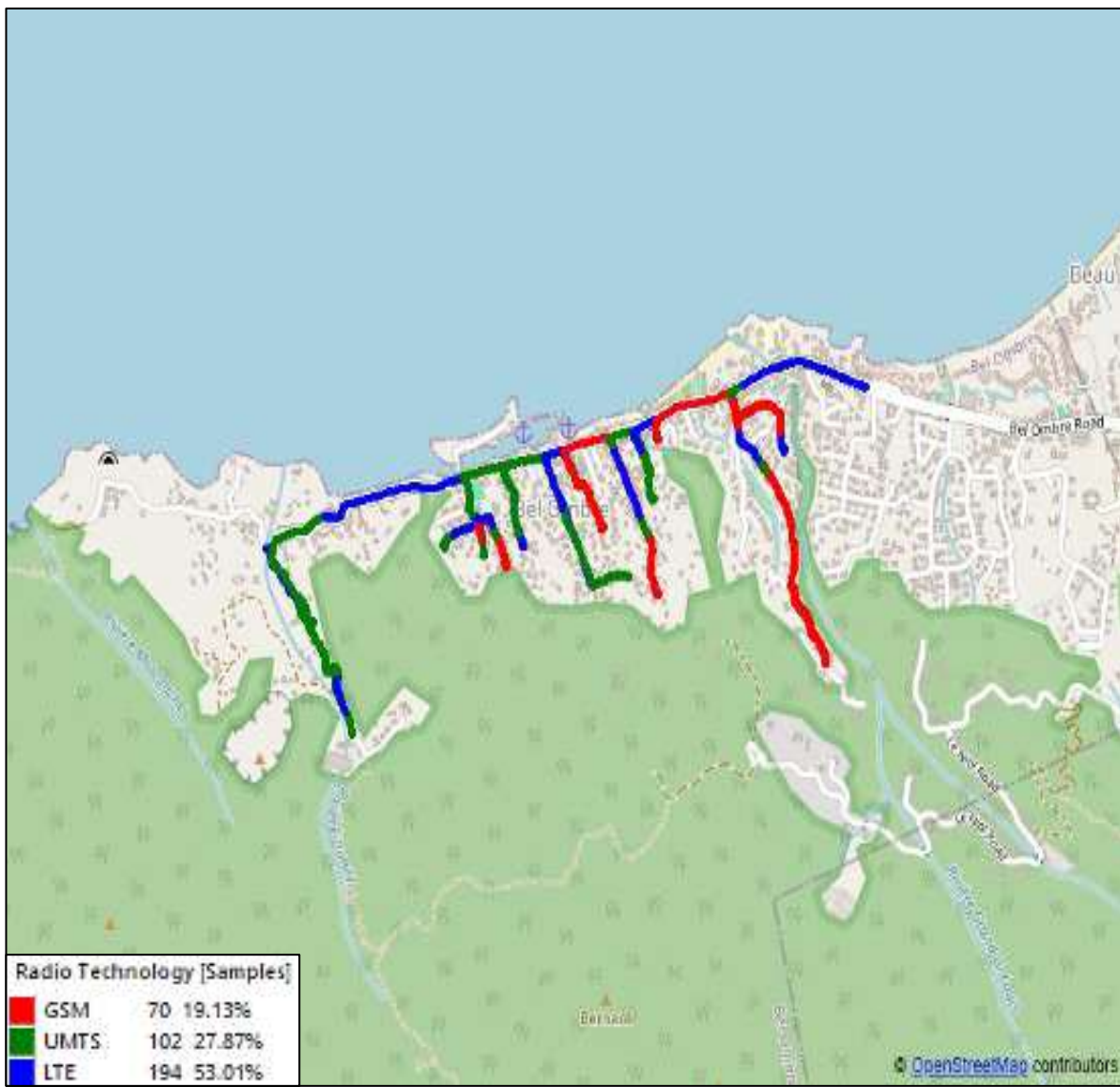
Airtel LC MO



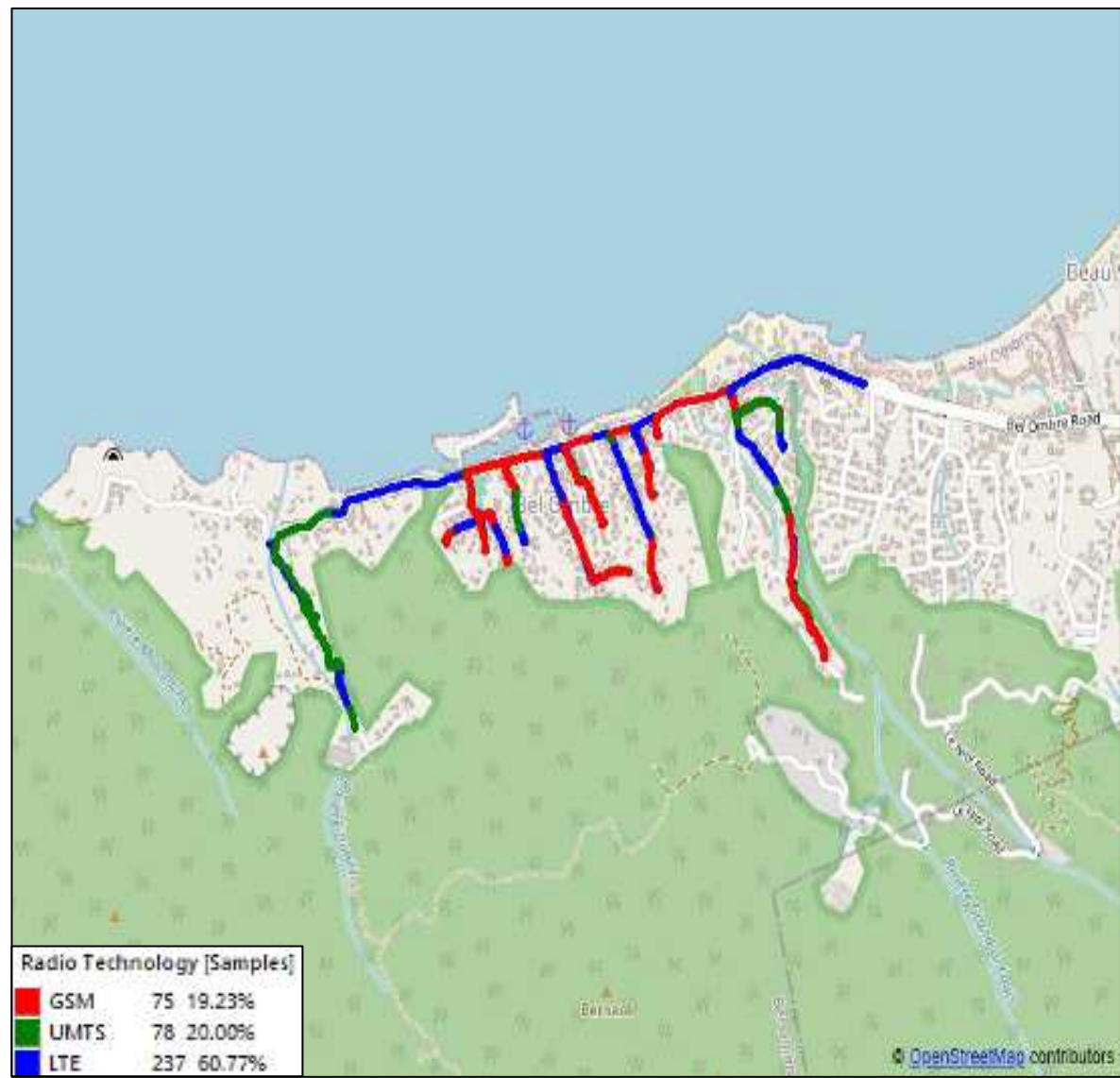
CWS LC MO



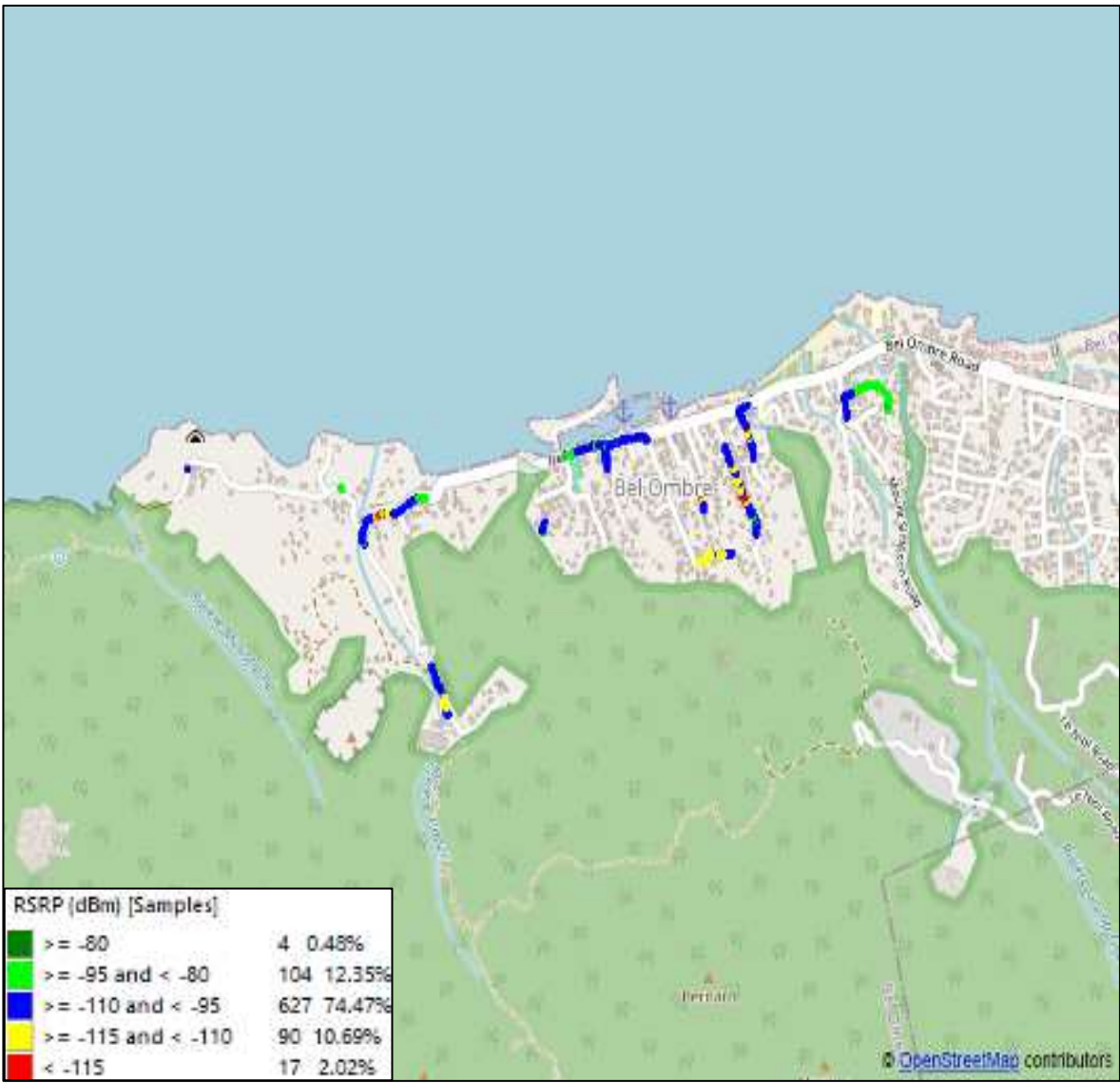
Airtel LC MO



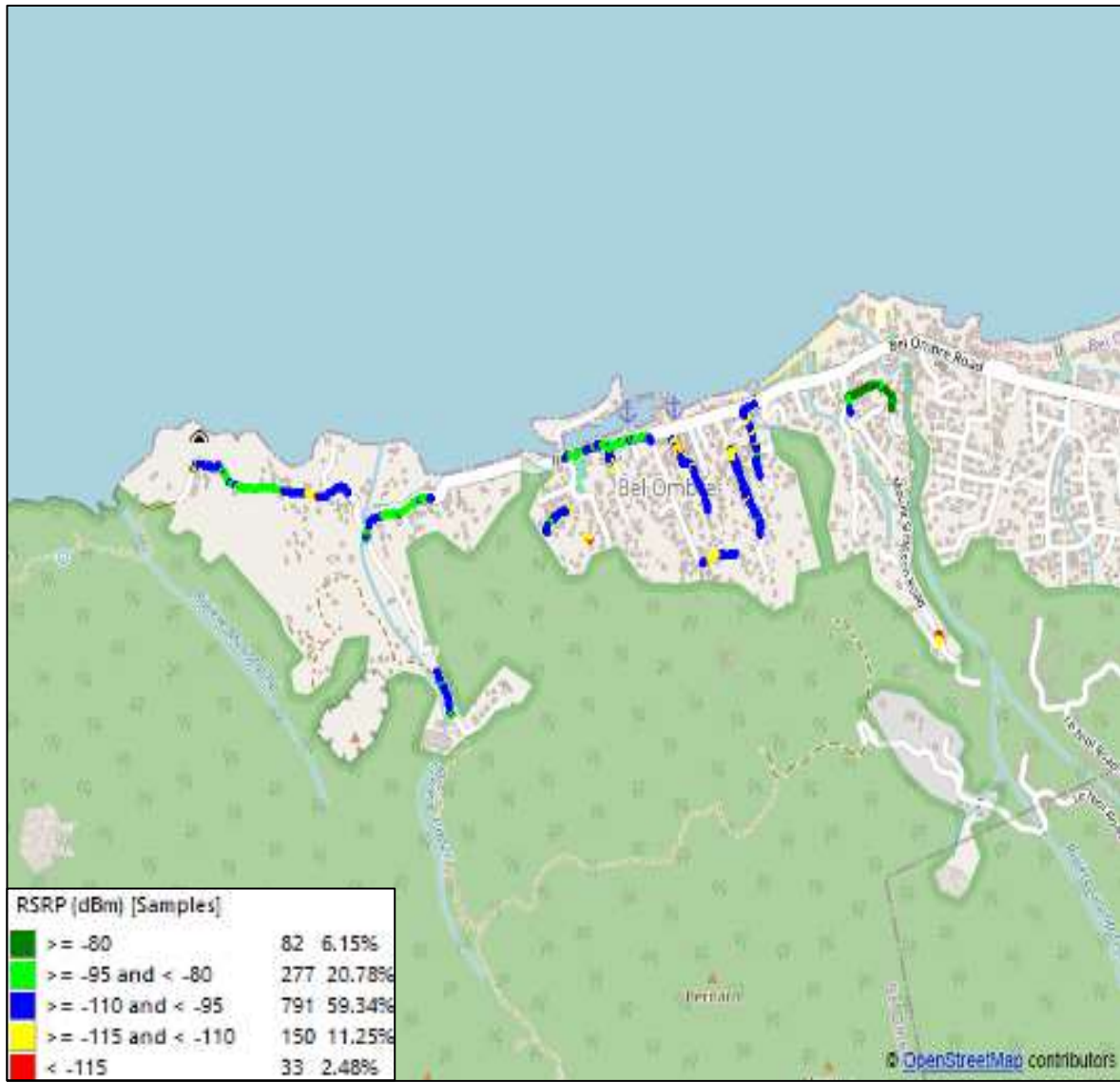
CWS LC MO



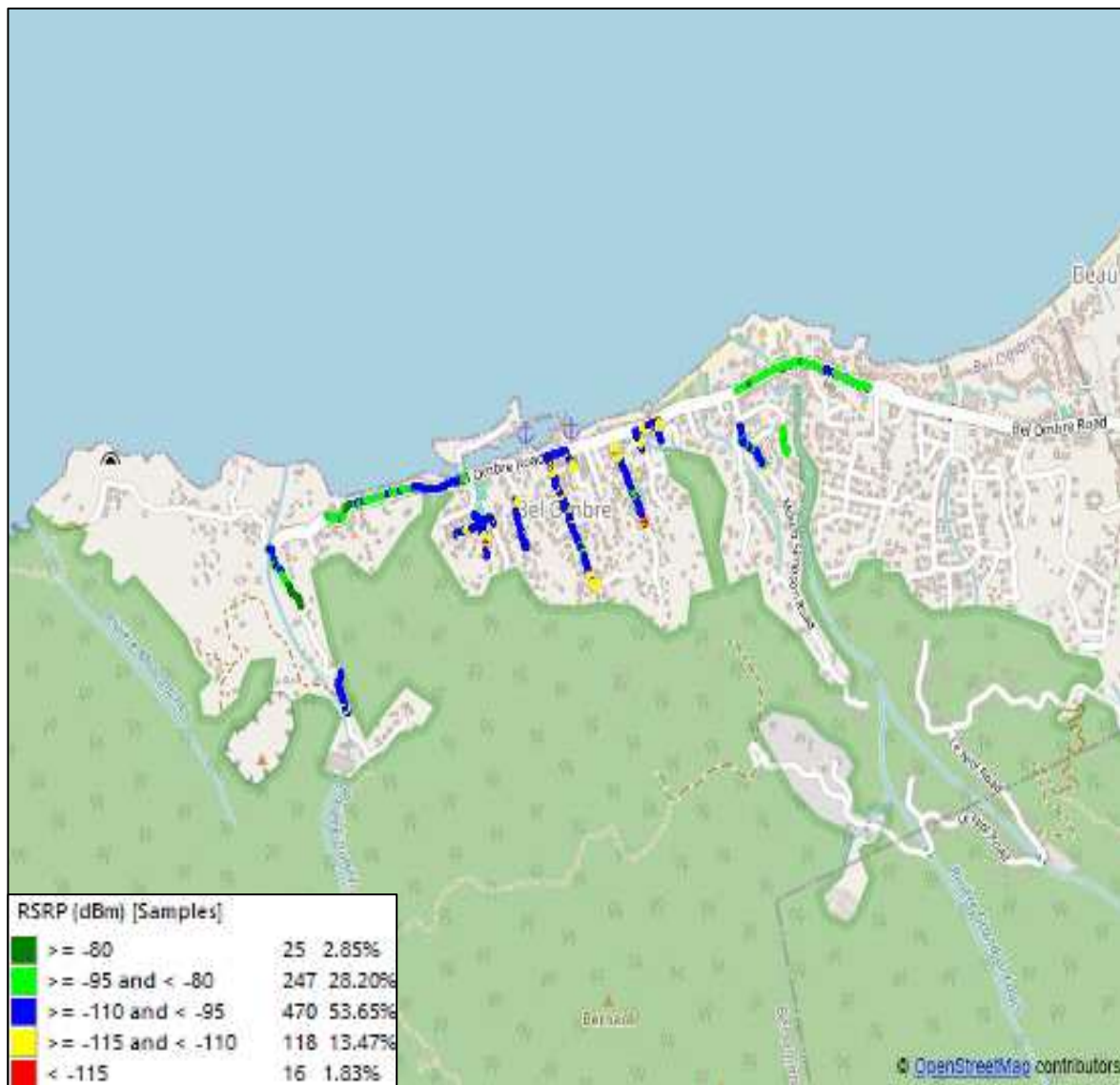
Airtel LC MO



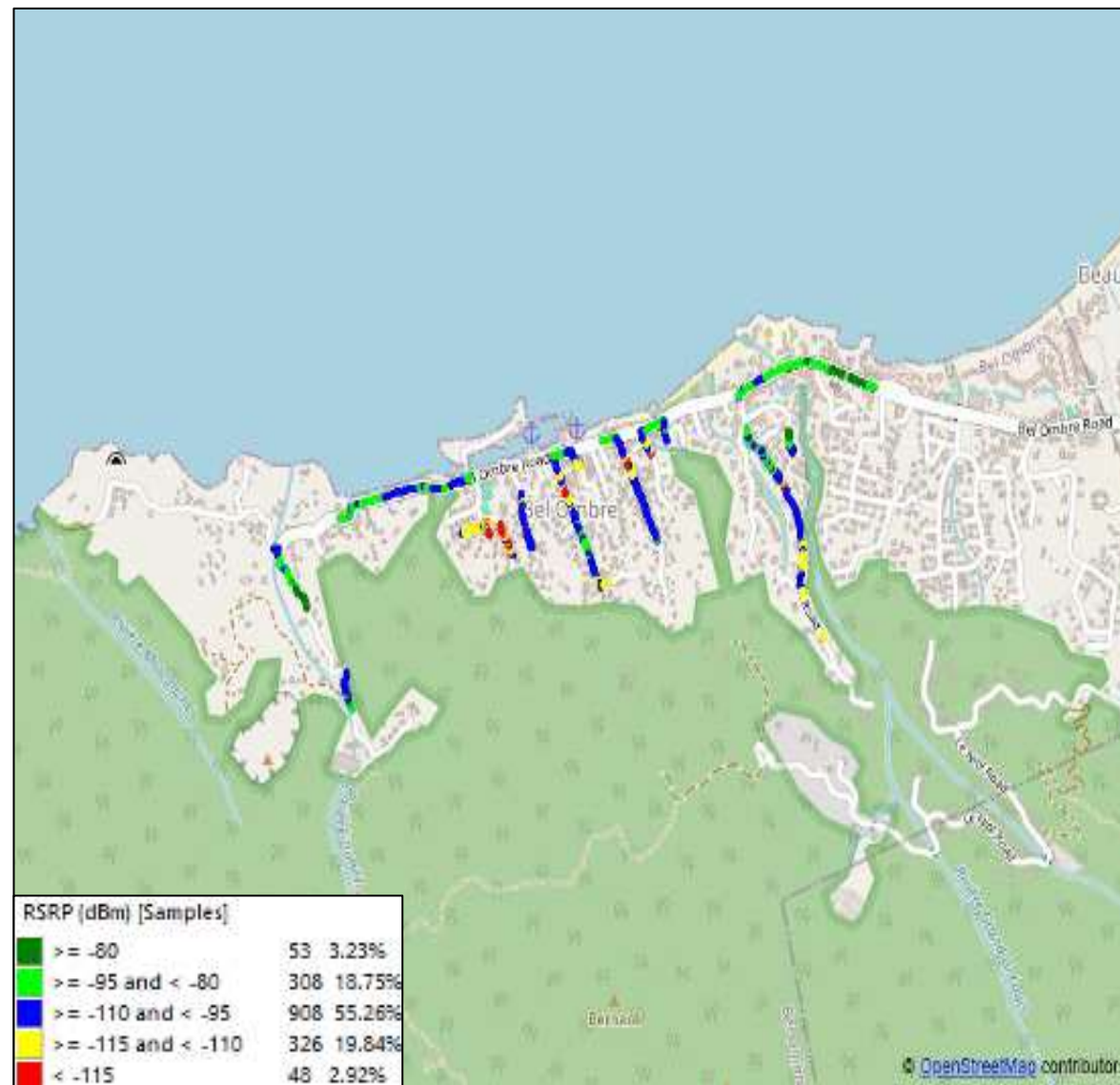
CWS LC MO



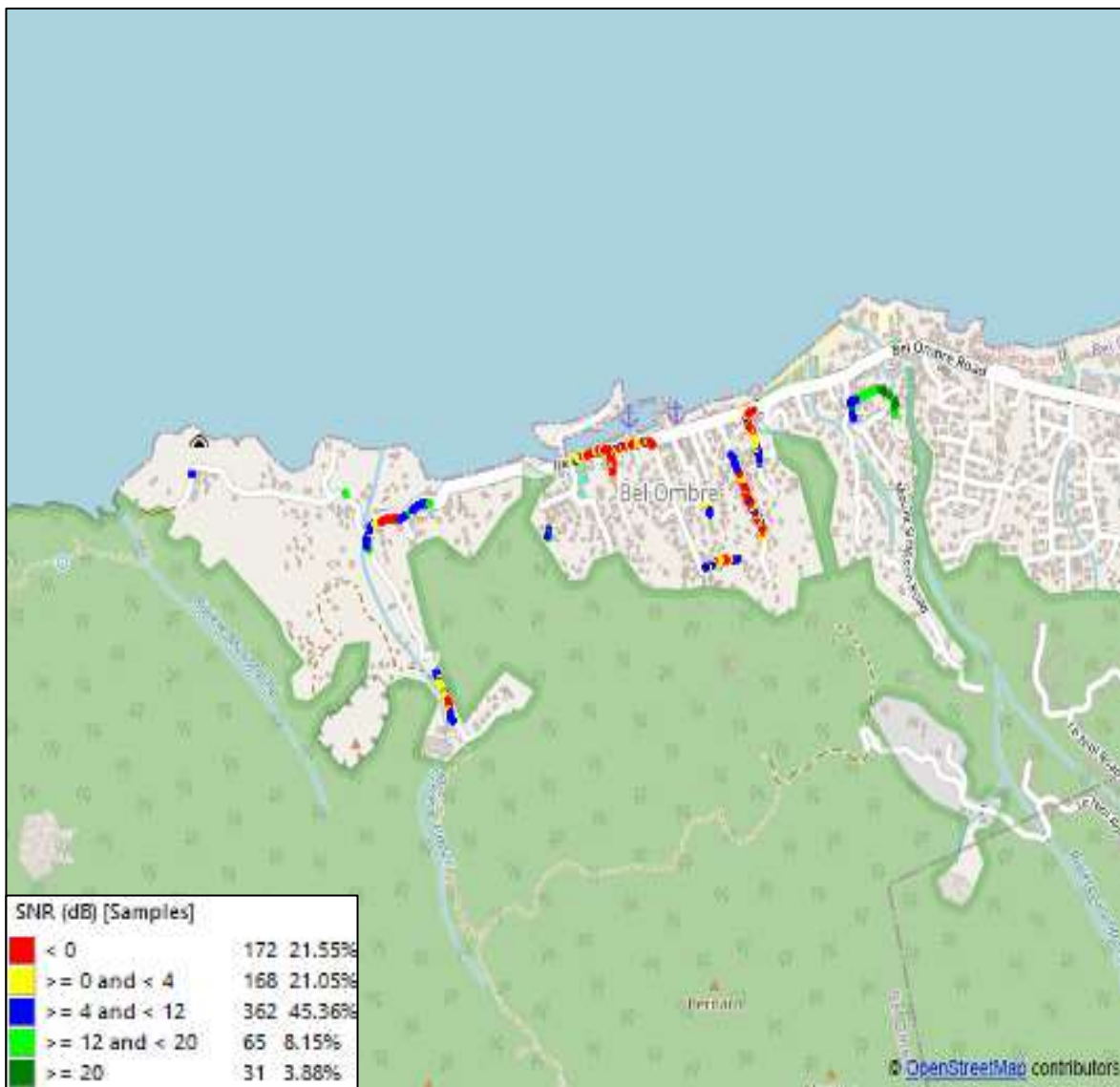
Airtel LC MO



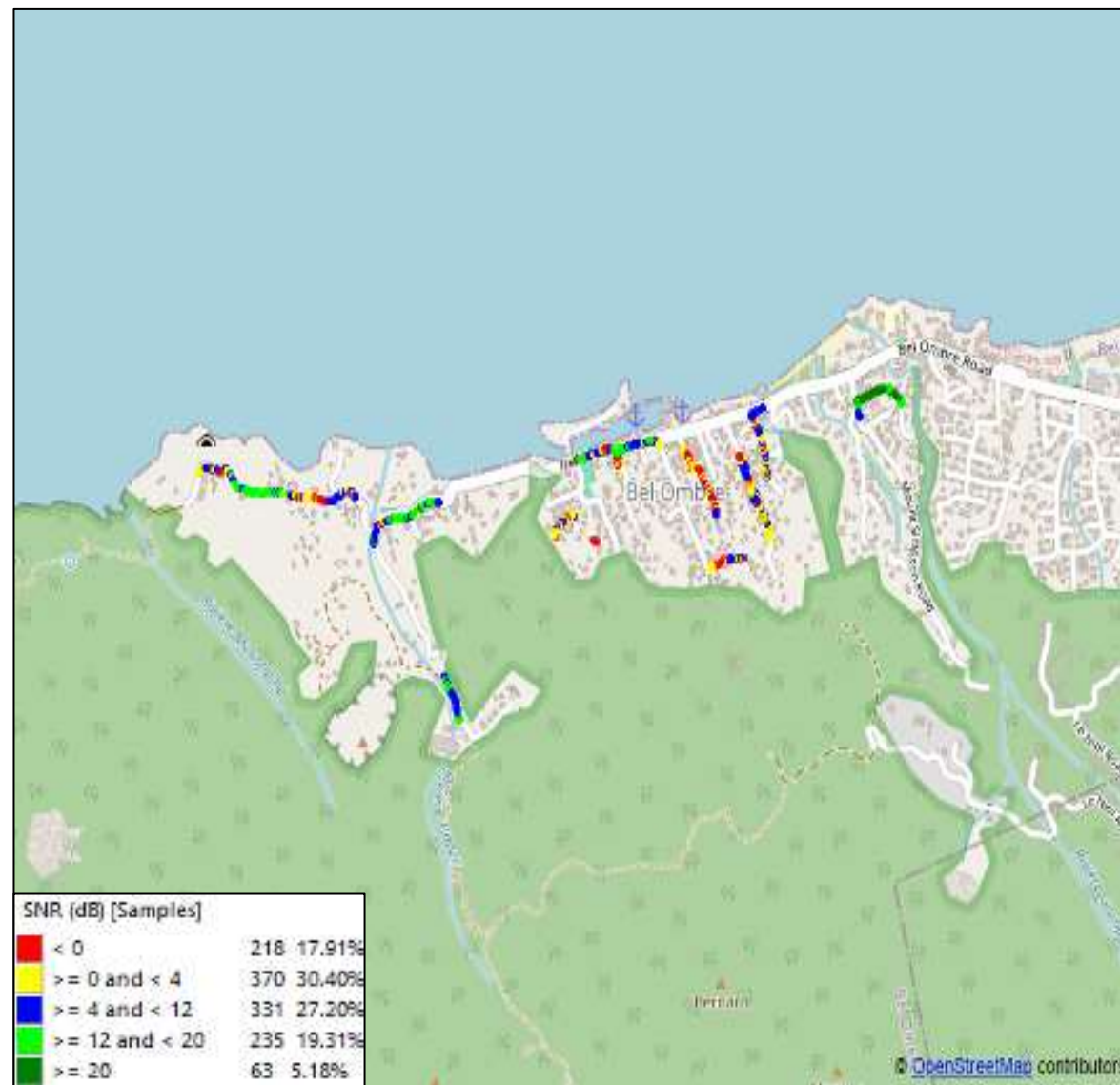
CWS LC MO



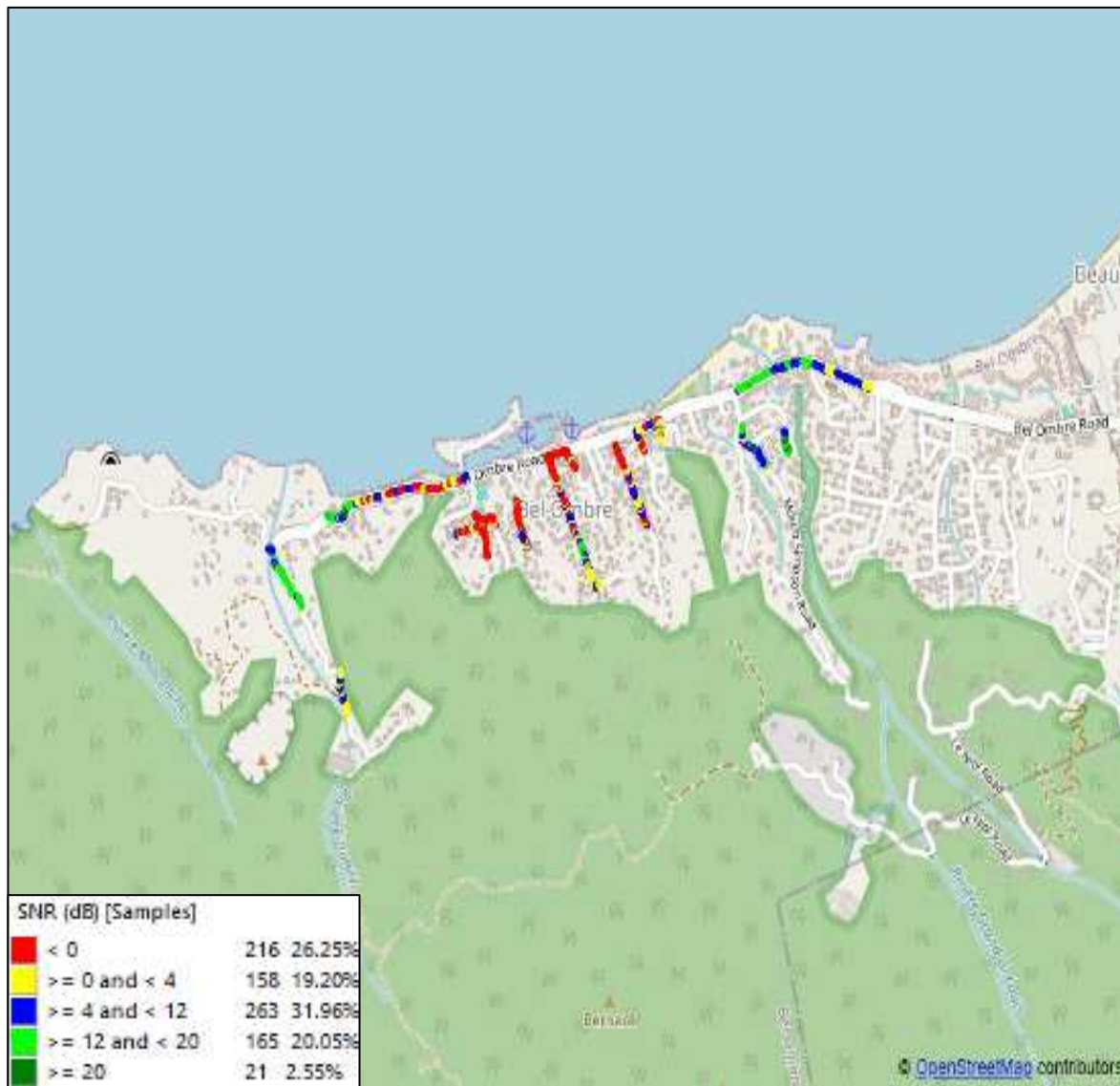
Airtel LC MO



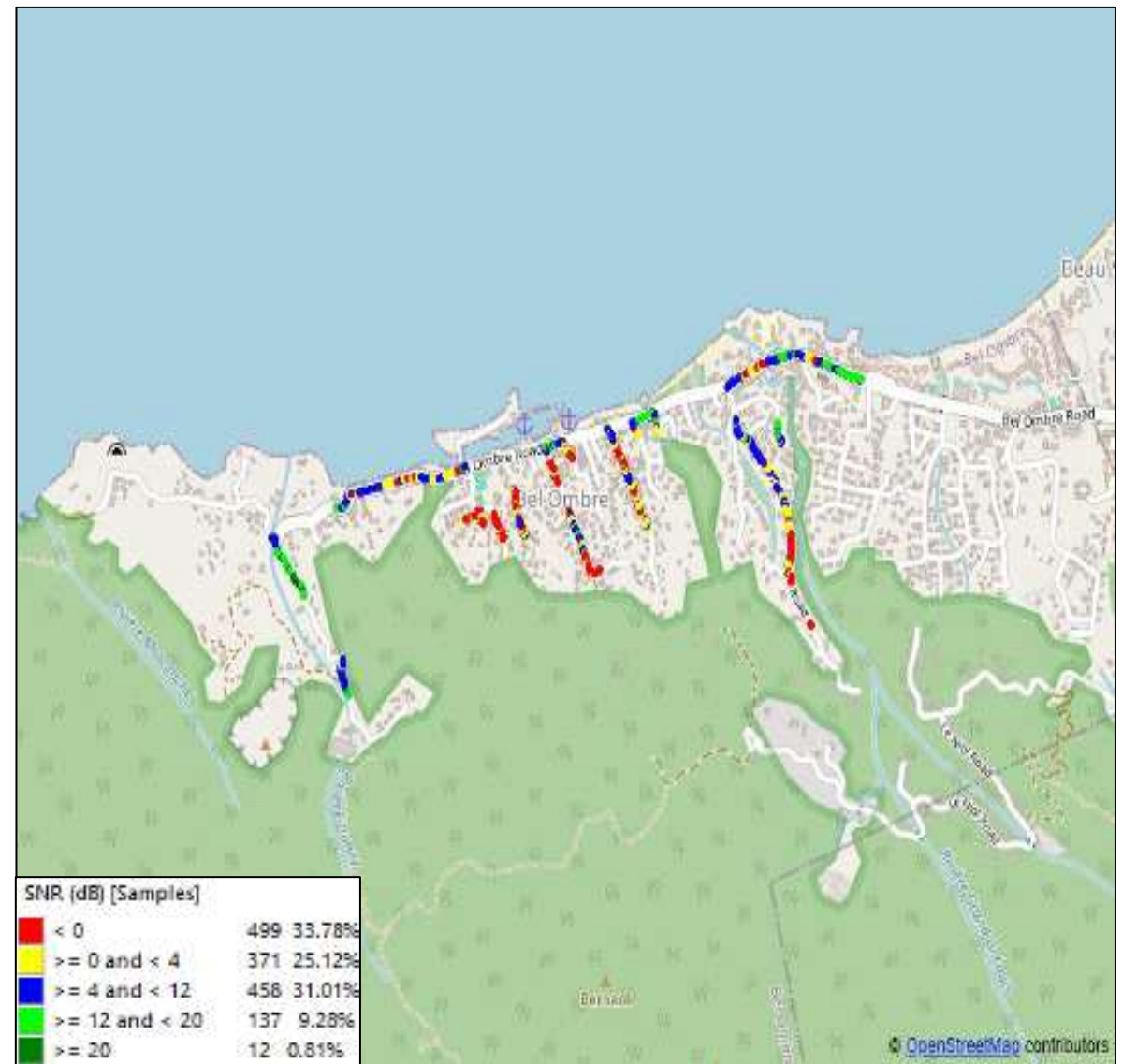
CWS LC MO



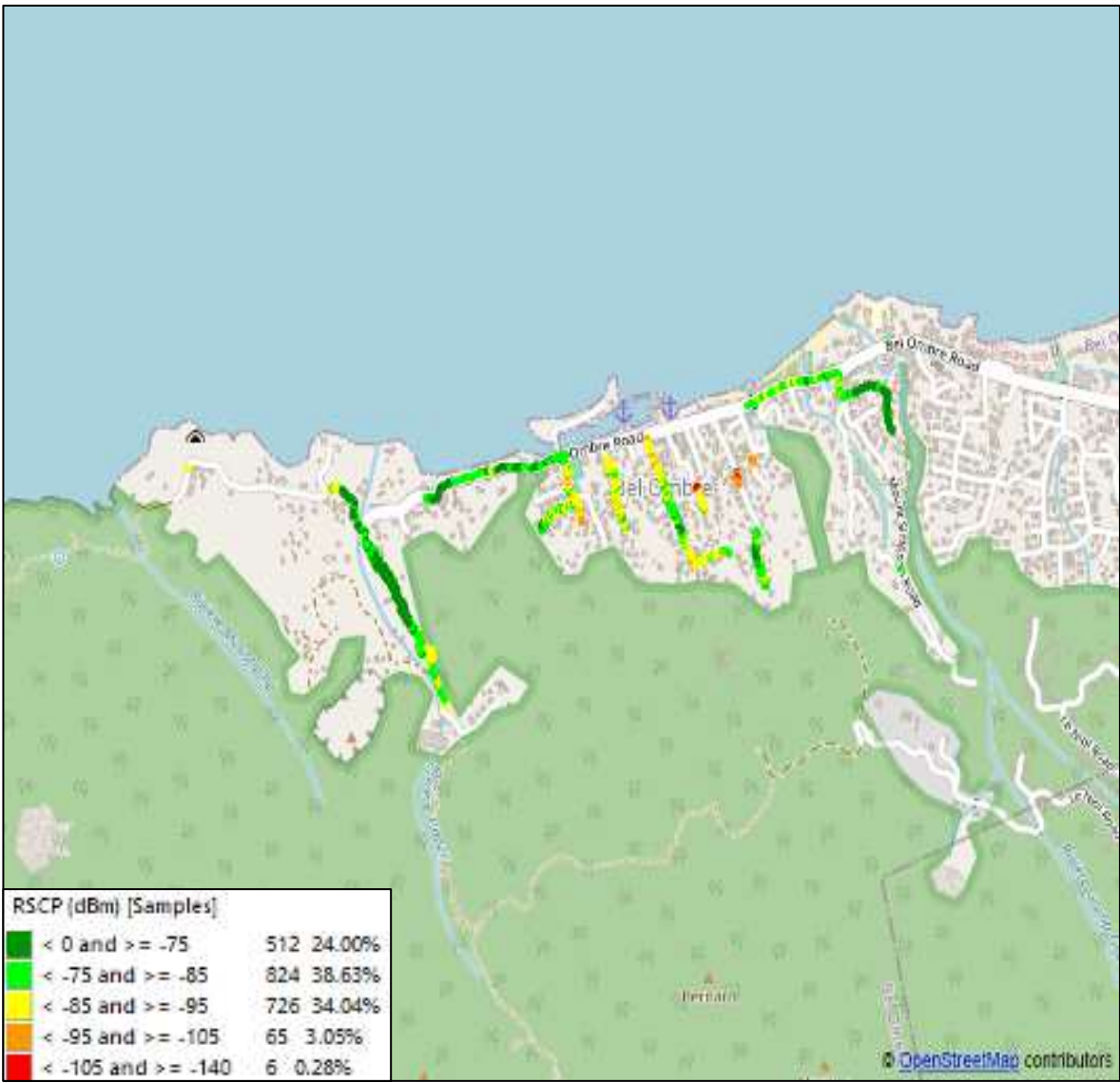
Airtel LC MO



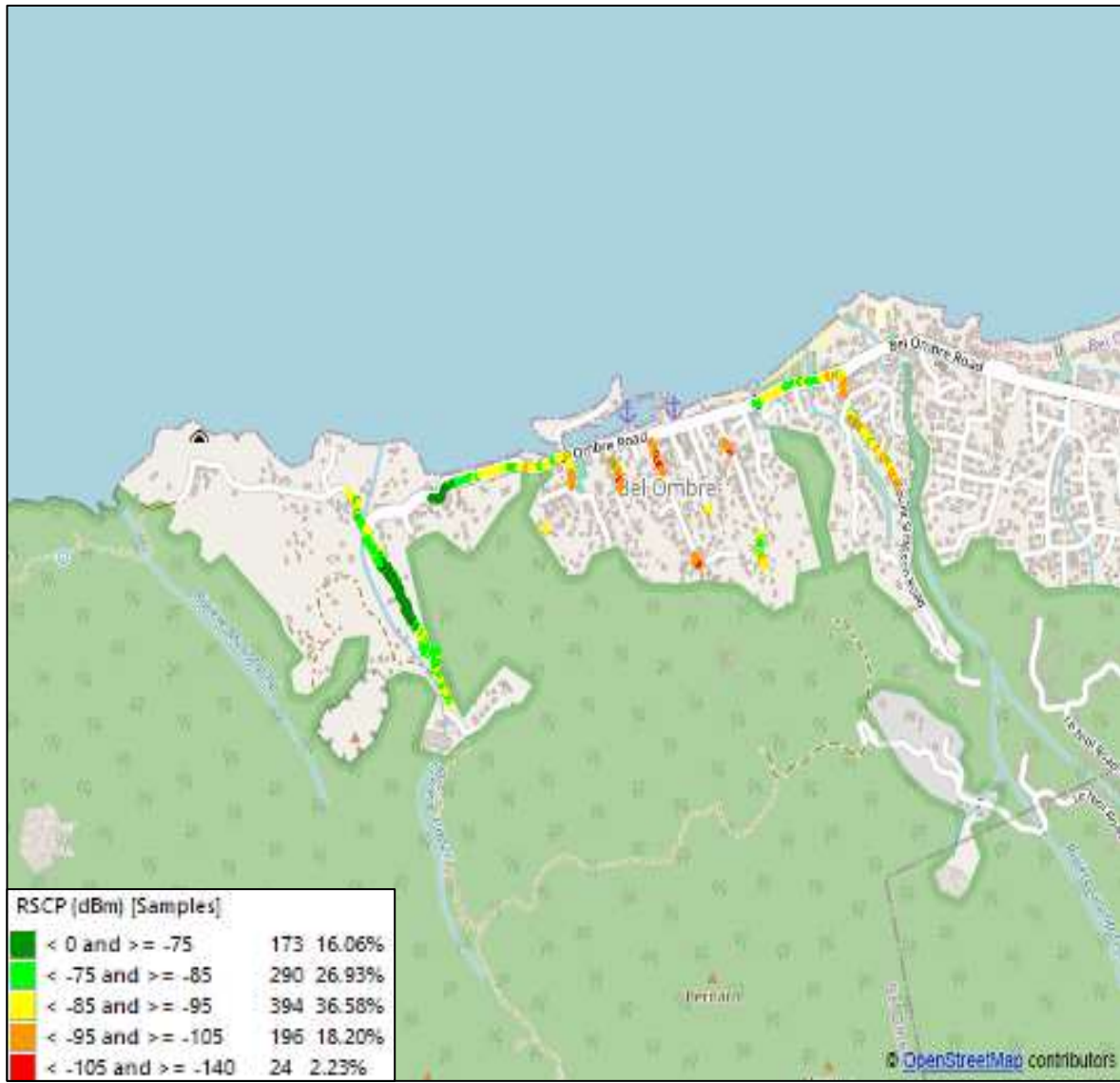
CWS LC MO



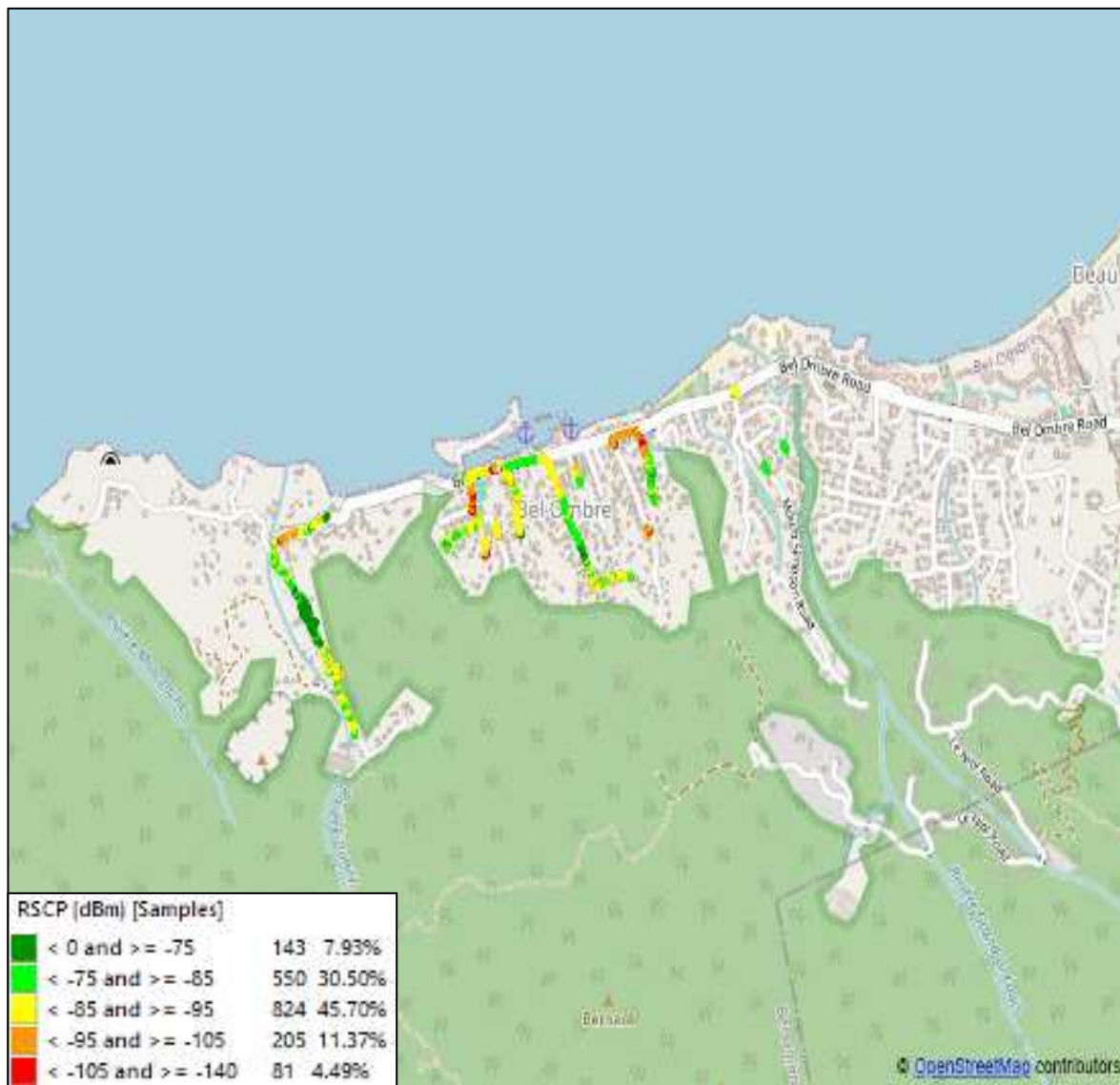
Airtel LC MO



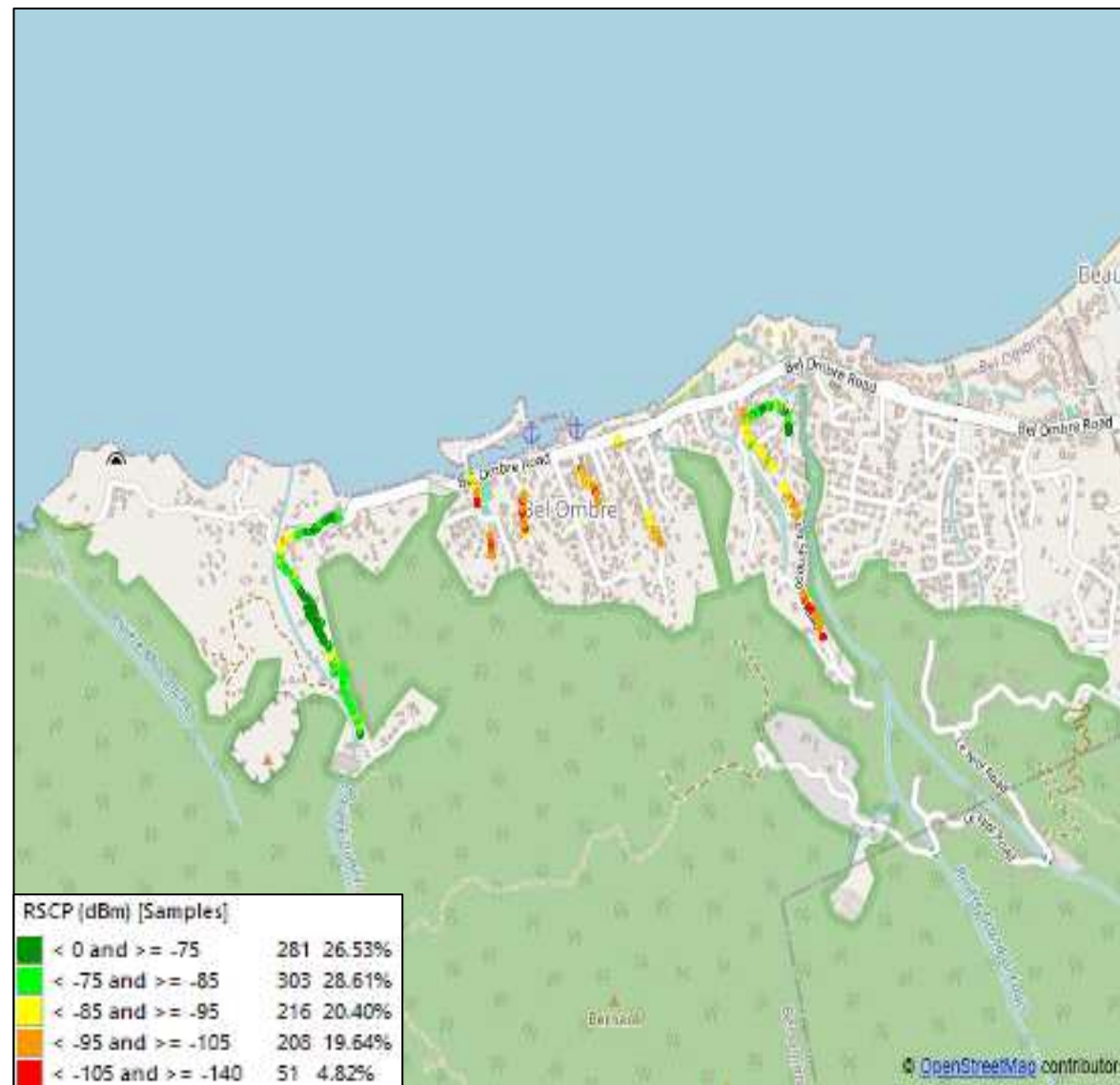
CWS LC MO



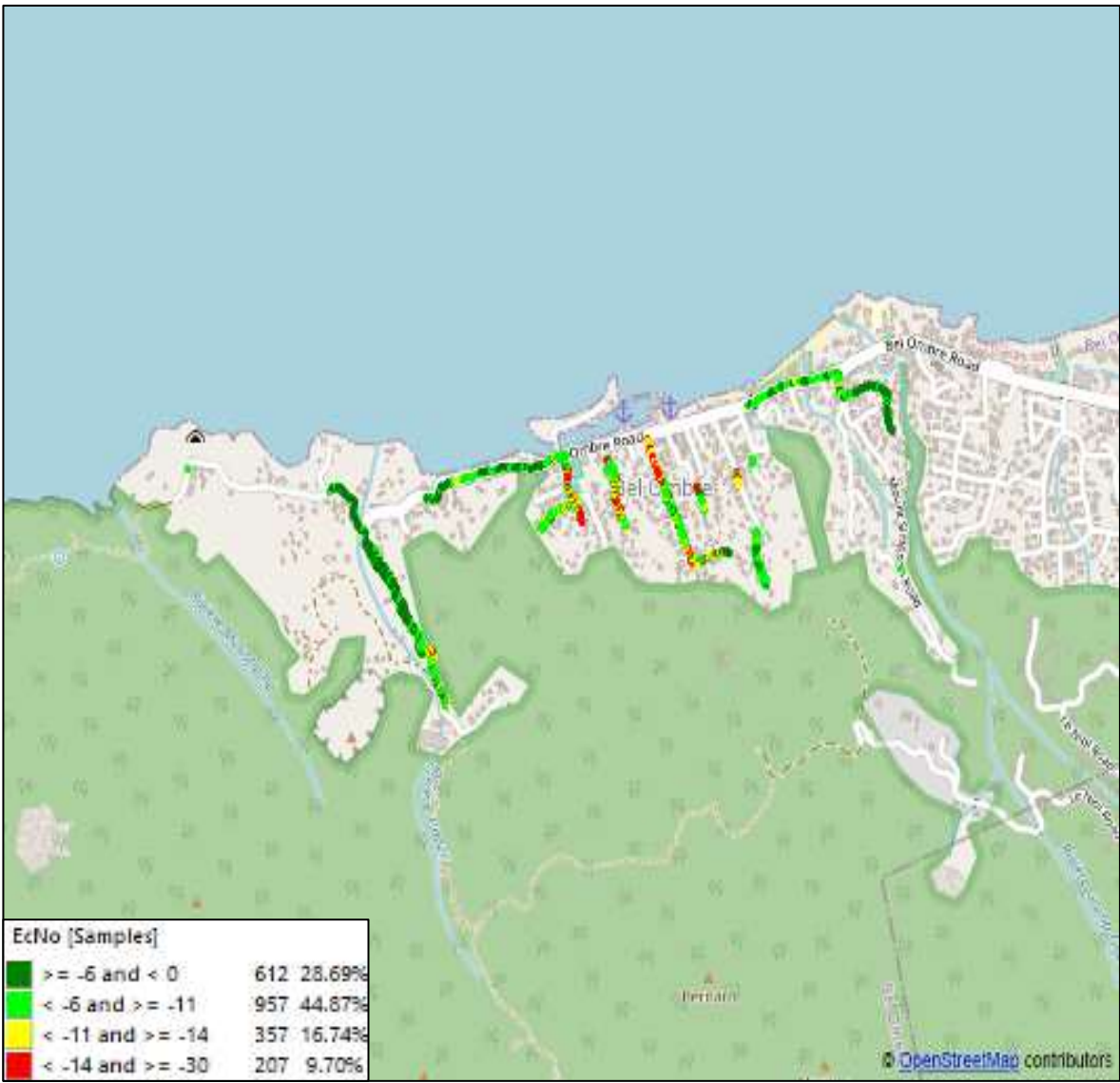
Airtel LC MO



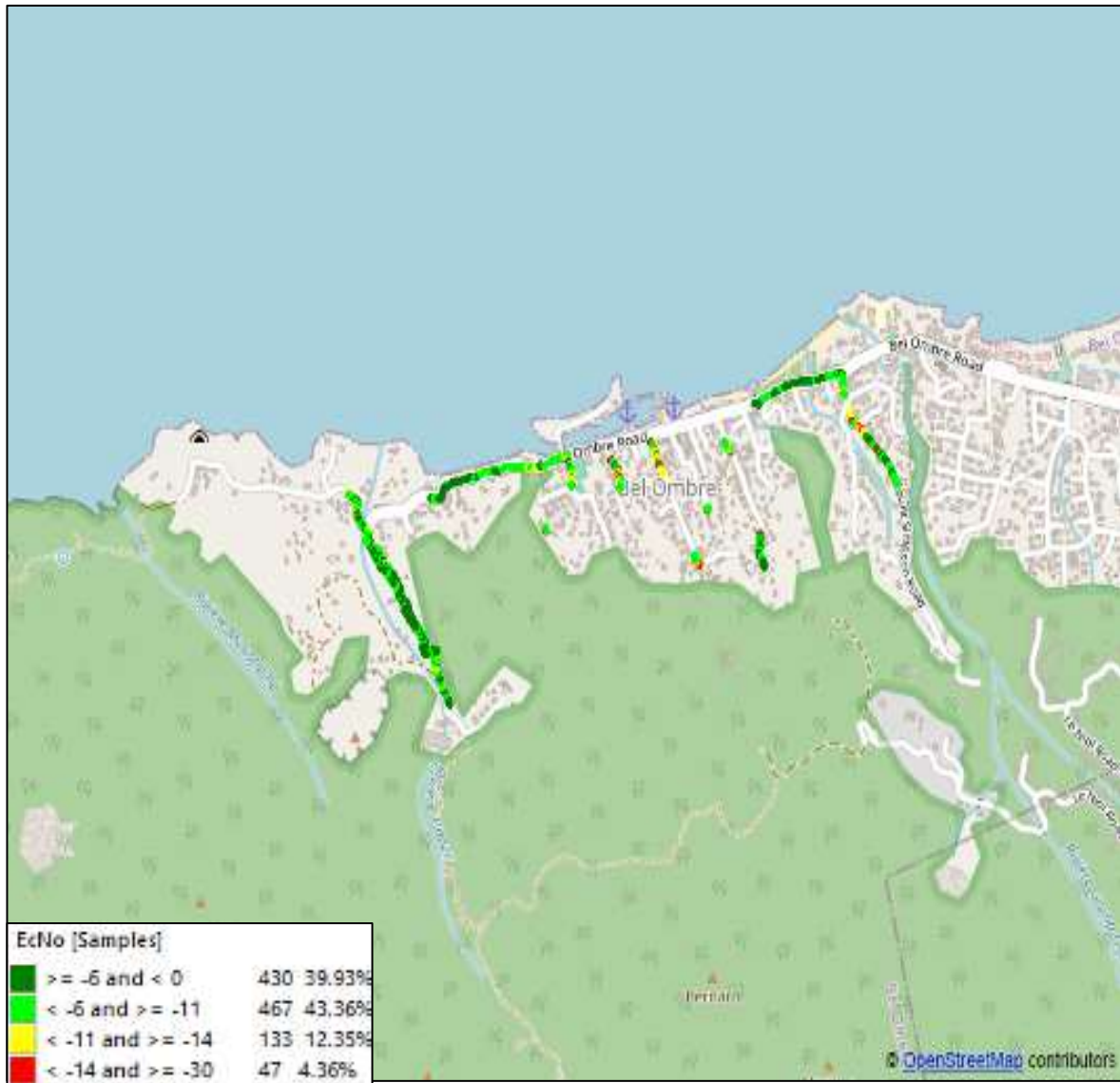
CWS LC MO



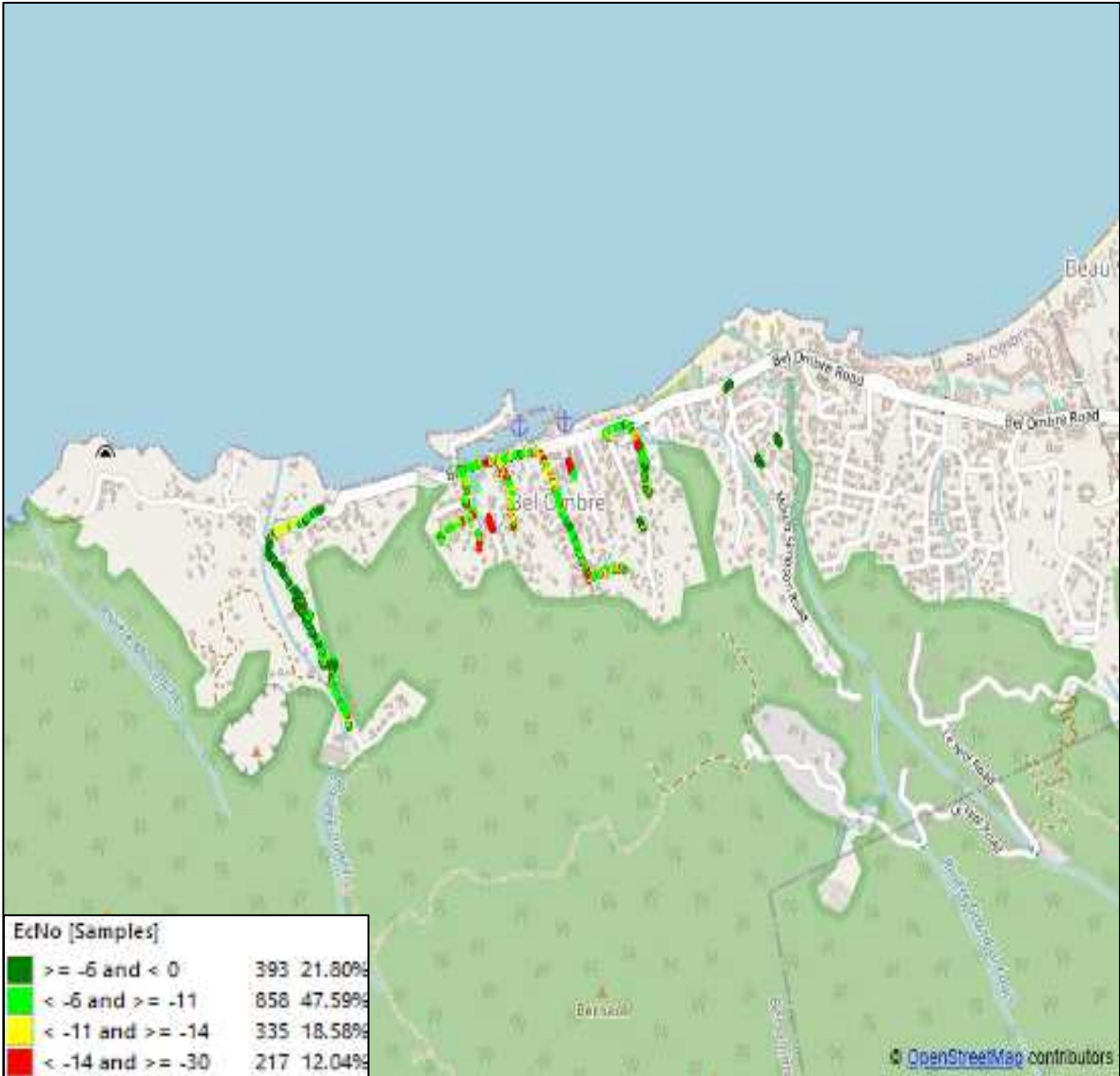
Airtel LC MO



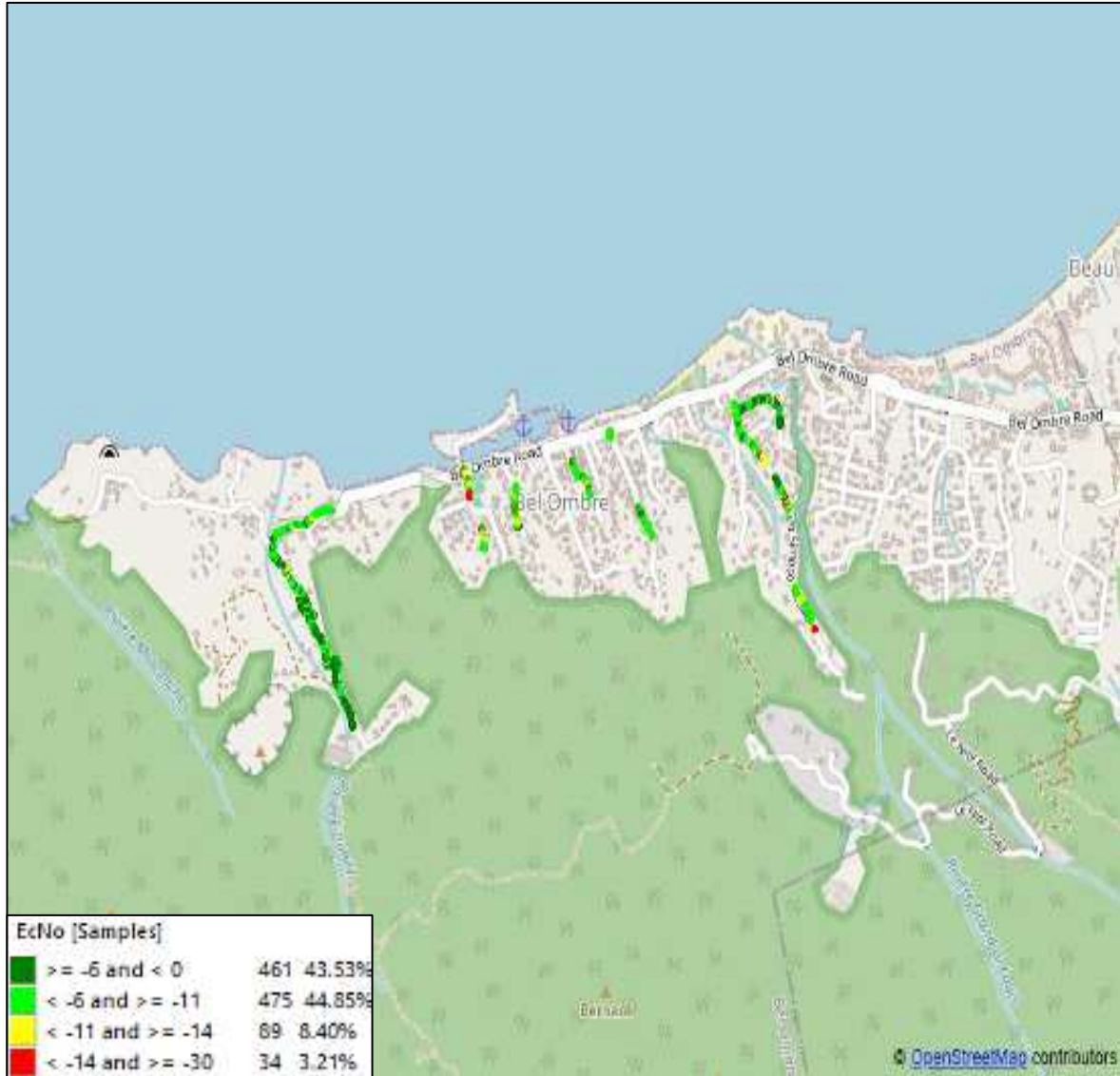
CWS LC MO



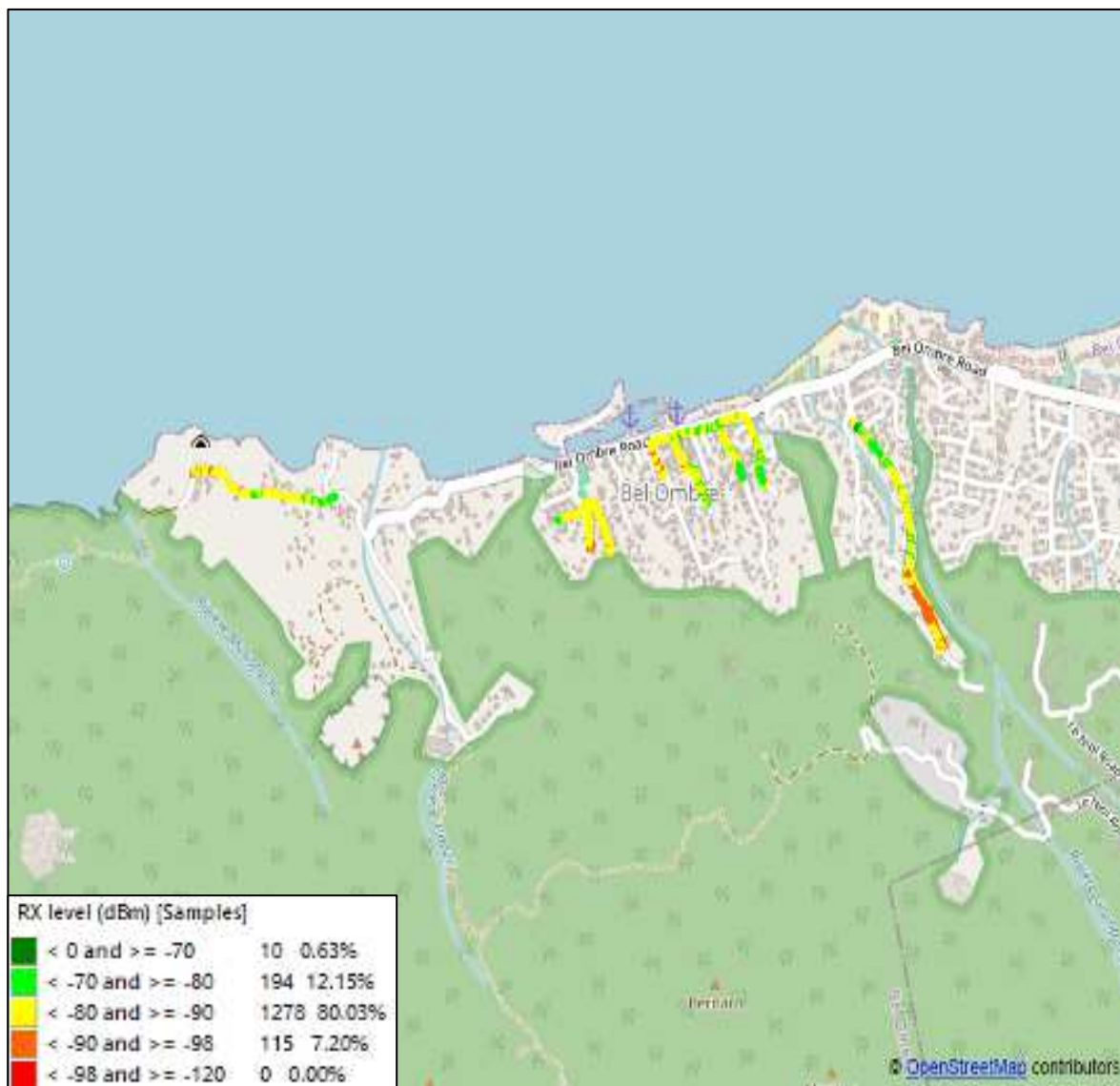
Airtel LC MO



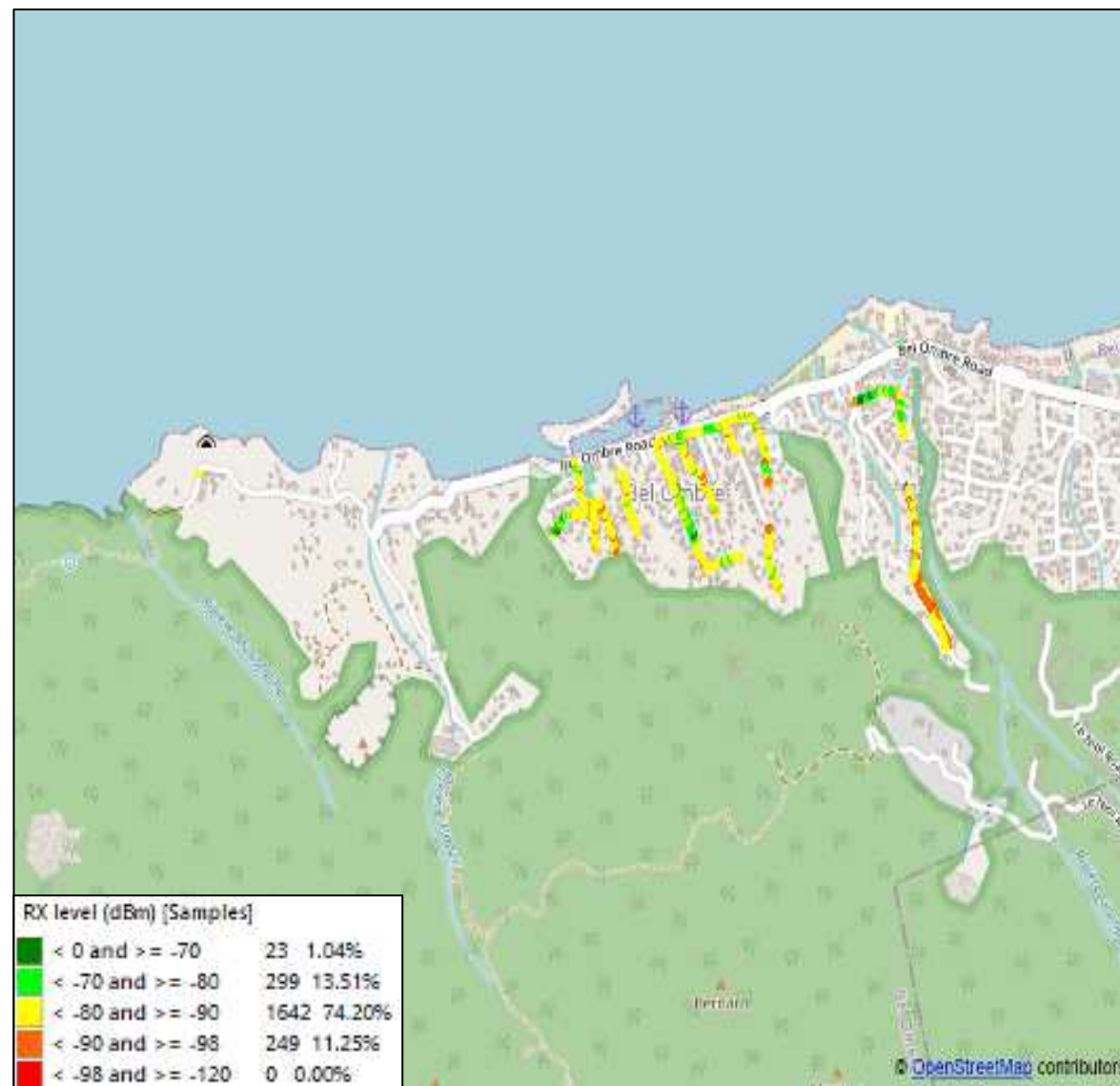
CWS LC MO



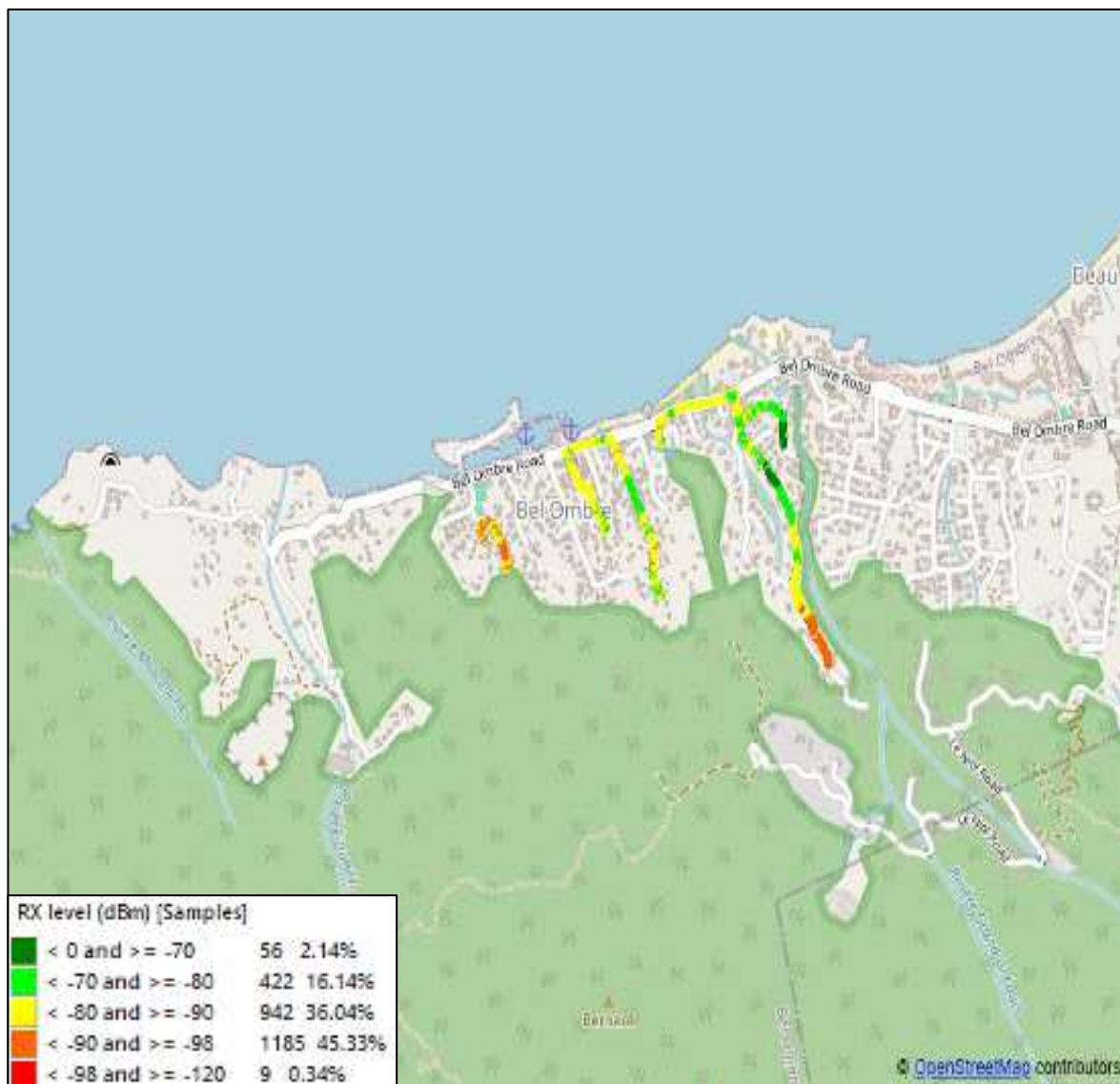
Airtel LC MO



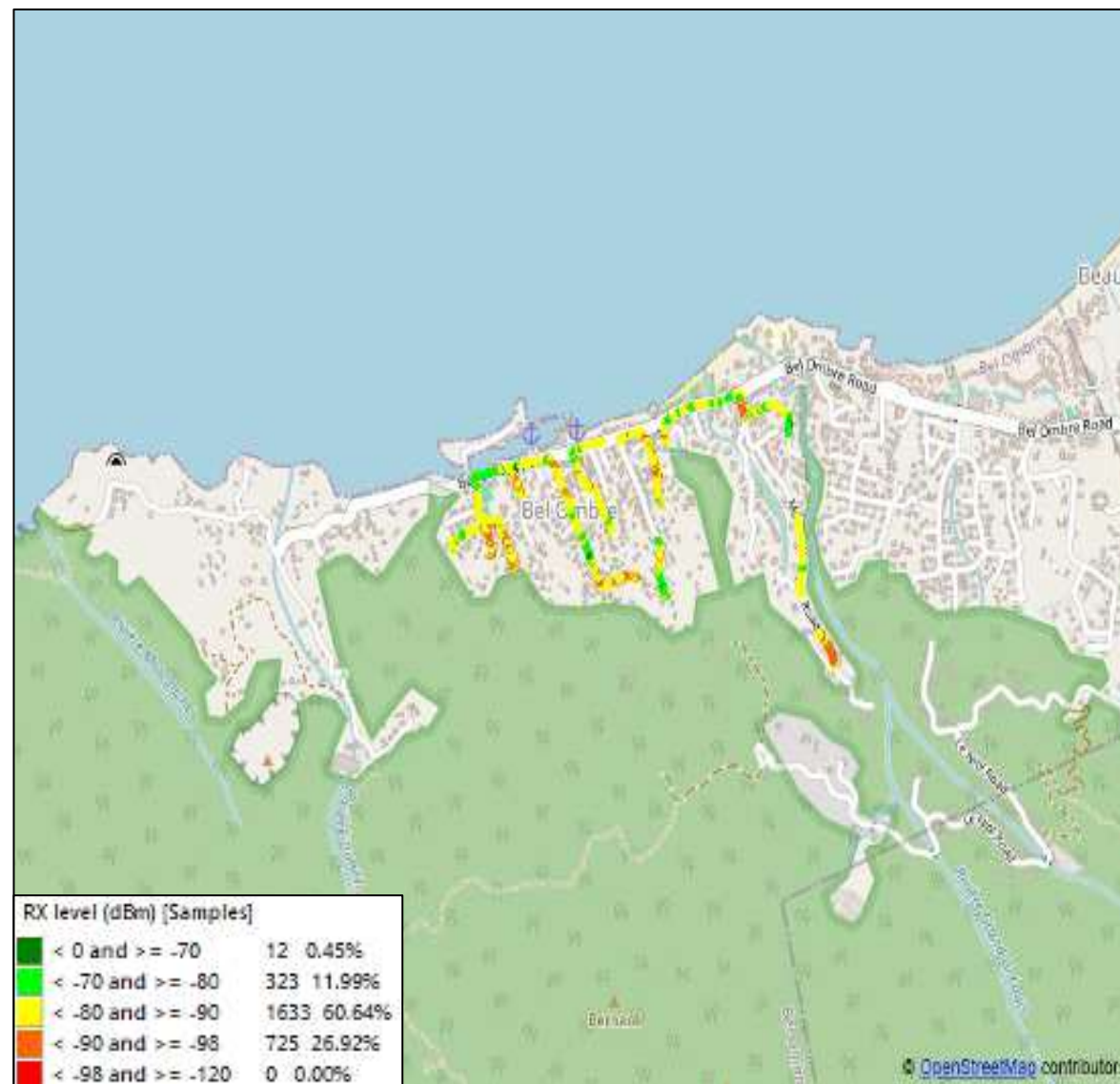
CWS LC MO



Airtel LC MO



CWS LC MO



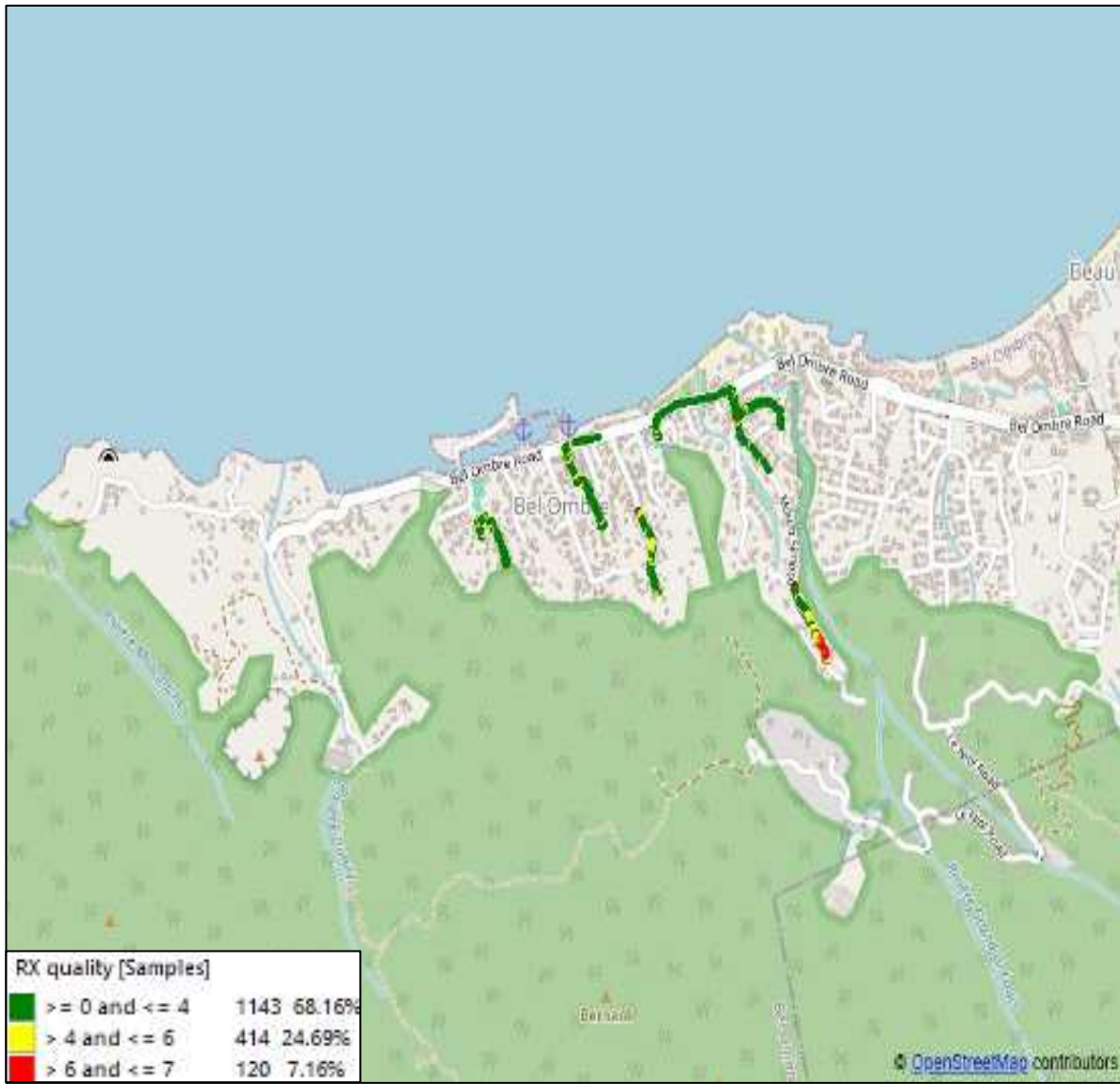
Airtel LC MO



CWS LC MO



Airtel LC MO



CWS LC MO

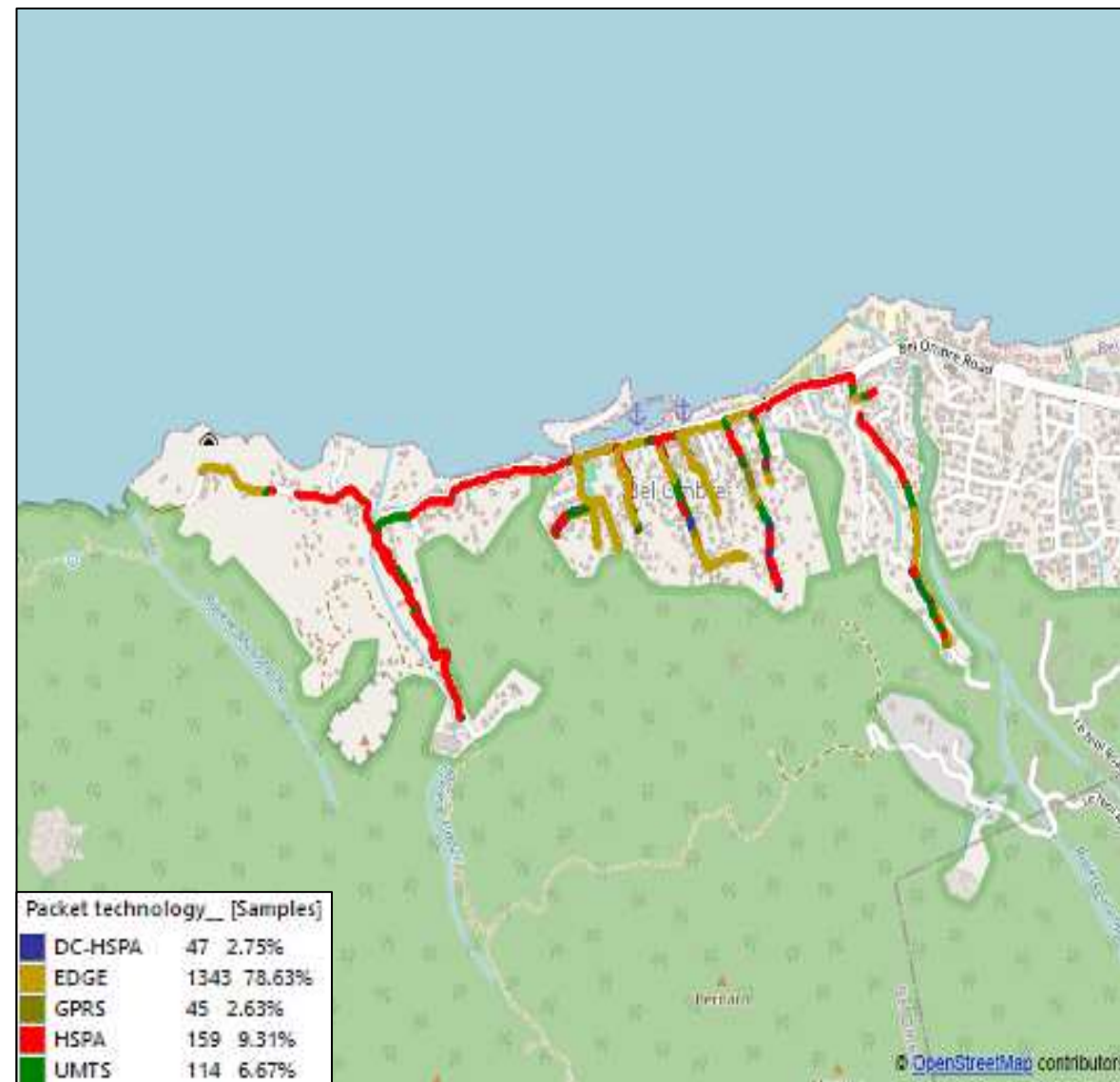


3G PREFERRED DATA DRIVE PLOTS

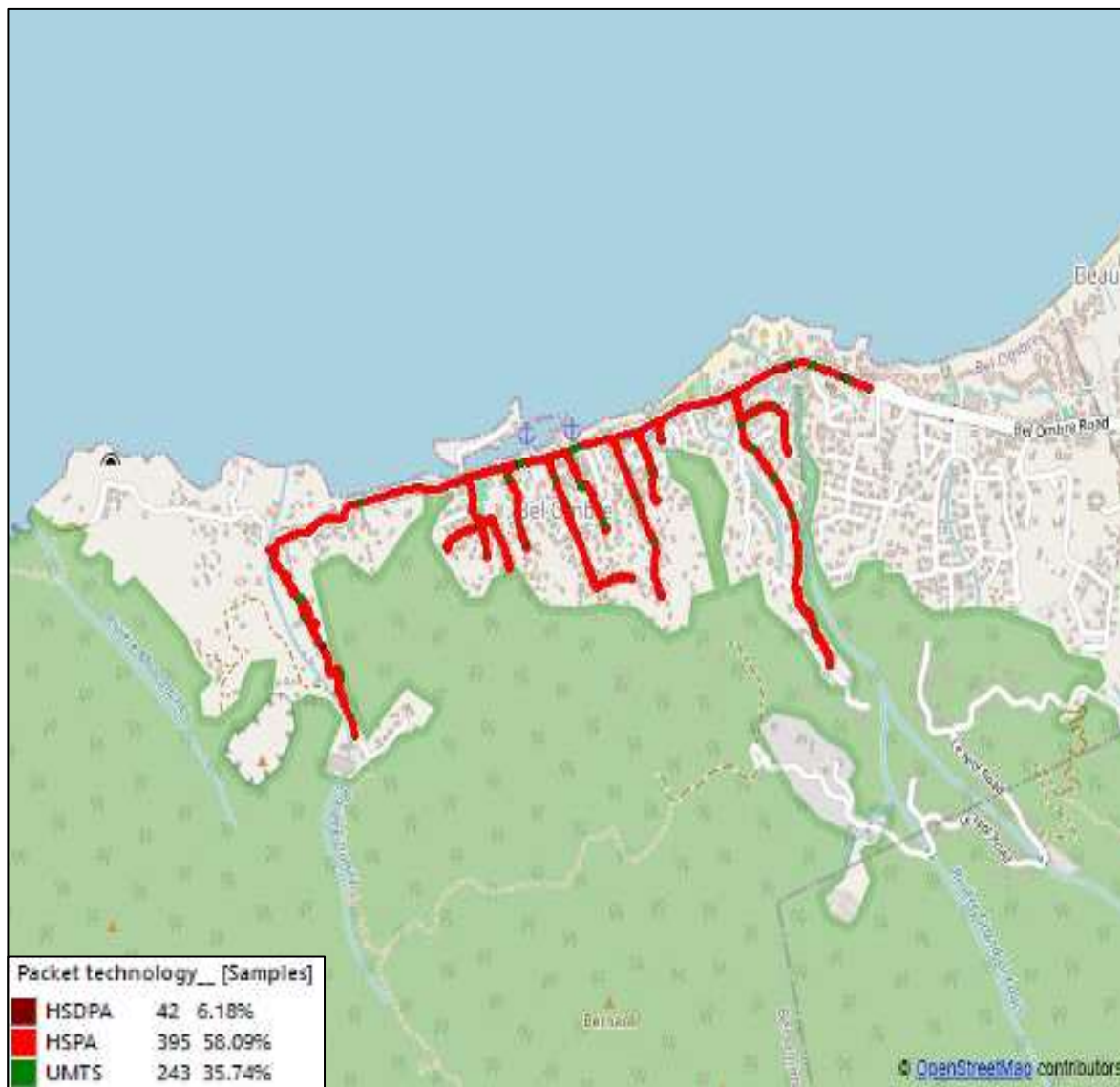
Airtel Data 3G



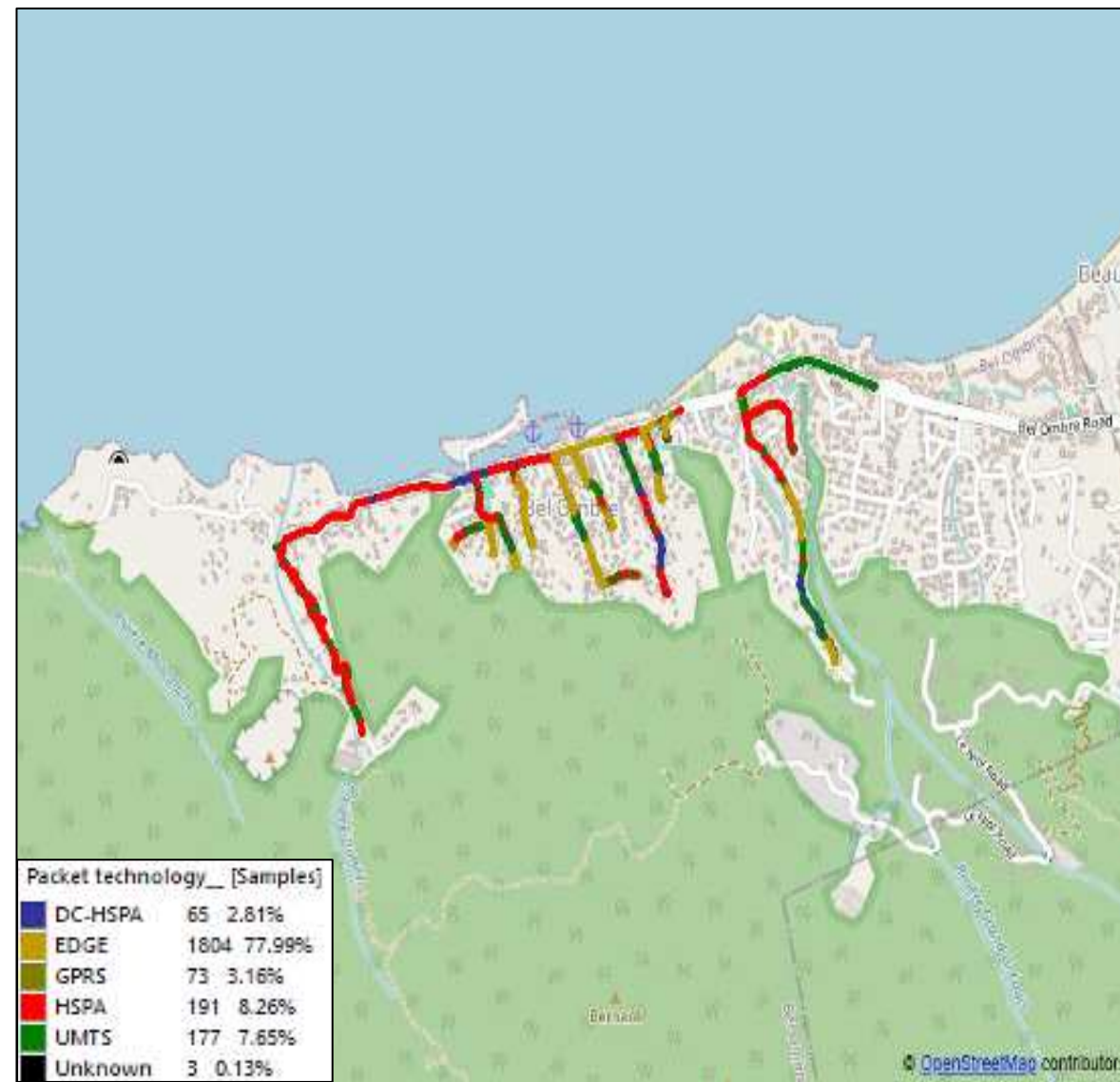
CWS Data 3G



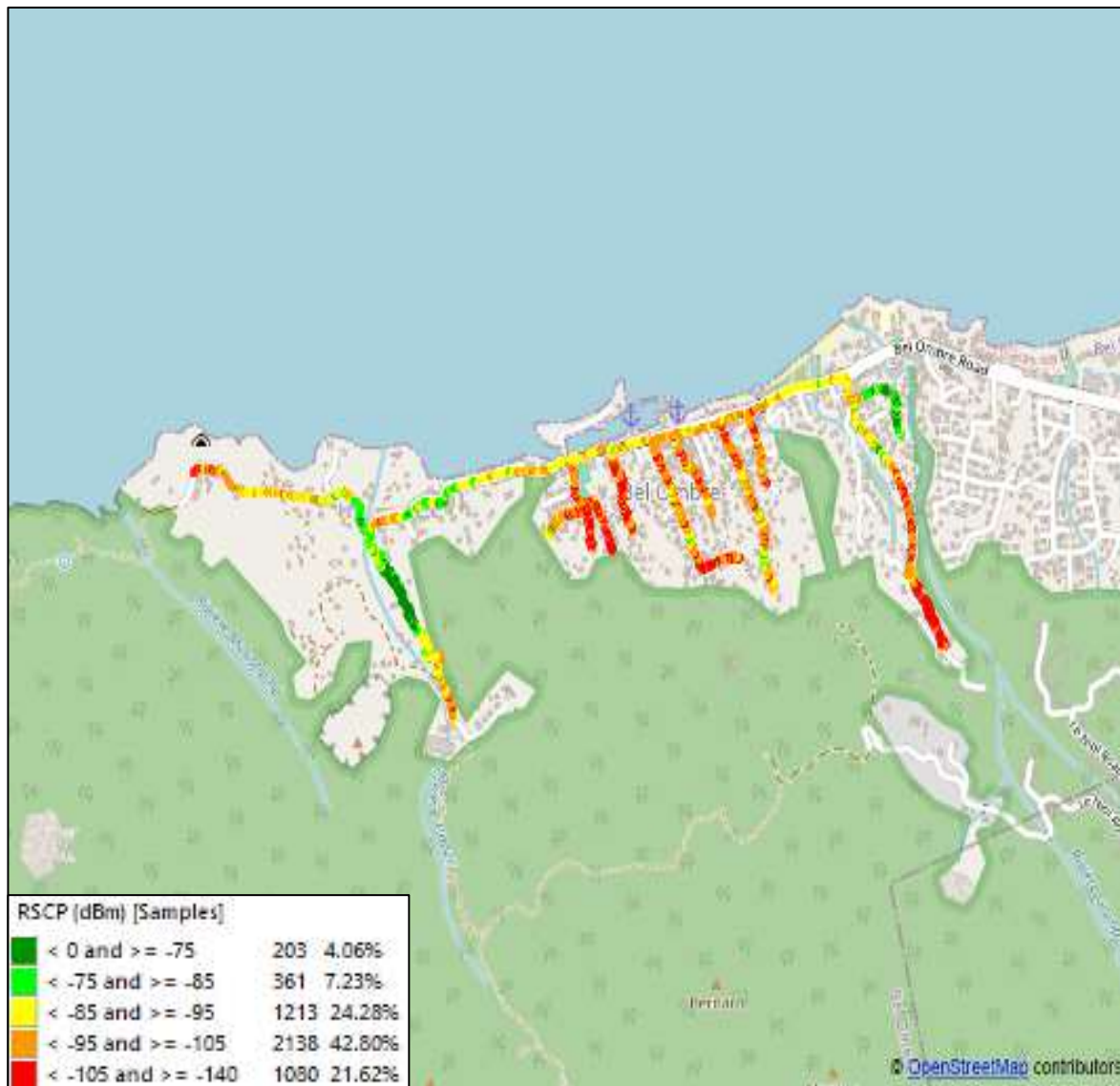
Airtel Data 3G



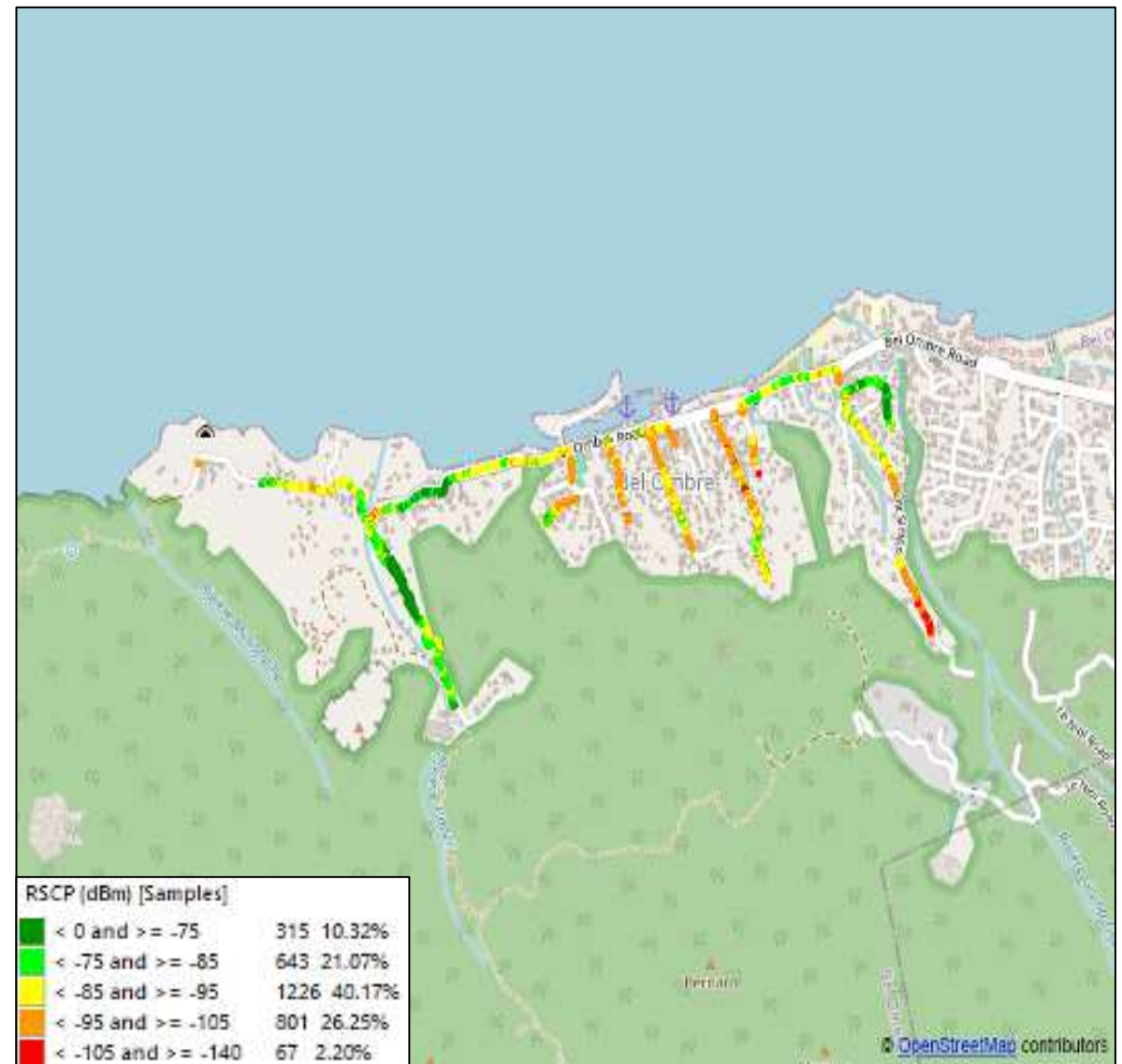
CWS Data 3G



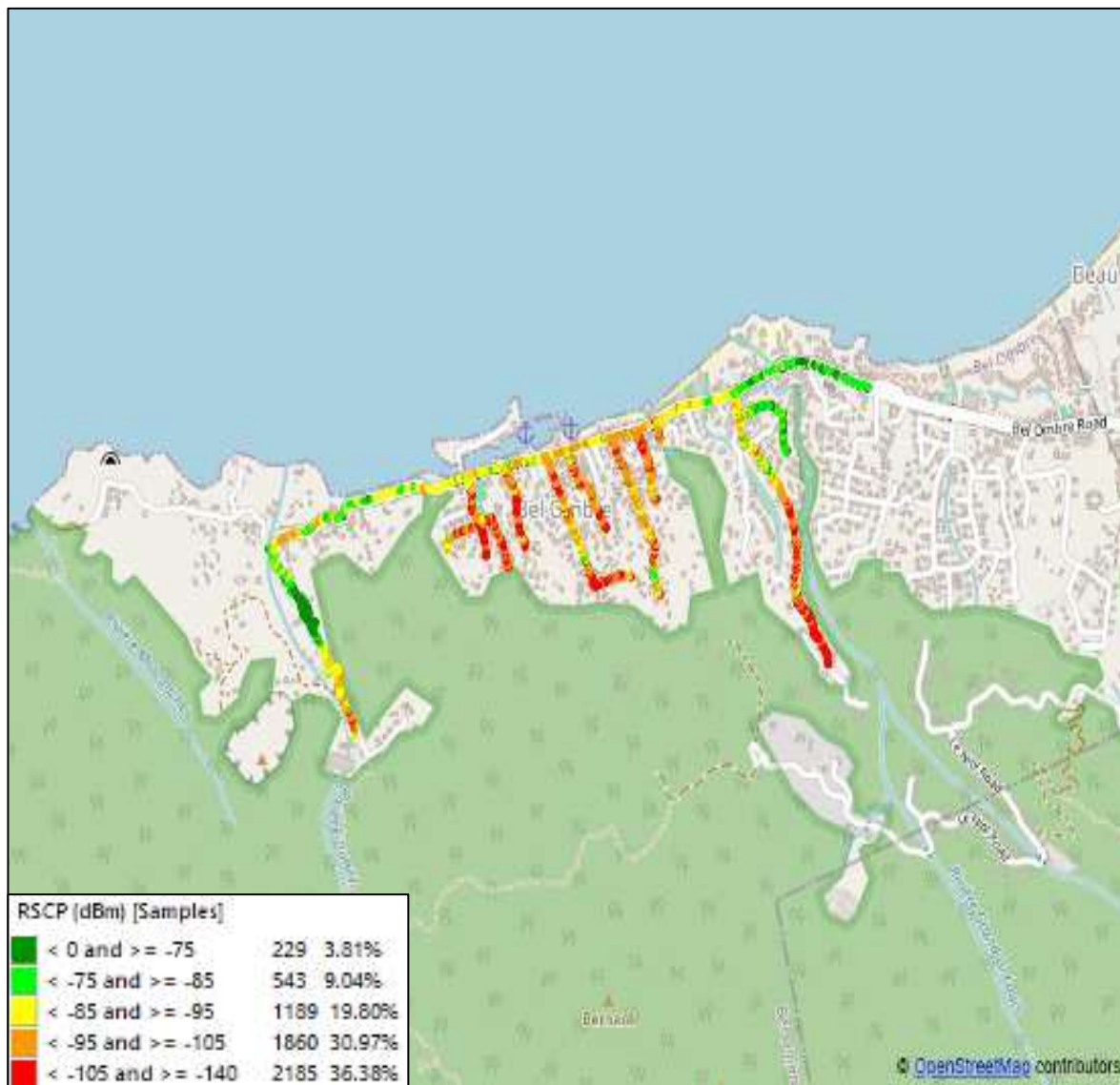
Airtel Data 3G



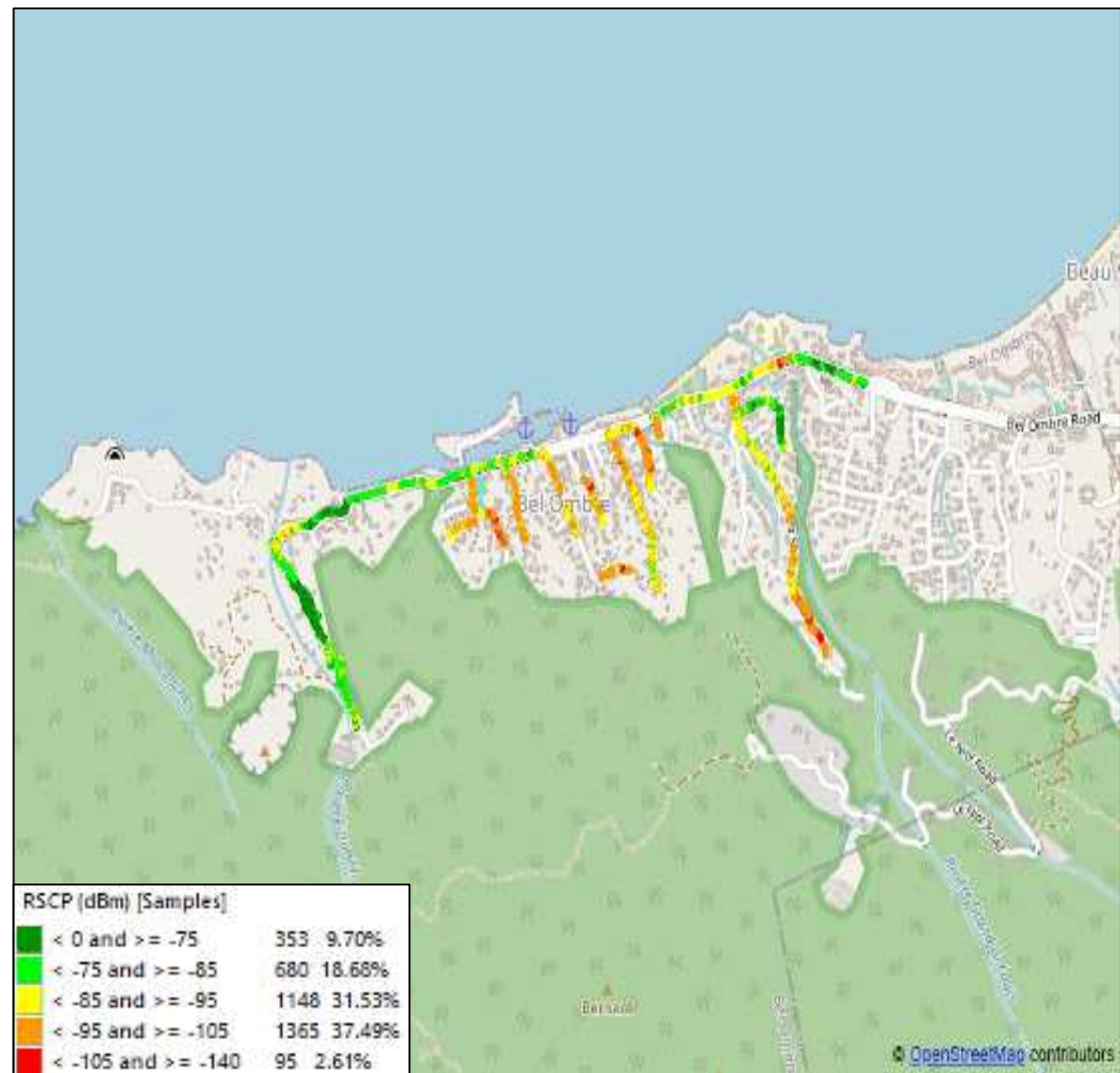
CWS Data 3G



Airtel Data 3G



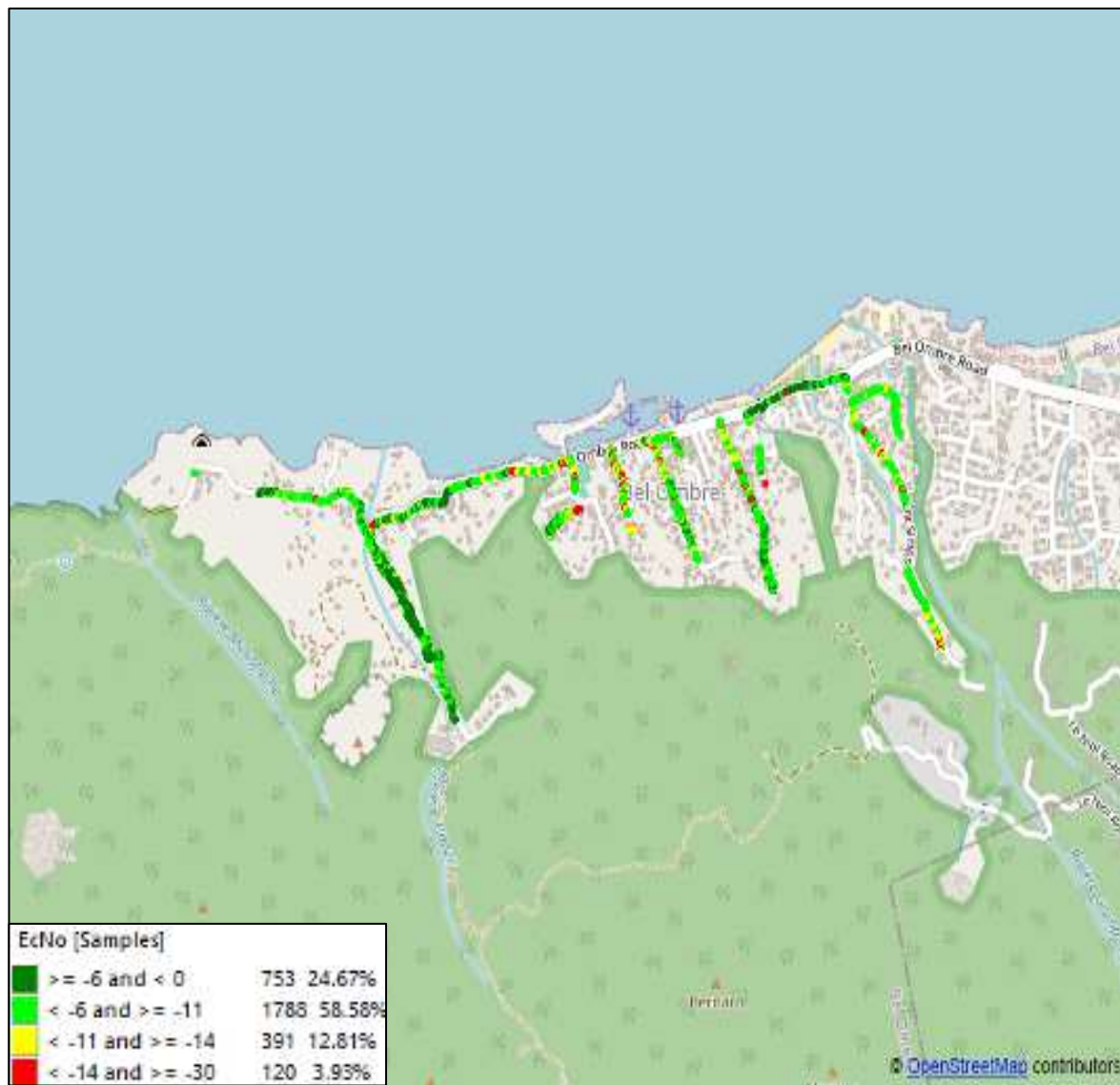
CWS Data 3G



Airtel Data 3G

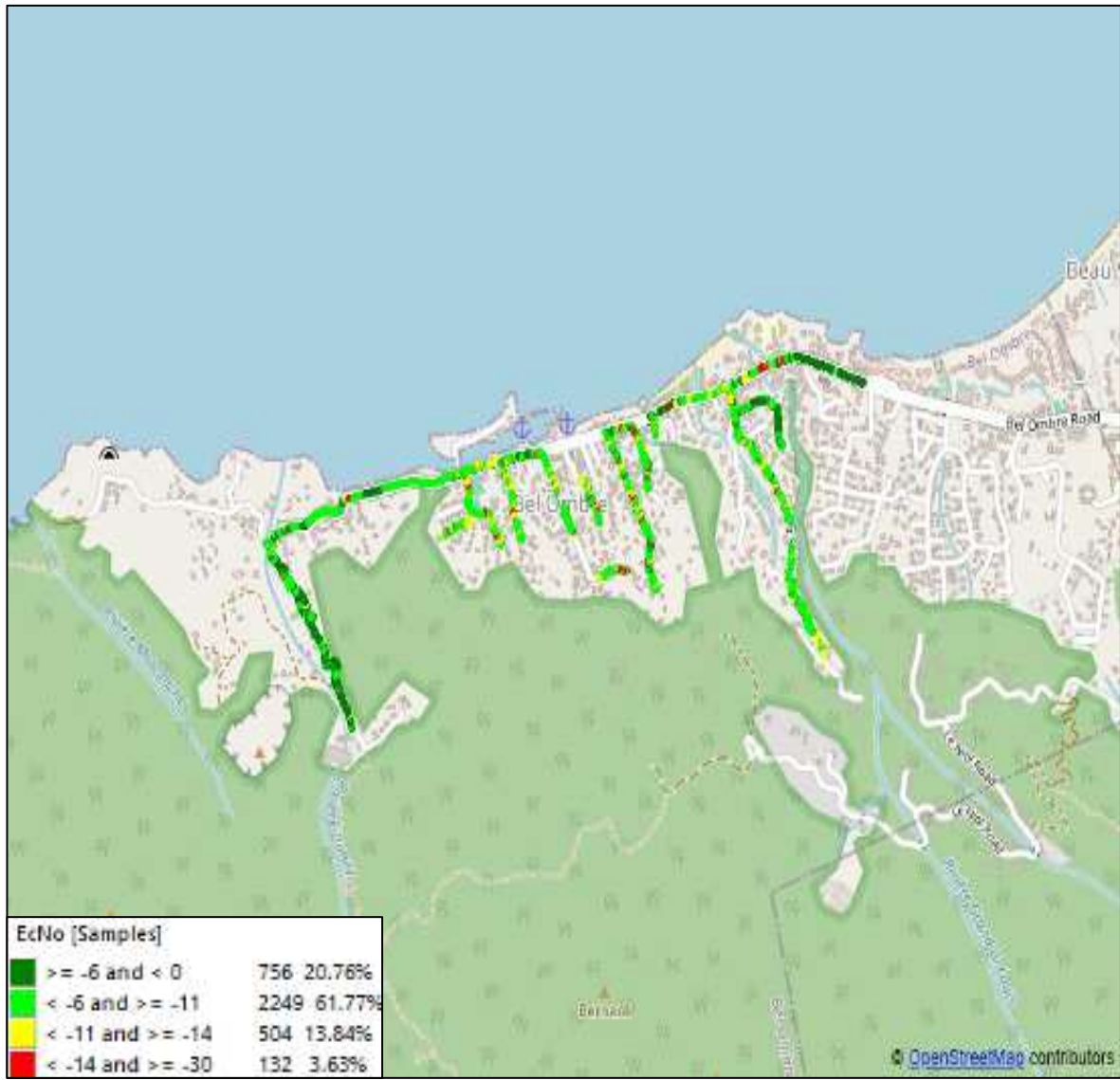
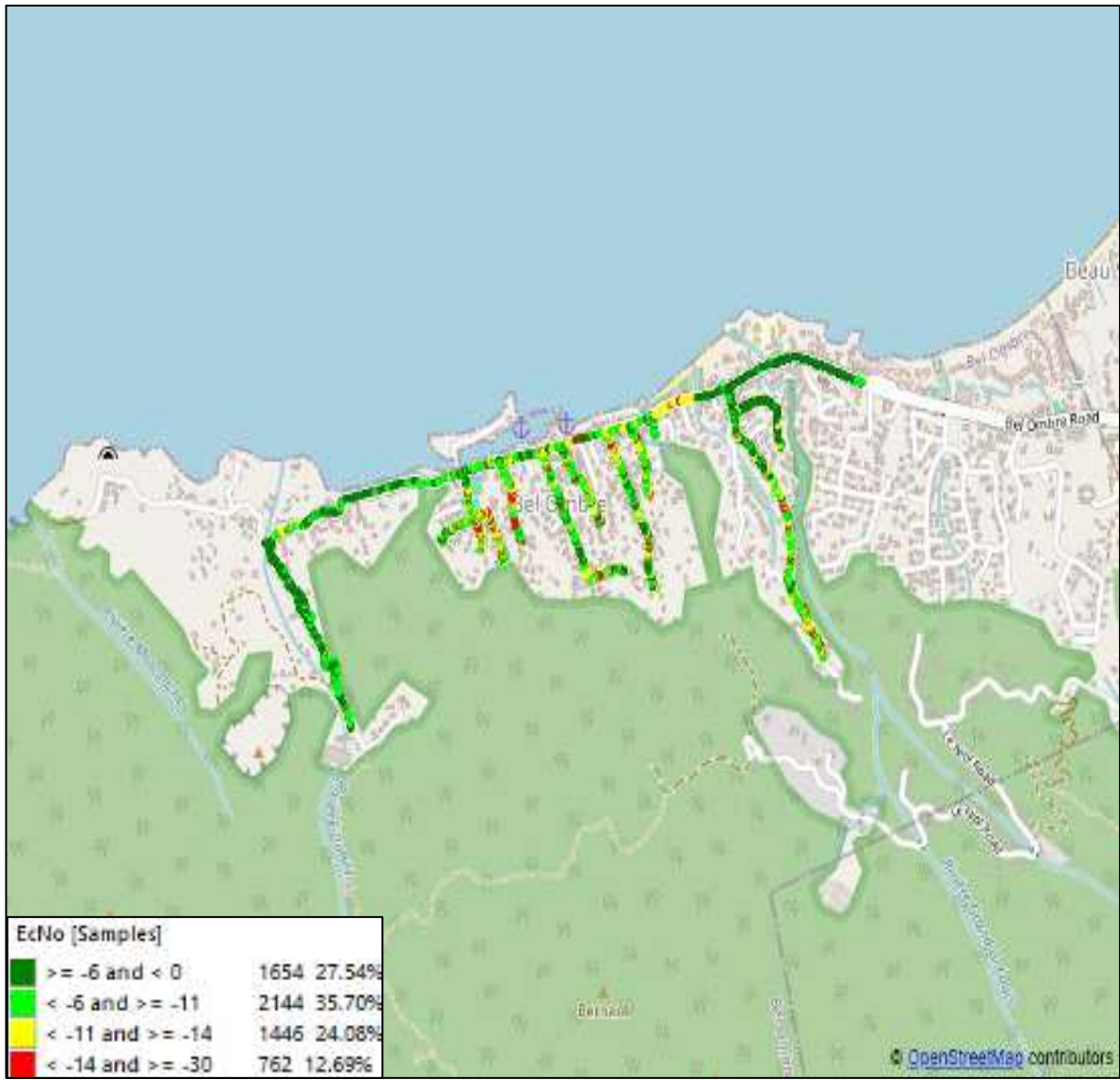


CWS Data 3G



Airtel Data 3G

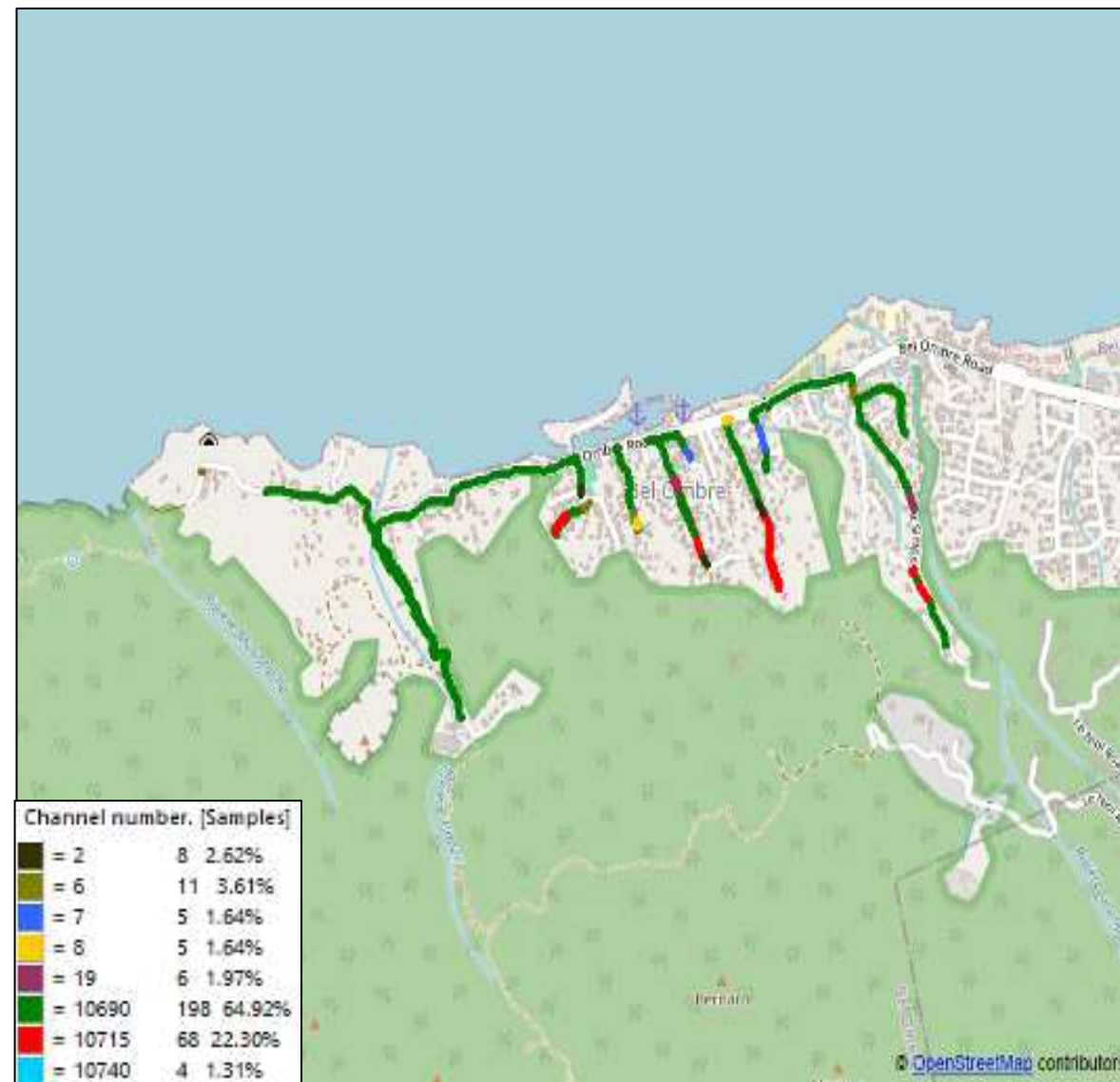
CWS Data 3G



Airtel Data 3G



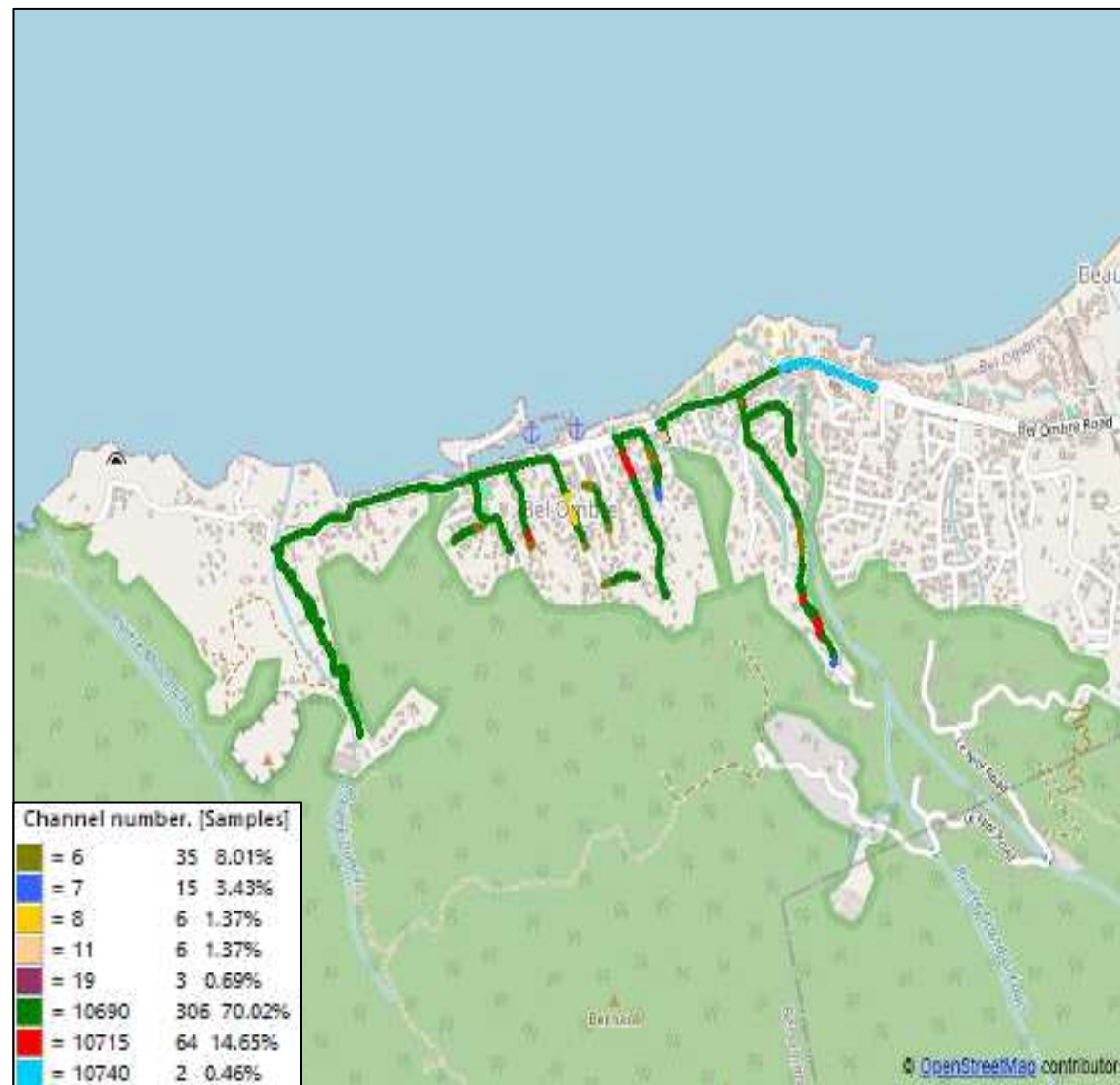
CWS Data 3G



Airtel Data 3G



CWS Data 3G



4G PREFERRED DATA DRIVE PLOTS

Airtel Data 4G



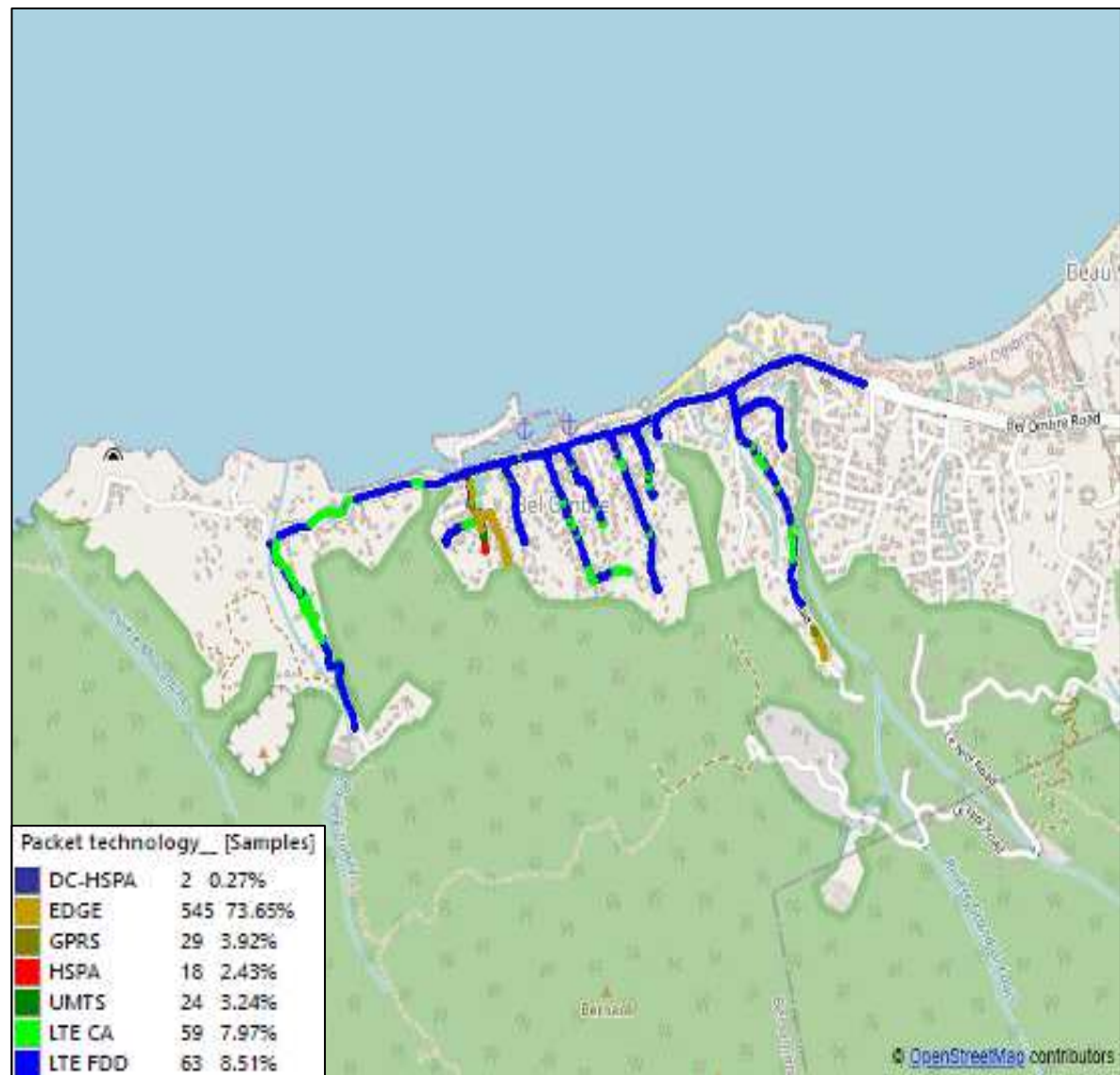
CWS Data 4G



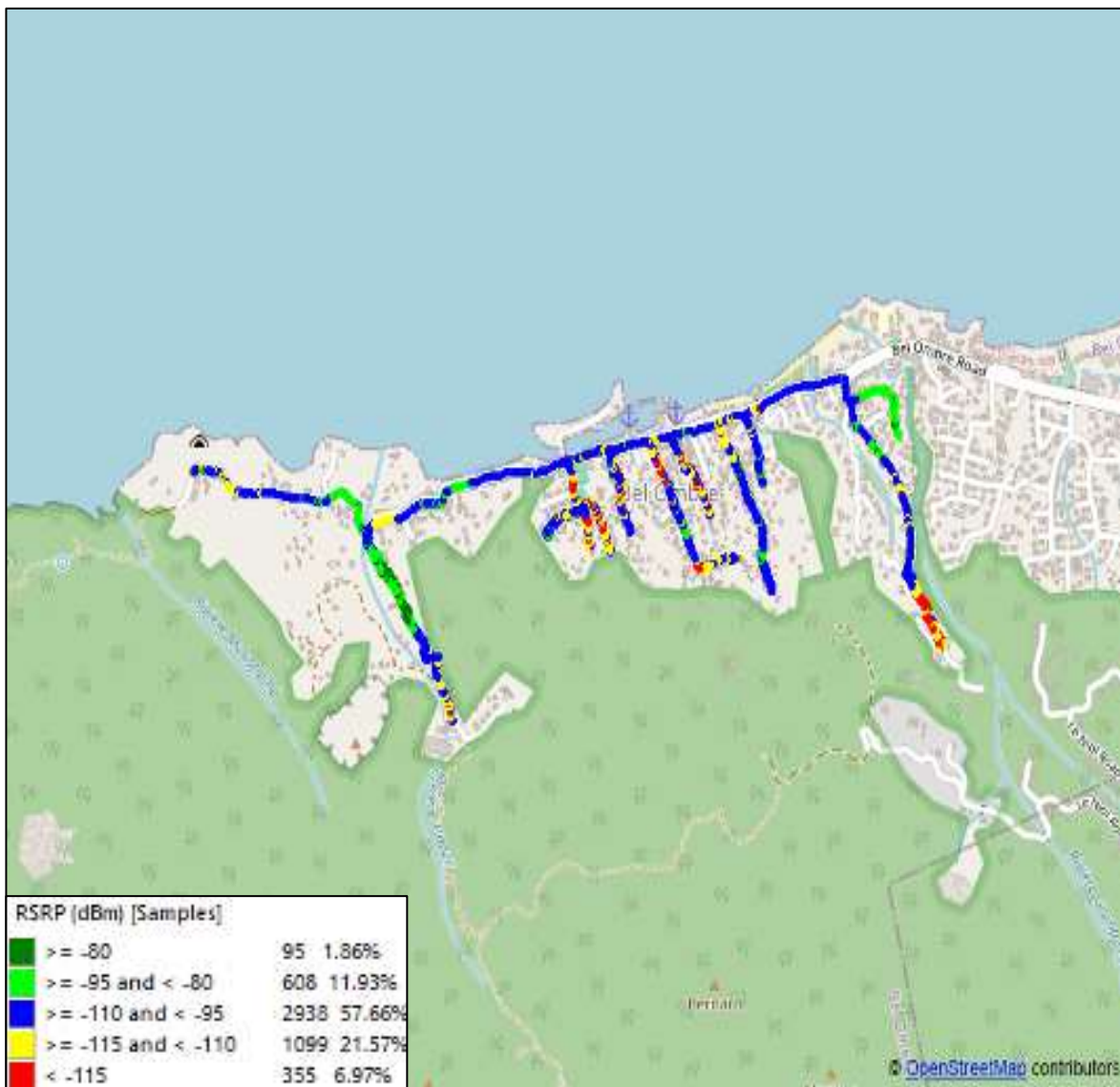
Airtel Data 4G



CWS Data 4G



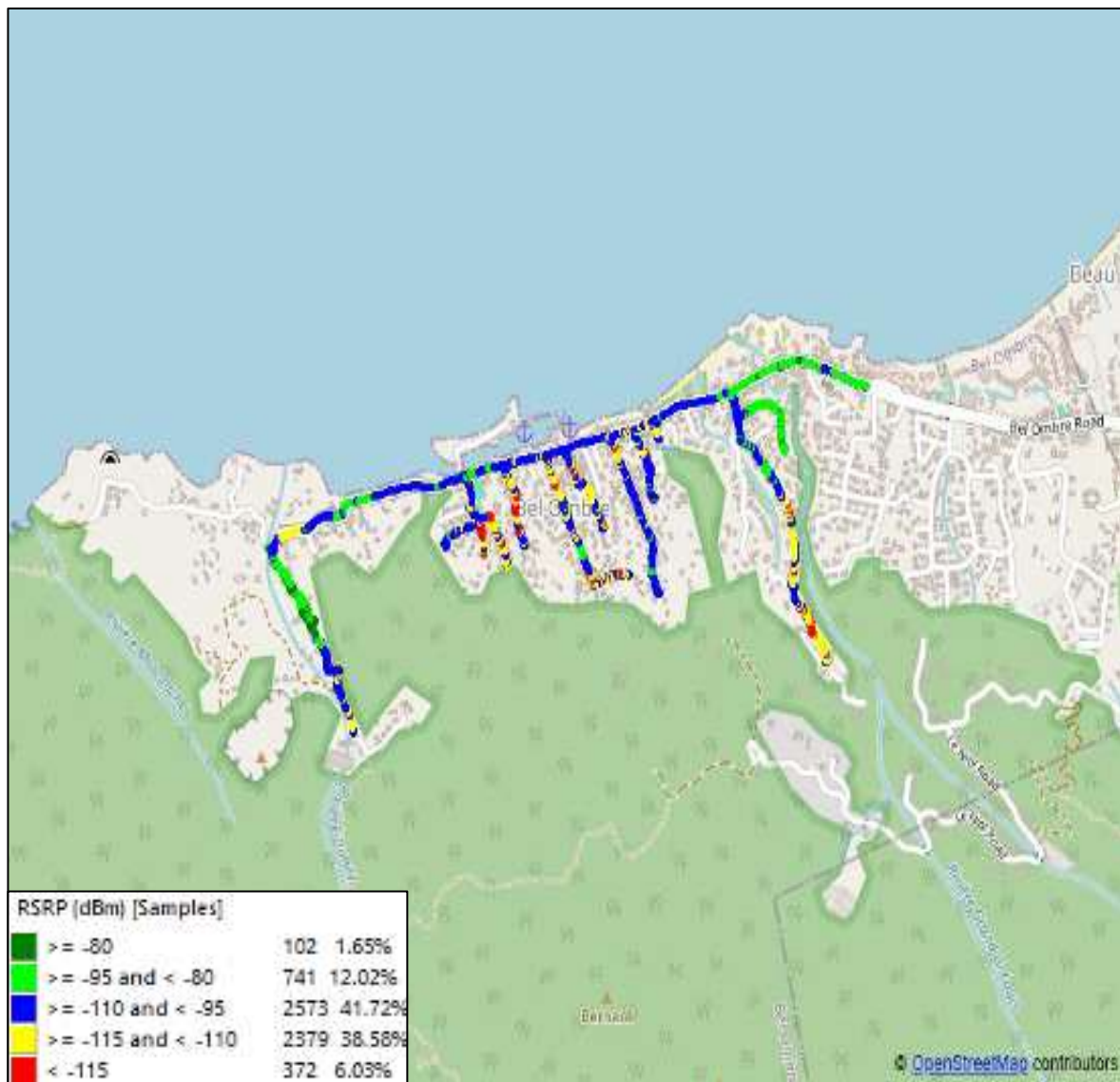
Airtel Data 4G



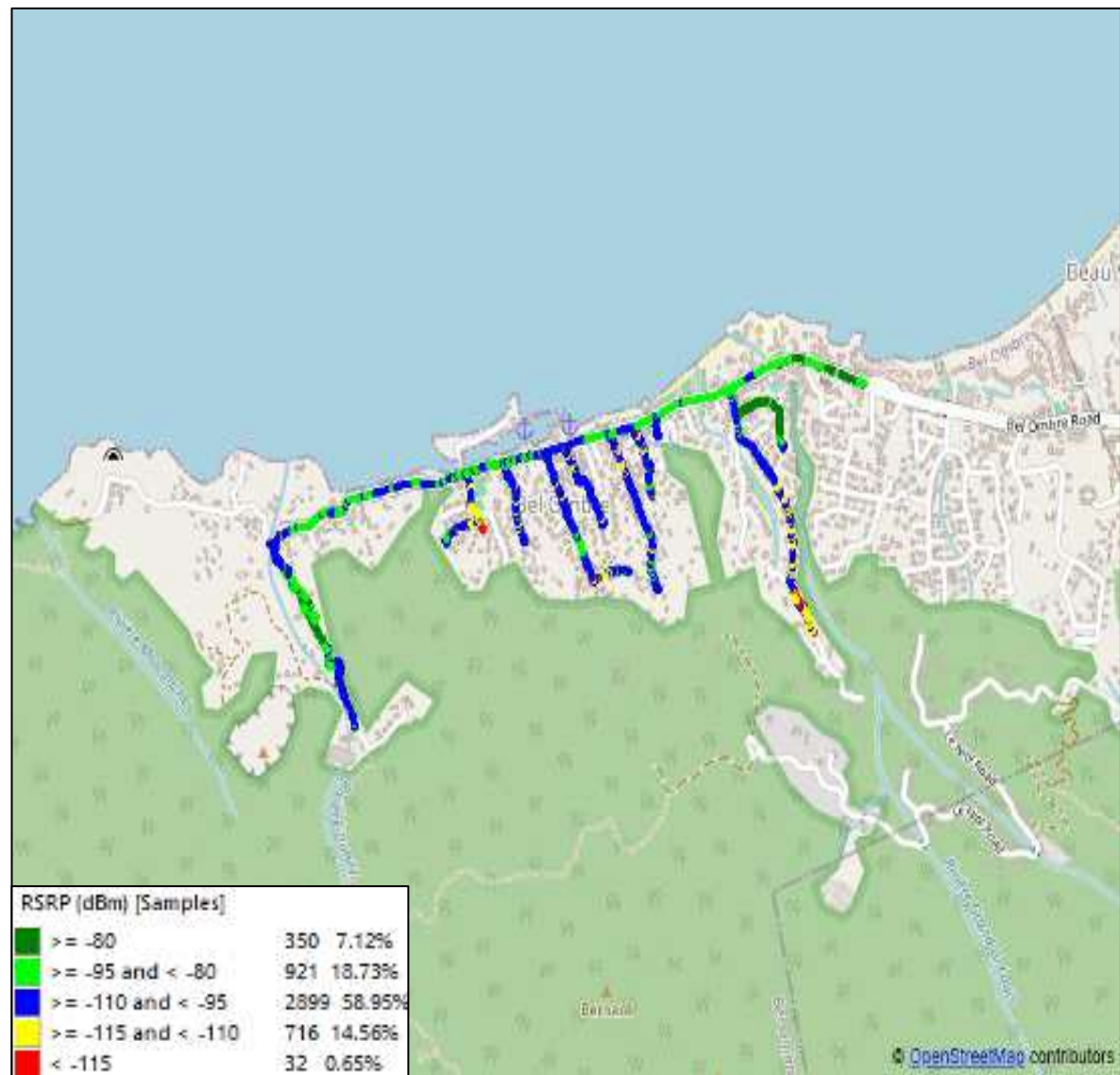
CWS Data 4G



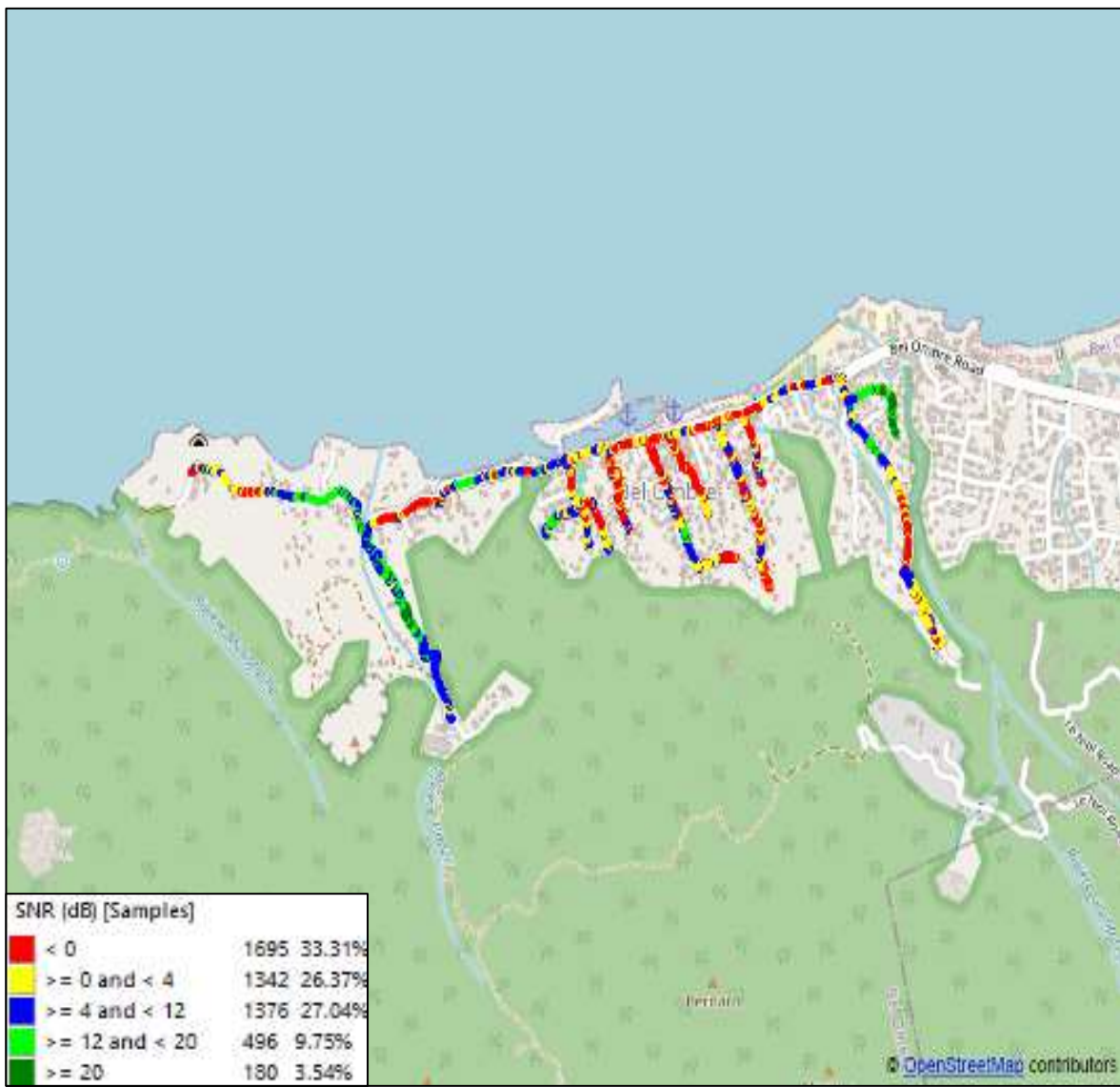
Airtel Data 4G



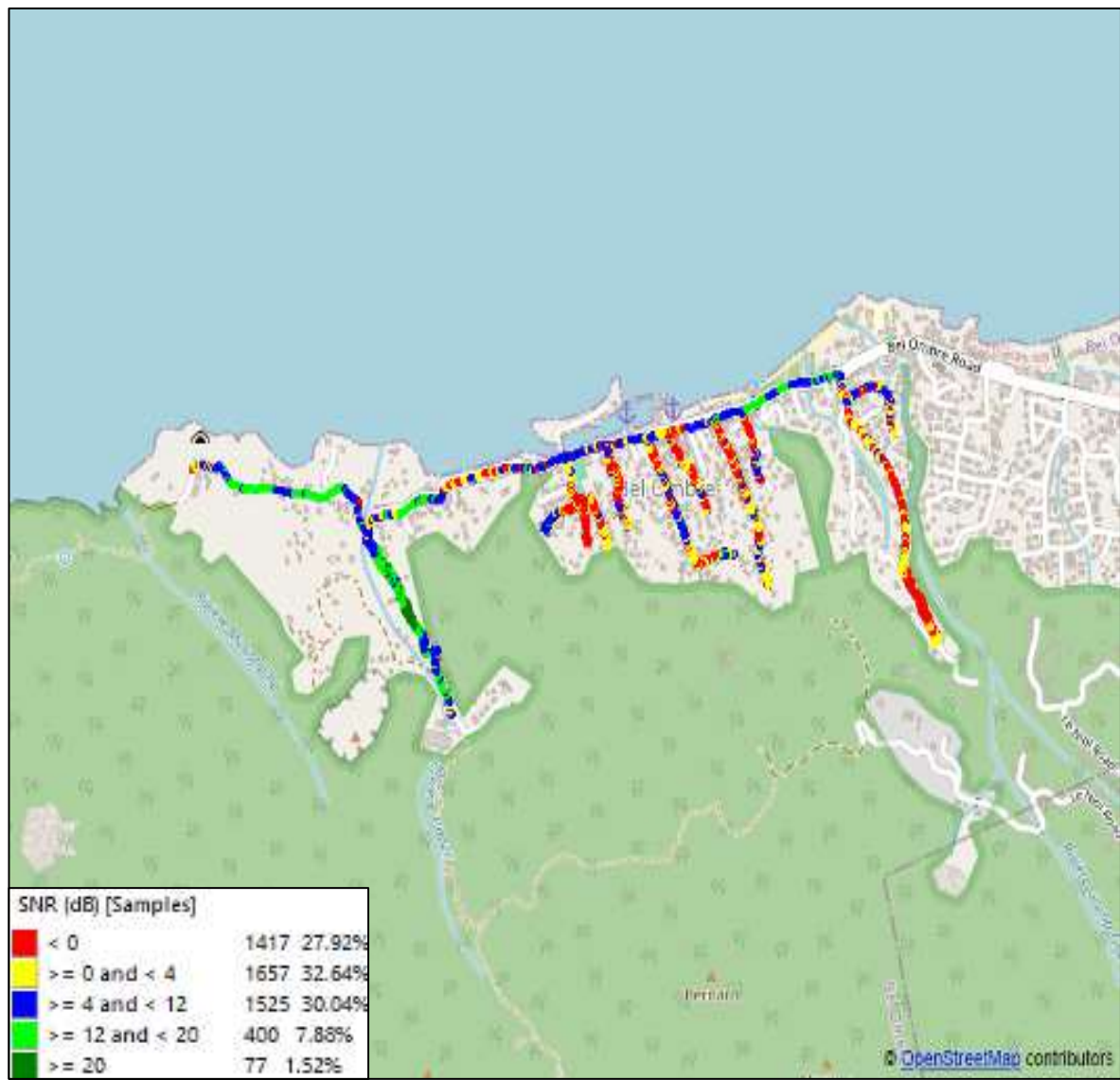
CWS Data 4G



Airtel Data 4G

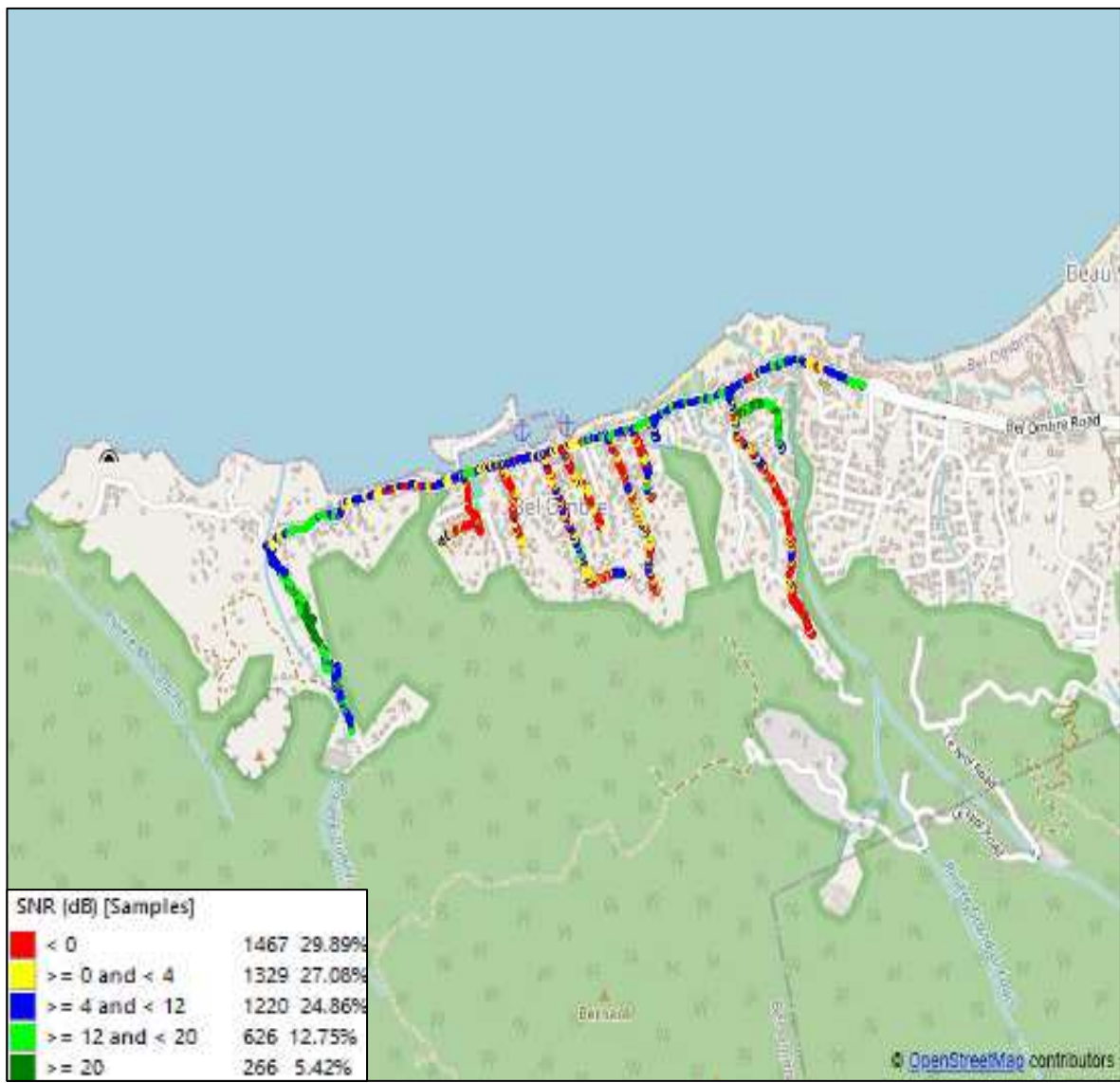
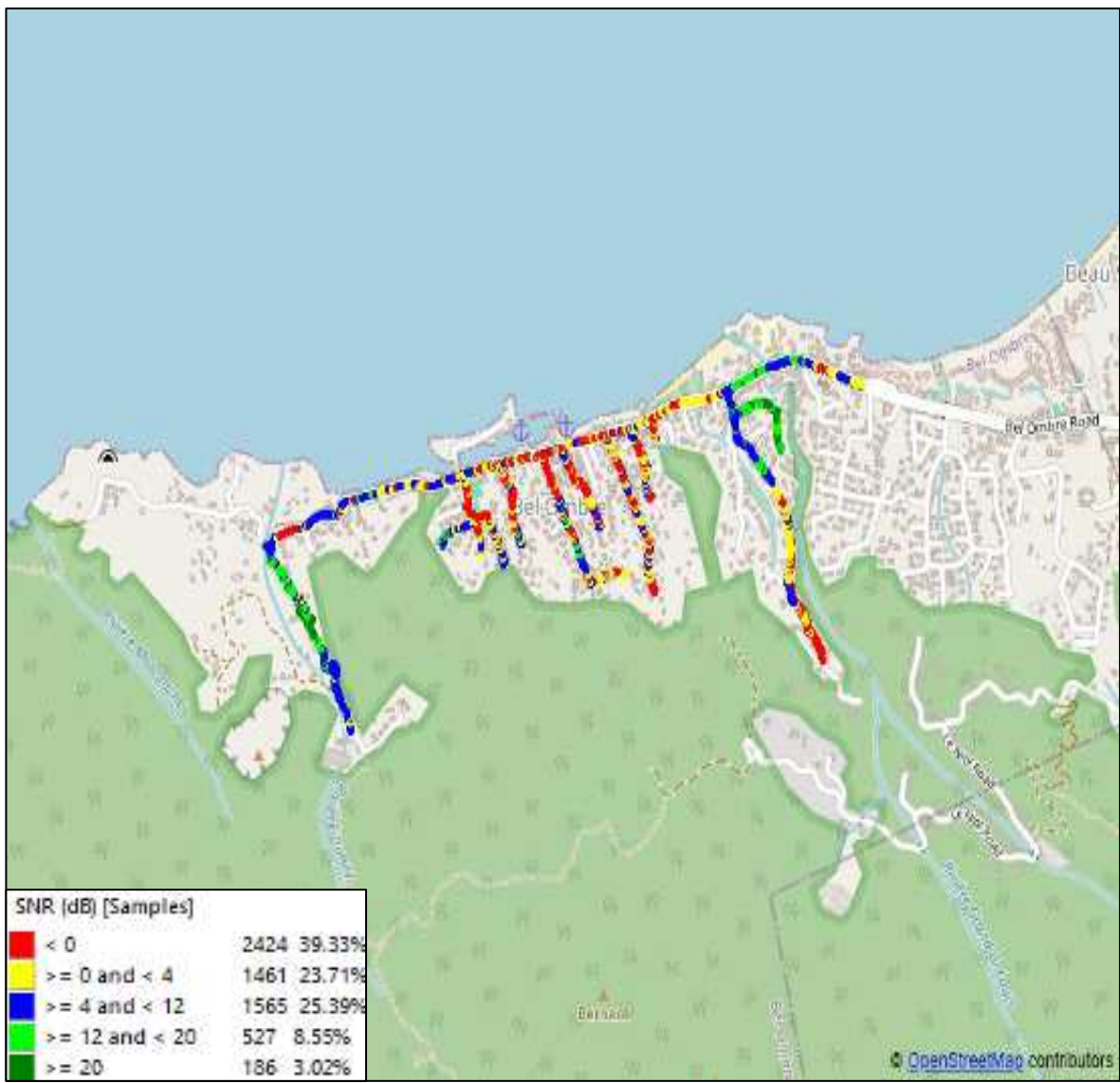


CWS Data 4G



Airtel Data 4G

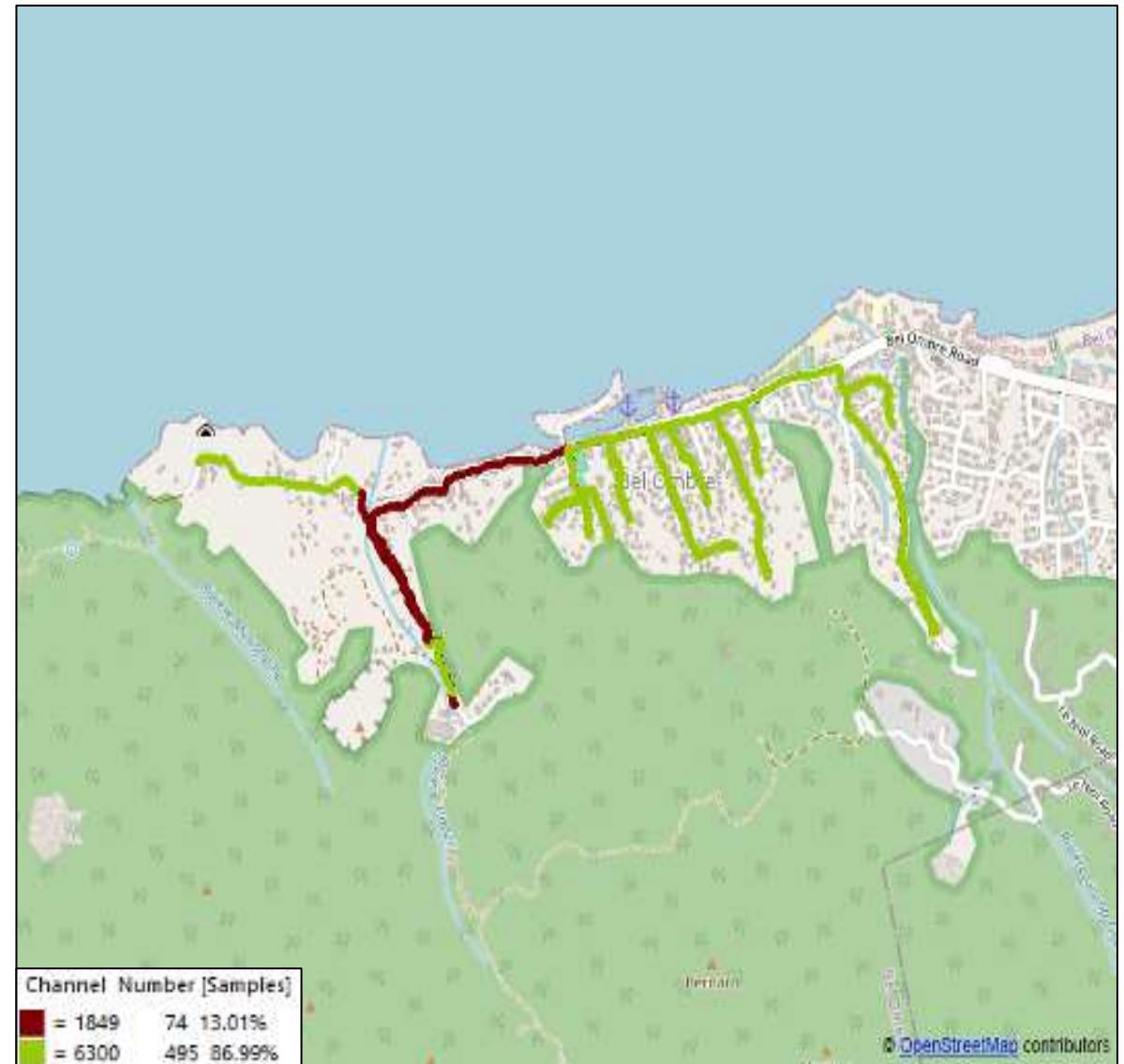
CWS Data 4G



Airtel Data 4G



CWS Data 4G



Airtel Data 4G



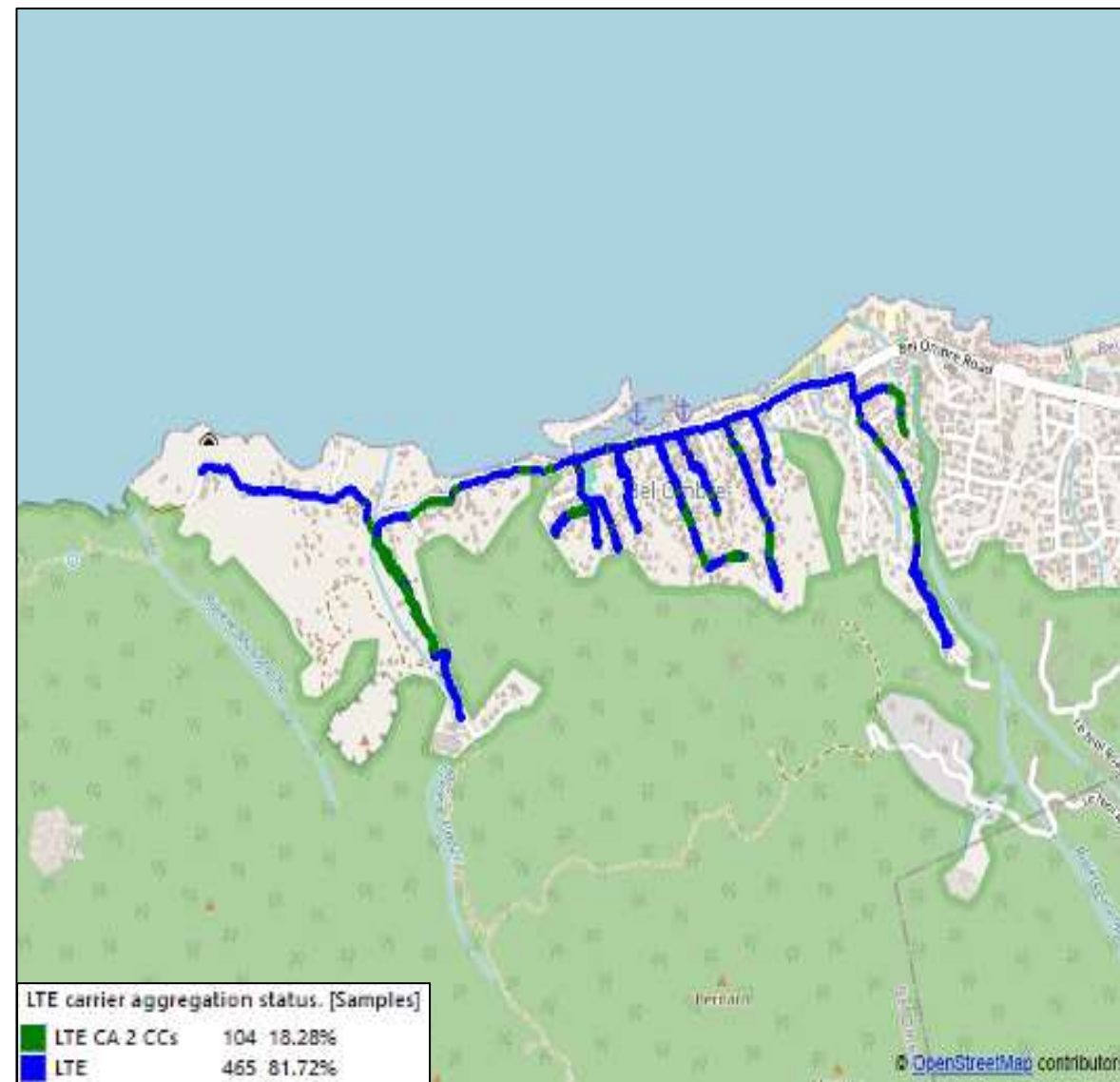
CWS Data 4G



Airtel Data 4G



CWS Data 4G



Airtel Data 4G



CWS Data 4G



Airtel Data 4G



CWS Data 4G



Airtel Data 4G

CWS Data 4G



Negative Event Analysis

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

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

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 Coverage	1

Call Drop cause from CWS	Count
Total Call Drop	0

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

	Time	System	Serving band	Cal	1. best active RSCP	Time	Ch	SC	1. best	Event ID	System	Transf. dir.	Time	Subchannel	Message name
1.	13:59:15.649	UMTS FDD	900	Not	2821. -82.1	13:59:30.527	3050	208		10222.	RRC	Downlink	13:59:47.400	DCCH	MEASUREMENT_CONTROL
					2822.	13:59:30.527	3050	208	-3.7	10223.	RRC	Downlink	13:59:47.460	DCCH	MEASUREMENT_CONTROL
					2823.	13:59:31.583	3050	208	-90.5	10224.	RRC	Downlink	13:59:47.470	DCCH	MEASUREMENT_CONTROL
					2824.	13:59:31.583	3050	208	-9.5	10225.	RRC	Downlink	13:59:47.480	DCCH	MEASUREMENT_CONTROL
					2825.	13:59:32.814	3050	208	-105.5	10226.	RRC	Downlink	13:59:47.480	DCCH	MEASUREMENT_CONTROL
					2826.	13:59:32.814	3050	208	-16.7	10227.	RRC	Downlink	13:59:47.520	DCCH	DOWNLINK_DIRECT_TRANSFER
					2827.	13:59:33.524	3050	208	-102.7	10228.	L3SM	Downlink	13:59:47.520	DCCH	AUTHENTICATION_REQUEST
					2828.	13:59:33.524	3050	208	-18.4	10229.	RRC	Uplink	13:59:47.631	DCCH	UPLINK_DIRECT_TRANSFER
					2829.	13:59:33.825	3050	208	-87.3	10230.	L3SM	Uplink	13:59:47.631	DCCH	AUTHENTICATION_RESPONSE
					2830.	13:59:33.825	3050	208	-7.1	10231.	RRC	Downlink	13:59:47.740	DCCH	SECURITY_MODE_COMMAND
					2831.	13:59:35.253	3050	208	-88.1	10232.	RRC	Uplink	13:59:47.740	DCCH	SECURITY_MODE_COMPLETE
					2832.	13:59:35.253	3050	208	-7.2	10233.	RRC	Uplink	13:59:47.841	DCCH	UPLINK_DIRECT_TRANSFER
					2833.	13:59:36.520	3050	208	-86.1	10234.	L3SM	Uplink	13:59:47.841	DCCH	SETUP
					2834.	13:59:36.520	3050	208	-5.4	10235.	RRC	Downlink	13:59:47.850	DCCH	DOWNLINK_DIRECT_TRANSFER
					2835.	13:59:47.580	10588	9	-83.3	10236.	L3SM	Downlink	13:59:47.850	DCCH	IDENTITY_REQUEST
					2836.	13:59:47.580	10588	9	-3.1	10237.	RRC	Uplink	13:59:47.850	DCCH	UPLINK_DIRECT_TRANSFER
					2837.	13:59:47.841	10588	9	-85.4	10238.	L3SM	Uplink	13:59:47.850	DCCH	IDENTITY_RESPONSE
					2838.	13:59:47.841	10588	9	-3.2	10239.	RRC	Downlink	13:59:47.970	DCCH	DOWNLINK_DIRECT_TRANSFER
					2839.	13:59:48.580	10588	9	-86	10240.	L3SM	Downlink	13:59:47.970	DCCH	CALL_PROCEEDING
					2840.	13:59:48.580	10588	9	-3.1	10241.	RRC	Uplink	13:59:48.681	DCCH	MEASUREMENT_REPORT
					2841.	13:59:48.793	10588	9	-102.6	10242.	RRC	Uplink	13:59:48.792	DCCH	MEASUREMENT_REPORT
					2842.	13:59:48.793	10588	9	-9.9	10243.	RRC	Uplink	13:59:48.792	DCCH	MEASUREMENT_REPORT
					2843.	13:59:49.582	10588	9	-98.4	10244.	RRC	Uplink	13:59:49.833	DCCH	MEASUREMENT_REPORT
					2844.	13:59:49.582	10588	9	-10	10245.	RRC	Uplink	13:59:49.873	DCCH	MEASUREMENT_REPORT
					2845.	13:59:50.029	10588	9	-97.6	10246.	RRC	Downlink	13:59:49.950	DCCH	ACTIVE_SET_UPDATE
					2846.	13:59:50.029	10588	9	-8.7	10247.	RRC	Uplink	13:59:49.962	DCCH	ACTIVE_SET_UPDATE_COMPLETE
					2847.	13:59:50.518	10588	9	-98.2	10248.	RRC	Downlink	13:59:50.100	DCCH	MEASUREMENT_CONTROL
					2848.	13:59:50.518	10588	9	-7.2	10249.	RRC	Downlink	13:59:50.110	DCCH	ACTIVE_SET_UPDATE
					2849.	13:59:51.121	10588	9	-102.2	10250.	RRC	Uplink	13:59:50.121	DCCH	ACTIVE_SET_UPDATE_COMPLETE
					2850.	13:59:51.121	10588	9	-9.9	10251.	RRC	Downlink	13:59:50.240	DCCH	MEASUREMENT_CONTROL
					2851.	13:59:51.633	10588	367	-100.4	10252.	RRC	Uplink	13:59:50.623	DCCH	MEASUREMENT_REPORT
					2852.	13:59:51.633	10588	367	-10.3	10253.	RRC	Downlink	13:59:50.750	DCCH	ACTIVE_SET_UPDATE
					2853.	13:59:51.923	10588	367	-103.4	10254.	RRC	Uplink	13:59:50.771	DCCH	ACTIVE_SET_UPDATE_COMPLETE
					2854.	13:59:51.923	10588	367	-12.4	10255.	RRC	Downlink	13:59:50.920	DCCH	MEASUREMENT_CONTROL
					2855.	13:59:52.621	10588	367	-98	10256.	RRC	Downlink	13:59:51.090	DCCH	RADIO_BEARER_SETUP
					2856.	13:59:52.621	10588	367	-7.2	10257.	RRC	Uplink	13:59:51.453	DCCH	RADIO_BEARER_SETUP_COMPLETE

Analysis:

- This call failure event occurred on short call at 13:59:15:649 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 9 and RF condition RSCP -102.6 dBm and Ec/No -9.9 dB are very good.
- Need to check MT End.

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

	Time	Band (MHz)	Ch	PCI	RSRP	SNR	▲	Event ID	System	Transf. dir.	Time	Subchannel	Message name	
3693.	13:59:31.081					-1		9275.	RRCSM	LTE FDD	Downlink	13:59:00.175	BCCH-SCH	SystemInformationBlockType1
3694.	13:59:32.300	800	6400	11	-108.6			9276.	RRCSM	LTE FDD	Downlink	13:59:00.176	BCCH-SCH	SystemInformation - SIB2,SIB3
3695.	13:59:32.300					-4		9277.	RRCSM	LTE FDD	Downlink	13:59:00.176	BCCH-SCH	SystemInformation - SIB6
3696.	13:59:32.584	800	6400	11	-108.6			9278.	RRCSM	LTE FDD	Downlink	13:59:00.196	BCCH-SCH	SystemInformationBlockType1
3697.	13:59:33.584	800	6400	11	-104.9			9279.	RRCSM	LTE FDD	Downlink	13:59:00.202	DCCH	RRCCONNECTIONRECONFIGURATION
3698.	13:59:33.584					-0.7		9280.	RRCSM	LTE FDD	Uplink	13:59:00.211	DCCH	RRCCONNECTIONRECONFIGURATIONCOMPLETE
3699.	13:59:34.082	800	6400	11	-104.9			9281.	RRCSM	LTE FDD	Uplink	13:59:00.275	DCCH	MEASUREMENTREPORT
3700.	13:59:35.256	800	6400	11	-100.6			9282.	RRCSM	LTE FDD	Downlink	13:59:00.289	DCCH	RRCCONNECTIONRECONFIGURATION
3701.	13:59:35.256					4.6		9283.	RRCSM	LTE FDD	Uplink	13:59:00.290	DCCH	RRCCONNECTIONRECONFIGURATIONCOMPLETE
3702.	13:59:36.694	800	6400	11	-97			9284.	RRCSM	LTE FDD	Downlink	13:59:03.236	DCCH	RRCCONNECTIONRELEASE
3703.	13:59:36.694					5.8		9285.	RRCSM	LTE FDD	Downlink	13:59:48.919	PCCH	PAGING
3704.	13:59:37.584	800	6400	11	-96.7			9286.	L3SM	LTE FDD	Uplink	13:59:48.920		EXTENDED_SERVICE_REQUEST
3705.	13:59:37.584					-0.5		9287.	RRCSM	LTE FDD	Uplink	13:59:48.920	CCCH	RRCCONNECTIONREQUEST
3706.	13:59:38.800	800	6400	11	-101.2			9288.	RRCSM	LTE FDD	Downlink	13:59:48.971	CCCH	RRCCONNECTIONSETUP
3707.	13:59:38.800					0.1		9289.	RRCSM	LTE FDD	Uplink	13:59:48.975	DCCH	RRCCONNECTIONSETUPCOMPLETE
3708.	13:59:39.966	800	6400	11	-101.2			9290.	RRCSM	LTE FDD	Downlink	13:59:49.025	DCCH	RRCCONNECTIONRELEASE
3709.	13:59:39.966					2.7		9291.	RRCSM	UMTS FDD	Downlink	13:59:49.456	BCCH_BCH	SYSTEM_INFORMATION_BCH
3710.	13:59:41.580	800	6400	11	-100.8			9292.	RRCSM	UMTS FDD	Downlink	13:59:49.476	BCCH_BCH	SYSTEM_INFORMATION_BCH
3711.	13:59:41.580					-1.9		9293.	RRCSM	UMTS FDD	Downlink	13:59:49.516	BCCH_BCH	SYSTEM_INFORMATION_BCH
3712.	13:59:42.556	800	6400	11	-99.1			9294.	RRCSM	UMTS FDD	Downlink	13:59:49.516	BCCH	MASTER_INFORMATION_BLOCK
3713.	13:59:42.556					1		9295.	RRCSM	UMTS FDD	Downlink	13:59:49.536	BCCH_BCH	SYSTEM_INFORMATION_BCH
3714.	13:59:43.850	800	6400	11	-103.6			9296.	RRCSM	UMTS FDD	Downlink	13:59:49.536	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_3
3715.	13:59:43.850					-5.4		9297.	RRCSM	UMTS FDD	Downlink	13:59:49.536	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_7
3716.	13:59:45.287	800	6400	11	-101.9			9298.	RRCSM	UMTS FDD	Downlink	13:59:49.556	BCCH_BCH	SYSTEM_INFORMATION_BCH
3717.	13:59:45.287					-0.7		9299.	RRCSM	UMTS FDD	Downlink	13:59:49.576	BCCH_BCH	SYSTEM_INFORMATION_BCH
3718.	13:59:46.583	800	6400	11	-104.6			9300.	RRCSM	UMTS FDD	Downlink	13:59:49.596	BCCH_BCH	SYSTEM_INFORMATION_BCH
3719.	13:59:46.583					-4.5		9301.	RRCSM	UMTS FDD	Downlink	13:59:49.596	BCCH	MASTER_INFORMATION_BLOCK
3720.	13:59:47.789	800	6400	11	-100.4			9302.	RRCSM	UMTS FDD	Downlink	13:59:49.616	BCCH_BCH	SYSTEM_INFORMATION_BCH
3721.	13:59:47.789					-3.6		9303.	RRCSM	UMTS FDD	Downlink	13:59:49.636	BCCH_BCH	SYSTEM_INFORMATION_BCH
3722.	13:59:49.026	800	6400	11	-101.9			9304.	RRCSM	UMTS FDD	Downlink	13:59:49.716	BCCH_BCH	SYSTEM_INFORMATION_BCH
3723.	13:59:49.026					0.7		9305.	RRCSM	UMTS FDD	Downlink	13:59:49.716	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_1
3724.	13:59:49.087	800	6400	11	-102.1			9306.	RRCSM	UMTS FDD	Downlink	13:59:49.736	BCCH_BCH	SYSTEM_INFORMATION_BCH

Analysis:

- On MT End, During the setup fail, UE was latched with PCI 11 and RF condition RSRP -104 dBm and SINR -3.6 dB both are poor.
- As per the Analysis the call setup failure event occurred due to poor Coverage in the network.

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

	Time	System	Serving band		T. best active RSCP	Time	Ch	SC	T. best active Ec/No		System	Transf. dir.	Time	Subchannel	Message name	
1.	14:00:50.694	UMTS FDD	2100	Cal	2258.		14:00:43.635	10690	10	-6.5	8848.	UMTS FDD	Downlink	14:00:40.948	DCCH	DOWNLINK_DIRECT_TRANSFER
					2259.	-93.7	14:00:44.062	10690	380		8849.	UMTS FDD	Downlink	14:00:40.948	DCCH	CALL_PROCEEDING
					2260.		14:00:44.062	10690	380	-7.8	8850.	UMTS FDD	Uplink	14:00:41.062	DCCH	MEASUREMENT_REPORT
					2261.	-95.5	14:00:44.633	10690	10		8851.	UMTS FDD	Uplink	14:00:41.172	DCCH	MEASUREMENT_REPORT
					2262.		14:00:44.633	10690	10	-12.6	8852.	UMTS FDD	Downlink	14:00:41.388	DCCH	ACTIVE_SET_UPDATE
					2263.	-97	14:00:45.203	10690	380		8853.	UMTS FDD	Uplink	14:00:41.406	DCCH	ACTIVE_SET_UPDATE_COMPLETE
					2264.		14:00:45.203	10690	10	-13.6	8854.	UMTS FDD	Downlink	14:00:41.789	DCCH	PHYSICAL_CHANNEL_RECONFIGURATION
					2265.	-93.8	14:00:45.721	10690	10		8855.	UMTS FDD	Uplink	14:00:41.910	DCCH	MEASUREMENT_REPORT
					2266.		14:00:45.721	10690	10	-5.7	8856.	UMTS FDD	Uplink	14:00:42.382	DCCH	MEASUREMENT_REPORT
					2267.	-94.9	14:00:46.171	10690	10		8857.	UMTS FDD	Uplink	14:00:42.596	DCCH	PHYSICAL_CHANNEL_RECONFIGURATION_COMPLI
					2268.		14:00:46.171	10715	10	-5.8	8858.	UMTS FDD	Downlink	14:00:42.908	DCCH	MEASUREMENT_CONTROL
					2269.	-96.1	14:00:46.725	10715	10		8859.	UMTS FDD	Uplink	14:00:43.250	DCCH	MEASUREMENT_REPORT
					2270.		14:00:46.725	10715	10	-6.1	8860.	UMTS FDD	Uplink	14:00:43.613	DCCH	MEASUREMENT_REPORT
					2271.	-97.2	14:00:47.321	10690	10		8861.	UMTS FDD	Uplink	14:00:43.750	DCCH	MEASUREMENT_REPORT
					2272.		14:00:47.321	10690	10	-14	8862.	UMTS FDD	Uplink	14:00:43.910	DCCH	MEASUREMENT_REPORT
					2273.	-95.7	14:00:47.861	10690	10		8863.	UMTS FDD	Downlink	14:00:44.028	DCCH	RADIO_BEARER_RECONFIGURATION
					2274.		14:00:47.861	10715	10	-10.8	8864.	UMTS FDD	Uplink	14:00:44.260	DCCH	MEASUREMENT_REPORT
					2275.	-96.8	14:00:48.281	10690	10		8865.	UMTS FDD	Uplink	14:00:44.795	DCCH	RADIO_BEARER_RECONFIGURATION_COMPLETE
					2276.		14:00:48.281	10715	10	-6.5	8866.	UMTS FDD	Downlink	14:00:45.588	DCCH	MEASUREMENT_CONTROL
					2277.	-101.4	14:00:48.803	10690	10		8867.	UMTS FDD	Downlink	14:00:45.628	DCCH	MEASUREMENT_CONTROL
					2278.		14:00:48.803	10690	10	-9.5	8868.	UMTS FDD	Uplink	14:00:45.689	DCCH	MEASUREMENT_REPORT
					2279.	-100.8	14:00:49.289	10690	10		8869.	UMTS FDD	Downlink	14:00:45.708	DCCH	MEASUREMENT_CONTROL
					2280.		14:00:49.289	10715	10	-12.6	8870.	UMTS FDD	Downlink	14:00:45.748	DCCH	MEASUREMENT_CONTROL
					2281.	-92.7	14:00:49.885	10690	10		8871.	UMTS FDD	Downlink	14:00:45.748	DCCH	MEASUREMENT_CONTROL
					2282.		14:00:49.885	10715	10	-8.7	8872.	UMTS FDD	Downlink	14:00:45.788	DCCH	MEASUREMENT_CONTROL
					2283.	-98.6	14:00:50.087	10715	10		8873.	UMTS FDD	Uplink	14:00:45.821	DCCH	MEASUREMENT_REPORT
					2284.		14:00:50.087	10715	10	-11.1	8874.	UMTS FDD	Downlink	14:00:45.868	DCCH	MEASUREMENT_CONTROL
					2285.	-96	14:00:50.694	10715	10		8875.	UMTS FDD	Uplink	14:00:46.804	DCCH	MEASUREMENT_REPORT
					2286.		14:00:50.694	10715	10	-8.2	8876.	UMTS FDD	Uplink	14:00:47.002	DCCH	MEASUREMENT_REPORT
					2287.	-97.3	14:00:51.455	10715	10		8877.	UMTS FDD	Uplink	14:00:47.443	DCCH	MEASUREMENT_REPORT
					2288.		14:00:51.455	10715	10	-10.3	8878.	UMTS FDD	Uplink	14:00:47.629	DCCH	MEASUREMENT_REPORT
					2289.	-92.7	14:00:51.720	10715	10		8879.	UMTS FDD	Uplink	14:00:48.526	DCCH	MEASUREMENT_REPORT
					2290.		14:00:51.720	10715	10	-5.6	8880.	UMTS FDD	Uplink	14:00:49.629	DCCH	MEASUREMENT_REPORT
					2291.	-88	14:00:52.478	10715	113		8881.	UMTS FDD	Uplink	14:00:49.821	DCCH	MEASUREMENT_REPORT
					2292.		14:00:52.478	10715	113	-4.6	8882.	UMTS FDD	Downlink	14:00:50.022	BCCH_BCH	SYSTEM_INFORMATION_BCH
					2293.	-96.4	14:00:52.887	10715	113		8883.	UMTS FDD	Downlink	14:00:50.042	BCCH_BCH	SYSTEM_INFORMATION_BCH

Analysis:

- This call failure event occurred on short call at 14:00:50:694 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 10 and RF condition RSCP -100.8 dBm and Ec/No -12.6 dB are very poor.
- As per the Analysis the call setup failure event occurred due to poor Coverage in the network.

Phase-1 Call Drop Analysis 1 MS9 Airtel MO

Event ID	Event	CS disc. status	N	Time	RxLev sub	ARFCN	BSIC	LAC	RAC	RXQ sub	Event ID	System	Transf. dir.	Time	Subchannel	Message name
1, CAD	Call dropped	Dropped call	Nor	2788, 14:13:18.902	-87	96	21	50000	1		10157, L3SM	GSM	Uplink	14:13:26.037	SACCH	MEASUREMENT_REPORT
				2789, 14:13:19.317						0	10158, L3SM	GSM	Downlink	14:13:26.471	SACCH	SYSTEM_INFORMATION_TYPE_5
				2790, 14:13:19.641	-87	96	21	50000	1		10159, L3SM	GSM	Uplink	14:13:26.517	SACCH	MEASUREMENT_REPORT
				2791, 14:13:20.065	-85	96	21	50000	1		10160, L3SM	GSM	Downlink	14:13:26.951	SACCH	MEASUREMENT_INFORMATION
				2792, 14:13:20.623	-85	96	21	50000	1		10161, L3SM	GSM	Uplink	14:13:26.997	SACCH	MEASUREMENT_REPORT
				2793, 14:13:20.965	-85	96	21	50000	1		10162, L3SM	GSM	Downlink	14:13:27.431	SACCH	SYSTEM_INFORMATION_TYPE_6
				2794, 14:13:21.238						1	10163, L3SM	GSM	Uplink	14:13:27.478	SACCH	MEASUREMENT_REPORT
				2795, 14:13:21.638	-86	96	21	50000	1		10164, L3SM	GSM	Downlink	14:13:27.911	SACCH	SYSTEM_INFORMATION_TYPE_5
				2796, 14:13:22.197	-89	96	21	50000	1		10165, L3SM	GSM	Uplink	14:13:27.957	SACCH	MEASUREMENT_REPORT
				2797, 14:13:22.197						2	10166, L3SM	GSM	Downlink	14:13:28.391	SACCH	MEASUREMENT_INFORMATION
				2798, 14:13:22.677						4	10167, L3SM	GSM	Uplink	14:13:28.437	SACCH	MEASUREMENT_REPORT
				2799, 14:13:22.718	-88	96	21	50000	1		10168, L3SM	GSM	Downlink	14:13:28.871	SACCH	SYSTEM_INFORMATION_TYPE_6
				2800, 14:13:23.157						3	10169, L3SM	GSM	Uplink	14:13:28.918	SACCH	MEASUREMENT_REPORT
				2801, 14:13:23.245	-86	96	21	50000	1		10170, L3SM	GSM	Downlink	14:13:29.351	SACCH	SYSTEM_INFORMATION_TYPE_5
				2802, 14:13:23.637						1	10171, L3SM	GSM	Uplink	14:13:29.397	SACCH	MEASUREMENT_REPORT
				2803, 14:13:23.642	-87	96	21	50000	1		10172, L3SM	GSM	Downlink	14:13:29.831	SACCH	MEASUREMENT_INFORMATION
				2804, 14:13:24.325	-86	96	21	50000	1		10173, L3SM	GSM	Uplink	14:13:29.877	SACCH	MEASUREMENT_REPORT
				2805, 14:13:24.597						4	10174, L3SM	GSM	Downlink	14:13:30.311	SACCH	SYSTEM_INFORMATION_TYPE_6
				2806, 14:13:24.883	-87	96	21	50000	1		10175, L3SM	GSM	Uplink	14:13:30.357	SACCH	MEASUREMENT_REPORT
				2807, 14:13:25.557	-89	96	21	50000	1		10176, L3SM	GSM	Downlink	14:13:30.791	SACCH	SYSTEM_INFORMATION_TYPE_5
				2808, 14:13:25.557						2	10177, L3SM	GSM	Uplink	14:13:30.837	SACCH	MEASUREMENT_REPORT
				2809, 14:13:26.517	-89	96	21	50000	1		10178, L3SM	GSM	Downlink	14:13:31.271	SACCH	MEASUREMENT_INFORMATION
				2810, 14:13:26.517						3	10179, L3SM	GSM	Uplink	14:13:31.317	SACCH	MEASUREMENT_REPORT
				2811, 14:13:26.997						1	10180, L3SM	GSM	Downlink	14:13:31.751	SACCH	SYSTEM_INFORMATION_TYPE_6
				2812, 14:13:27.478						0	10181, L3SM	GSM	Uplink	14:13:31.797	SACCH	MEASUREMENT_REPORT
				2813, 14:13:27.565	-86	96	21	50000	1		10182, L3SM	GSM	Downlink	14:13:32.144	DCCH	DISCONNECT
				2814, 14:13:27.957						0	10183, L3SM	GSM	Uplink	14:13:32.144	DCCH	RELEASE
				2815, 14:13:27.980	-87	96	21	50000	1		10184, L3SM	GSM	Downlink	14:13:32.231	SACCH	SYSTEM_INFORMATION_TYPE_5
				2816, 14:13:28.437						0	10185, L3SM	GSM	Downlink	14:13:32.264	DCCH	RELEASE_COMPLETE
				2817, 14:13:28.641	-87	96	21	50000	1		10186, L3SM	GSM	Uplink	14:13:32.277	SACCH	MEASUREMENT_REPORT
				2818, 14:13:28.918	-86	96	21	50000	1		10187, L3SM	GSM	Downlink	14:13:32.384	DCCH	CHANNEL_RELEASE
				2819, 14:13:29.462	-86	96	21	50000	1		10188, L3SM	GSM	Downlink	14:13:33.371	CCCH	PAGING_REQUEST_TYPE_1
				2820, 14:13:29.877						2	10189, L3SM	GSM	Downlink	14:13:33.982	BCCH	SYSTEM_INFORMATION_TYPE_13
				2821, 14:13:29.918	-88	96	21	50000	1		10190, L3SM	GSM	Downlink	14:13:35.725	CCCH	PAGING_REQUEST_TYPE_1
				2822, 14:13:30.357						1	10191, L3SM	GSM	Downlink	14:13:35.808	CCCH	IMMEDIATE_ASSIGNMENT

Analysis:

- This call drop event occurred on MO side at 14:13:32:114 time when UE was latched with 2G network.
- After getting Alerting message at 12:12:31:622 time, core network responded with CC disconnect with Cause(31): Normal unspecified and Call drop happened.
- During the session UE was latched with ARFCN 96 and RF condition Rx lev -86 dBm is good and Rx qual 4 dB was very poor.
- As per the analysis call drop happened from poor Coverage .

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

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

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

Call Drop cause from Airtel	Count
Total Call Drop	0

Call Drop cause from CWS	Count
Total Call Drop	0

Phase-2 Call Attempt Failure Analysis 1 From MS7 CWC MO

	Time	System	Serving band	Call fail	Time	RxLev sub	ARFCN	BSIC	LAC	RAC	RXQ sub		System	Transf. dir.	Time	Subchannel	Message name	
1.	17:08:20.551	GSM	900	Dropped	609.	17:08:04.419					3		9829.	GSM	Uplink	17:08:08.185	SACCH	MEASUREMENT_REPORT
					610.	17:08:04.677	-86	6	29	1			9830.	GSM	Downlink	17:08:08.208	DCCH	CM_SERVICE_ACCEPT
					611.	17:08:04.890					3		9831.	GSM	Uplink	17:08:08.209	DCCH	SETUP
					612.	17:08:05.361	-87	6	29	1			9832.	GSM	Downlink	17:08:08.356	SACCH	MEASUREMENT_INFORMATION
					613.	17:08:05.361					0		9833.	GSM	Uplink	17:08:08.656	SACCH	MEASUREMENT_REPORT
					614.	17:08:05.831	-90	6	29	1			9834.	GSM	Downlink	17:08:08.827	SACCH	SYSTEM_INFORMATION_TYPE_5
					615.	17:08:05.831					0		9835.	GSM	Downlink	17:08:08.914	DCCH	CALL_PROCEEDING
					616.	17:08:06.302					0		9836.	GSM	Uplink	17:08:09.127	SACCH	MEASUREMENT_REPORT
					617.	17:08:06.325	-91	6	29	1			9837.	GSM	Downlink	17:08:09.297	SACCH	SYSTEM_INFORMATION_TYPE_5TER
					618.	17:08:07.107	-92	6	29	1			9838.	GSM	Uplink	17:08:09.598	SACCH	MEASUREMENT_REPORT
					619.	17:08:07.244					1		9839.	GSM	Downlink	17:08:09.768	SACCH	SYSTEM_INFORMATION_TYPE_6
					620.	17:08:07.415	-90	6	29	1			9840.	GSM	Uplink	17:08:10.068	SACCH	MEASUREMENT_REPORT
					621.	17:08:07.715	-92	6	29	1			9841.	GSM	Downlink	17:08:10.239	SACCH	MEASUREMENT_INFORMATION
					622.	17:08:07.715					3		9842.	GSM	Uplink	17:08:10.539	SACCH	MEASUREMENT_REPORT
					623.	17:08:08.185					2		9843.	GSM	Downlink	17:08:10.710	SACCH	MEASUREMENT_INFORMATION
					624.	17:08:08.656	-94	6	29	1			9844.	GSM	Uplink	17:08:11.010	SACCH	MEASUREMENT_REPORT
					625.	17:08:08.656					4		9845.	GSM	Downlink	17:08:11.033	DCCH	ASSIGNMENT_COMMAND
					626.	17:08:09.166	-95	6	29	1			9846.	GSM	Uplink	17:08:11.093	DCCH	ASSIGNMENT_COMPLETE
					627.	17:08:09.598					5		9847.	GSM	Uplink	17:08:11.199	SACCH	MEASUREMENT_REPORT
					628.	17:08:10.068					1		9848.	GSM	Downlink	17:08:11.633	SACCH	SYSTEM_INFORMATION_TYPE_5
					629.	17:08:10.167	-91	6	29	1			9849.	GSM	Uplink	17:08:11.679	SACCH	MEASUREMENT_REPORT
					630.	17:08:10.539					5		9850.	GSM	Downlink	17:08:12.113	SACCH	SYSTEM_INFORMATION_TYPE_5TER
					631.	17:08:10.710	-94	6	29	1			9851.	GSM	Uplink	17:08:12.159	SACCH	MEASUREMENT_REPORT
					632.	17:08:11.010					5		9852.	GSM	Downlink	17:08:12.593	SACCH	SYSTEM_INFORMATION_TYPE_6
					633.	17:08:11.199	-95	24	29	1			9853.	GSM	Uplink	17:08:12.639	SACCH	MEASUREMENT_REPORT
					634.	17:08:11.199					7		9854.	GSM	Downlink	17:08:13.073	SACCH	MEASUREMENT_INFORMATION
					635.	17:08:11.679					6		9855.	GSM	Uplink	17:08:13.119	SACCH	MEASUREMENT_REPORT
					636.	17:08:11.683	-96	24	29	1			9856.	GSM	Uplink	17:08:13.599	SACCH	MEASUREMENT_REPORT
					637.	17:08:12.159					5		9857.	GSM	Uplink	17:08:14.079	SACCH	MEASUREMENT_REPORT
					638.	17:08:12.167	-94	24	29	1			9858.	GSM	Uplink	17:08:14.559	SACCH	MEASUREMENT_REPORT
					639.	17:08:12.639					6		9859.	GSM	Downlink	17:08:14.993	SACCH	SYSTEM_INFORMATION_TYPE_5
					640.	17:08:13.105	-97	24	29	1			9860.	GSM	Uplink	17:08:15.039	SACCH	MEASUREMENT_REPORT
					641.	17:08:13.119					7		9861.	GSM	Downlink	17:08:15.473	SACCH	SYSTEM_INFORMATION_TYPE_5TER
					642.	17:08:13.387	-97	24	29	1			9862.	GSM	Uplink	17:08:15.519	SACCH	MEASUREMENT_REPORT
					643.	17:08:14.088	-97	24	29	1			9863.	GSM	Downlink	17:08:15.953	SACCH	SYSTEM_INFORMATION_TYPE_6
					644.	17:08:14.683	-98	24	29	1			9864.	GSM	Uplink	17:08:15.999	SACCH	MEASUREMENT_REPORT

- Analysis:**
- This call failure event occurred on short call at 17:08:20:551 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 6 and RF condition Rx lev -94 dBm is good and Rx qual 4 dB was very good.
 - As per the Analysis the call setup failure event occurred due to poor quality in the network.

THANKS