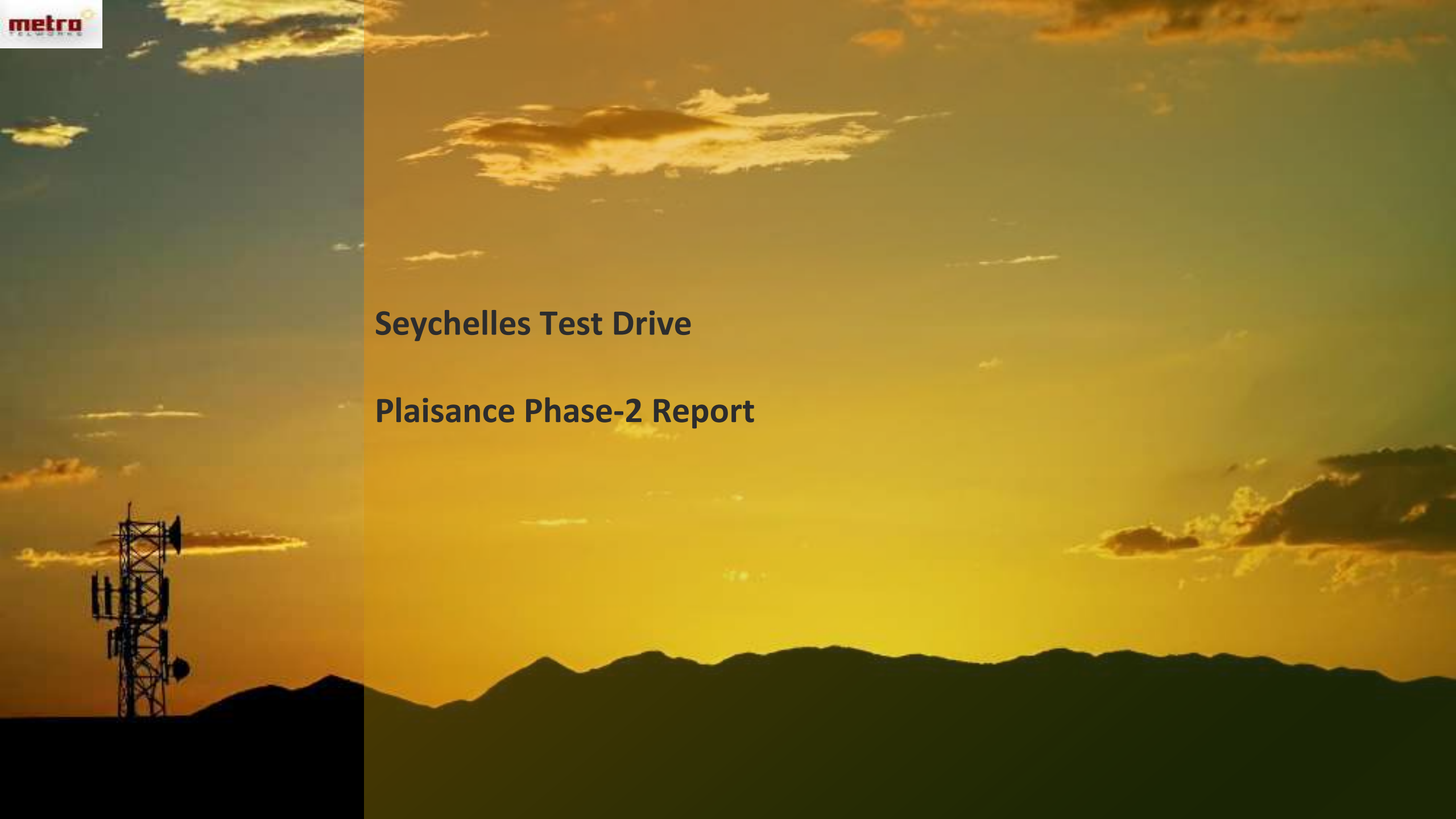


Seychelles Test Drive

Plaisance Phase-2 Report

DRIVE TEST ROUTE

Phase-1 Dates- 08th Oct 2024

Route Name: Mahe

District Name: Plaisance

Region: Central

Island: Mahé

Drive Test Distance: 18.68 kms

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

Phase-2 Dates- 21st Oct 2024

Route Name: Mahe

District Name: Plaisance

Region: Central

Island: Mahé

Drive Test Distance: 16.32 kms

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

VOICE EXECUTIVE SUMMARY

Phase-1

Short Call Findings:

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

Long Call Findings :

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

Phase-2

Short Call Findings:

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

Long Call Findings :

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

4G PREFERRED DATA TEST – EXECUTIVE SUMMARY

Phase-1

4G Preferred Data Findings:

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

Phase-2

4G Preferred Data Findings:

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

3G PREFERRED DATA TEST - EXECUTIVE SUMMARY

Phase-1

3G Preferred Data Test Findings:

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

Phase-2

3G Preferred Data Test Findings:

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

TESTING METHODOLOGY

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

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

DATA	Test Type and Timeout	Technology 3G Preferred	Technology 4G Preferred
POP always on. 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 Call Statistics		
Short Call Scenario	Operator 1	Operator 2
Voice KPIs	Airtel	CWS
Call Attempt	62	59
Call Failed	2	0
Call Connected	60	59
CSSR[%]	96.77	100.00
USCSR[%]	3.23	0.00
CST [s] Alerting	6.80	7.16
CST [s]Connected	7.08	7.38

CSSR= Call Setup Success rate

USCSR=Unsuccessful call setup ratio

CST=Call setup time

Call Setup Success Ratio >97%

CRR= Call retainability ratio

DCR=Dropped-call rate

MOS=Mean Opinion Score

Drop Call Ratio<2

Call Setup Time (s)	Operators		Rank	
	Airtel	CWS	Airtel	CWS
Overall CST (until ringing/alerting)	6.80	7.16	1	2
CS calls CST (until ringing/alerting)	6.45	#N/A	1	#N/A
CSFB calls CST (until ringing/alerting)	6.82	7.16	1	2
Overall CST (until Connect/Connect Acknowledge)	7.08	7.38	1	2
CS calls CST (until Connect/Connect Acknowledge)	6.84	#N/A	1	#N/A
CSFB calls CST (until Connect/Connect Acknowledge)	7.09	7.38	1	2

Phase-2

Short Call Statistics		
Short Call Scenario	Operator 1	Operator 2
Voice KPIs	Airtel	CWS
Call Attempt	66	65
Call Failed	0	0
Call Connected	66	65
CSSR[%]	100.00	100.00
USCSR[%]	0.00	0.00
CST [s] Alerting	7.00	7.66
CST [s]Connected	7.24	7.86

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

VOICE TEST KPI STATISTICS (Long Call)

Phase-1

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

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

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

Phase-2

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

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

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

DATA TEST KPI STATISTICS(4G Preferred)

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

4G PREFERRED THROUGHPUT FILE ACCESS

Phase-1

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	10	10	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	10	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	10	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	10	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	8	8	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	8	6	100.00	100.00
	Failure	0	0	0.00	0.00

Phase-2

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	9	10	90.00	100.00
	Failure	1	0	10.00	0.00
SFTP UL	Success	9	9	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	10	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	9	10	90.00	100.00
	Failure	1	0	10.00	0.00
HTTP Capacity DL	Success	9	9	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	9	9	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 (%)
Kepler	Success	6	9	60.00	100.00
	Failure	4	0	40.00	0.00
Mobile Kepler	Success	8	8	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	8	9	88.89	100.00
	Failure	1	0	11.11	0.00
www.nbs.gov.sc	Success	9	9	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	9	8	100.00	88.89
	Failure	0	1	0.00	11.11

Phase-2

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

4G PREFERRED LATENCY

Phase-1

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	18	18
	Average Latency [ms]	257.11	298.17
	Median Latency [ms]	144	249
	Ping session status: Successful	18	18
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
www.google.com	Average Latency [ms]	420.00	255.75
	Median Latency [ms]	423	178
	Ping session status: Successful	8	8
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00
102.133.176.104	Average Latency [ms]	126.80	332.10
	Median Latency [ms]	125	324
	Ping session status: Successful	10	10
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	0
	Packet Loss<1%	0.00	0.00

Phase-2

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

4G PREFERRED YOUTUBE COMPARISON

Phase-1

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

Phase-2

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

DATA TEST KPI STATISTICS (3G Preferred)

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

3G PREFERRED THROUGHPUT FILE ACCESS

Phase-1

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G (%)	CWS 3G (%)
SFTP DL	Success	10	7	100.00	87.50
	Failure	0	1	0.00	12.50
SFTP UL	Success	10	8	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	10	9	100.00	90.00
	Failure	0	1	0.00	10.00
HTTP UL	Success	10	10	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	6	6	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	6	6	100.00	100.00
	Failure	0	0	0.00	0.00

Phase-2

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

3G PREFERRED BROWSING FILE ACCESS

Phase-1

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

Phase-2

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

3G PREFERRED LATENCY

Phase-1

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

Phase-2

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

3G PREFERRED YOUTUBE COMPARISON

Phase-1

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

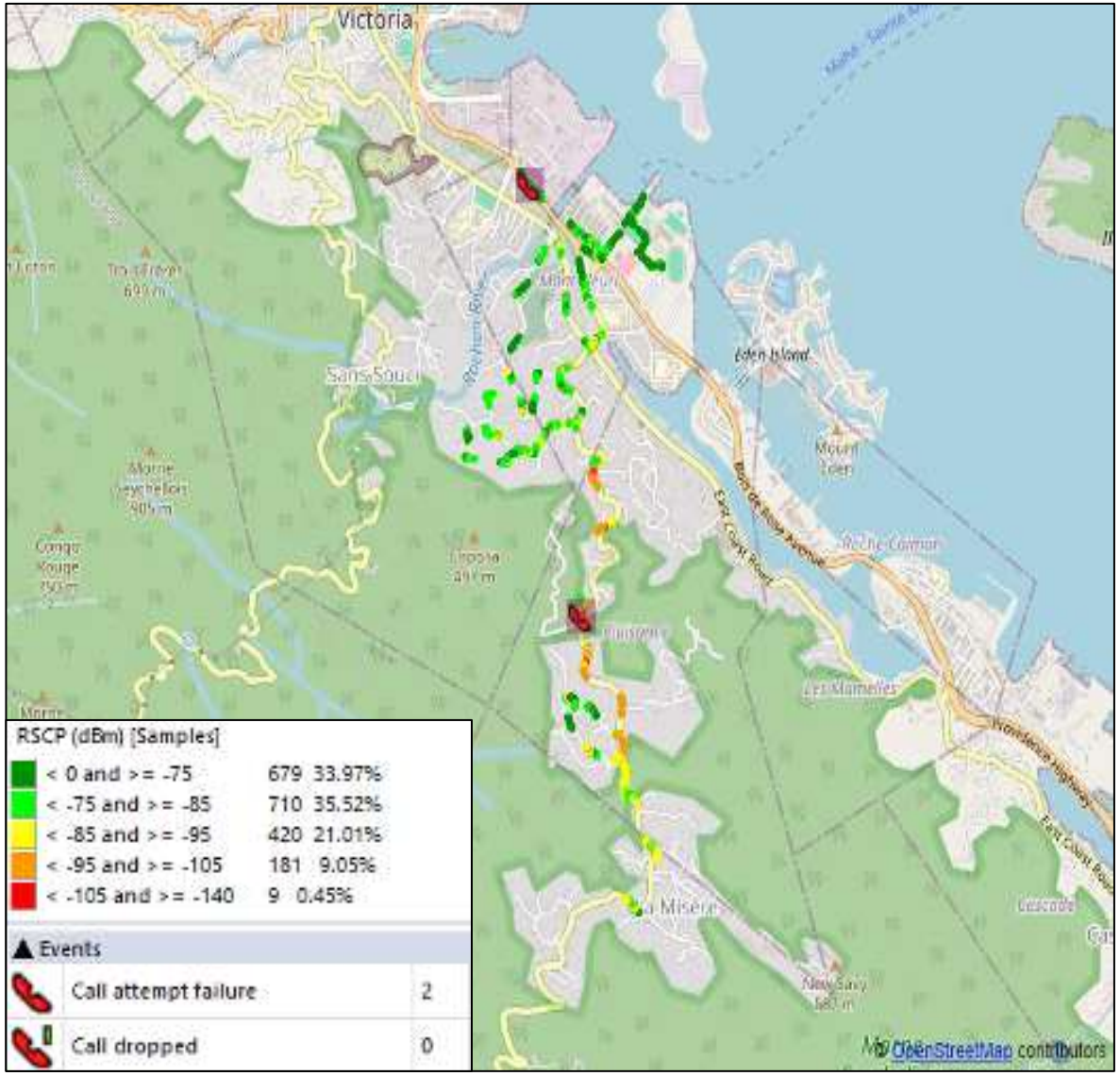
Phase-2

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

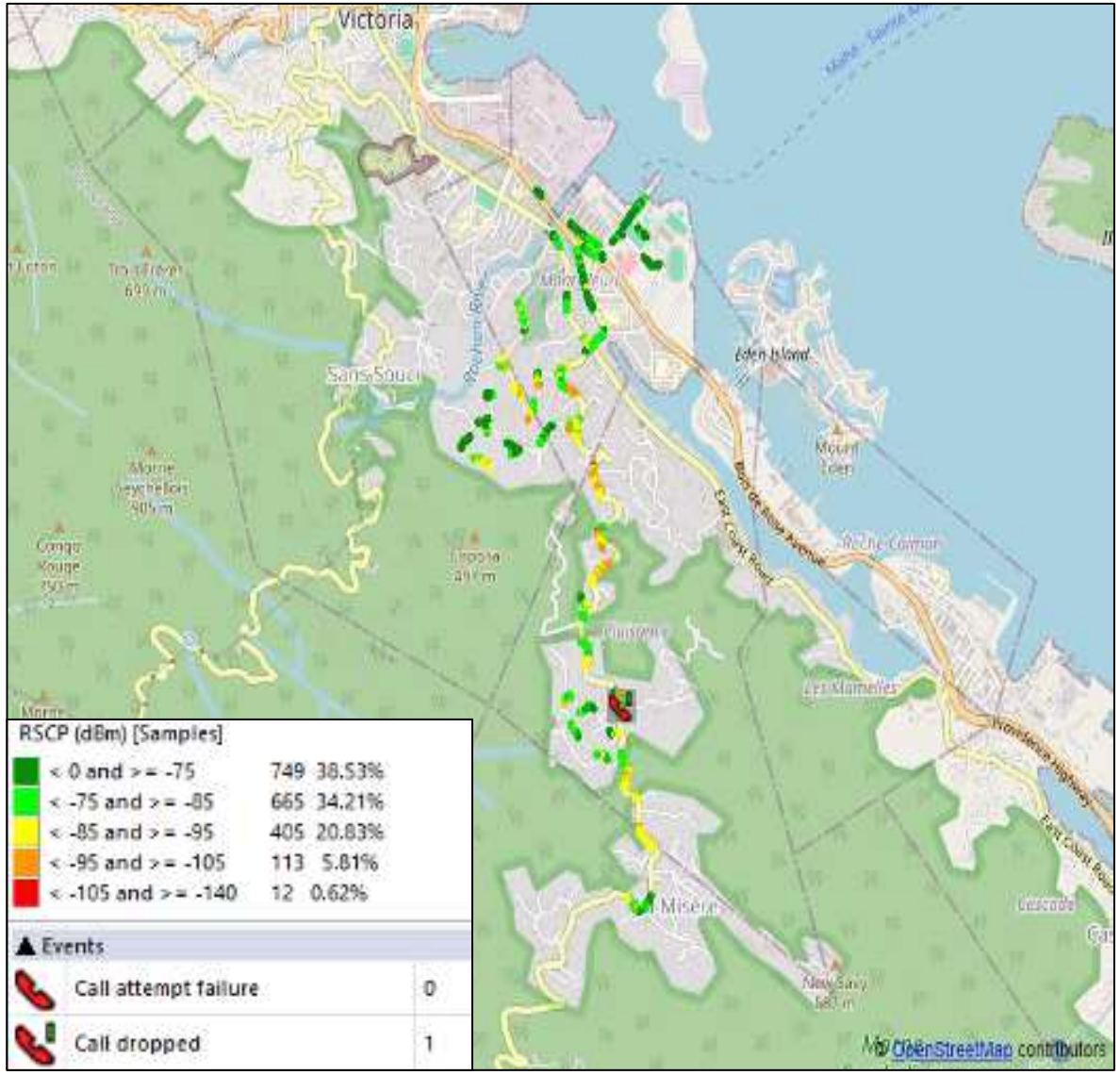
Voice Call Events

Phase-1 SHORT CALL FAILURE EVENTS LOCATION vs RSCP

Airtel SC MO

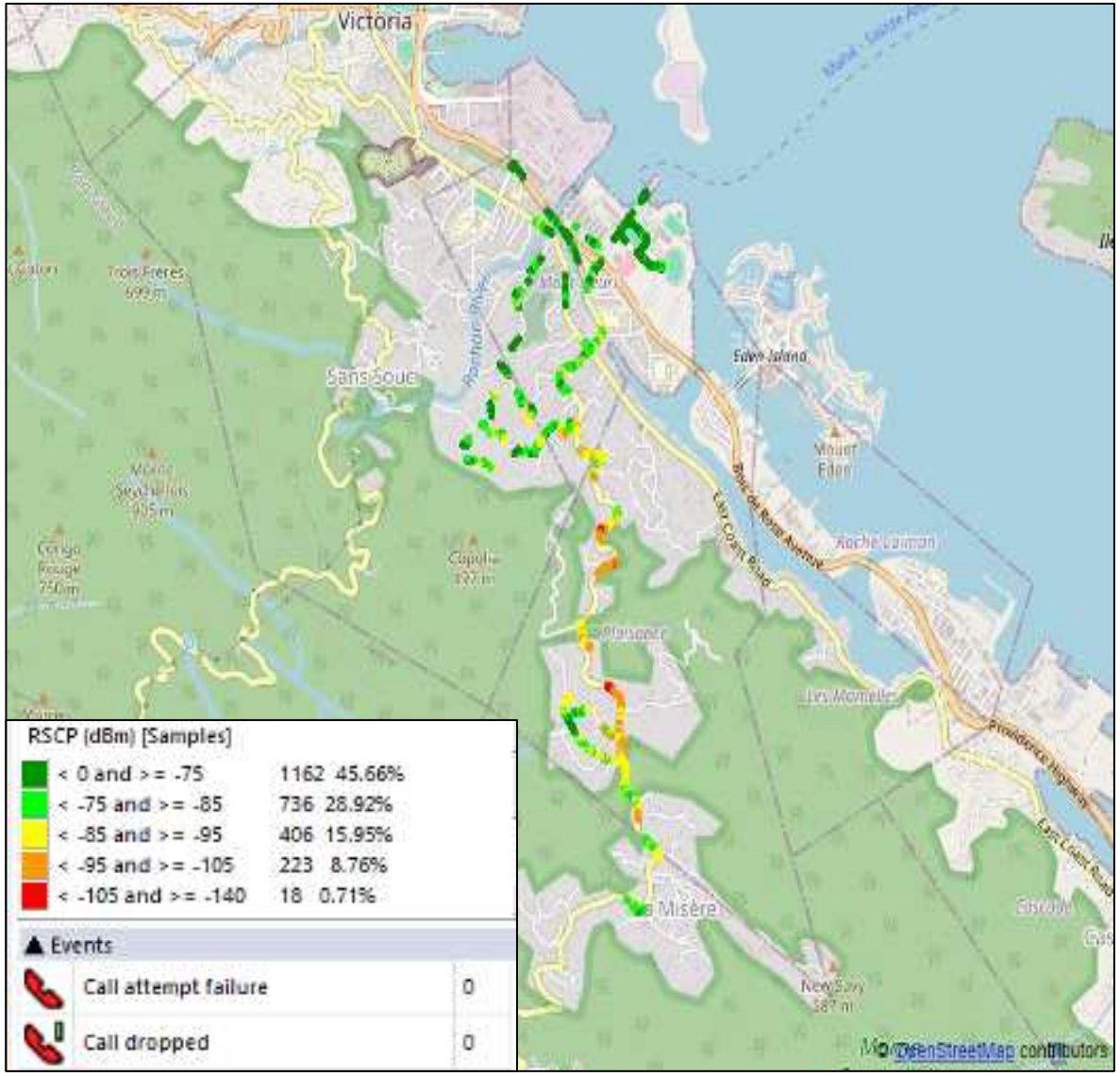


CWS SC MO

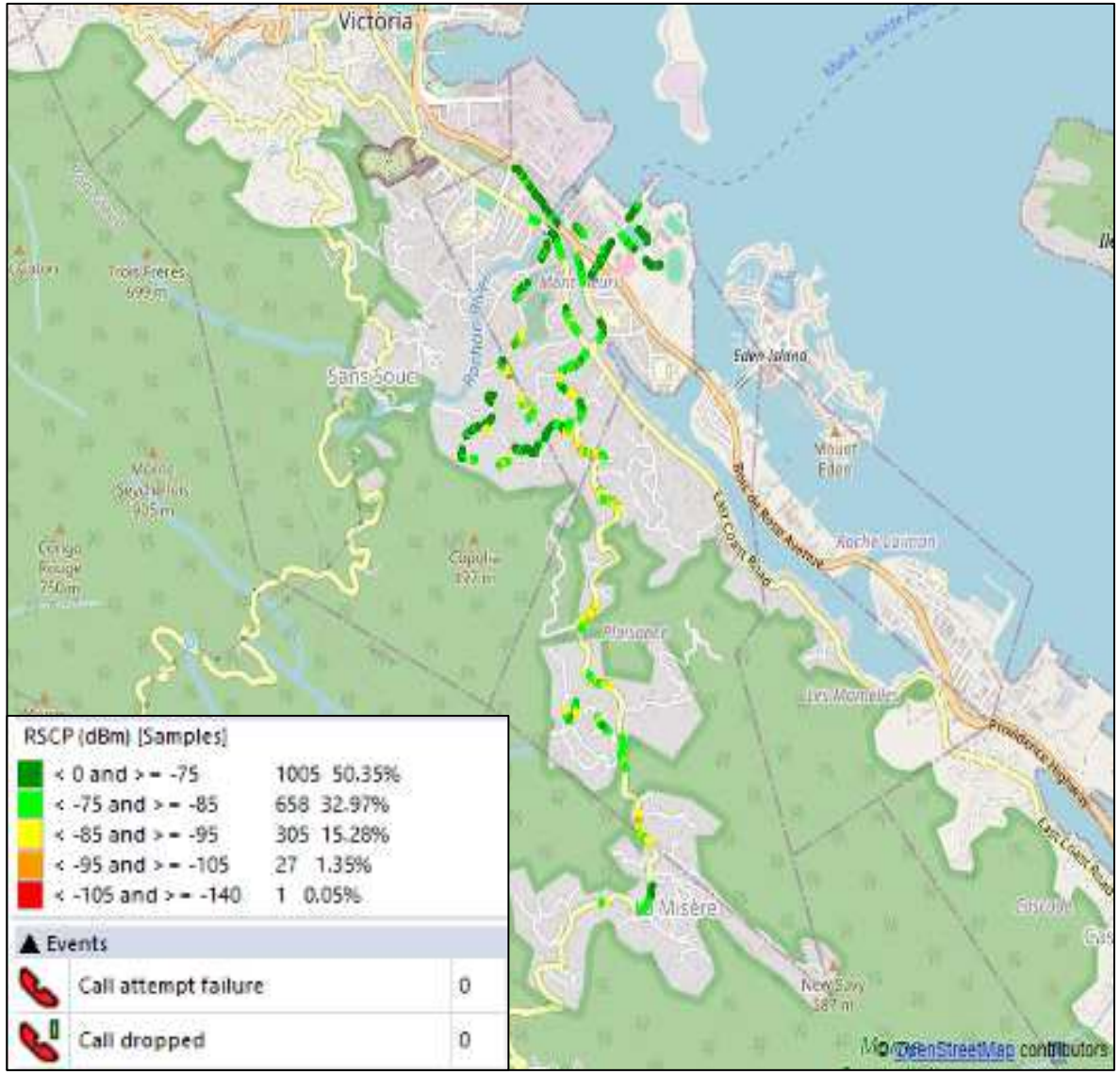


Phase-2 SHORT CALL FAILURE EVENTS LOCATION vs RSCP

Airtel SC MO

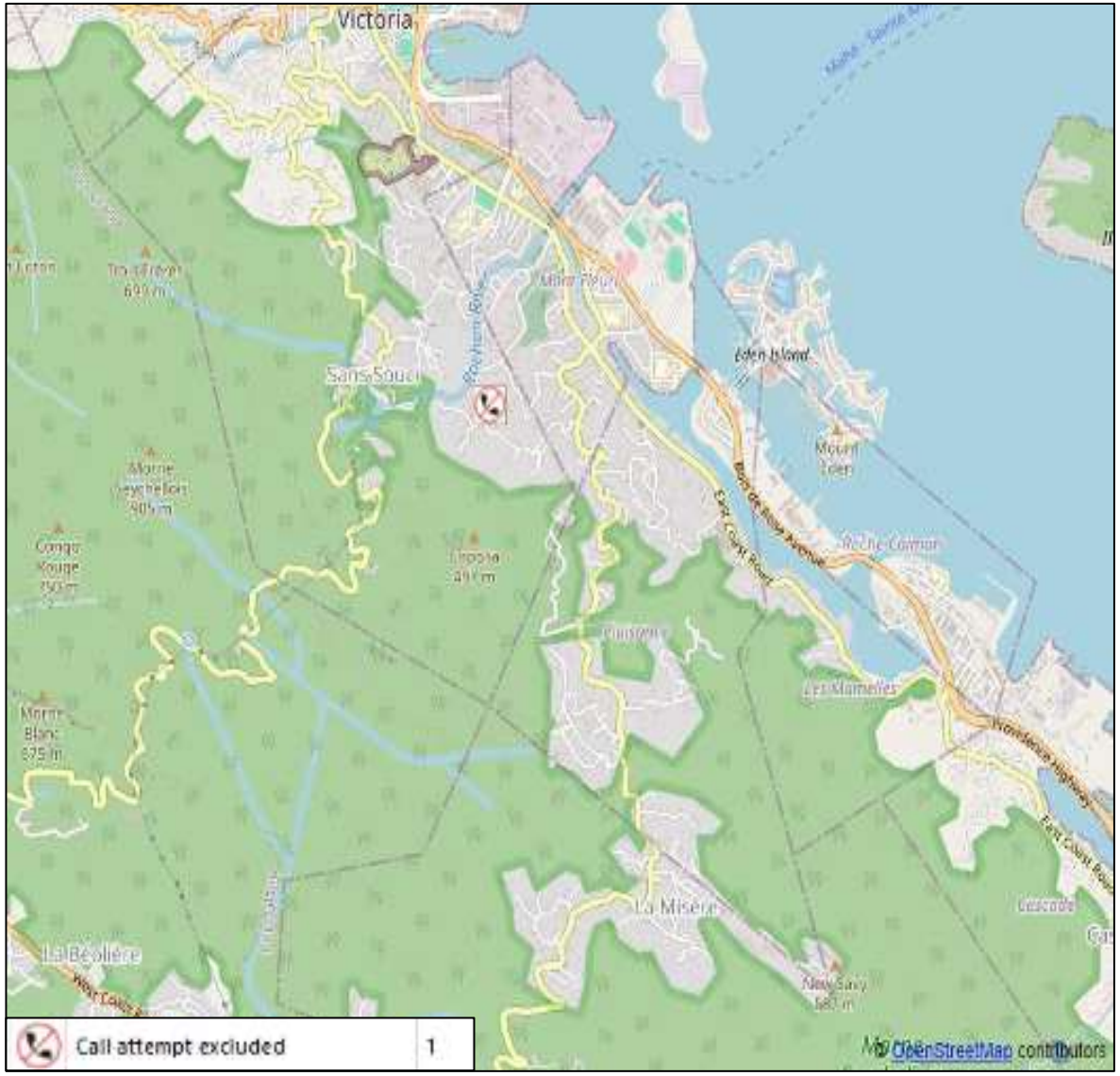


CWS SC MO

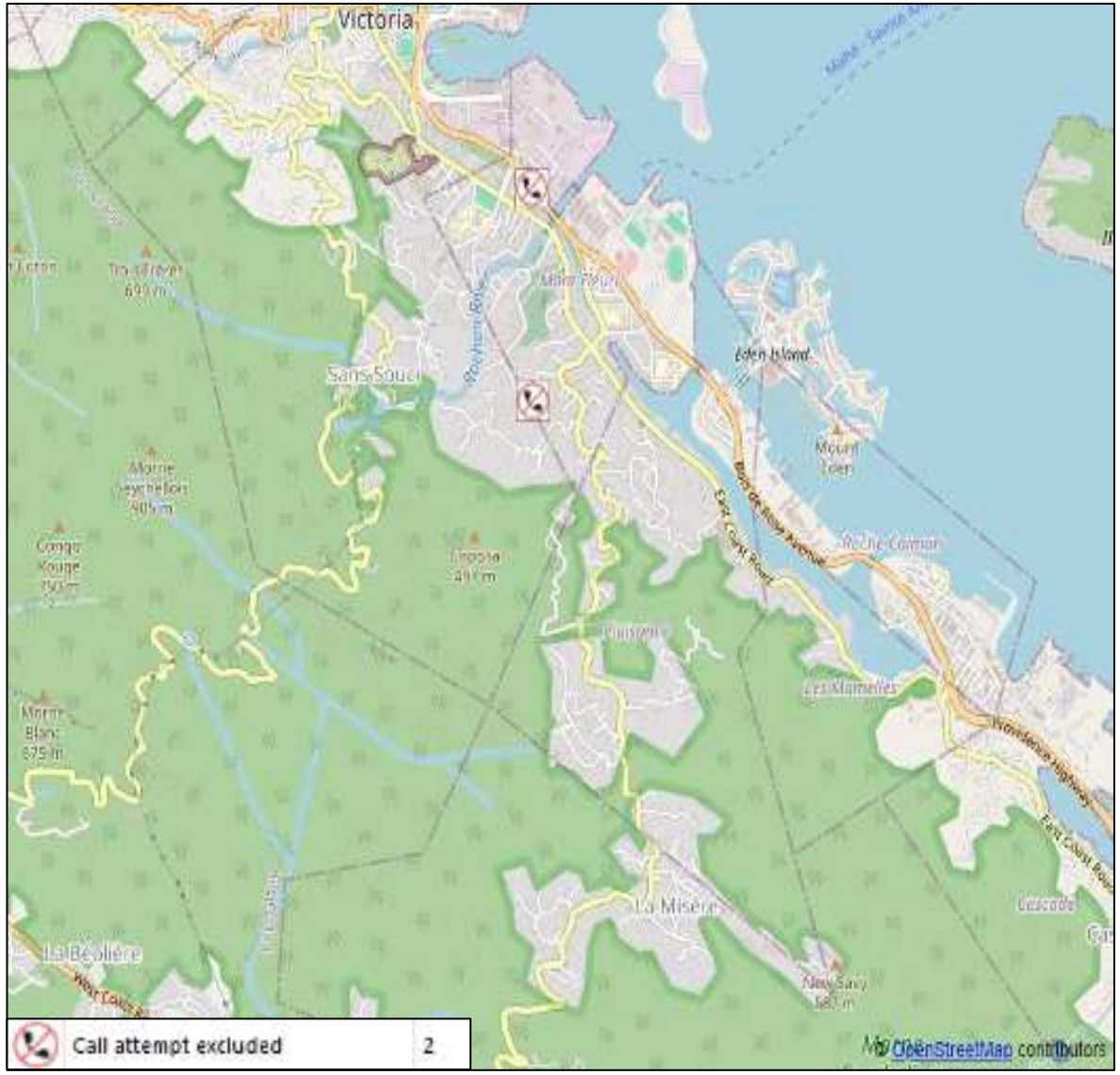


Phase-1 SHORT CALL EXCLUDED EVENTS

Airtel SC MO

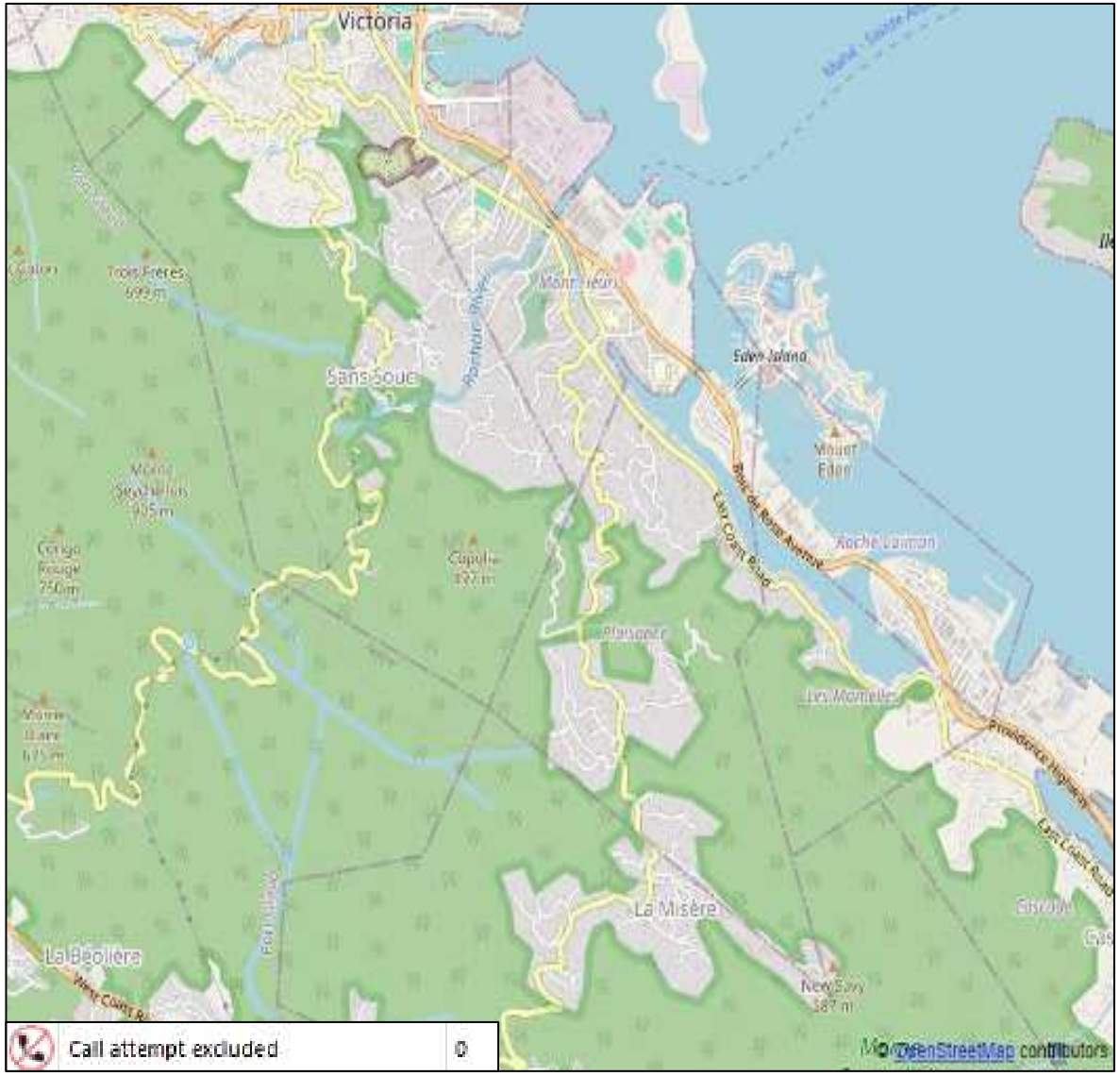


CWS SC MO

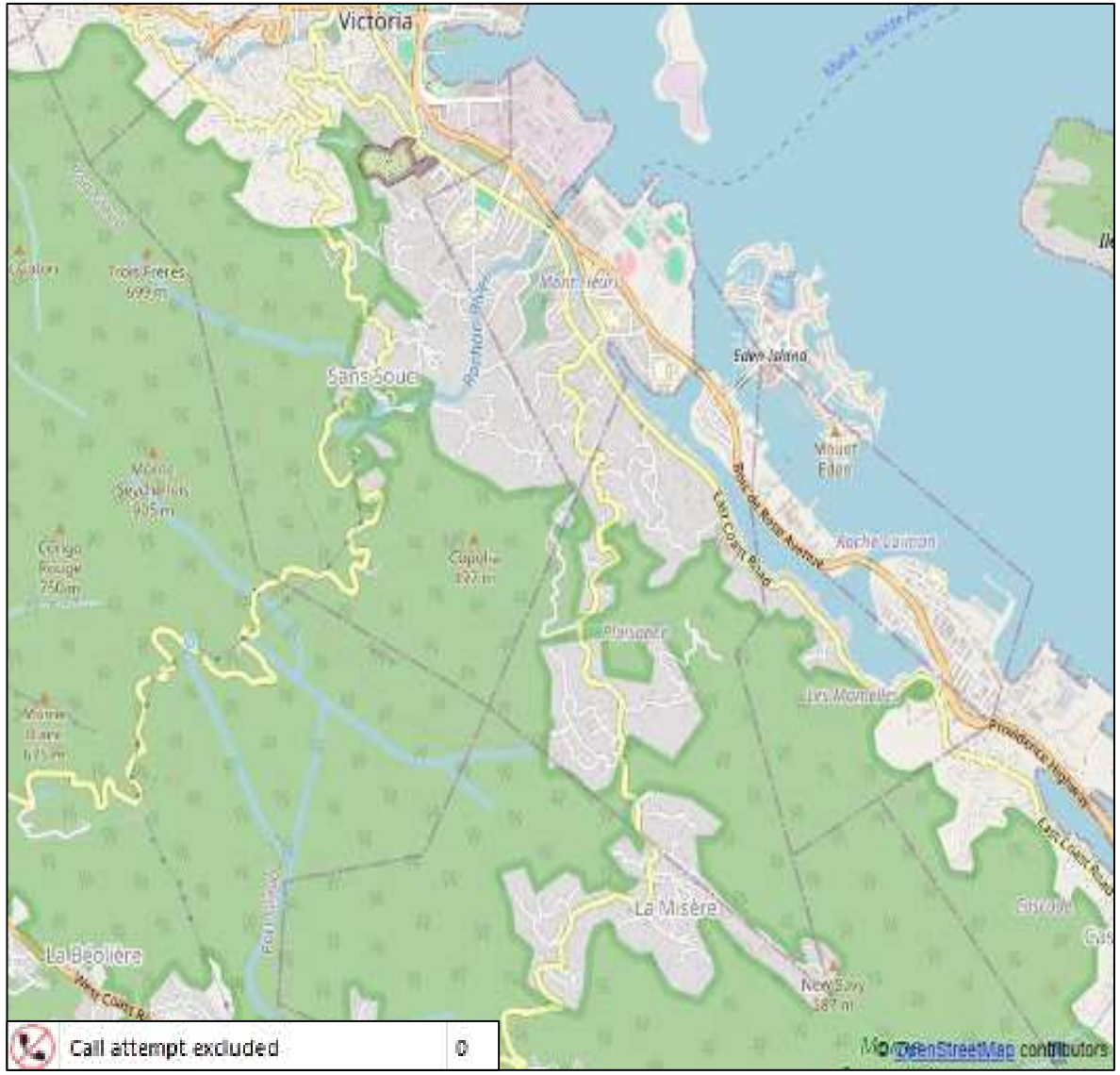


Phase-2 SHORT CALL EXCLUDED EVENTS

Airtel SC MO

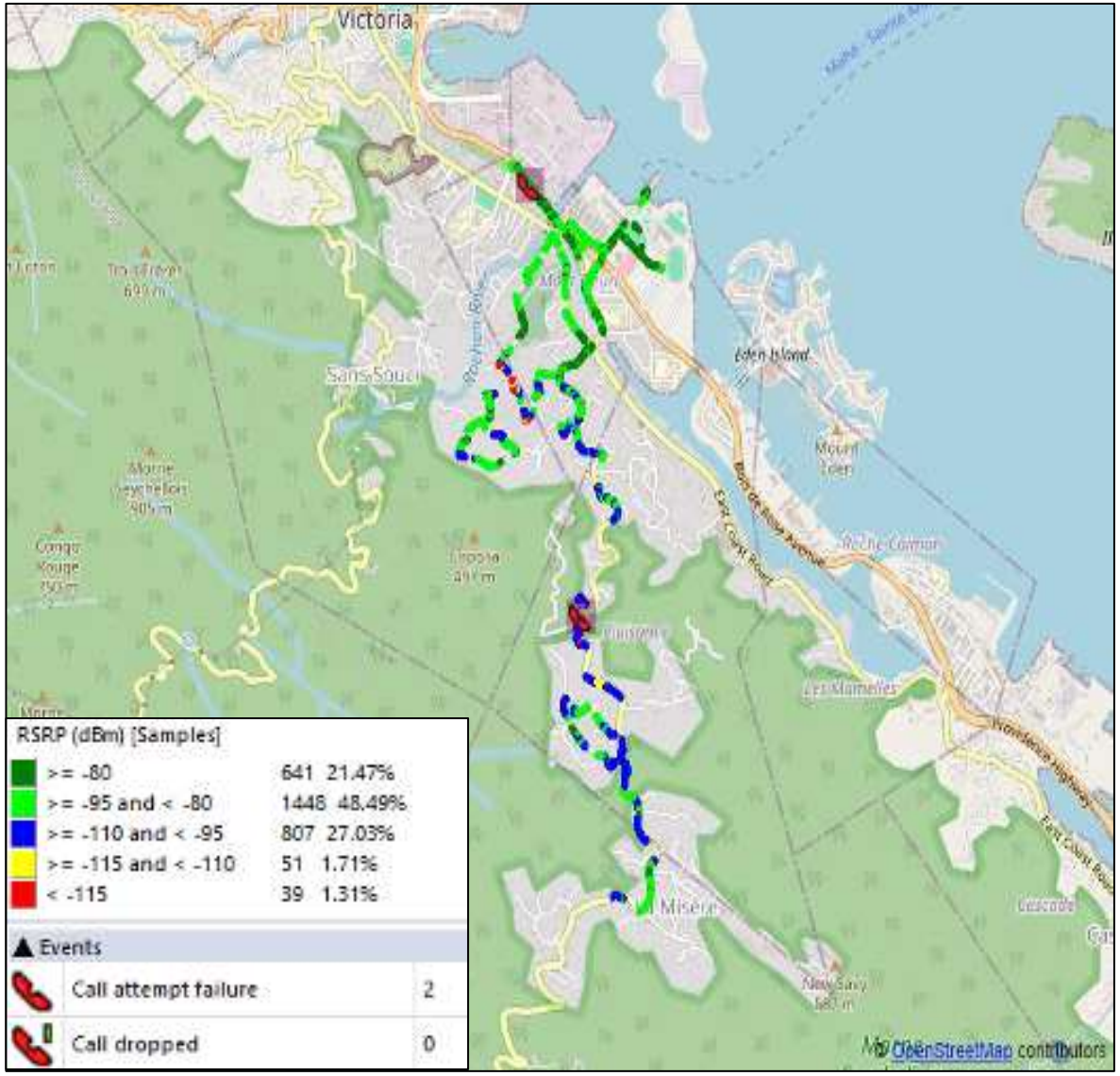


CWS SC MO

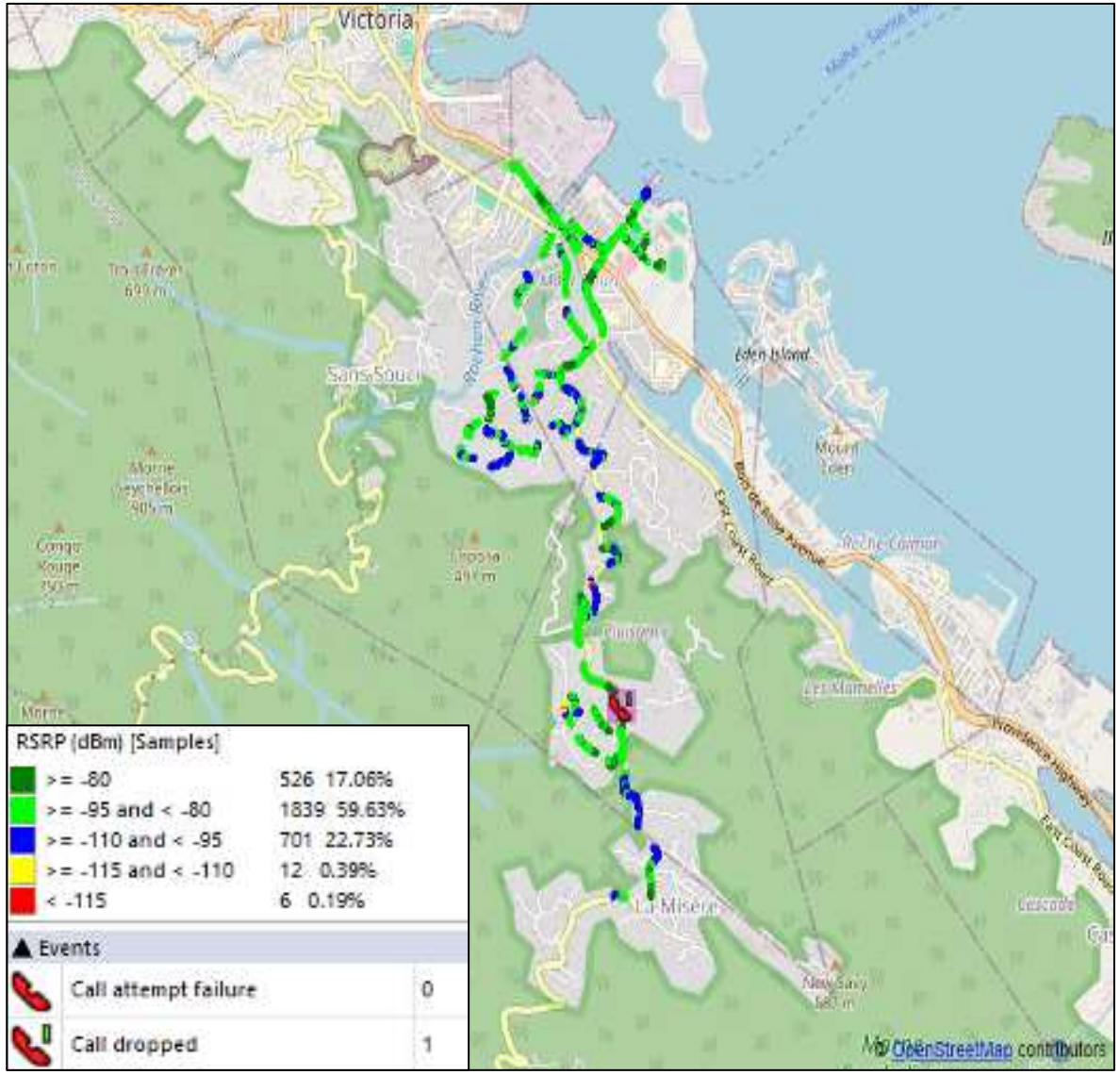


Phase-1 SHORT CALL FAILURE EVENTS LOCATION vs RSRP

Airtel SC MO

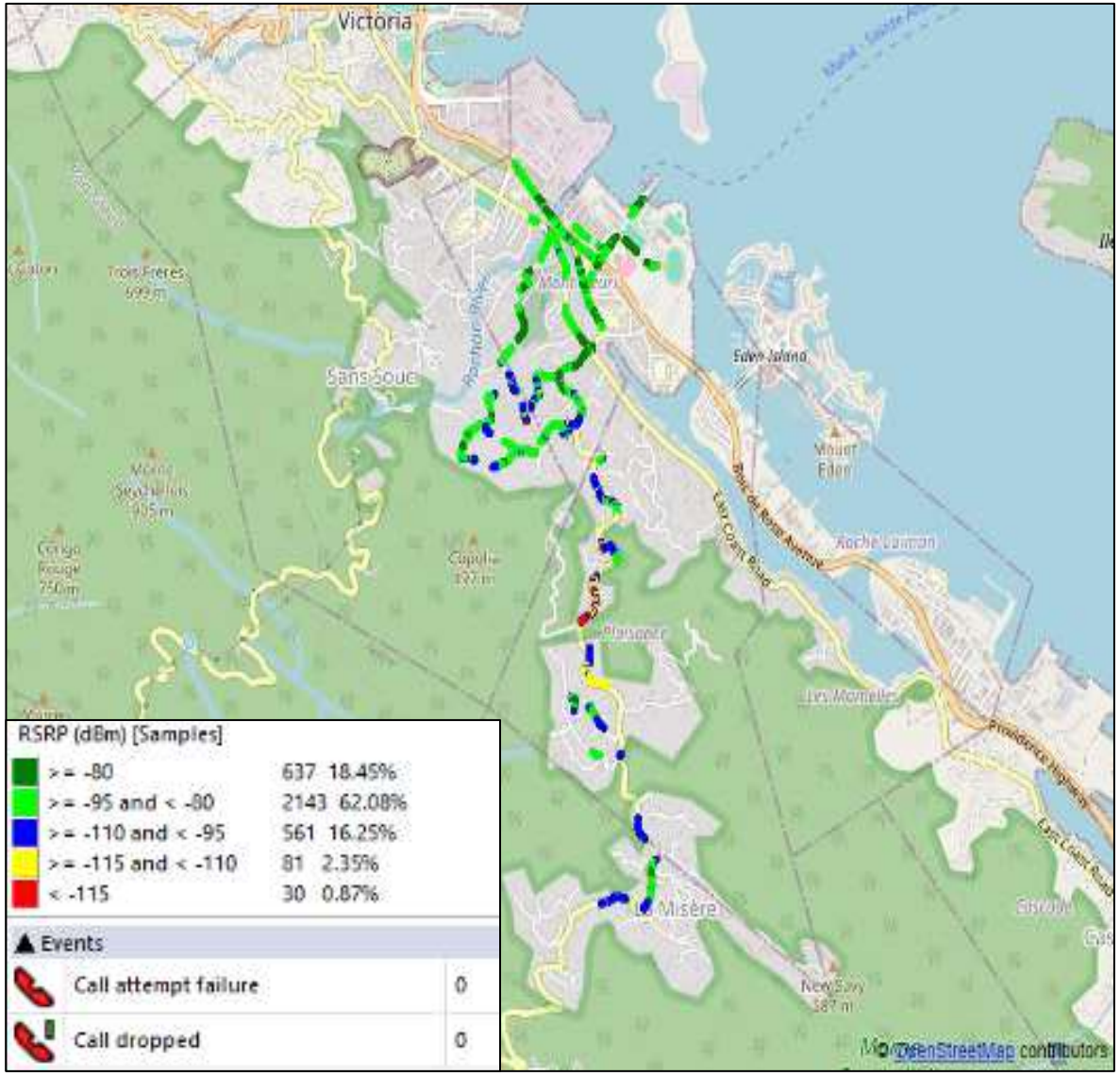


CWS SC MO

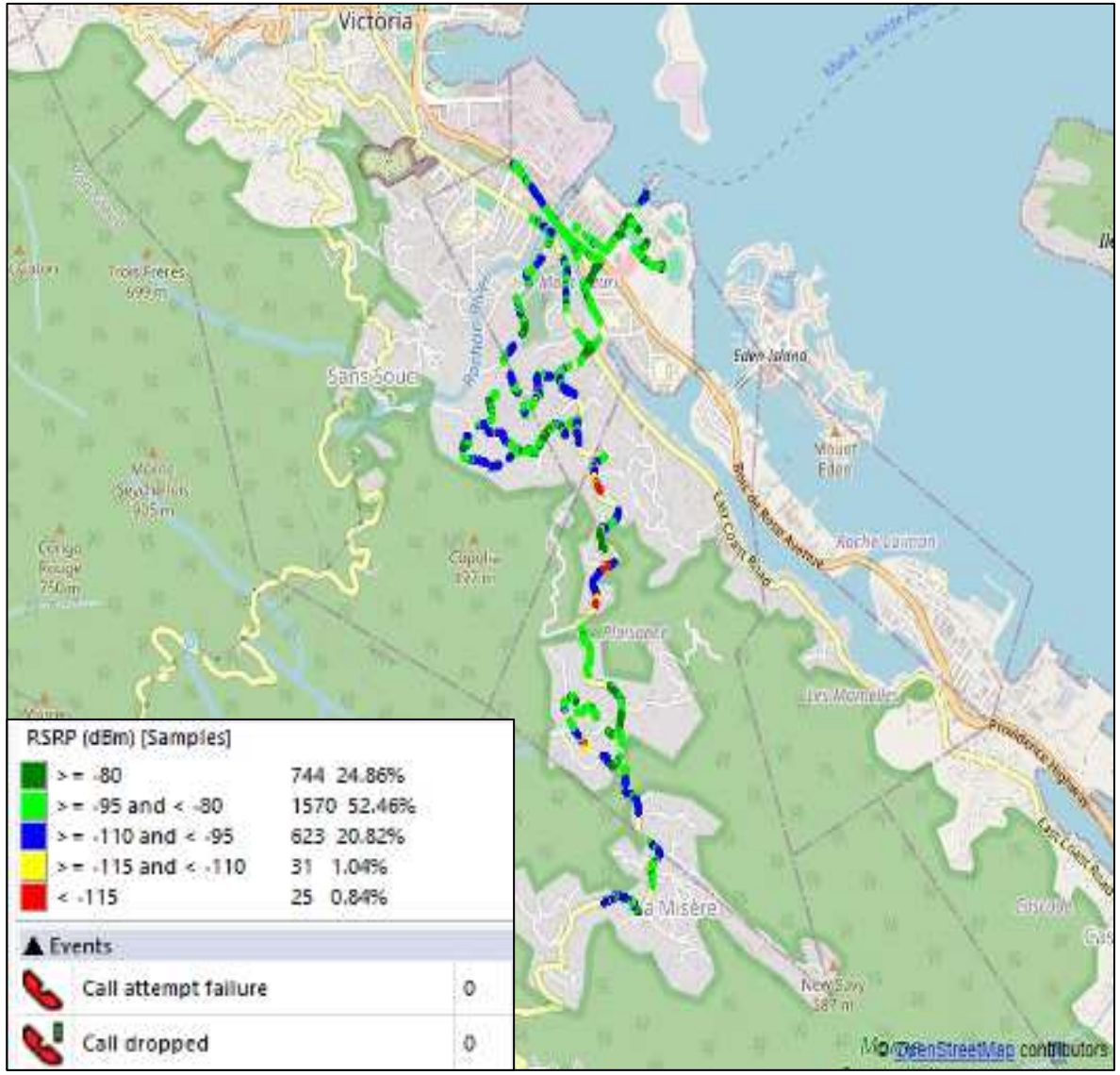


Phase-2 SHORT CALL FAILURE EVENTS LOCATION vs RSRP

Airtel SC MO

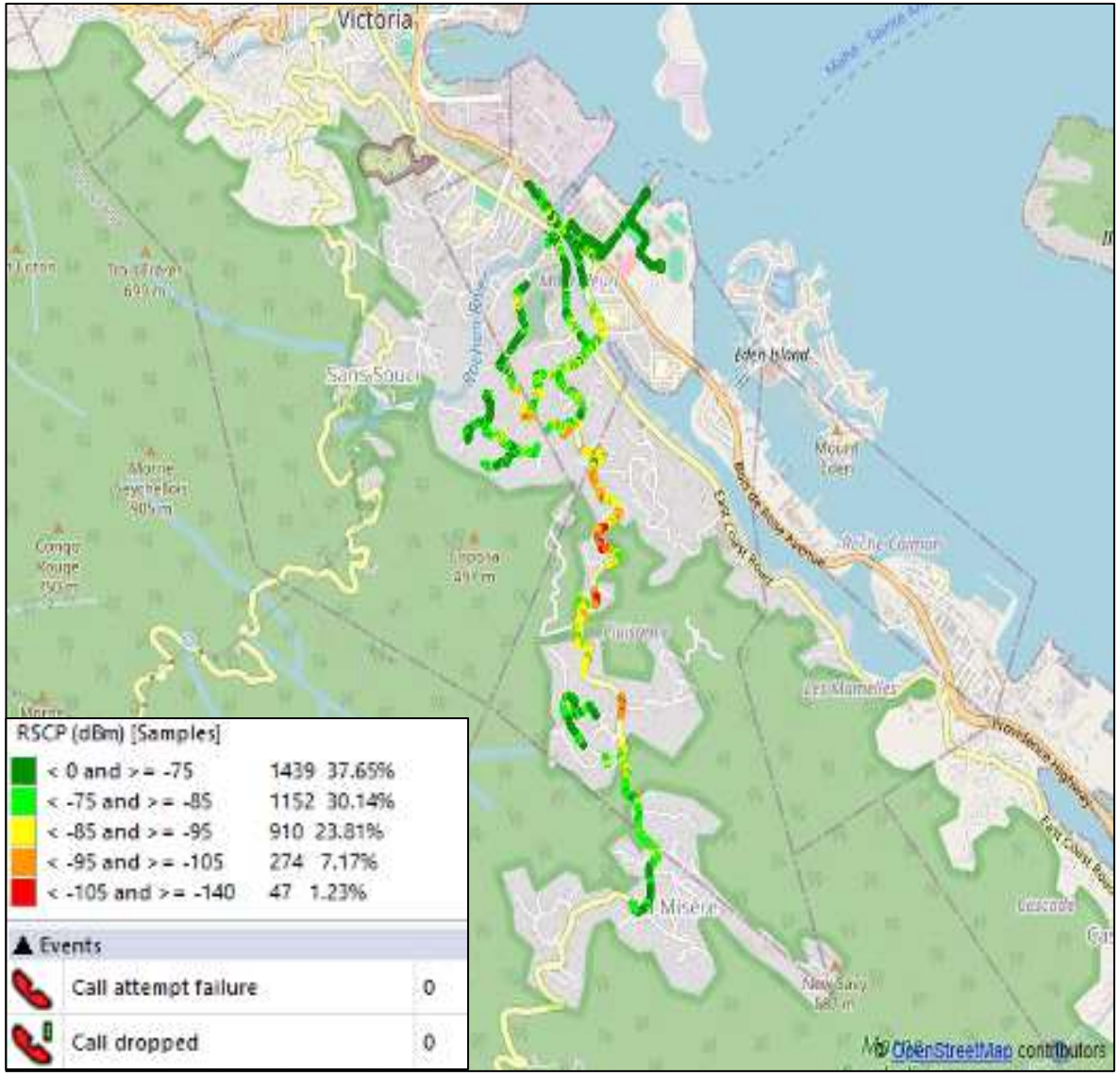


CWS SC MO

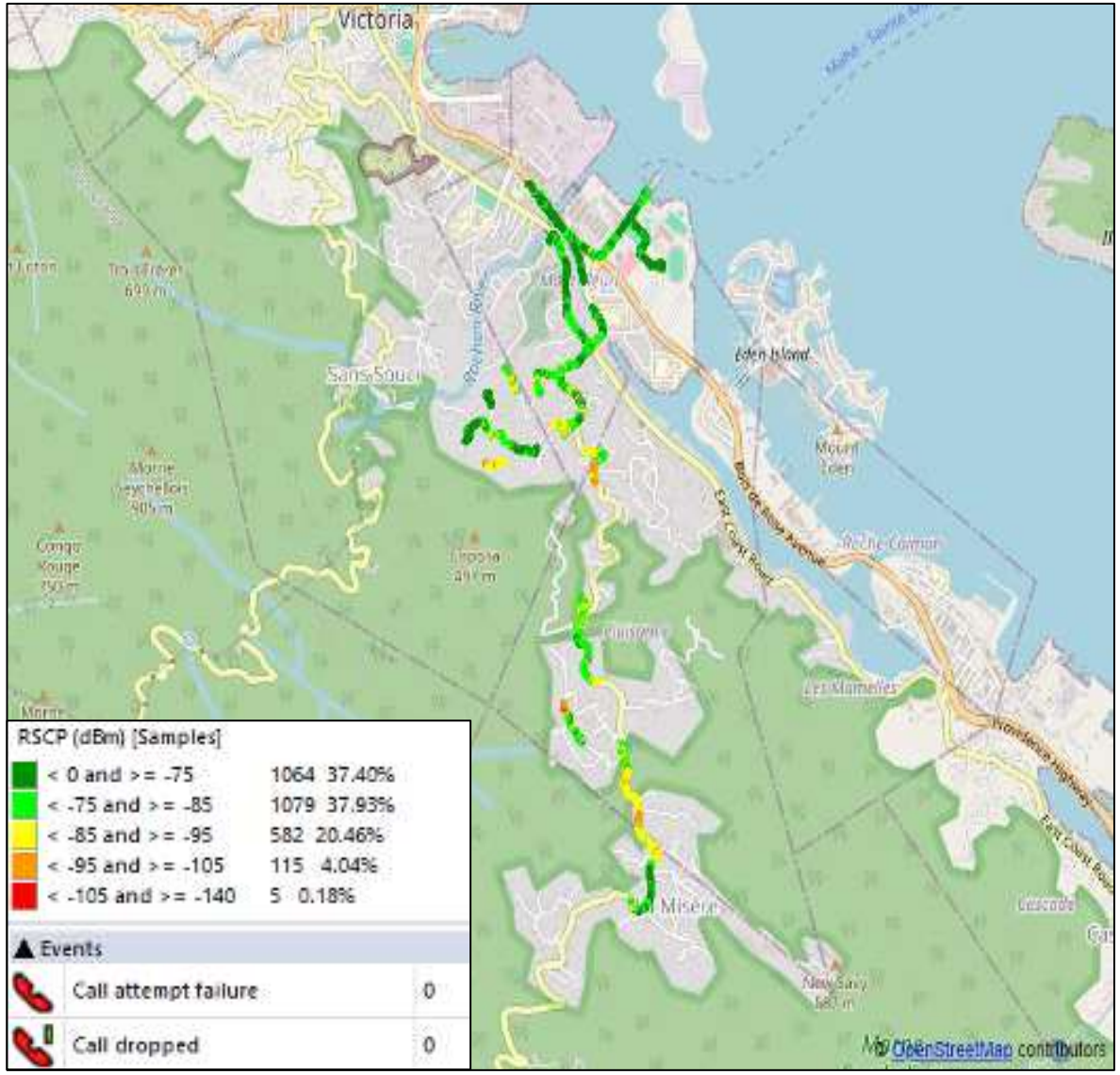


Phase-1 LONG CALL FAILURE EVENTS LOCATION vs RSCP

Airtel LC MO

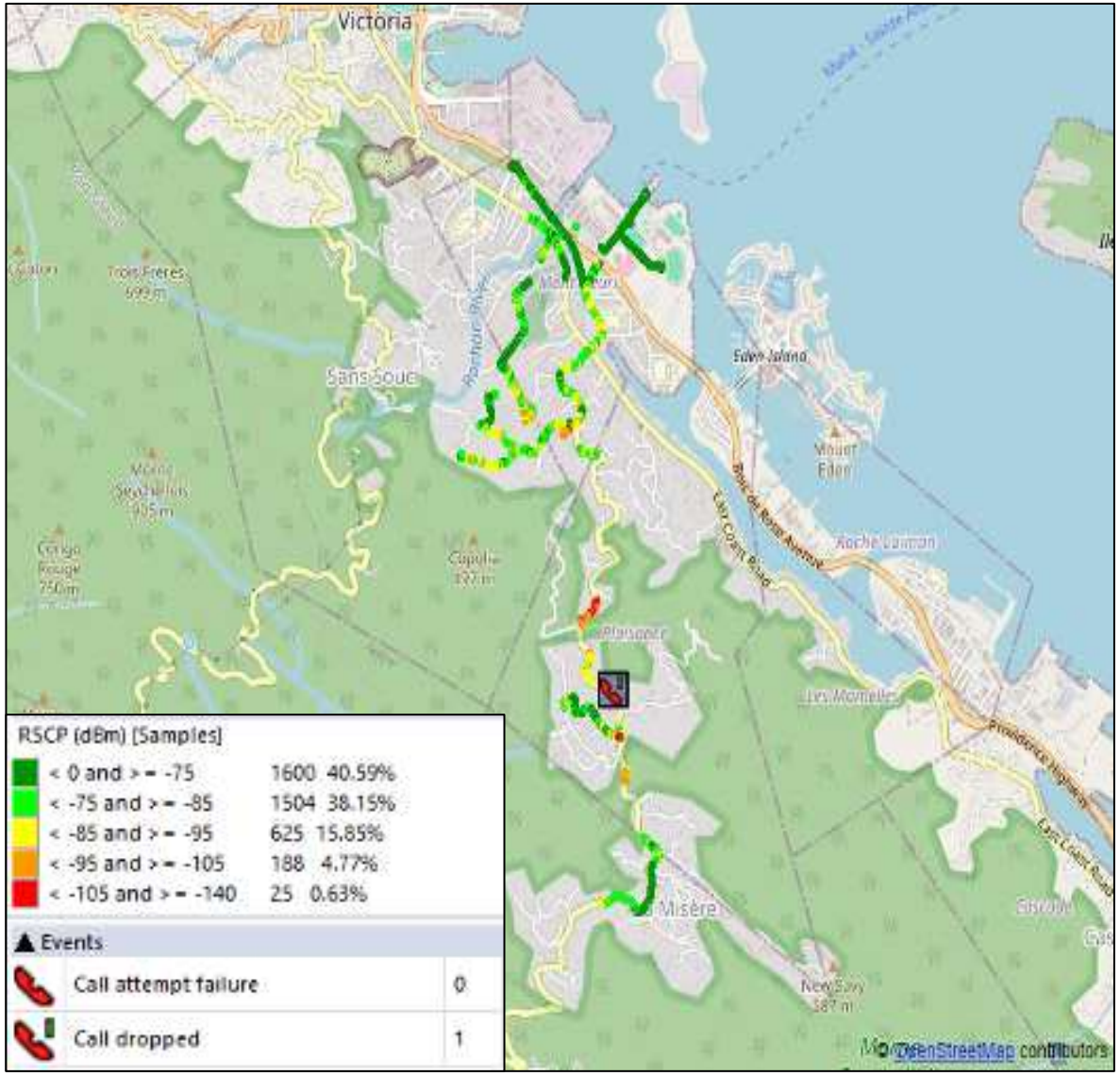


CWS LC MO

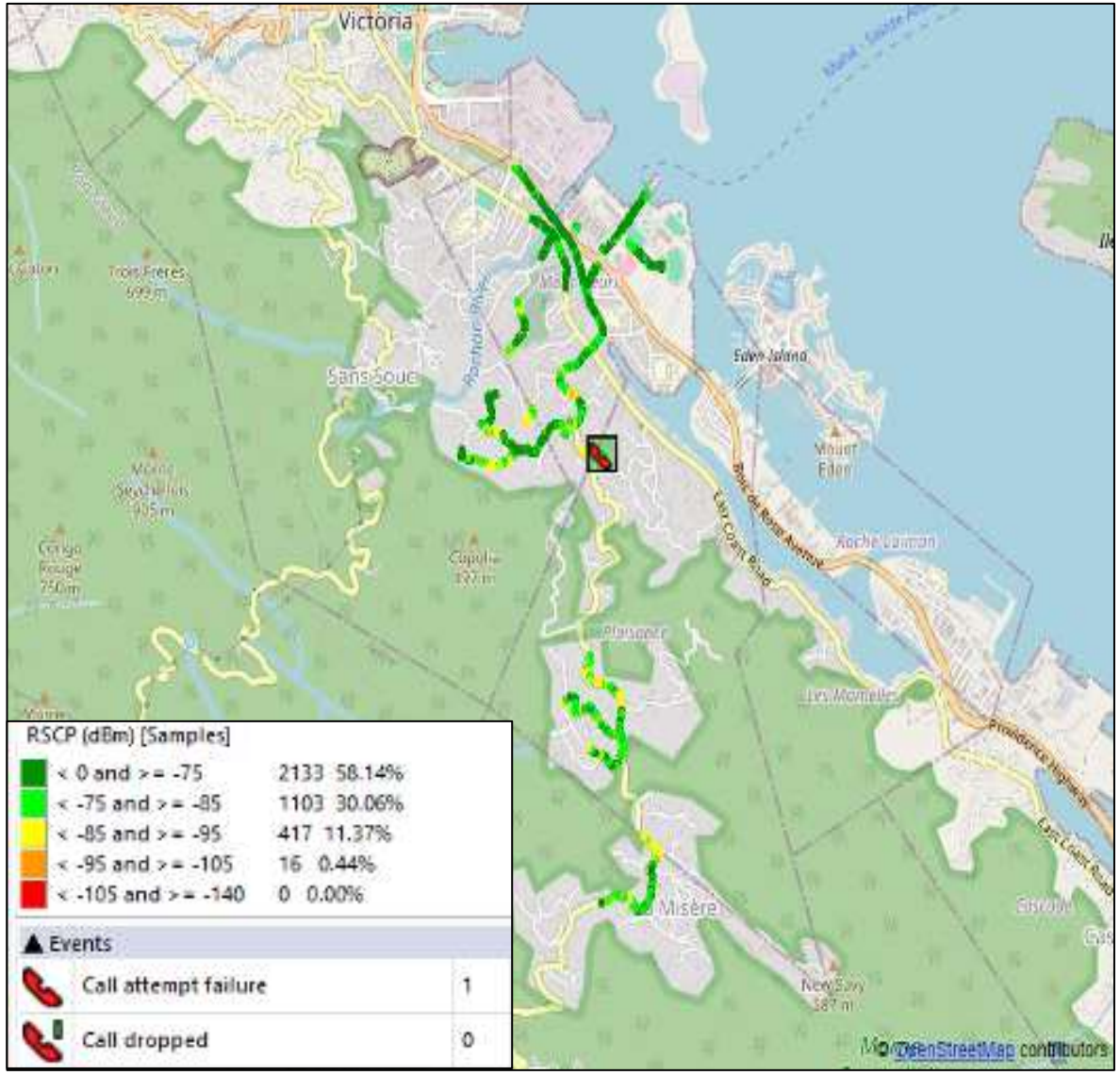


Phase-2 LONG CALL FAILURE EVENTS LOCATION vs RSCP

Airtel LC MO

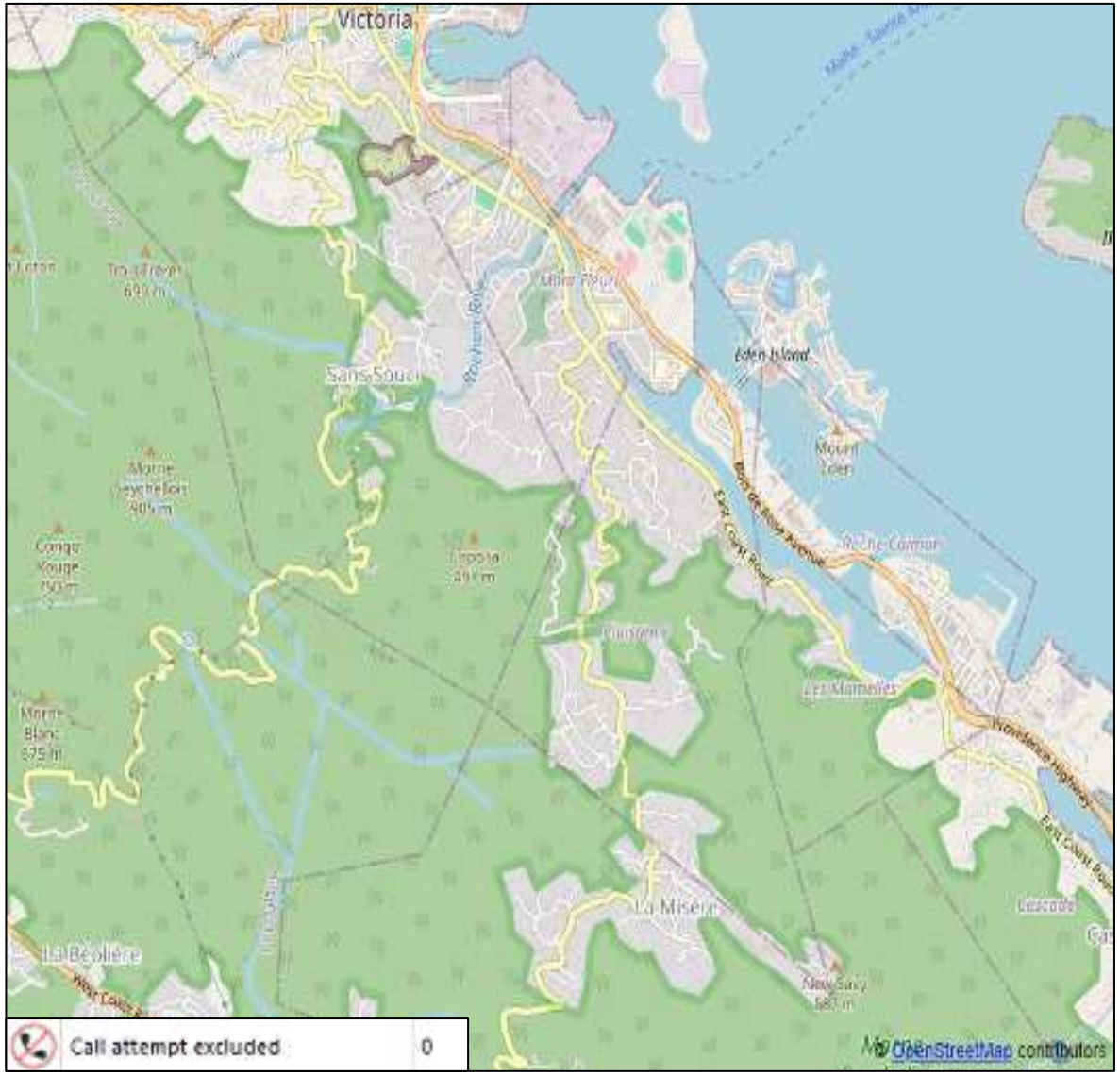


CWS LC MO

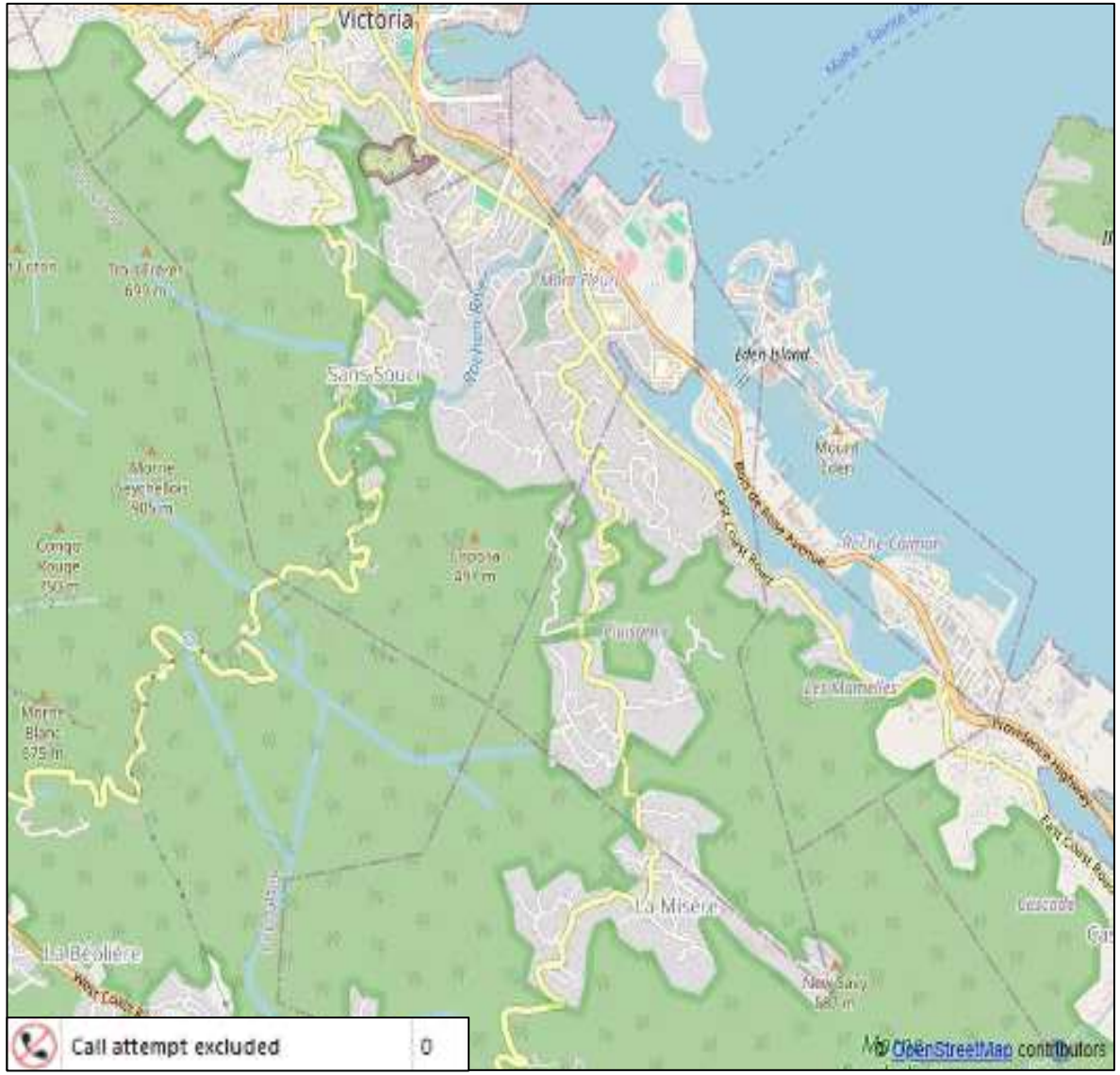


Phase-1 LONG CALL EXCLUDED EVENTS

Airtel LC MO

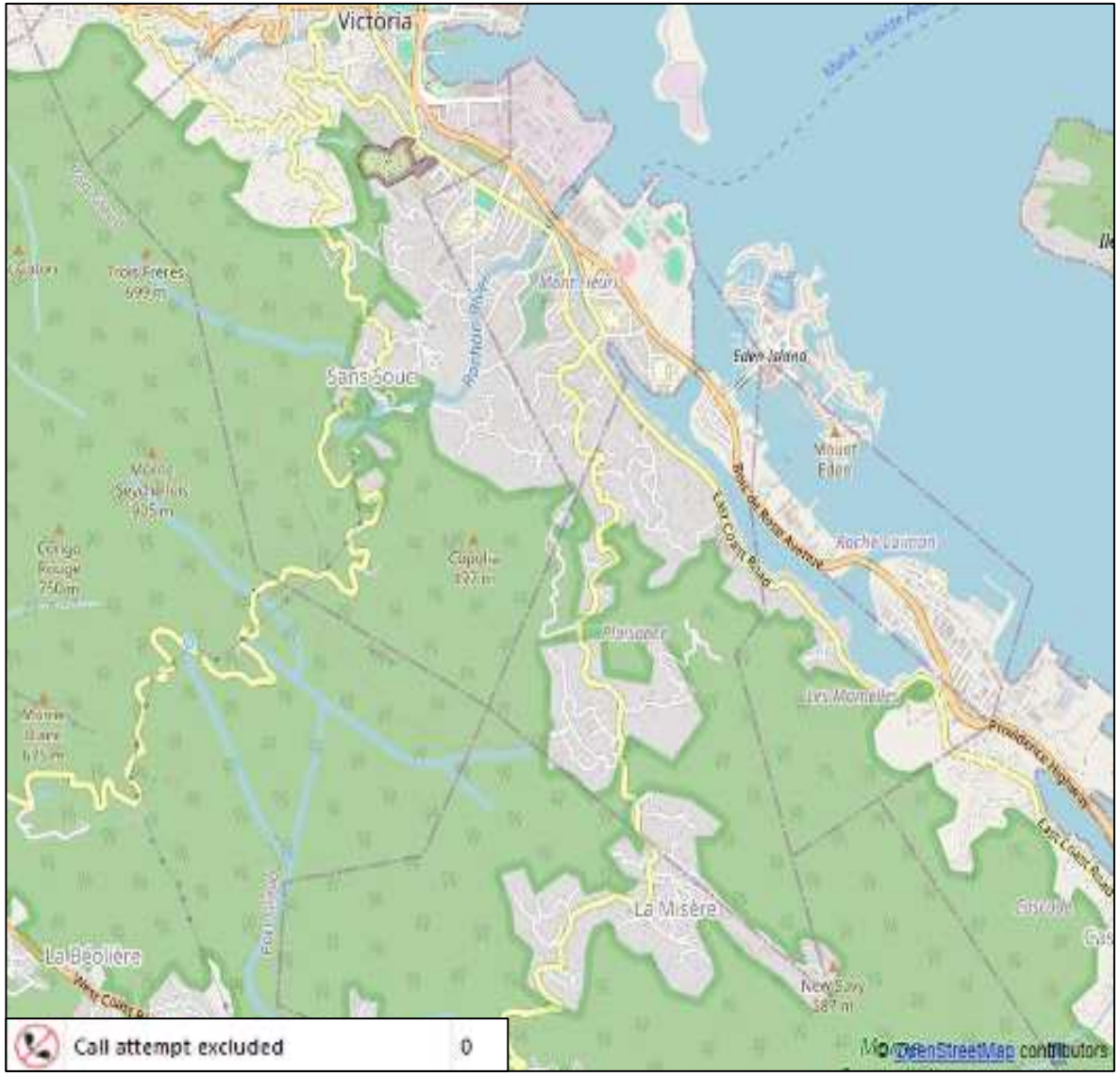


CWS LC MO

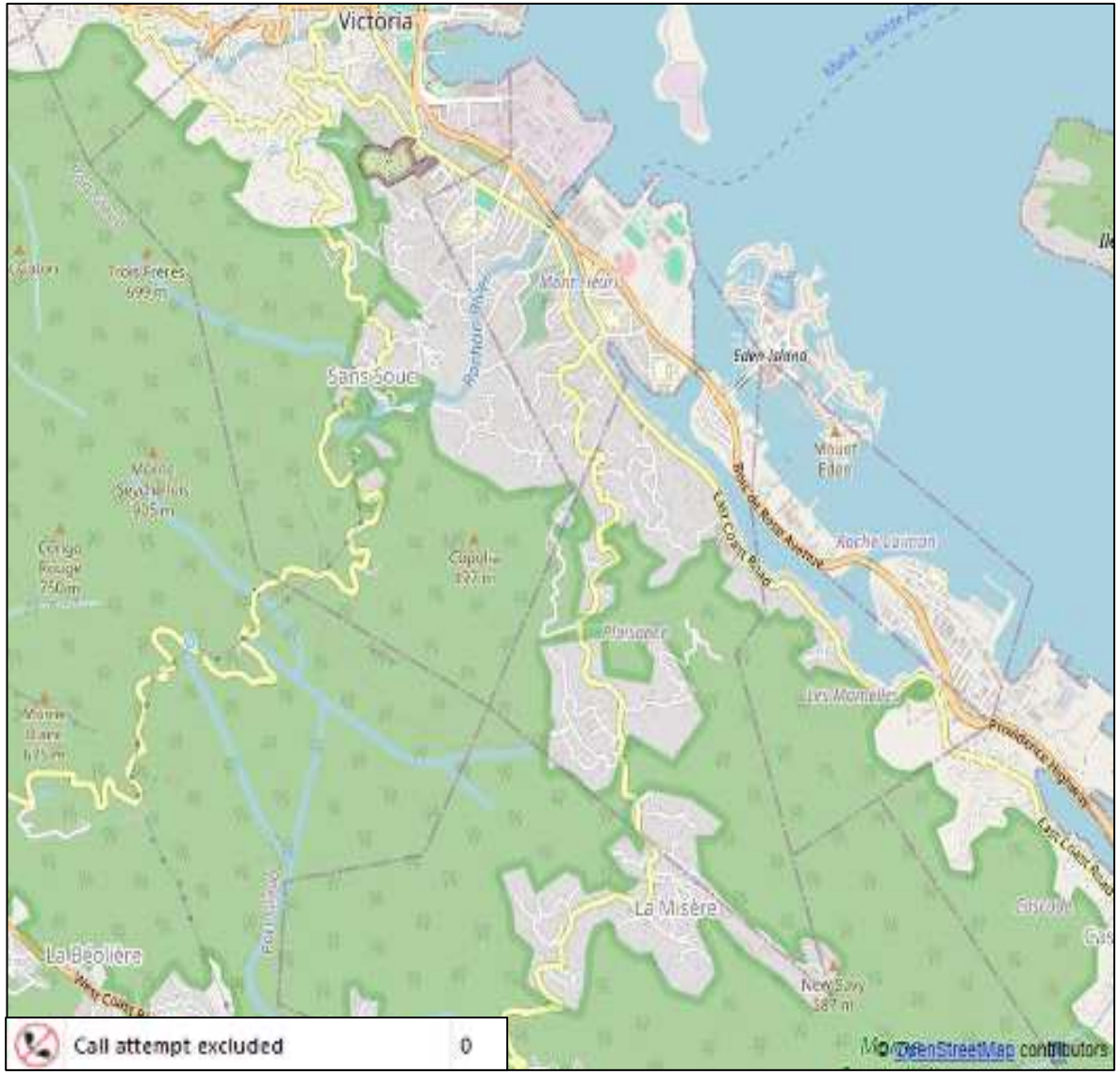


Phase-2 LONG CALL EXCLUDED EVENTS

Airtel LC MO

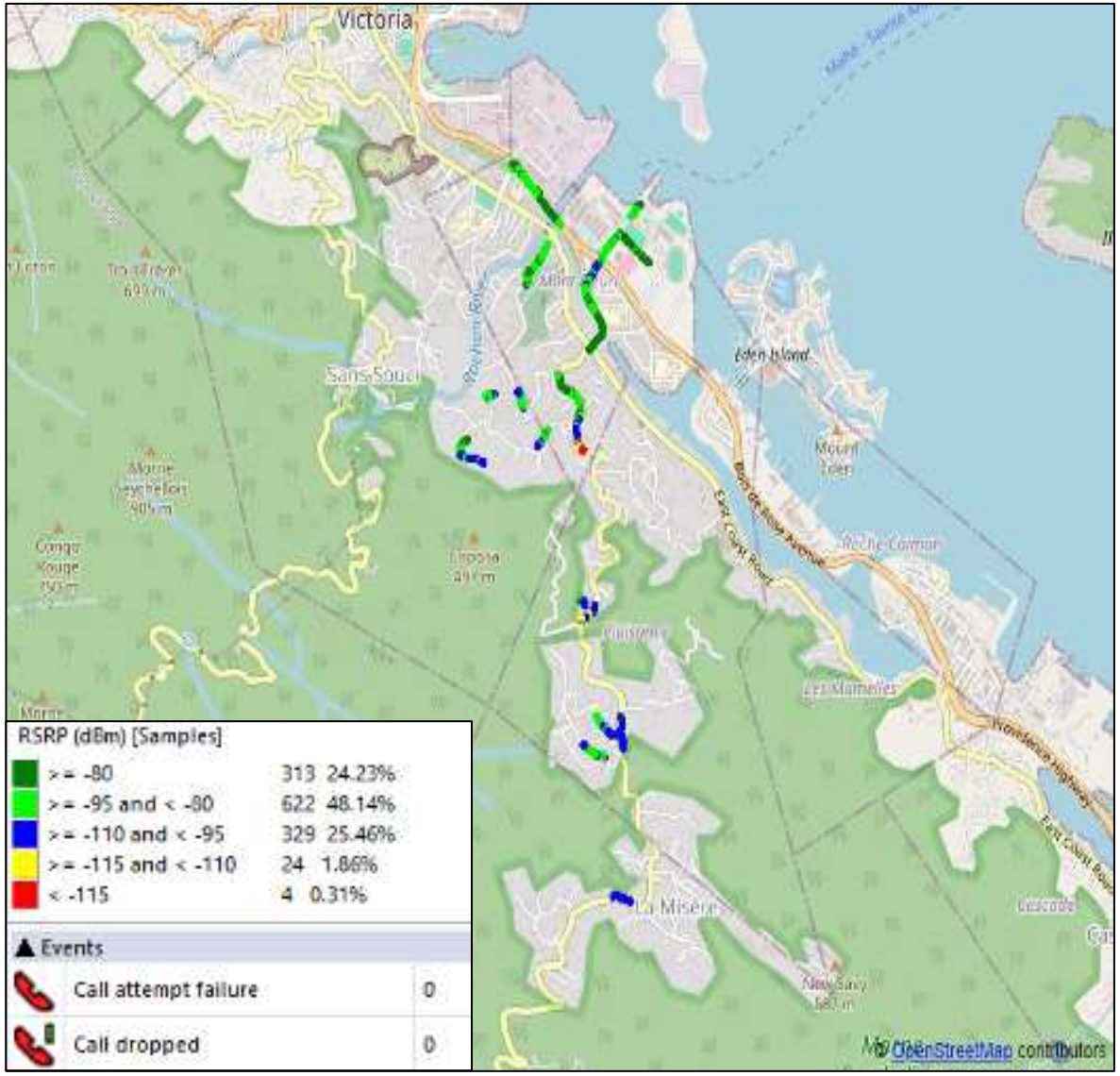


CWS LC MO

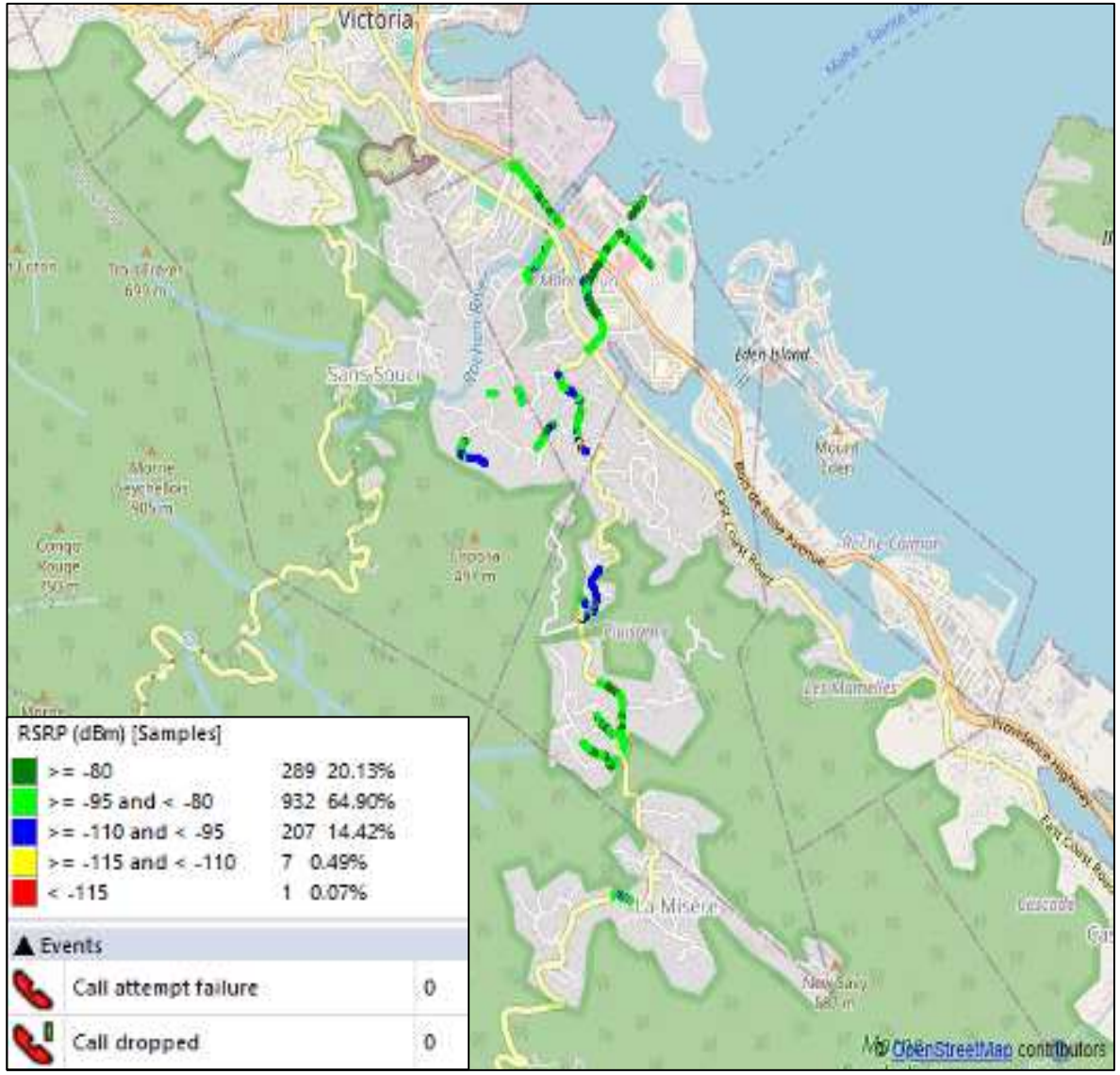


Phase-1 LONG CALL FAILURE EVENTS LOCATION vs RSRP

Airtel LC MO

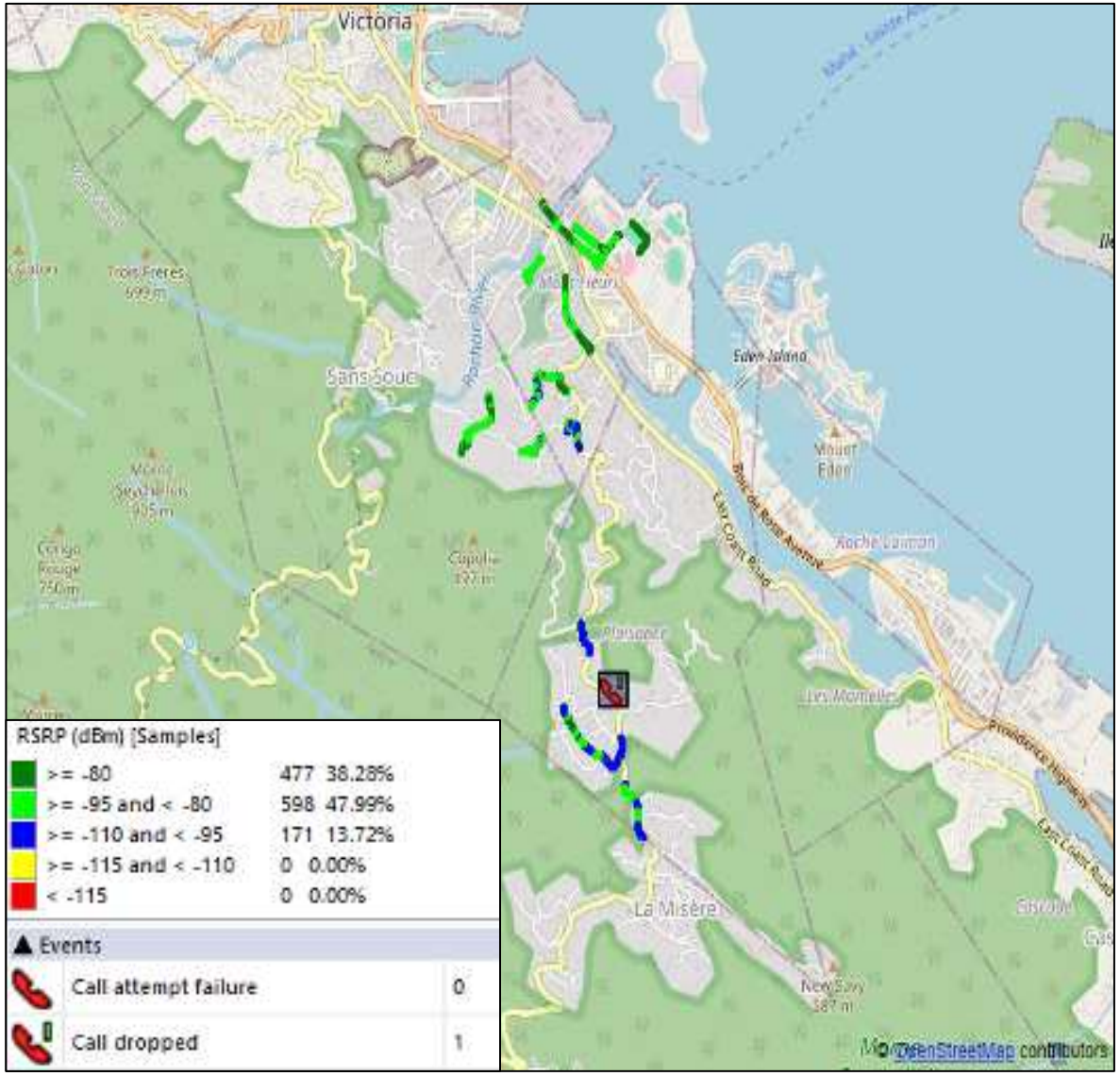


CWS LC MO

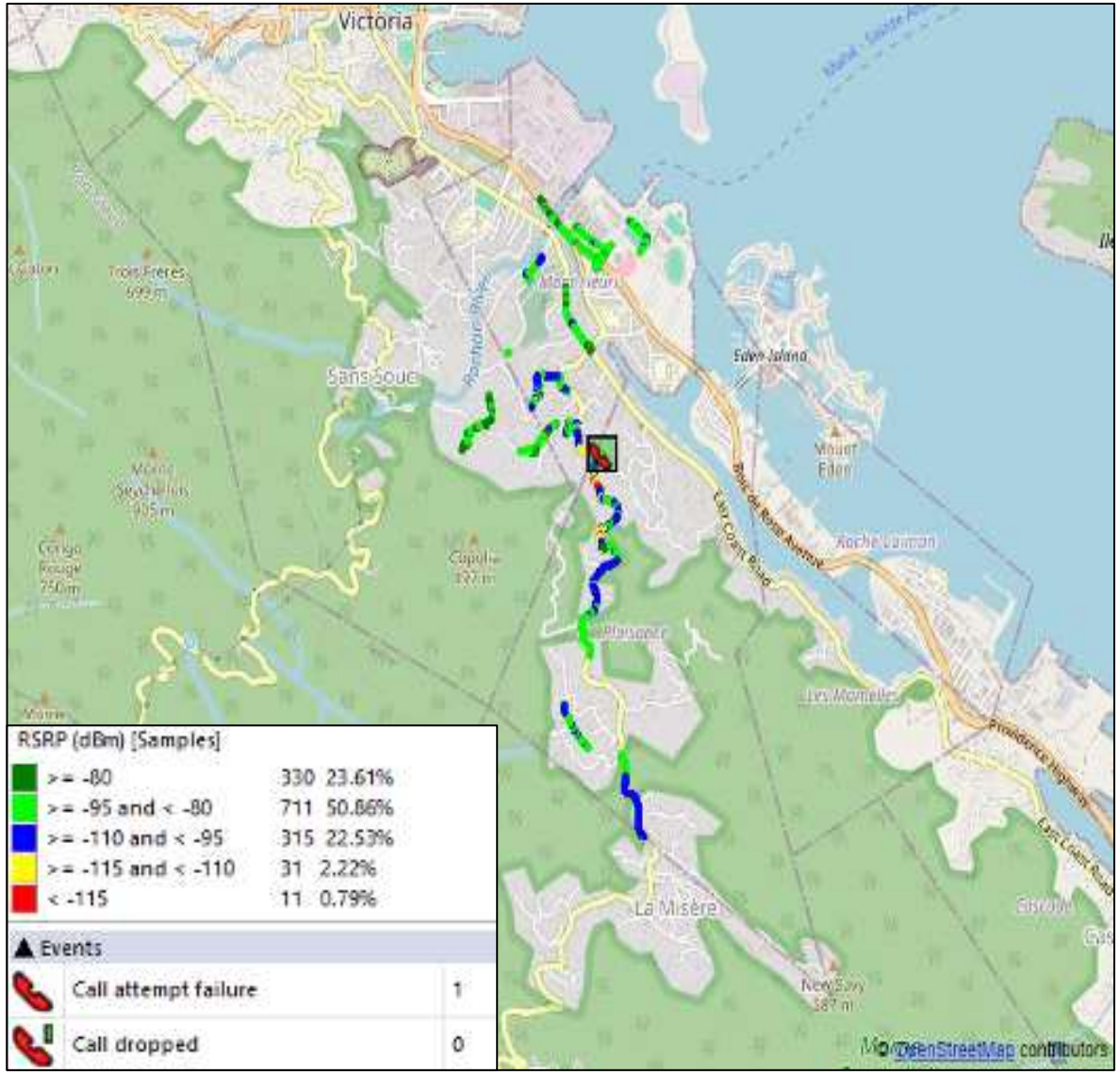


Phase-2 LONG CALL FAILURE EVENTS LOCATION vs RSRP

Airtel LC MO



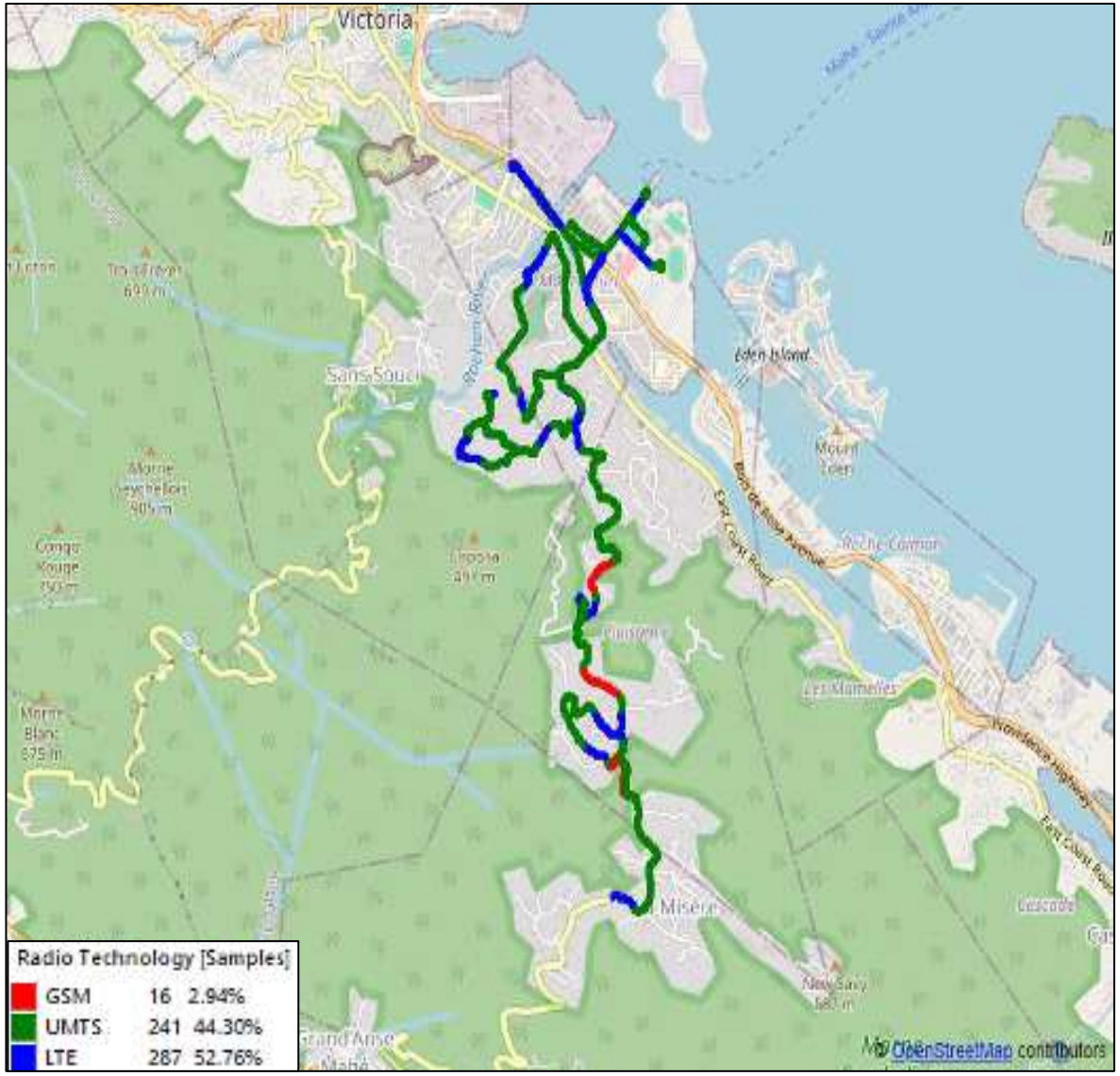
CWS LC MO



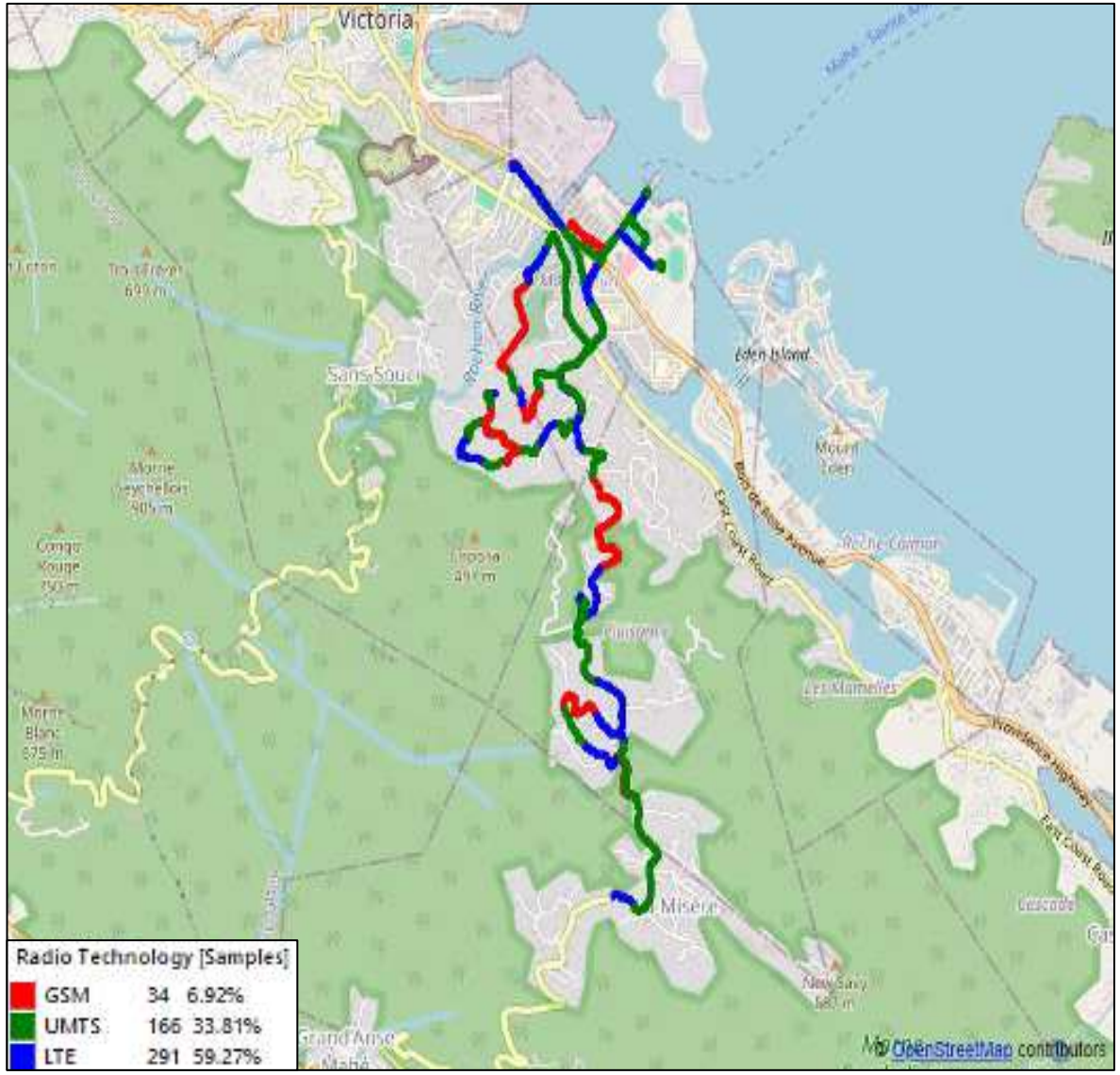
LONG CALL DRIVE PLOTS

Phase-1 Long Call RADIO TECHNOLOGY PLOT

Airtel LC MO

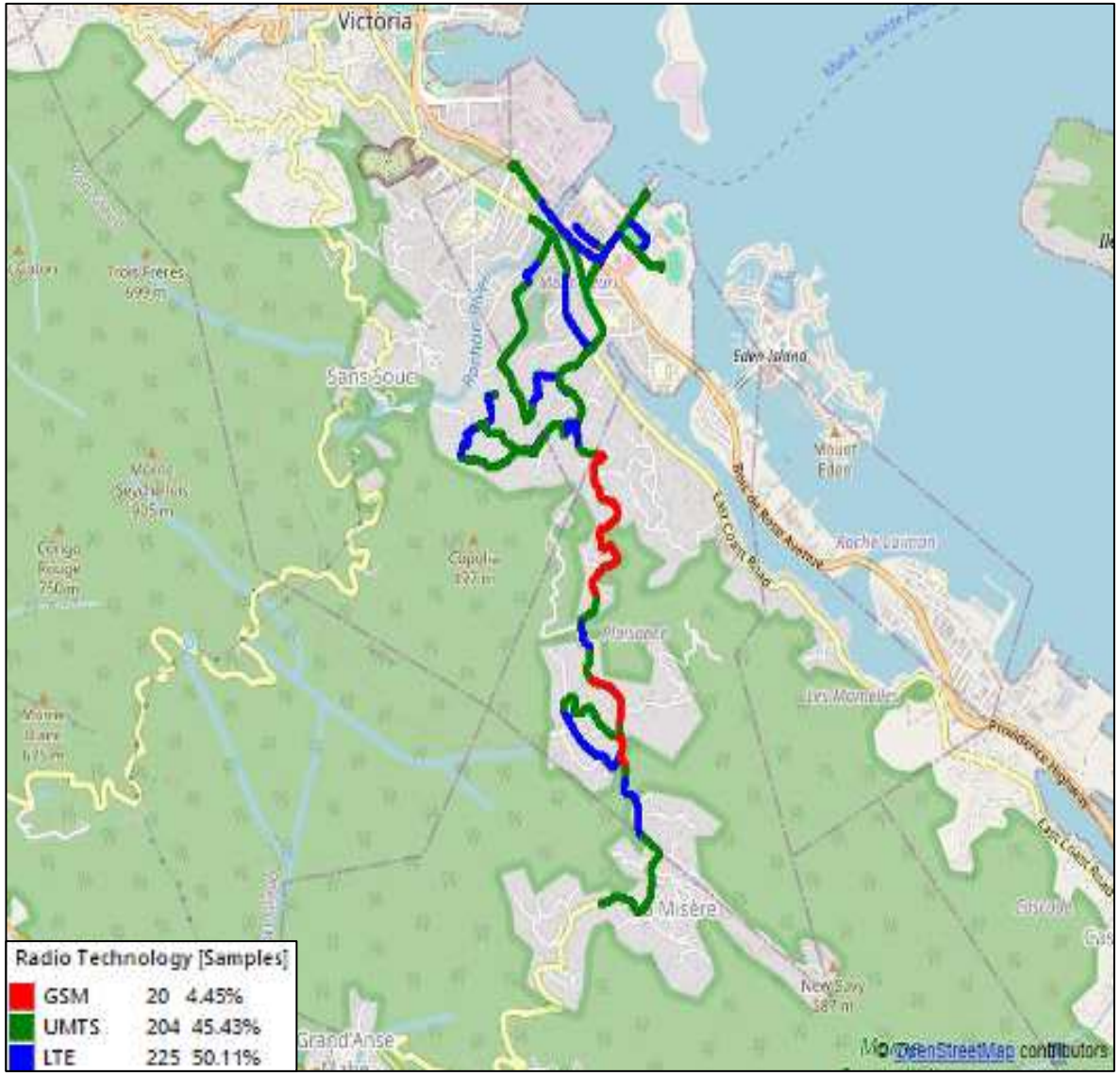


CWS LC MO

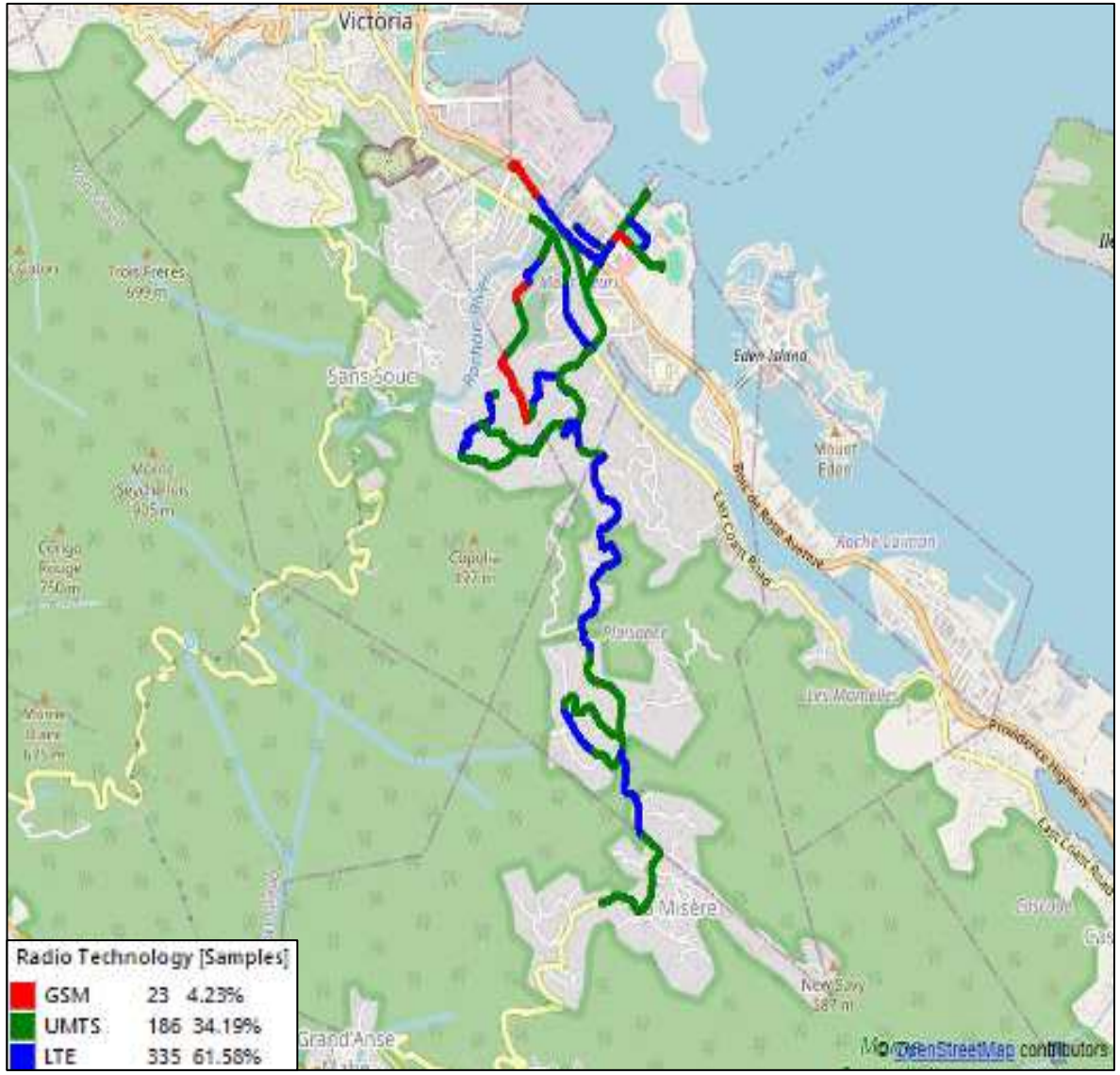


Phase-2 Long Call RADIO TECHNOLOGY PLOT

Airtel LC MO

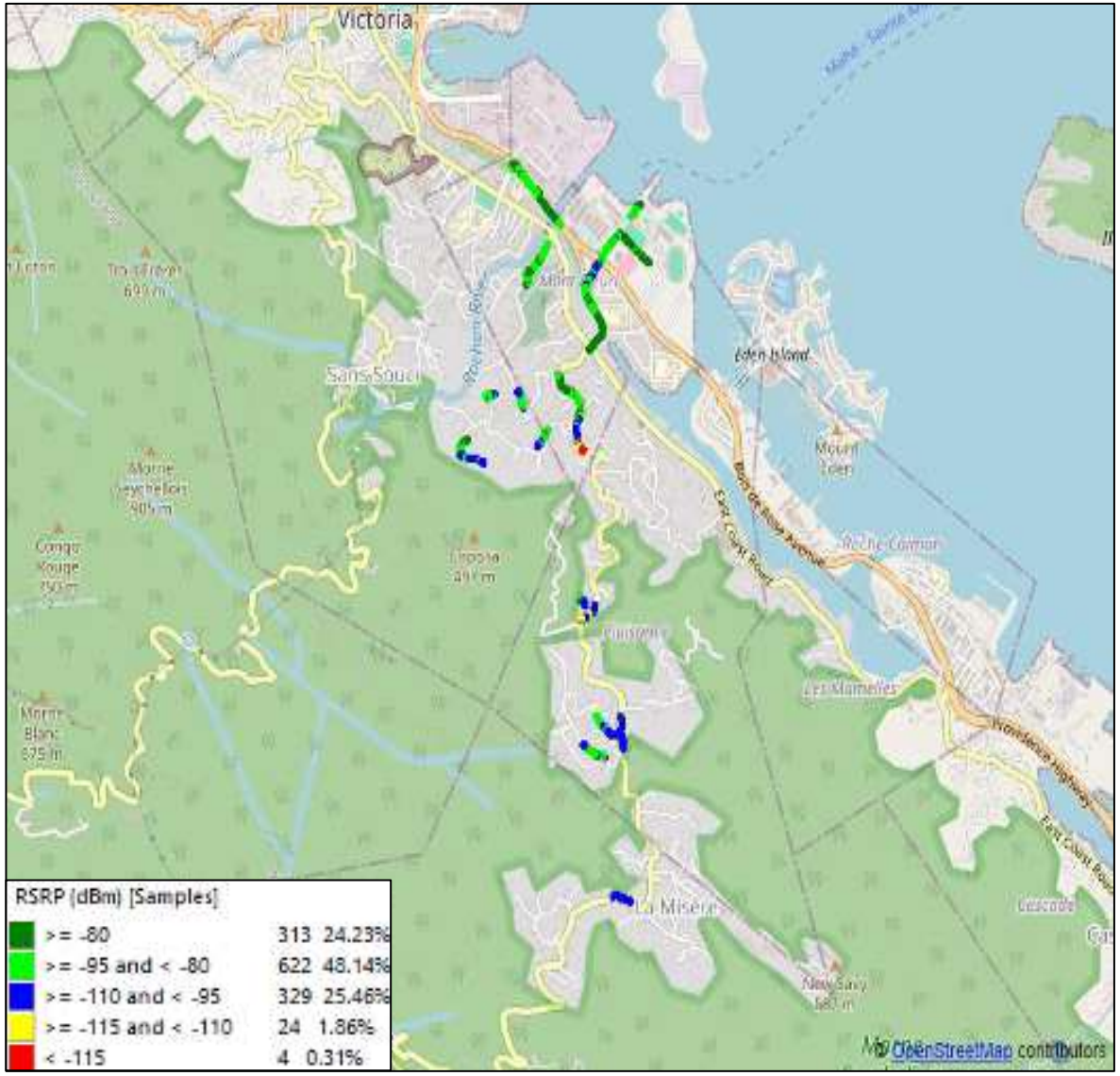


CWS LC MO

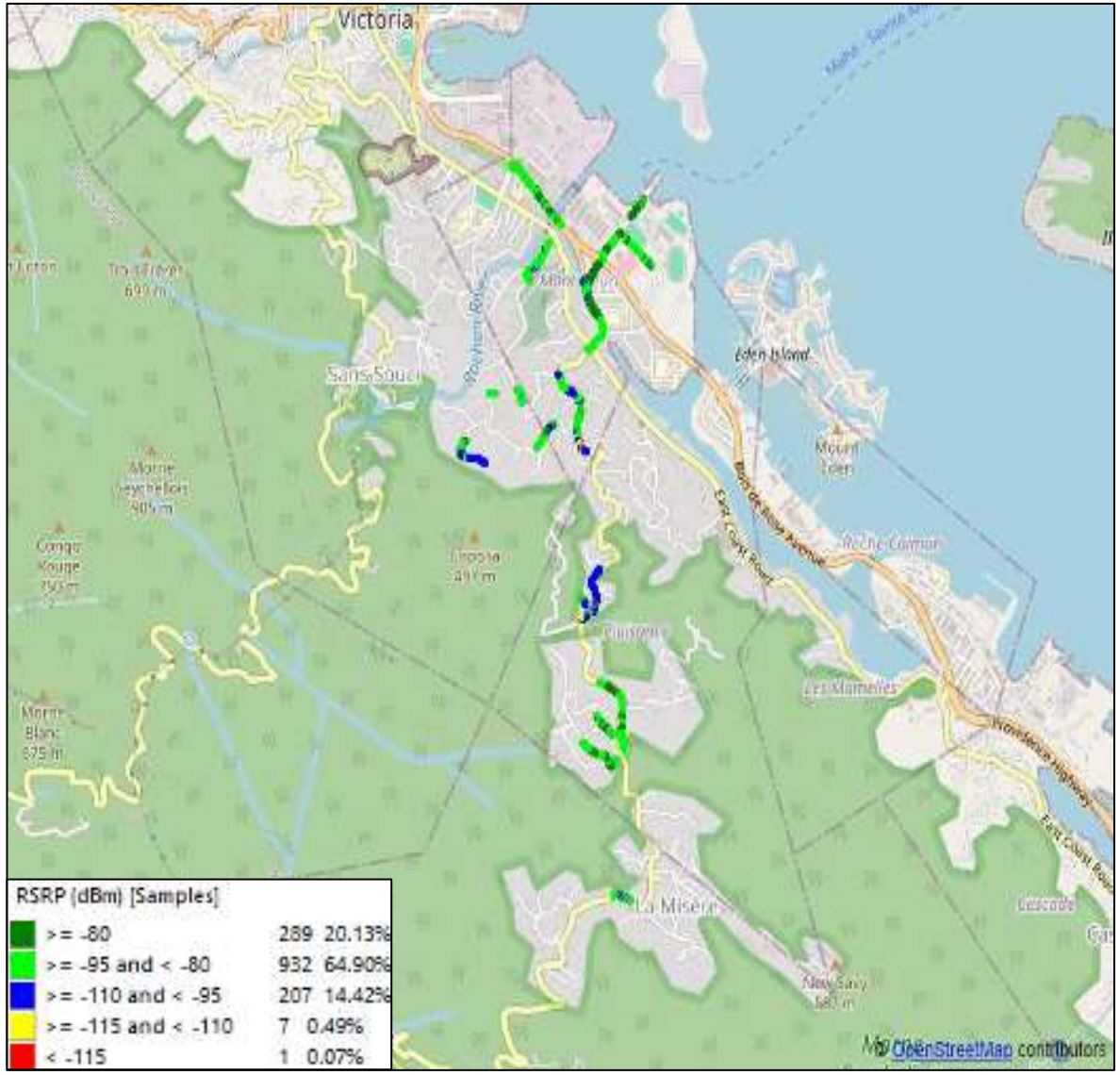


Phase-1 Long Call RSRP PLOT

Airtel LC MO

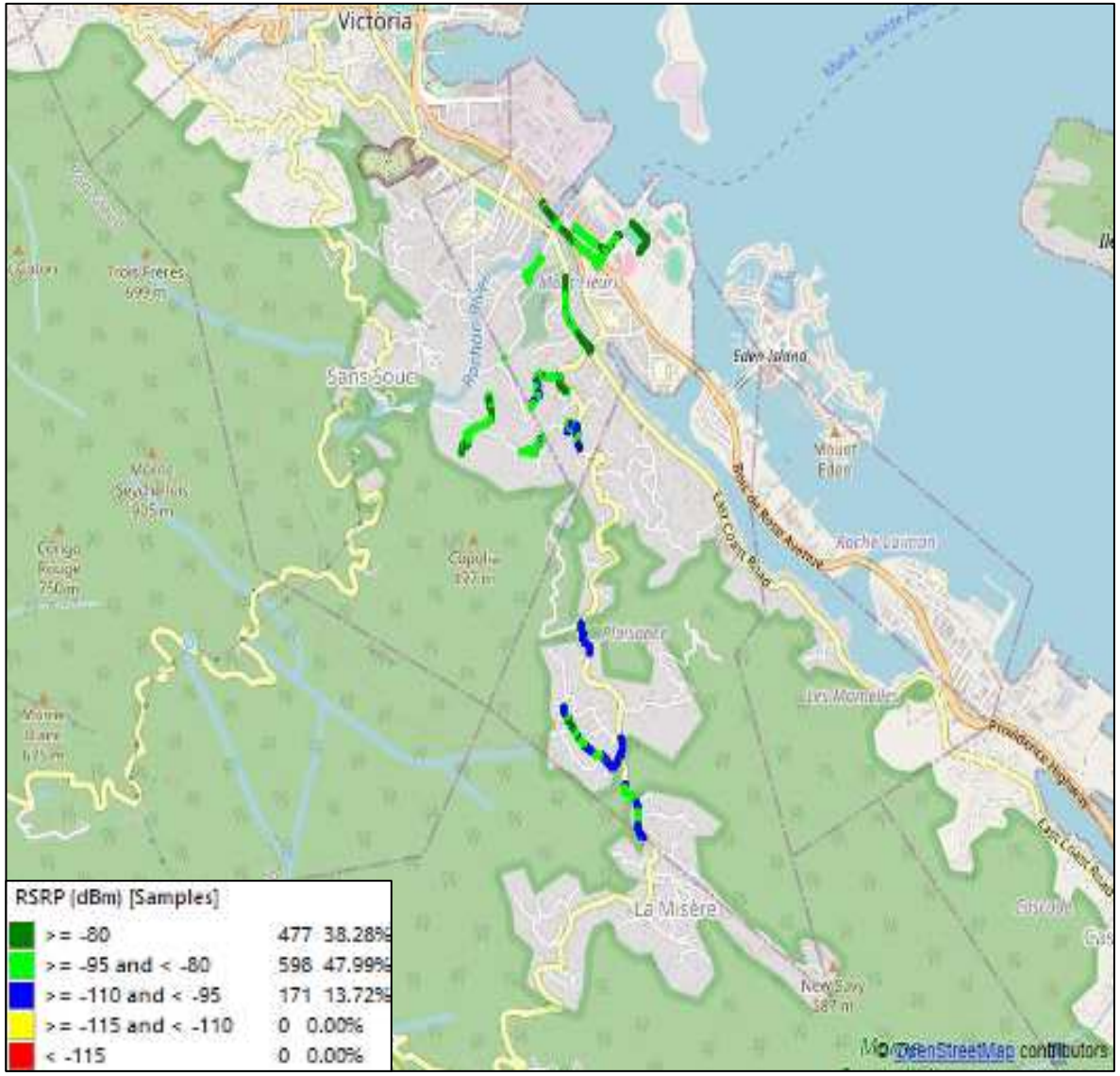


CWS LC MO

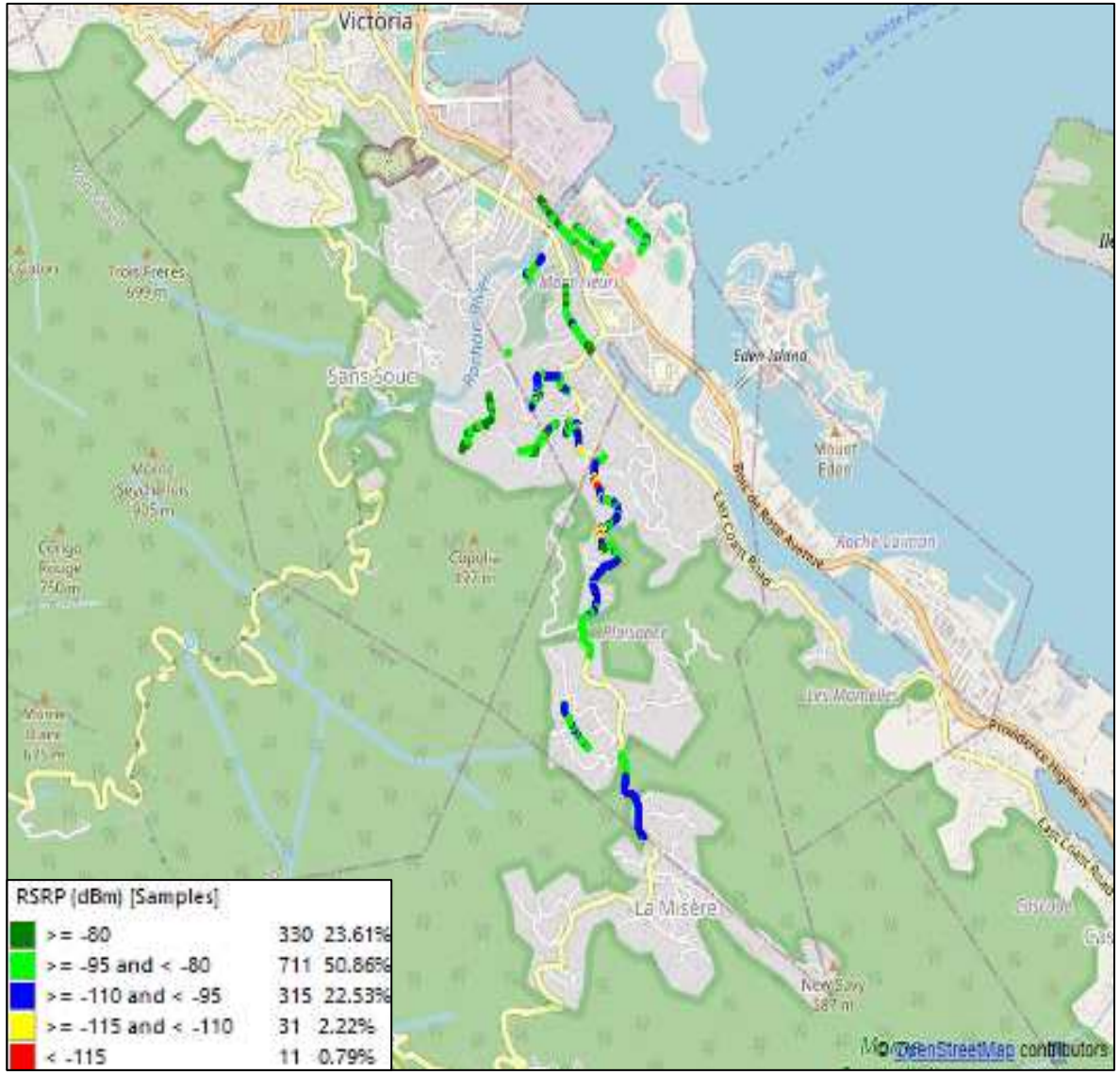


Phase-2 Long Call RSRP PLOT

Airtel LC MO

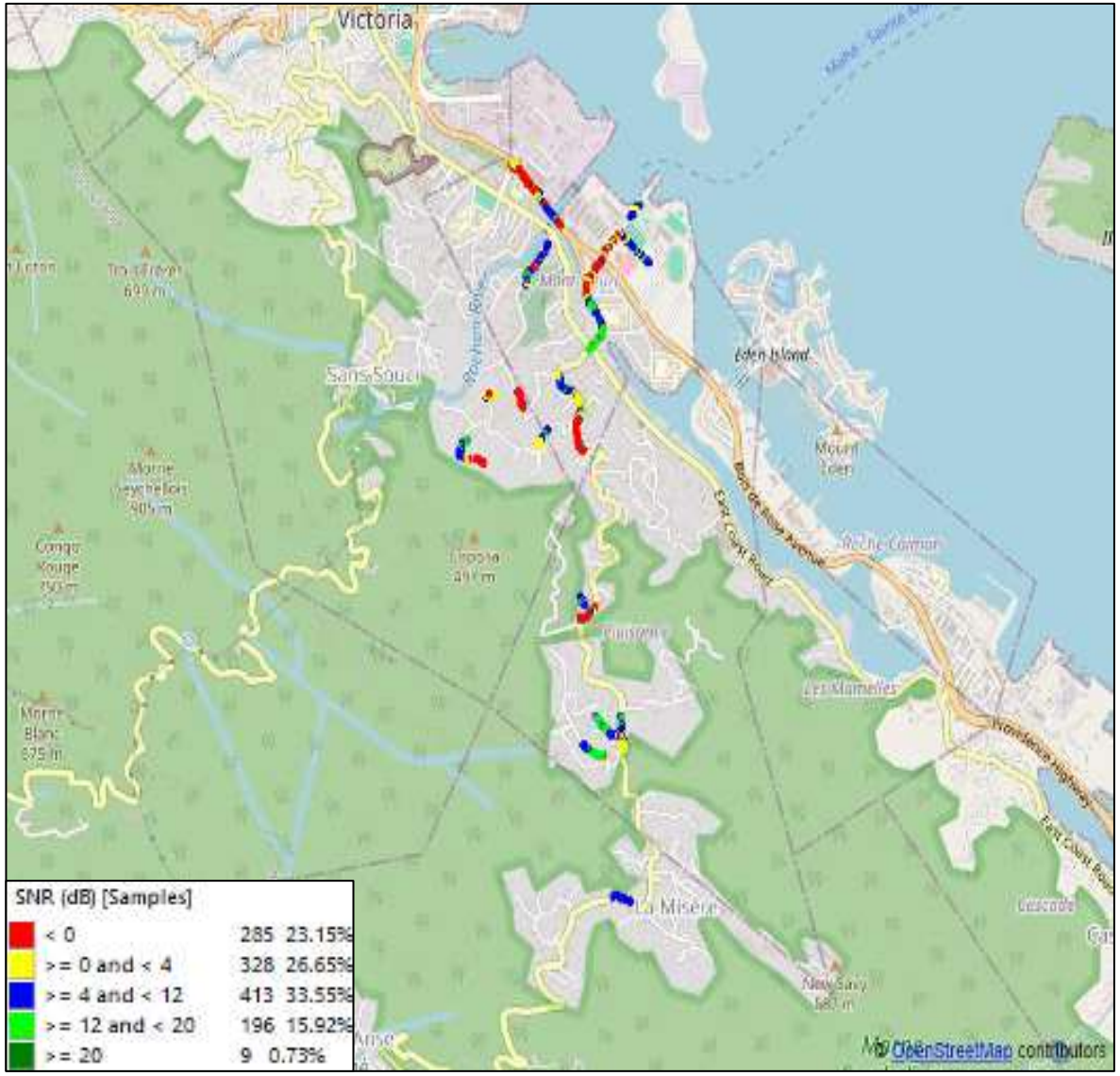


CWS LC MO

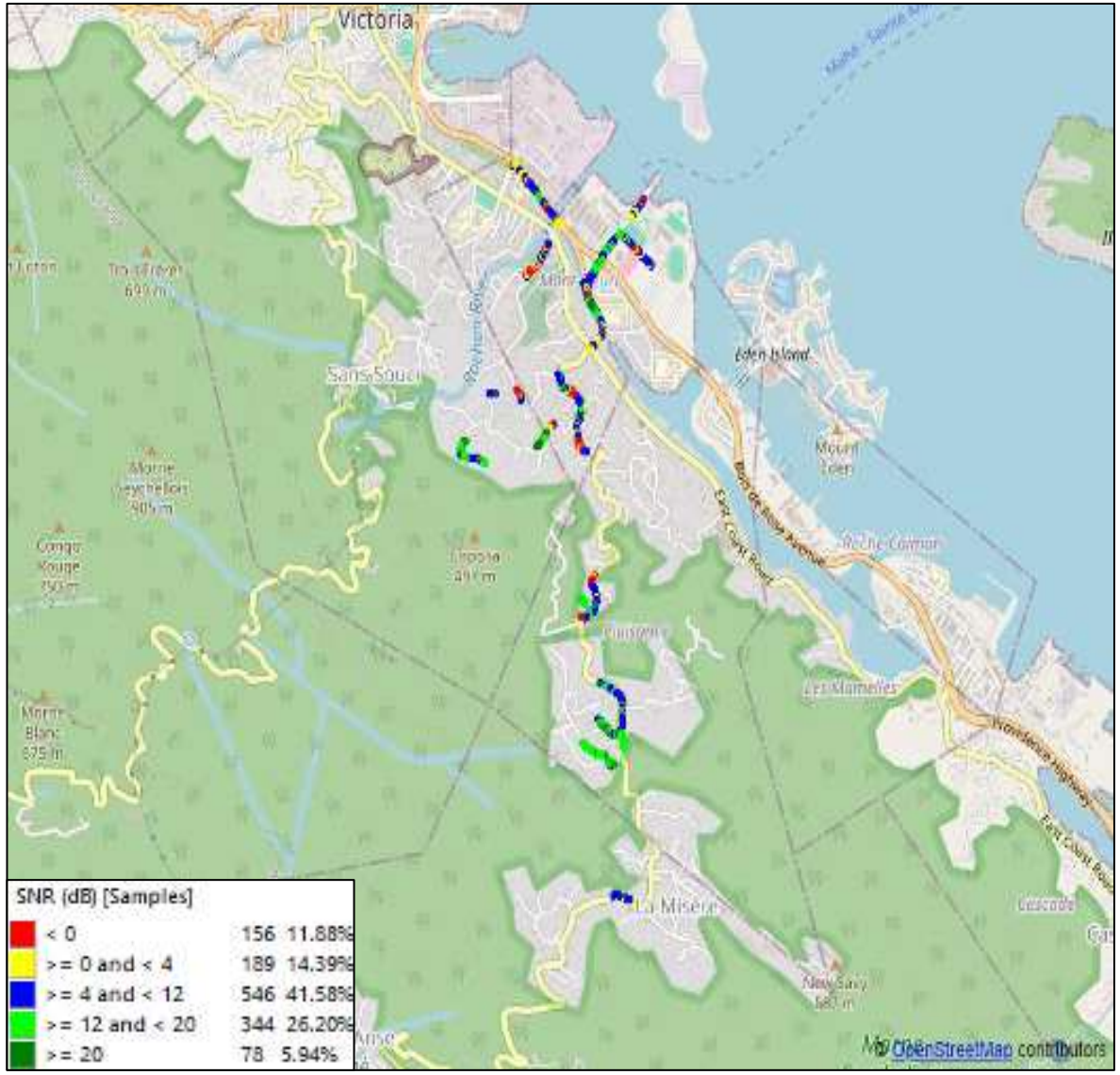


Phase-1 Long Call SINR PLOT

Airtel LC MO

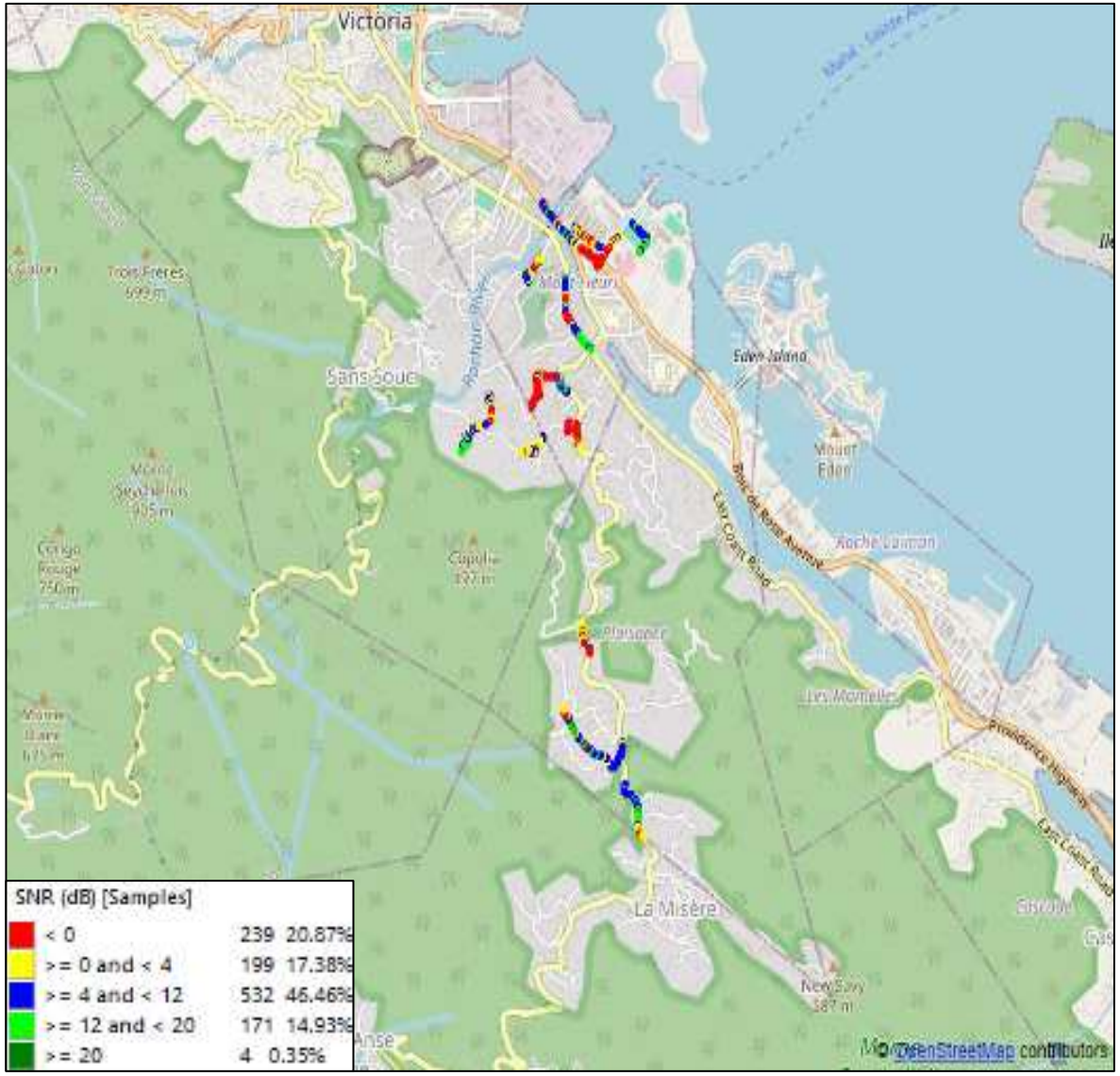


CWS LC MO

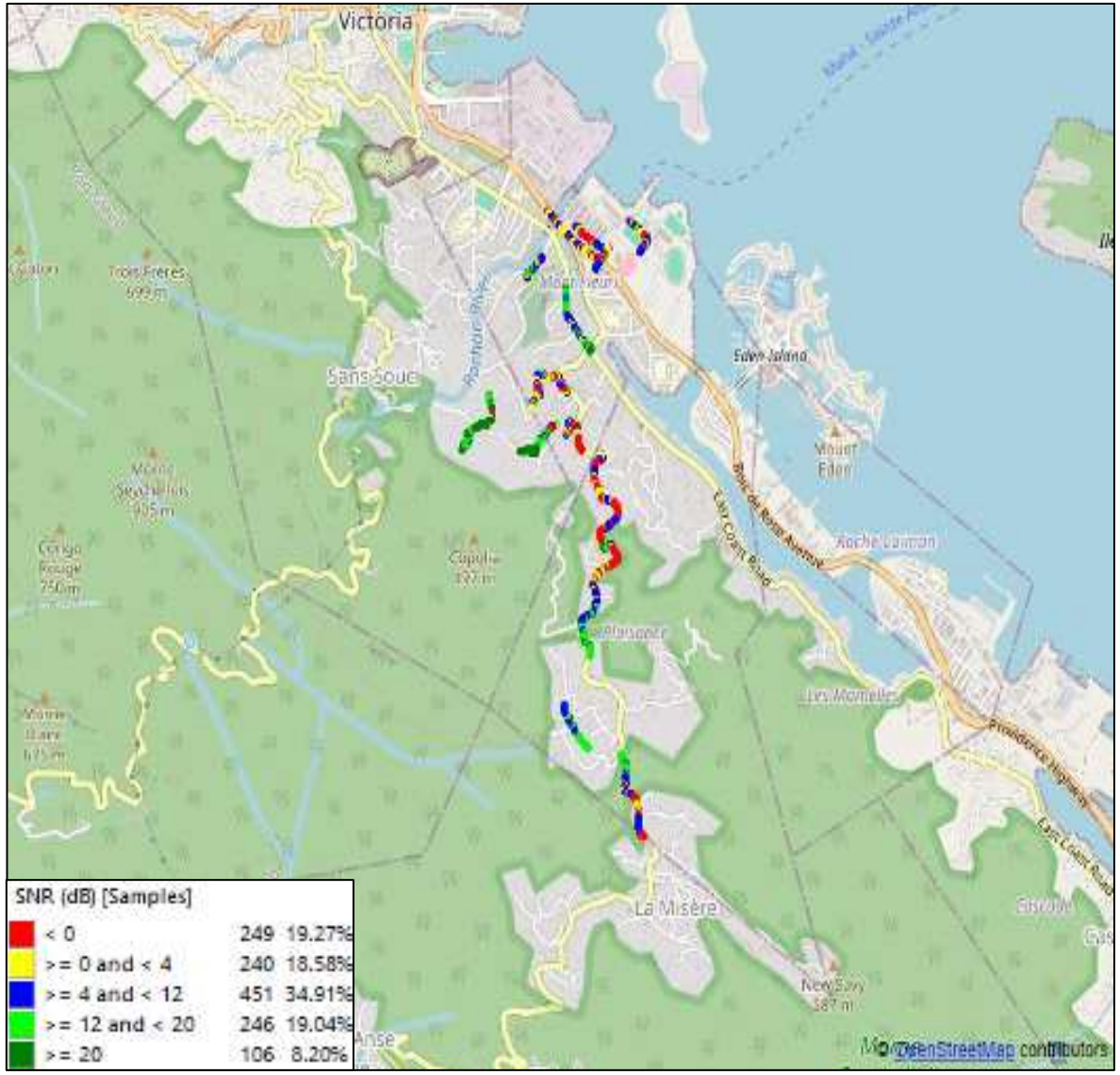


Phase-2 Long Call SINR PLOT

Airtel LC MO

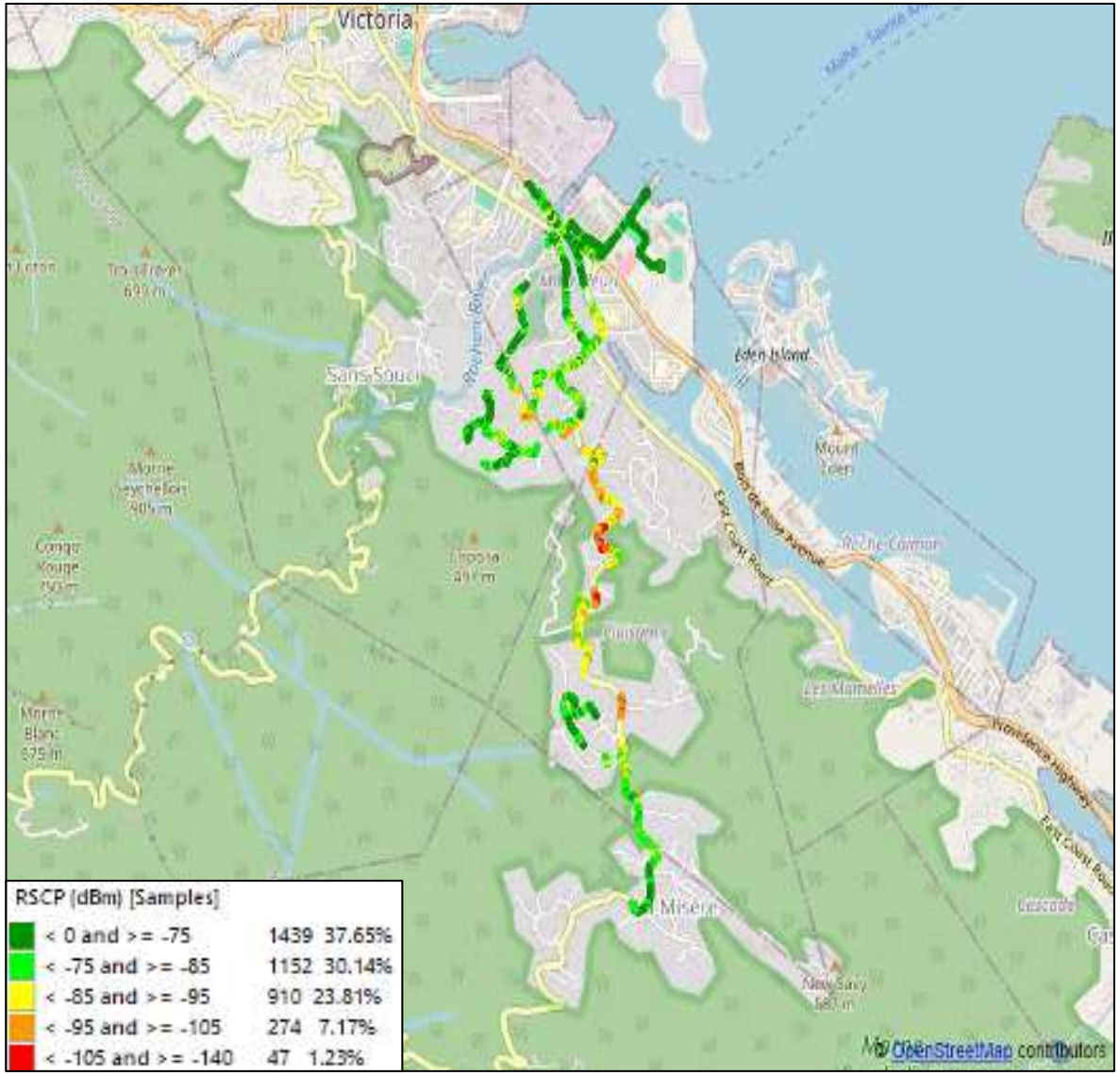


CWS LC MO

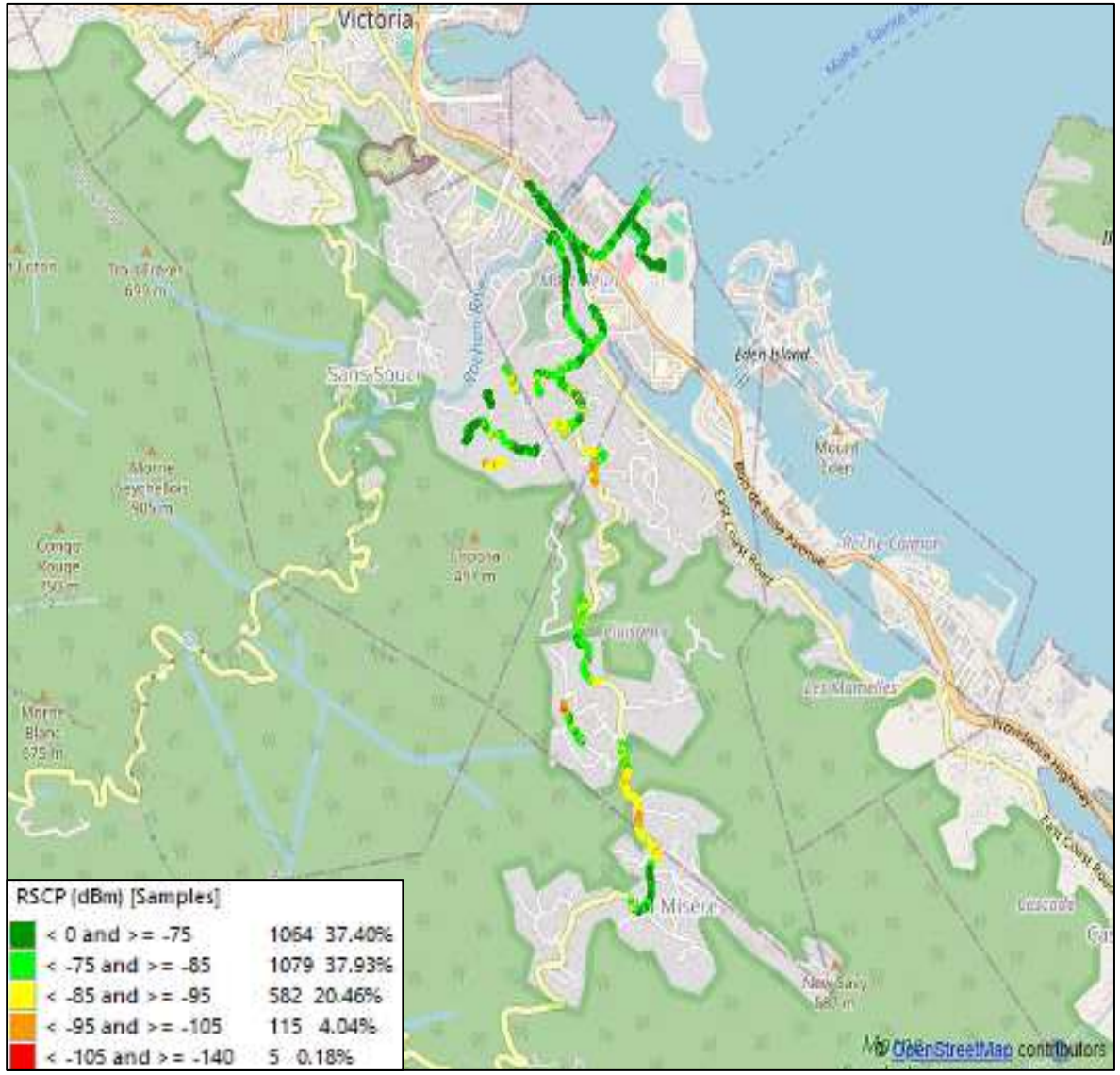


Phase-1 Long Call RSCP PLOT

Airtel LC MO

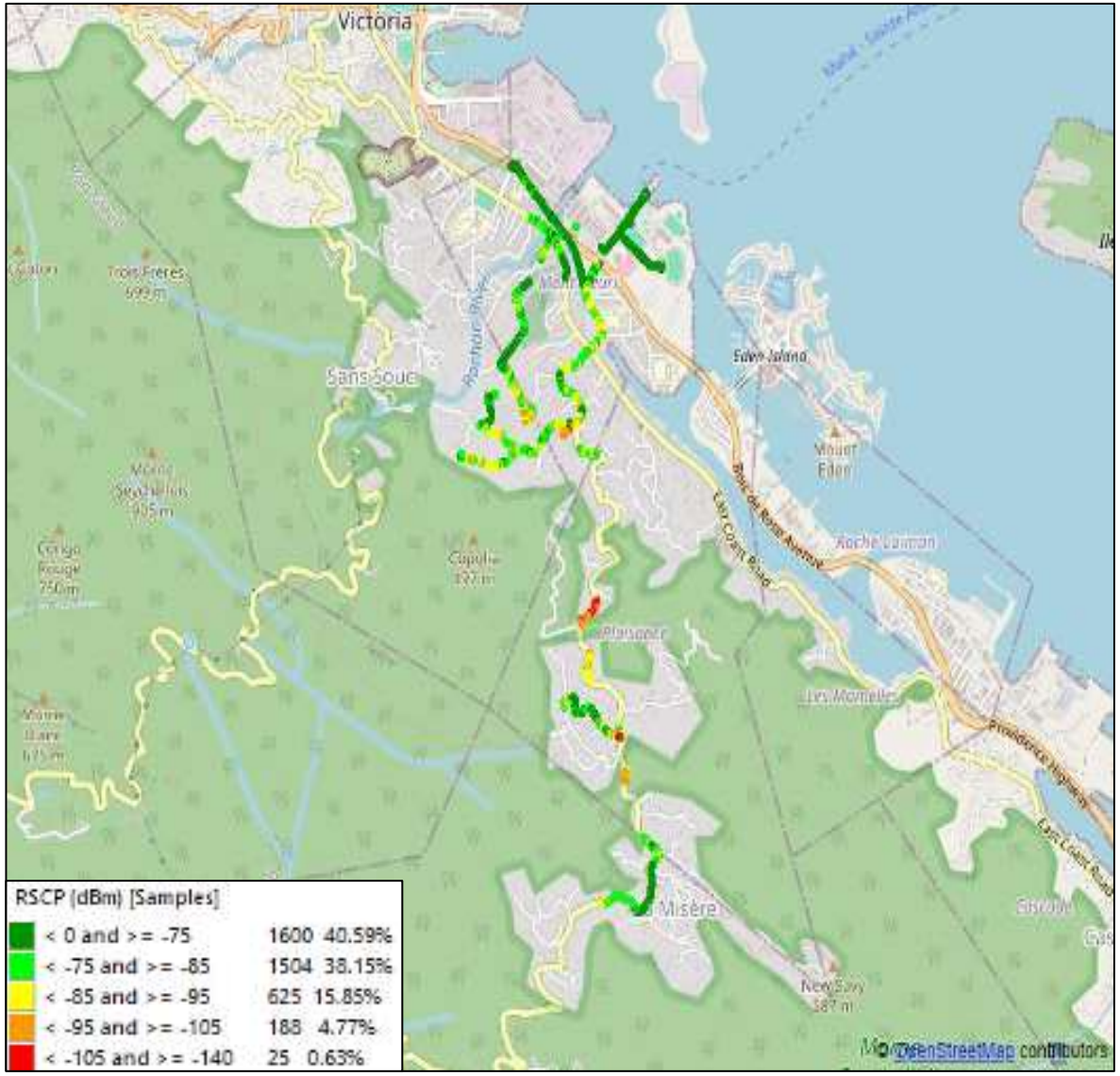


CWS LC MO

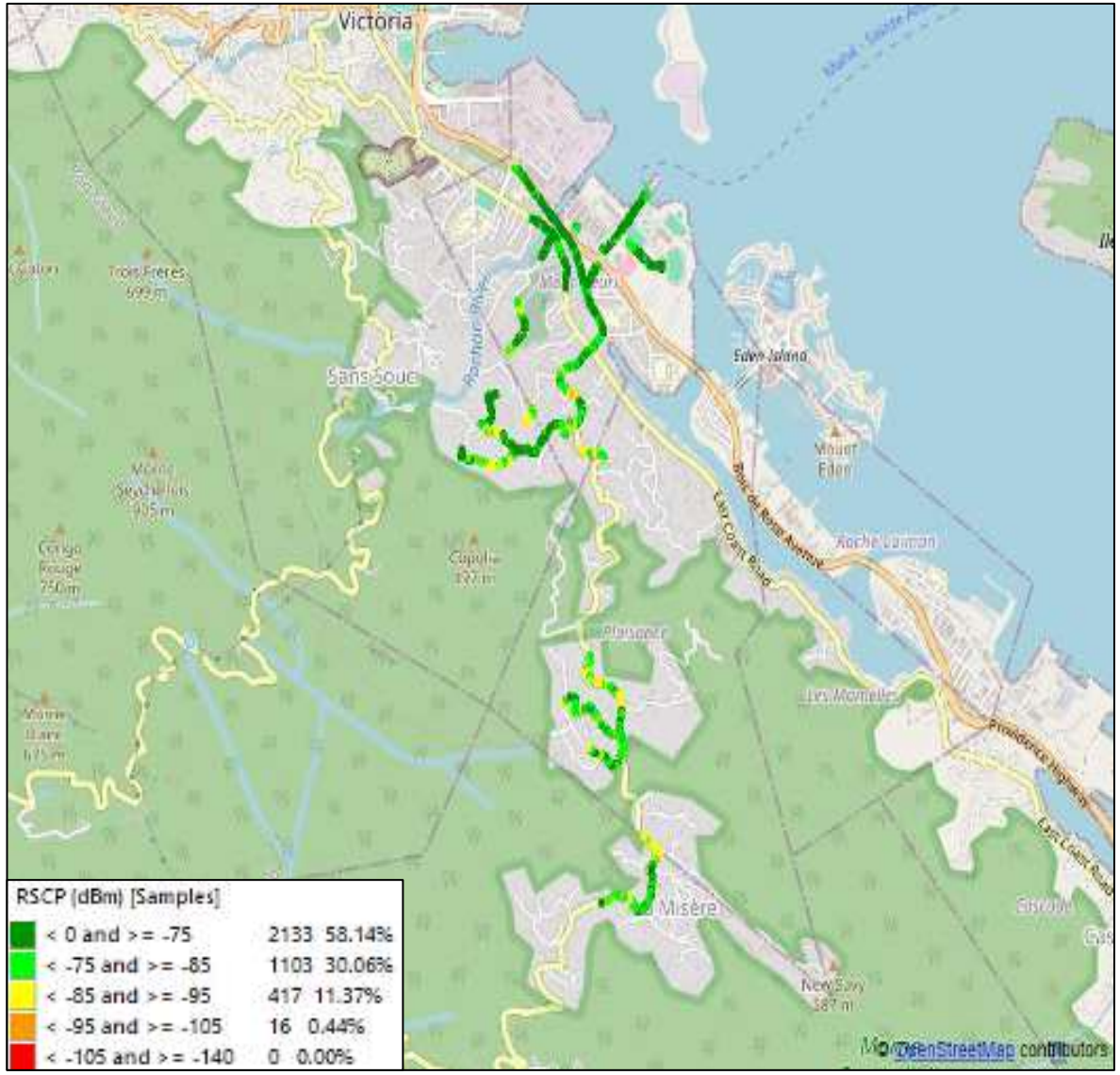


Phase-2 Long Call RSCP PLOT

Airtel LC MO

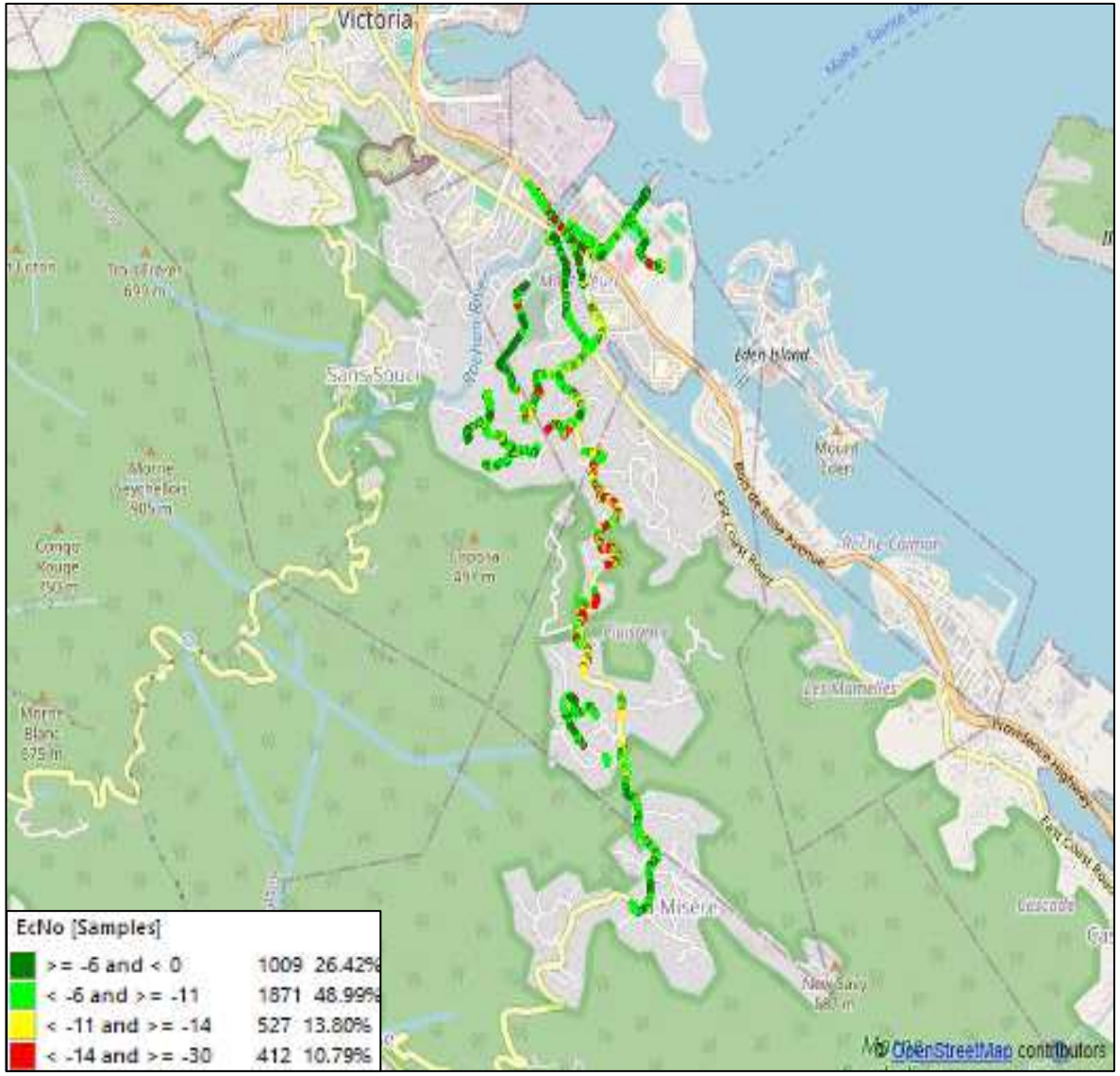


CWS LC MO

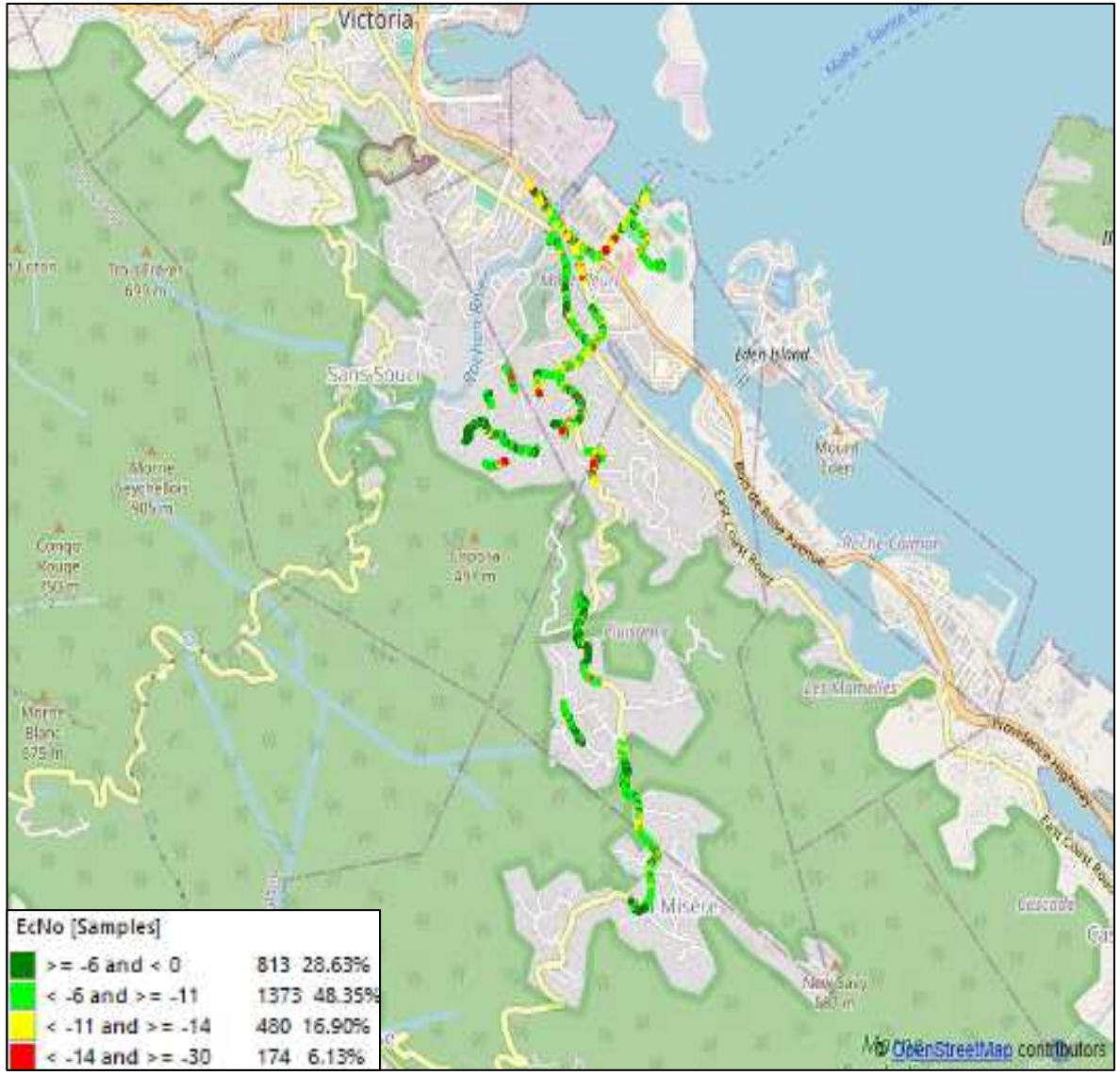


Phase-1 Long Call EC/NO PLOT

Airtel LC MO

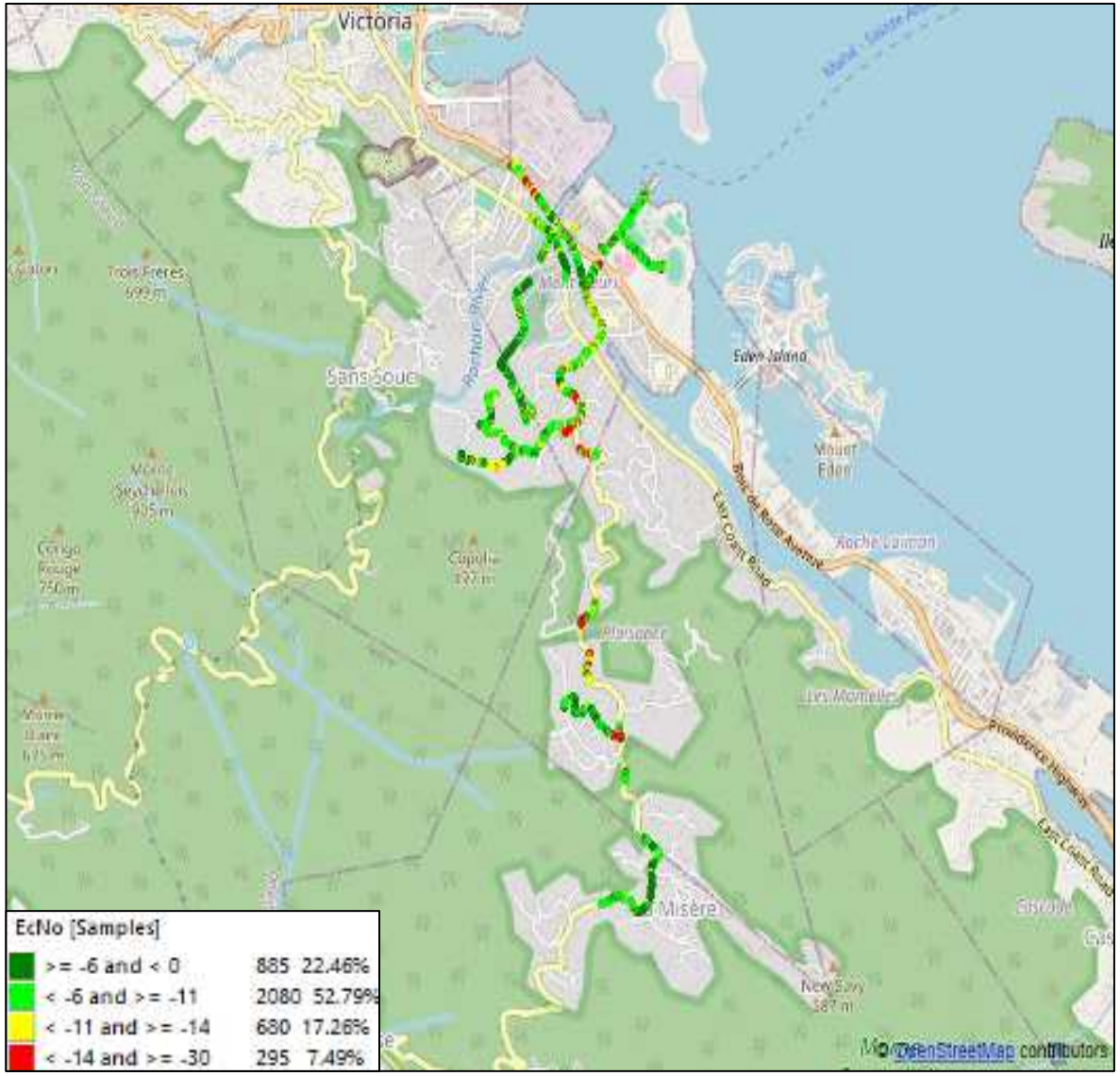


CWS LC MO

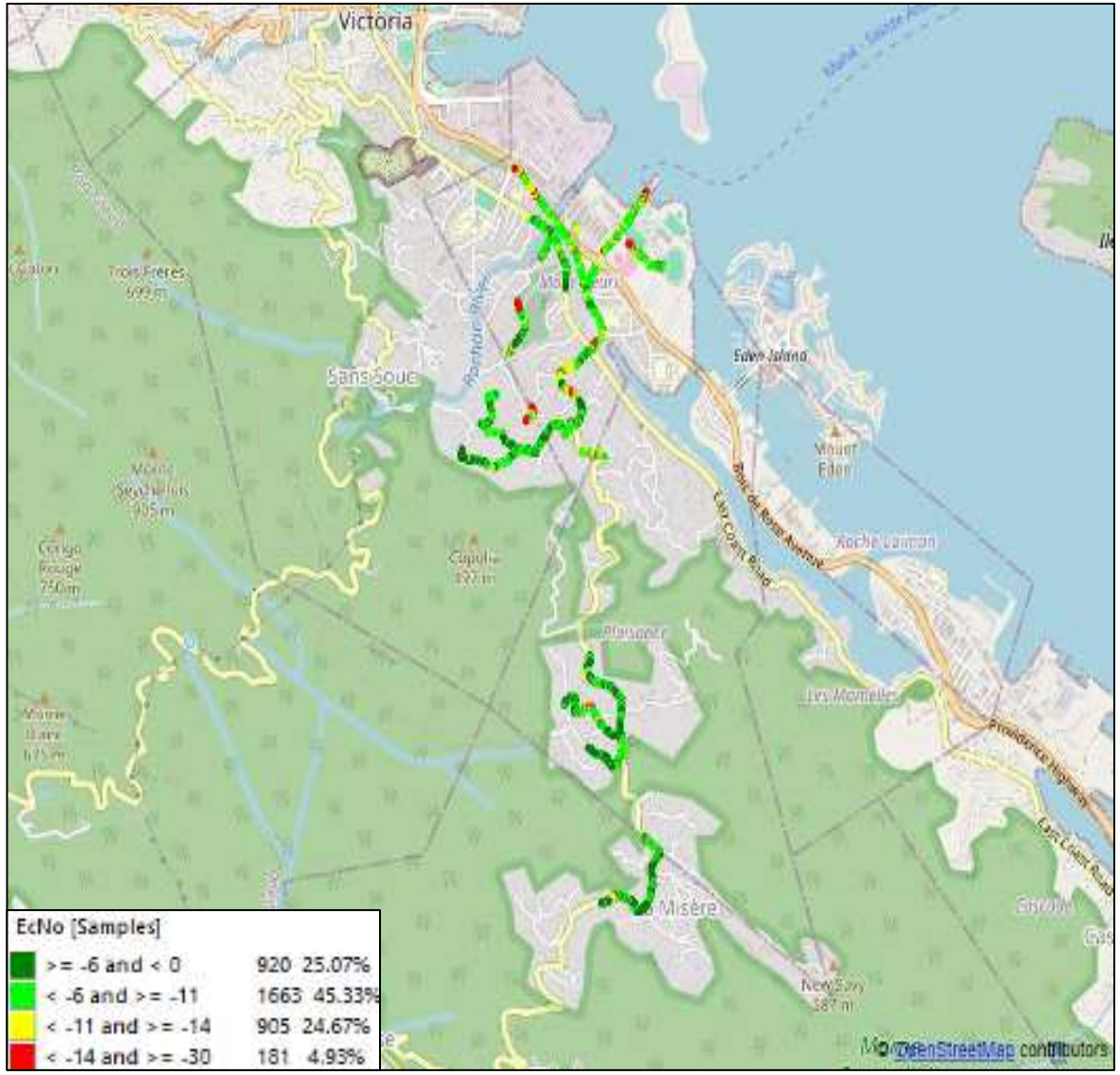


Phase-2 Long Call EC/NO PLOT

Airtel LC MO

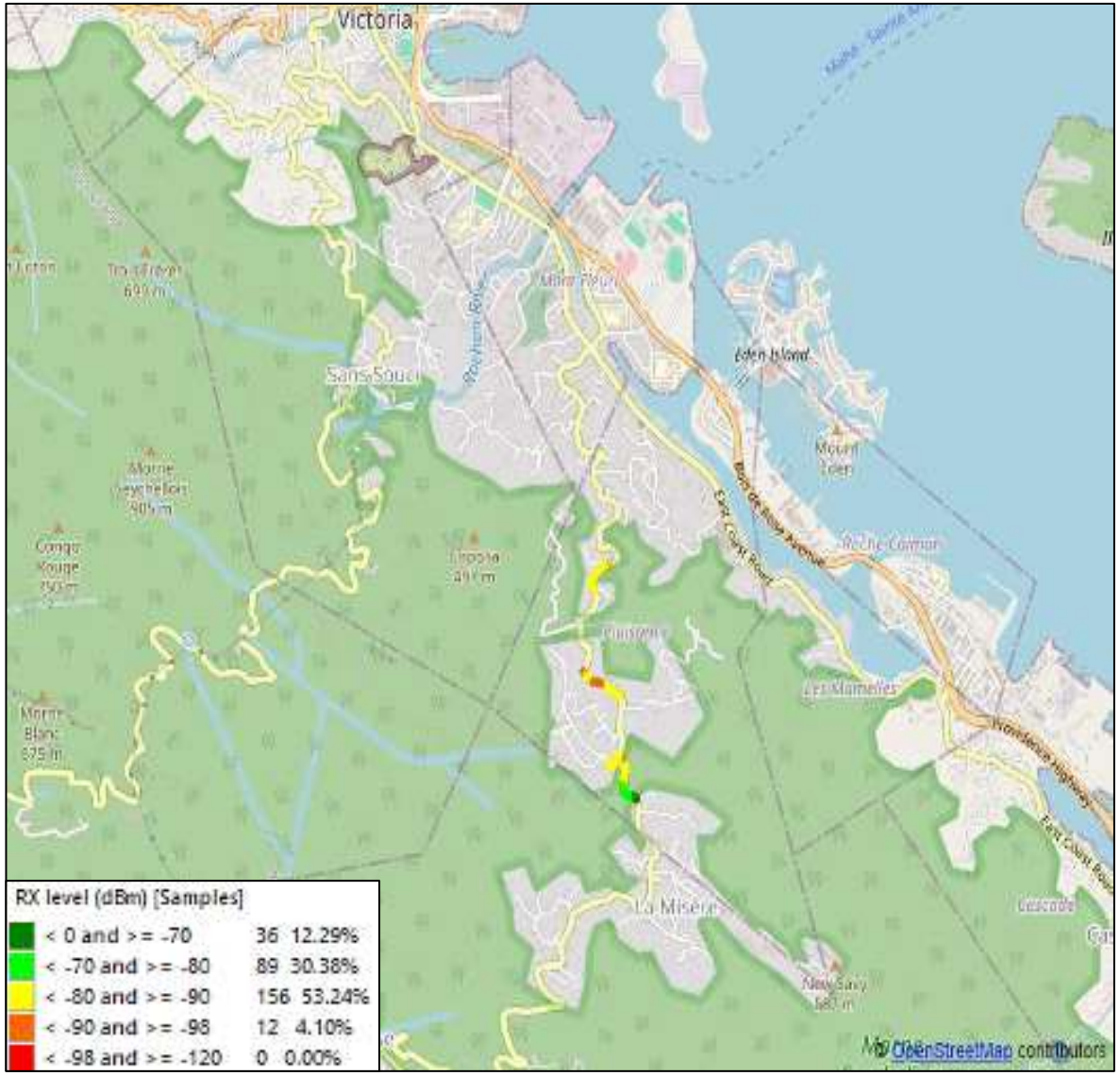


CWS LC MO

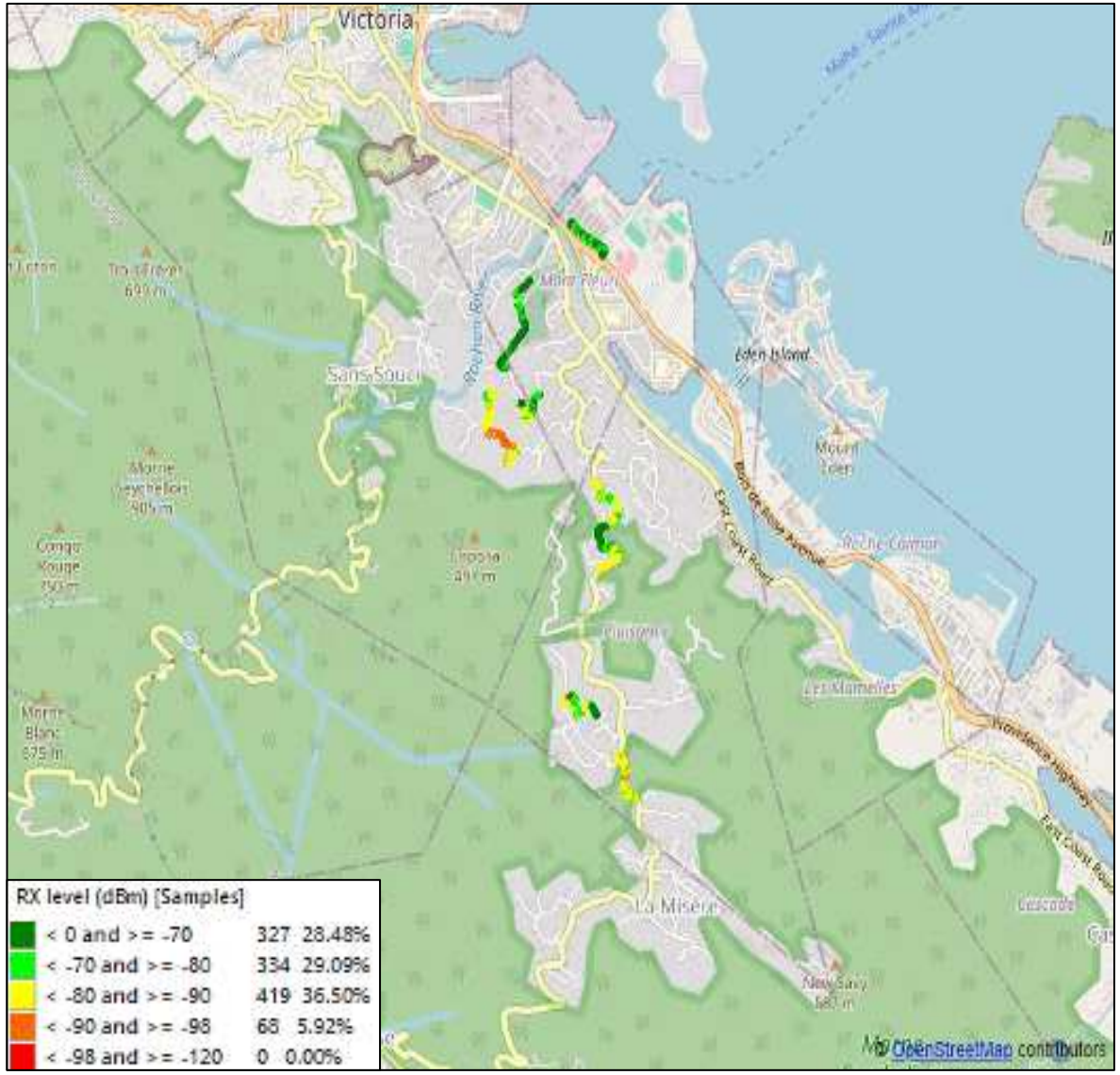


Phase-1 Long Call RX level sub PLOT

Airtel LC MO

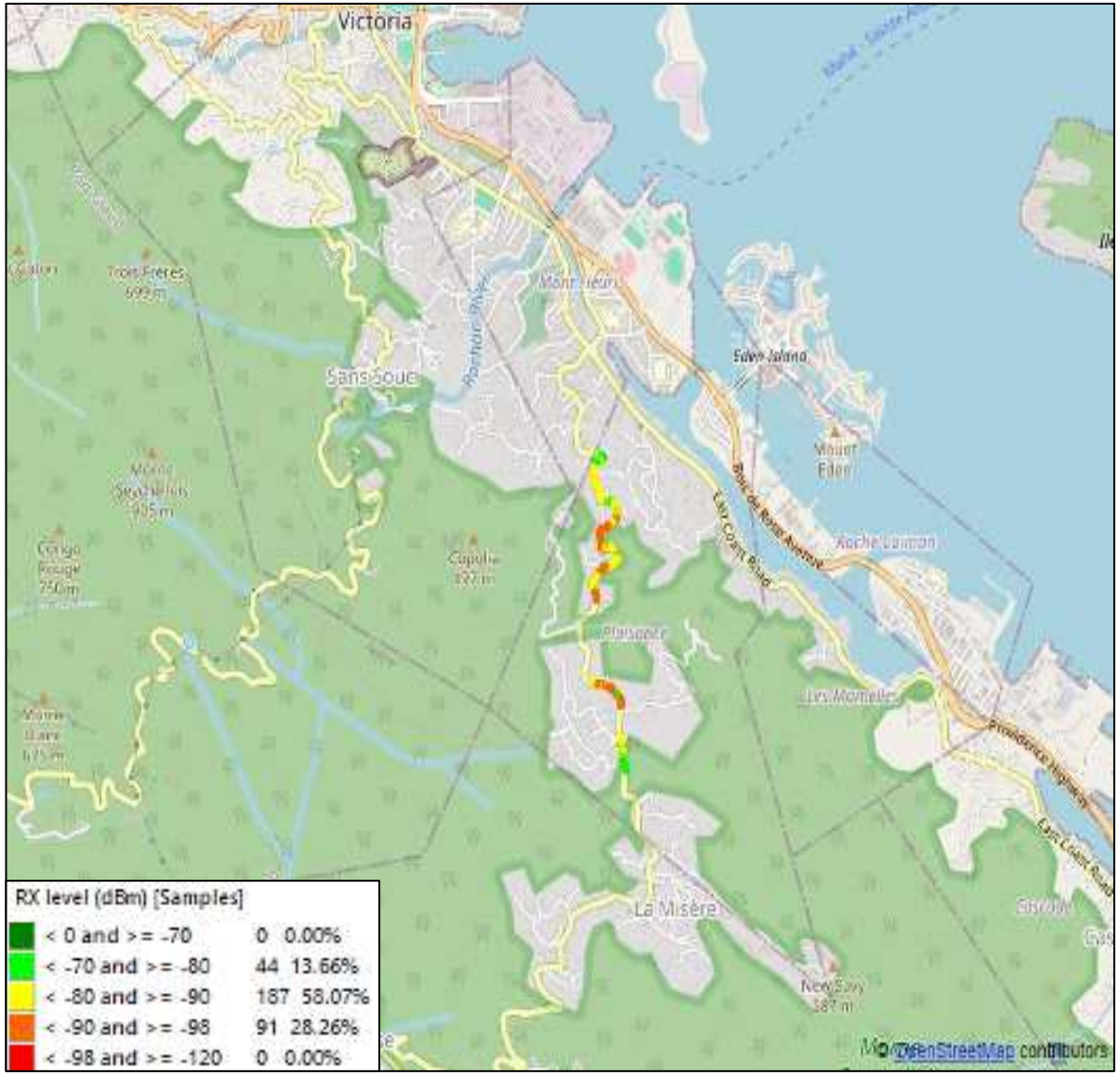


CWS LC MO

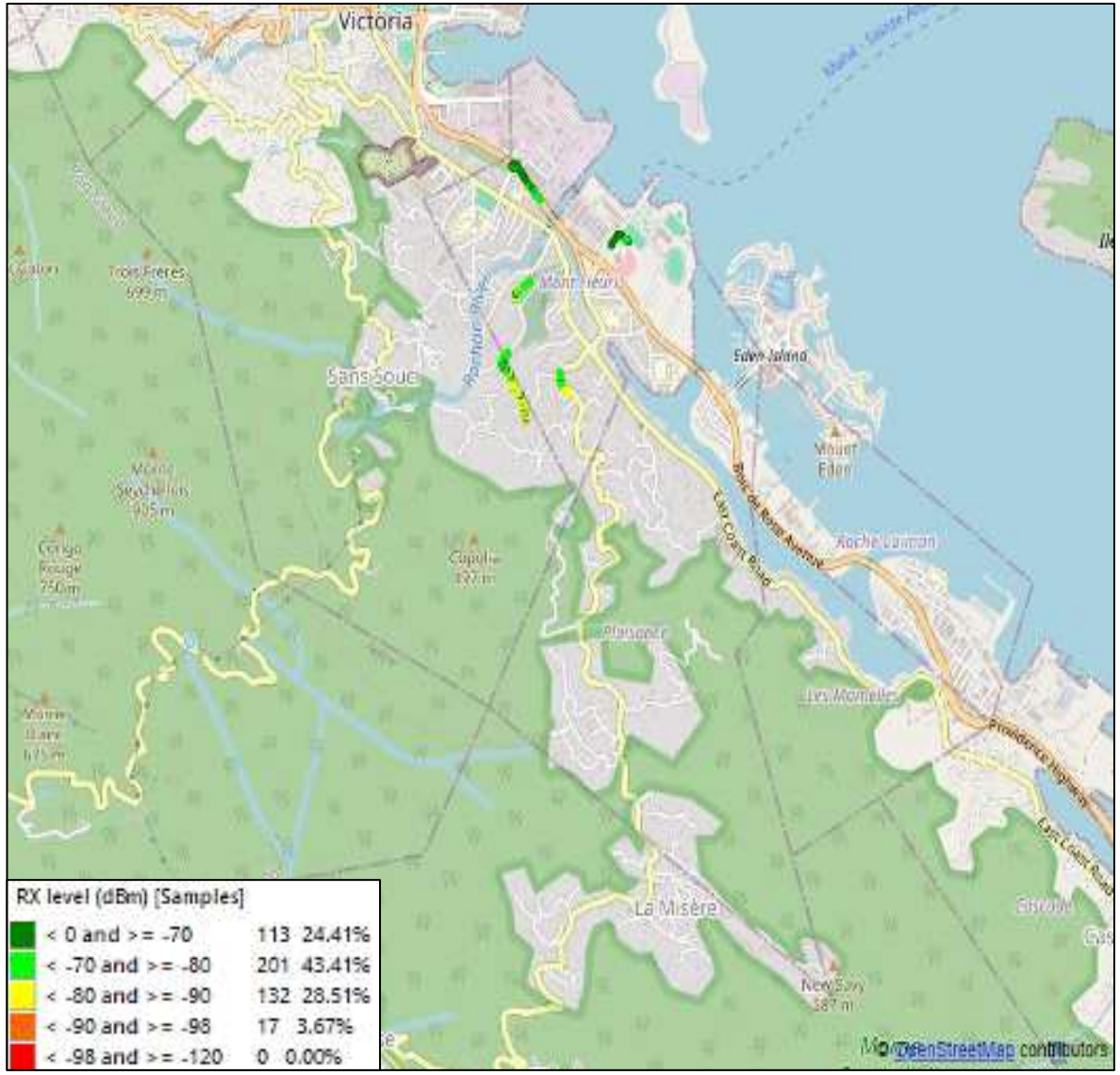


Phase-2 Long Call RX level sub PLOT

Airtel LC MO

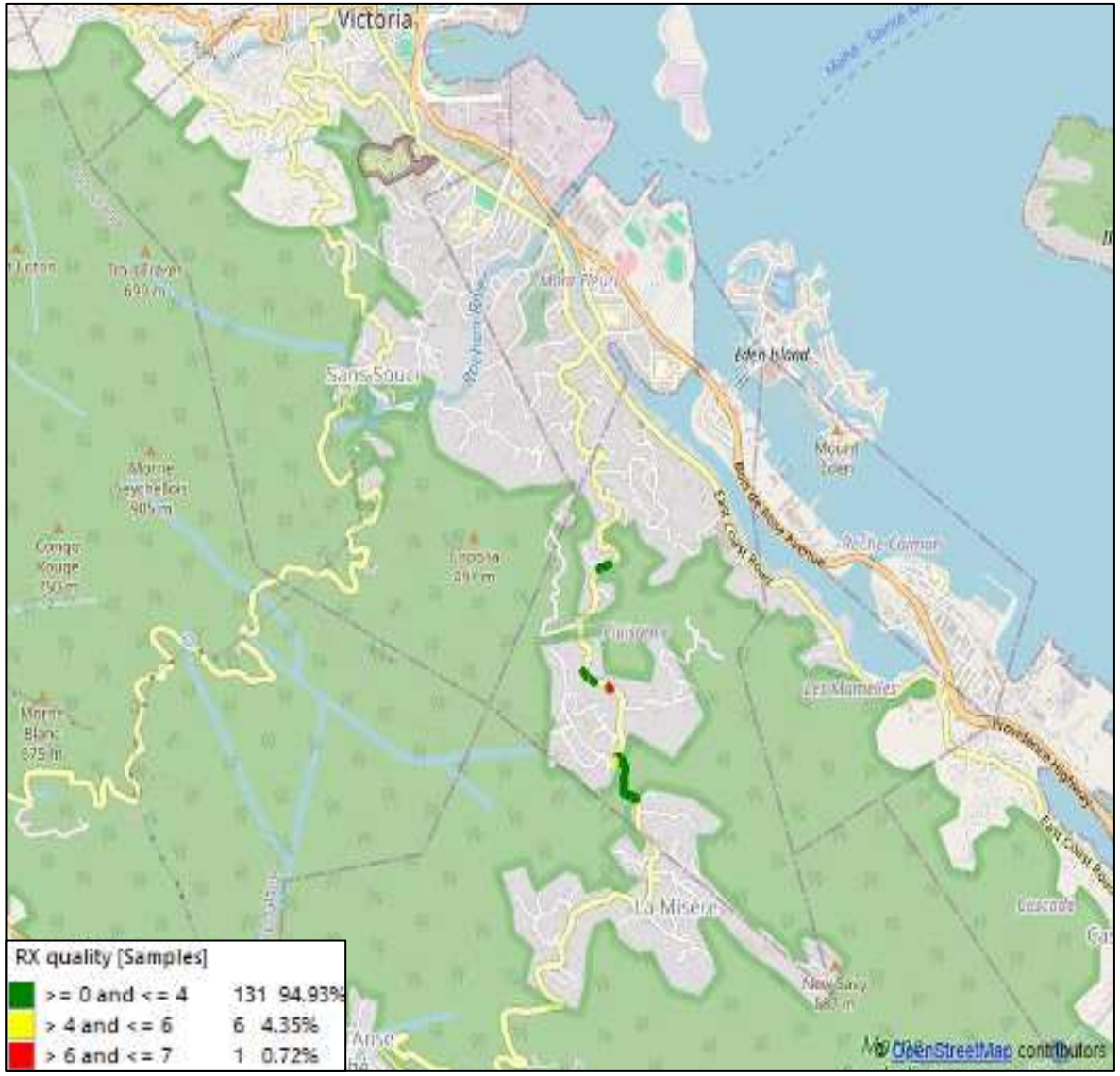


CWS LC MO

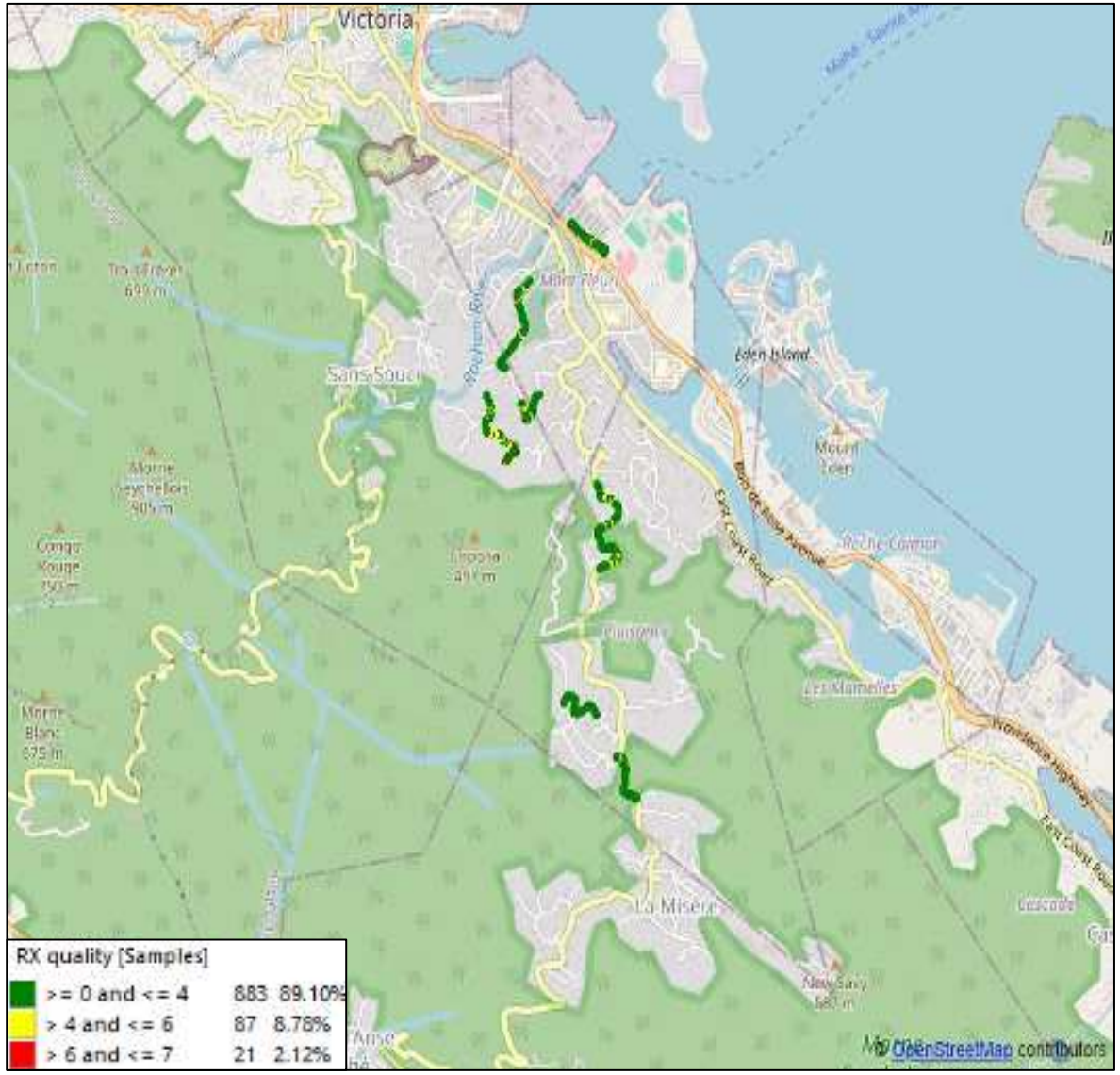


Phase-1 Long Call RX quality sub PLOT

Airtel LC MO

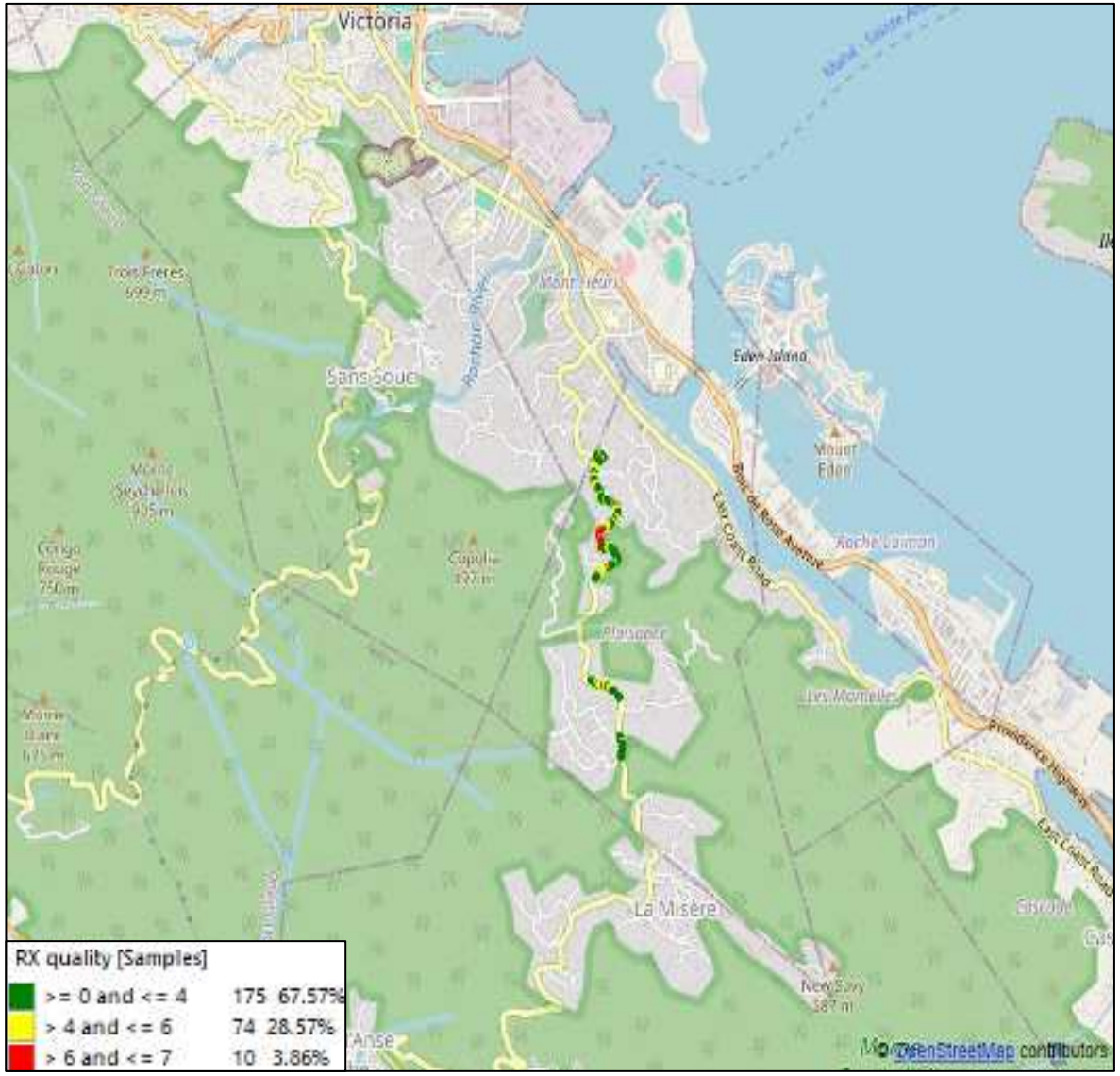


CWS LC MO

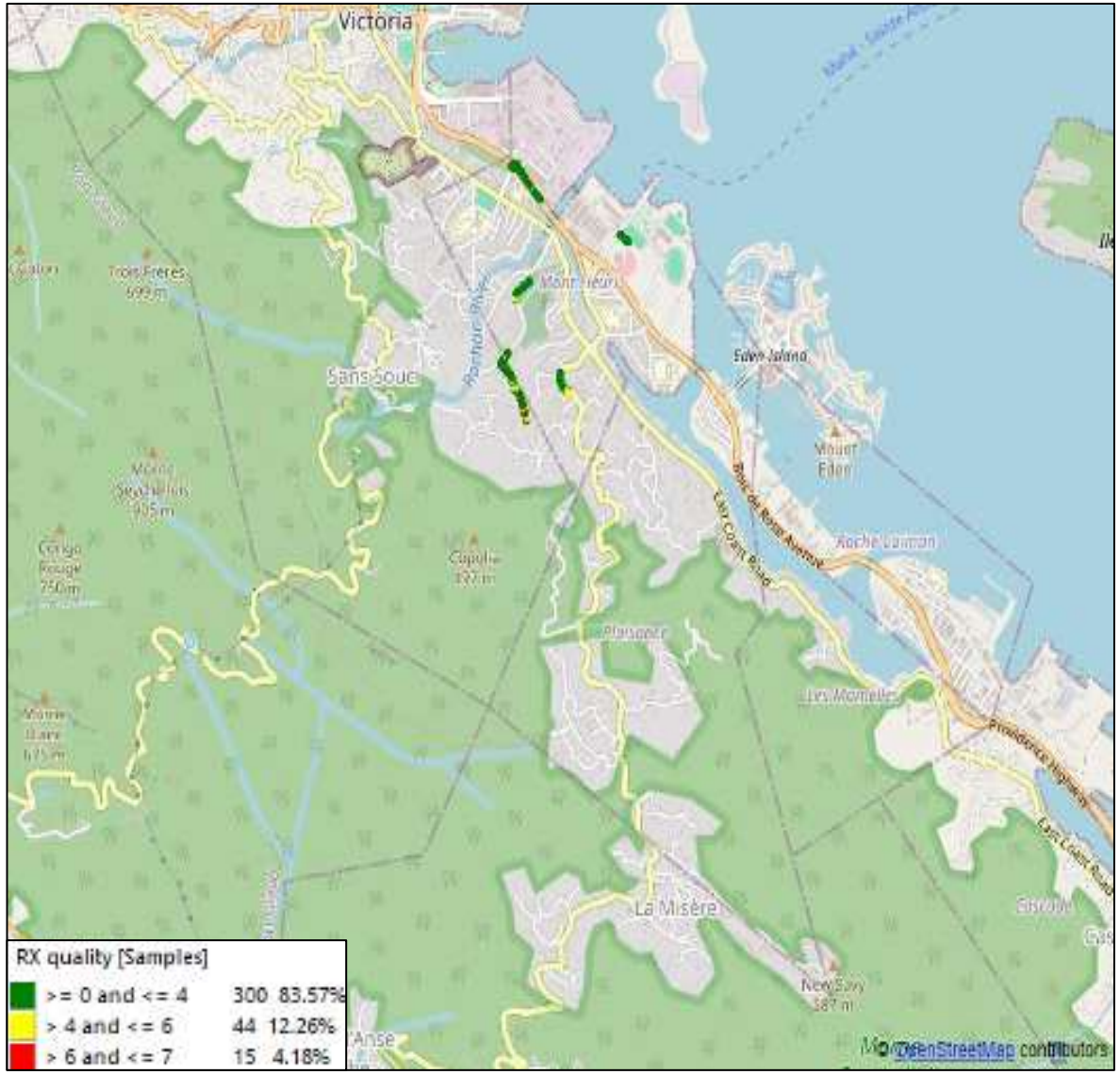


Phase-2 Long Call RX quality sub PLOT

Airtel LC MO



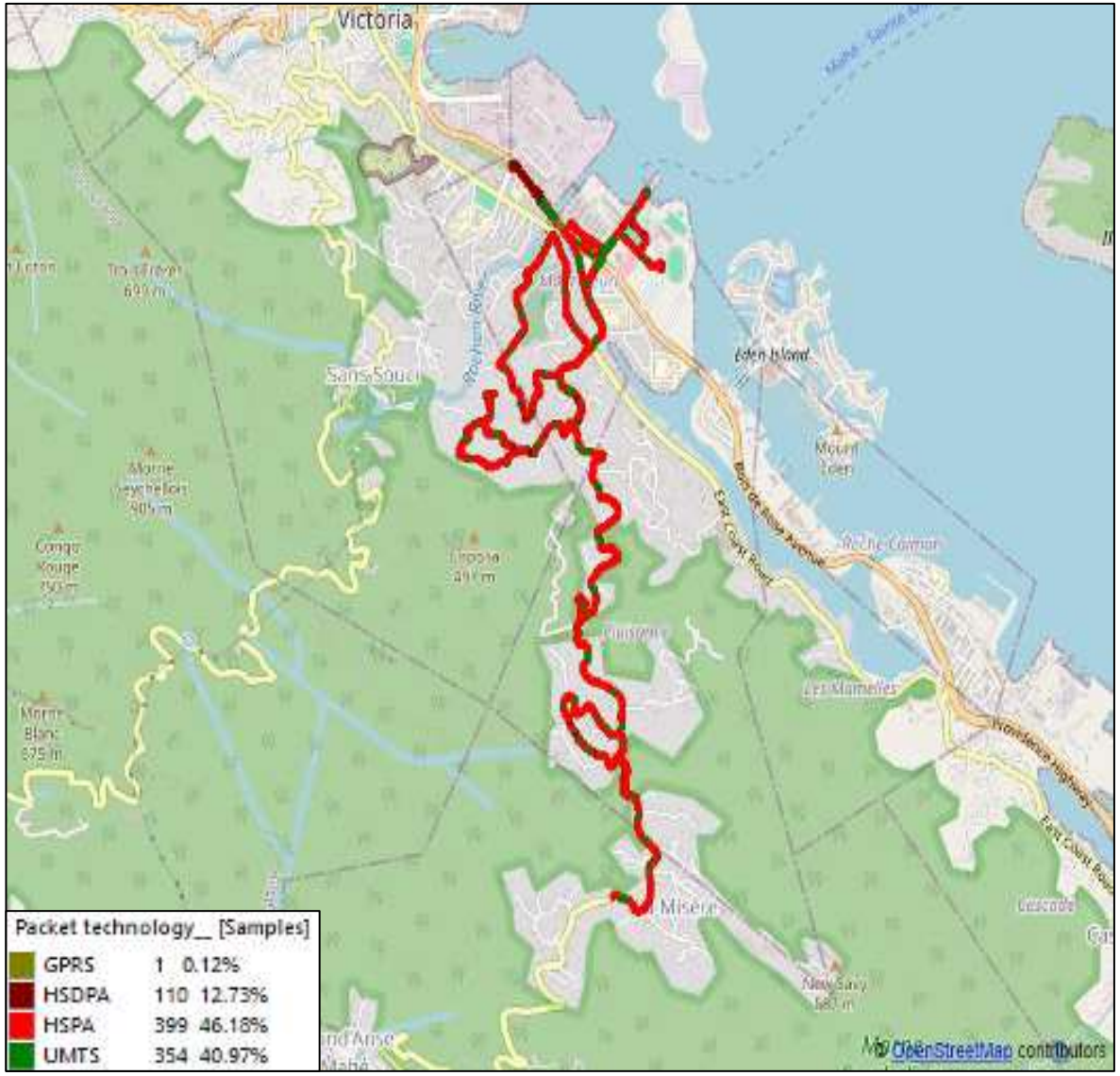
CWS LC MO



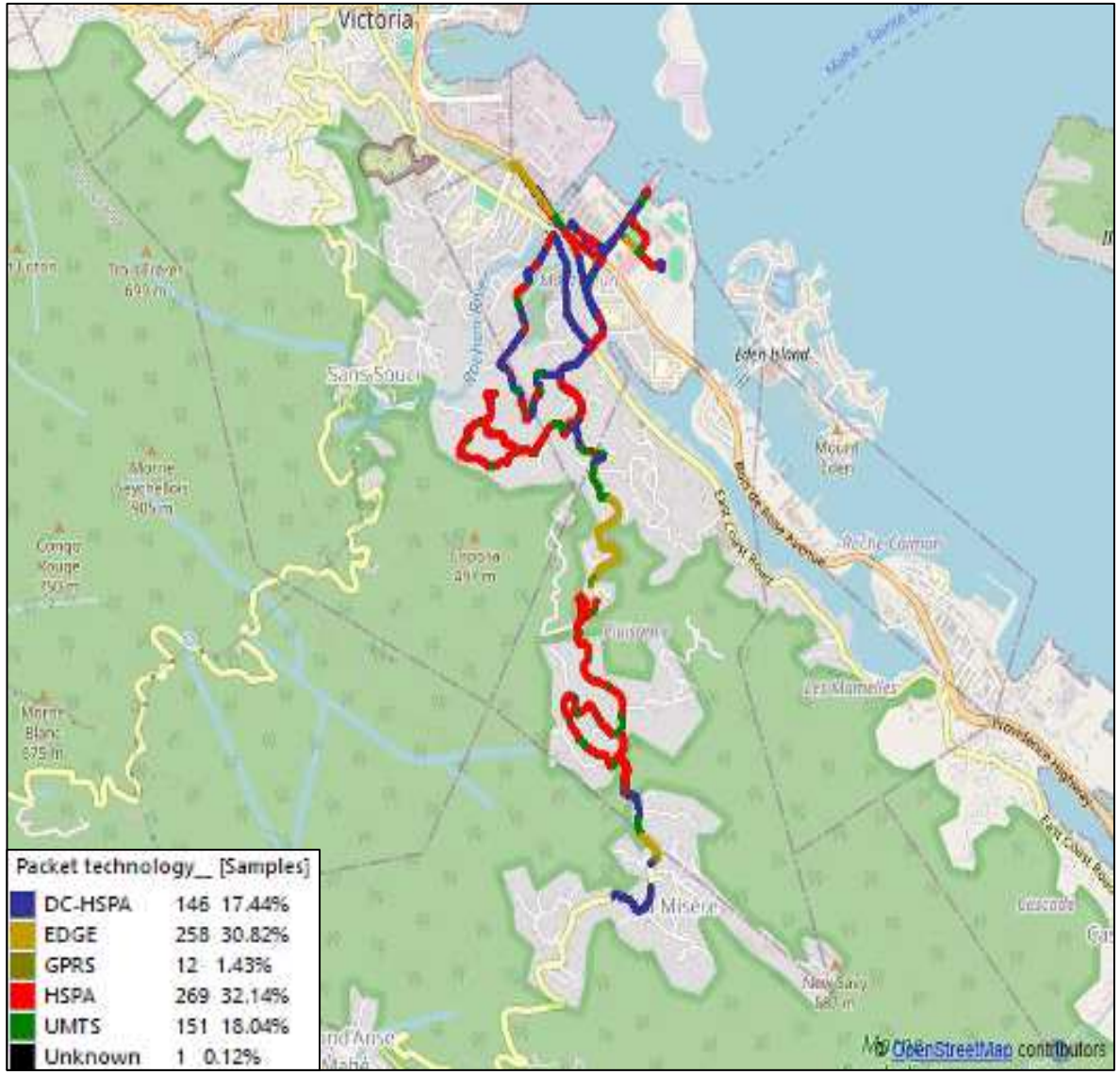
3G PREFERRED DATA DRIVE PLOTS

Phase-1 3G PREFERRED DATA TEST - TECHNOLOGY PLOT

Airtel Data 3G

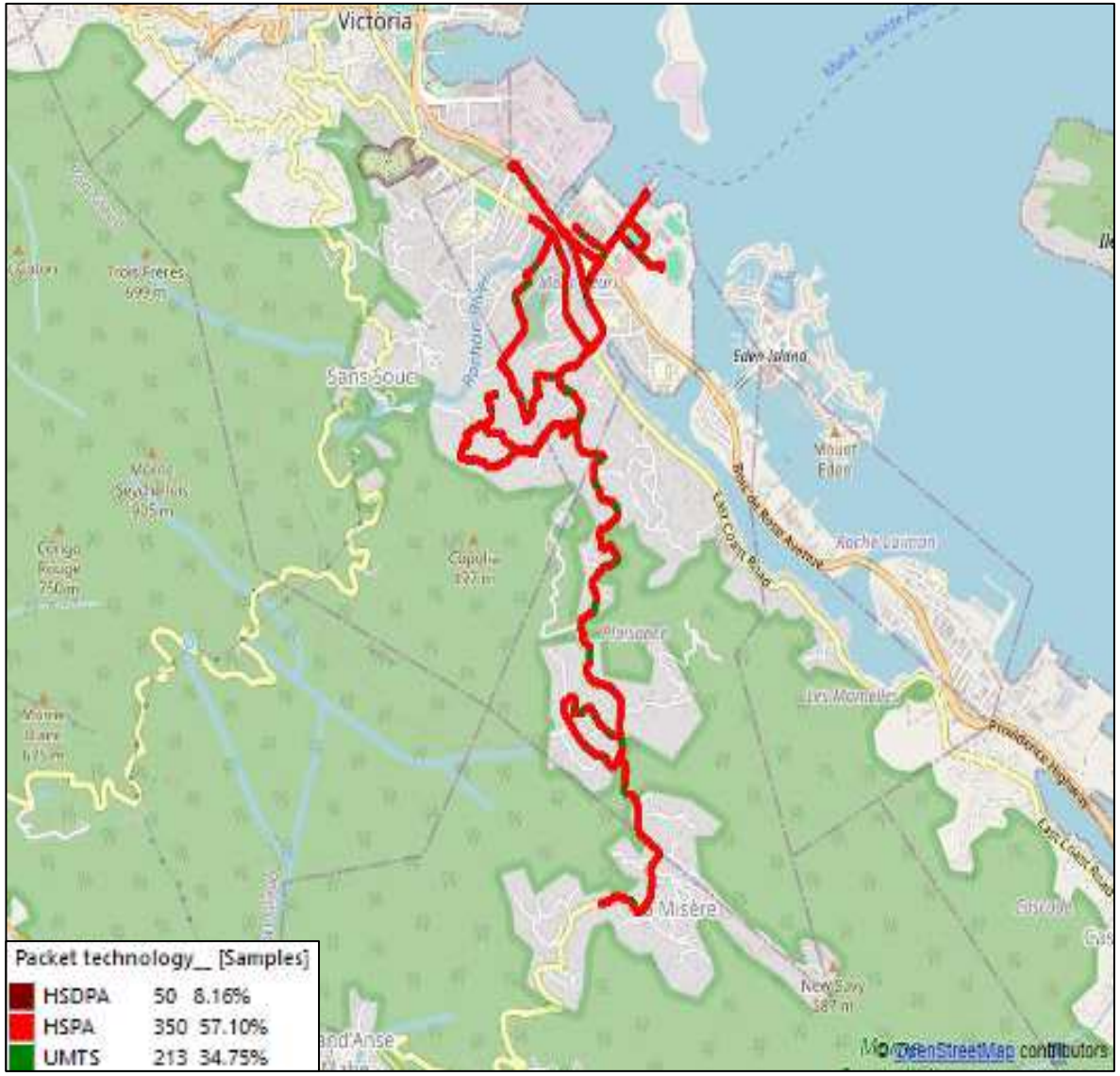


CWS Data 3G

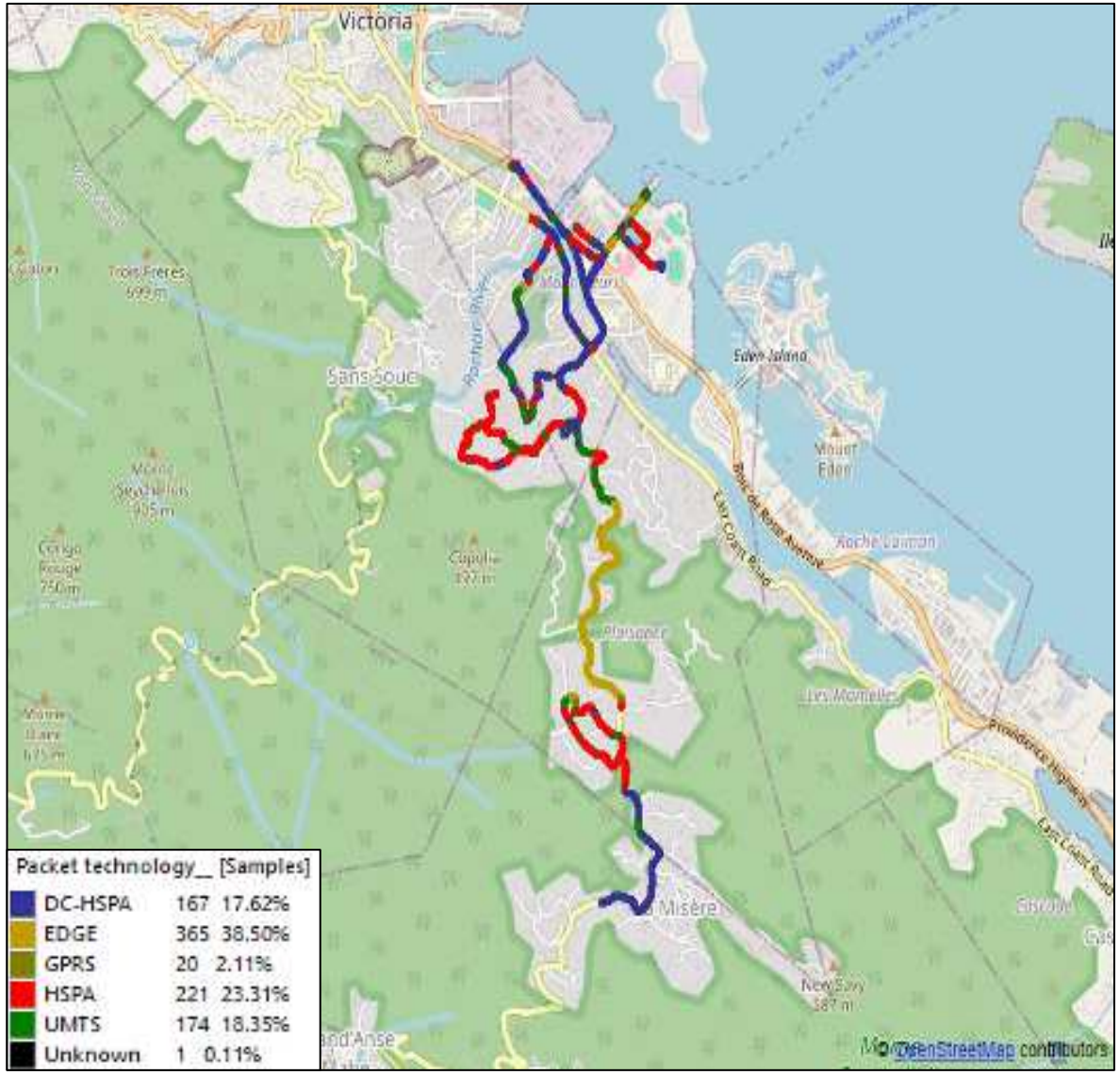


Phase-2 3G PREFERRED DATA TEST - TECHNOLOGY PLOT

Airtel Data 3G

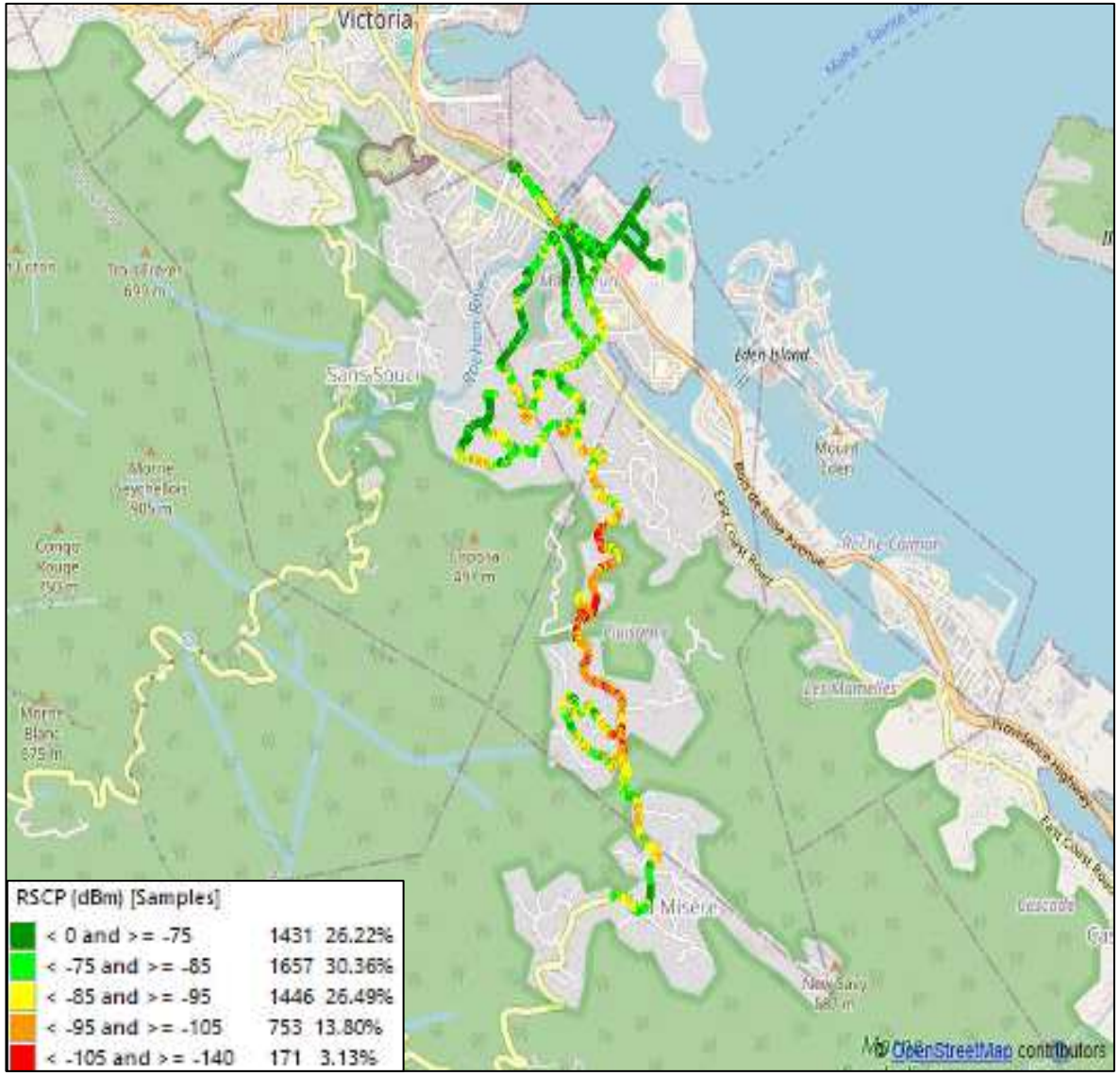


CWS Data 3G

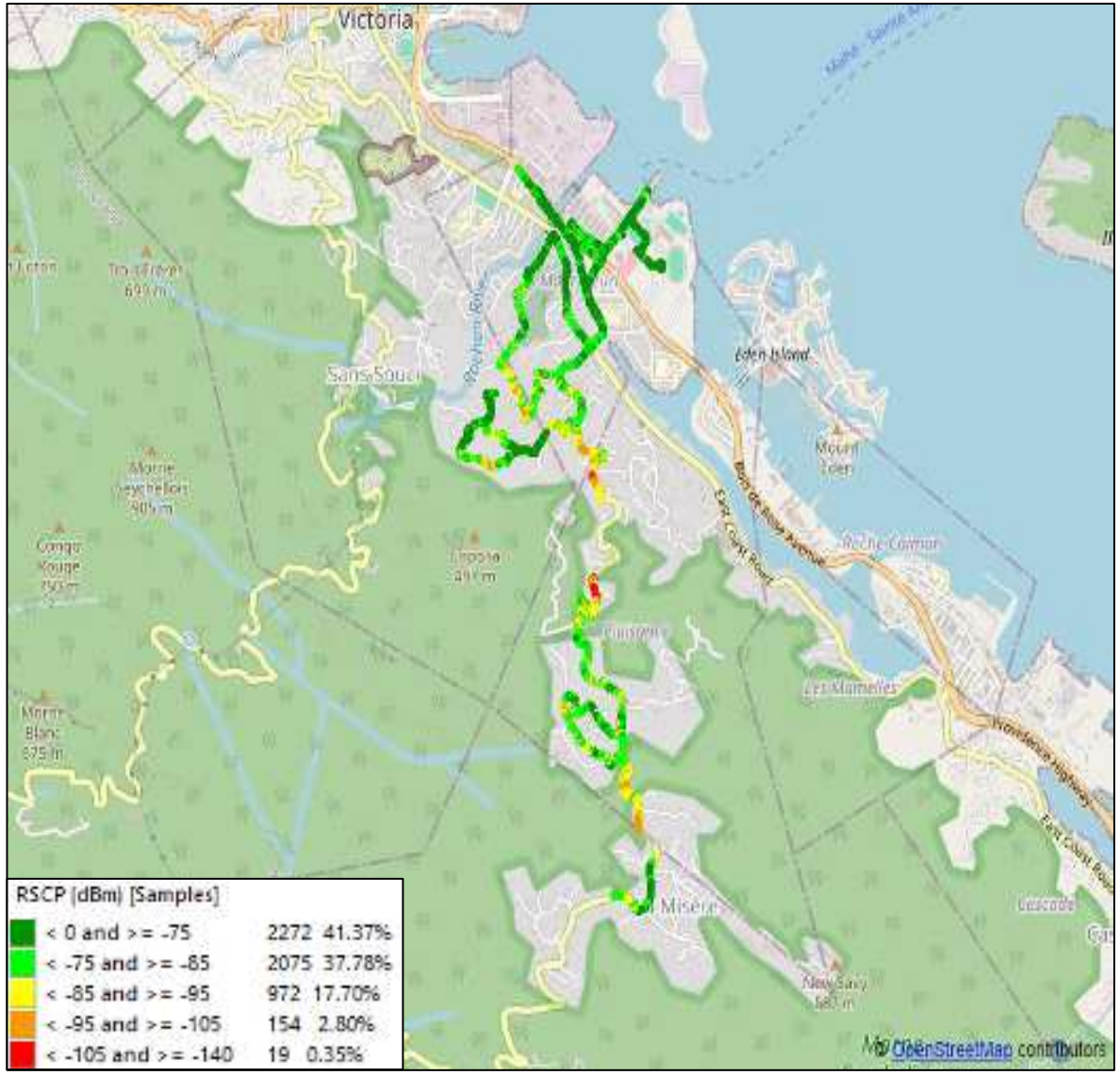


Phase-1 3G PREFERRED DATA TEST - RSCP PLOT

Airtel Data 3G

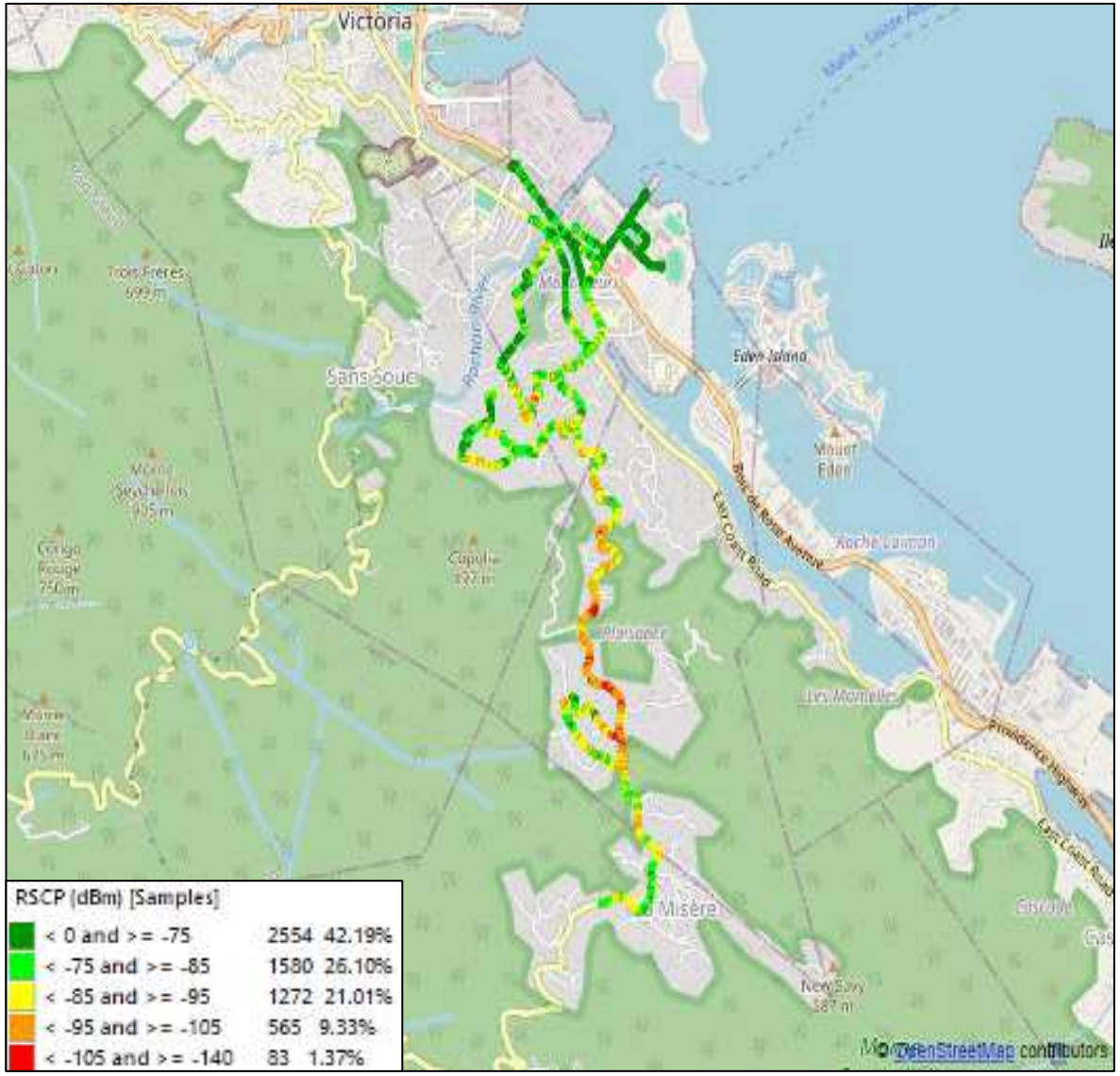


CWS Data 3G

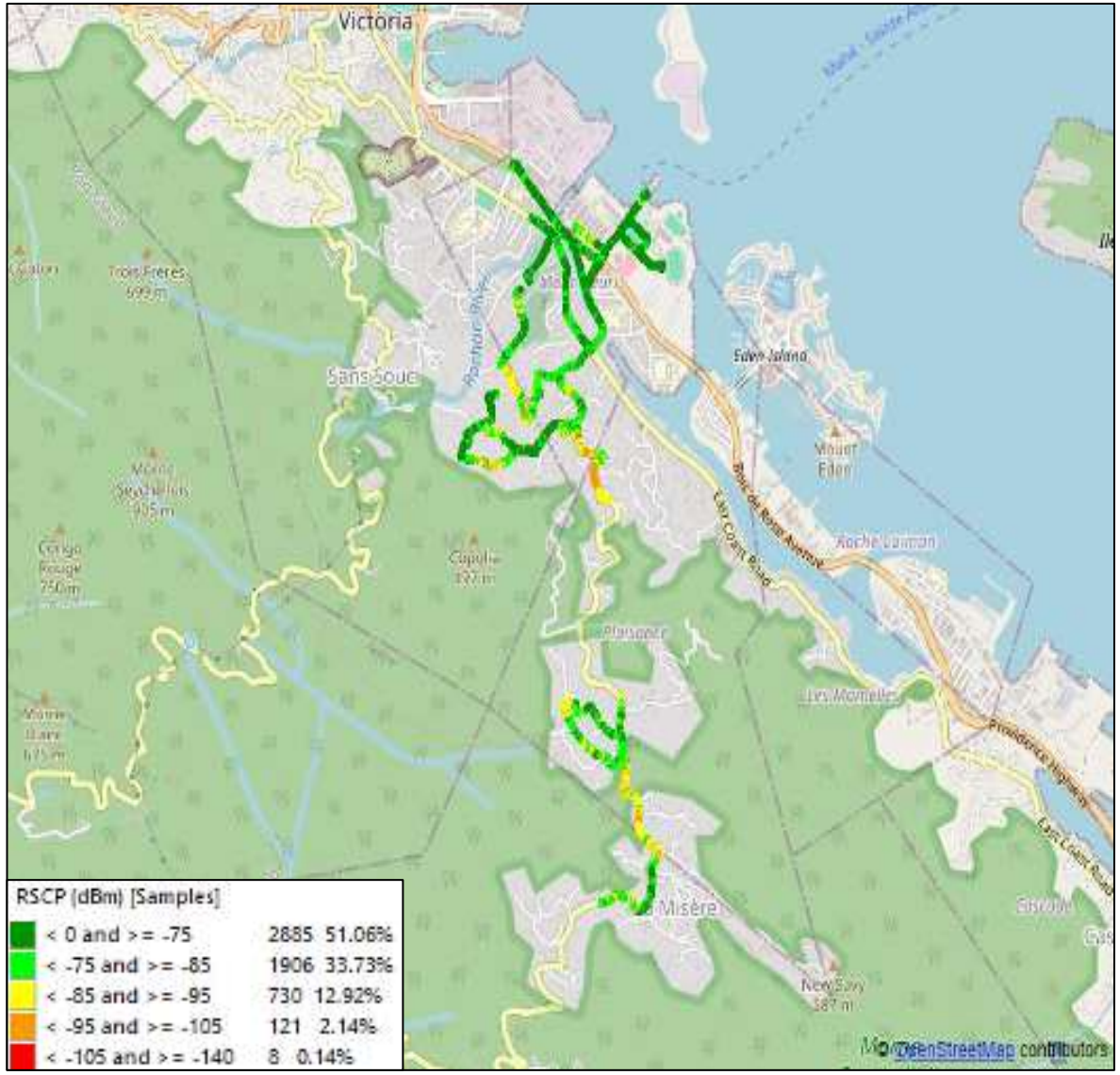


Phase-2 3G PREFERRED DATA TEST - RSCP PLOT

Airtel Data 3G

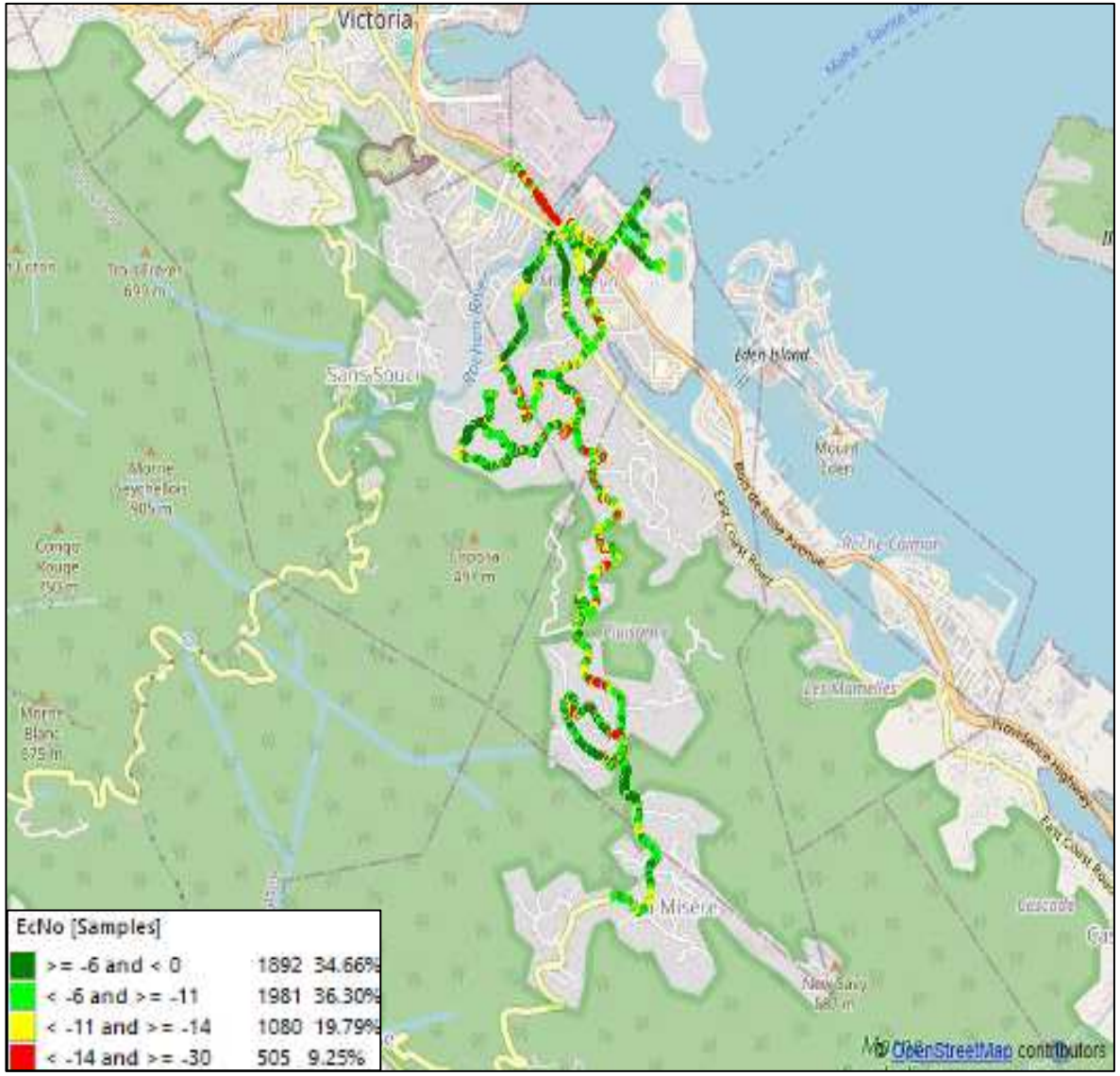


CWS Data 3G

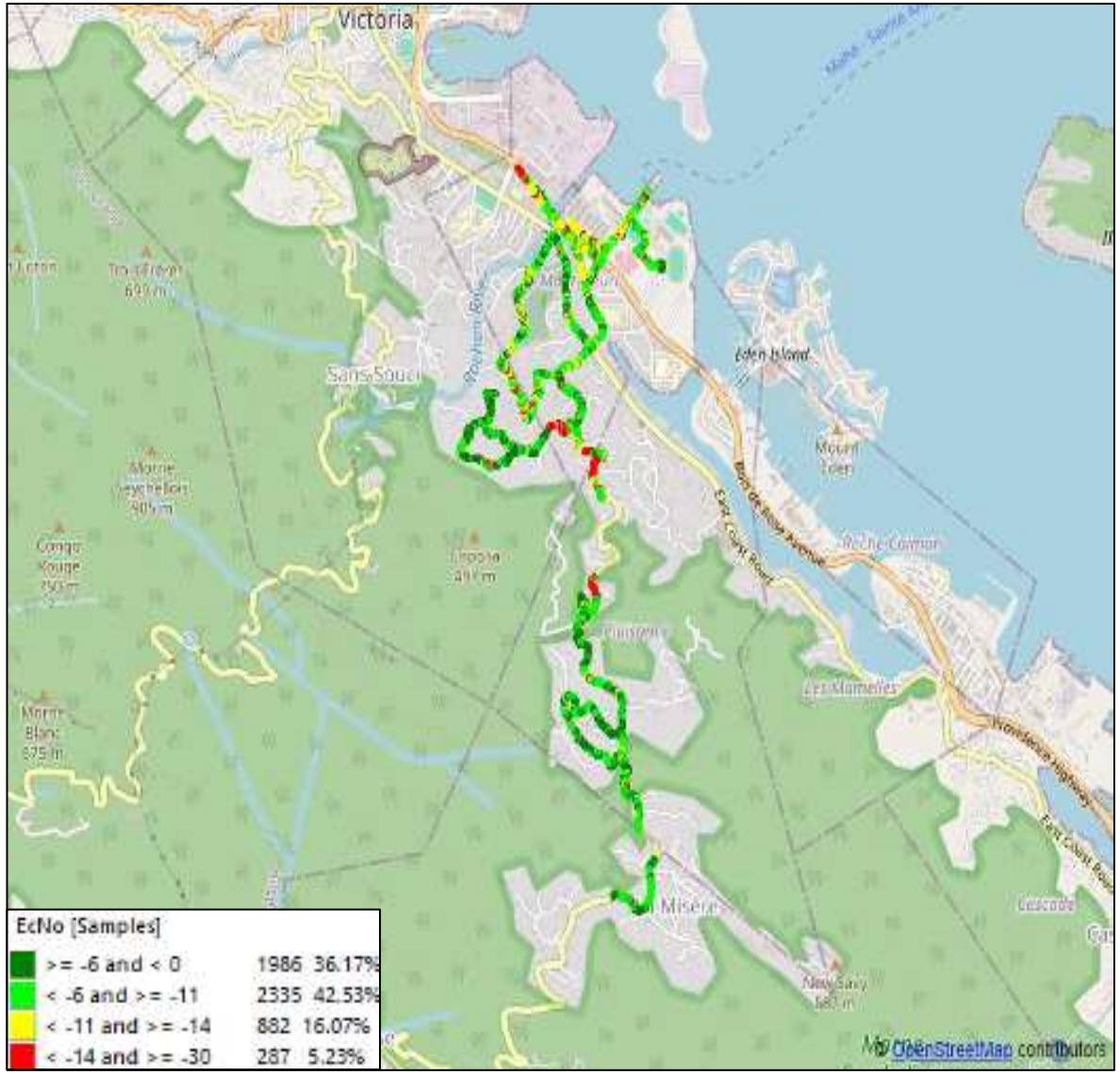


Phase-1 3G PREFERRED DATA TEST - EC/NO PLOT

Airtel Data 3G

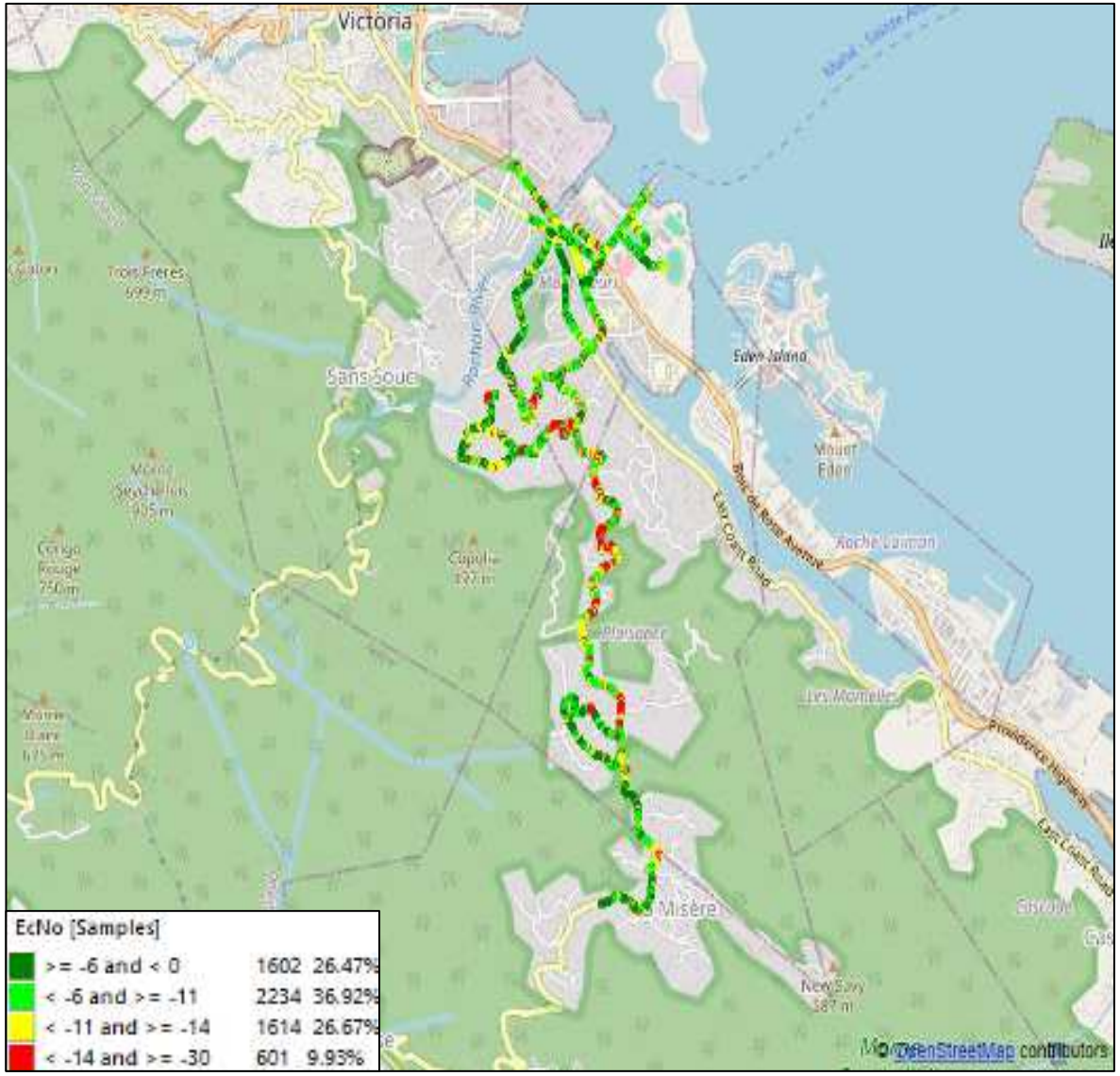


CWS Data 3G

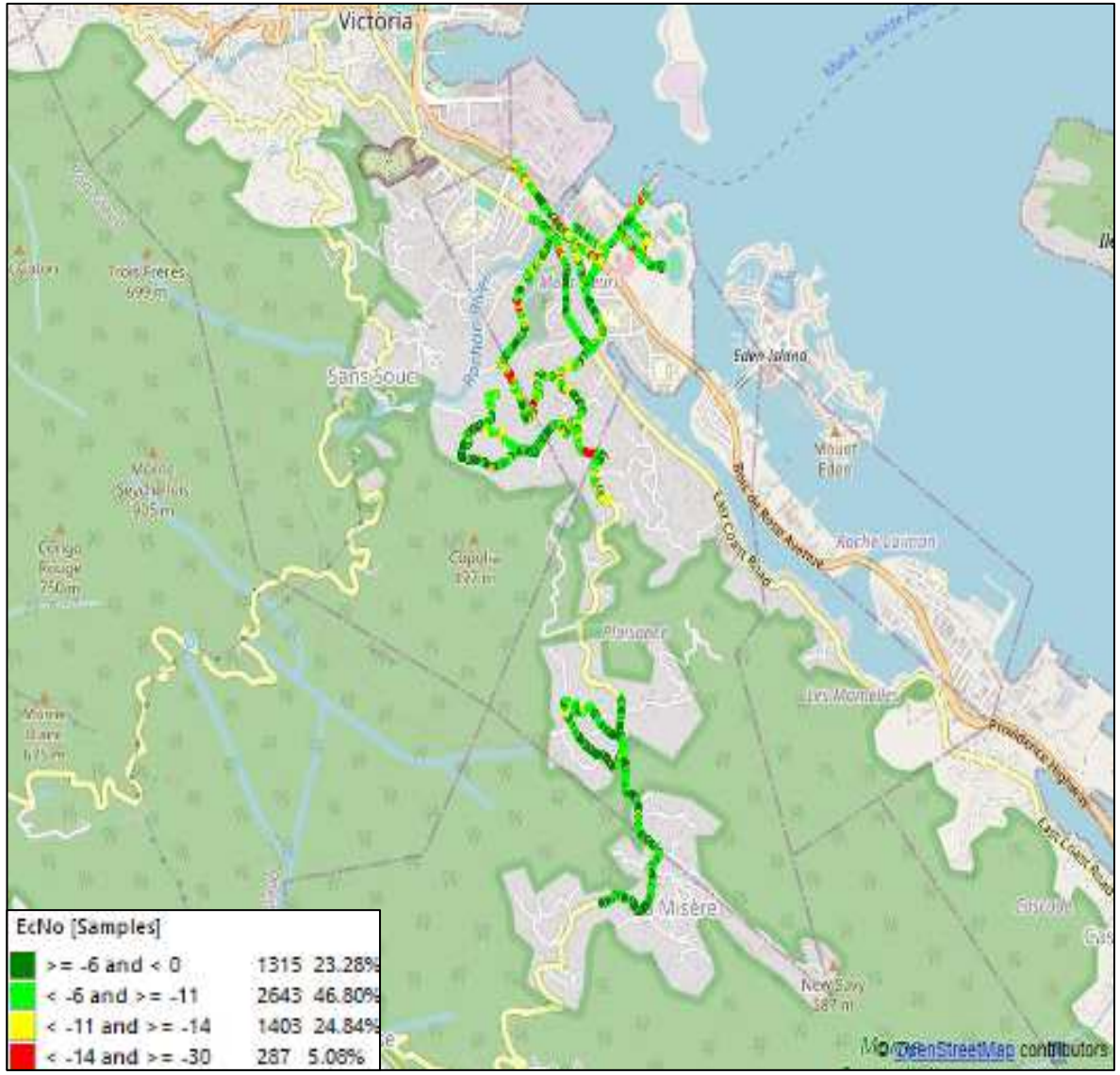


Phase-2 3G PREFERRED DATA TEST - EC/NO PLOT

Airtel Data 3G

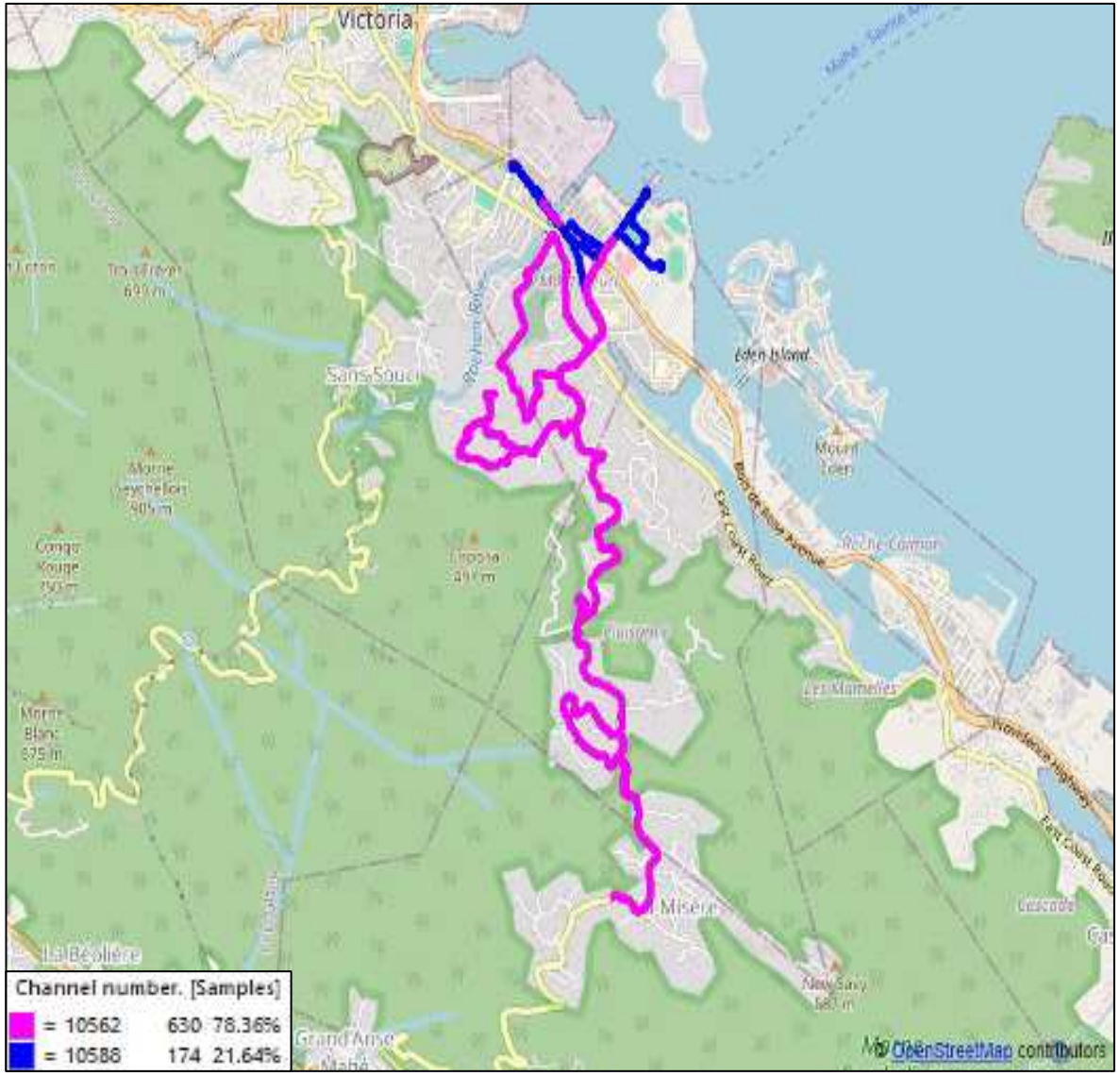


CWS Data 3G

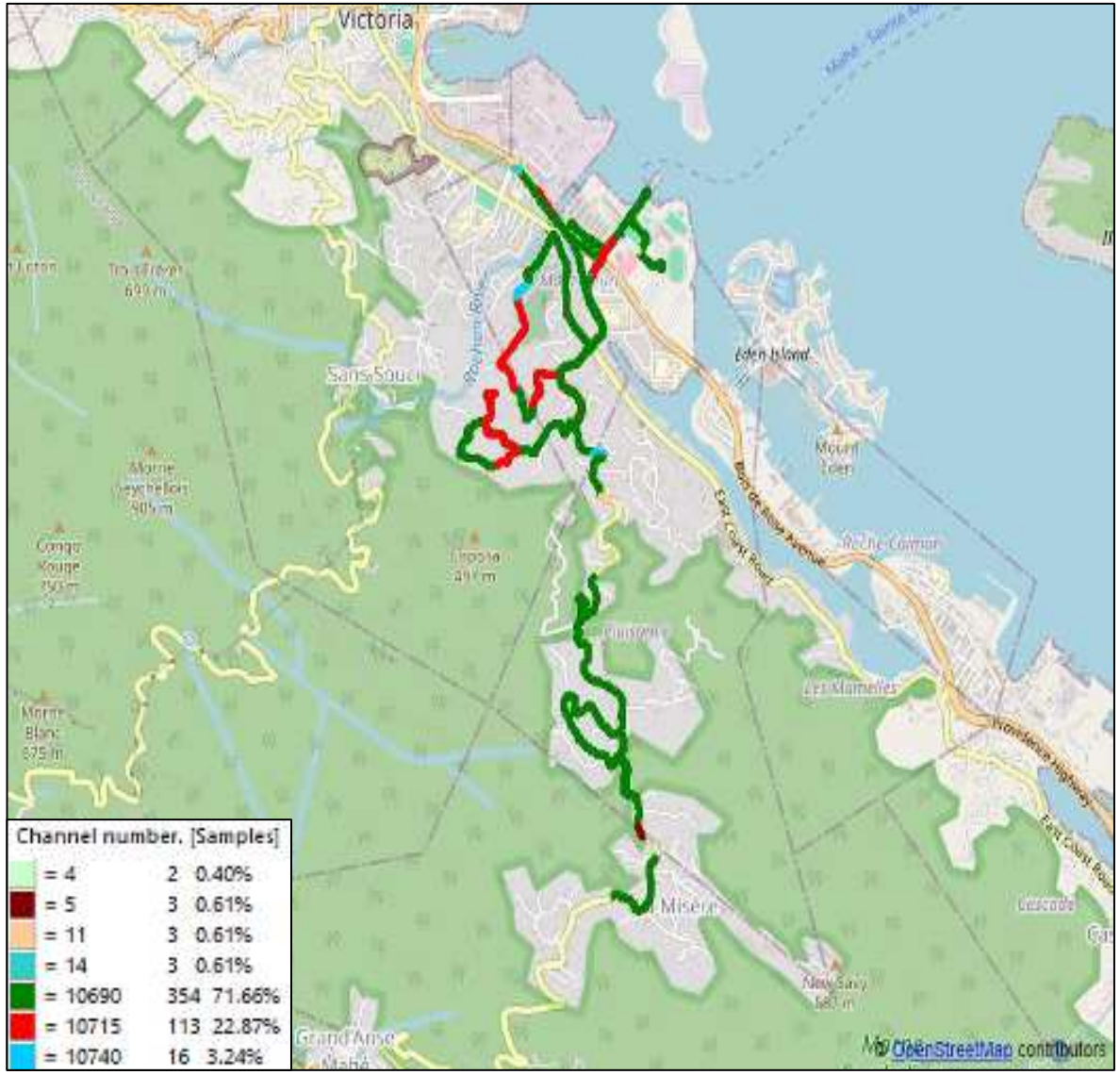


Phase-1 3G PREFERRED DATA TEST - UARFCN PLOT

Airtel Data 3G

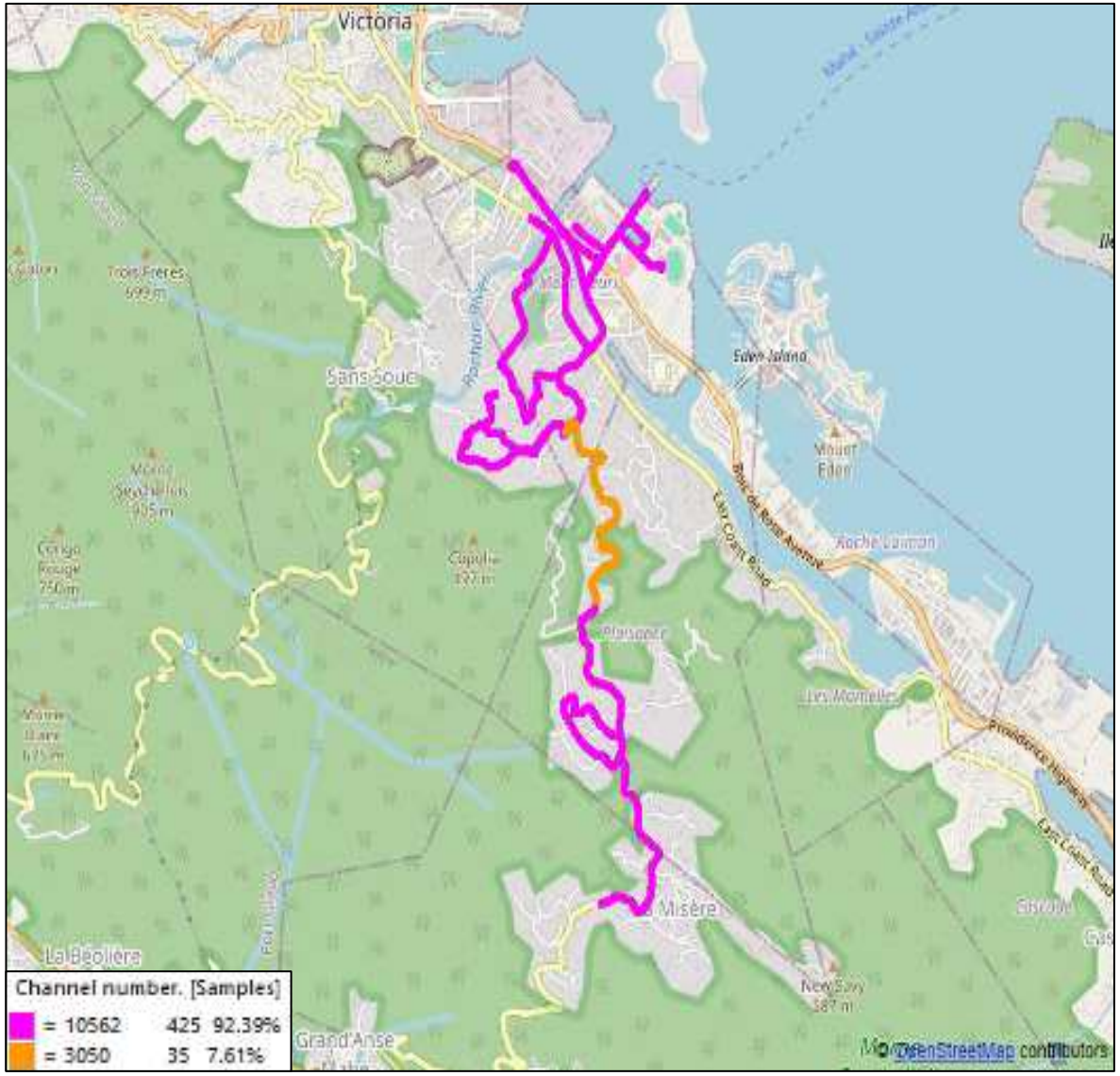


CWS Data 3G

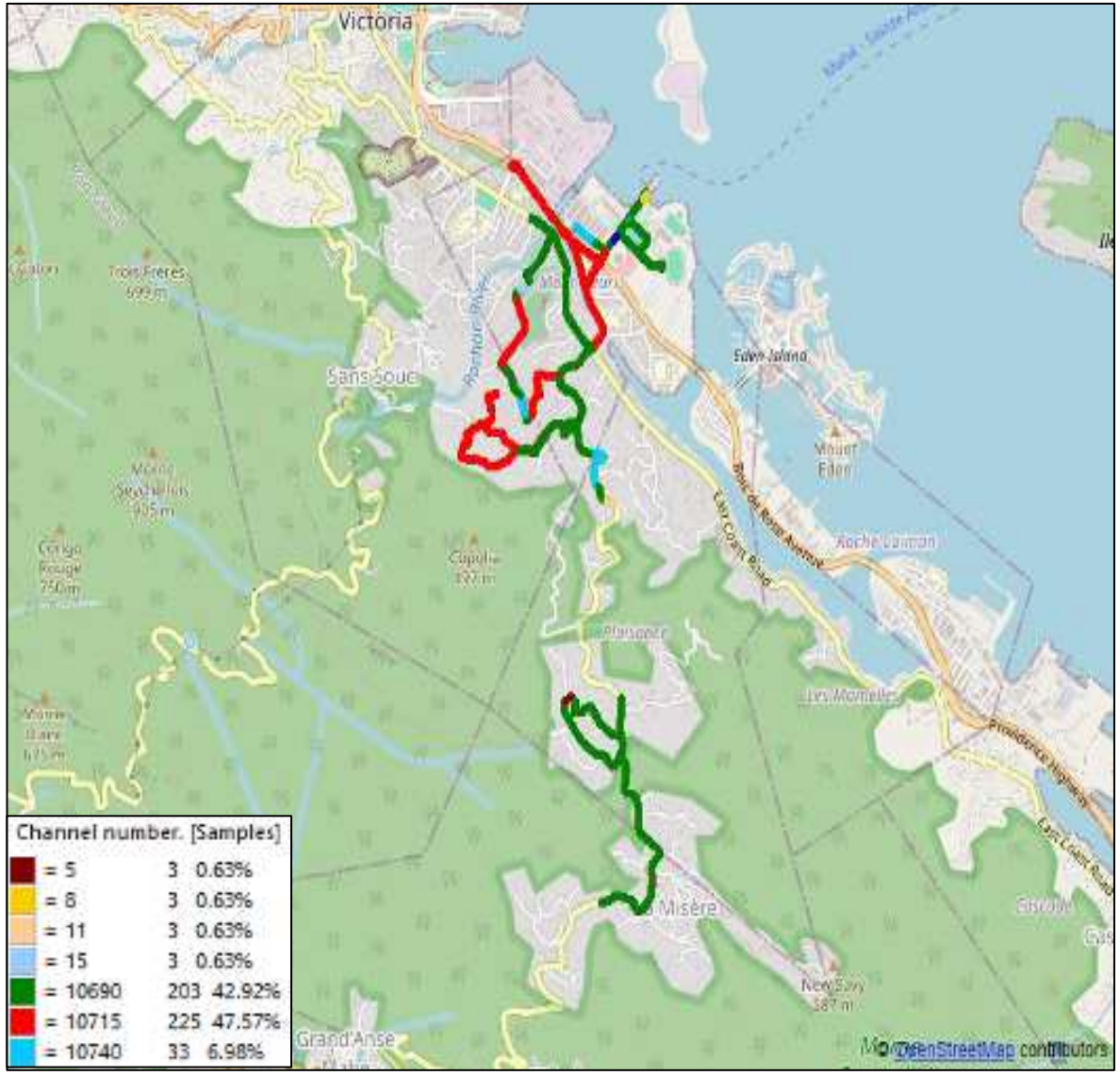


Phase-2 3G PREFERRED DATA TEST - UARFCN PLOT

Airtel Data 3G



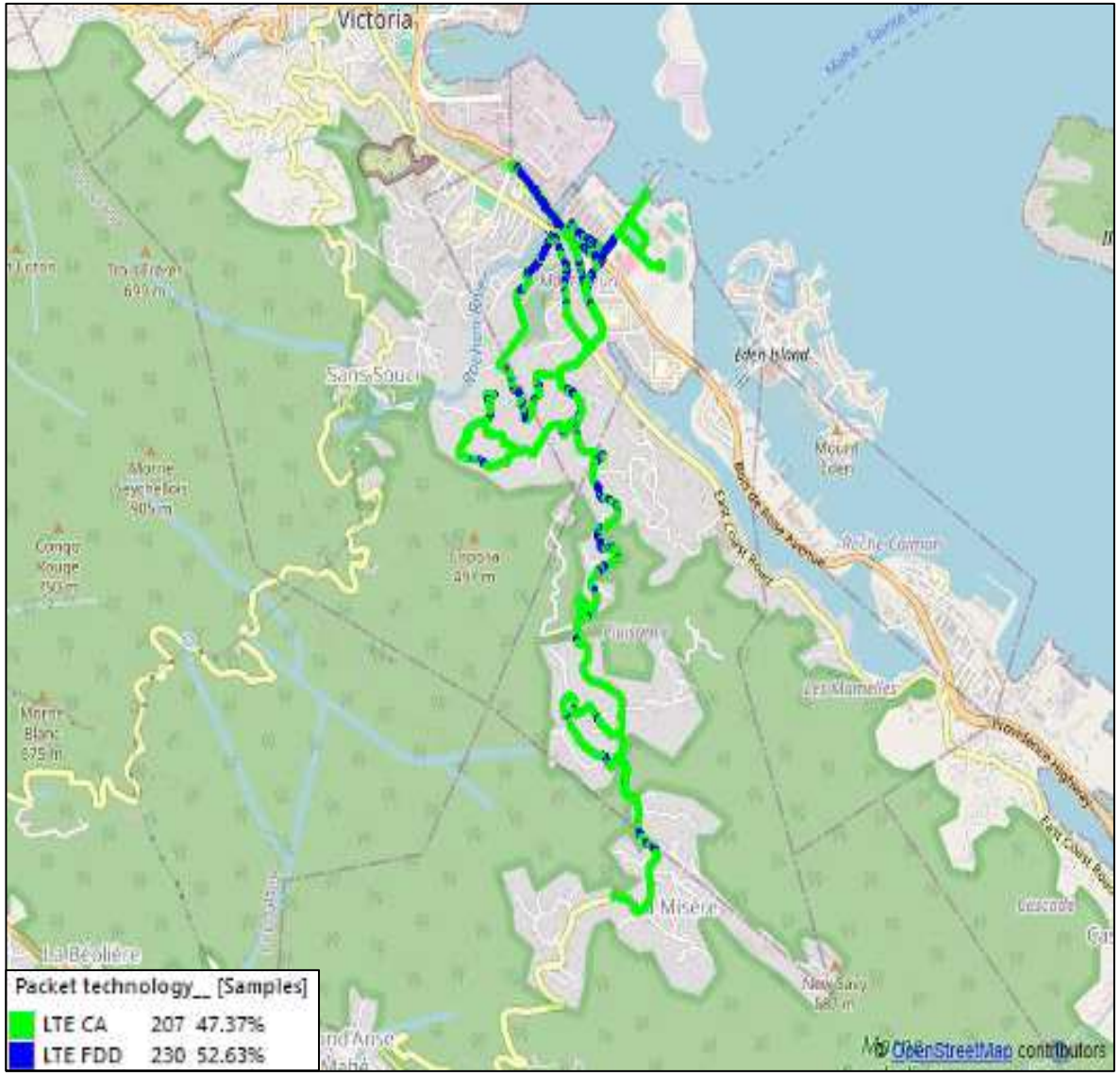
CWS Data 3G



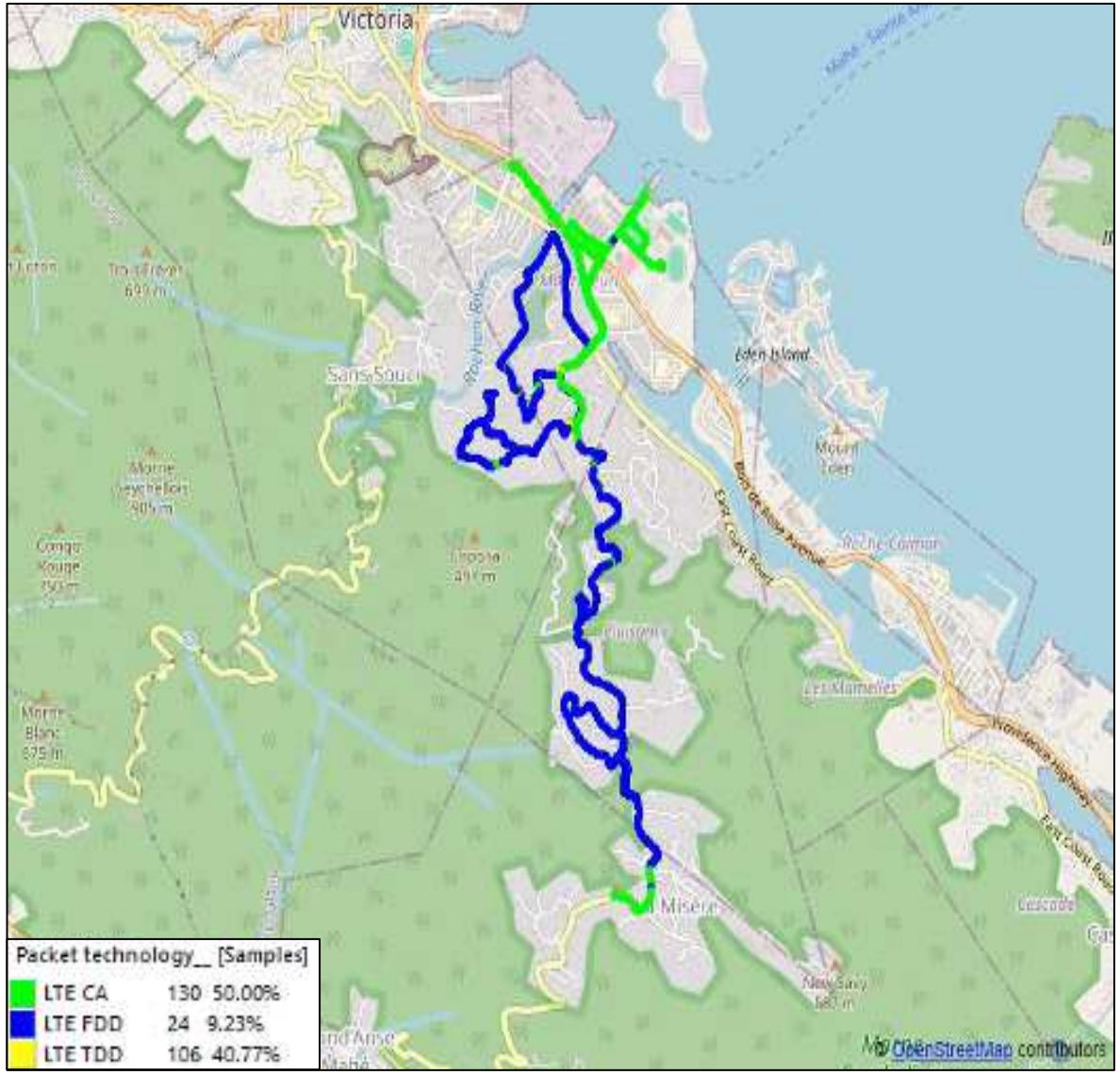
4G PREFERRED
DATA DRIVE PLOTS

Phase-1 4G PREFERRED DATA TEST - TECHNOLOGY PLOT

Airtel Data 4G

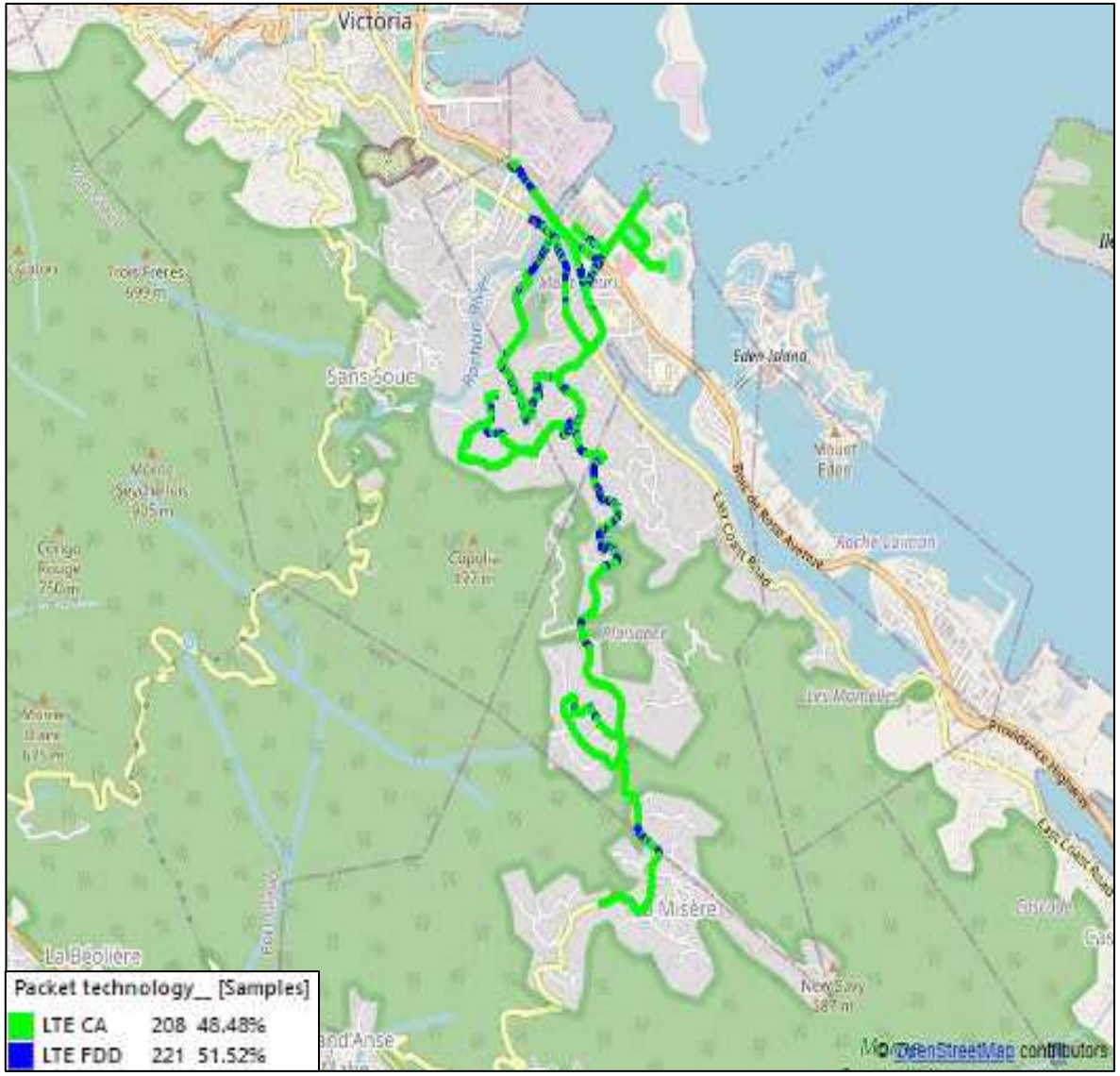


CWS Data 4G

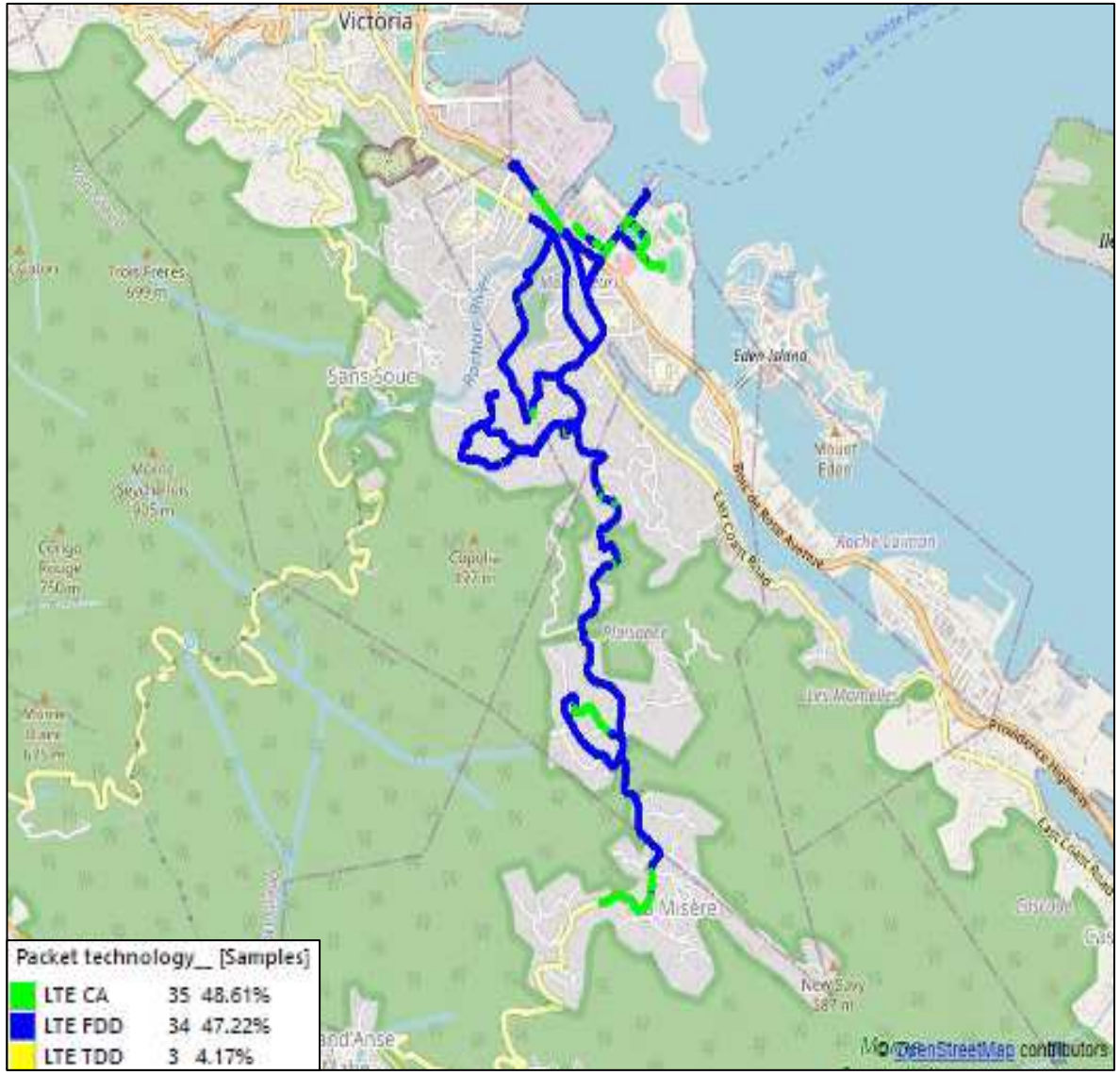


Phase-2 4G PREFERRED DATA TEST - TECHNOLOGY PLOT

Airtel Data 4G

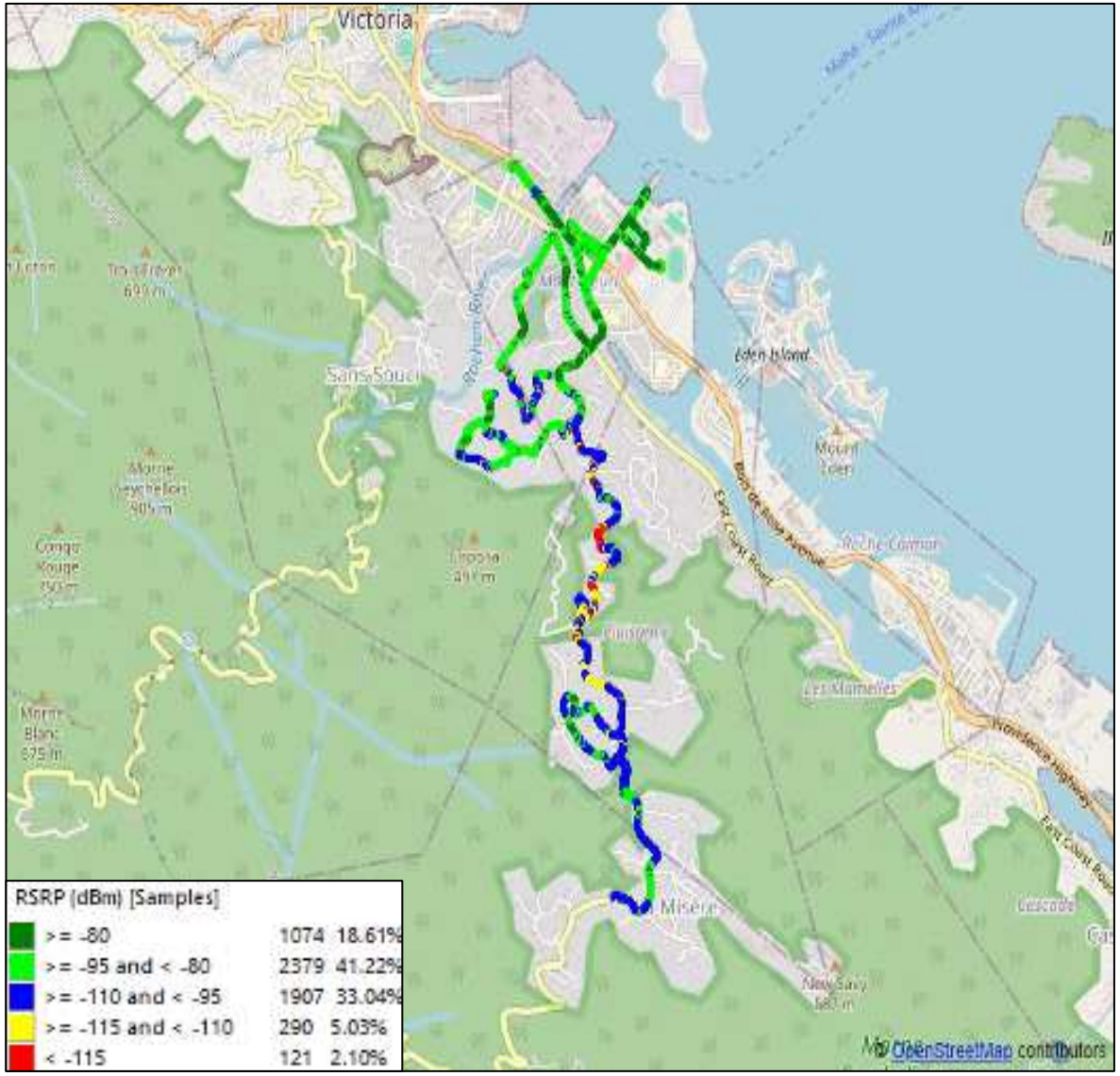


CWS Data 4G

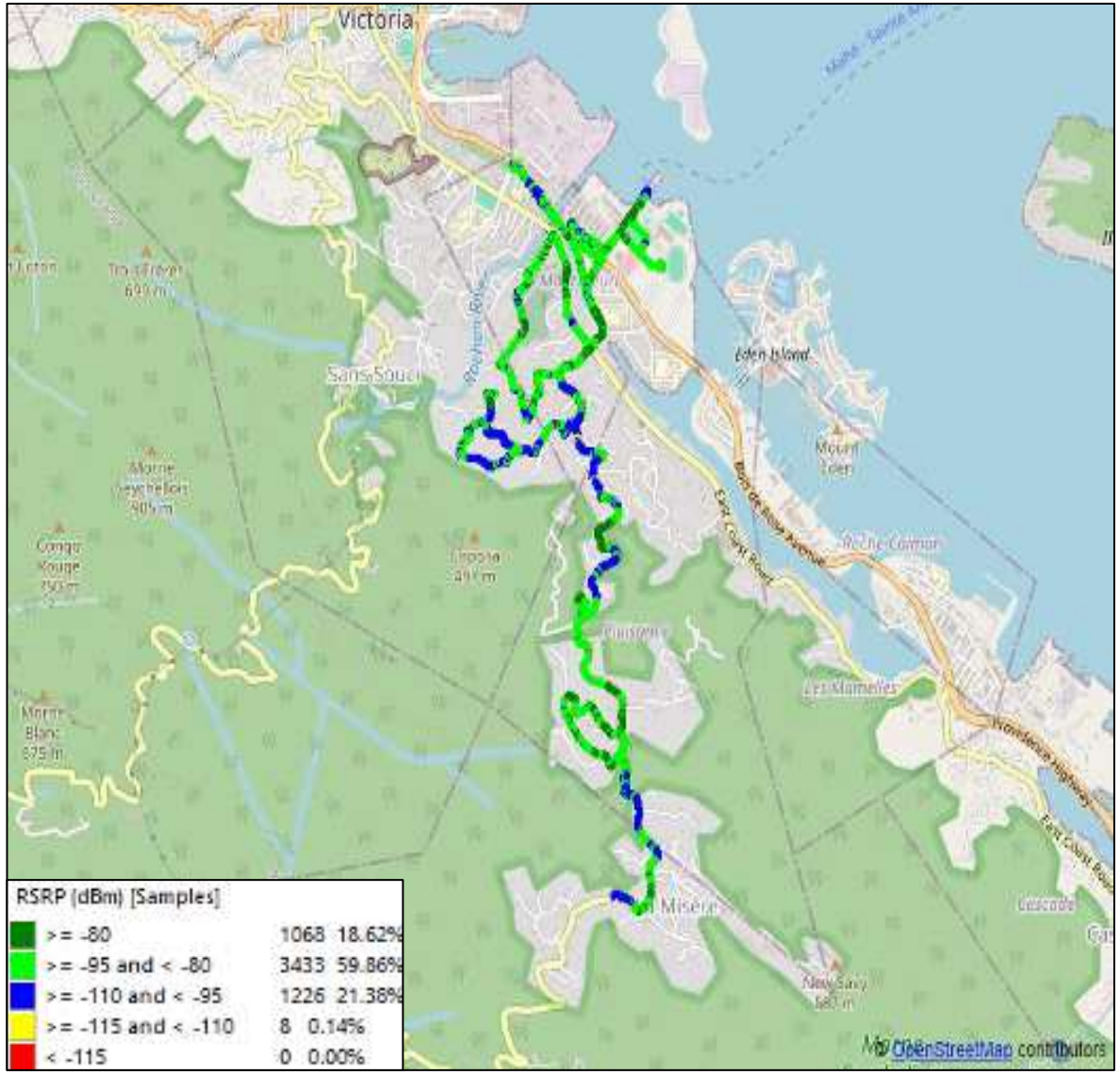


Phase-1 4G PREFERRED DATA TEST - RSRP PLOT

Airtel Data 4G

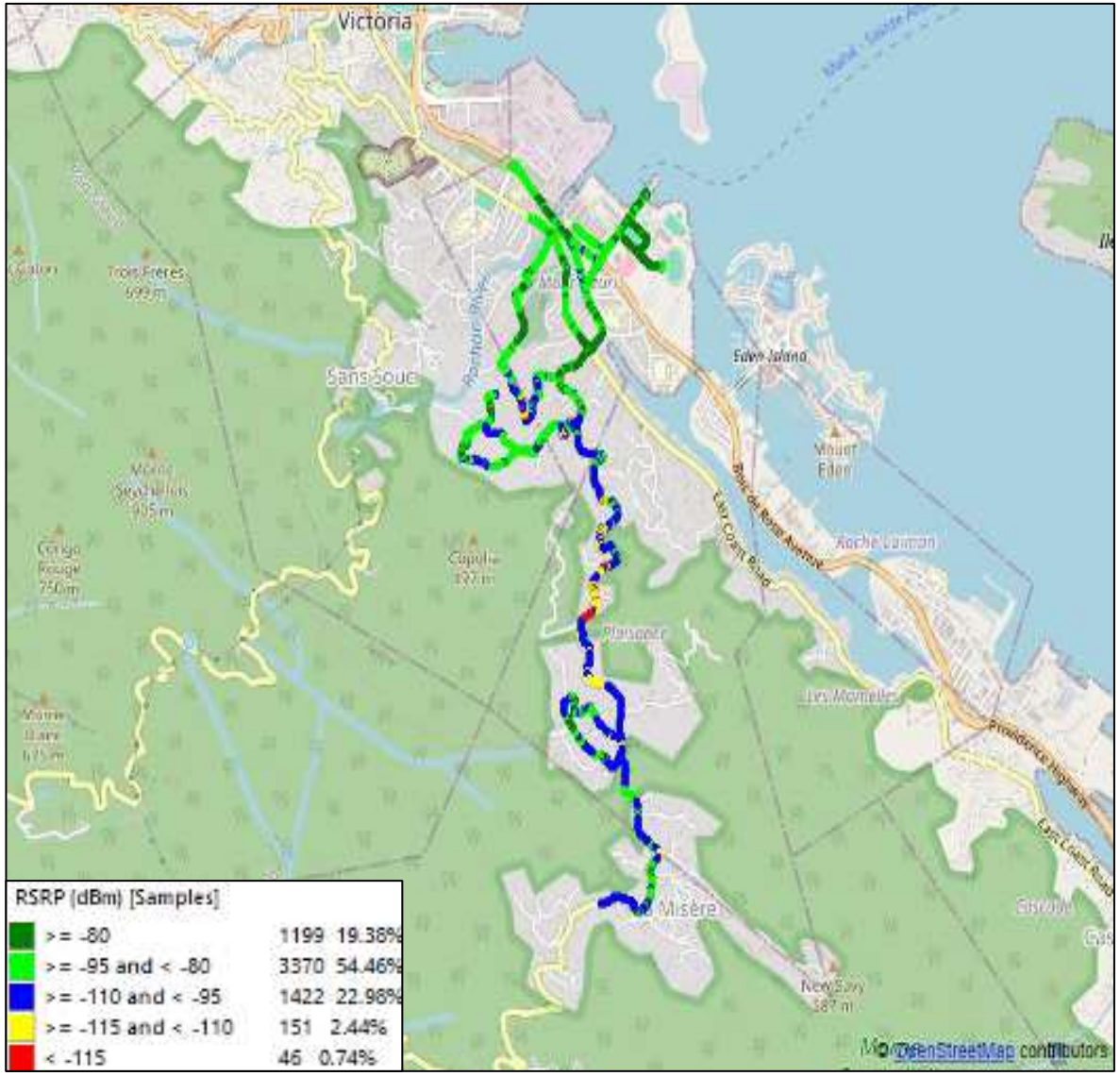


CWS Data 4G

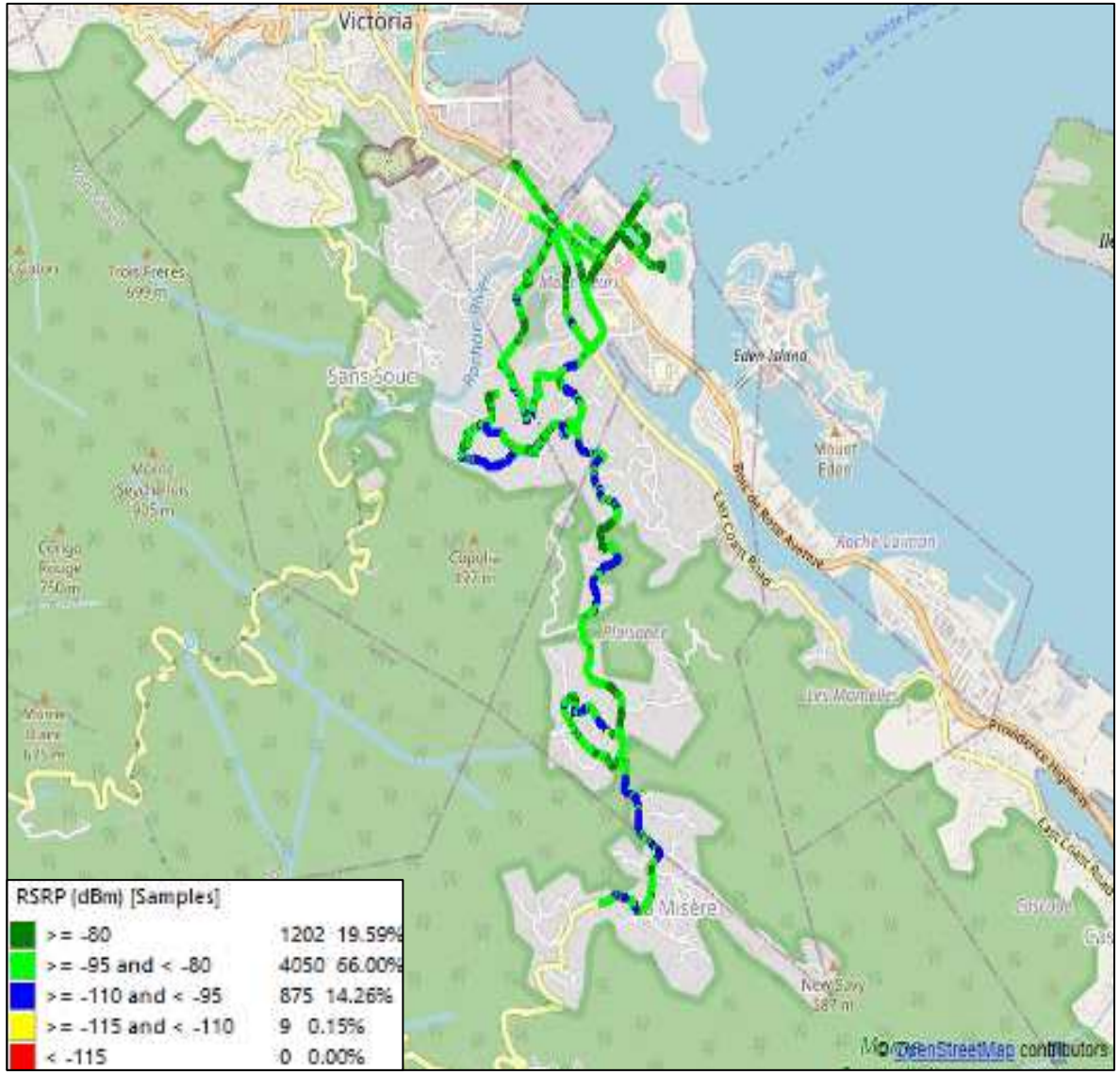


Phase-2 4G PREFERRED DATA TEST - RSRP PLOT

Airtel Data 4G

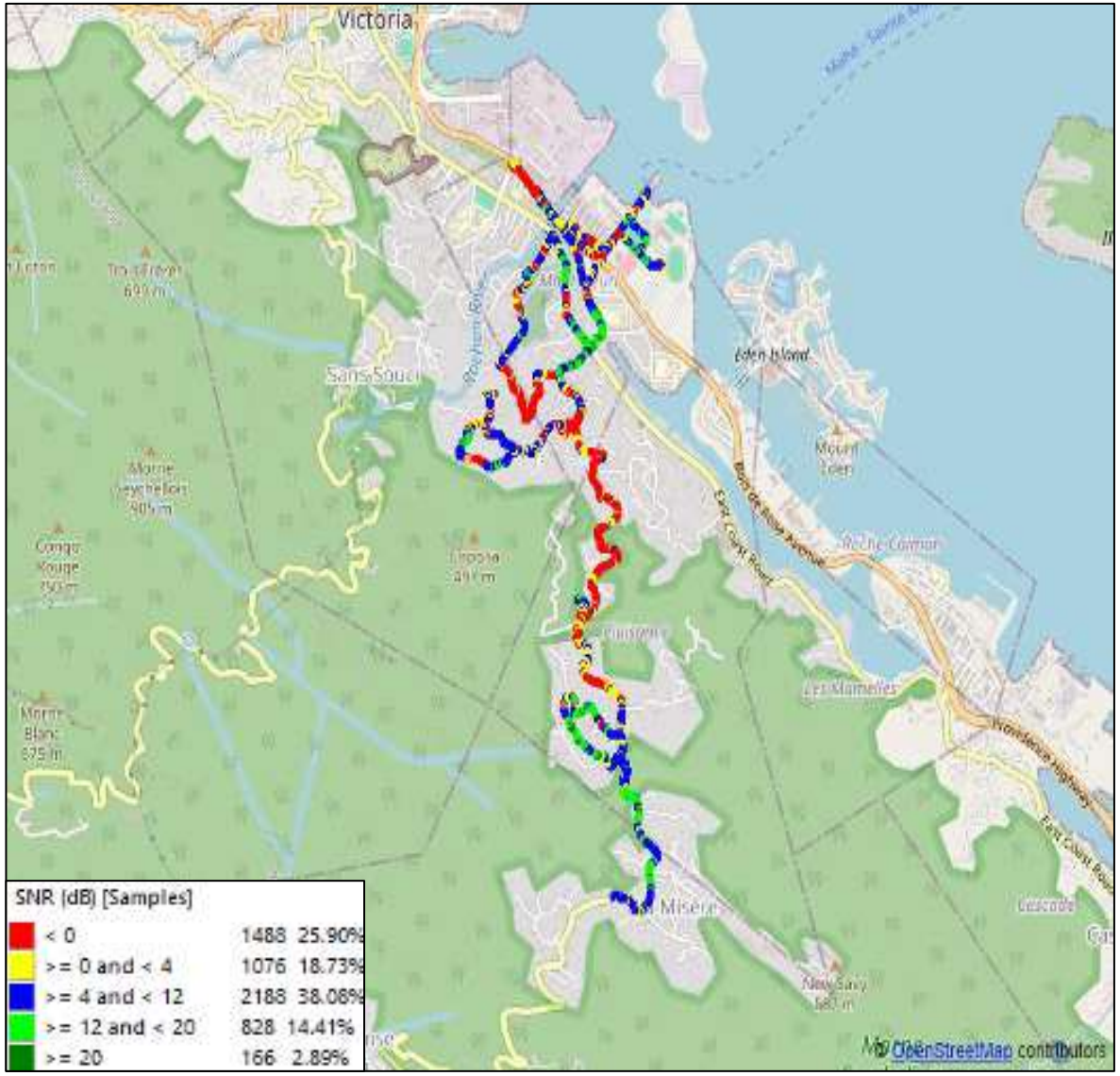


CWS Data 4G

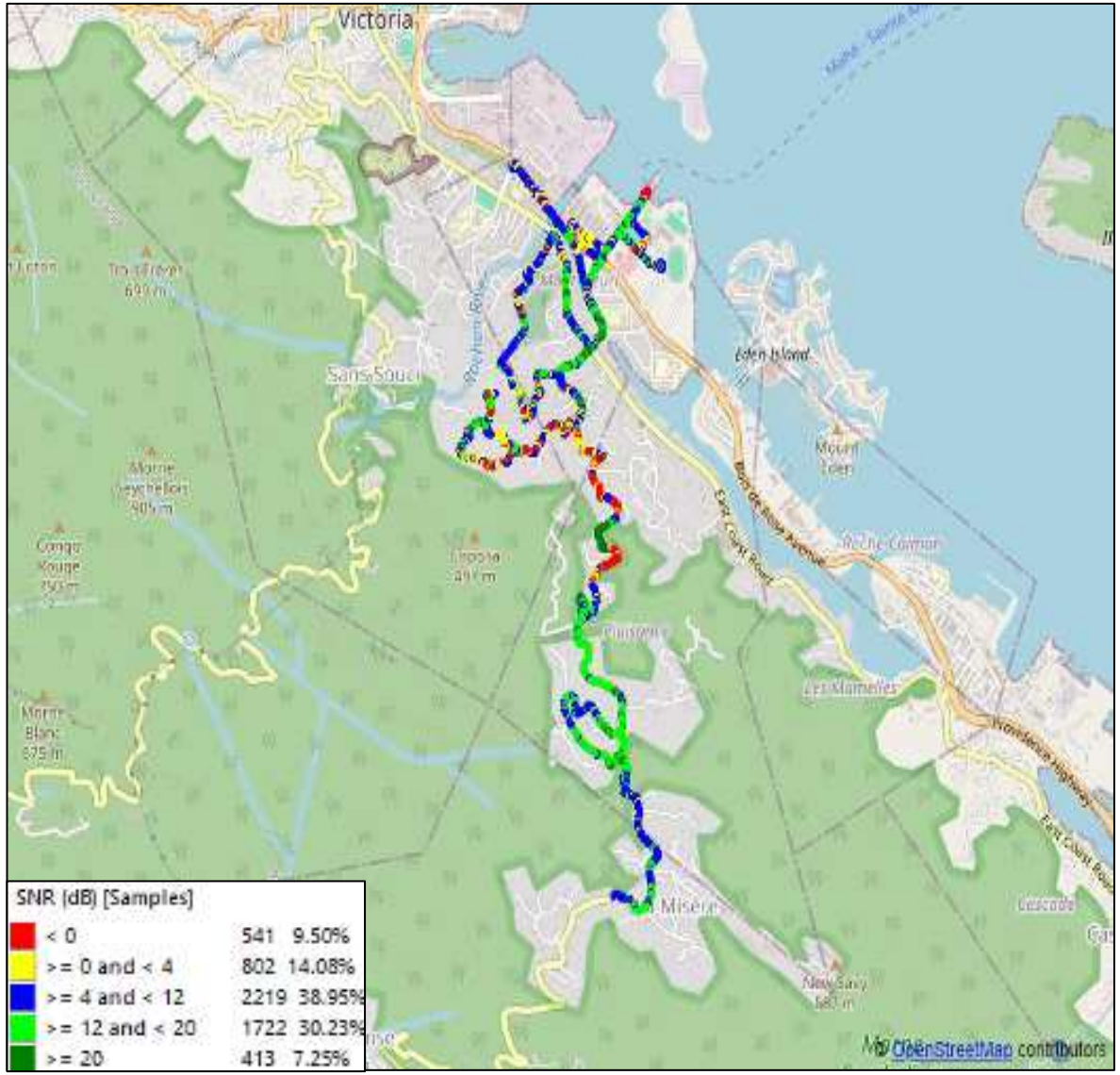


Phase-1 4G PREFERRED DATA TEST - SINR PLOT

Airtel Data 4G

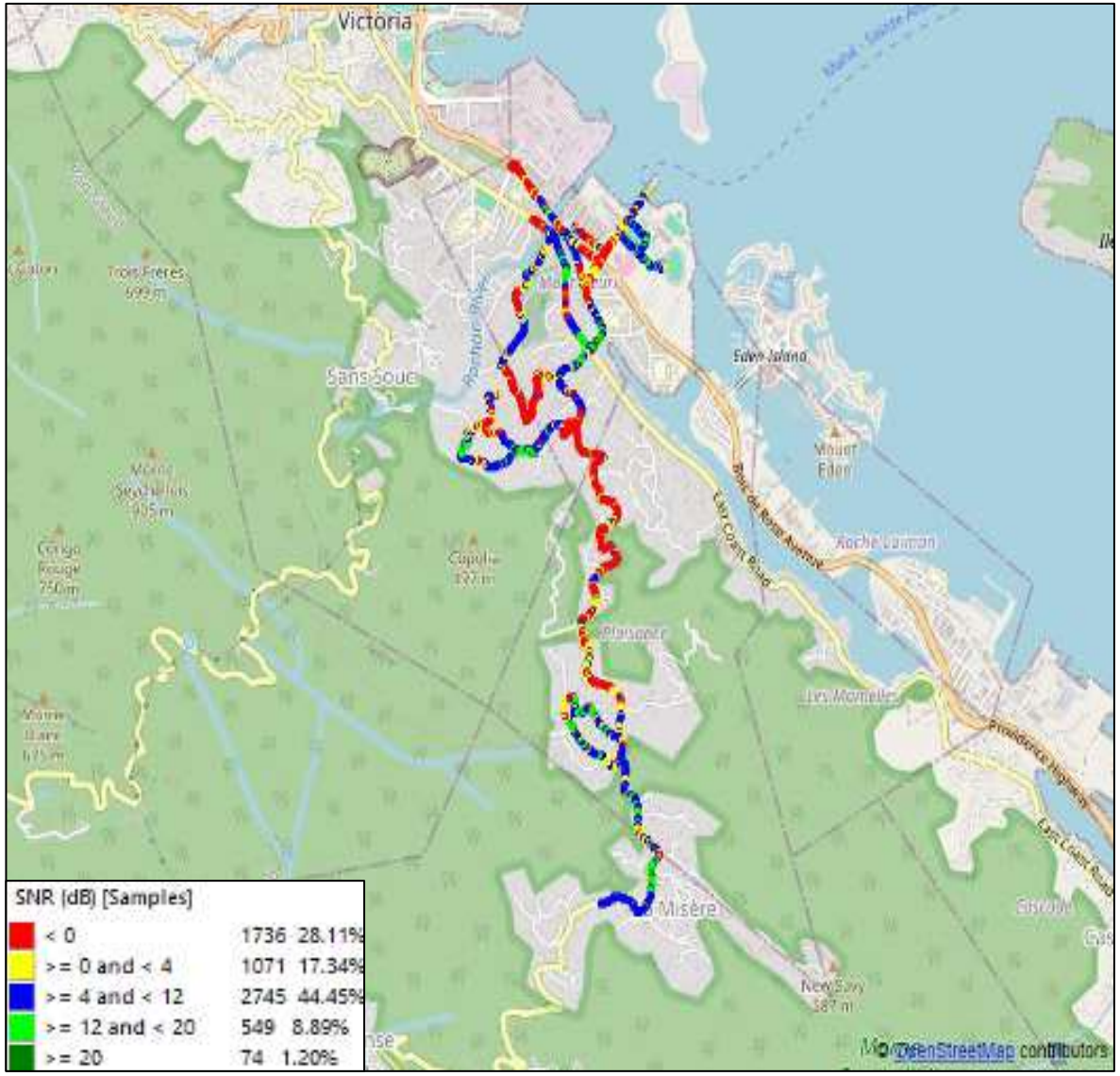


CWS Data 4G

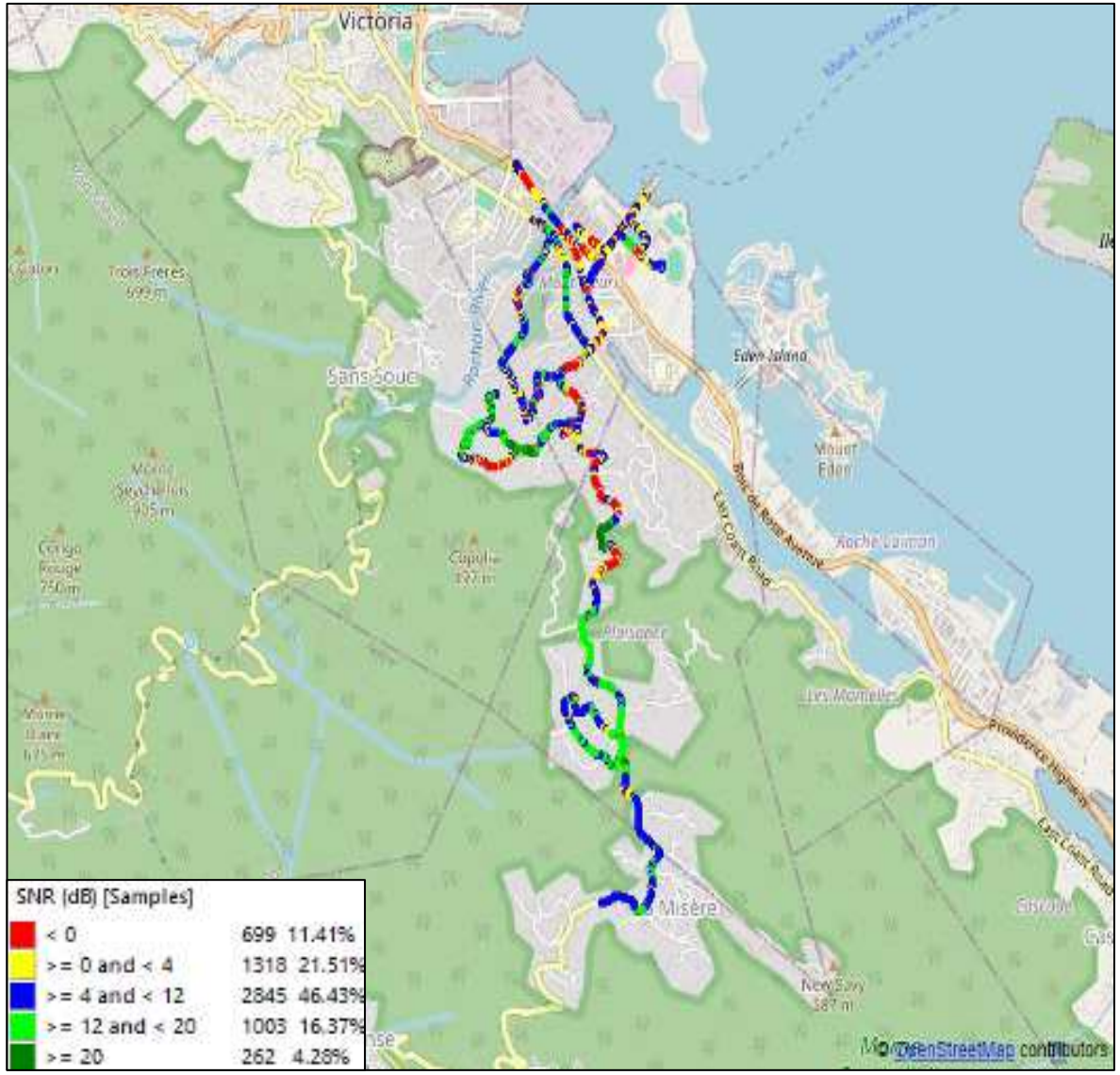


Phase-2 4G PREFERRED DATA TEST - SINR PLOT

Airtel Data 4G

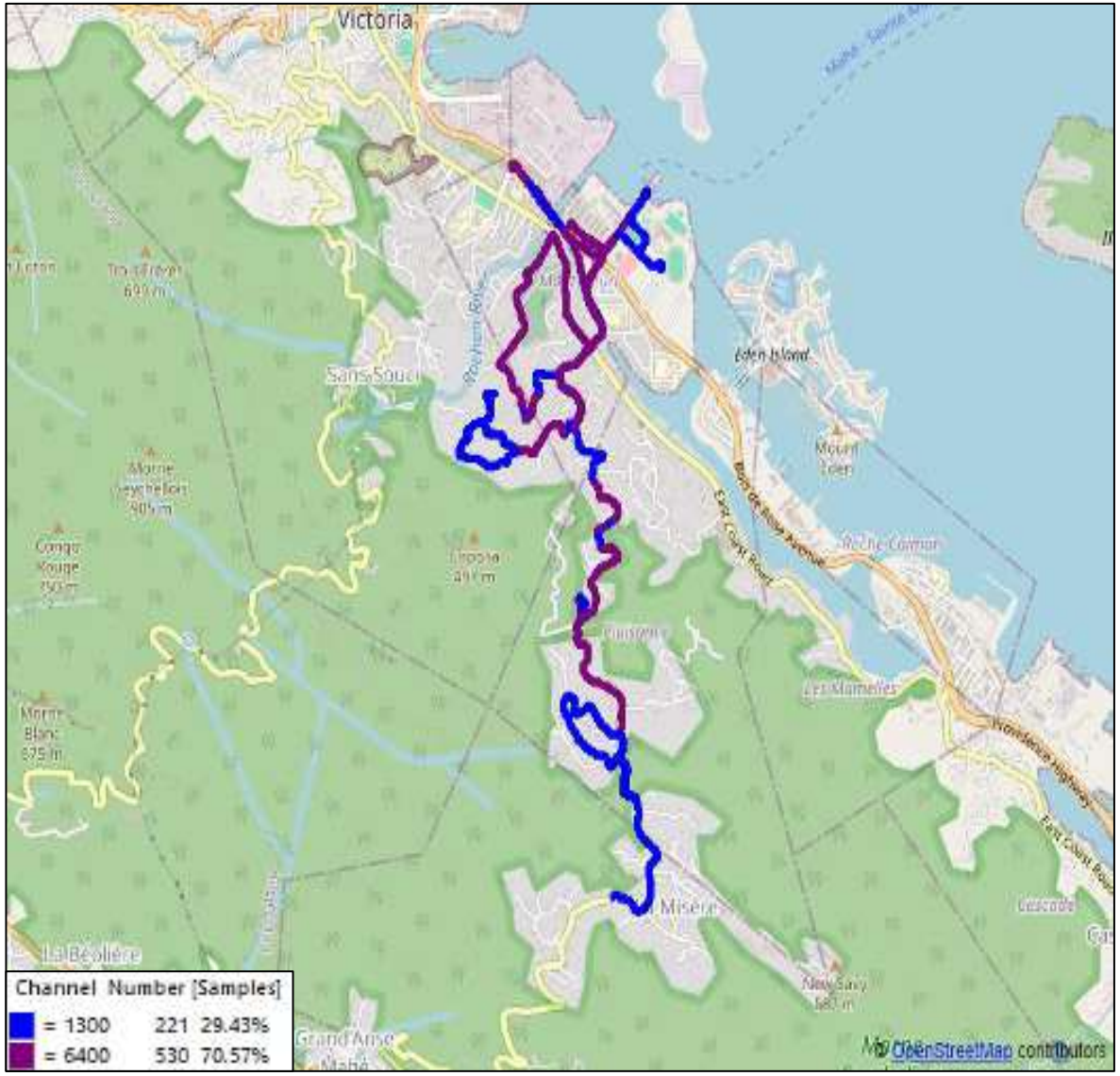


CWS Data 4G

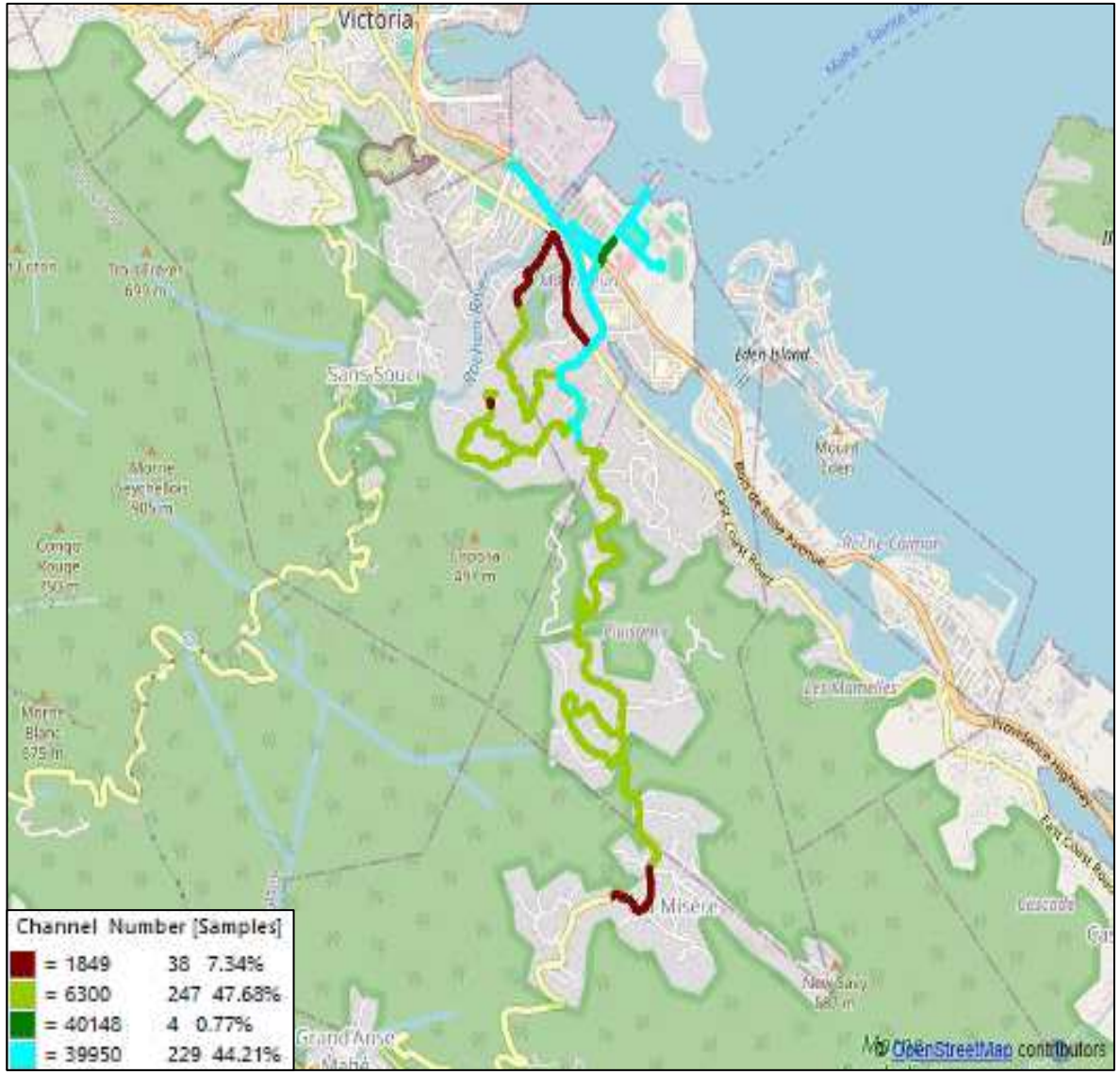


Phase-1 4G PREFERRED DATA TEST - FREQUENCY BAND PLOT

Airtel Data 4G

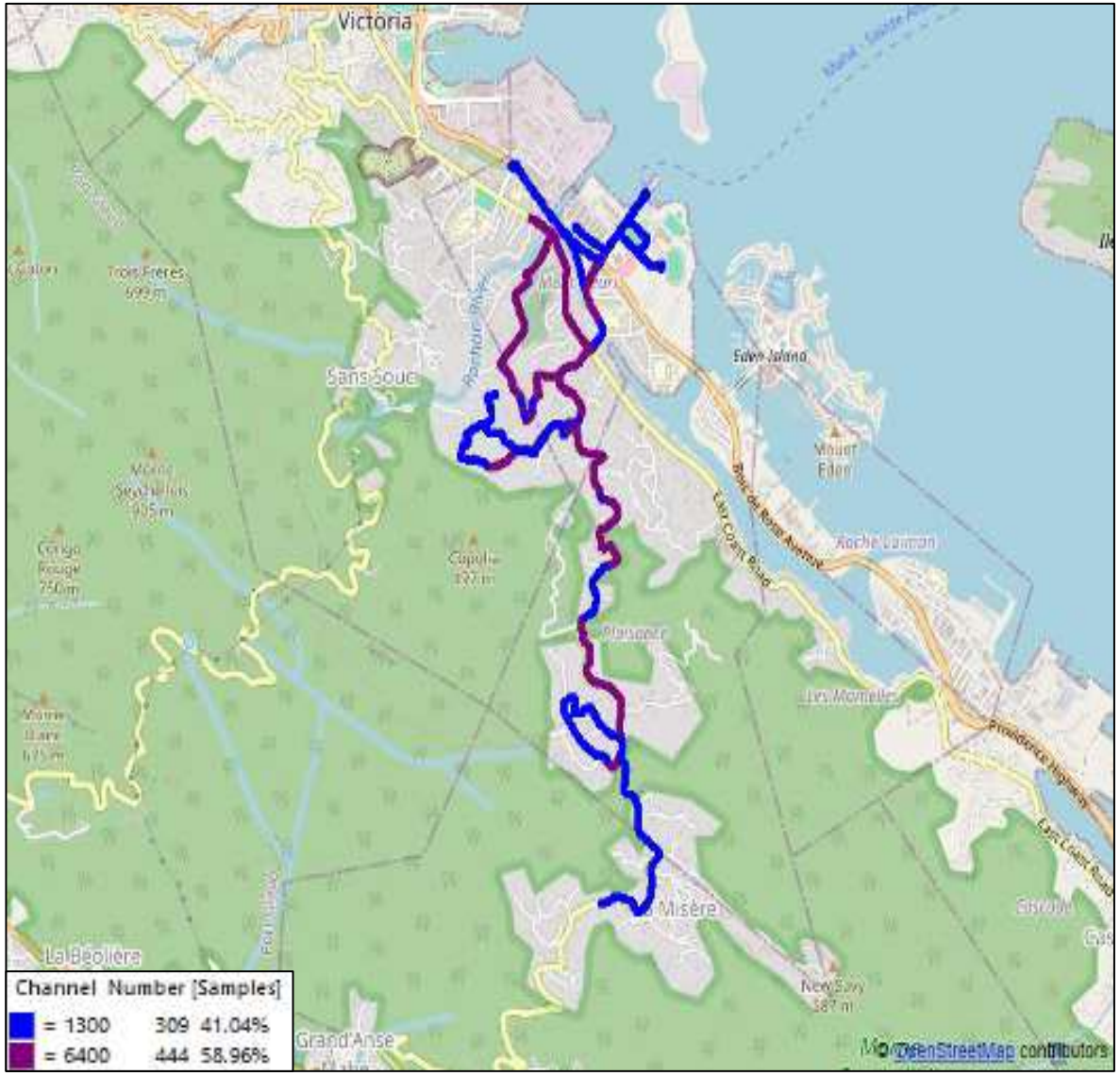


CWS Data 4G

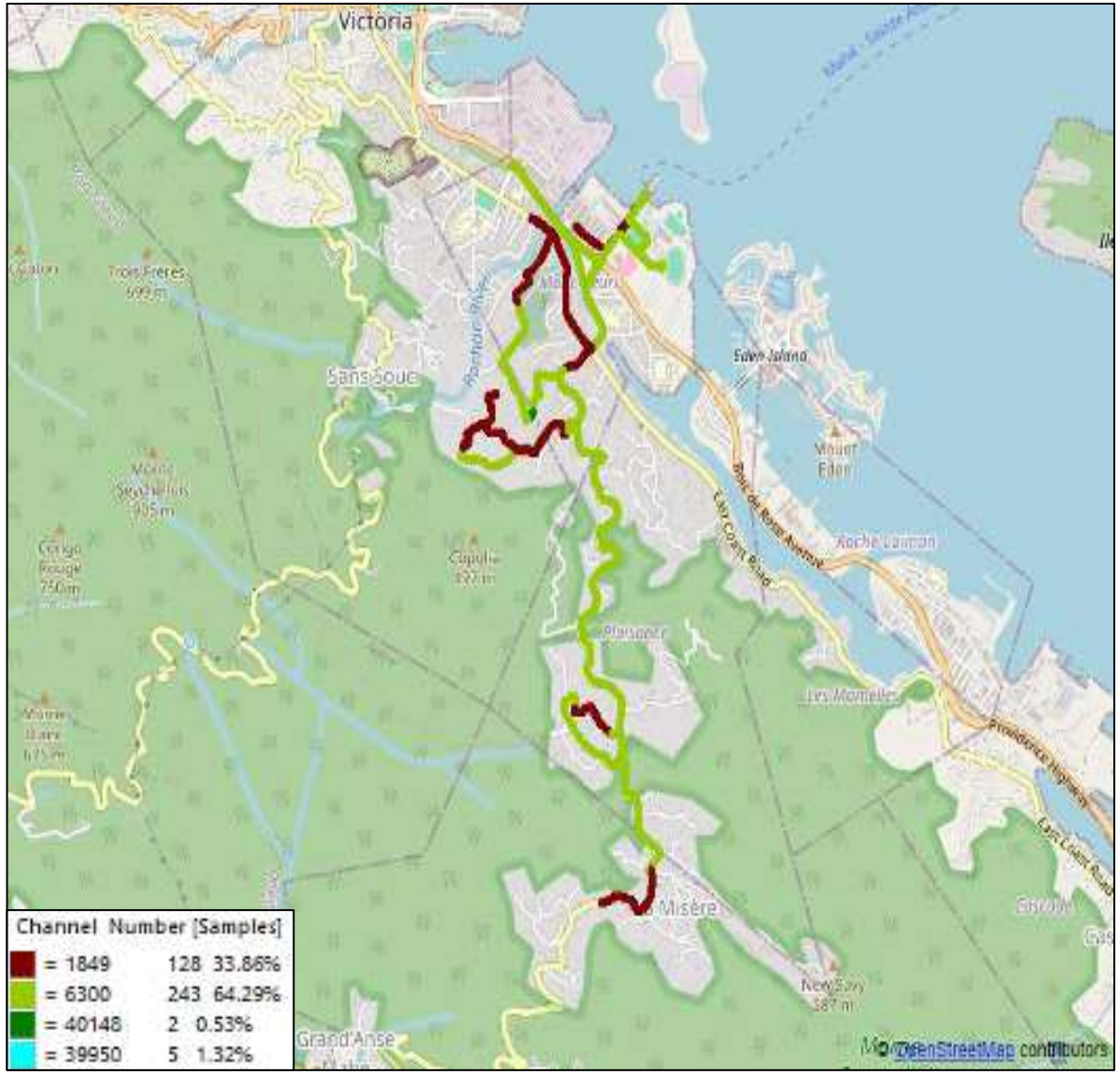


Phase-2 4G PREFERRED DATA TEST - FREQUENCY BAND PLOT

Airtel Data 4G

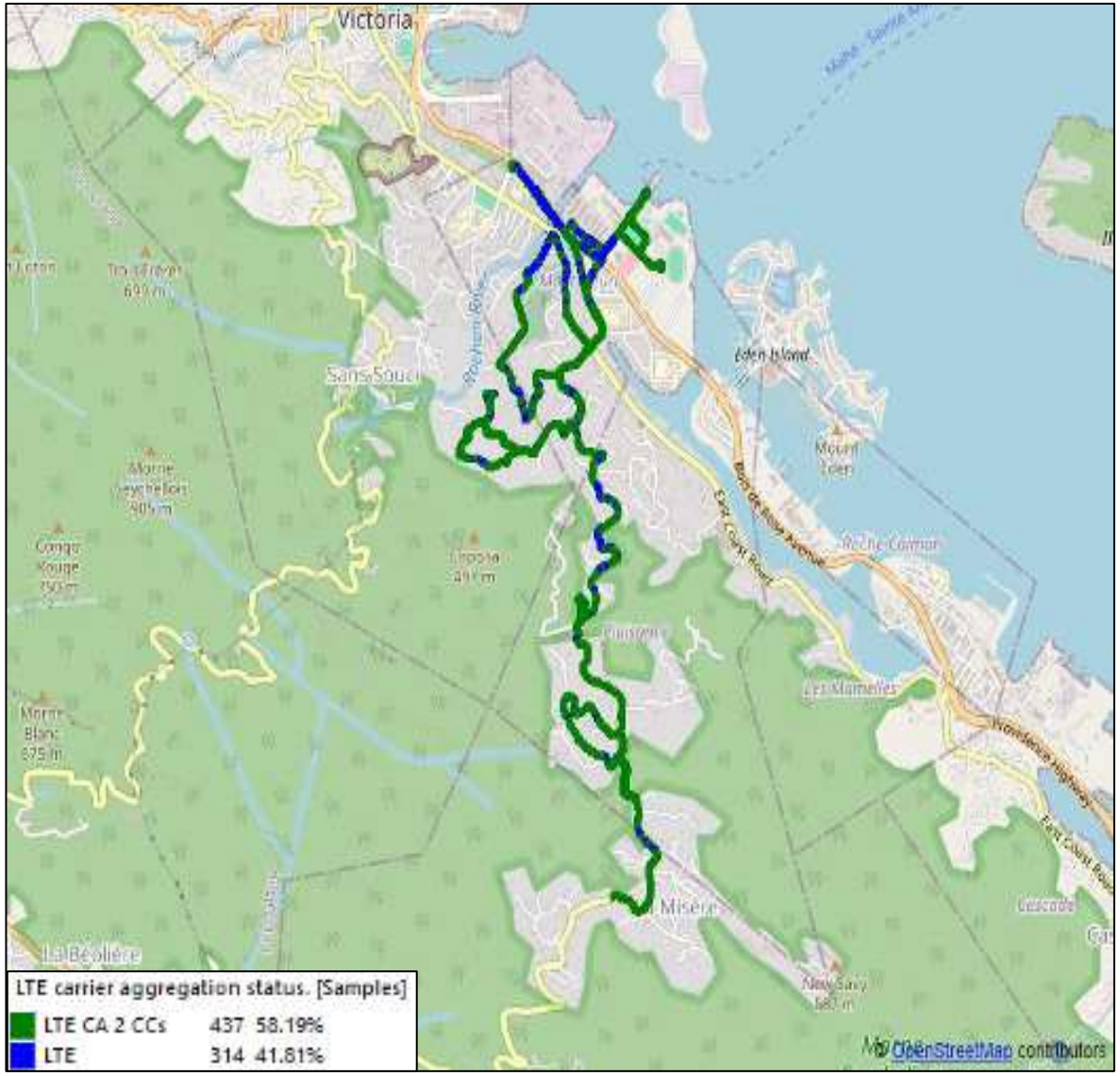


CWS Data 4G

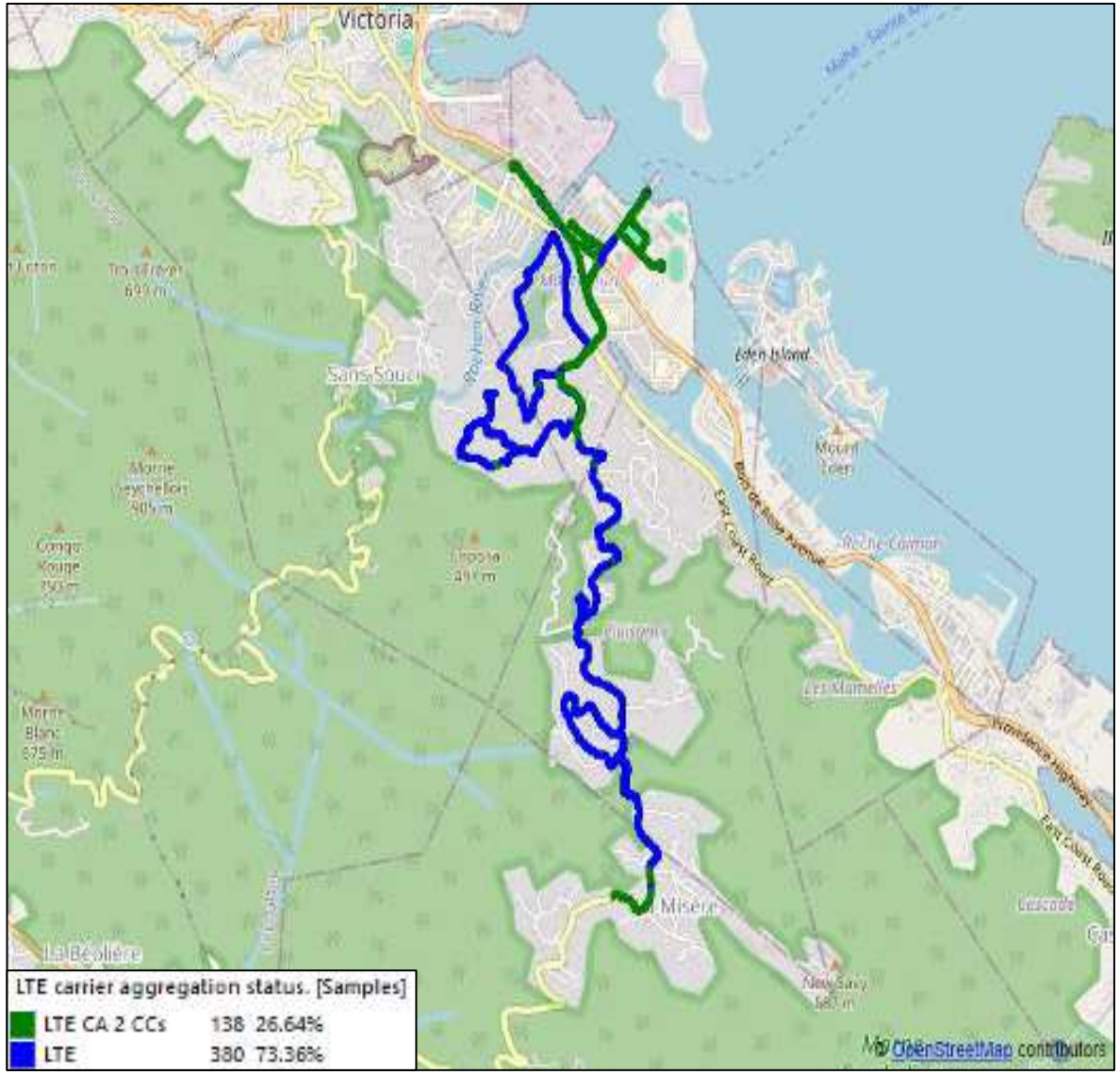


Phase-1 4G PREFERRED DATA TEST - CARRIER AGGREGATION PLOT

Airtel Data 4G

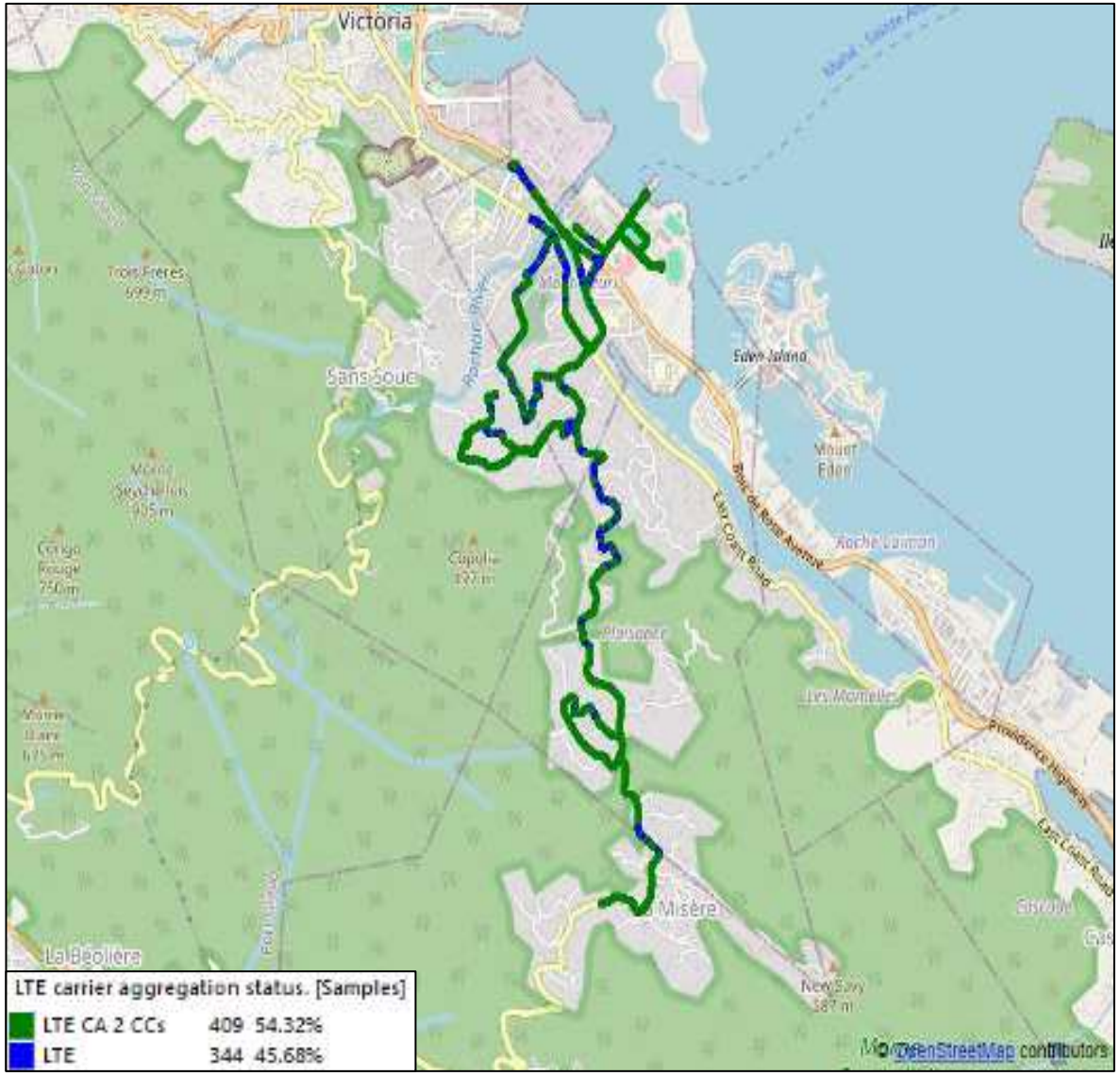


CWS Data 4G

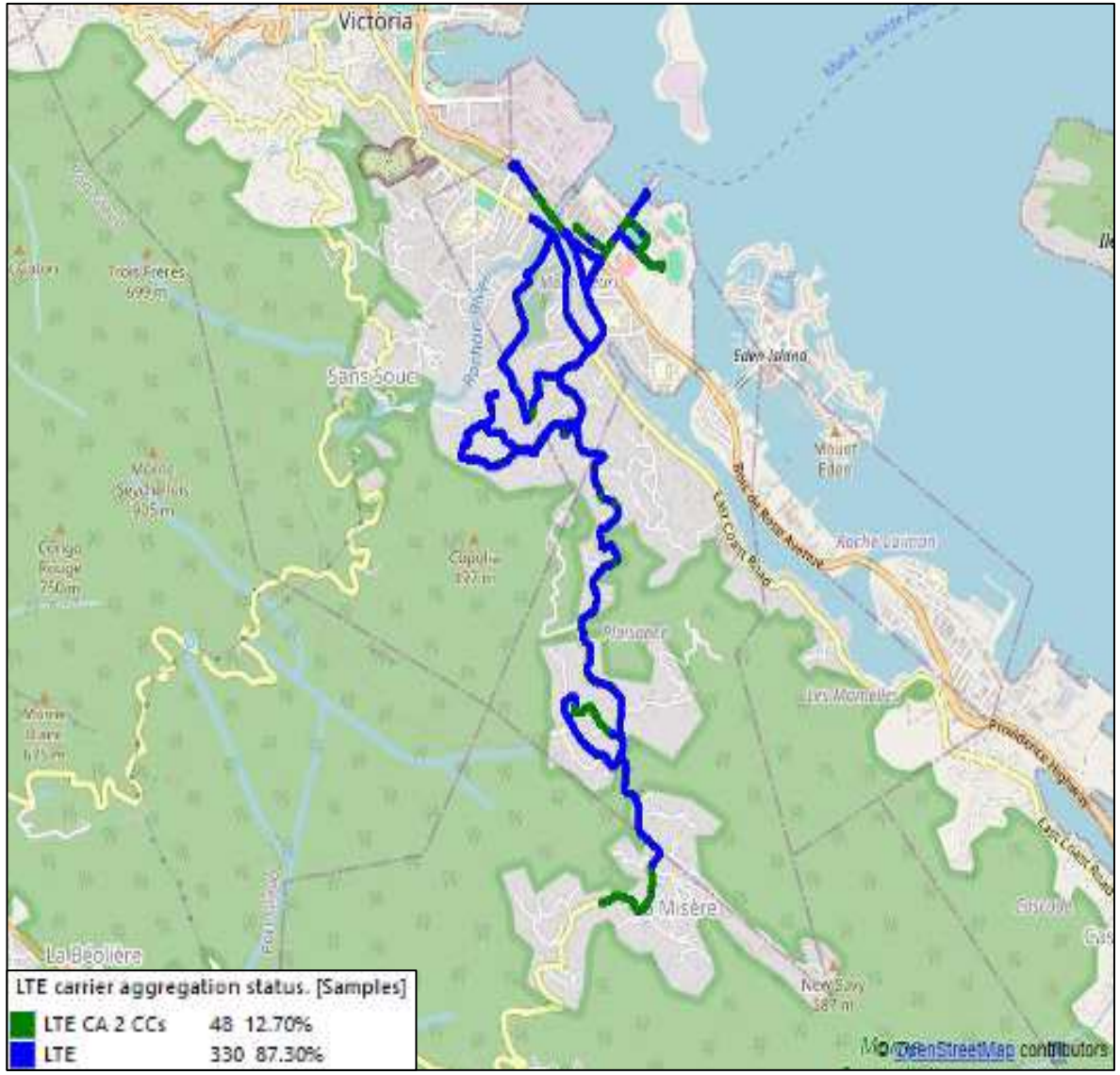


Phase-2 4G PREFERRED DATA TEST - CARRIER AGGREGATION PLOT

Airtel Data 4G

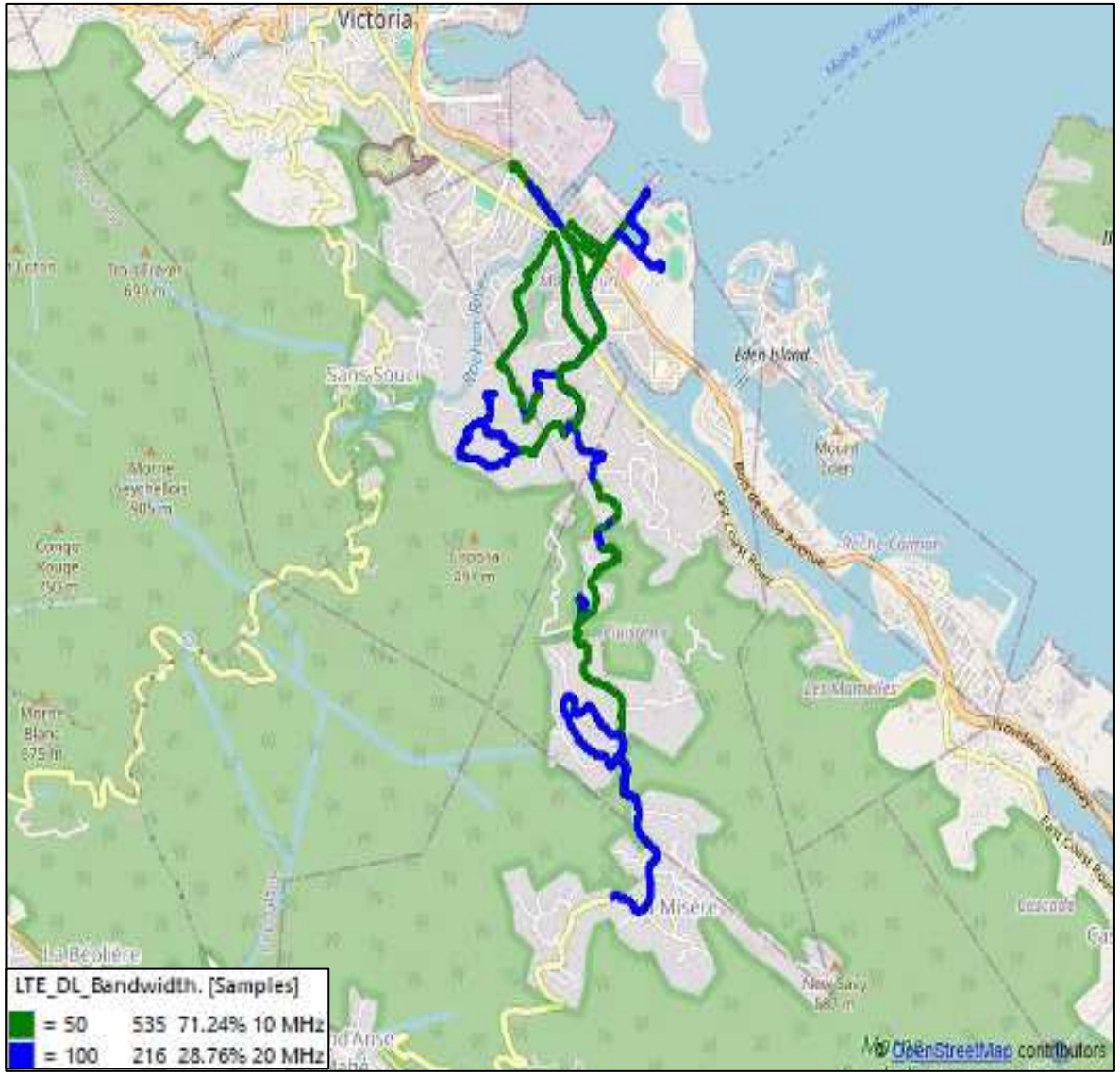


CWS Data 4G

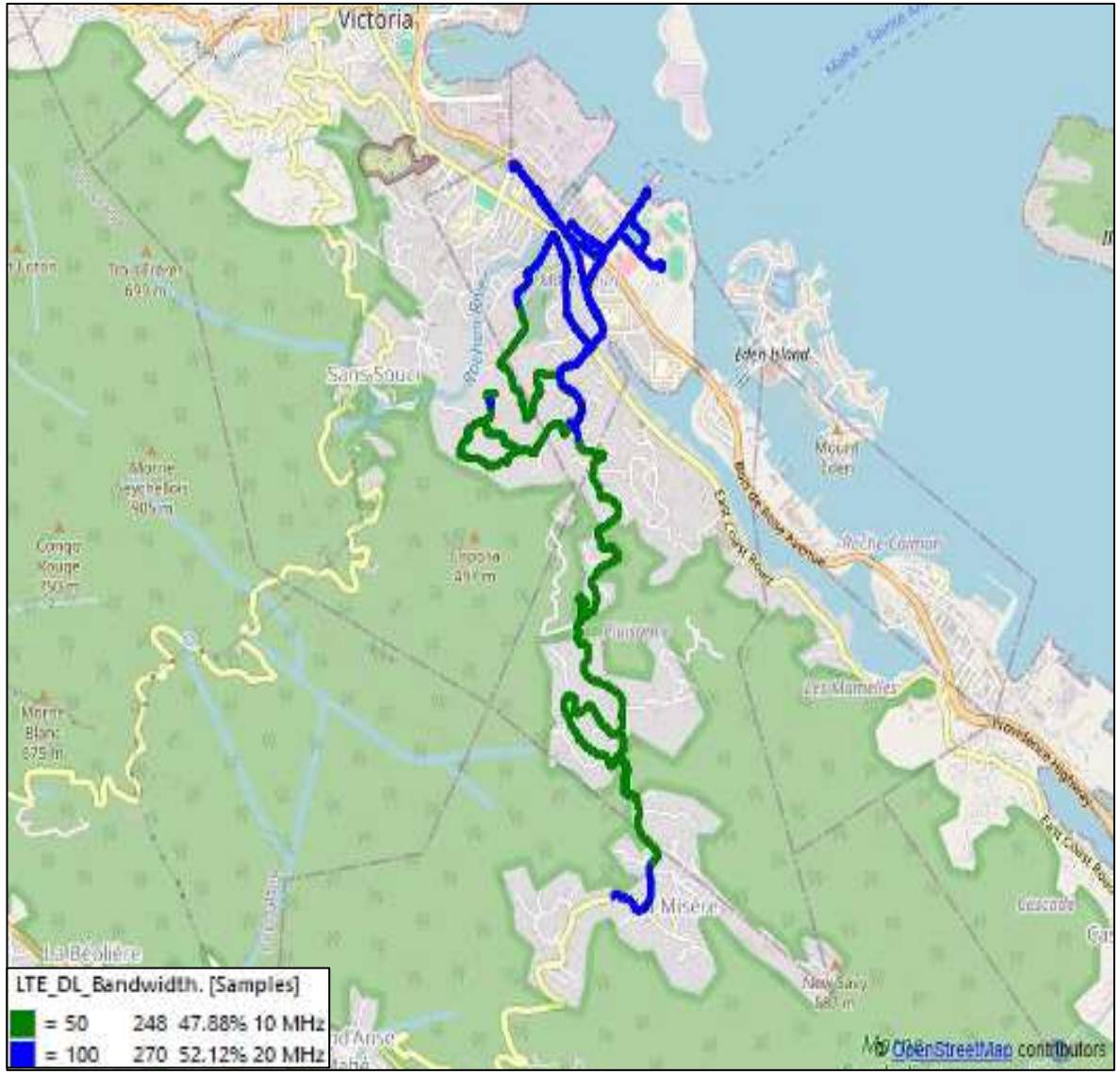


Phase-1 4G PREFERRED DATA TEST – BANDWIDTH PLOT

Airtel Data 4G

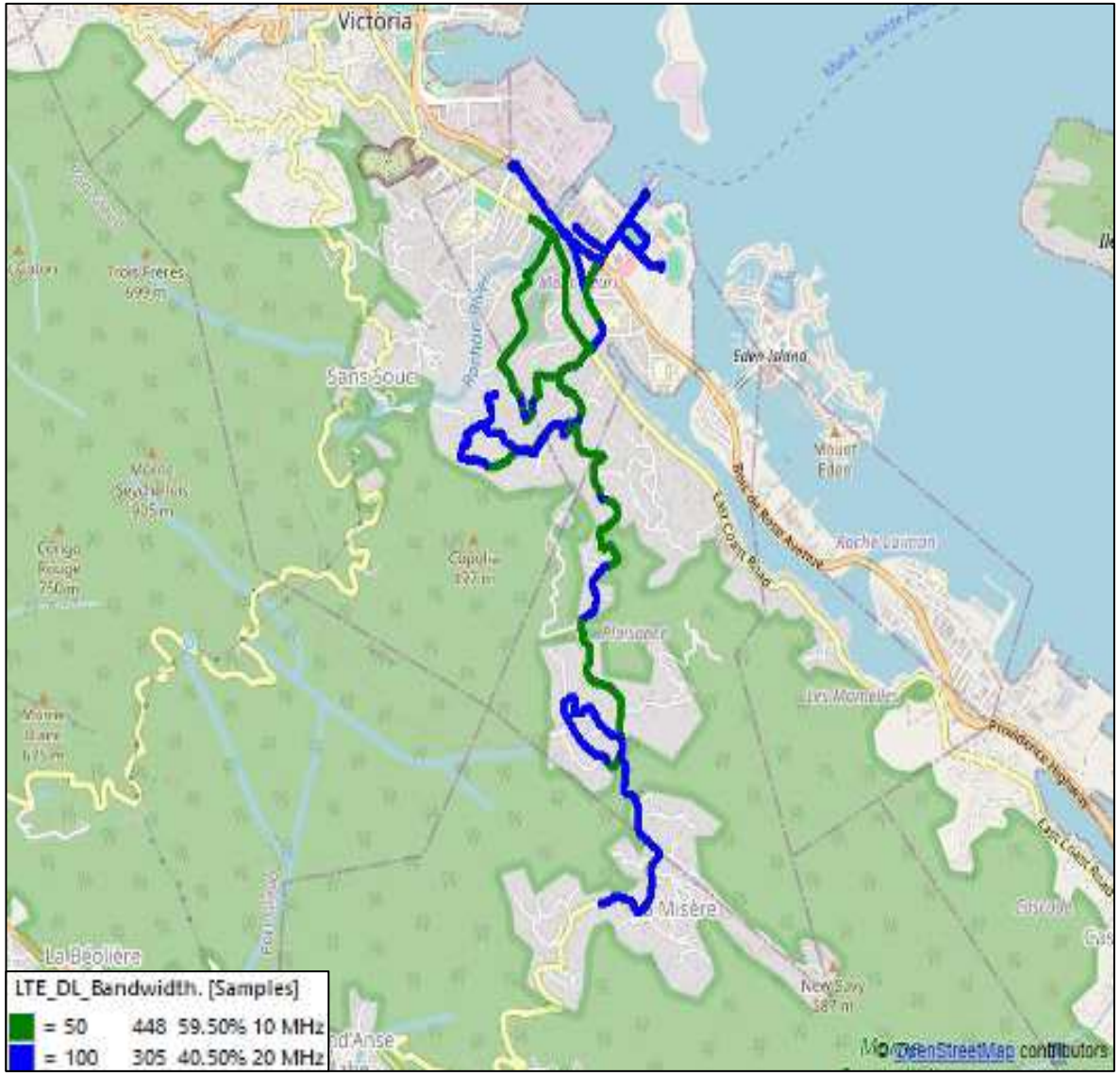


CWS Data 4G

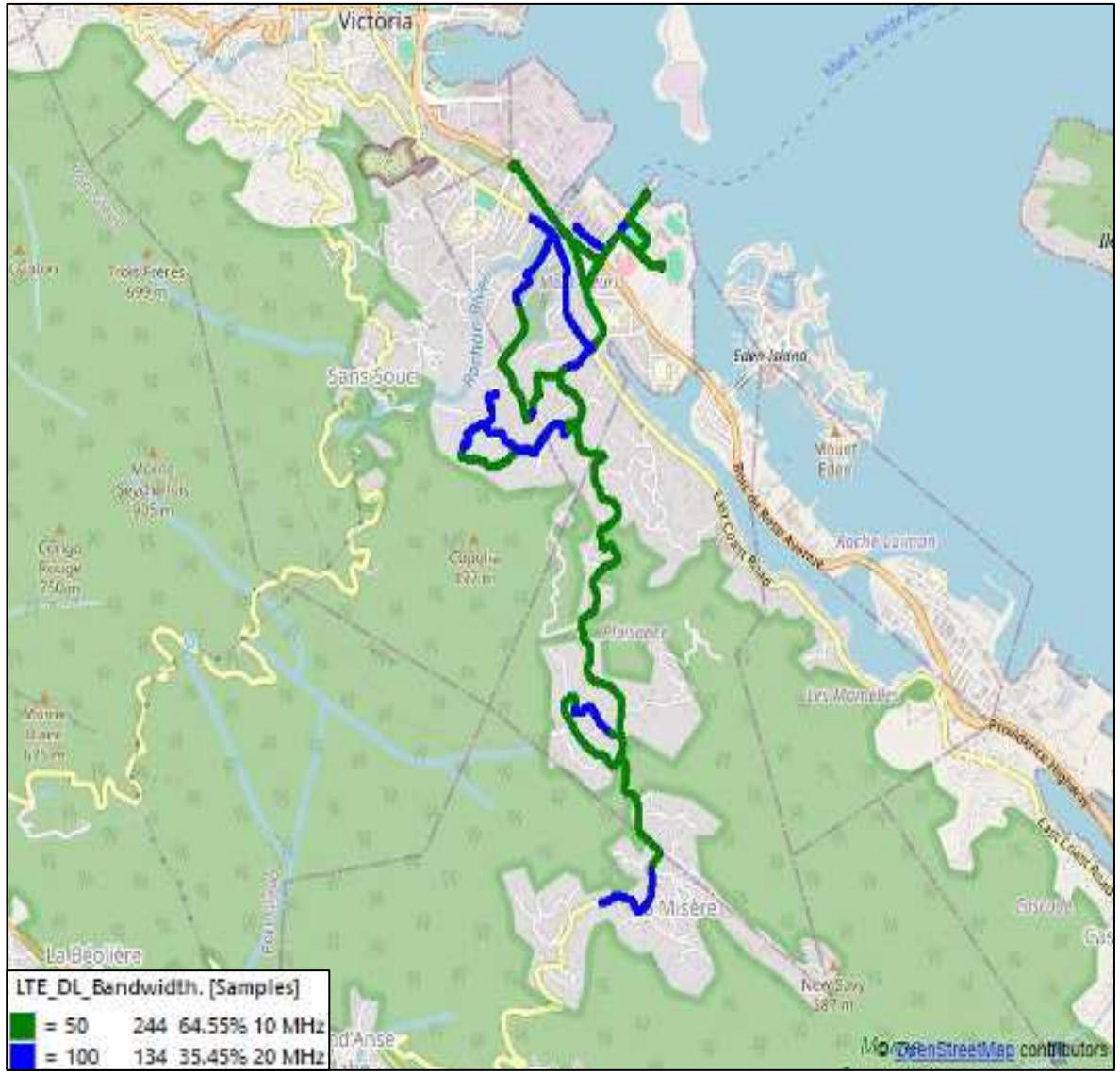


Phase-2 4G PREFERRED DATA TEST – BANDWIDTH PLOT

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	**2**
Poor quality	2

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

Call Drop cause from Airtel	Count
Total Call Drop	**0**

Call Drop cause from CWS	Count
Total Call Drop	**0**

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

	Time	System	Serving band	
1.	9:36:05.051	UMTS FDD	2100	Cal
2.	10:09:35.502	GSM	900	Call

	1. best active RSCP	Time	Ch	SC	1. best :
918.	-67.3	9:35:28.527	3050	144	
919.		9:35:28.527	3050	144	-4.7
920.	-73.3	9:35:29.039	3050	144	
921.		9:35:29.039	3050	144	-6.5
922.	-72.8	9:35:29.527	3050	144	
923.		9:35:29.527	3050	144	-7.3
924.	-70.2	9:35:30.400	3050	144	
925.		9:35:30.400	3050	144	-9.6
926.	-70.9	9:35:30.787	3050	144	
927.		9:35:30.787	3050	144	-5.1
928.	-68	9:35:31.387	3050	144	
929.		9:35:31.387	3050	144	-5.1
930.	-64	9:35:31.887	3050	144	
931.		9:35:31.887	3050	144	-6.8
932.	-76.6	9:36:03.104	10562	416	
933.		9:36:03.104	10562	416	-10.2
934.	-74.1	9:36:03.845	10562	416	
935.		9:36:03.845	10562	416	-12.1
936.	-72.3	9:36:04.335	10562	416	
937.		9:36:04.335	10562	416	-13
938.	-74.5	9:36:04.539	10562	416	
939.		9:36:04.539	10562	416	-7.9
940.	-80.4	9:36:05.384	10562	416	
941.		9:36:05.384	10562	416	-16.2
942.	-76.6	9:36:05.823	10562	416	
943.		9:36:05.823	10562	416	-10.6
944.	-75.9	9:36:06.245	10562	416	
945.		9:36:06.245	10562	416	-7.7
946.	-76.8	9:36:06.662	10562	416	
947.		9:36:06.662	10562	416	-8.6
948.	-78.3	9:36:07.466	10562	416	
949.		9:36:07.466	10562	416	-8.9
950.	-82.3	9:36:07.614	10562	416	
951.		9:36:07.614	10562	416	-11.1
952.	-84.3	9:36:07.917	10562	416	
953.		9:36:07.917	10562	416	-13.9

	Event ID	System	Transf. dir.	Time	Subchannel	Message name
3888.	RRCSM	UMTS FDD	Downlink	9:36:03.253	BCCH_BCH	SYSTEM_INFORMATION_BCH
3889.	RRCSM	UMTS FDD	Downlink	9:36:03.273	BCCH_BCH	SYSTEM_INFORMATION_BCH
3890.	RRCSM	UMTS FDD	Downlink	9:36:03.293	BCCH_BCH	SYSTEM_INFORMATION_BCH
3891.	RRCSM	UMTS FDD	Downlink	9:36:03.293	BCCH	MASTER_INFORMATION_BLOCK
3892.	RRCSM	UMTS FDD	Downlink	9:36:03.313	CCCH	RRC_CONNECTION_SETUP
3893.	RRCSM	UMTS FDD	Downlink	9:36:03.315	BCCH_BCH	SYSTEM_INFORMATION_BCH
3894.	RRCSM	UMTS FDD	Downlink	9:36:03.315	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_3
3895.	RRCSM	UMTS FDD	Downlink	9:36:03.315	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_7
3896.	RRCSM	UMTS FDD	Uplink	9:36:03.369	DCCH	RRC_CONNECTION_SETUP_COMPLETE
3897.	RRCSM	UMTS FDD	Uplink	9:36:03.369	DCCH	INITIAL_DIRECT_TRANSFER
3898.	L3SM	UMTS FDD	Uplink	9:36:03.369	DCCH	CM_SERVICE_REQUEST
3899.	RRCSM	UMTS FDD	Uplink	9:36:03.369	DCCH	INITIAL_DIRECT_TRANSFER
3900.	L3SM	UMTS FDD	Uplink	9:36:03.369	DCCH	ROUTING_AREA_UPDATE_REQUEST
3901.	RRCSM	UMTS FDD	Downlink	9:36:03.602	DCCH	MEASUREMENT_CONTROL
3902.	RRCSM	UMTS FDD	Downlink	9:36:03.672	DCCH	MEASUREMENT_CONTROL
3903.	RRCSM	UMTS FDD	Downlink	9:36:03.682	DCCH	MEASUREMENT_CONTROL
3904.	RRCSM	UMTS FDD	Downlink	9:36:03.692	DCCH	MEASUREMENT_CONTROL
3905.	RRCSM	UMTS FDD	Downlink	9:36:03.702	DCCH	MEASUREMENT_CONTROL
3906.	RRCSM	UMTS FDD	Downlink	9:36:03.742	DCCH	DOWNLINK_DIRECT_TRANSFER
3907.	L3SM	UMTS FDD	Downlink	9:36:03.742	DCCH	AUTHENTICATION_REQUEST
3908.	RRCSM	UMTS FDD	Uplink	9:36:03.871	DCCH	UPLINK_DIRECT_TRANSFER
3909.	L3SM	UMTS FDD	Uplink	9:36:03.871	DCCH	AUTHENTICATION_RESPONSE
3910.	RRCSM	UMTS FDD	Downlink	9:36:03.962	DCCH	SECURITY_MODE_COMMAND
3911.	RRCSM	UMTS FDD	Uplink	9:36:03.962	DCCH	SECURITY_MODE_COMPLETE
3912.	RRCSM	UMTS FDD	Uplink	9:36:04.053	DCCH	UPLINK_DIRECT_TRANSFER
3913.	L3SM	UMTS FDD	Uplink	9:36:04.053	DCCH	SETUP
3914.	RRCSM	UMTS FDD	Downlink	9:36:04.062	DCCH	DOWNLINK_DIRECT_TRANSFER
3915.	L3SM	UMTS FDD	Downlink	9:36:04.062	DCCH	IDENTITY_REQUEST
3916.	RRCSM	UMTS FDD	Uplink	9:36:04.062	DCCH	UPLINK_DIRECT_TRANSFER
3917.	L3SM	UMTS FDD	Uplink	9:36:04.062	DCCH	IDENTITY_RESPONSE
3918.	RRCSM	UMTS FDD	Downlink	9:36:04.182	DCCH	DOWNLINK_DIRECT_TRANSFER
3919.	L3SM	UMTS FDD	Downlink	9:36:04.182	DCCH	CALL_PROCEEDING
3920.	RRCSM	UMTS FDD	Uplink	9:36:04.883	DCCH	MEASUREMENT_REPORT
3921.	RRCSM	UMTS FDD	Uplink	9:36:04.995	DCCH	MEASUREMENT_REPORT
3922.	RRCSM	UMTS FDD	Uplink	9:36:05.024	DCCH	MEASUREMENT_REPORT
3923.	RRCSM	UMTS FDD	Uplink	9:36:05.051	DCCH	UPLINK_DIRECT_TRANSFER

Analysis:

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

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

	Time	Band (MHz)	Ch	PCI	RSRP	SNR
1430.	9:35:52.716	800	6400	6	-83.2	
1431.	9:35:52.716					-3.8
1432.	9:35:53.046	800	6400	6	-86.3	
1433.	9:35:53.046					-5.6
1434.	9:35:53.965	800	6400	6	-83.4	
1435.	9:35:53.965					-2.1
1436.	9:35:54.927	800	6400	6	-83	
1437.	9:35:54.927					0.6
1438.	9:35:55.450	800	6400	6	-83	
1439.	9:35:56.450	800	6400	6	-83.2	
1440.	9:35:56.450					3
1441.	9:35:57.509	800	6400	6	-76.3	
1442.	9:35:57.509					8.4
1443.	9:35:58.116	800	6400	6	-76.3	
1444.	9:35:58.763	800	6400	6	-73.3	
1445.	9:35:58.763					12.2
1446.	9:36:00.394	800	6400	6	-80.5	
1447.	9:36:00.394					-2.6
1448.	9:36:01.383	800	6400	6	-86.1	
1449.	9:36:01.383					-18.1
1450.	9:36:02.599	800	6400	6	-84.9	
1451.	9:36:02.599					-3.2
1452.	9:36:02.614	800	6400	6	-84.9	
1453.	9:36:04.450	800	6400	6	-82.4	
1454.	9:36:04.450					-2.1
1455.	9:36:05.278	800	6400	6	-88.3	
1456.	9:36:05.278					-7.1
1457.	9:36:05.448	800	6400	6	-88.4	
1458.	9:36:05.448					-8.2
1459.	9:36:14.283	1800	1300	63	-93.4	
1460.	9:36:14.283					
1461.	9:36:14.587	1800	1300	54	-87.8	
1462.	9:36:14.587					-7.9
1463.	9:36:14.804	1800	1300	54	-87.8	
1464.	9:36:16.005	1800	1300	54	-87.8	

	Event ID	System	Transf. dir.	Time	Subchannel	Message name
3006.	RRCSM	LTE FDD	Downlink	9:35:42.038	PCCH	Paging
3007.	RRCSM	LTE FDD	Uplink	9:35:46.550	DCCH	MeasurementReport
3008.	RRCSM	LTE FDD	Downlink	9:35:46.588	DCCH	RRCConnectionReconfiguration
3009.	RRCSM	LTE FDD	Uplink	9:35:46.598	DCCH	RRCConnectionReconfigurationComplete
3010.	RRCSM	LTE FDD	Downlink	9:35:48.438	PCCH	Paging
3011.	RRCSM	LTE FDD	Downlink	9:35:48.596	DCCH	RRCConnectionReconfiguration
3012.	RRCSM	LTE FDD	Uplink	9:35:48.606	DCCH	RRCConnectionReconfigurationComplete
3013.	RRCSM	LTE FDD	Uplink	9:35:48.750	DCCH	MeasurementReport
3014.	RRCSM	LTE FDD	Downlink	9:35:48.785	DCCH	RRCConnectionReconfiguration
3015.	RRCSM	LTE FDD	Uplink	9:35:48.787	DCCH	RRCConnectionReconfigurationComplete
3016.	RRCSM	LTE FDD	Uplink	9:35:48.790	DCCH	MeasurementReport
3017.	RRCSM	LTE FDD	Downlink	9:35:48.809	DCCH	RRCConnectionReconfiguration
3018.	RRCSM	LTE FDD	Uplink	9:35:48.818	DCCH	RRCConnectionReconfigurationComplete
3019.	RRCSM	LTE FDD	Downlink	9:35:50.835	DCCH	RRCConnectionReconfiguration
3020.	RRCSM	LTE FDD	Uplink	9:35:50.847	DCCH	RRCConnectionReconfigurationComplete
3021.	RRCSM	LTE FDD	Uplink	9:35:50.992	DCCH	MeasurementReport
3022.	RRCSM	LTE FDD	Downlink	9:35:51.018	DCCH	RRCConnectionReconfiguration
3023.	RRCSM	LTE FDD	Uplink	9:35:51.019	DCCH	RRCConnectionReconfigurationComplete
3024.	RRCSM	LTE FDD	Downlink	9:35:52.995	DCCH	RRCConnectionRelease
3025.	RRCSM	LTE FDD	Downlink	9:36:05.158	PCCH	Paging
3026.	L3SM	LTE FDD	Uplink	9:36:05.159		EXTENDED_SERVICE_REQUEST
3027.	RRCSM	LTE FDD	Uplink	9:36:05.159	CCCH	RRCConnectionRequest
3028.	RRCSM	LTE FDD	Downlink	9:36:05.208	CCCH	RRCConnectionSetup
3029.	RRCSM	LTE FDD	Uplink	9:36:05.212	DCCH	RRCConnectionSetupComplete
3030.	RRCSM	LTE FDD	Downlink	9:36:05.262	DCCH	RRCConnectionRelease
3031.	RRCSM	UMTS FDD	Downlink	9:36:05.714	BCCH_BCH	SYSTEM_INFORMATION_BCH
3032.	RRCSM	UMTS FDD	Downlink	9:36:05.714	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_3
3033.	RRCSM	UMTS FDD	Downlink	9:36:05.714	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_7
3034.	RRCSM	UMTS FDD	Downlink	9:36:05.734	BCCH_BCH	SYSTEM_INFORMATION_BCH
3035.	RRCSM	UMTS FDD	Downlink	9:36:05.754	BCCH_BCH	SYSTEM_INFORMATION_BCH
3036.	RRCSM	UMTS FDD	Downlink	9:36:05.774	BCCH_BCH	SYSTEM_INFORMATION_BCH
3037.	RRCSM	UMTS FDD	Downlink	9:36:05.774	BCCH	MASTER_INFORMATION_BLOCK
3038.	RRCSM	UMTS FDD	Downlink	9:36:05.874	BCCH_BCH	SYSTEM_INFORMATION_BCH
3039.	RRCSM	UMTS FDD	Downlink	9:36:05.874	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_3
3040.	RRCSM	UMTS FDD	Downlink	9:36:05.874	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_7

Analysis:

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

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

	Time	System	Serving band
1.	9:36:05.051	UMTS FDD	2100
2.	10:09:35.502	GSM	900

	Time	RxLev sub	ARFCN	LAC	RAC	RXQ sub
155.	10:09:08.432	-94	114	50000	1	
156.	10:09:08.649	-94	114	50000	1	
157.	10:09:09.429	-94	114	50000	1	
158.	10:09:09.604	-94	114	50000	1	
159.	10:09:10.435	-94	114	50000	1	
160.	10:09:11.105	-95	114	50000	1	
161.	10:09:11.600	-96	114	50000	1	
162.	10:09:11.823	-96	114	50000	1	
163.	10:09:12.941	-93	114	50000	1	
164.	10:09:12.941					7
165.	10:09:13.478	-92	114	50000	1	
166.	10:09:13.478					7
167.	10:09:13.883					3
168.	10:09:14.016	-93	114	50000	1	
169.	10:09:14.353					7
170.	10:09:14.479	-93	114	50000	1	
171.	10:09:14.824					6
172.	10:09:15.051	-94	114	50000	1	
173.	10:09:15.295					3
174.	10:09:15.516	-93	114	50000	1	
175.	10:09:15.766					7
176.	10:09:15.899	-94	114	50000	1	
177.	10:09:16.458	-93	114	50000	1	
178.	10:09:17.106	-93	114	50000	1	
179.	10:09:17.649			50000	1	
180.	10:09:18.120	-93	114	50000	1	
181.	10:09:18.590					7
182.	10:09:19.061	-92	114	50000	1	
183.	10:09:19.061					7
184.	10:09:19.665	-92	114	50000	1	
185.	10:09:20.003	-92	114	50000	1	
186.	10:09:20.607	-93	114	50000	1	
187.	10:09:20.944					5
188.	10:09:21.133	-93	114	50000	1	
189.	10:09:21.415					7
190.	10:09:21.872	-93	114	50000	1	

	System	Transf. dir.	Time	Subchannel	Message name
11509.	GSM	Uplink	10:09:15.05(	DCCH	CIPHERING_MODE_COMPLETE
11510.	GSM	Uplink	10:09:15.05'	DCCH	SETUP
11511.	GSM	Uplink	10:09:15.29!	SACCH	MEASUREMENT_REPORT
11512.	GSM	Uplink	10:09:15.76(	SACCH	MEASUREMENT_REPORT
11513.	GSM	Uplink	10:09:16.23'	SACCH	MEASUREMENT_REPORT
11514.	GSM	Uplink	10:09:16.70'	SACCH	MEASUREMENT_REPORT
11515.	GSM	Uplink	10:09:17.17(	SACCH	MEASUREMENT_REPORT
11516.	GSM	Uplink	10:09:17.64!	SACCH	MEASUREMENT_REPORT
11517.	GSM	Uplink	10:09:18.11!	SACCH	MEASUREMENT_REPORT
11518.	GSM	Downlink	10:09:18.25'	SACCH	SYSTEM_INFORMATION_TYPE_5
11519.	GSM	Downlink	10:09:18.57(	DCCH	IDENTITY_REQUEST
11520.	GSM	Uplink	10:09:18.57'	DCCH	IDENTITY_RESPONSE
11521.	GSM	Uplink	10:09:18.59(	SACCH	MEASUREMENT_REPORT
11522.	GSM	Uplink	10:09:19.06'	SACCH	MEASUREMENT_REPORT
11523.	GSM	Uplink	10:09:19.53'	SACCH	MEASUREMENT_REPORT
11524.	GSM	Downlink	10:09:19.98!	DCCH	CALL_PROCEEDING
11525.	GSM	Uplink	10:09:20.00'	SACCH	MEASUREMENT_REPORT
11526.	GSM	Uplink	10:09:20.47'	SACCH	MEASUREMENT_REPORT
11527.	GSM	Downlink	10:09:20.60'	SACCH	SYSTEM_INFORMATION_TYPE_6
11528.	GSM	Uplink	10:09:20.94(	SACCH	MEASUREMENT_REPORT
11529.	GSM	Uplink	10:09:21.41!	SACCH	MEASUREMENT_REPORT
11530.	GSM	Uplink	10:09:21.88(	SACCH	MEASUREMENT_REPORT
11531.	GSM	Uplink	10:09:22.35(	SACCH	MEASUREMENT_REPORT
11532.	GSM	Uplink	10:09:22.82'	SACCH	MEASUREMENT_REPORT
11533.	GSM	Uplink	10:09:23.29(	SACCH	MEASUREMENT_REPORT
11534.	GSM	Uplink	10:09:23.76(	SACCH	MEASUREMENT_REPORT
11535.	GSM	Uplink	10:09:24.23!	SACCH	MEASUREMENT_REPORT
11536.	GSM	Uplink	10:09:24.71(	SACCH	MEASUREMENT_REPORT
11537.	GSM	Uplink	10:09:25.18'	SACCH	MEASUREMENT_REPORT
11538.	GSM	Uplink	10:09:25.65'	SACCH	MEASUREMENT_REPORT
11539.	GSM	Uplink	10:09:26.12'	SACCH	MEASUREMENT_REPORT
11540.	GSM	Uplink	10:09:26.59!	SACCH	MEASUREMENT_REPORT
11541.	GSM	Uplink	10:09:27.06(	SACCH	MEASUREMENT_REPORT
11542.	GSM	Uplink	10:09:27.53!	SACCH	MEASUREMENT_REPORT
11543.	GSM	Uplink	10:09:28.00(	SACCH	MEASUREMENT_REPORT
11544.	GSM	Uplink	10:09:28.47(	SACCH	MEASUREMENT_REPORT

Analysis:

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

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

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

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

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

Call Drop cause from CWS	Count
Total Call Drop	0

Phase-2 Call Drop Analysis 1 From MS9 Airtel MO

	Time	System	Serving band
1.	12:53:46.035	GSM	900

	Time	RxLev sub	ARFCN	BSIC	LAC	RAC	RXQ sub
478.	12:53:39.947						3
479.	12:53:39.981	-90	96	53	50000	4	
480.	12:53:40.427						5
481.	12:53:40.491	-91	96	53	50000	4	
482.	12:53:40.907						4
483.	12:53:41.133	-93	96	53	50000	4	
484.	12:53:41.387						5
485.	12:53:41.613	-94	96	53	50000	4	
486.	12:53:42.088	-94	96	53	50000	4	
487.	12:53:42.347						4
488.	12:53:42.554	-94	96	53	50000	4	
489.	12:53:42.827						5
490.	12:53:43.307	-95	96	53	50000	4	
491.	12:53:43.307						5
492.	12:53:43.787	-97	96	53	50000	4	
493.	12:53:43.787						6
494.	12:53:44.747						4
495.	12:53:44.793	-95	96	53	50000	4	
496.	12:53:45.227	-95	96	53	50000	4	
497.	12:53:45.227						5
498.	12:53:45.707						6
499.	12:53:45.711	-95	96	53	50000	4	
500.	12:53:46.187						6
501.	12:53:46.431	-95	96	53	50000	4	
502.	12:53:46.431						
503.	12:53:49.051				50000	1	
504.	12:53:49.340						0
505.	12:53:50.052	-75	112	1	50000	1	
506.	12:53:50.487						
507.	12:53:50.542				50000	1	
508.	12:53:51.123	-92	112	1	50000	1	
509.	12:53:51.525	-92	112	1	50000	1	
510.	12:53:52.143	-92	112	1	50000	1	
511.	12:53:52.554	-93	112	1	50000	1	
512.	12:53:53.099	-92	112	1	50000	1	
513.	12:53:53.597	-92	112	1	50000	1	

	Event ID	System	Transf. dir.	Time	Subchannel	Message name
9228.	L3SM	GSM	Downlink	12:53:40.381	SACCH	MEASUREMENT_INFORMATION
9229.	L3SM	GSM	Uplink	12:53:40.427	SACCH	MEASUREMENT_REPORT
9230.	L3SM	GSM	Downlink	12:53:40.861	SACCH	SYSTEM_INFORMATION_TYPE_6
9231.	L3SM	GSM	Uplink	12:53:40.907	SACCH	MEASUREMENT_REPORT
9232.	L3SM	GSM	Downlink	12:53:41.341	SACCH	SYSTEM_INFORMATION_TYPE_5
9233.	L3SM	GSM	Uplink	12:53:41.387	SACCH	MEASUREMENT_REPORT
9234.	L3SM	GSM	Downlink	12:53:41.821	SACCH	MEASUREMENT_INFORMATION
9235.	L3SM	GSM	Uplink	12:53:41.867	SACCH	MEASUREMENT_REPORT
9236.	L3SM	GSM	Downlink	12:53:42.301	SACCH	SYSTEM_INFORMATION_TYPE_6
9237.	L3SM	GSM	Uplink	12:53:42.347	SACCH	MEASUREMENT_REPORT
9238.	L3SM	GSM	Downlink	12:53:42.781	SACCH	SYSTEM_INFORMATION_TYPE_5
9239.	L3SM	GSM	Uplink	12:53:42.827	SACCH	MEASUREMENT_REPORT
9240.	L3SM	GSM	Downlink	12:53:43.261	SACCH	MEASUREMENT_INFORMATION
9241.	L3SM	GSM	Uplink	12:53:43.307	SACCH	MEASUREMENT_REPORT
9242.	L3SM	GSM	Downlink	12:53:43.741	SACCH	SYSTEM_INFORMATION_TYPE_6
9243.	L3SM	GSM	Uplink	12:53:43.787	SACCH	MEASUREMENT_REPORT
9244.	L3SM	GSM	Uplink	12:53:44.267	SACCH	MEASUREMENT_REPORT
9245.	L3SM	GSM	Downlink	12:53:44.701	SACCH	MEASUREMENT_INFORMATION
9246.	L3SM	GSM	Uplink	12:53:44.747	SACCH	MEASUREMENT_REPORT
9247.	L3SM	GSM	Downlink	12:53:45.181	SACCH	SYSTEM_INFORMATION_TYPE_6
9248.	L3SM	GSM	Uplink	12:53:45.227	SACCH	MEASUREMENT_REPORT
9249.	L3SM	GSM	Downlink	12:53:45.661	SACCH	SYSTEM_INFORMATION_TYPE_5
9250.	L3SM	GSM	Uplink	12:53:45.707	SACCH	MEASUREMENT_REPORT
9251.	L3SM	GSM	Downlink	12:53:46.035	DCCH	DISCONNECT
9252.	L3SM	GSM	Uplink	12:53:46.035	DCCH	RELEASE
9253.	L3SM	GSM	Downlink	12:53:46.173	DCCH	RELEASE_COMPLETE
9254.	L3SM	GSM	Uplink	12:53:46.187	SACCH	MEASUREMENT_REPORT
9255.	L3SM	GSM	Downlink	12:53:46.293	DCCH	CHANNEL_RELEASE
9256.	L3SM	GSM	Downlink	12:53:46.947	BCCH	SYSTEM_INFORMATION_TYPE_3
9257.	L3SM	GSM	Downlink	12:53:47.187	BCCH	SYSTEM_INFORMATION_TYPE_4
9258.	L3SM	GSM	Downlink	12:53:47.520	BCCH	SYSTEM_INFORMATION_TYPE_3
9259.	L3SM	GSM	Downlink	12:53:47.651	BCCH	SYSTEM_INFORMATION_TYPE_2
9260.	L3SM	GSM	Downlink	12:53:47.669	BCCH	SYSTEM_INFORMATION_TYPE_2QUATER
9261.	L3SM	GSM	Downlink	12:53:48.126	BCCH	SYSTEM_INFORMATION_TYPE_4
9262.	L3SM	GSM	Downlink	12:53:48.228	CCCH	PAGING_REQUEST_TYPE_1
9263.	L3SM	GSM	Downlink	12:53:48.357	BCCH	SYSTEM_INFORMATION_TYPE_1

Analysis:

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

THANKS