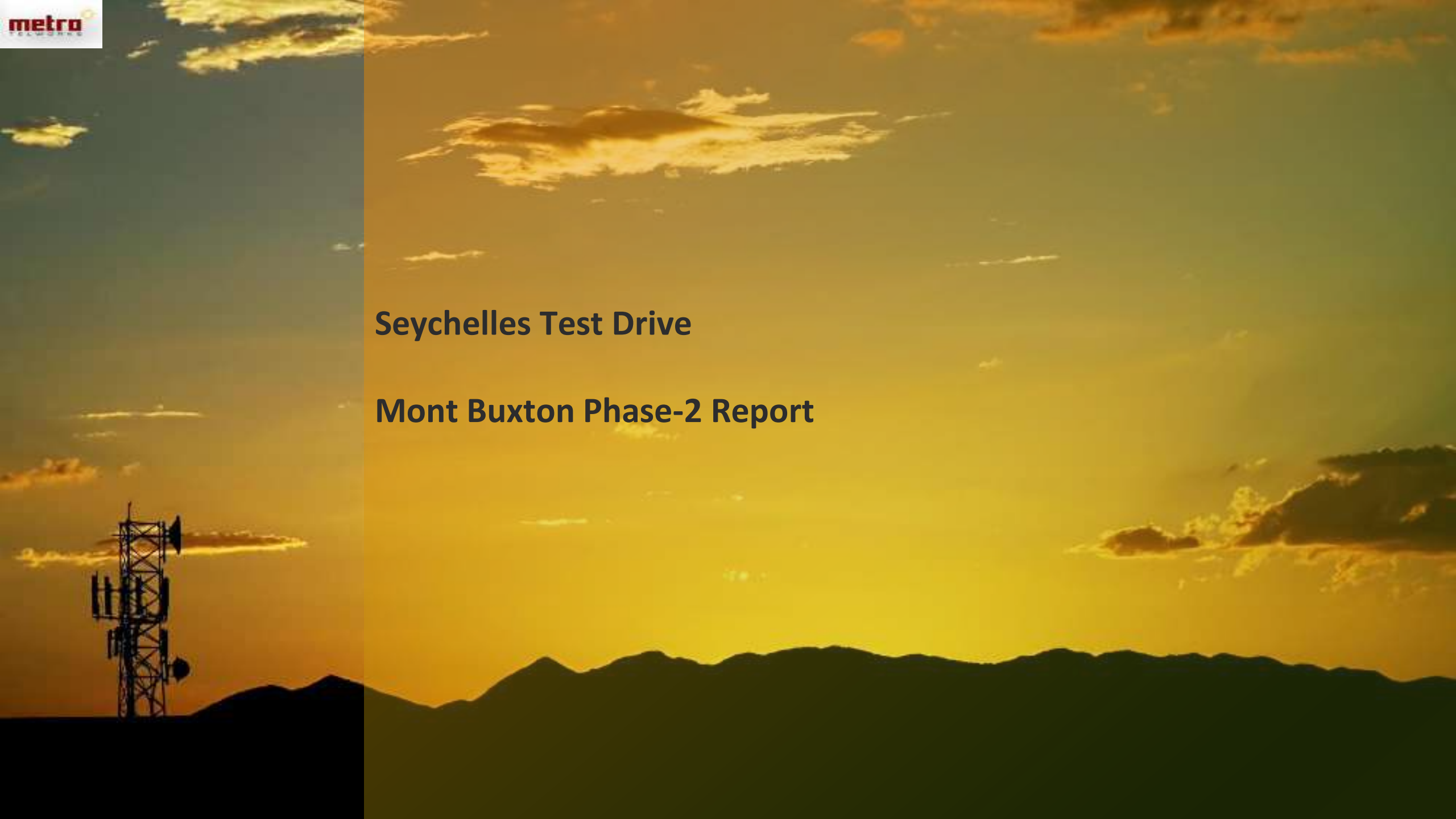


Seychelles Test Drive

Mont Buxton Phase-2 Report

DRIVE TEST ROUTE

Phase-1 Dates- 07th Oct 2024

Route Name: Mahe

District Name: Mont Buxton

Region: Central

Island: Mahé

Drive Test Distance: 9.28 kms

Drive Test Duration: 00 hours,41 minutes,33 seconds

Phase-2 Dates- 21st Oct 2024

Route Name: Mahe

District Name: Mont Buxton

Region: Central

Island: Mahé

Drive Test Distance: 8.64 kms

Drive Test Duration: 00 hours,56 minutes,10 seconds

VOICE EXECUTIVE SUMMARY

Phase-1

Short Call Findings:

- The Call Setup Success Rate for Airtel is (98.08%), while for Operator CWS it is (97.96%).
- The Call Setup Time for Airtel is (6.63s) , while for Operator CWS it is (8.93s)

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 (3.02), and for CWS, it is (3.04).

Phase-2

Short Call Findings:

- The Call Setup Success Rate for Airtel is (100.00%), while for Operator CWS it is (95.00%).
- The Call Setup Time for Airtel is (6.29s) , while for Operator CWS it is (8.74s)

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 (3.16), and for CWS, it is (3.26).

4G PREFERRED DATA TEST – EXECUTIVE SUMMARY

Phase-1

4G Preferred Data Findings:

- **All tests for webpage DL time (s) on www.sbc.sc failed for the LTE CWS operator. The issue may be related to network performance.**
- Airtel SFTP DL is (11.53 Mbps), while SFTP UL is (6.21 Mbps), CWS SFTP DL is (1.43 Mbps), while SFTP UL is (1.39 Mbps)
- Airtel HTTP DL is (14.44 Mbps), HTTP Capacity DL is (22.90 Mbps) ,HTTP UL is (7.59 Mbps) , and HTTP Capacity UL is (13.74 Mbps).
- CWS HTTP DL is (1.21 Mbps), HTTP Capacity DL is (1.70 Mbps) ,HTTP UL is (1.75 Mbps) , and HTTP Capacity UL is (7.48 Mbps).
- On live web page testing for browsing, www.shein.com took (8.41s), www.nbs.gov.sc took (18.37s), and www.sbc.sc took (19.79s) on Airtel.
- On live web page testing for browsing, www.shein.com took (22.62s), www.nbs.gov.sc took (16.74s), and www.sbc.sc took (N/A) on CWS.
- On static browsing, Kepler Webpage took (4.19s), and Kepler Mobile took (1.95s) on Airtel.
- On static browsing, Kepler Webpage took (5.96s), and Kepler Mobile took (2.86s) on CWS.
- YouTube average resolution in Airtel is (1047.21) pixels.
- YouTube average resolution in CWS is (781.74) pixels.
- Airtel scored 61.12% in Carrier Aggregation (CA).
- CWS scored 35.82% in Carrier Aggregation (CA).

Phase-2

4G Preferred Data Findings:

- Airtel SFTP DL is (11.54 Mbps), while SFTP UL is (6.46 Mbps), CWS SFTP DL is (6.90 Mbps), while SFTP UL is (3.75 Mbps)
- Airtel HTTP DL is (15.00 Mbps), HTTP Capacity DL is (37.70 Mbps) ,HTTP UL is (10.00 Mbps) , and HTTP Capacity UL is (22.25 Mbps).
- CWS HTTP DL is (7.52 Mbps), HTTP Capacity DL is (21.58 Mbps) ,HTTP UL is (6.52 Mbps) , and HTTP Capacity UL is (20.15 Mbps).
- On live web page testing for browsing, www.shein.com took (6.75s), www.nbs.gov.sc took (18.15s), and www.sbc.sc took (19.49s) on Airtel.
- On live web page testing for browsing, www.shein.com took (7.23s), www.nbs.gov.sc took (16.26s), and www.sbc.sc took (16.30s) on CWS.
- On static browsing, Kepler Webpage took (4.22s), and Kepler Mobile took (1.65s) on Airtel.
- On static browsing, Kepler Webpage took (5.49s), and Kepler Mobile took (2.89s) on CWS.
- YouTube average resolution in Airtel is (1080.00) pixels.
- YouTube average resolution in CWS is (1080.00) pixels.
- Airtel scored 57.64% in Carrier Aggregation (CA).
- CWS scored 30.16% in Carrier Aggregation (CA).

3G PREFERRED DATA TEST - EXECUTIVE SUMMARY

Phase-1

3G Preferred Data Test Findings:

- Airtel SFTP DL is (5.27 Mbps), while SFTP UL is (1.56 Mbps), CWS SFTP DL is (2.27 Mbps), while SFTP UL is (1.11 Mbps)
- Airtel HTTP DL is (4.75 Mbps), HTTP Capacity DL is (5.89 Mbps) ,HTTP UL is (2.70 Mbps) , and HTTP Capacity UL is (10.65 Mbps).
- CWS HTTP DL is (3.84 Mbps), HTTP Capacity DL is (2.93 Mbps) ,HTTP UL is (1.09 Mbps) , and HTTP Capacity UL is (2.64 Mbps).
- On live web page testing for browsing, www.shein.com took (13.33s), www.nbs.gov.sc took (11.86s), and www.sbc.sc took (15.33s) on Airtel.
- On live web page testing for browsing, www.shein.com took (12.17s), www.nbs.gov.sc took (10.33s), and www.sbc.sc took (10.62s) on CWS.
- On static browsing, Kepler Webpage took (6.07s), and Kepler Mobile took (1.87s) on Airtel.
- On static browsing, Kepler Webpage took (7.87s), and Kepler Mobile took (4.45s) on CWS.
- YouTube average resolution in Airtel is (911.27) pixels.
- YouTube average resolution in CWS is (813.71) pixels.

Phase-2

3G Preferred Data Test Findings:

- Airtel SFTP DL is (5.48 Mbps), while SFTP UL is (1.64 Mbps), CWS SFTP DL is (3.48 Mbps), while SFTP UL is (1.15 Mbps)
- Airtel HTTP DL is (4.87 Mbps), HTTP Capacity DL is (6.11 Mbps) ,HTTP UL is (1.91 Mbps) , and HTTP Capacity UL is (4.57 Mbps).
- CWS HTTP DL is (3.28 Mbps), HTTP Capacity DL is (9.37 Mbps) ,HTTP UL is (2.18 Mbps) , and HTTP Capacity UL is (4.57 Mbps).
- On live web page testing for browsing, www.shein.com took (11.03s), www.nbs.gov.sc took (14.03s), and www.sbc.sc took (15.77s) on Airtel.
- On live web page testing for browsing, www.shein.com took (7.96s), www.nbs.gov.sc took (10.03s), and www.sbc.sc took (10.72s) on CWS.
- On static browsing, Kepler Webpage took (4.08s), and Kepler Mobile took (2.59s) on Airtel.
- On static browsing, Kepler Webpage took (6.45s), and Kepler Mobile took (2.51s) on CWS.
- YouTube average resolution in Airtel is (1042.21) pixels.
- YouTube average resolution in CWS is (1080.00) 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	52	49
Call Failed	1	1
Call Connected	51	48
CSSR[%]	98.08	97.96
USCSR[%]	1.92	2.04
CST [s] Alerting	6.63	8.93
CST [s]Connected	6.89	9.02

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)	6.63	8.93	1	2
CS calls CST (until ringing/alerting)	6.51	13.94	1	2
CSFB calls CST (until ringing/alerting)	6.63	8.82	1	2
Overall CST (until Connect/Connect Acknowledge)	6.89	9.02	1	2
CS calls CST (until Connect/Connect Acknowledge)	6.65	N/A	1	N/A
CSFB calls CST (until Connect/Connect Acknowledge)	6.89	9.02	1	2

Phase-2

Short Call Statistics		
Short Call Scenario	Operator 1	Operator 2
Voice KPIs	Airtel	CWS
Call Attempt	65	60
Call Failed	0	3
Call Connected	65	57
CSSR[%]	100.00	95.00
USCSR	0.00	5.00
CST [s] Alerting	6.29	8.74
CST [s]Connected	6.56	8.95

Call Setup Time (s)	Operators		Rank	
	Airtel	CWS	Airtel	CWS
Overall CST (until ringing/alerting)	6.29	8.74	1	2
CS calls CST (until ringing/alerting)	7.07	#N/A	#N/A	#N/A
CSFB calls CST (until ringing/alerting)	6.26	8.74	1	2
Overall CST (until Connect/Connect Acknowledge)	6.56	8.95	1	2
CS calls CST (until Connect/Connect Acknowledge)	7.38	#N/A	#N/A	#N/A
CSFB calls CST (until Connect/Connect Acknowledge)	6.54	8.95	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	15	15
Call Dropped	0	0
Call Completed	15	15
CRR[%]	100.00	100.00
DCR[%]	0.00	0.00
MOS	3.02	3.04

	Airtel short call	CWS short call	Airtel long call	CWS long call
CSFB Calls	51	47	15	14
CS Calls	1	2	0	1

Handover Statistics	Airtel MO	CWS MO
Handover Attempt	33	68
Handover Failure	0	2
Handover Success	33	66
HOSR %	100.00	97.06

Phase-2

Long Call Statistics		
Long Call Scenario	Operator 1	Operator 2
Voice KPIs	Airtel	CWS
Call Connected	18	17
Call Dropped	0	0
Call Completed	18	17
CRR[%]	100.00	100.00
DCR[%]	0.00	0.00
MOS	3.16	3.26

	Airtel short call	CWS short call	Airtel long call	CWS long call
CSFB Calls	63	60	18	7
CS Calls	2	0	0	10

Handover Statistics	Airtel MO	CWS MO
Handover Attempt	37	62
Handover Failure	0	0
Handover Success	37	62
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)	11.53	1.43	1	2	11.54	6.90	1	2
	SFTP UL(Mbps)	6.21	1.39	1	2	6.46	3.75	1	2
	HTTP DL(Mbps)	14.44	1.21	1	2	15.00	7.25	1	2
	HTTP UL(Mbps)	7.59	1.75	1	2	10.00	6.52	1	2
	HTTP Capacity DL(Mbps)	22.90	1.70	1	2	37.70	21.58	1	2
	HTTP Capacity UL(Mbps)	13.74	7.48	1	2	22.25	20.15	1	2
BROWSER	Overall Browser DL Time (s)	10.87	12.04	1	2	10.32	9.48	2	1
	Kepler Webpage DL Time (s)	4.19	5.96	1	2	4.22	5.49	1	2
	Mobile Kepler Webpage DL Time (s)	1.95	2.86	1	2	1.65	2.89	1	2
	www.shein.com Webpage DL Time (s)	8.41	22.62	1	2	6.75	7.23	1	2
	www.nbs.gov.sc Webpage DL Time (s)	18.37	16.74	2	1	18.15	16.26	2	1
	www.sbc.sc Webpage DL Time (s)	19.79	NA	1	2	19.49	16.30	2	1
LATENCY	Avg Latency (ms)	264.65	199.08	2	1	268.94	268.55	2	1
	Median Latency (ms)	156.00	206.00	1	2	252	198	2	1
YOUTUBE	YouTube Access Time (s)	6.05	5.18	2	1	5.21	2.08	2	1
	YouTube Average Resolution (pixels)	1047.21	781.74	1	2	1080.00	1080.00	1	1
	YouTube Success Ratio [%]	100.00	100.00	1	1	100.00	100.00	1	1

4G PREFERRED THROUGHPUT FILE ACCESS

Phase-1

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	8	4	100.00	80.00
	Failure	0	1	0.00	20.00
SFTP UL	Success	8	5	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP DL	Success	7	6	87.50	100.00
	Failure	1	0	12.50	0.00
HTTP UL	Success	8	6	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	7	4	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	6	3	100.00	75.00
	Failure	0	1	0.00	25.00

Phase-2

Test Type	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
SFTP DL	Success	13	12	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	11	12	91.67	100.00
	Failure	1	0	8.33	0.00
HTTP DL	Success	11	12	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	11	10	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	8	8	88.89	100.00
	Failure	1	0	11.11	0.00

4G PREFERRED BROWSING FILE ACCESS

Phase-1

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	6	5	75.00	100.00
	Failure	2	0	25.00	0.00
Mobile Kepler	Success	7	5	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	8	0	100.00	0.00
	Failure	0	5	0.00	100.00
www.nbs.gov.sc	Success	8	5	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	7	5	100.00	100.00
	Failure	0	0	0.00	0.00

Phase-2

Web Page	Status	Airtel 4G	CWS 4G	Airtel 4G (%)	CWS 4G (%)
Kepler	Success	9	7	100.00	77.78
	Failure	0	2	0.00	22.22
Mobile Kepler	Success	9	9	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	9	9	100.00	100.00
	Failure	0	0	0.00	0.00
www.nbs.gov.sc	Success	8	9	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	9	9	100.00	100.00
	Failure	0	0	0.00	0.00

4G PREFERRED LATENCY

Phase-1

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	15	9
	Average Latency [ms]	277.87	198.78
	Median Latency [ms]	366	214
	Ping session status: Successful	15	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]	416.57	160.67
	Median Latency [ms]	410	155
	Ping session status: Successful	7	3
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	0	1
	Packet Loss<1%	0.00	25.00
102.133.176.104	Average Latency [ms]	156.50	217.83
	Median Latency [ms]	123	218
	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

Phase-2

	Latency KPIs	Airtel 4G	CWS 4G
Overall Latency	Sample Count [32 bytes]	19	17
	Average Latency [ms]	268.89	296.94
	Median Latency [ms]	297	198
	Ping session status: Successful	19	17
	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]	407.67	211.75
	Median Latency [ms]	402	158
	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]	144.00	372.67
	Median Latency [ms]	126	205
	Ping session status: Successful	10	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

4G PREFERRED YOUTUBE COMPARISON

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)	6.05	5.18
YouTube Average Resolution (pixels)	1047.21	781.74
YouTube Success Ratio [%]	100.00	100.00

Phase-2

LTE YOUTUBE Success Ratio		
KPIs	Airtel 4G	CWS 4G
Attempt(Count)	10	9
Success(Count)	10	9
Failure(Count)	0	0
YouTube Access Time (s)	5.21	2.08
YouTube Average Resolution (pixels)	1080.00	1080.00
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)	5.27	2.27	1	2	5.48	3.48	1	2
	SFTP UL(Mbps)	1.56	1.11	1	2	1.64	1.15	1	2
	HTTP DL(Mbps)	4.75	3.84	1	2	4.87	3.28	1	2
	HTTP UL(Mbps)	2.70	1.09	1	2	1.91	2.18	2	1
	HTTP Capacity DL(Mbps)	5.89	2.93	1	2	6.11	9.37	2	1
	HTTP Capacity UL(Mbps)	10.65	2.64	1	2	4.57	4.57	1	2
BROWSER	Overall Browser DL Time (s)	9.38	8.95	2	1	9.35	7.64	2	1
	Kepler Webpage DL Time (s)	6.07	7.87	1	2	4.08	6.45	1	2
	Mobile Kepler Webpage DL Time (s)	1.87	4.45	1	2	2.59	2.51	2	1
	www.shein.com Webpage DL Time (s)	13.33	12.17	2	1	11.03	7.96	2	1
	www.nbs.gov.sc Webpage DL Time (s)	11.86	10.33	2	1	14.03	10.03	2	1
	www.sbc.sc Webpage DL Time (s)	15.33	10.62	2	1	15.77	10.72	2	1
LATENCY	Avg Latency (ms)	287.70	196.08	2	1	284.07	220.15	2	1
	Median Latency (ms)	392.00	200.00	2	1	243	196	2	1
YOUTUBE	YouTube Access Time (s)	3.73	2.72	2	1	3.42	2.46	2	1
	YouTube Average Resolution (pixels)	911.27	813.71	1	2	1042.21	1080.00	2	1
	YouTube Success Ratio [%]	100.00	83.33	1	2	88.89	87.50	1	2

3G PREFERRED THROUGHPUT FILE ACCESS

Phase-1

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
SFTP DL	Success	6	3	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	7	2	100.00	50.00
	Failure	0	2	0.00	50.00
HTTP DL	Success	7	4	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	7	5	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity DL	Success	6	4	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	6	3	100.00	75.00
	Failure	0	1	0.00	25.00

Phase-2

Test Type	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
SFTP DL	Success	9	9	100.00	100.00
	Failure	0	0	0.00	0.00
SFTP UL	Success	10	7	90.91	77.78
	Failure	1	2	9.09	22.22
HTTP DL	Success	10	7	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP UL	Success	10	6	100.00	75.00
	Failure	0	2	0.00	25.00
HTTP Capacity DL	Success	7	6	100.00	100.00
	Failure	0	0	0.00	0.00
HTTP Capacity UL	Success	7	6	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	7	4	100.00	80.00
	Failure	0	1	0.00	20.00
Mobile Kepler	Success	6	4	100.00	100.00
	Failure	0	0	0.00	0.00
www.shein.com	Success	6	4	100.00	80.00
	Failure	0	1	0.00	20.00
www.nbs.gov.sc	Success	6	4	100.00	100.00
	Failure	0	0	0.00	0.00
www.sbc.sc	Success	5	2	83.33	66.67
	Failure	1	1	16.67	33.33

Phase-2

Web Page	Status	Airtel 3G	CWS 3G	Airtel 3G(%)	CWS 3G (%)
Kepler	Success	8	5	100.00	71.43
	Failure	0	2	0.00	28.57
Mobile Kepler	Success	7	4	100.00	80.00
	Failure	0	1	0.00	20.00
www.shein.com	Success	7	5	87.50	100.00
	Failure	1	0	12.50	0.00
www.nbs.gov.sc	Success	7	4	100.00	66.67
	Failure	0	2	0.00	33.33
www.sbc.sc	Success	7	5	100.00	83.33
	Failure	0	1	0.00	16.67

3G PREFERRED LATENCY

Phase-1

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	12	10
	Average Latency [ms]	342.67	217.30
	Median Latency [ms]	393	218
	Ping session status: Successful	12	10
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	0
	Packet Loss<1%	7.69	0.00
www.google.com	Average Latency [ms]	405.33	138.75
	Median Latency [ms]	406	139
	Ping session status: Successful	6	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
102.133.176.104	Average Latency [ms]	280.00	269.67
	Median Latency [ms]	136	253
	Ping session status: Successful	6	6
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	1	0
	Packet Loss<1%	14.29	0.00

Phase-2

	Latency KPIs	Airtel 3G	CWS 3G
Overall Latency	Sample Count [32 bytes]	13	11
	Average Latency [ms]	287.62	176.18
	Median Latency [ms]	394	195
	Ping session status: Successful	13	11
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	4	1
	Packet Loss<1%	23.53	8.33
www.google.com	Average Latency [ms]	410.29	154.67
	Median Latency [ms]	403	139
	Ping session status: Successful	7	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]	144.50	202.00
	Median Latency [ms]	139	198
	Ping session status: Successful	6	5
	Ping session status: Failed [Socket error]	0	0
	Ping session status: Failed [Protocol error timeout]	4	1
	Packet Loss<1%	40.00	16.67

3G PREFERRED YOUTUBE COMPARISON

Phase-1

UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	7	6
Success(Count)	7	5
Failure(Count)	0	1
YouTube Access Time (s)	3.73	2.72
YouTube Average Resolution (pixels)	911.27	813.71
YouTube Success Ratio [%]	100.00	83.33

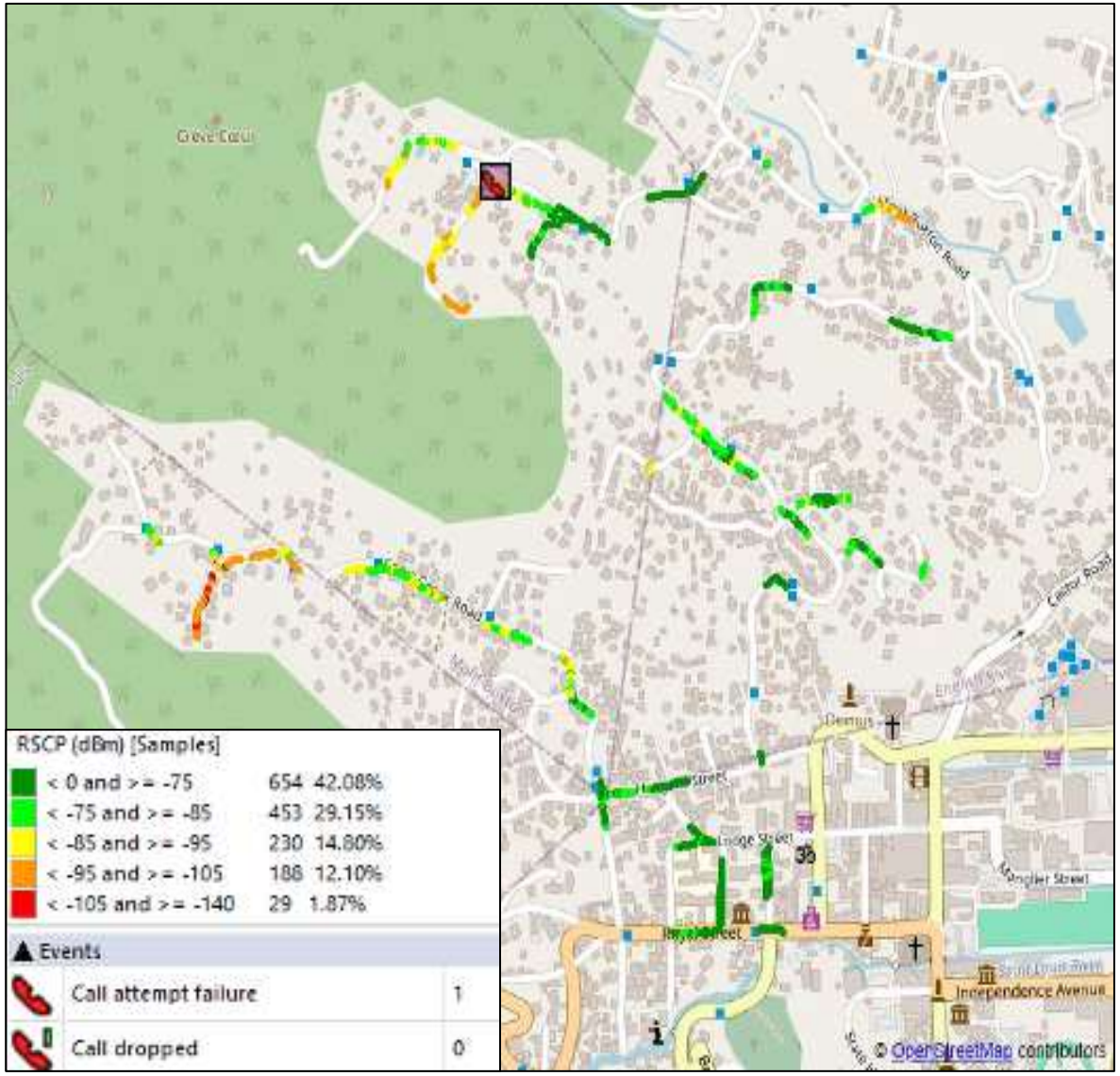
Phase-2

UMTS YOUTUBE Success Ratio		
KPIs	Airtel 3G	CWS 3G
Attempt(Count)	9	8
Success(Count)	8	7
Failure(Count)	1	1
YouTube Access Time (s)	3.42	2.46
YouTube Average Resolution (pixels)	1042.21	1080.00
YouTube Success Ratio [%]	88.89	87.50

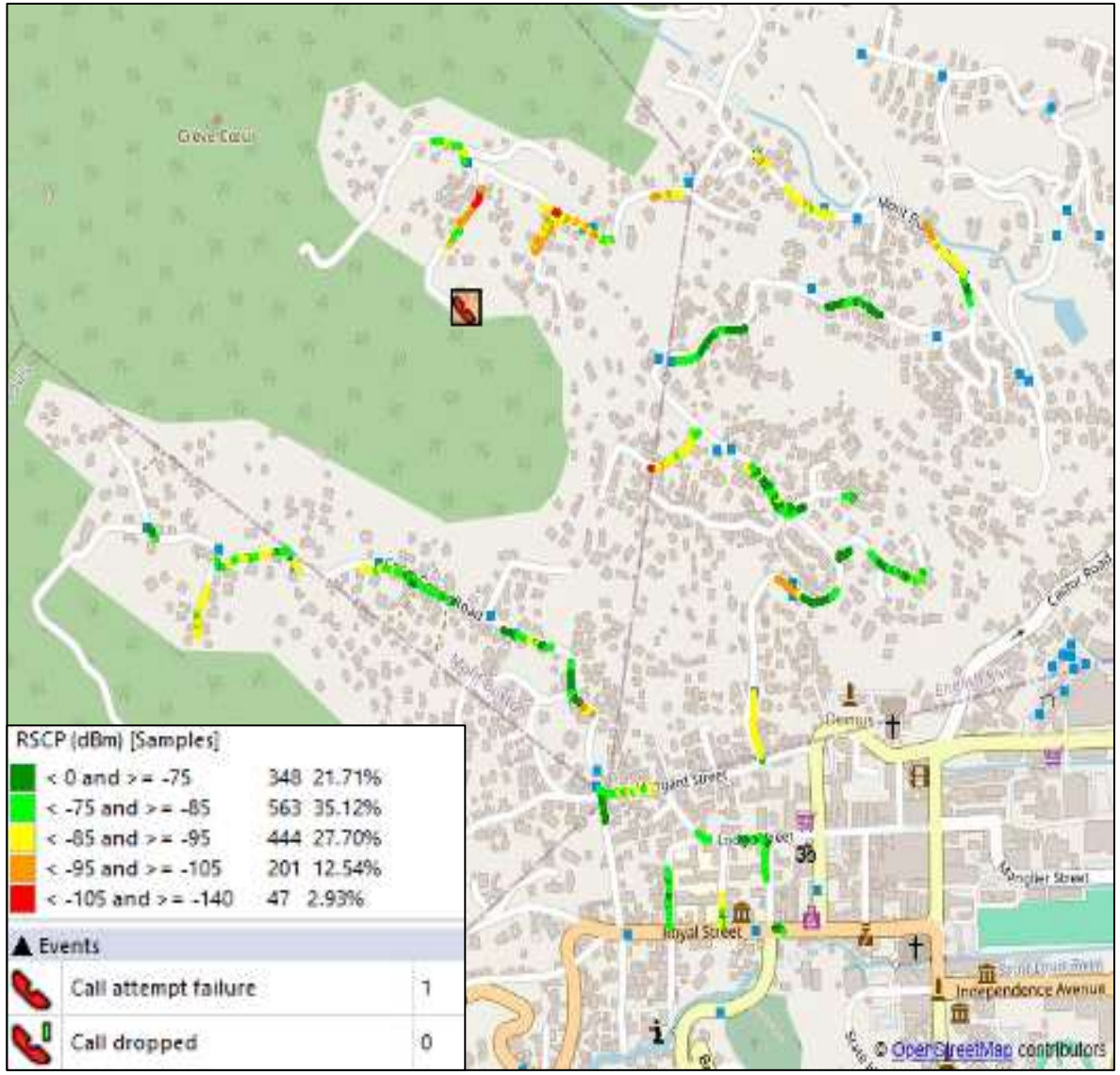
Voice Call Events

Phase-1 SHORT CALL FAILURE EVENTS LOCATION vs RSCP

Airtel SC MO

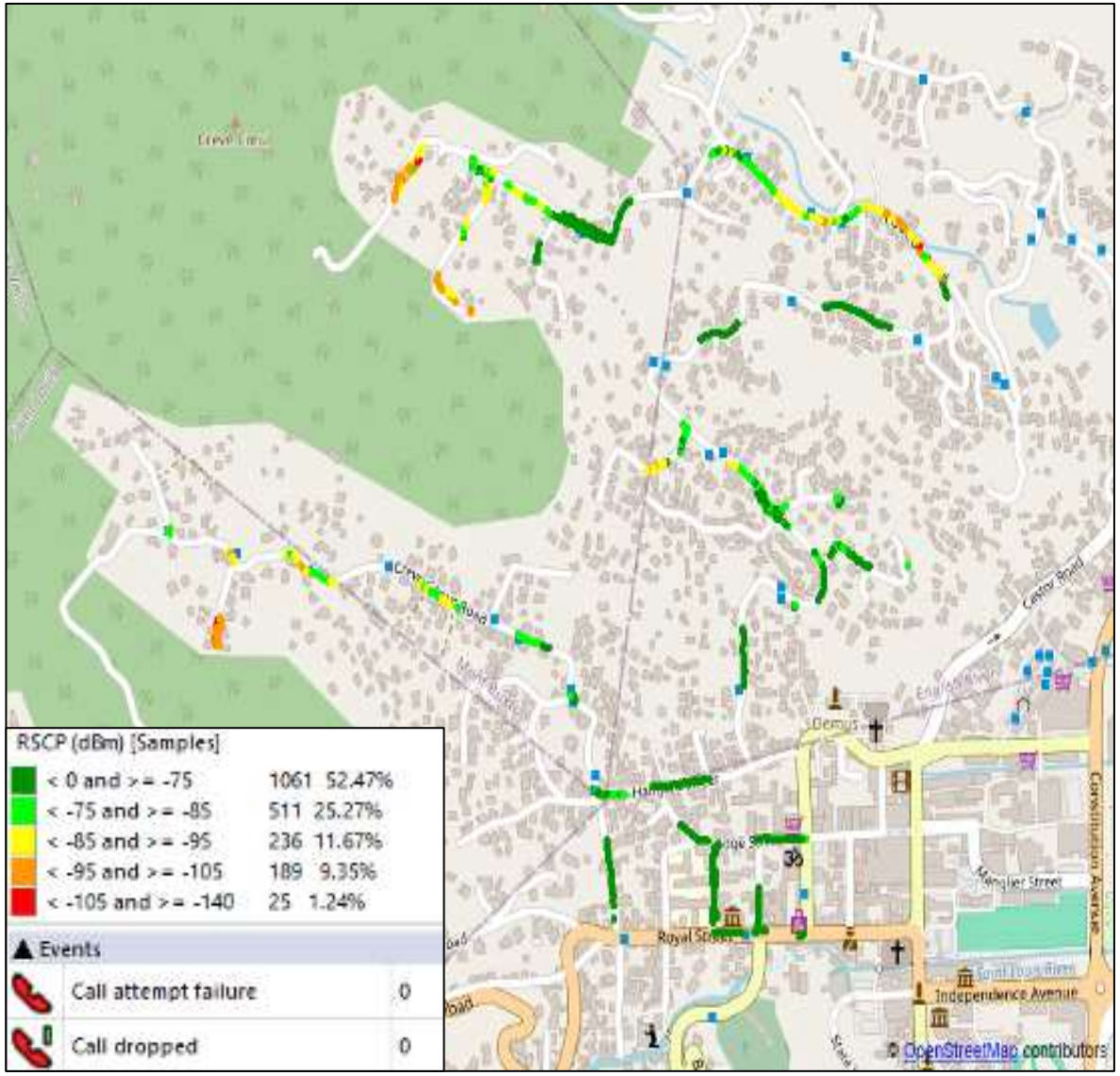


CWS SC MO

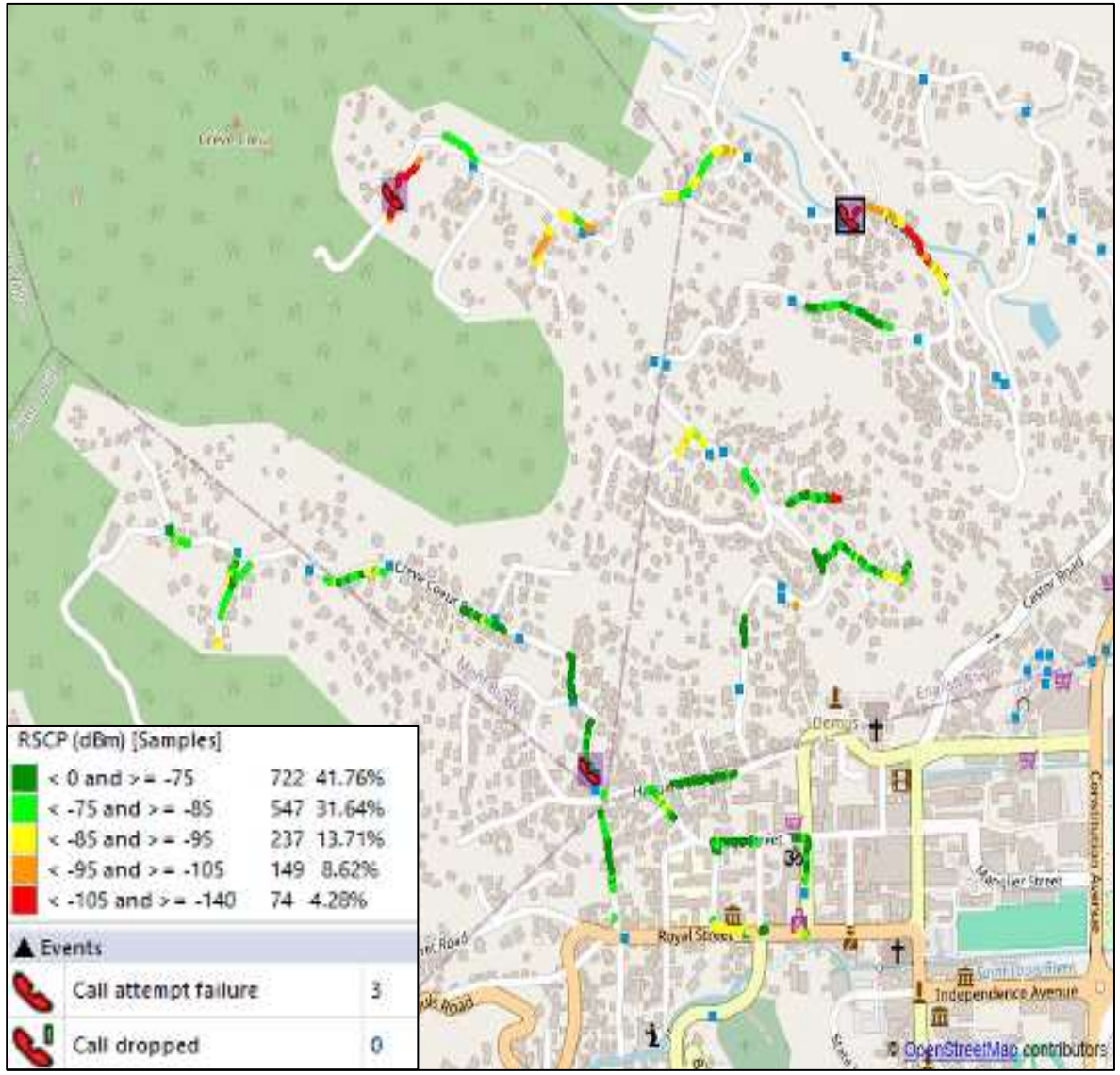


Phase-2 SHORT CALL FAILURE EVENTS LOCATION vs RSCP

Airtel SC MO

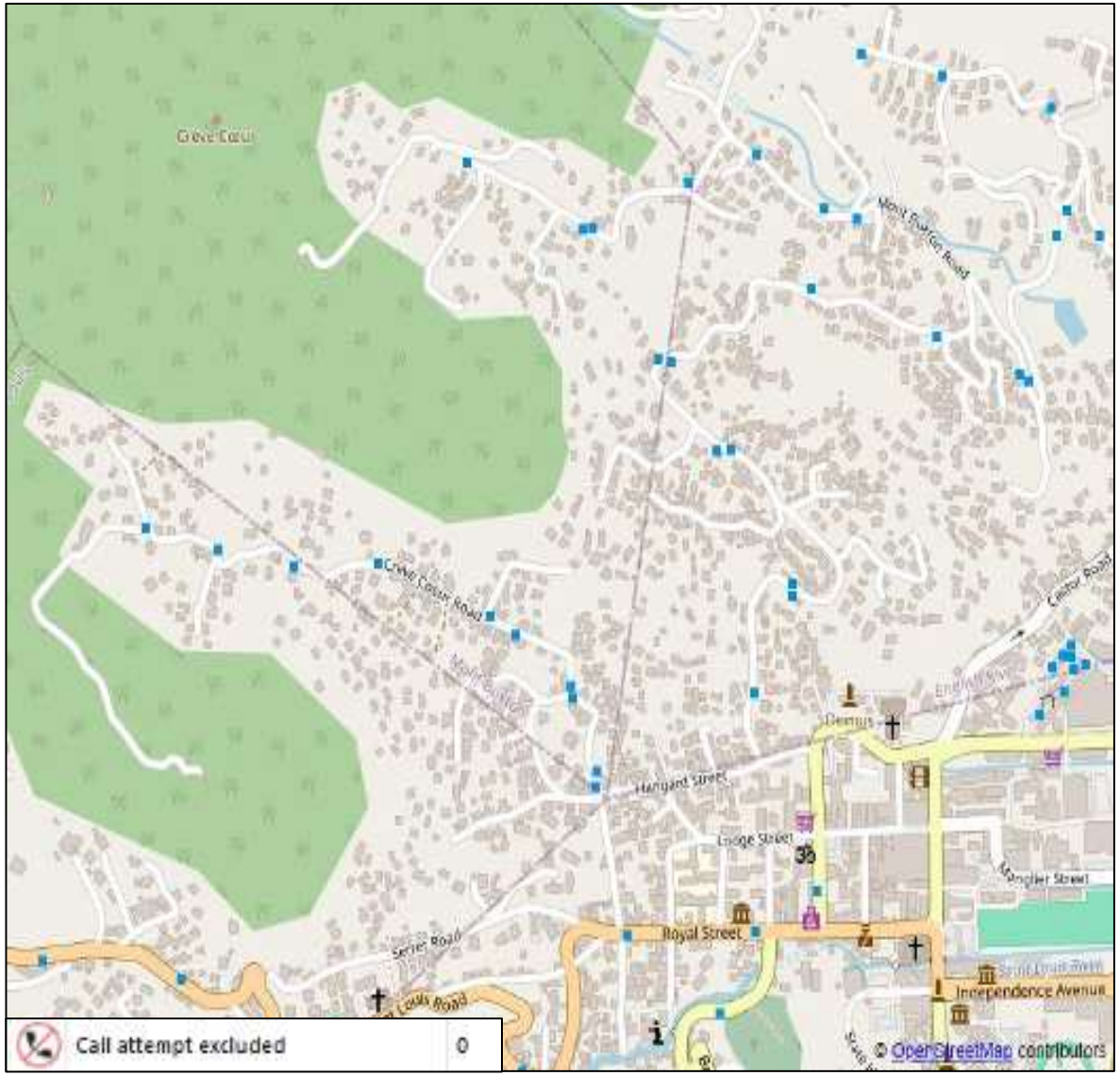


CWS SC MO

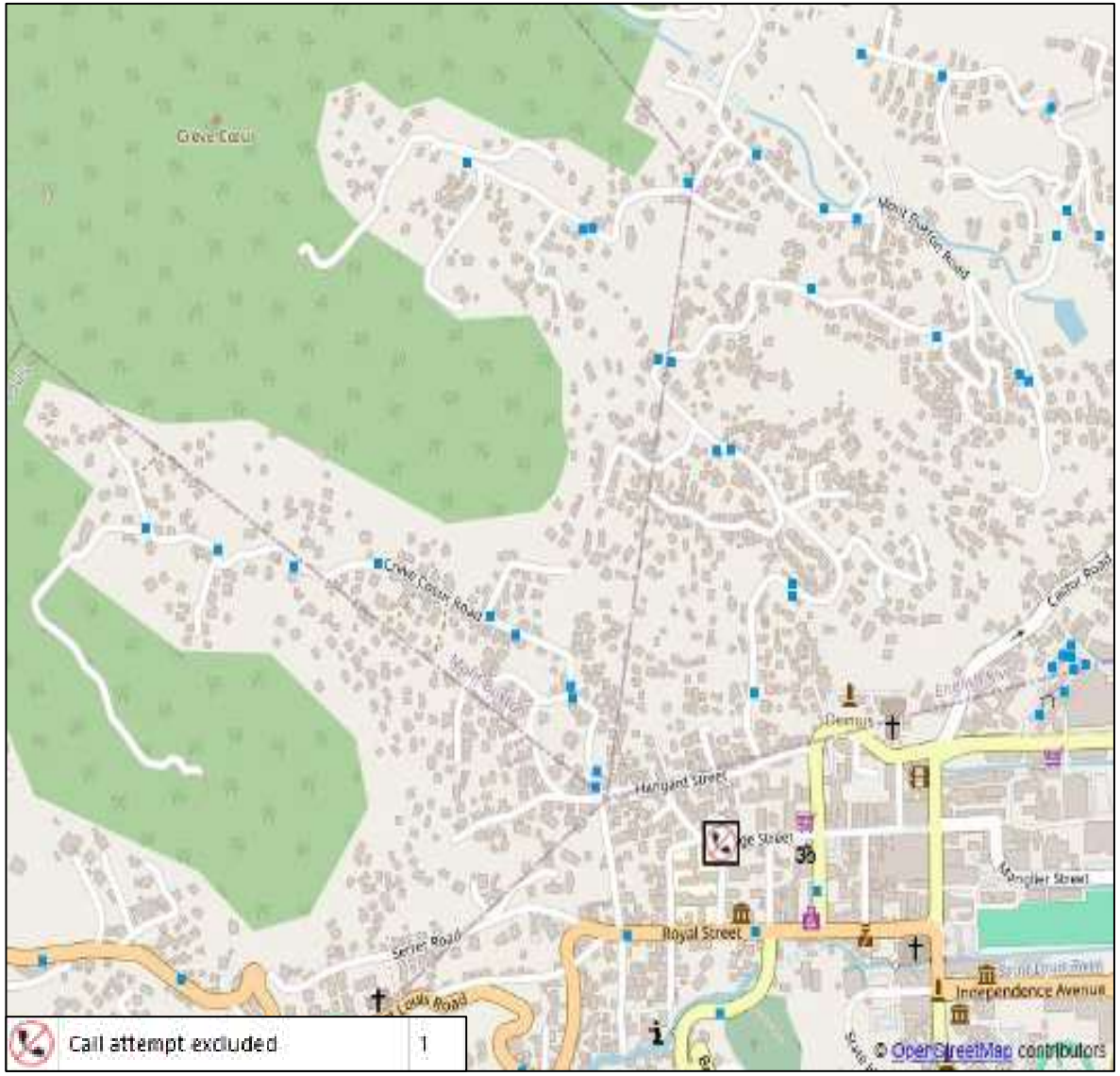


Phase-1 SHORT CALL EXCLUDED EVENTS

Airtel SC MO

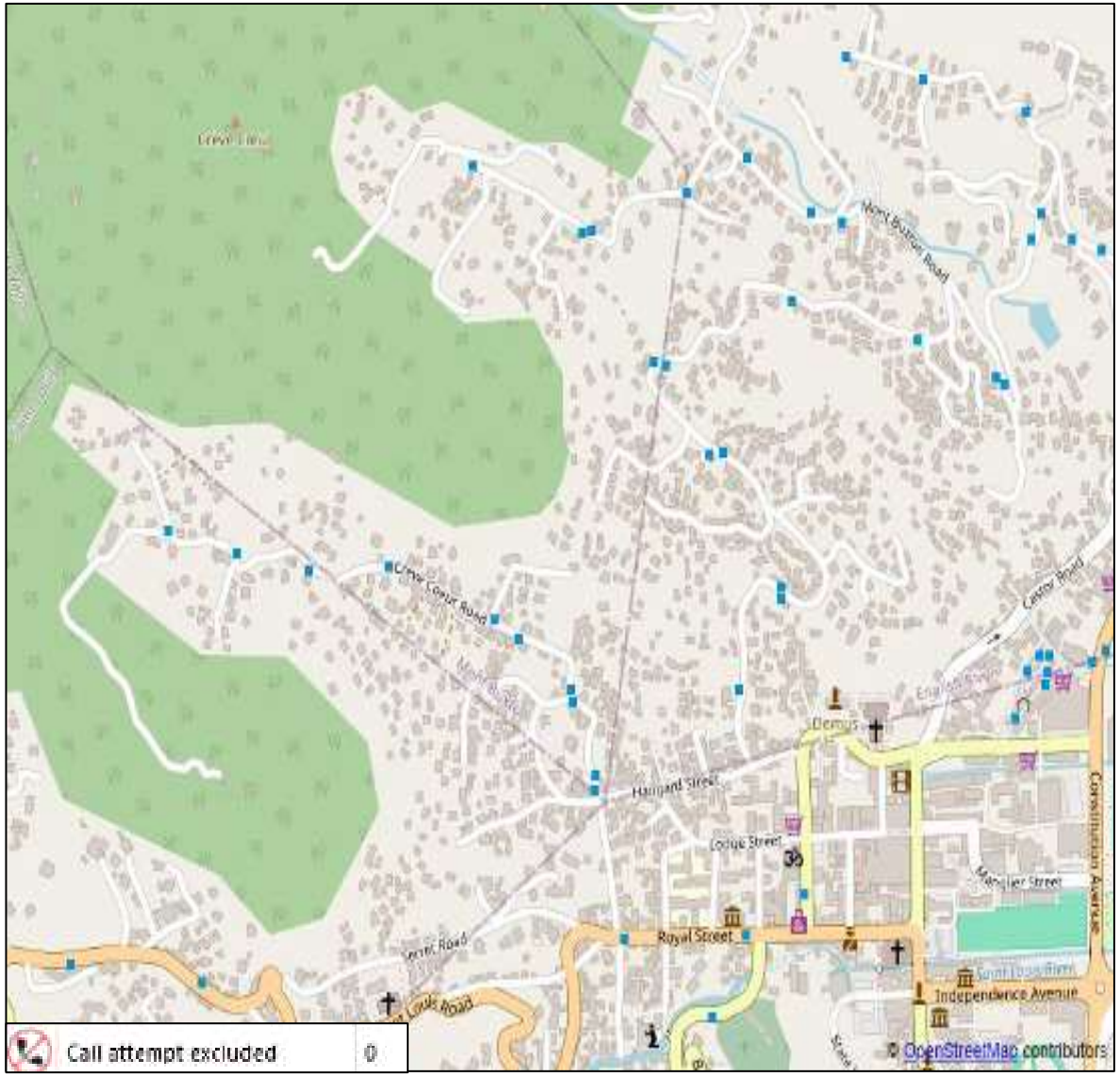


CWS SC MO

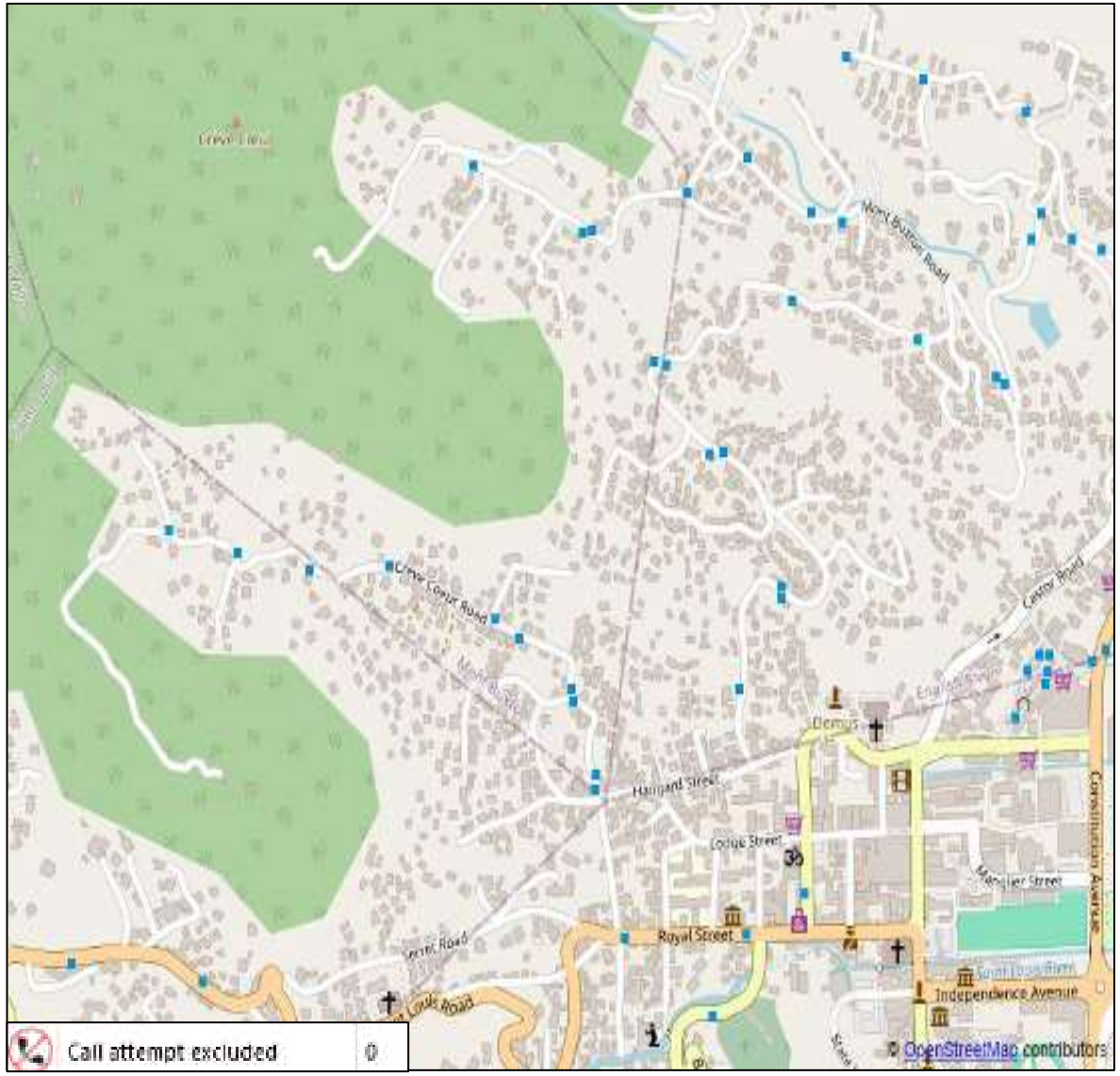


Phase-2 SHORT CALL EXCLUDED EVENTS

Airtel SC MO

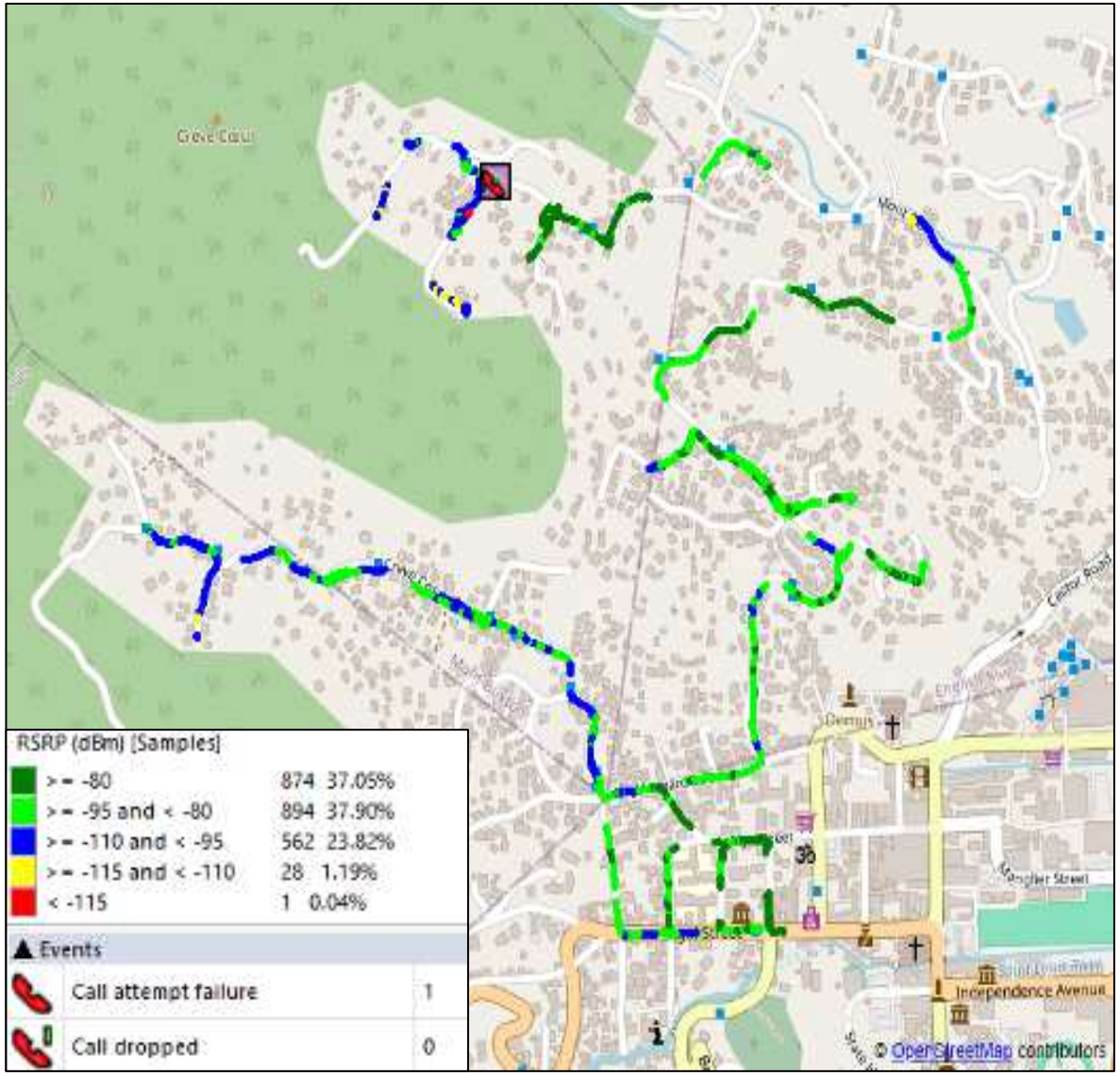


CWS SC MO

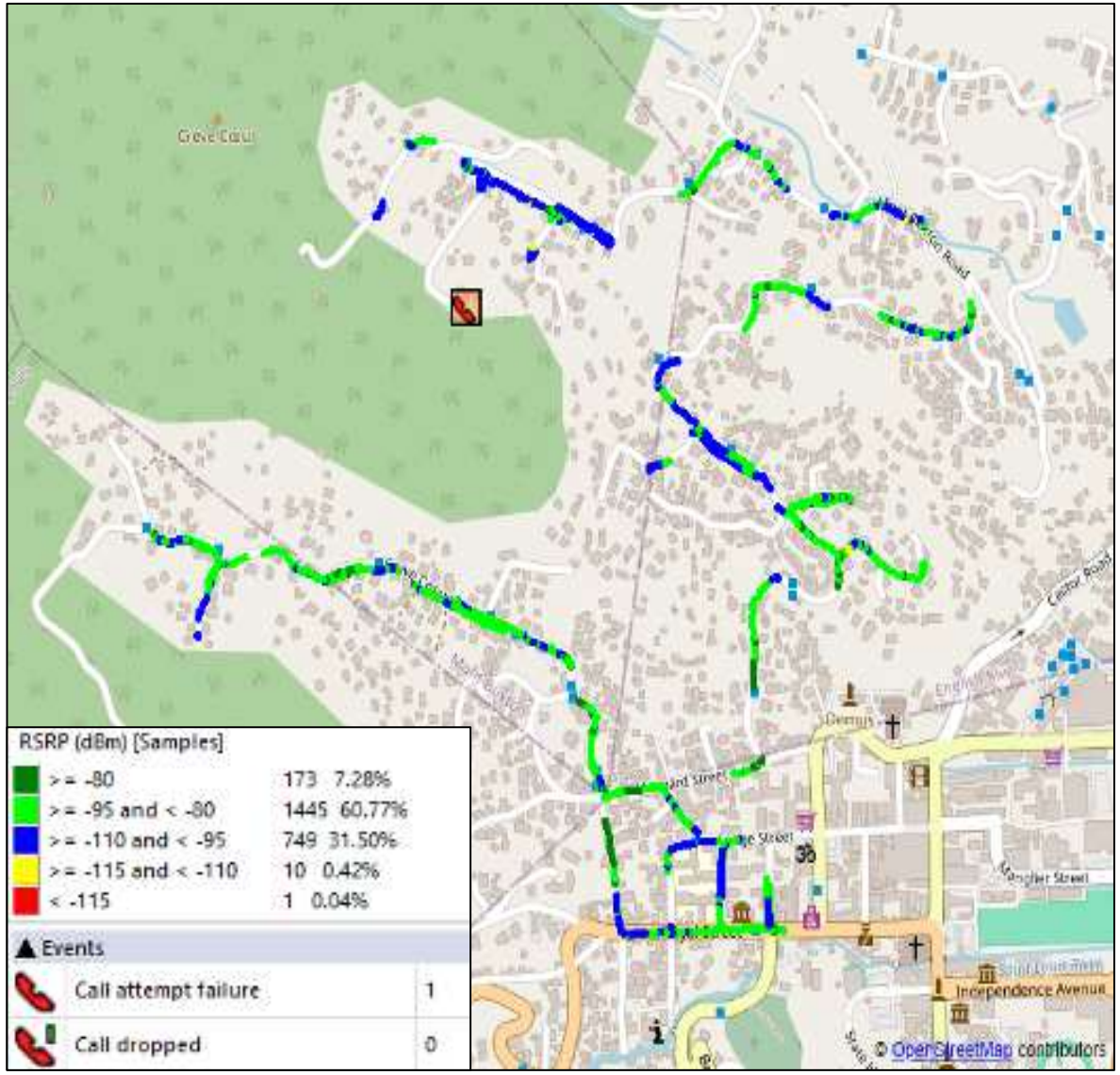


Phase-1 SHORT CALL FAILURE EVENTS LOCATION vs RSRP

Airtel SC MO

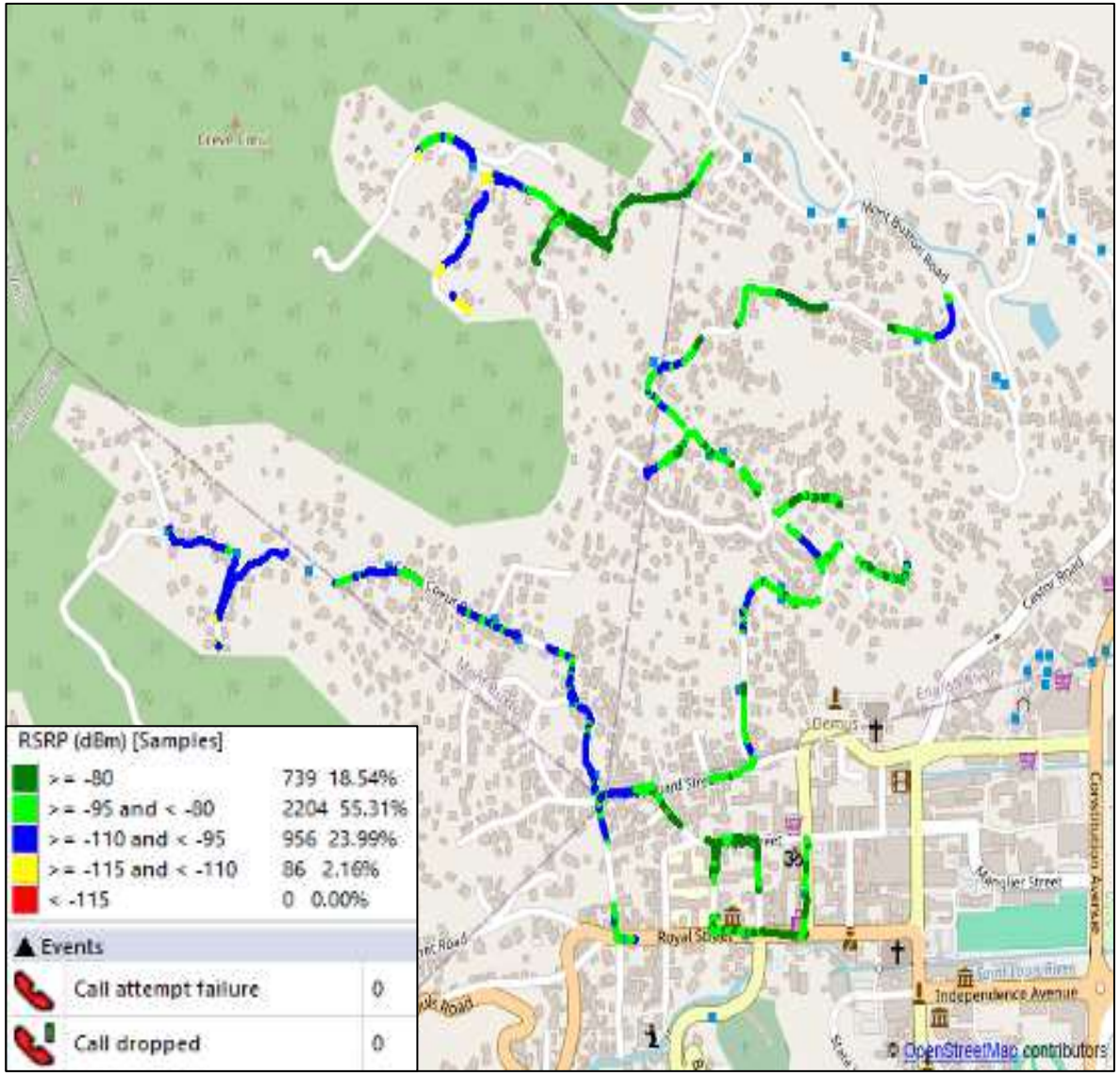


CWS SC MO

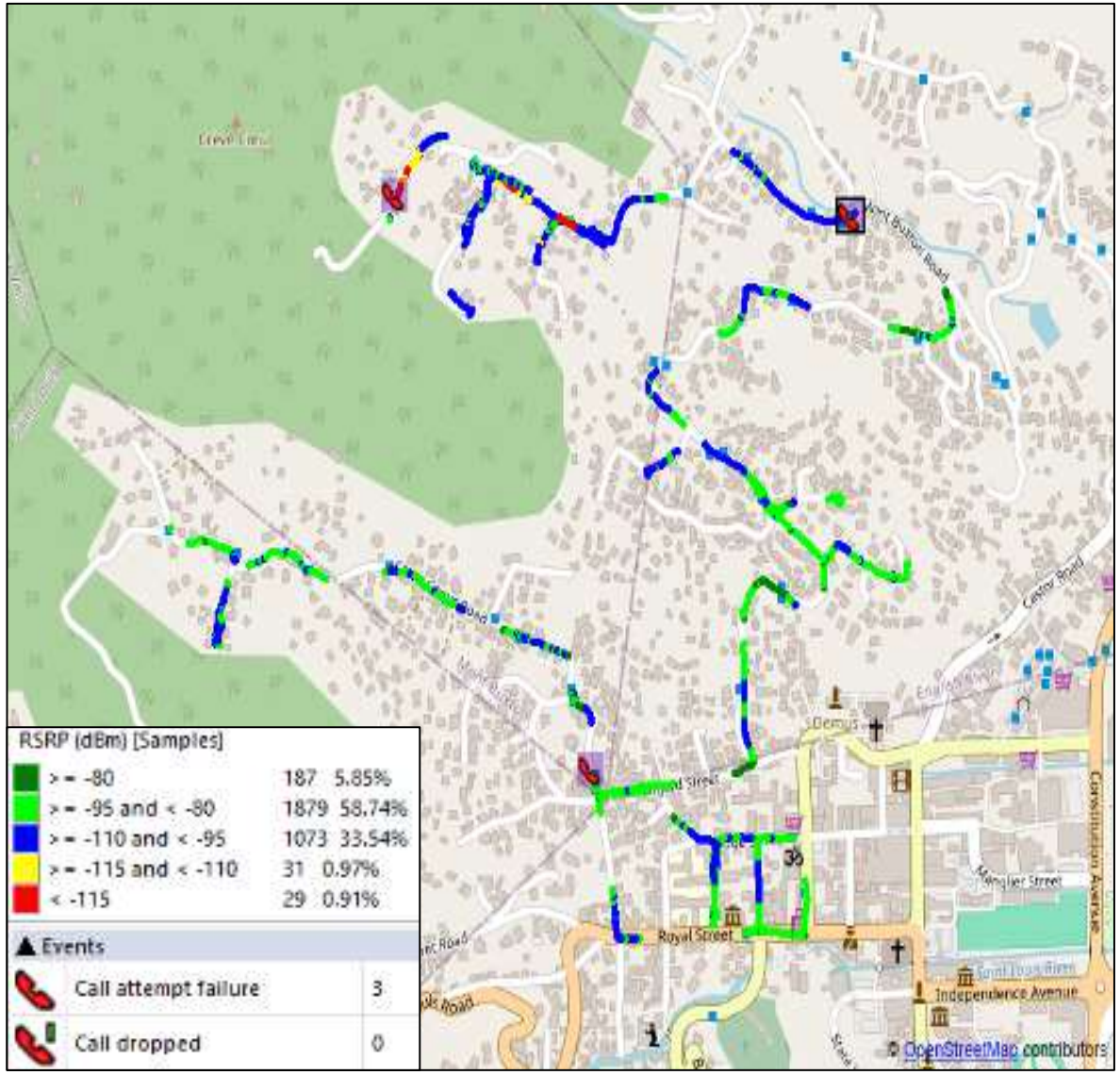


Phase-2 SHORT CALL FAILURE EVENTS LOCATION vs RSRP

Airtel SC MO

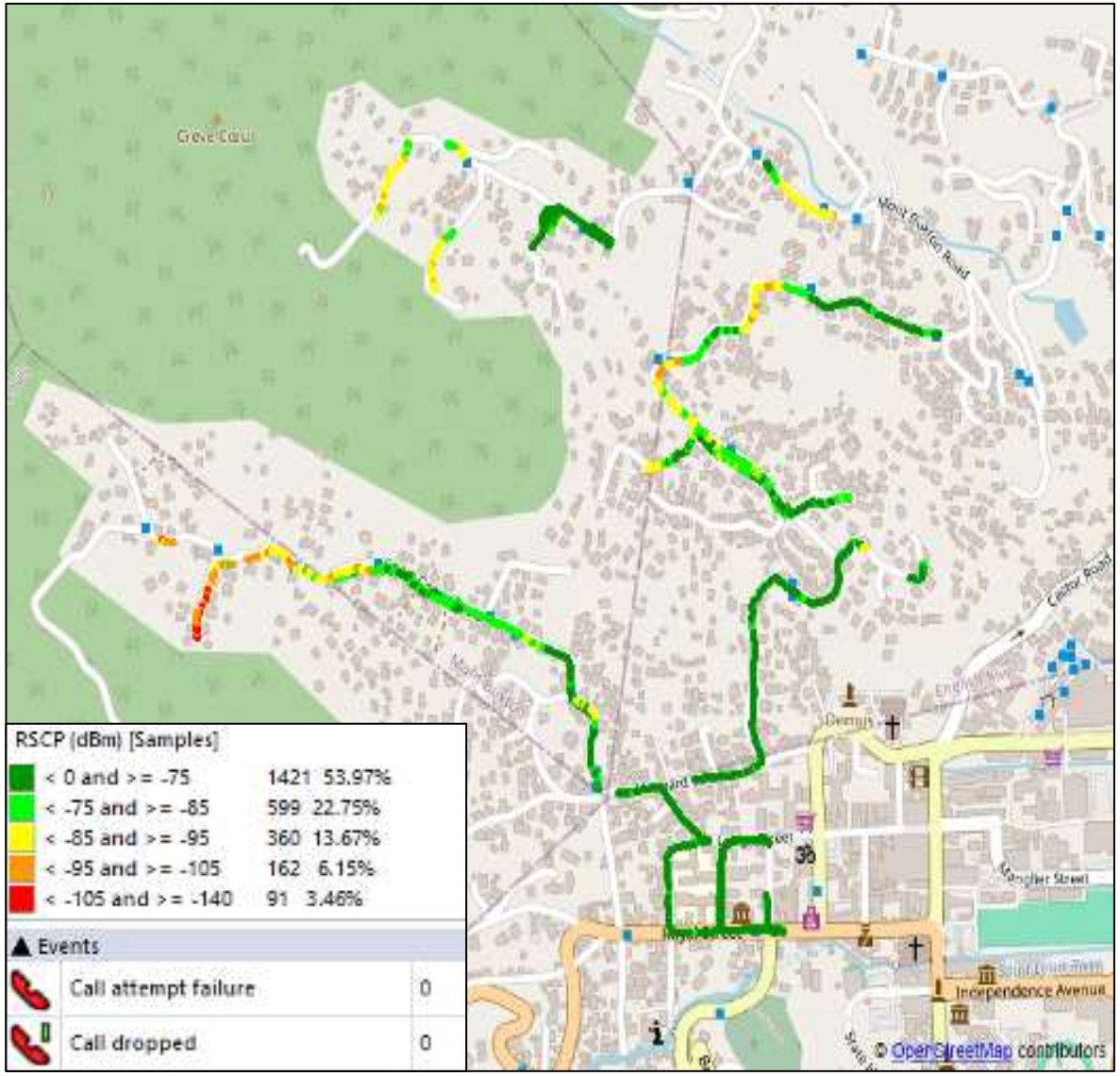


CWS SC MO

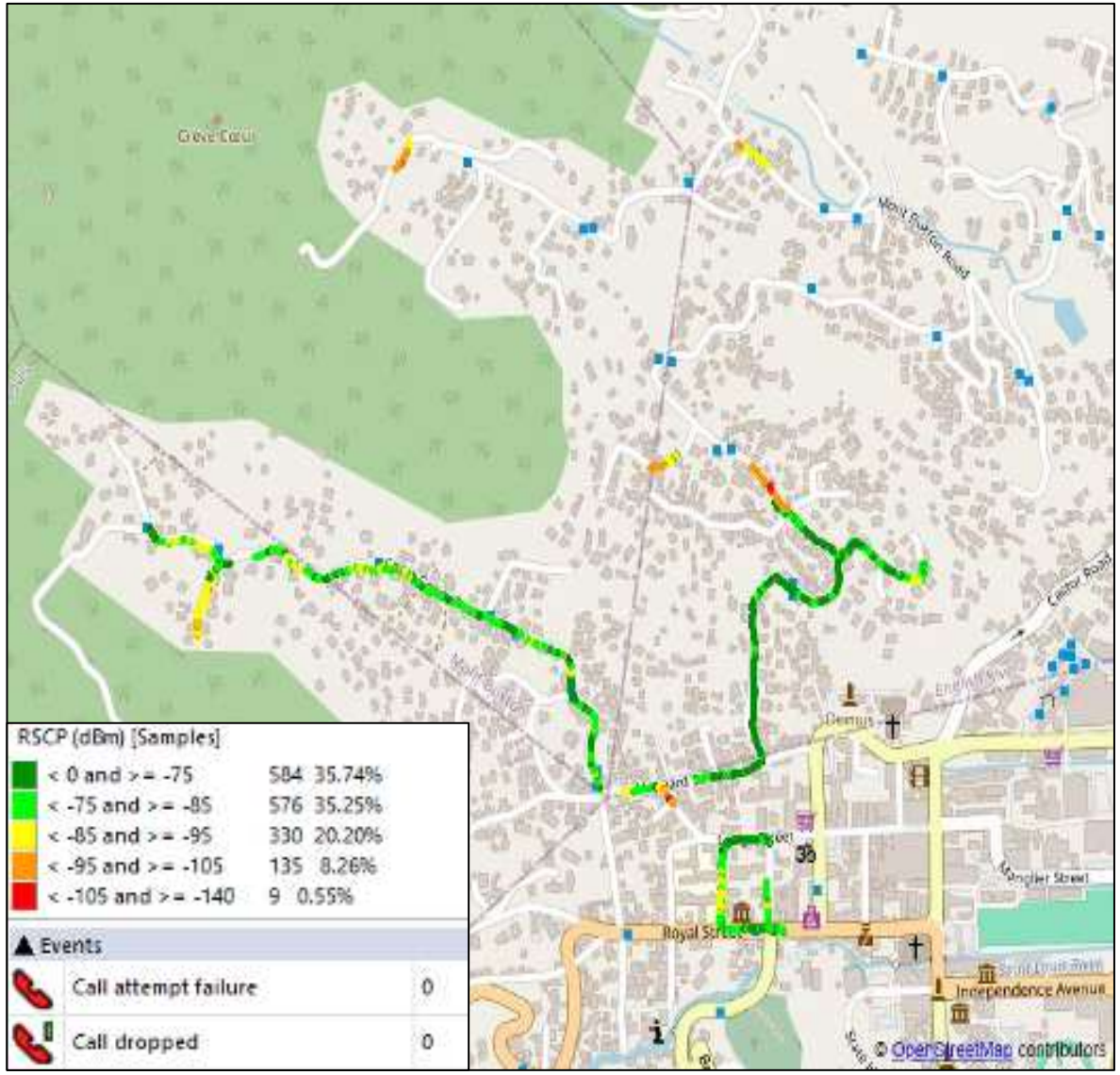


Phase-1 LONG CALL FAILURE EVENTS LOCATION vs RSCP

Airtel LC MO

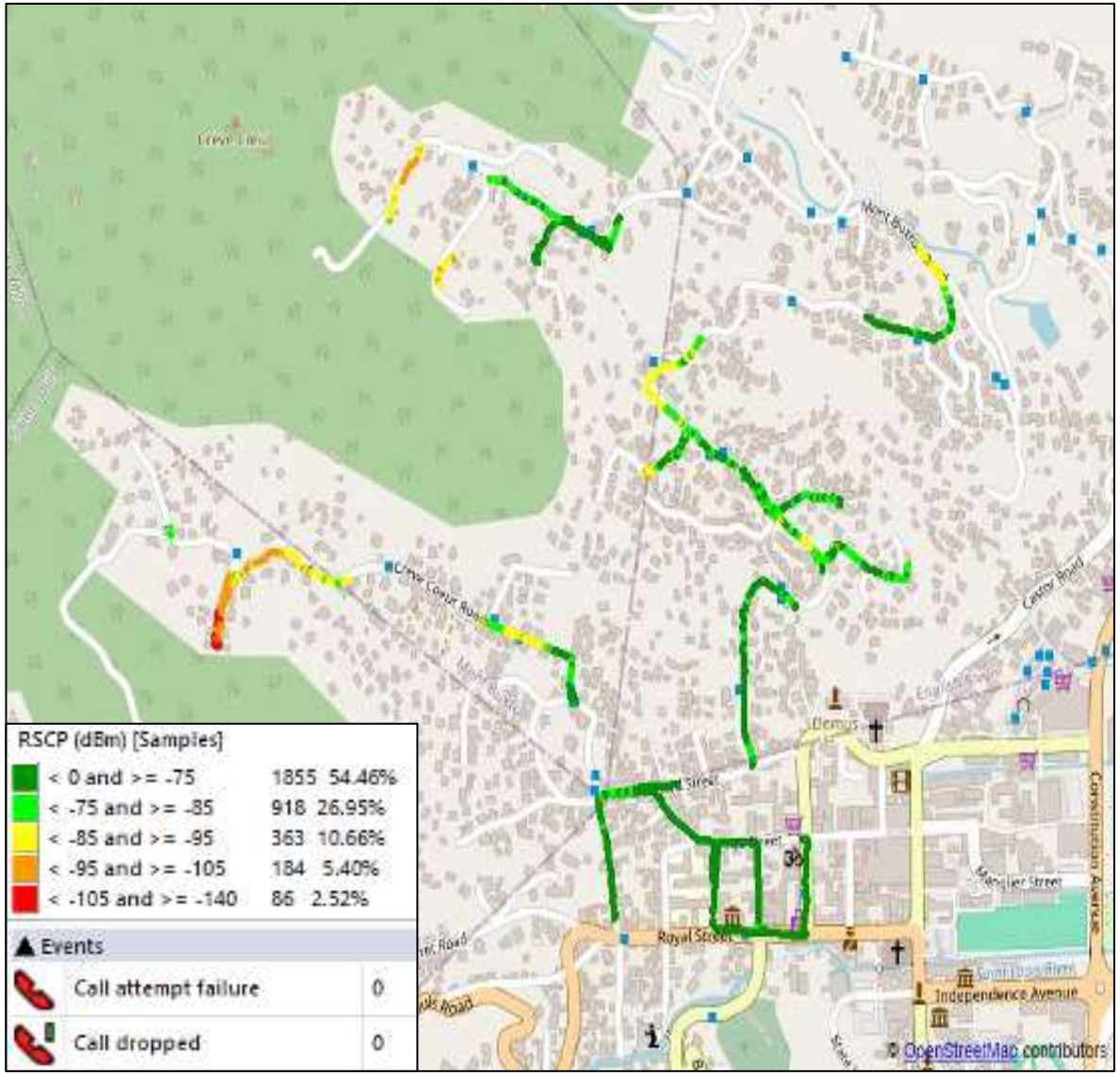


CWS LC MO

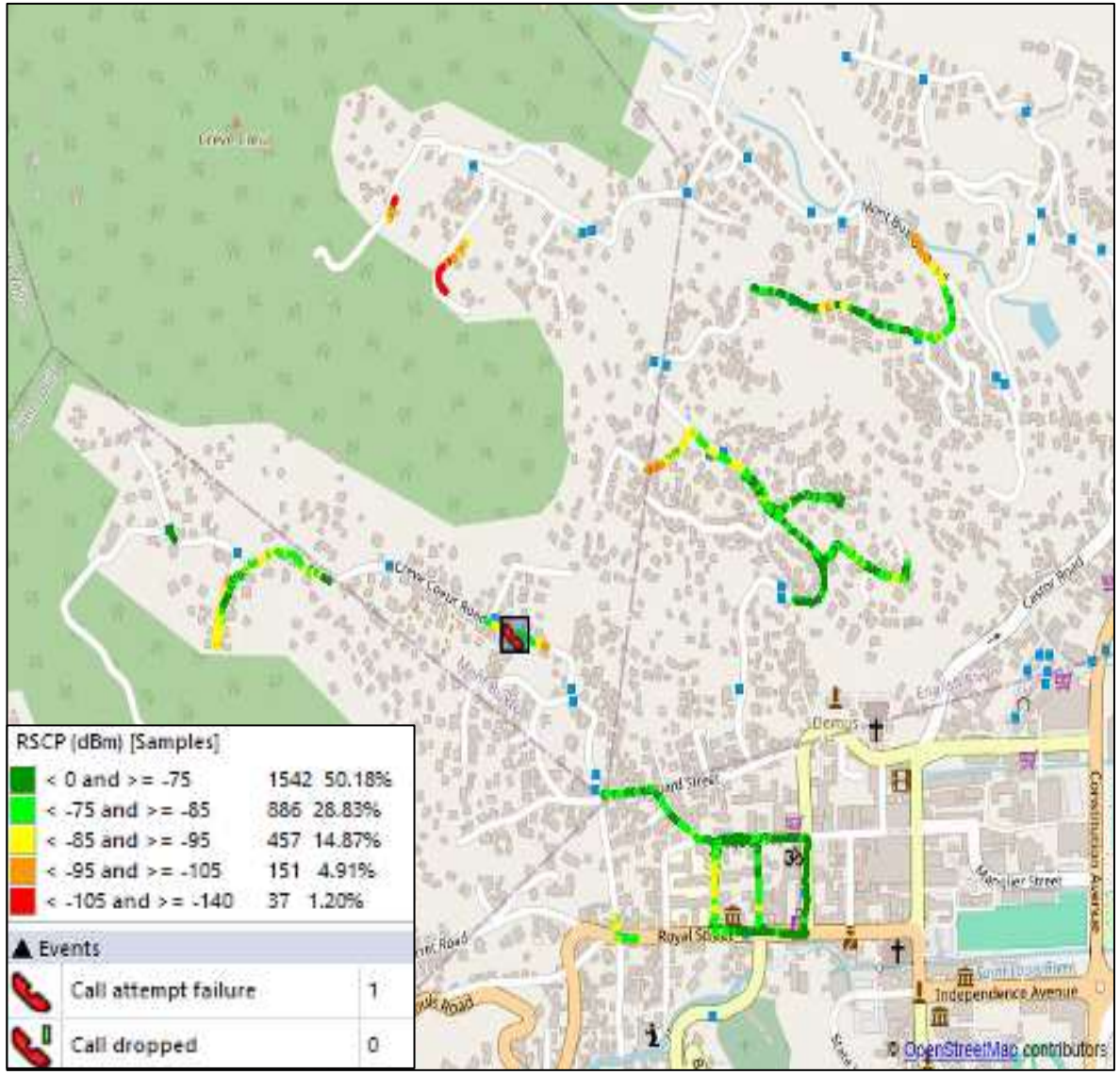


Phase-2 LONG CALL FAILURE EVENTS LOCATION vs RSCP

Airtel LC MO

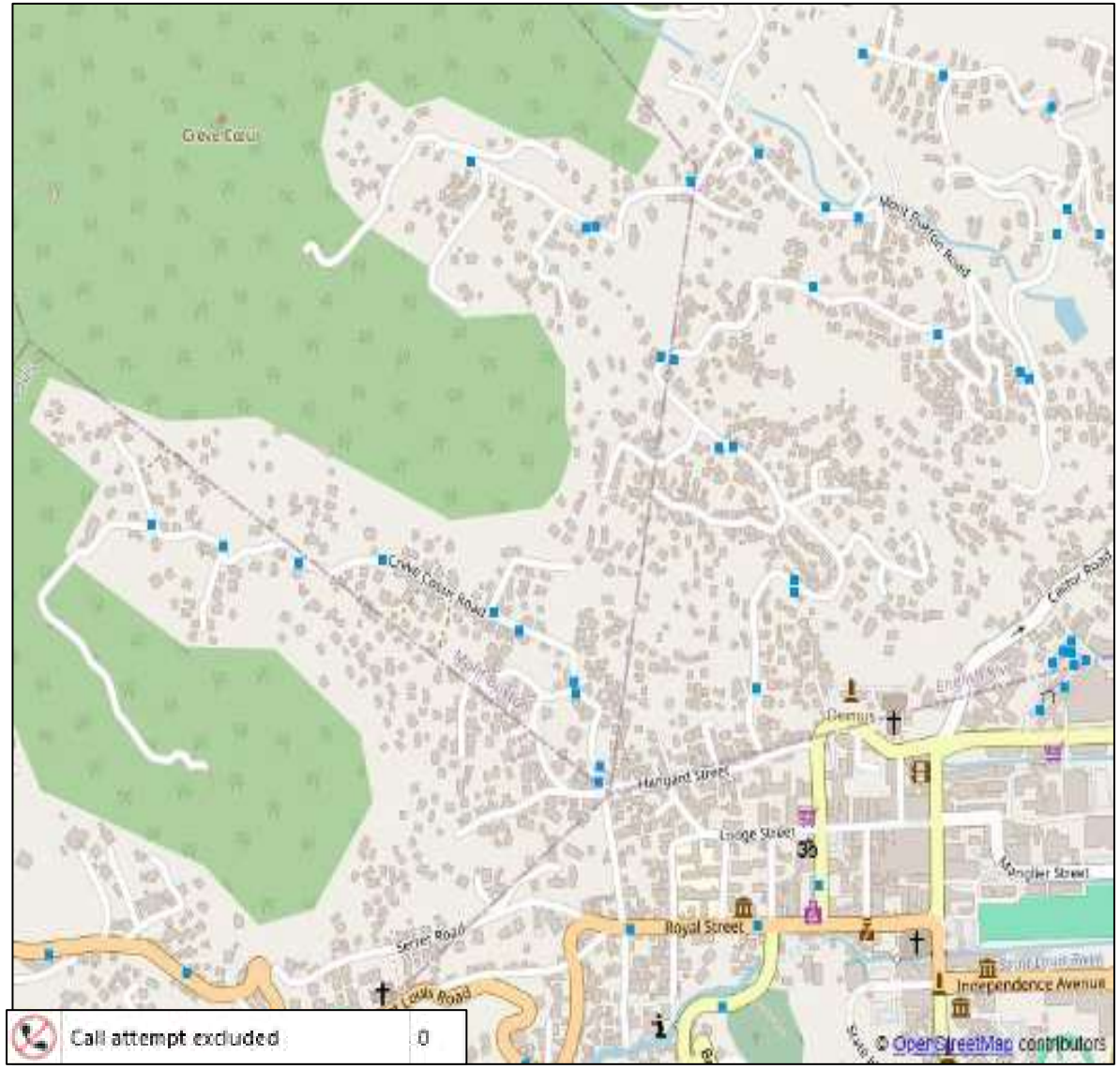


CWS LC MO

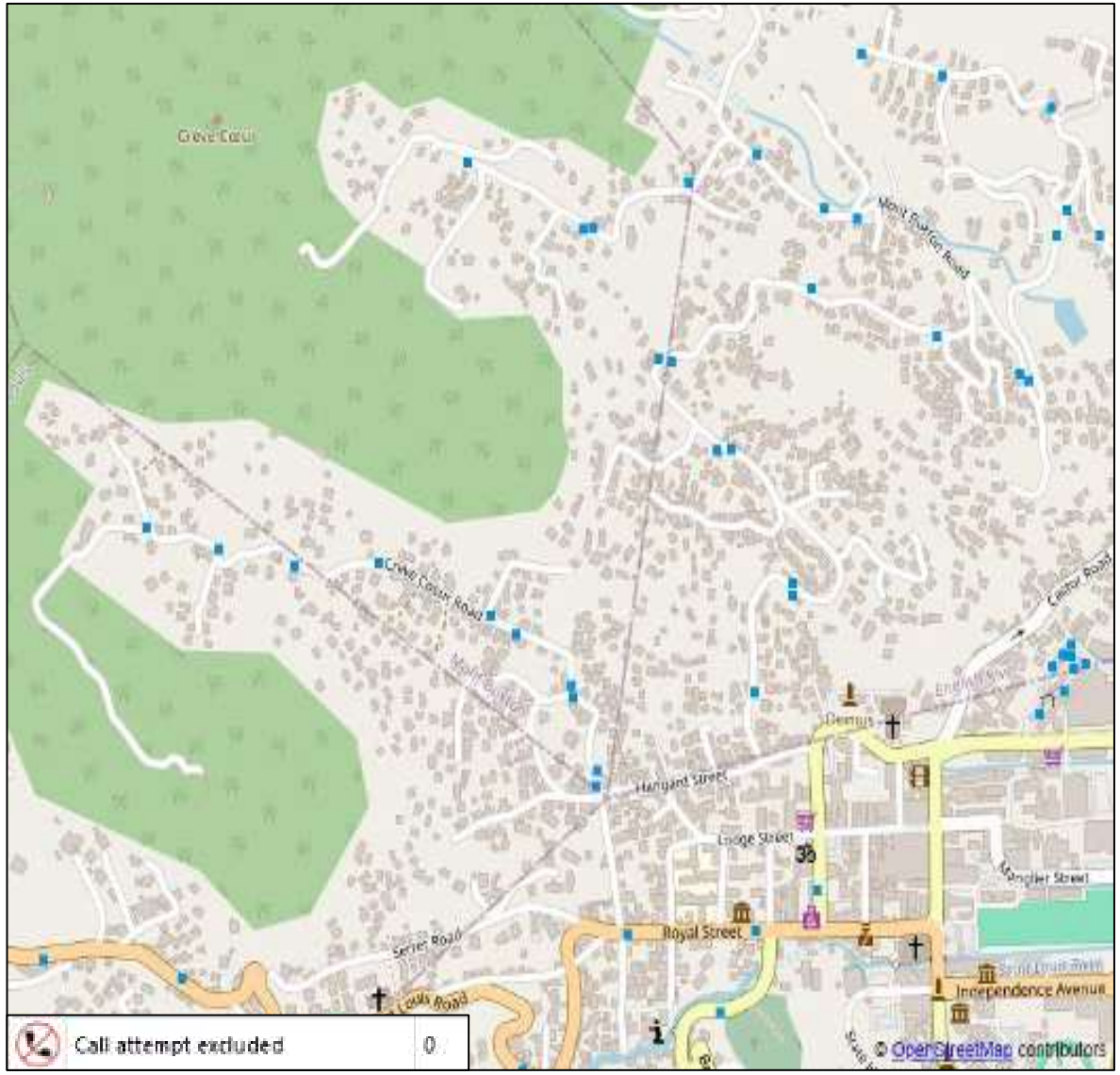


Phase-1 LONG CALL EXCLUDED EVENTS

Airtel LC MO

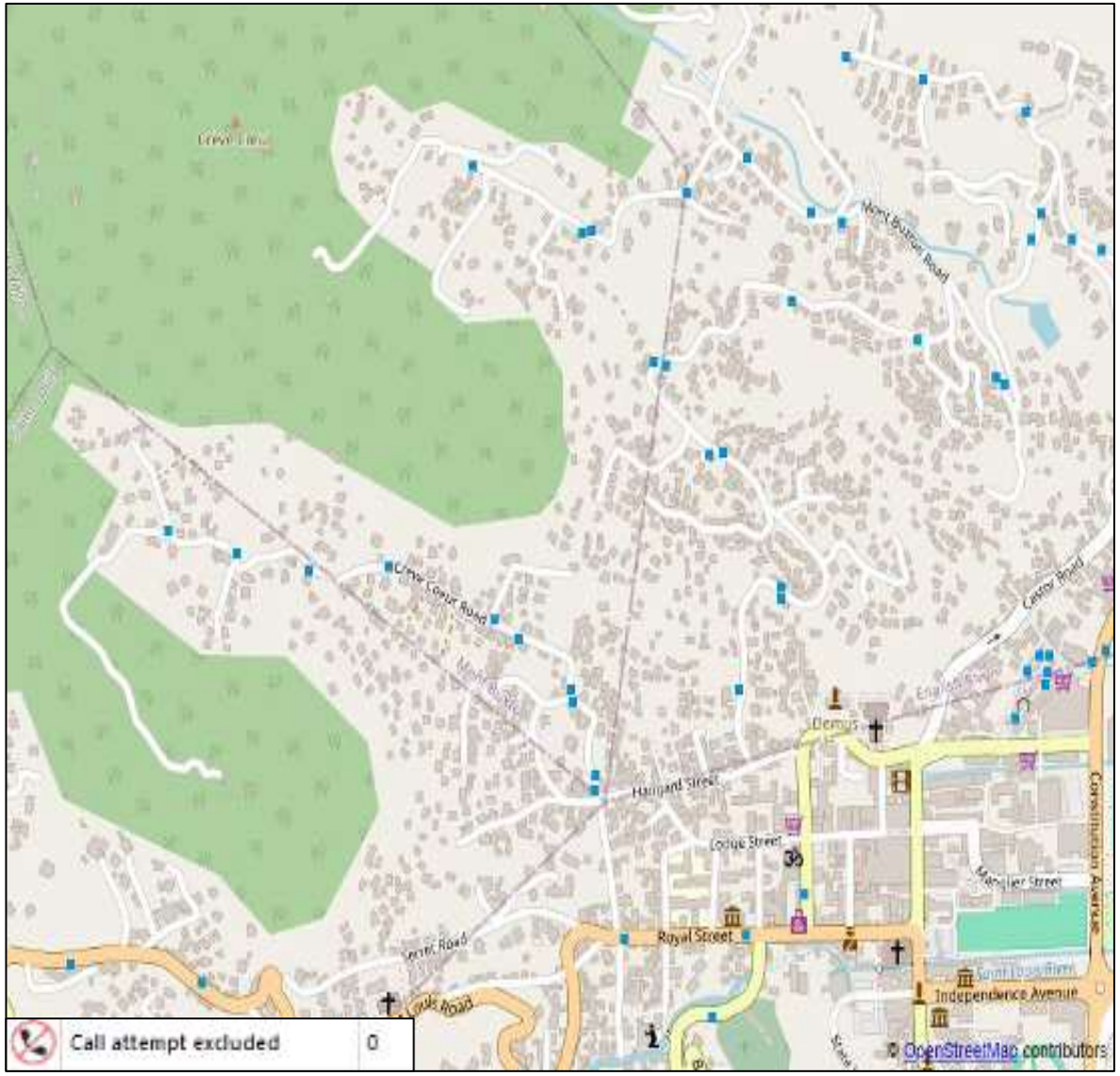


CWS LC MO

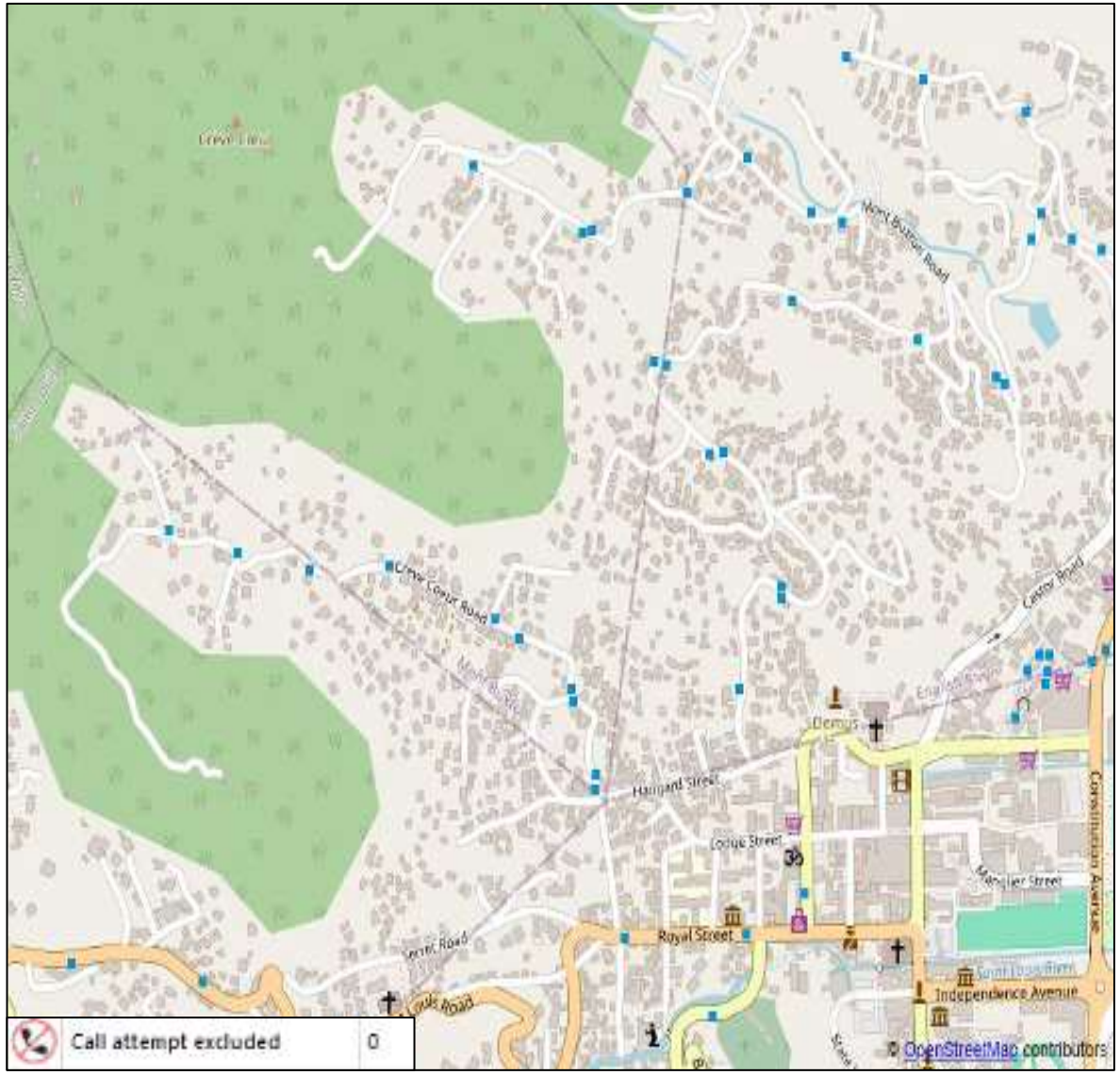


Phase-2 LONG CALL EXCLUDED EVENTS

Airtel LC MO

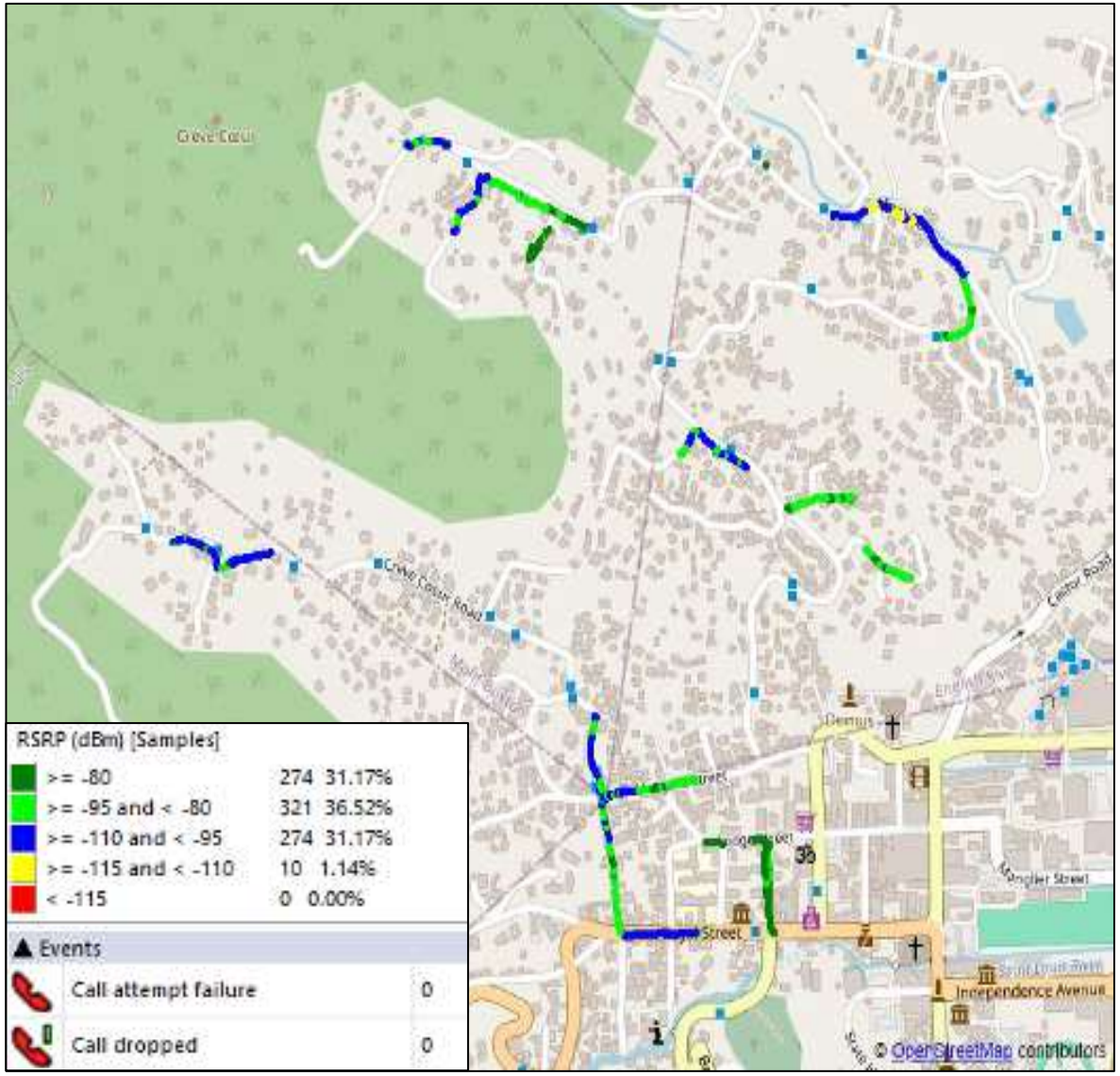


CWS LC MO

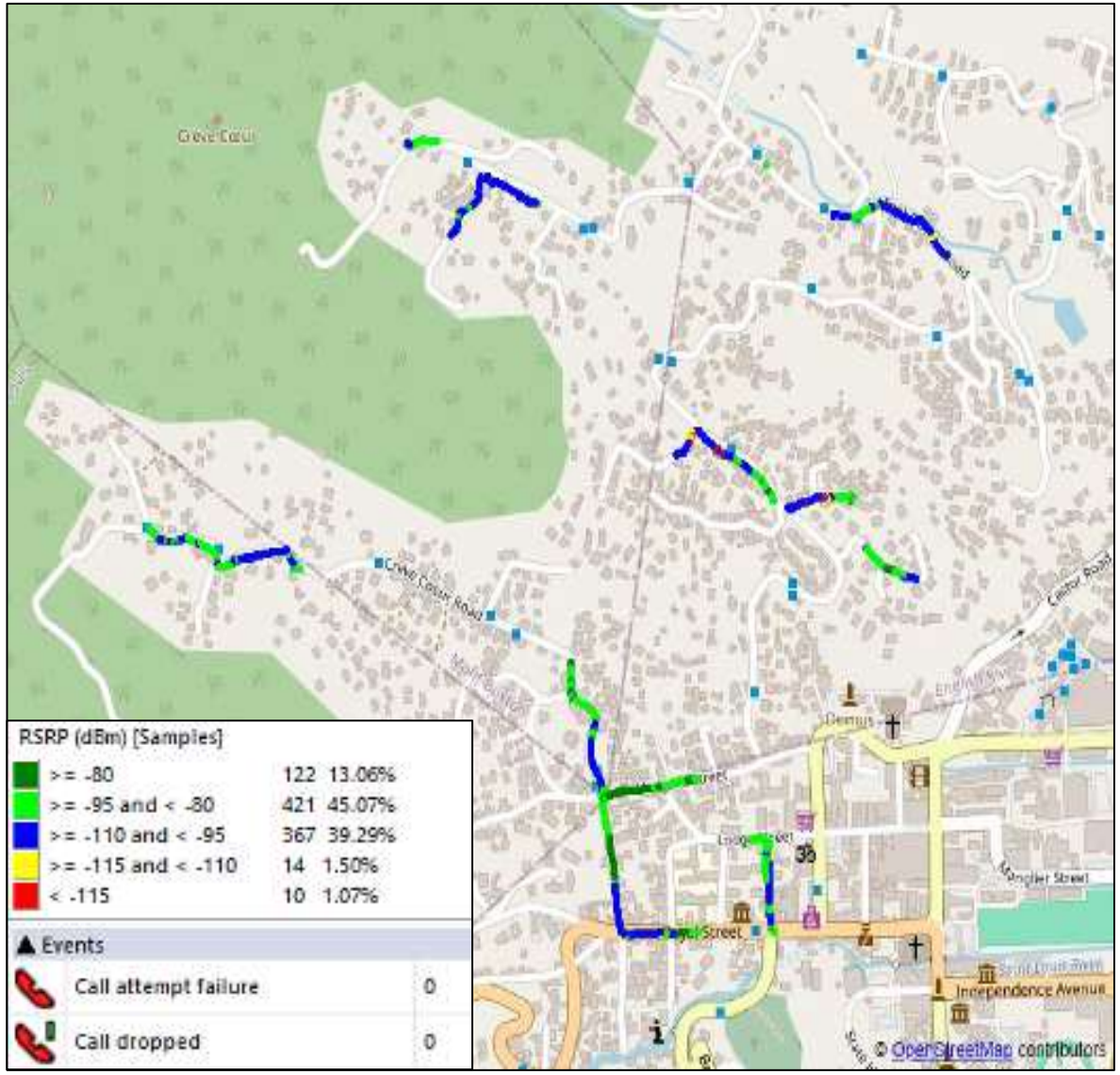


Phase-1 LONG CALL FAILURE EVENTS LOCATION vs RSRP

Airtel LC MO

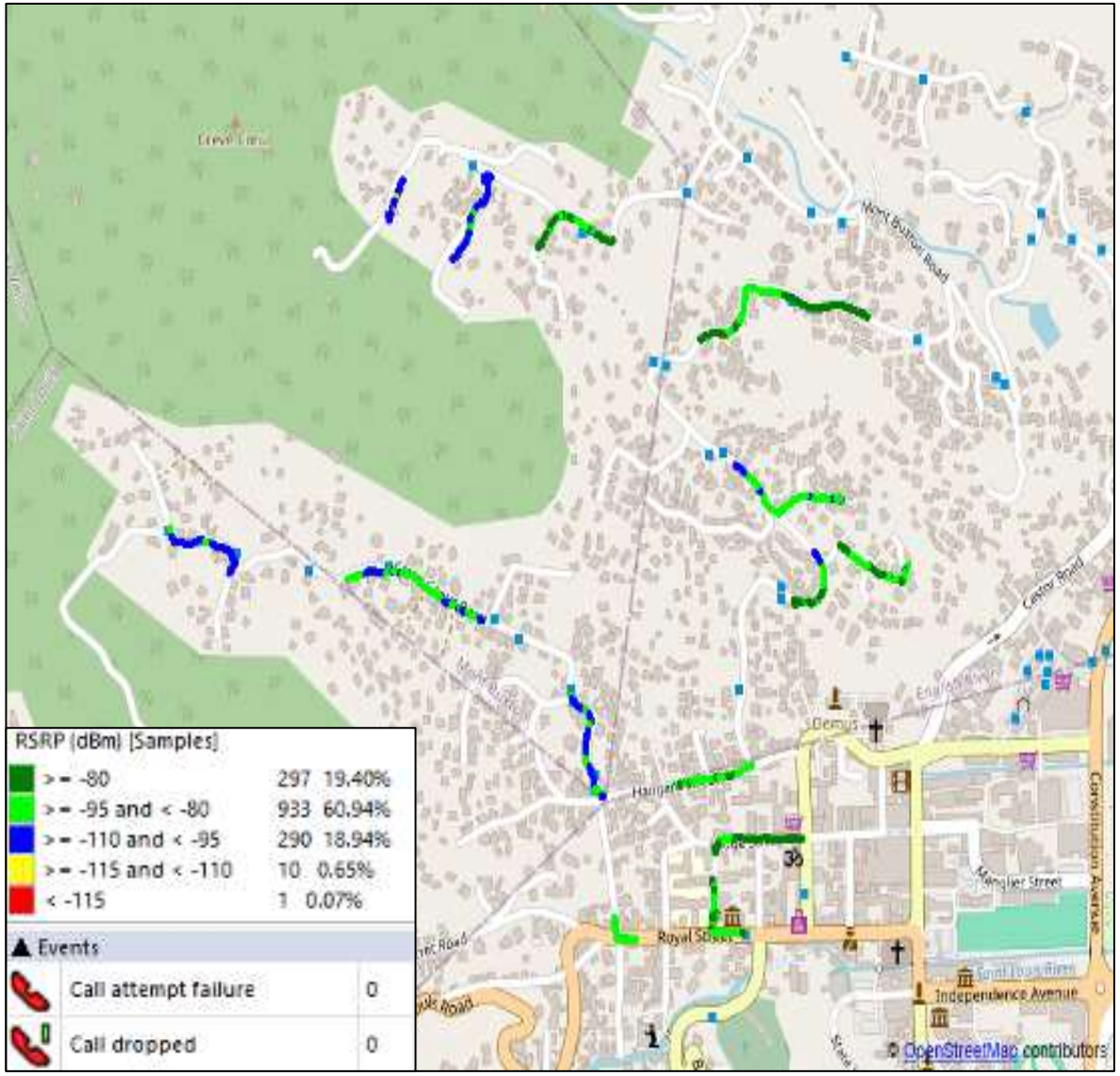


CWS LC MO

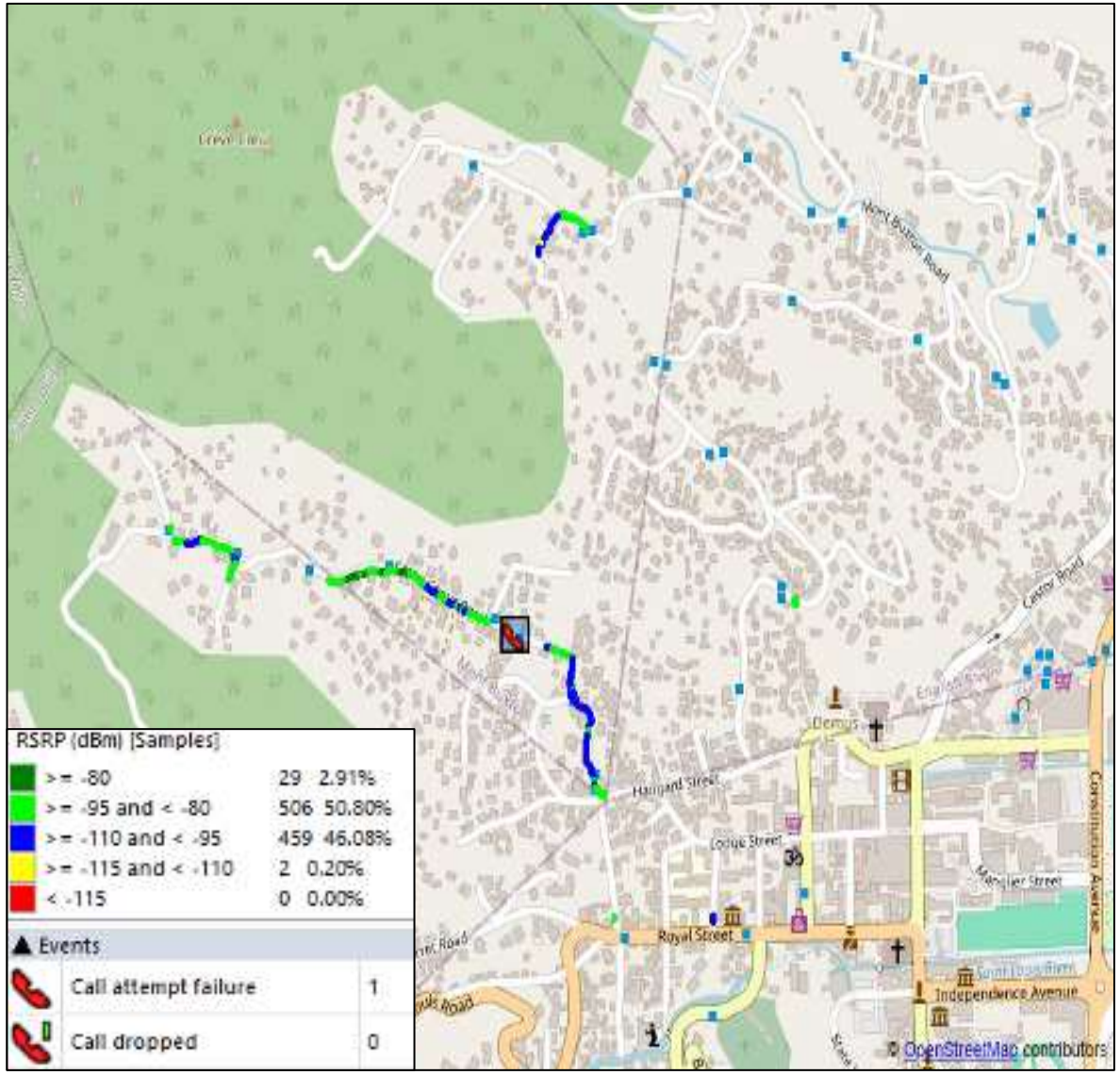


Phase-2 LONG CALL FAILURE EVENTS LOCATION vs RSRP

Airtel LC MO



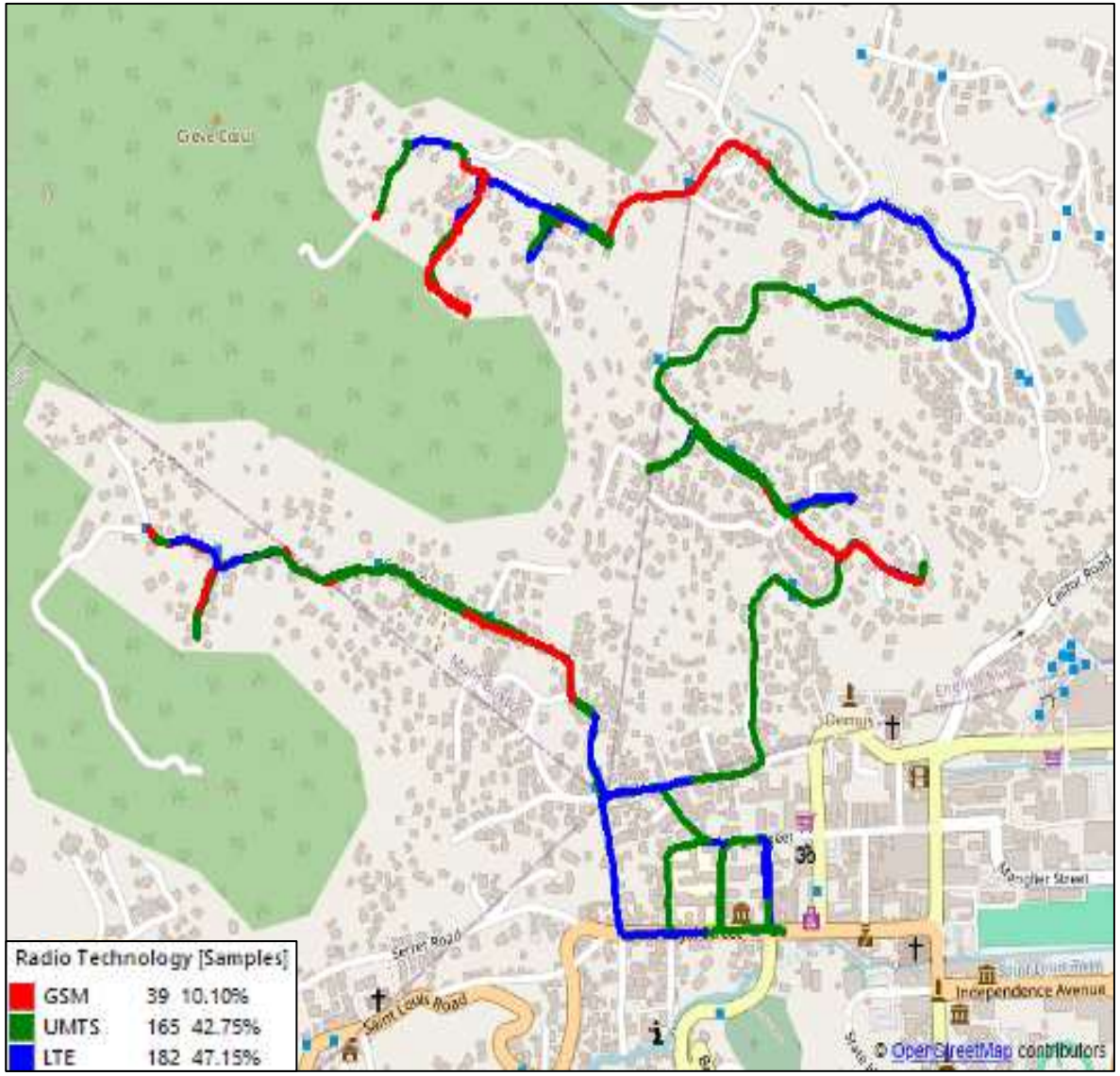
CWS LC MO



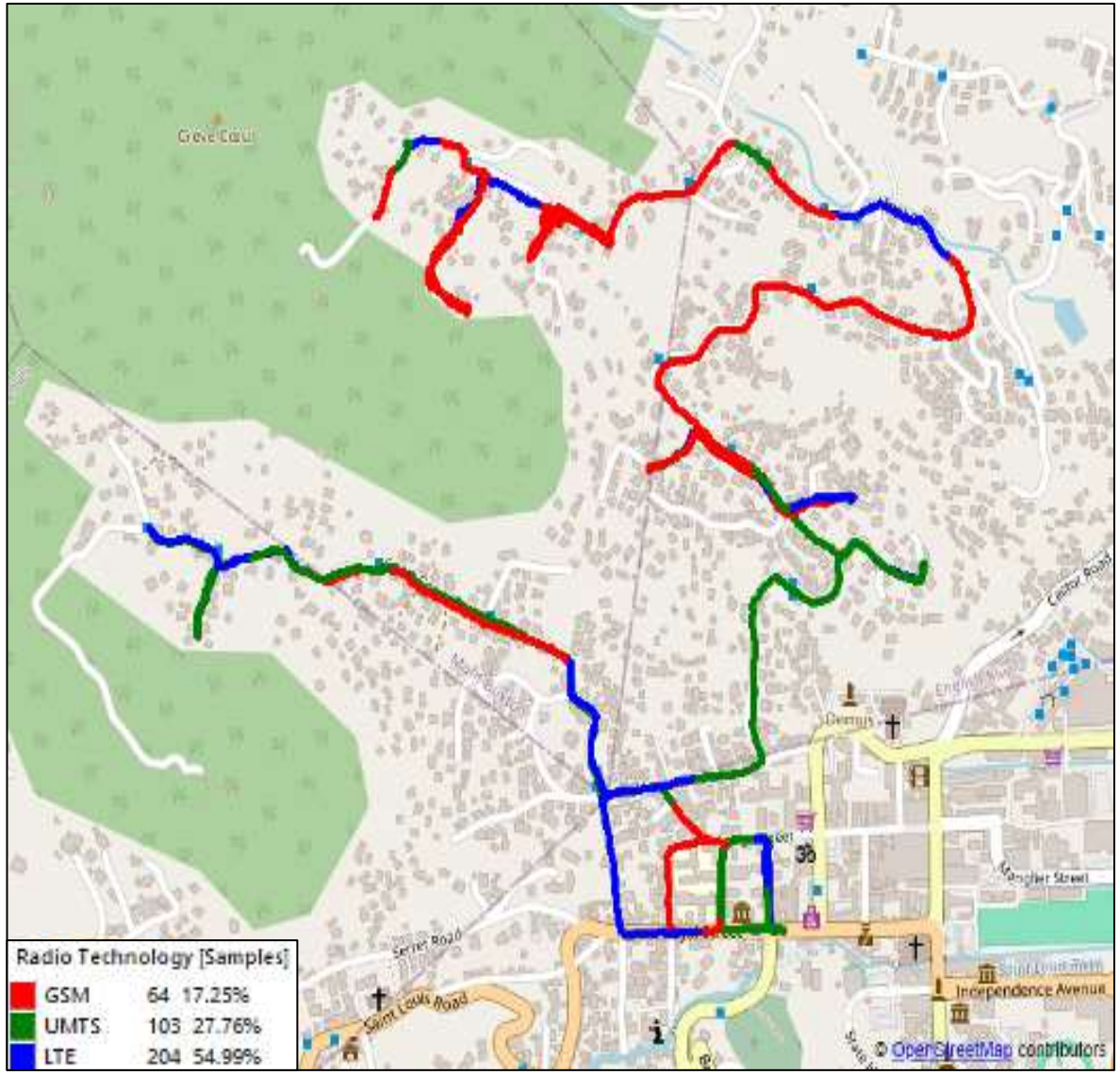
LONG CALL DRIVE PLOTS

Phase-1 Long Call RADIO TECHNOLOGY PLOT

Airtel LC MO

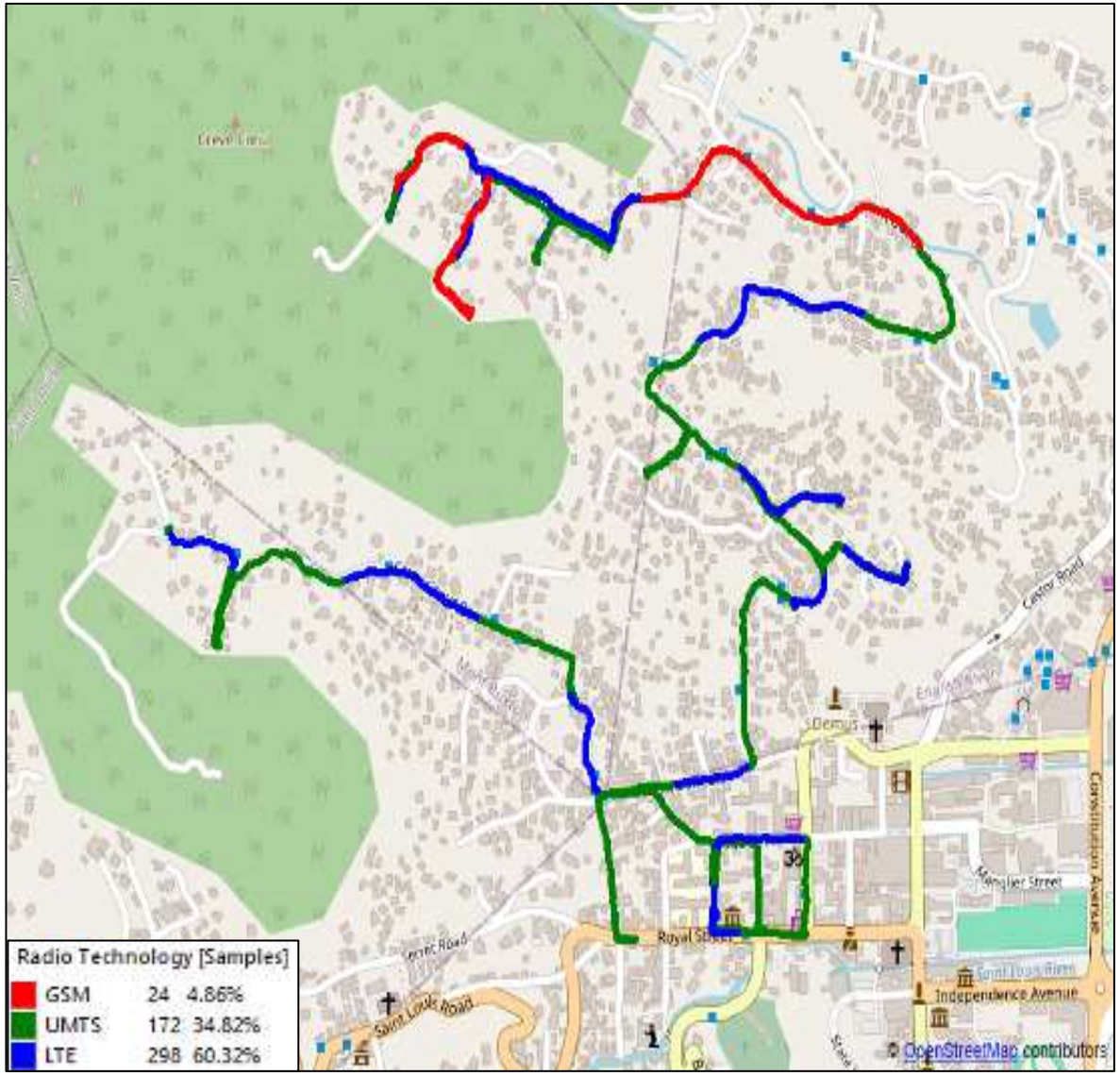


CWS LC MO

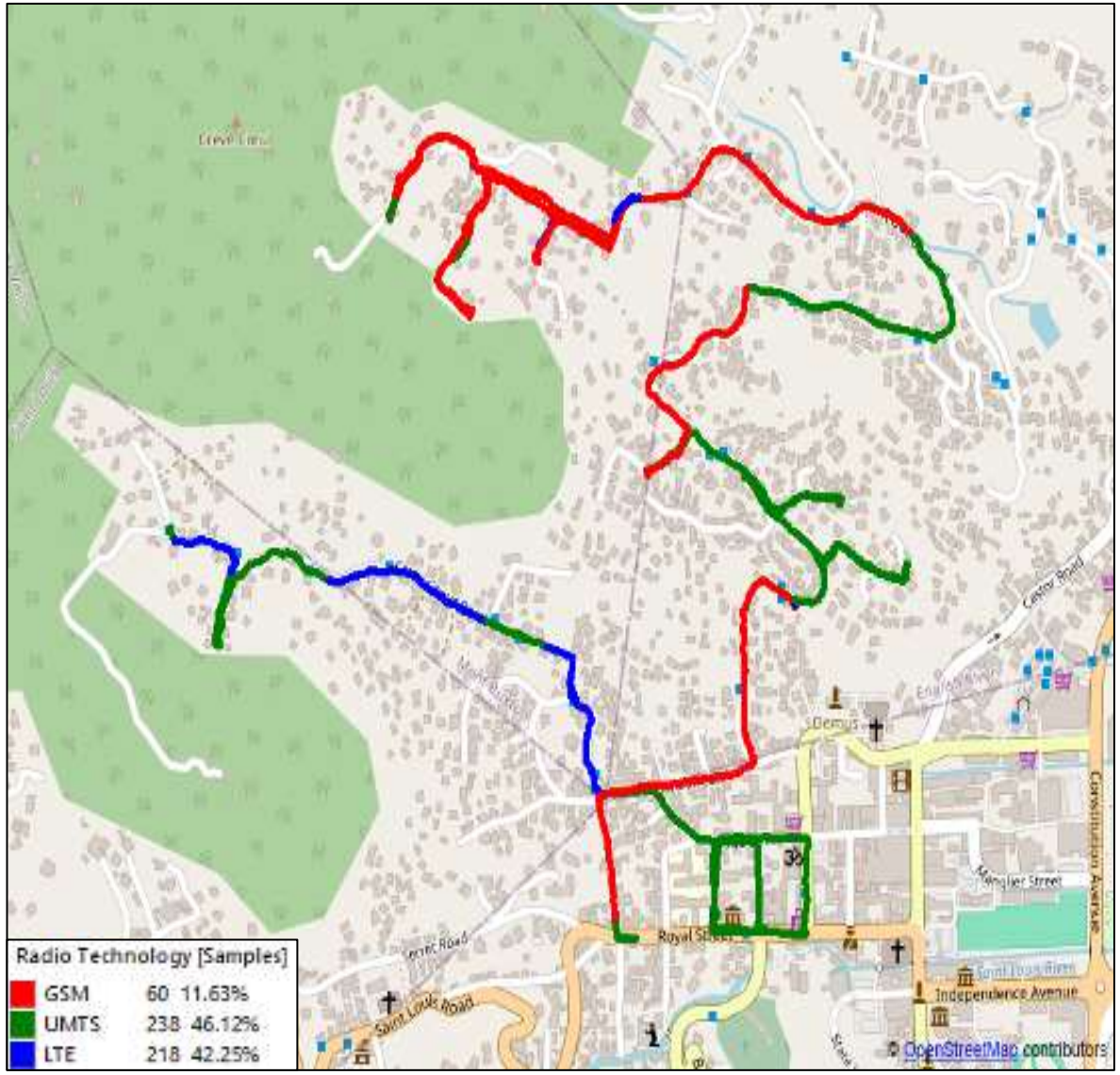


Phase-2 Long Call RADIO TECHNOLOGY PLOT

Airtel LC MO

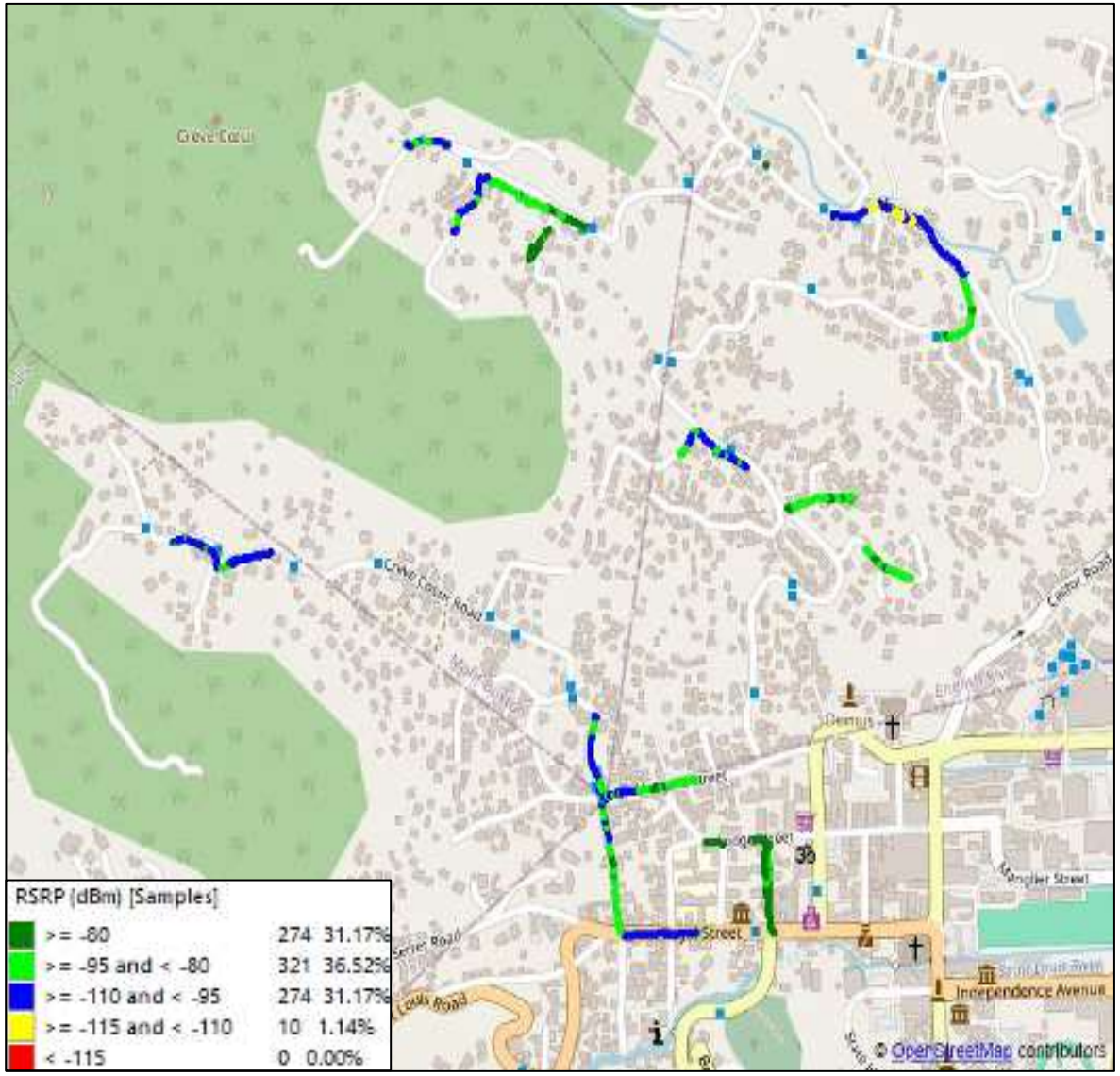


CWS LC MO

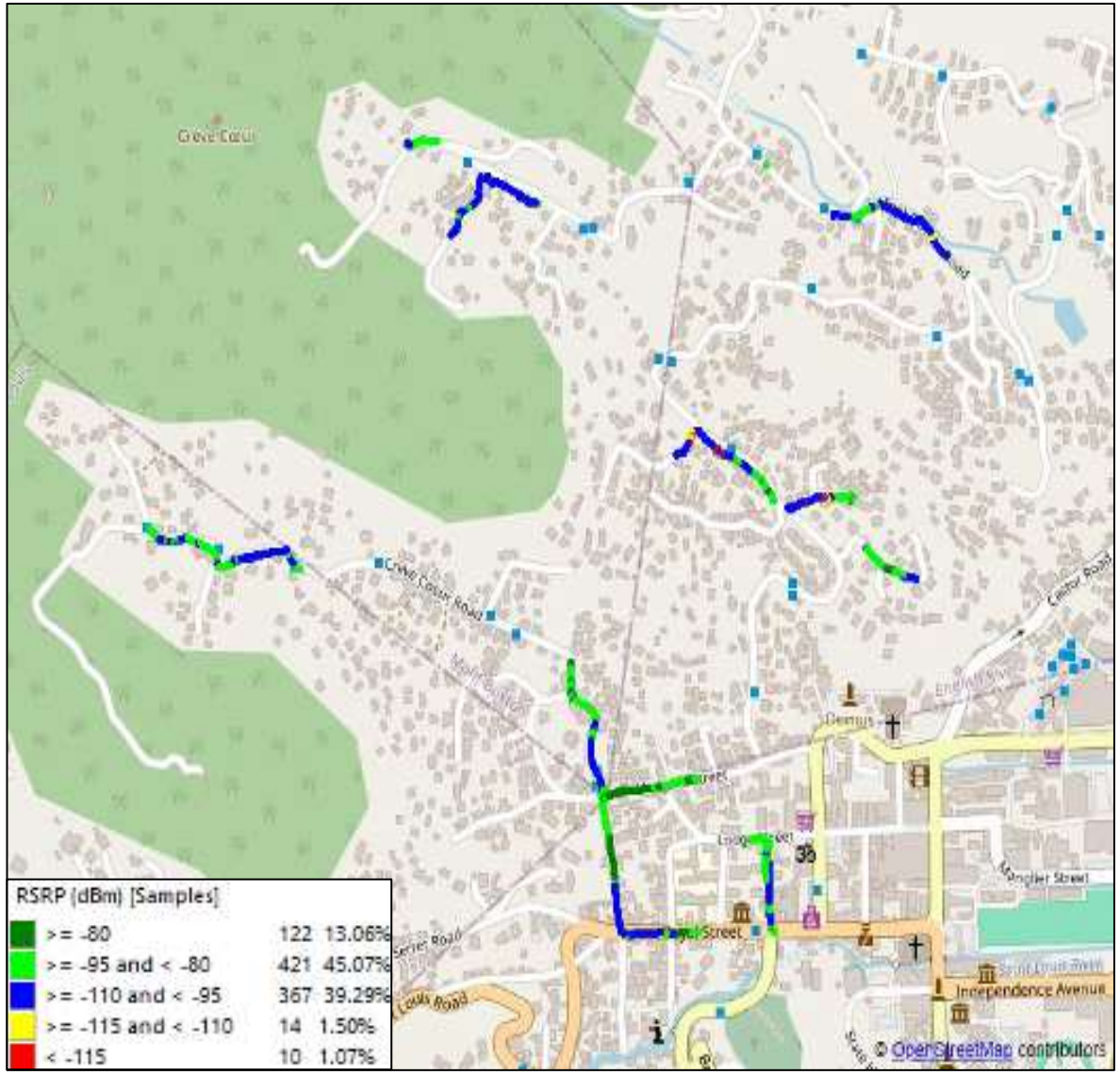


Phase-1 Long Call RSRP PLOT

Airtel LC MO

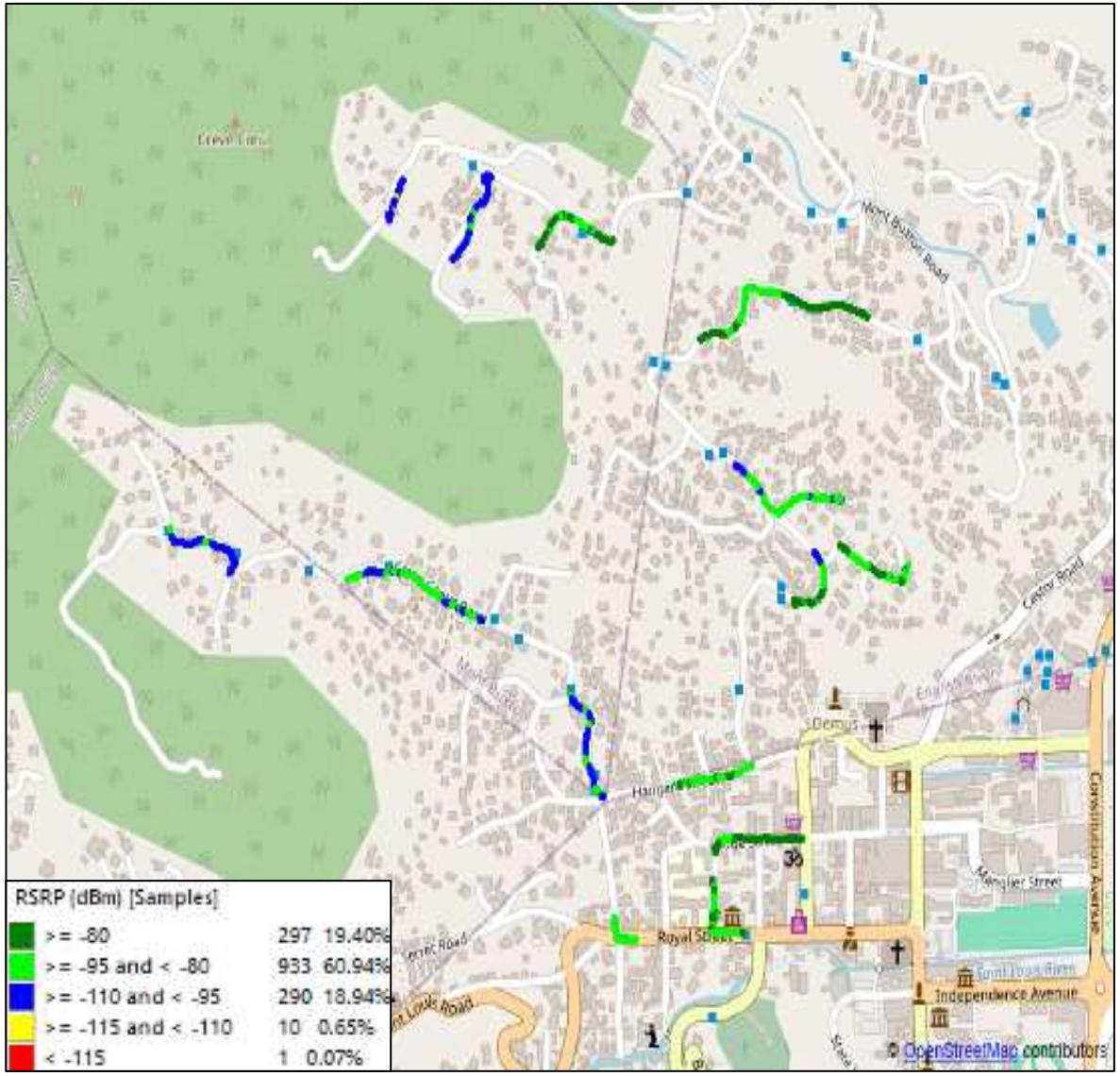


CWS LC MO

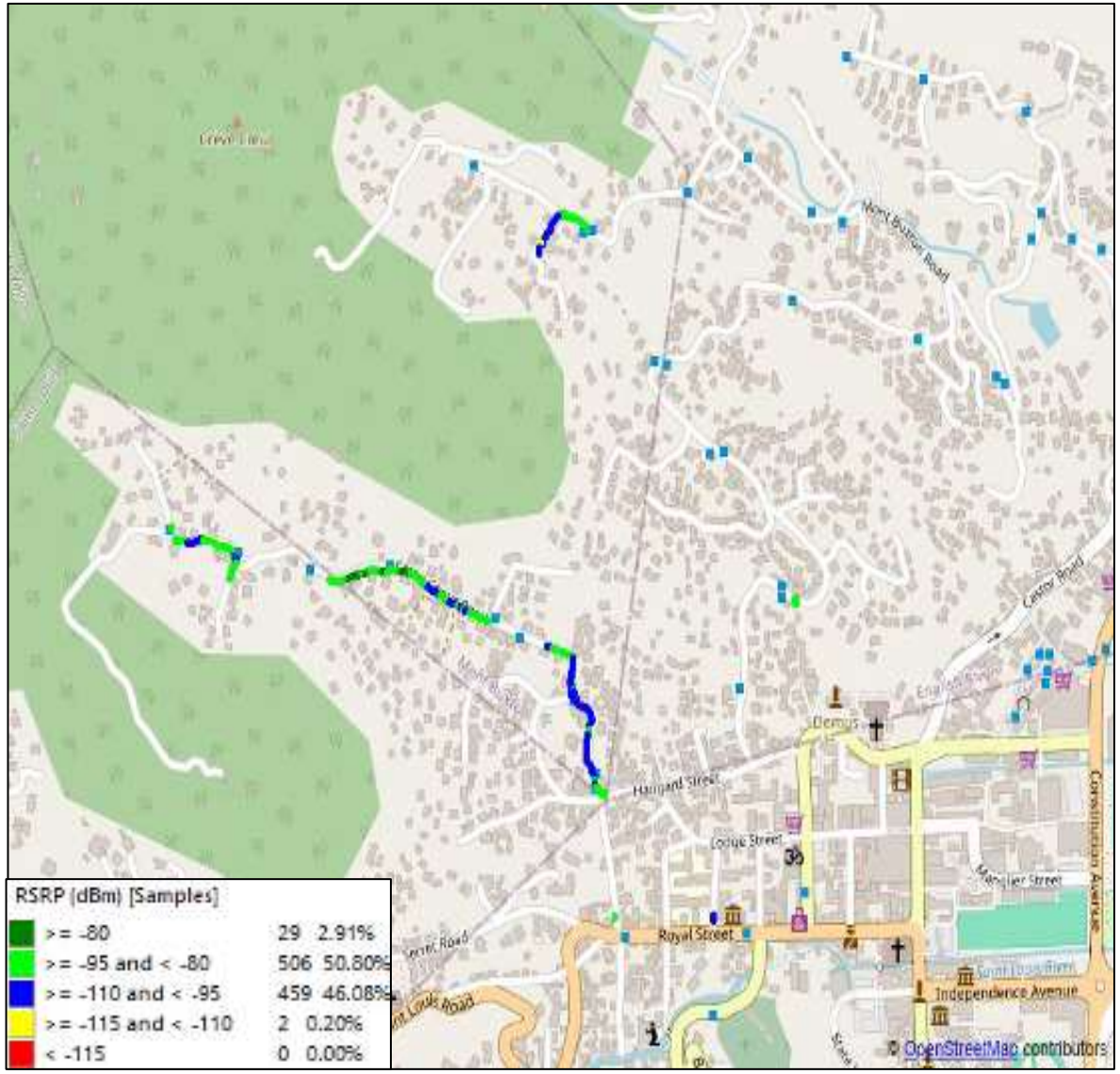


Phase-2 Long Call RSRP PLOT

Airtel LC MO

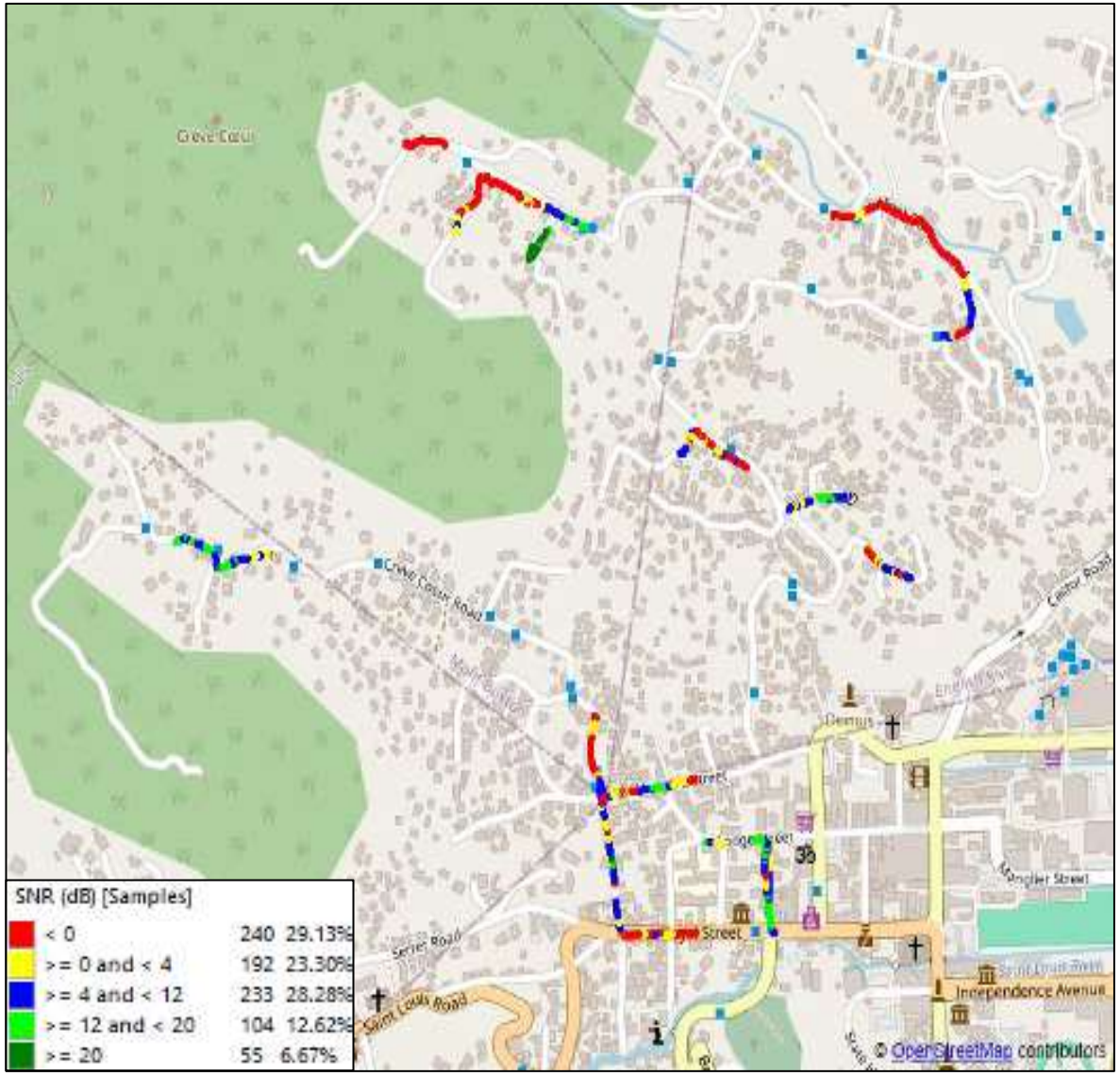


CWS LC MO

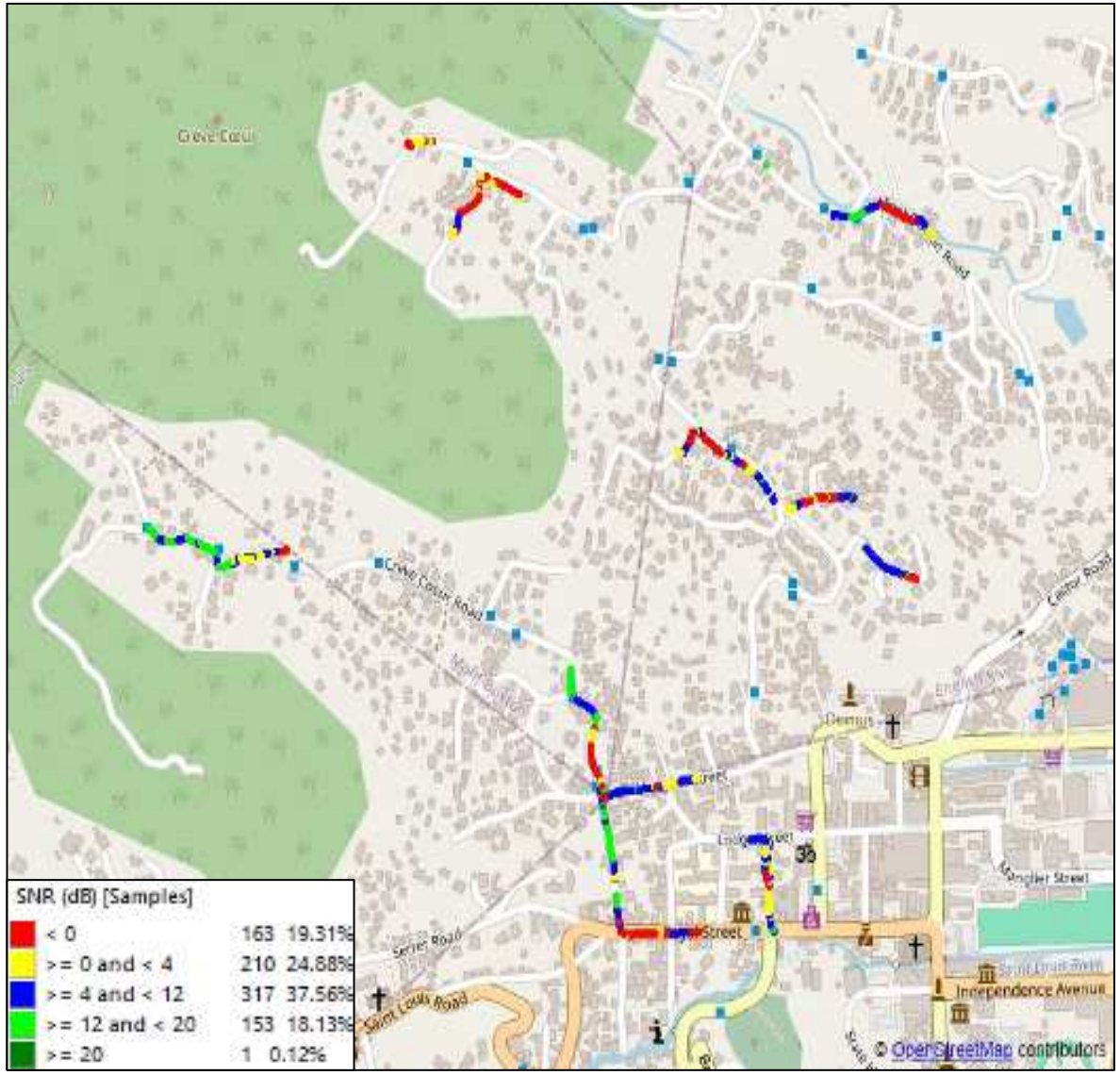


Phase-1 Long Call SINR PLOT

Airtel LC MO

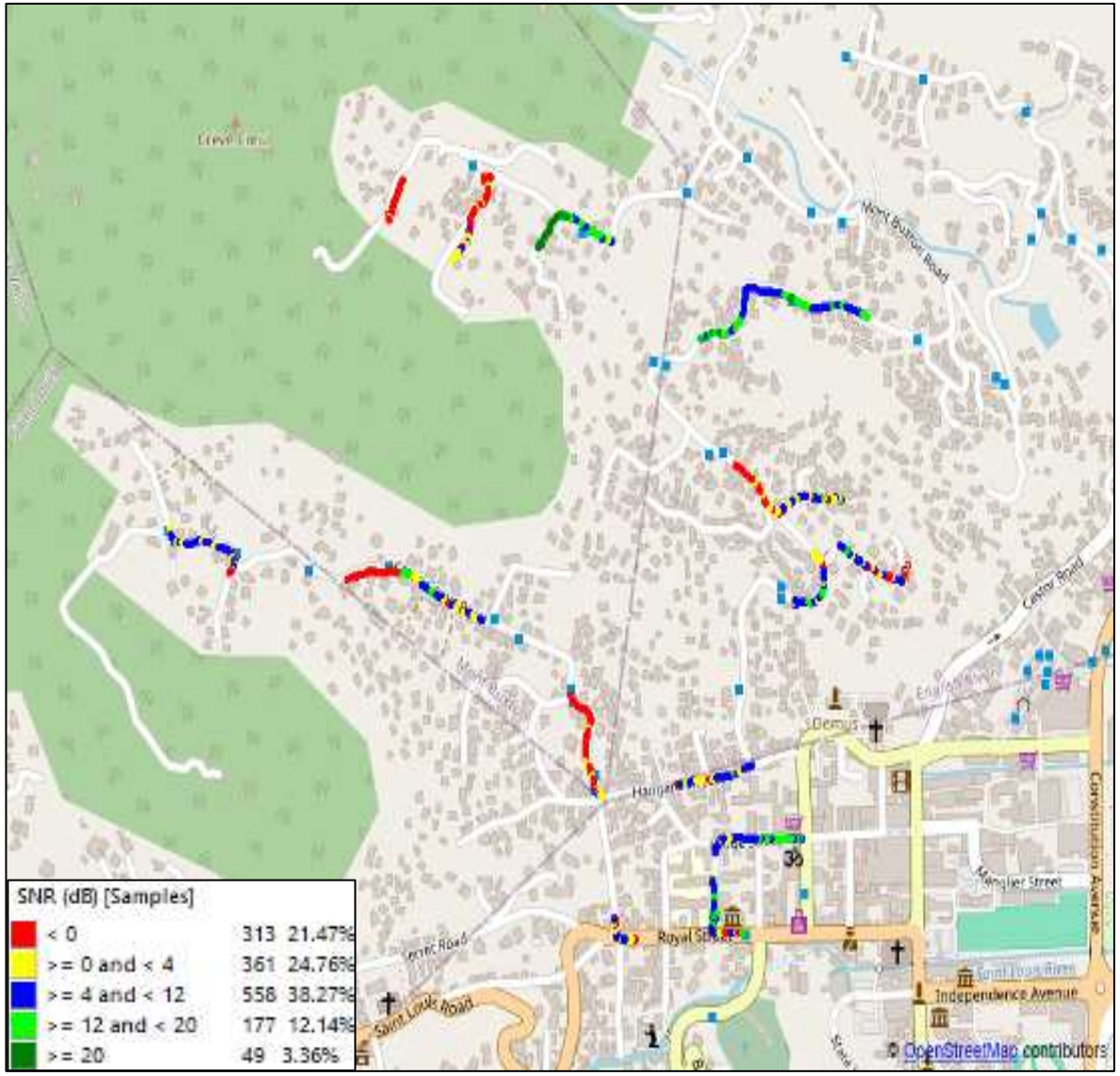


CWS LC MO

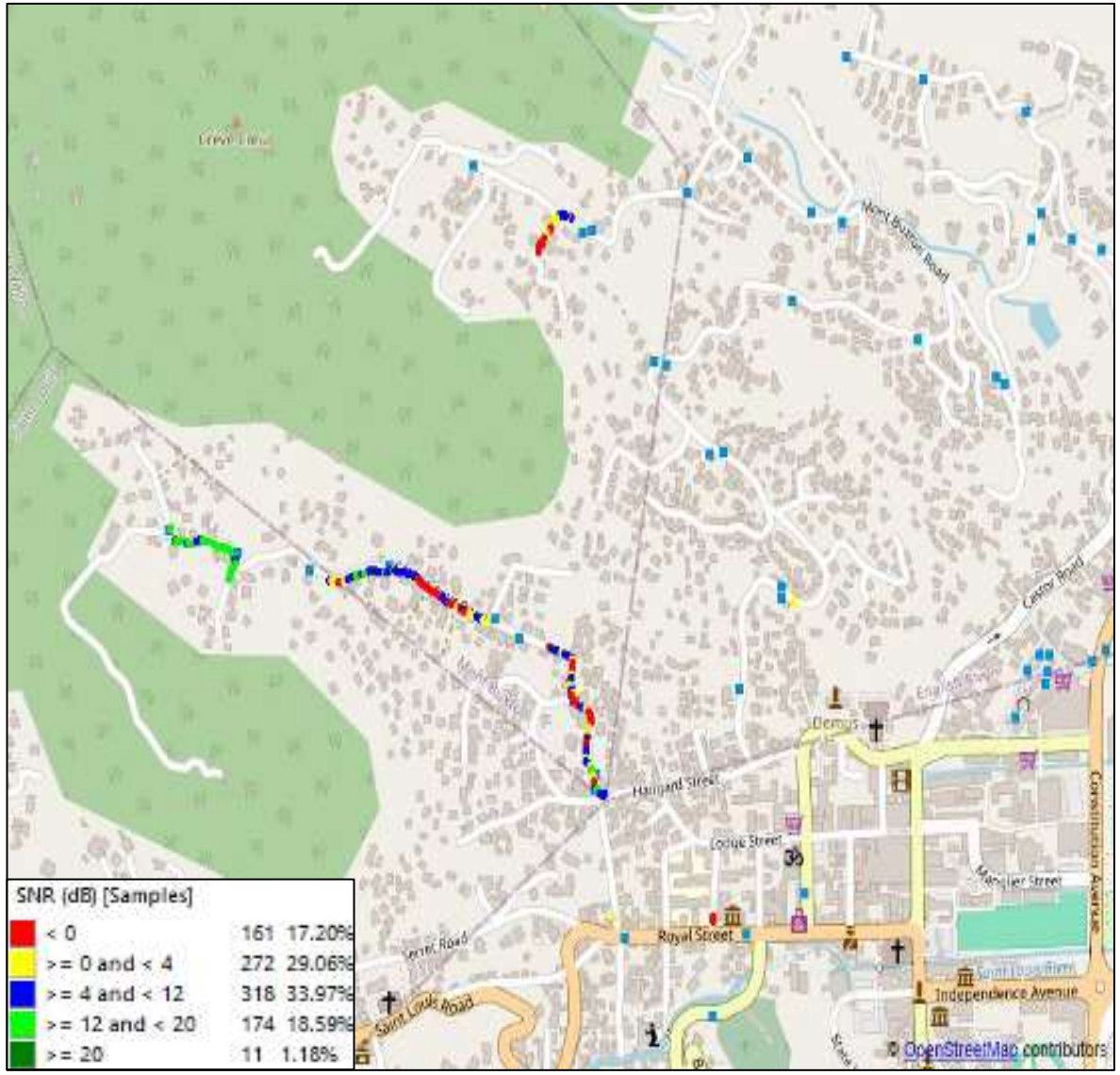


Phase-2 Long Call SINR PLOT

Airtel LC MO

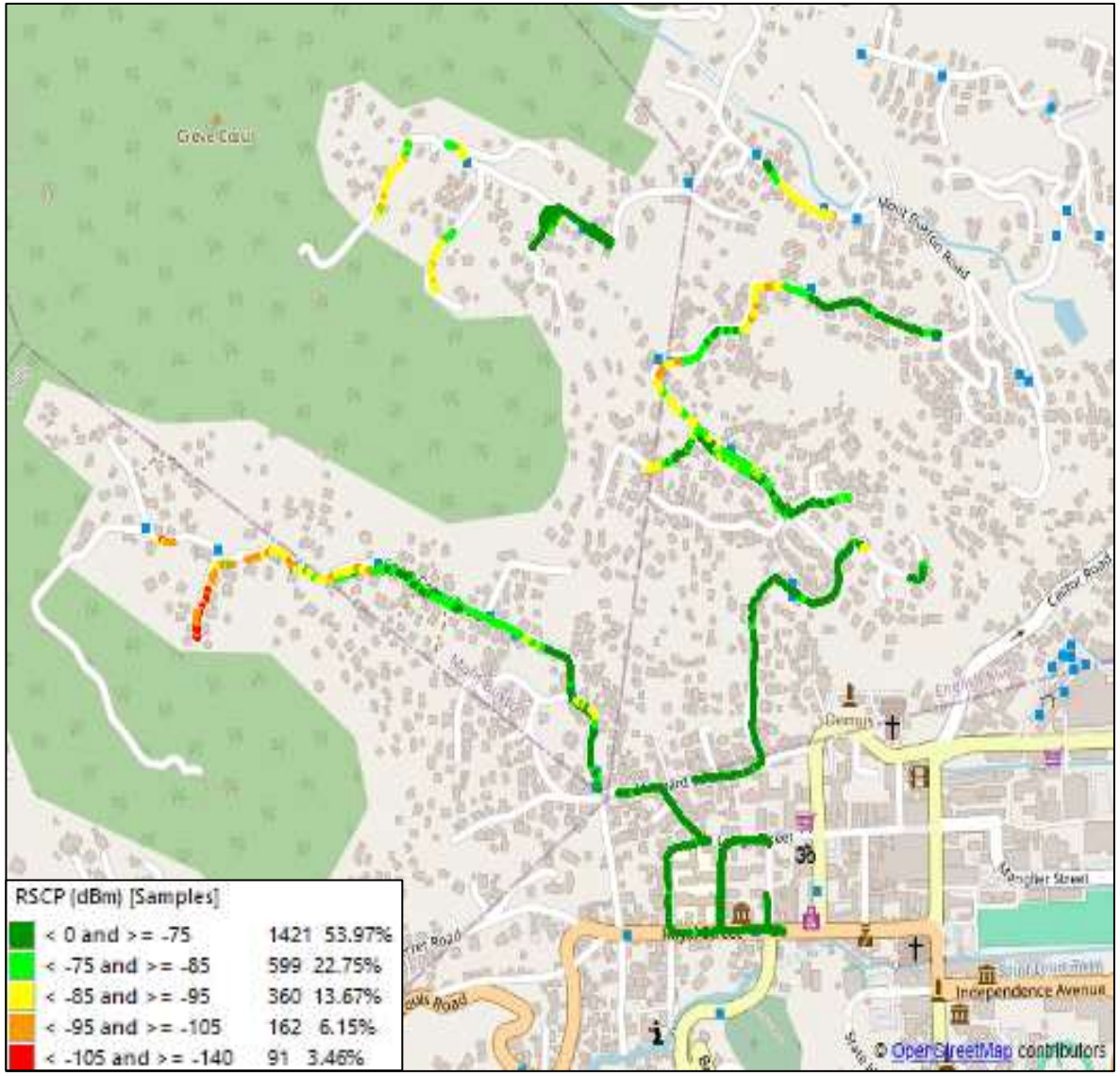


CWS LC MO

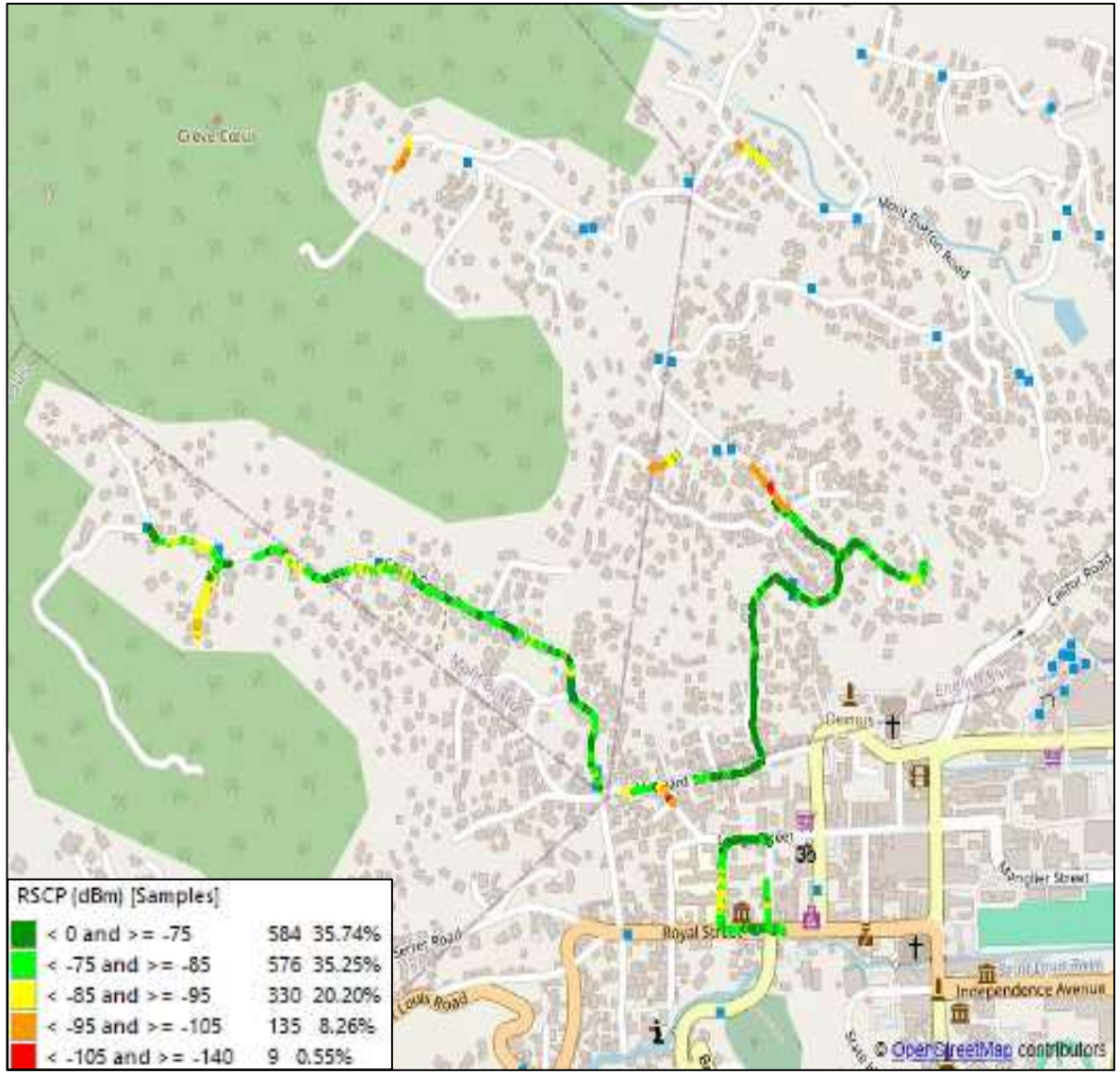


Phase-1 Long Call RSCP PLOT

Airtel LC MO

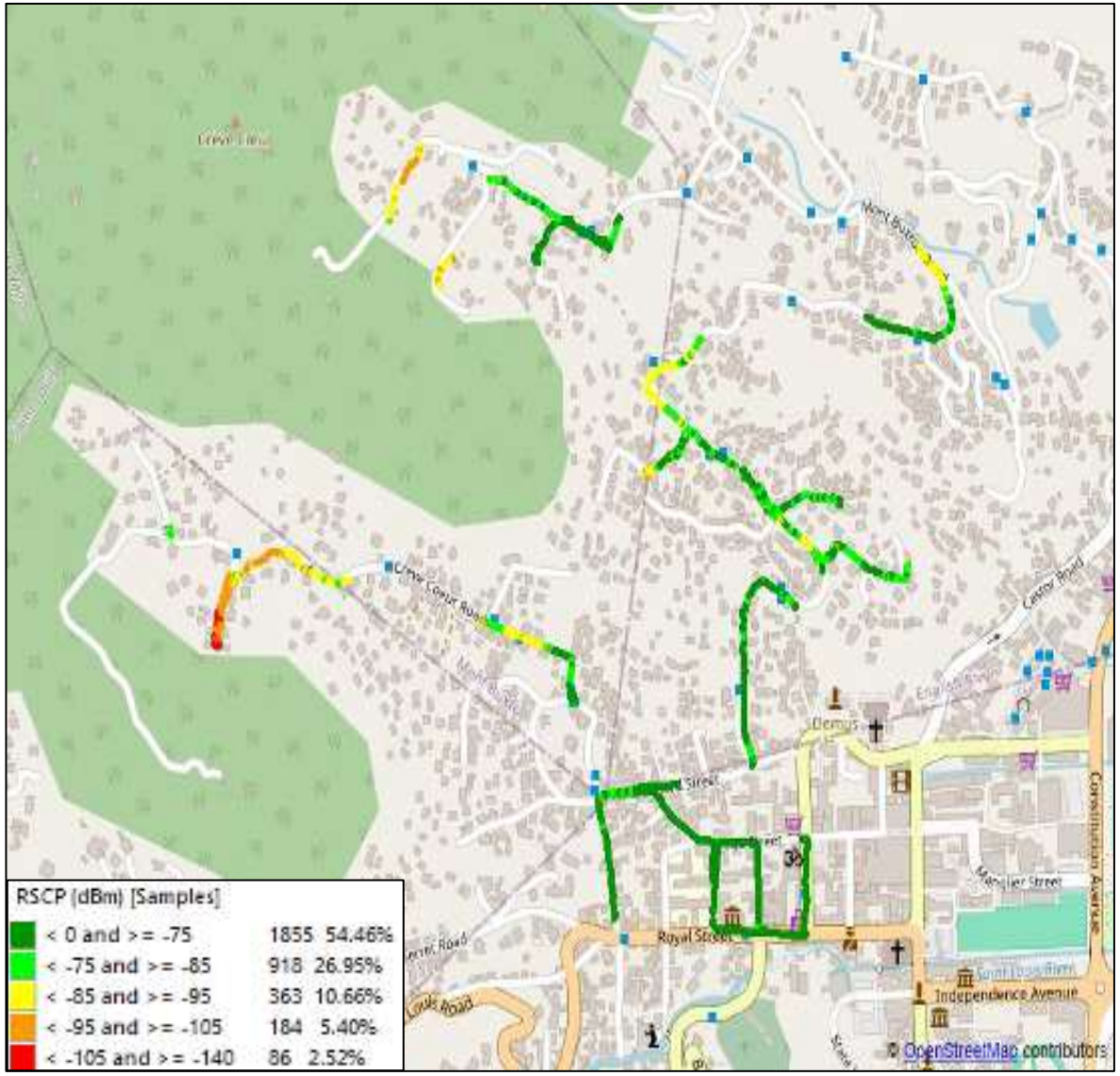


CWS LC MO

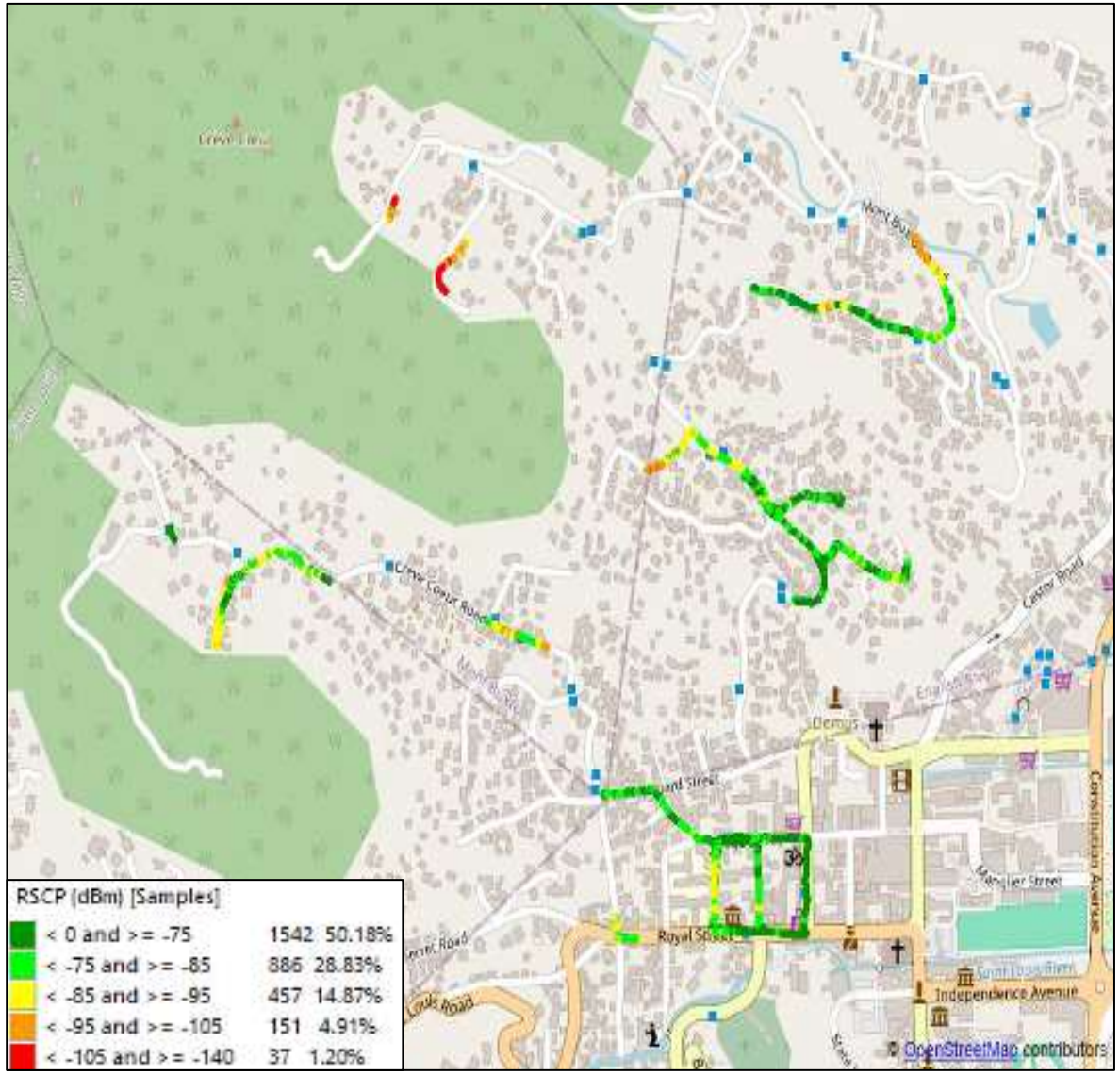


Phase-2 Long Call RSCP PLOT

Airtel LC MO

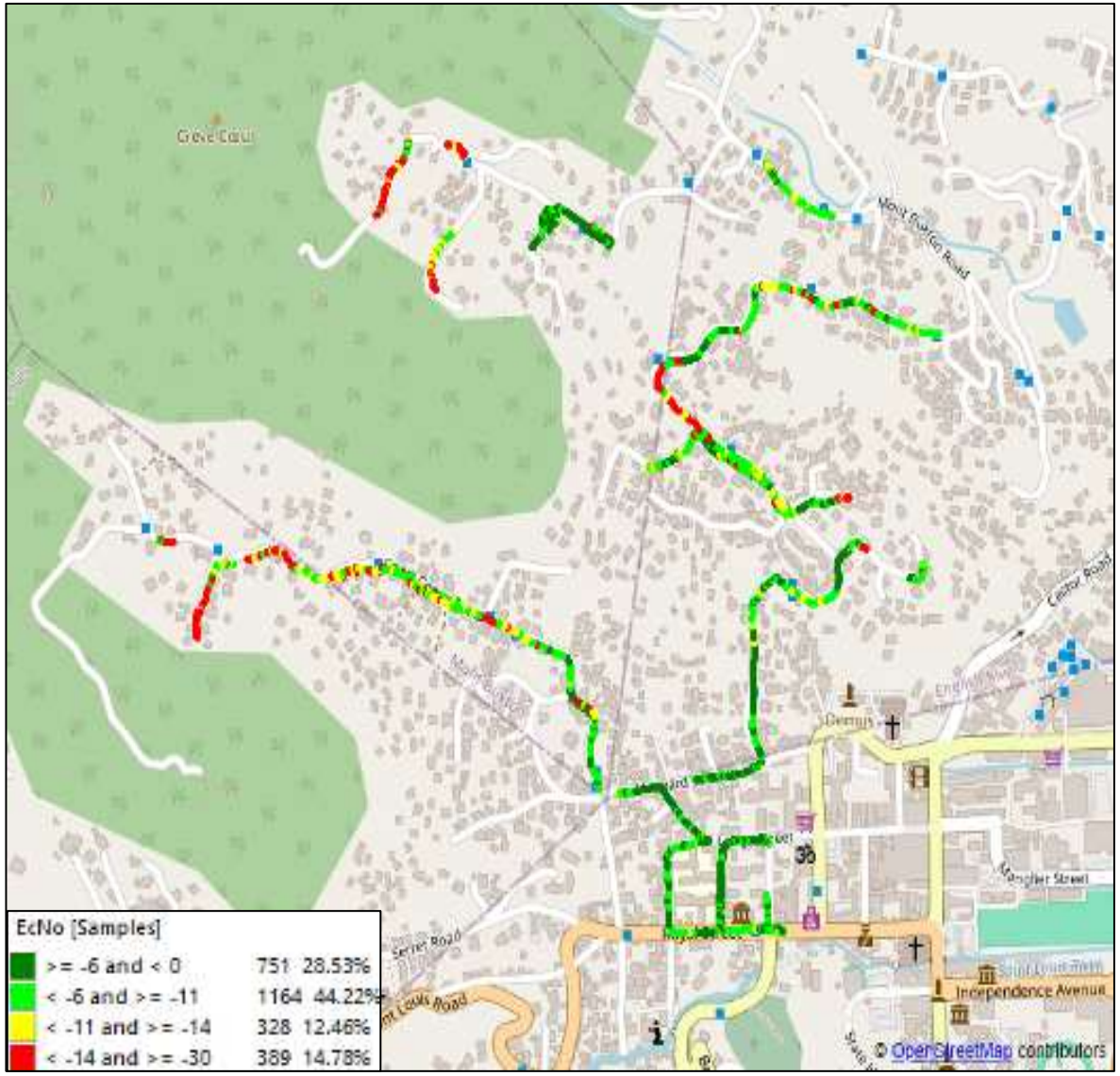


CWS LC MO

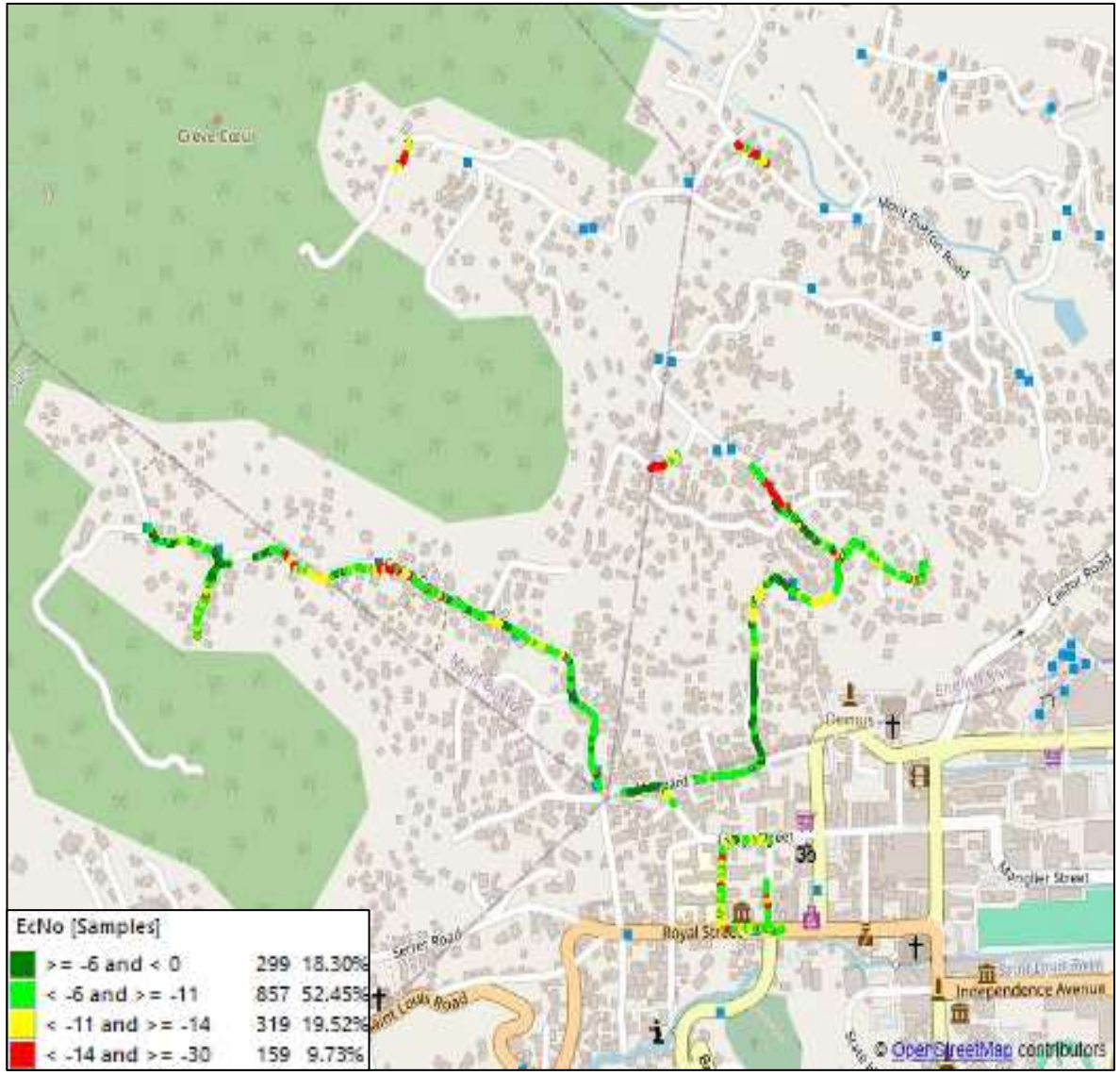


Phase-1 Long Call EC/NO PLOT

Airtel LC MO

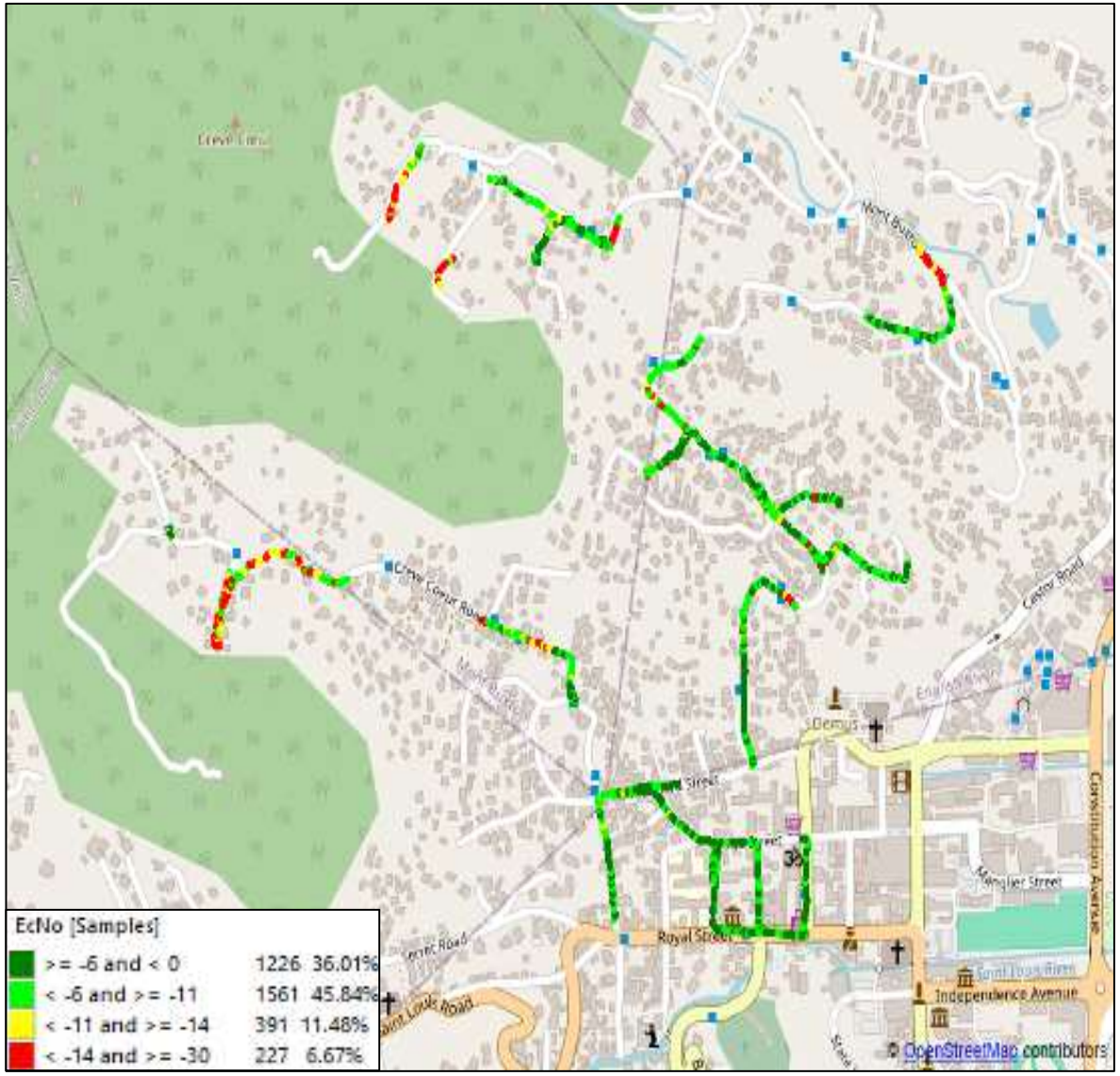


CWS LC MO

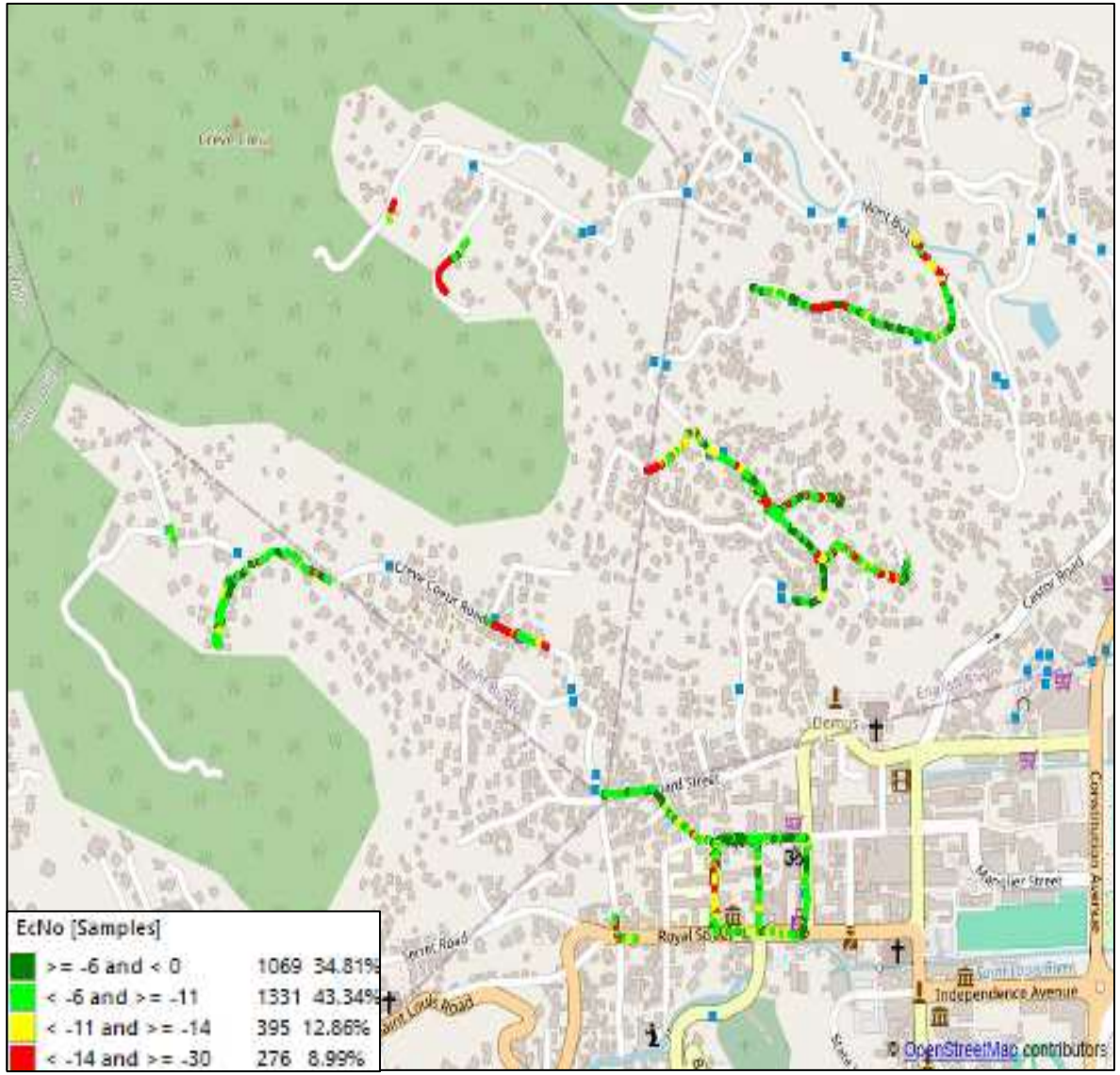


Phase-2 Long Call EC/NO PLOT

Airtel LC MO

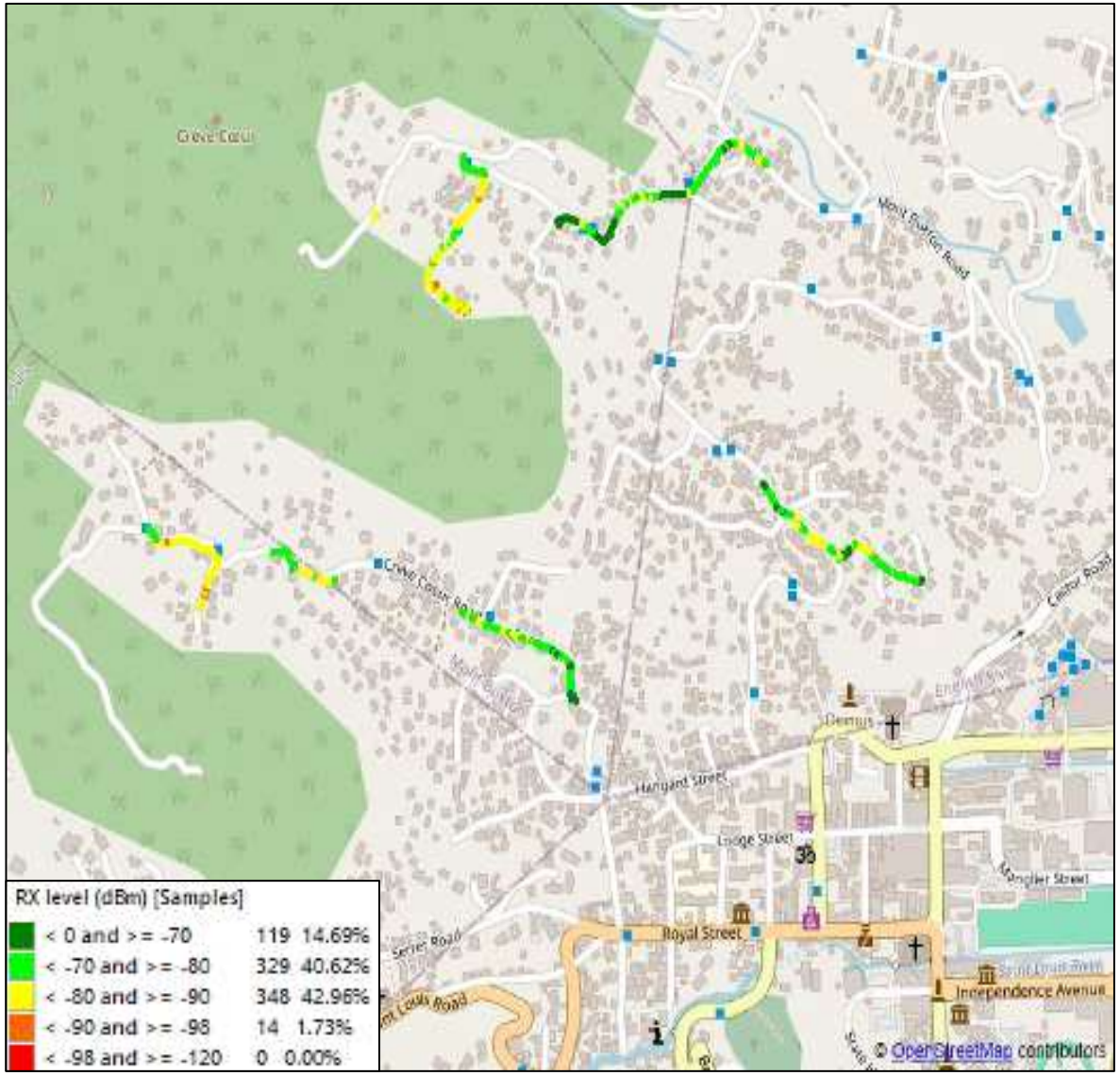


CWS LC MO

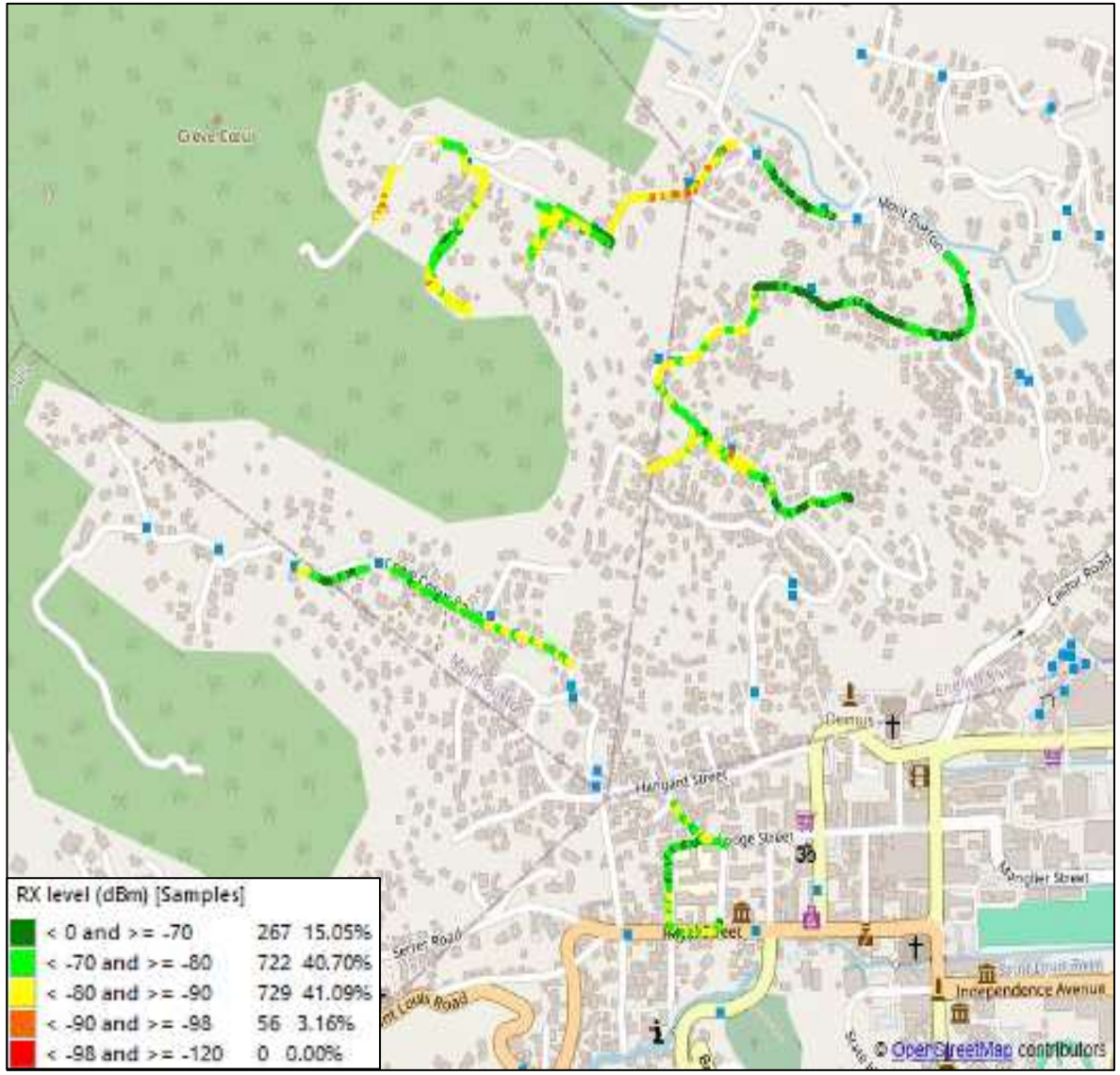


Phase-1 Long Call RX level sub PLOT

Airtel LC MO

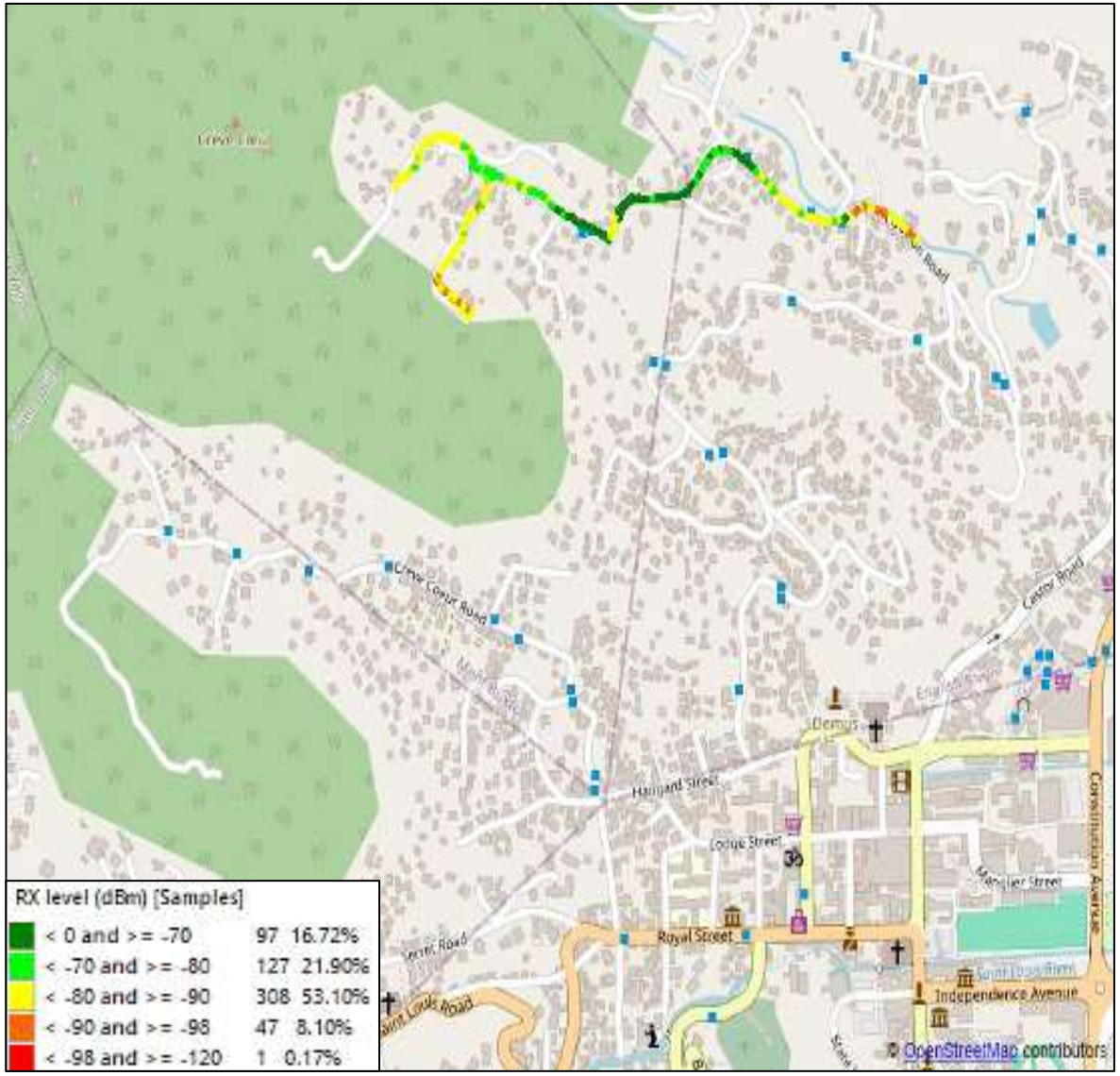


CWS LC MO

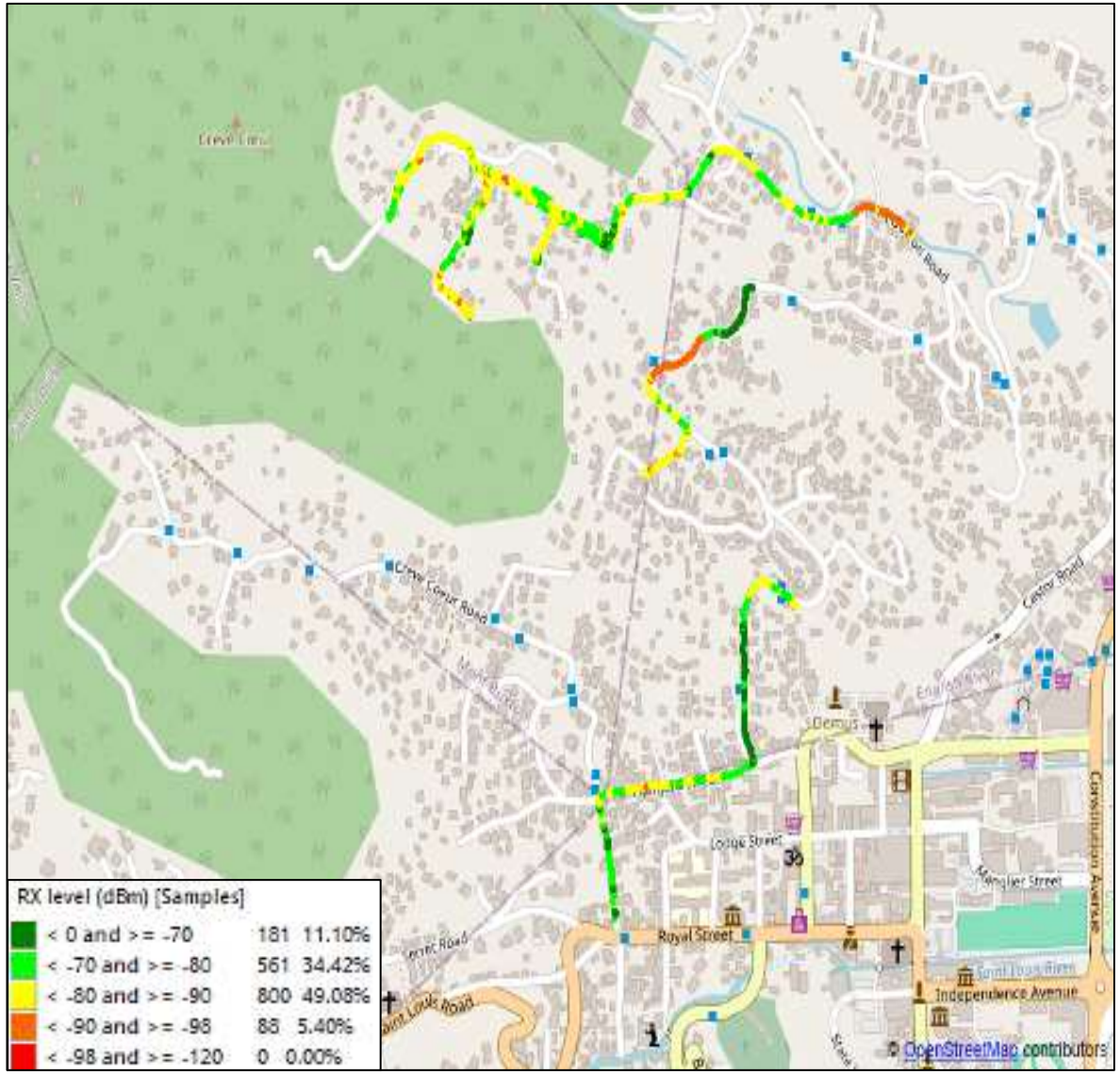


Phase-2 Long Call RX level sub PLOT

Airtel LC MO

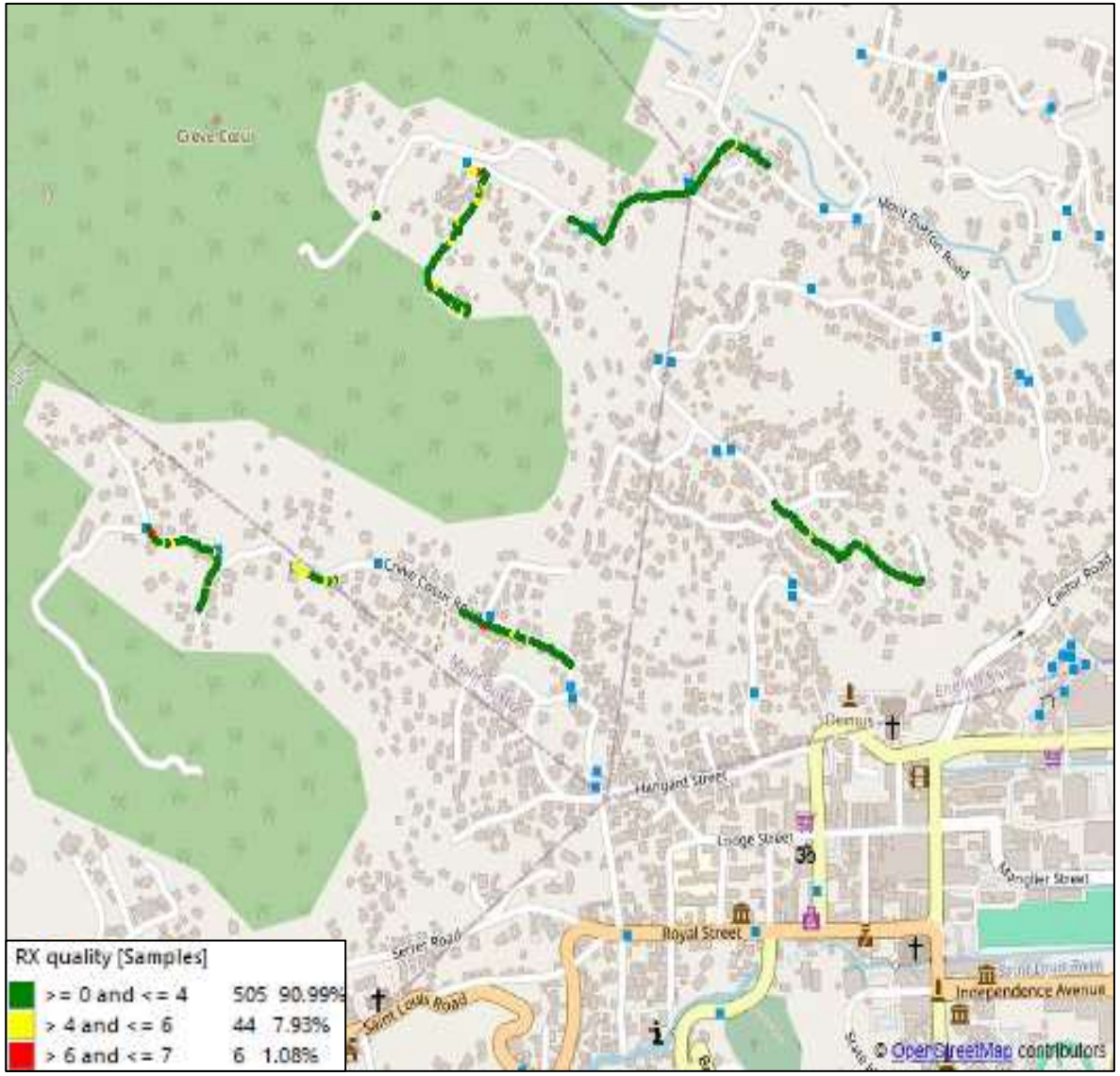


CWS LC MO

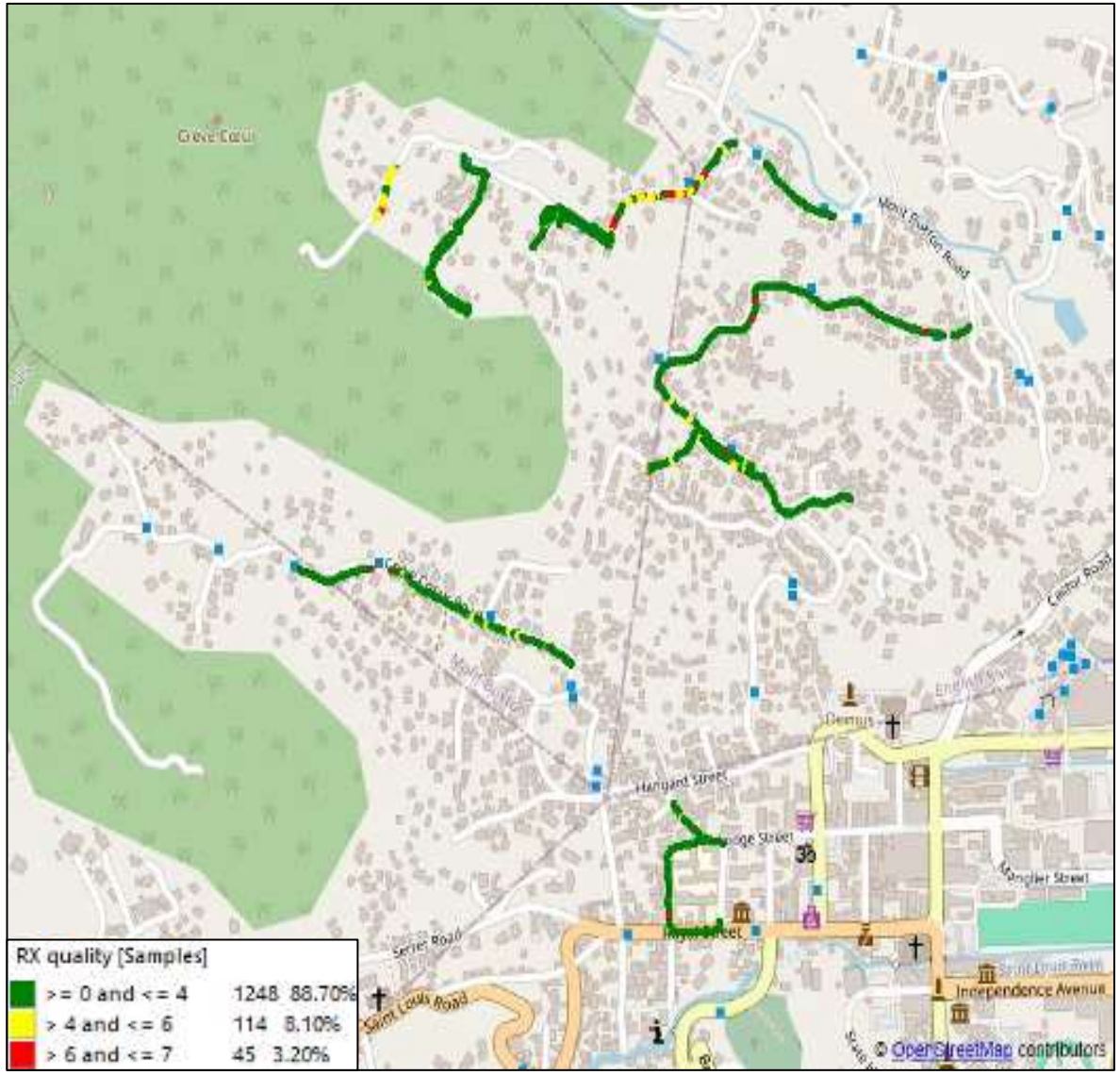


Phase-1 Long Call RX quality sub PLOT

Airtel LC MO

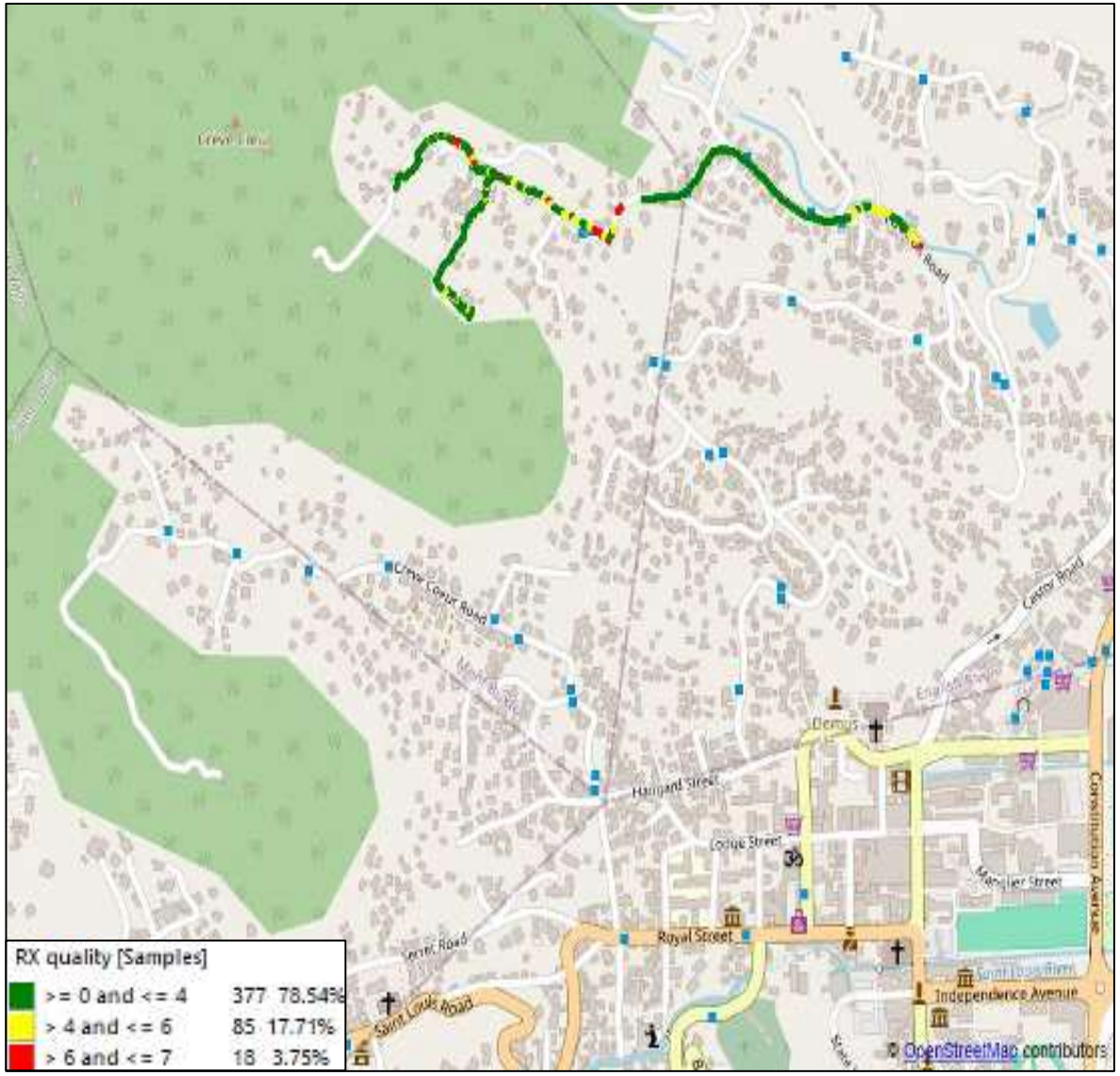


CWS LC MO

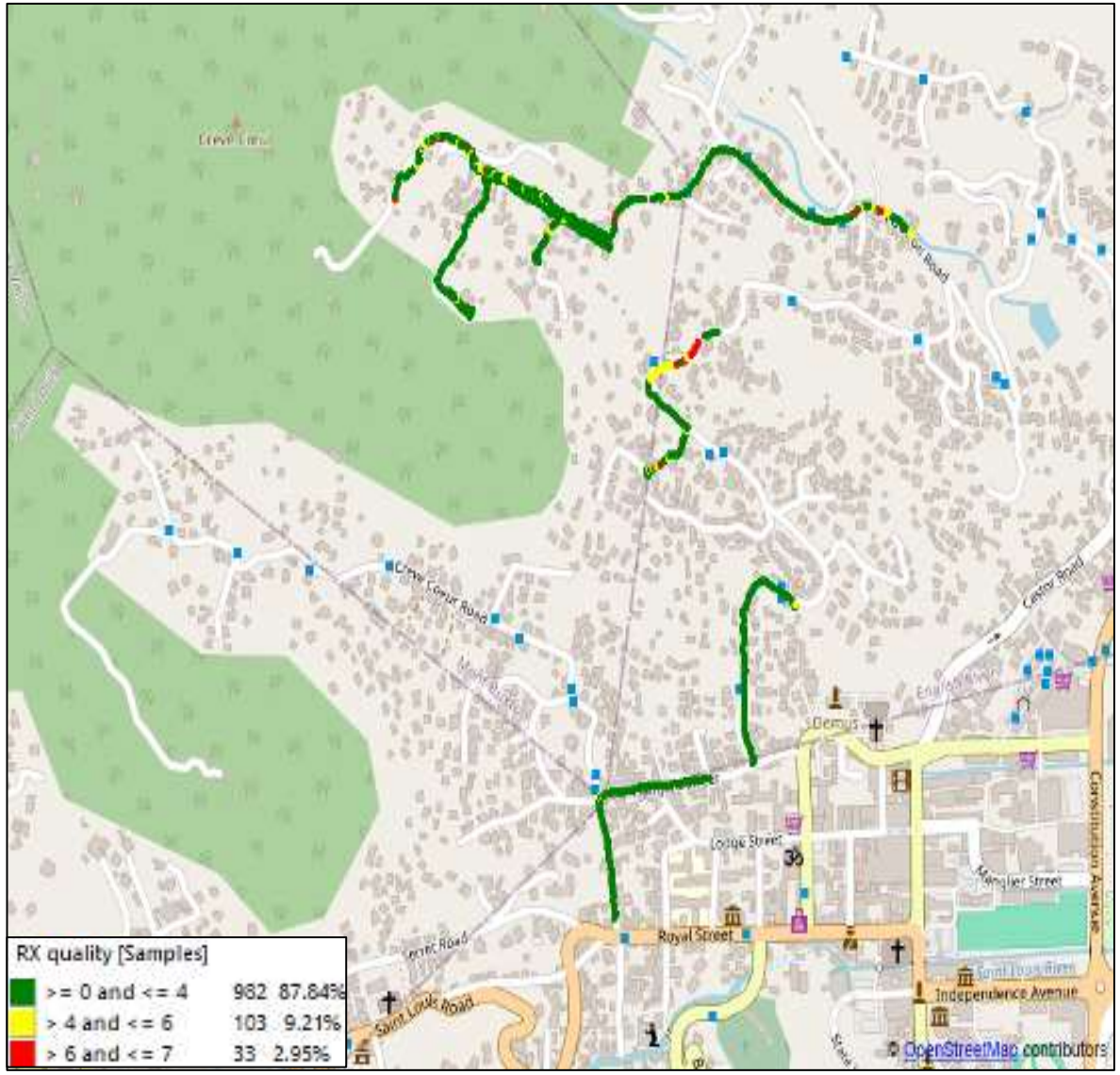


Phase-2 Long Call RX quality sub PLOT

Airtel LC MO



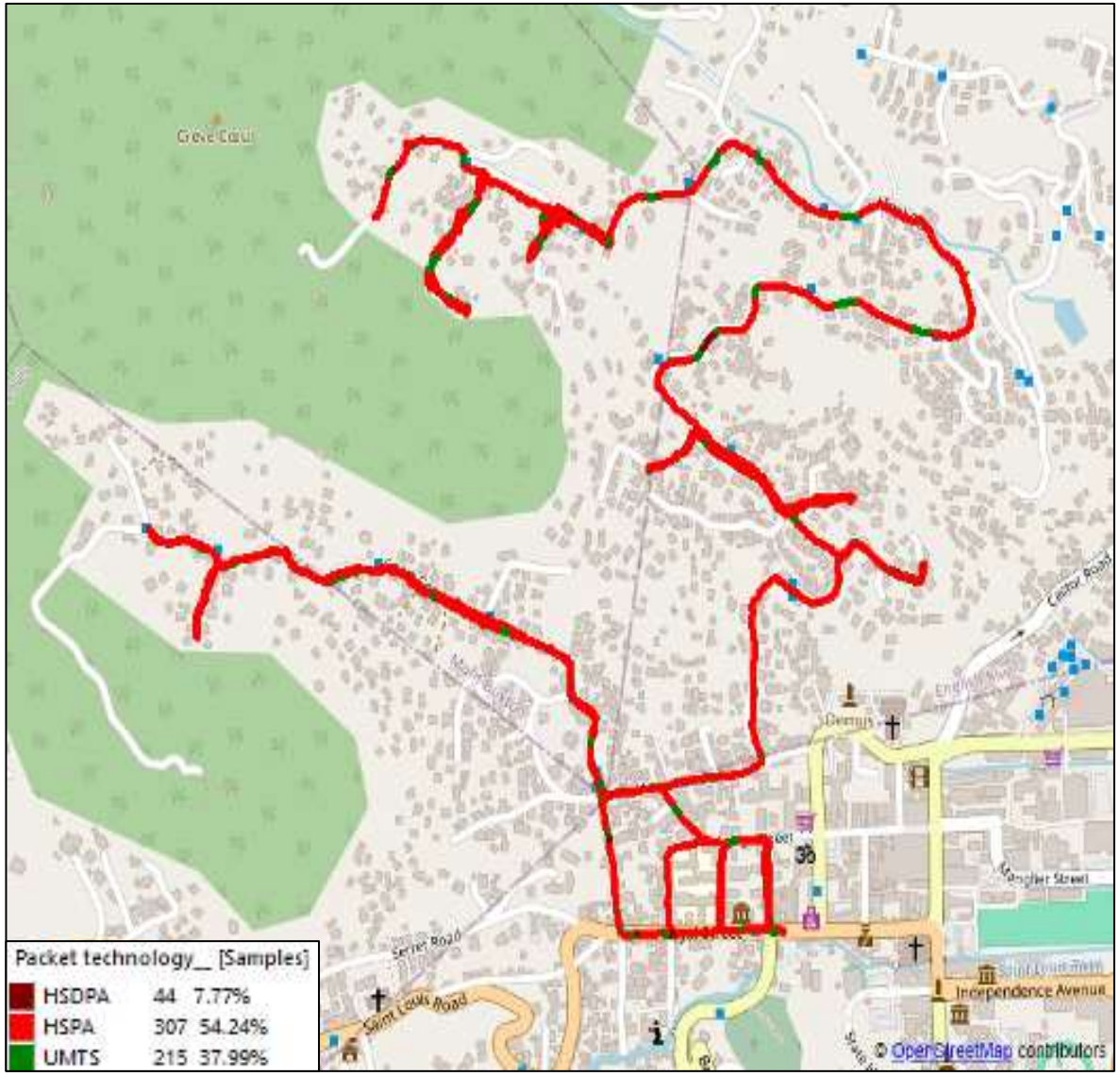
CWS LC MO



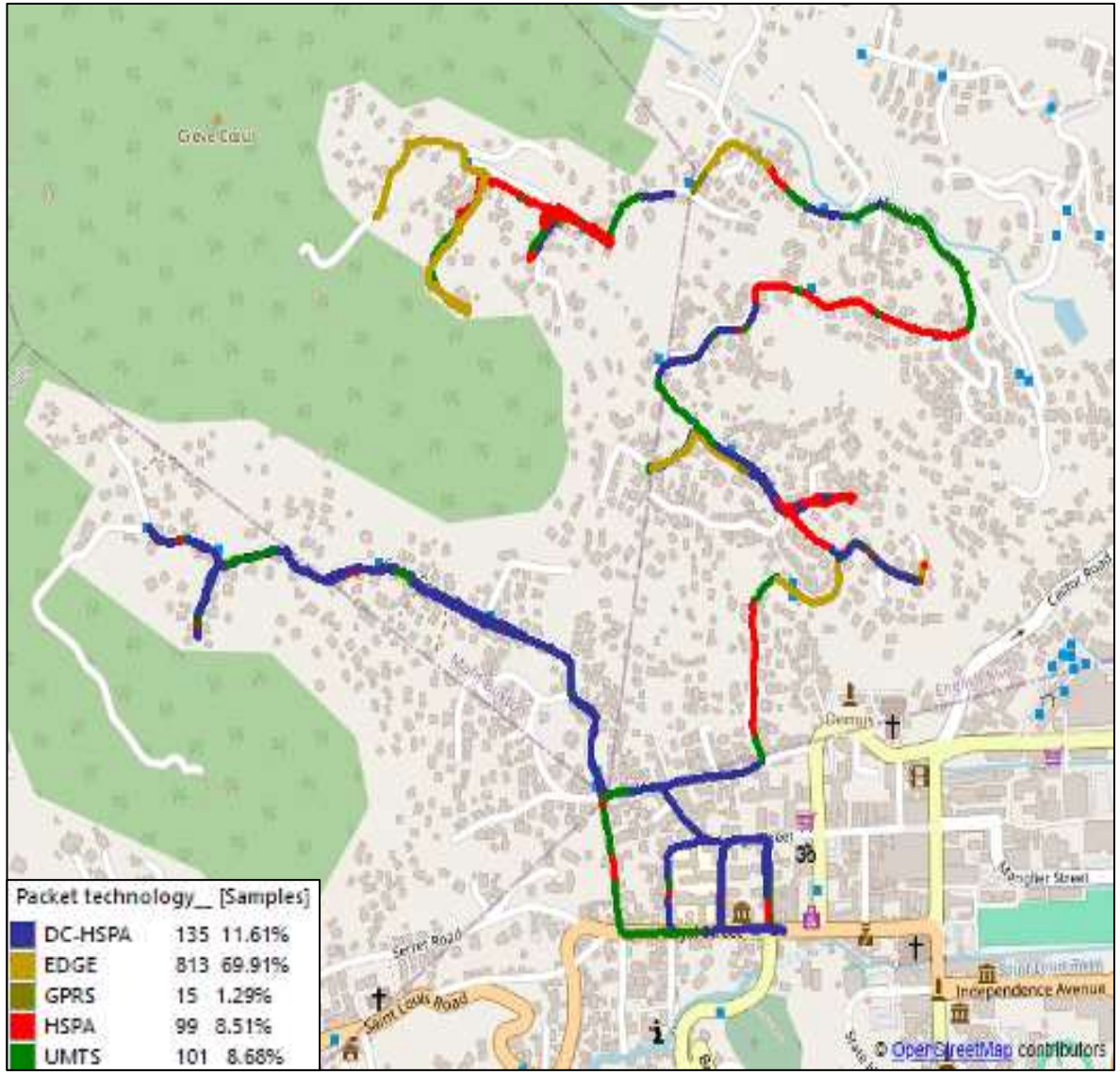
3G PREFERRED DATA DRIVE PLOTS

Phase-1 3G PREFERRED DATA TEST - TECHNOLOGY PLOT

Airtel Data 3G

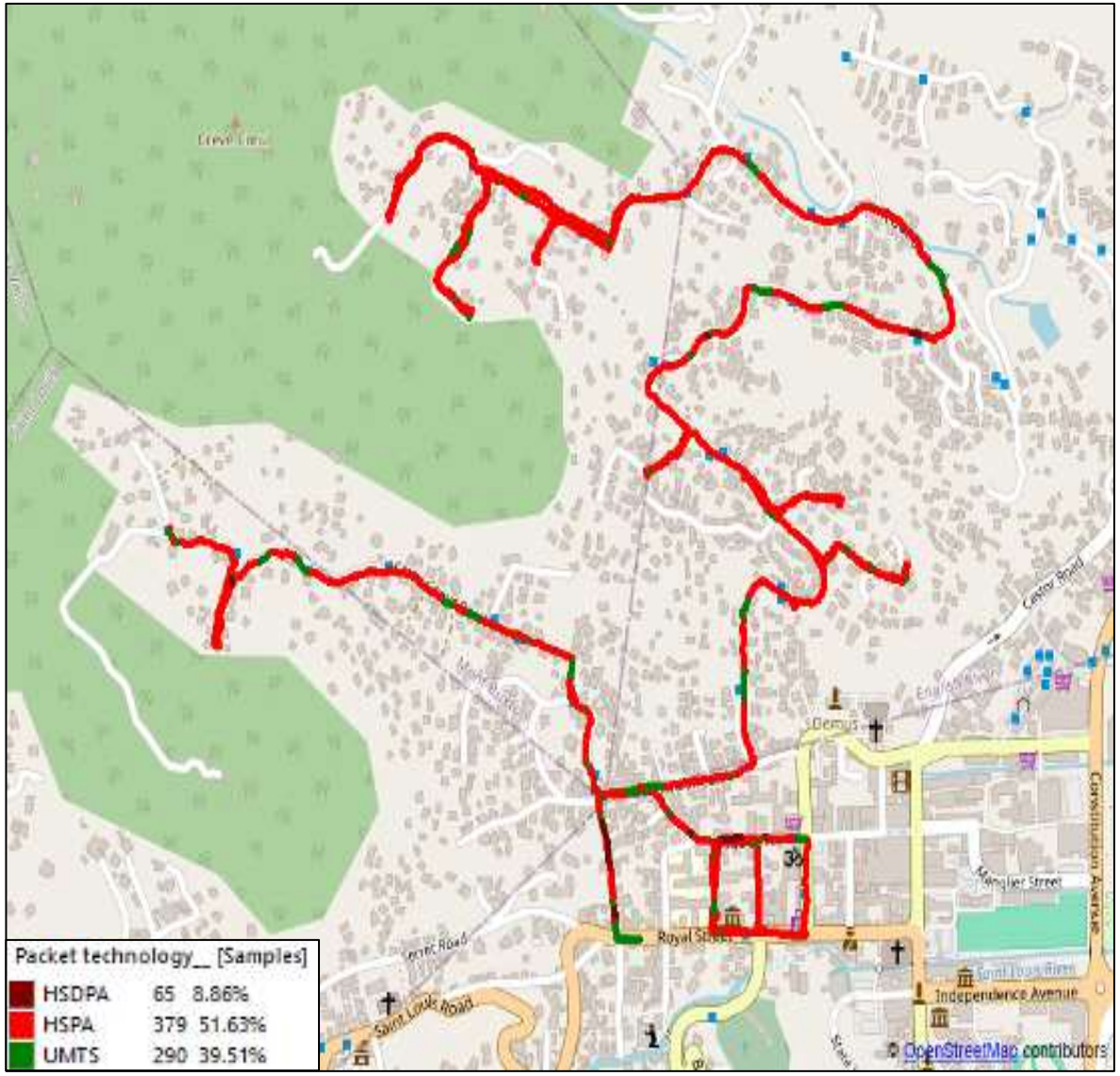


CWS Data 3G

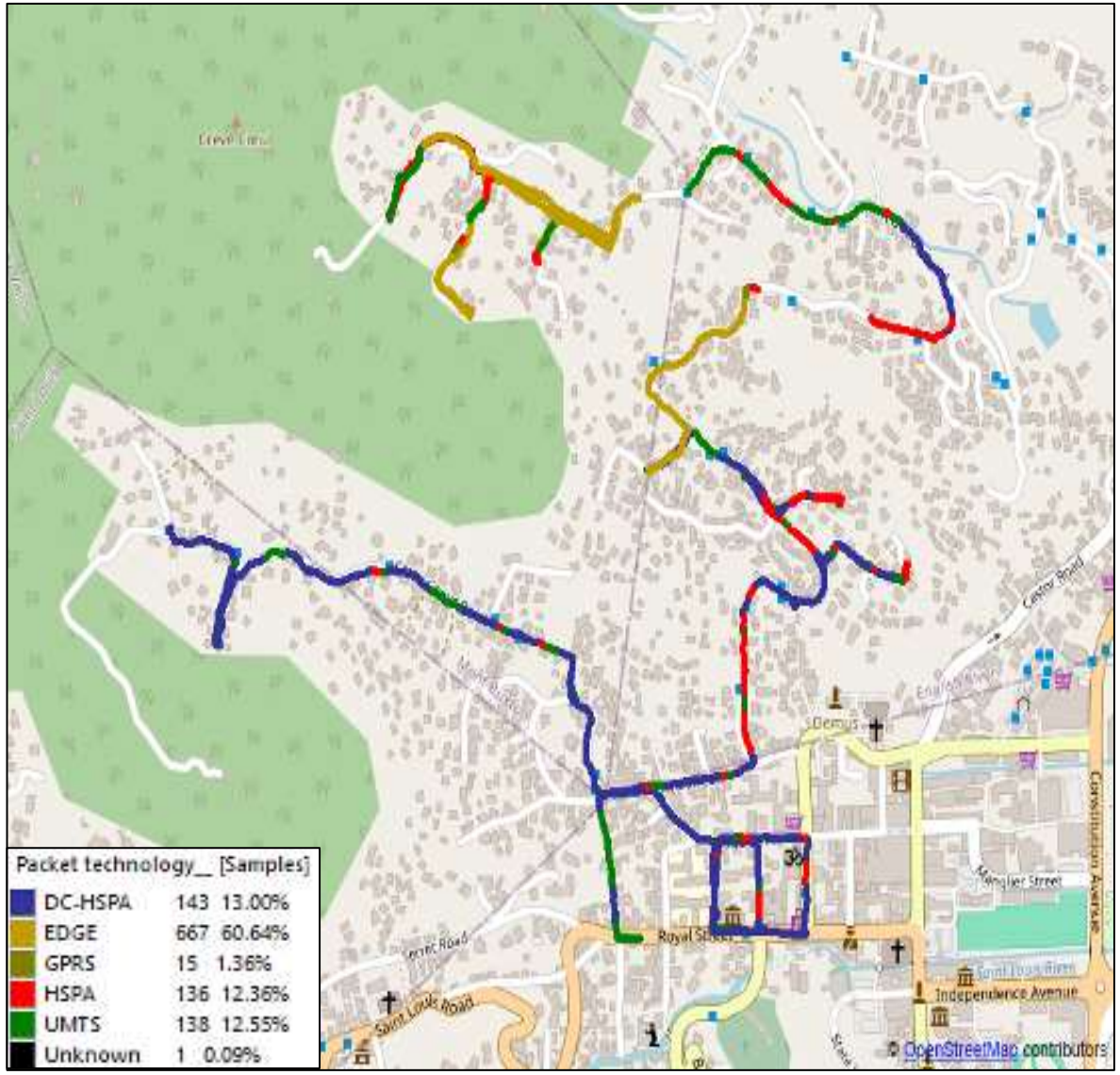


Phase-2 3G PREFERRED DATA TEST - TECHNOLOGY PLOT

Airtel Data 3G

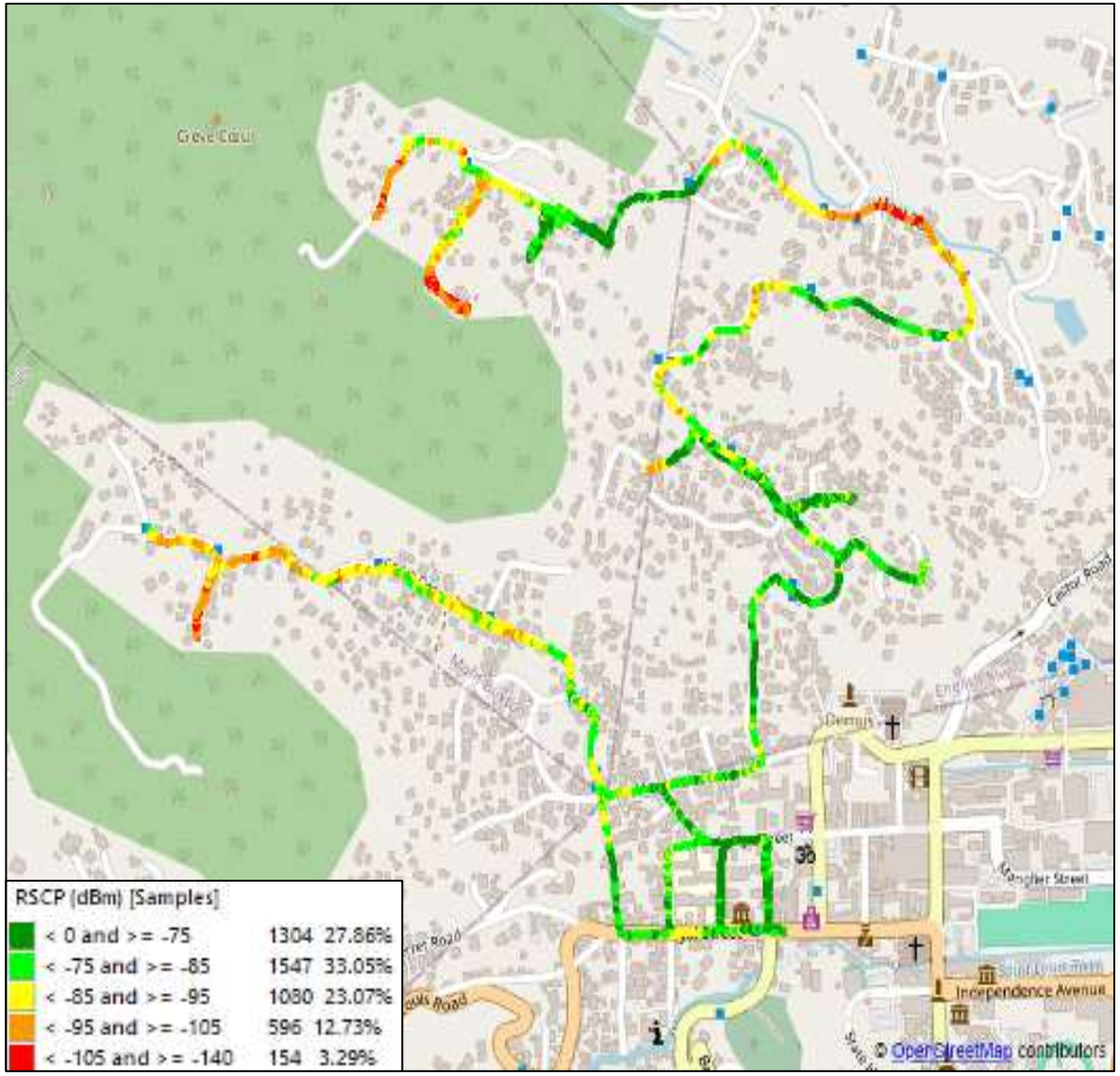


CWS Data 3G

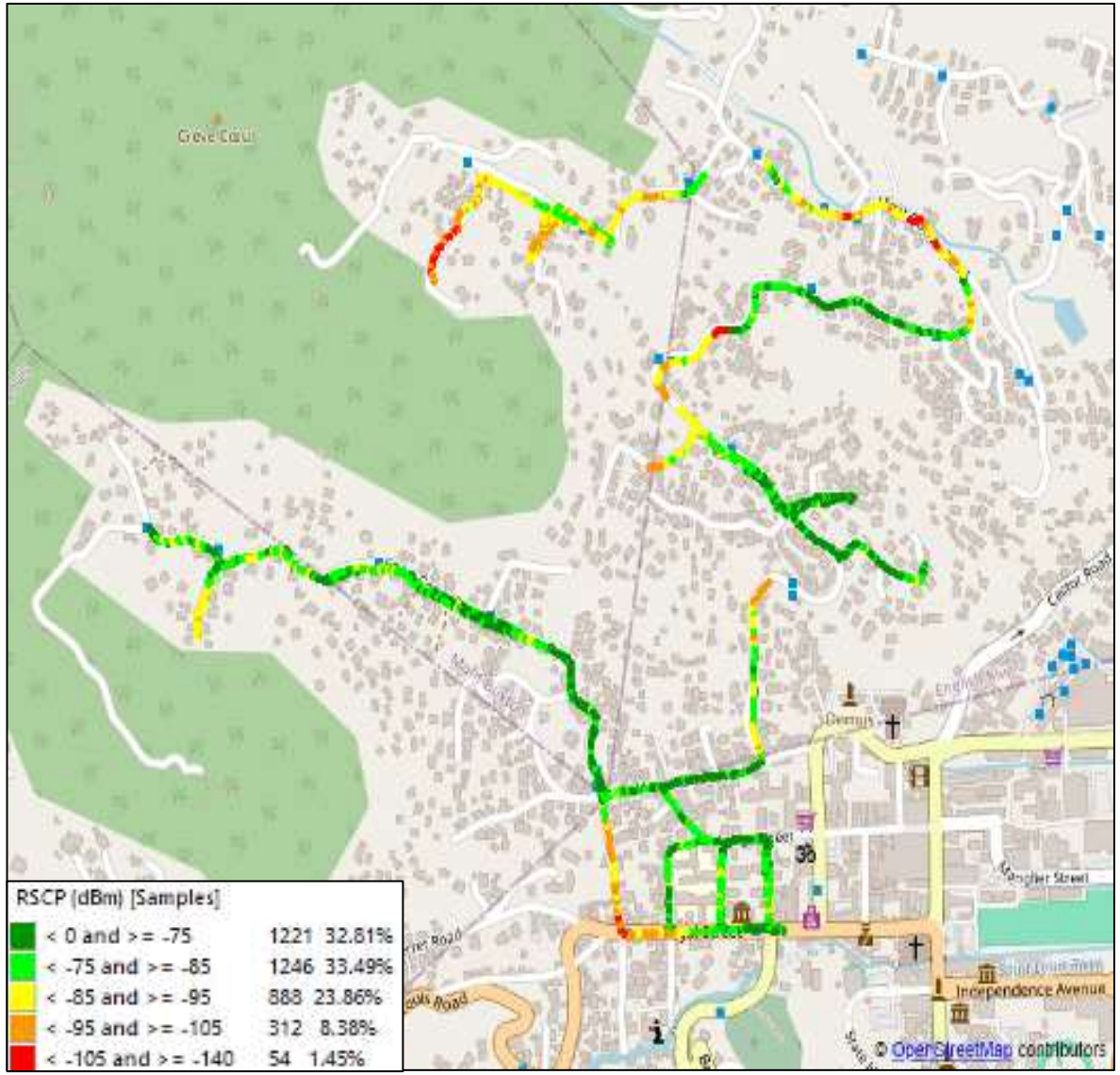


Phase-1 3G PREFERRED DATA TEST - RSCP PLOT

Airtel Data 3G

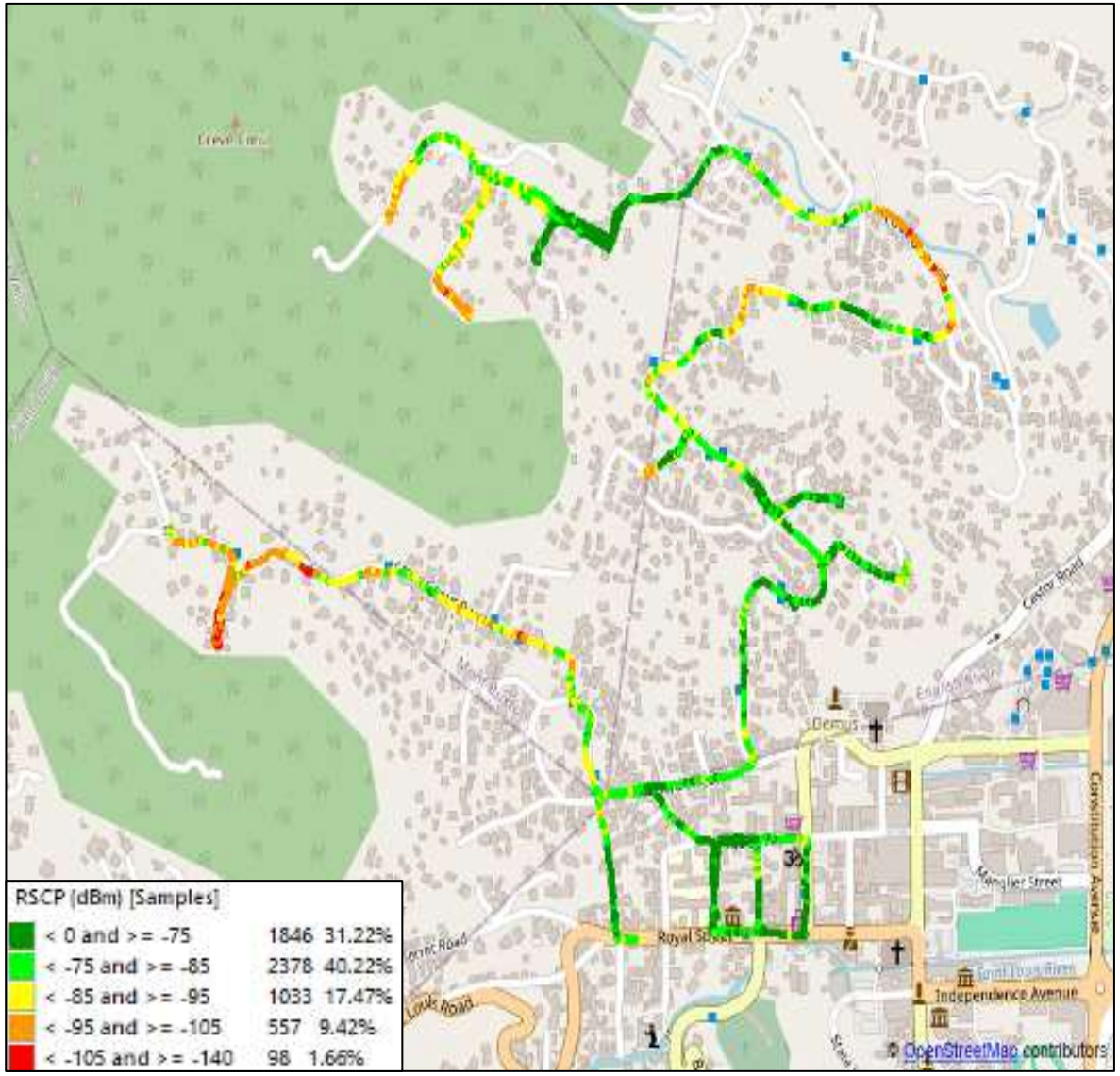


CWS Data 3G

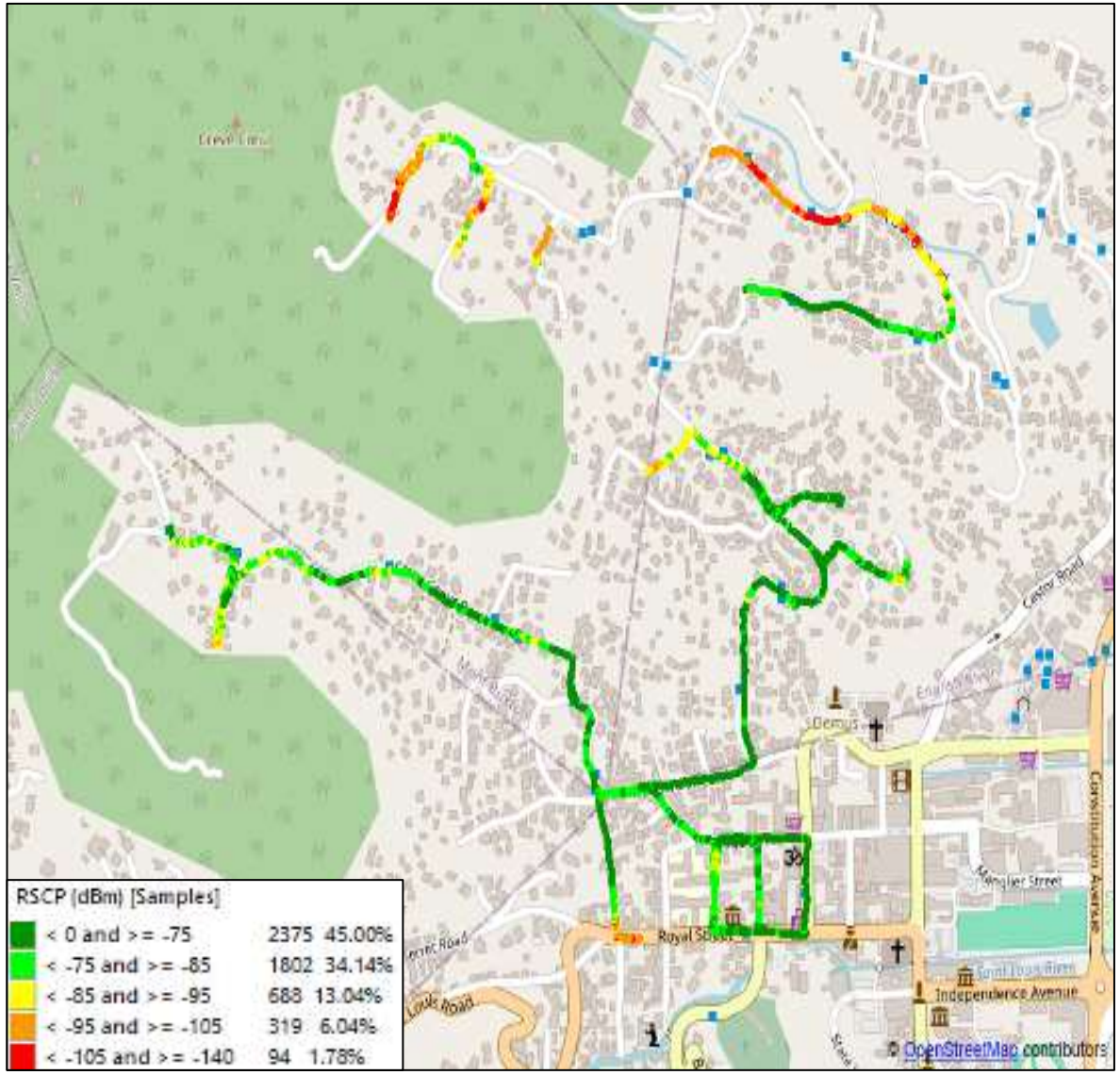


Phase-2 3G PREFERRED DATA TEST - RSCP PLOT

Airtel Data 3G

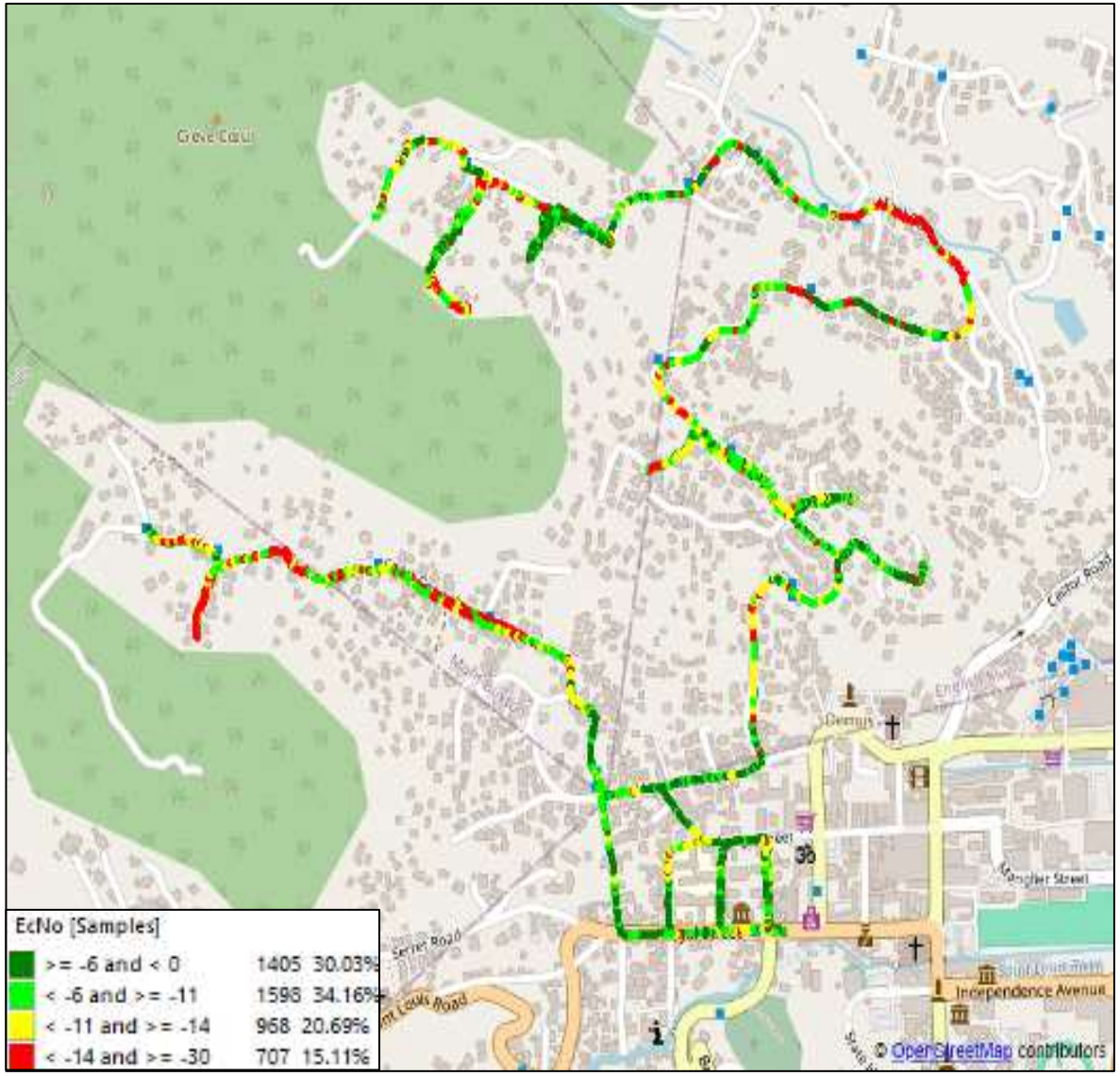


CWS Data 3G

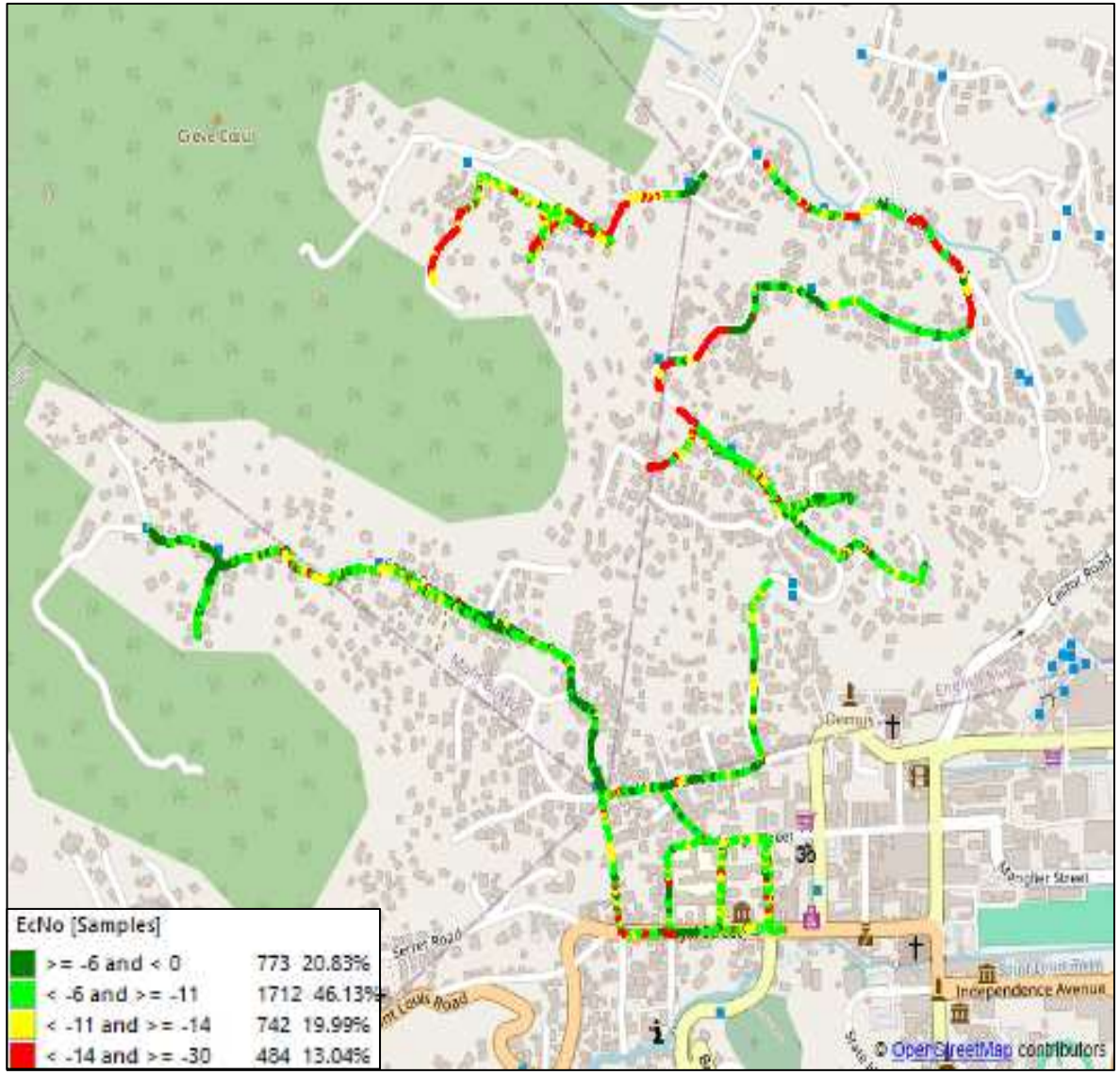


Phase-1 3G PREFERRED DATA TEST - EC/NO PLOT

Airtel Data 3G

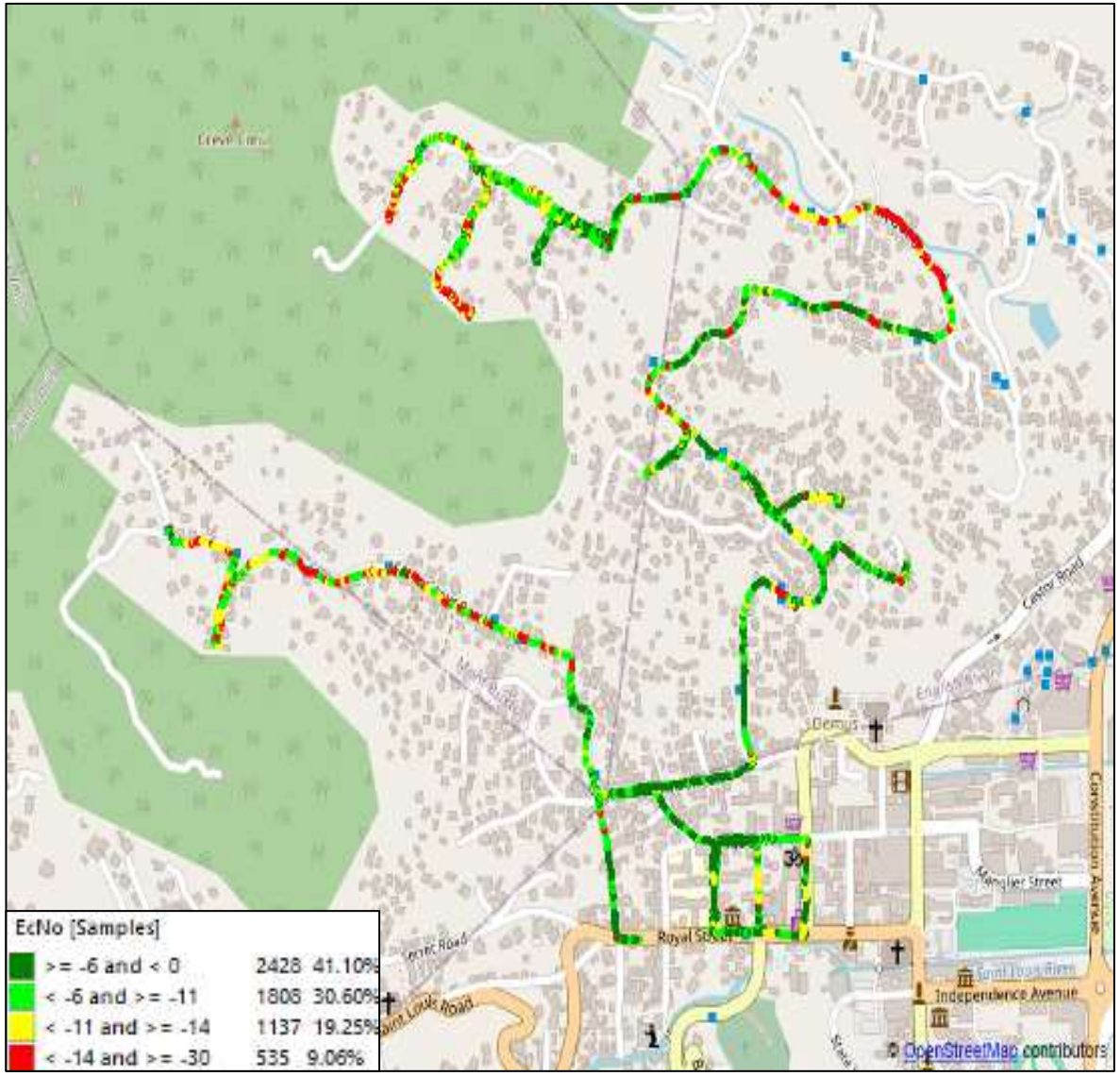


CWS Data 3G

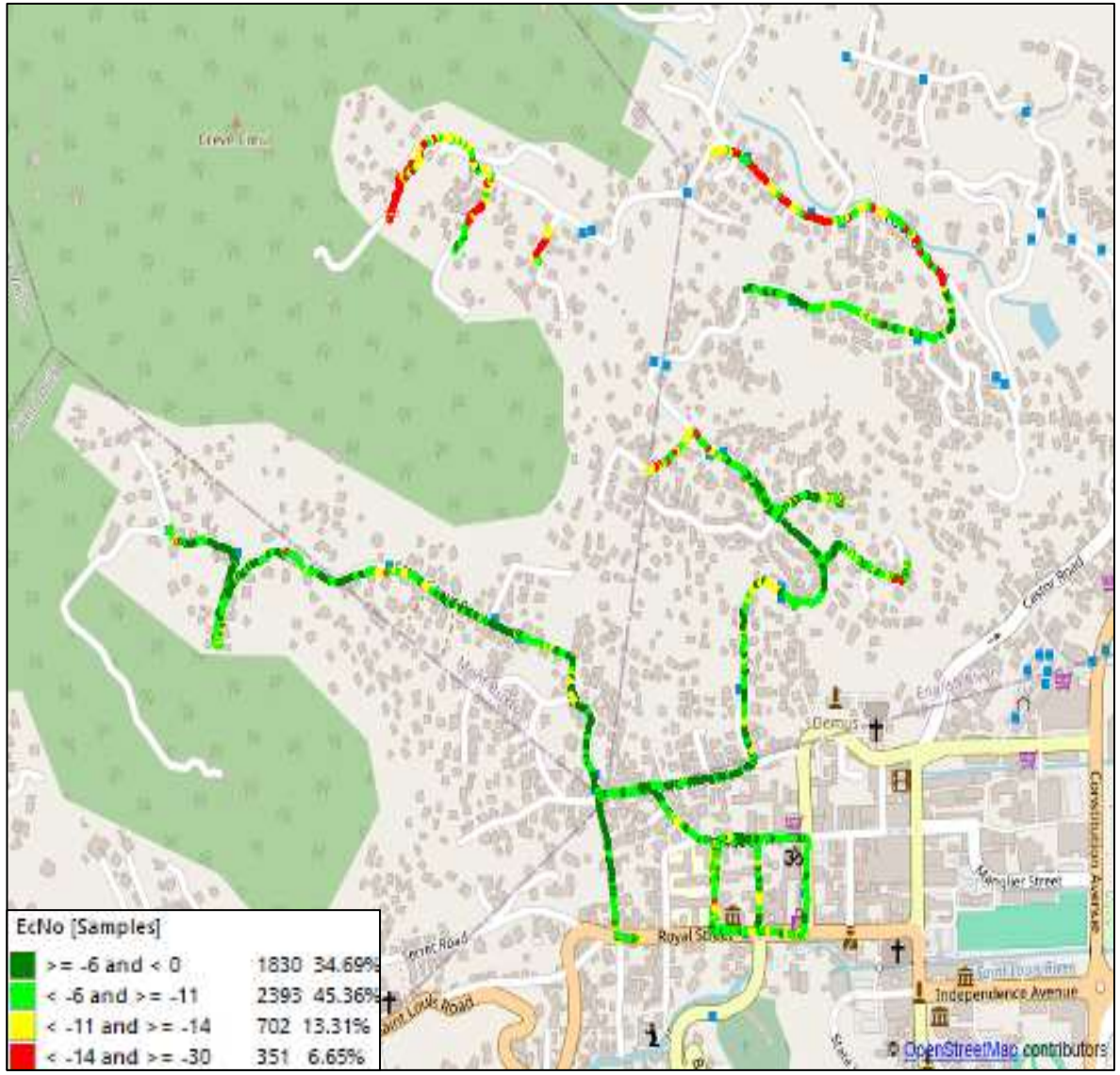


Phase-2 3G PREFERRED DATA TEST - EC/NO PLOT

Airtel Data 3G

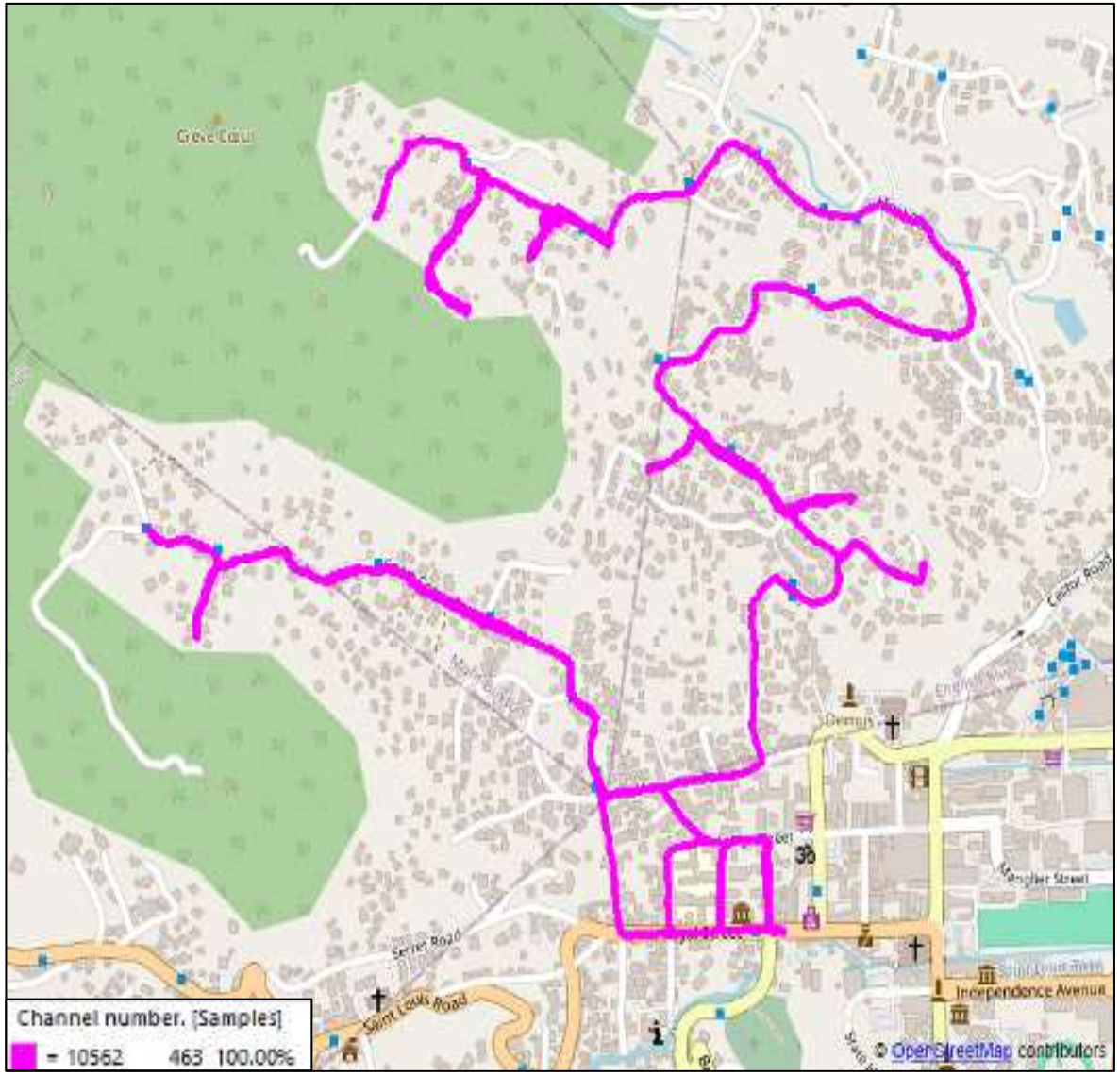


CWS Data 3G

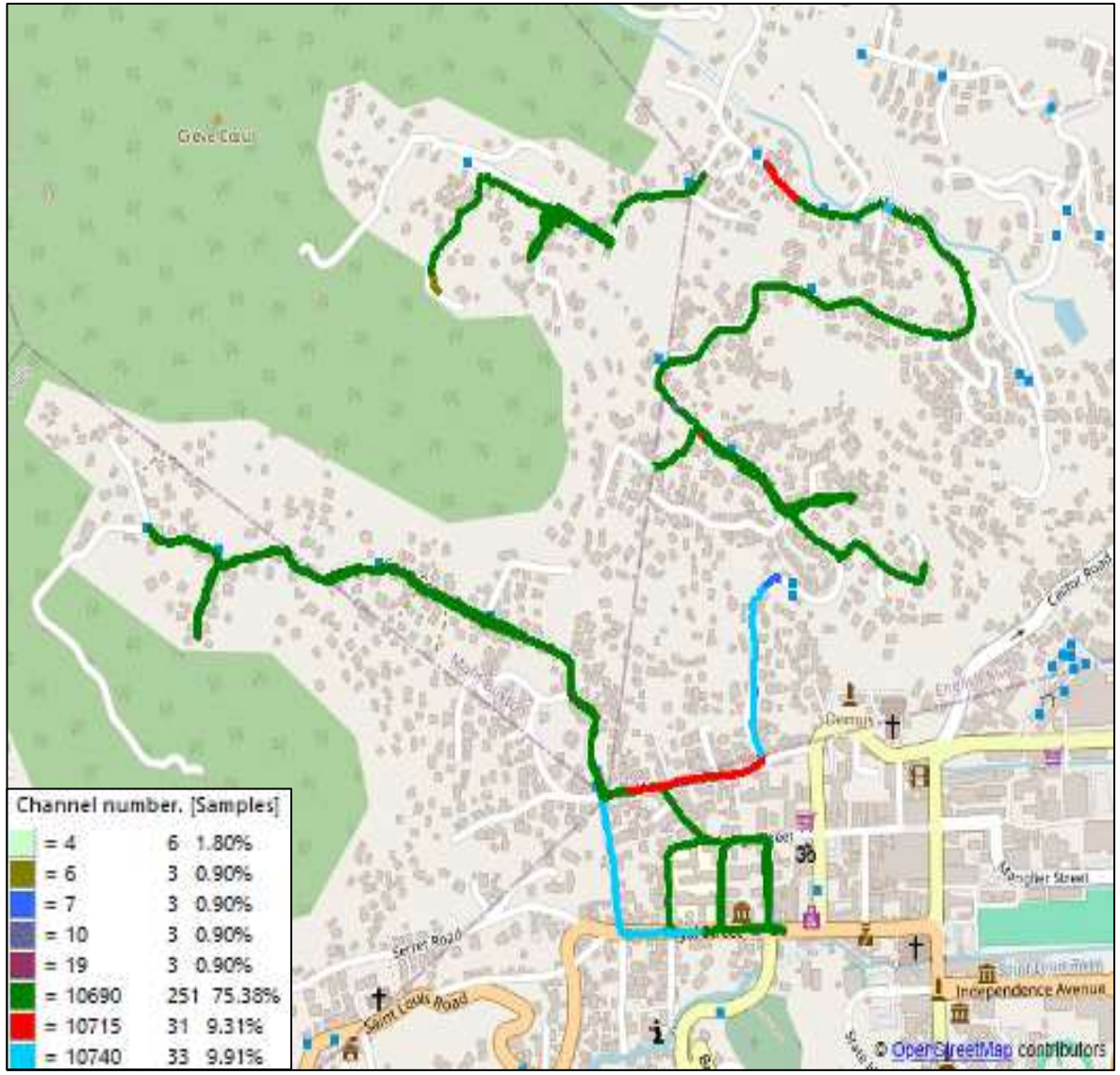


Phase-1 3G PREFERRED DATA TEST - UARFCN PLOT

Airtel Data 3G

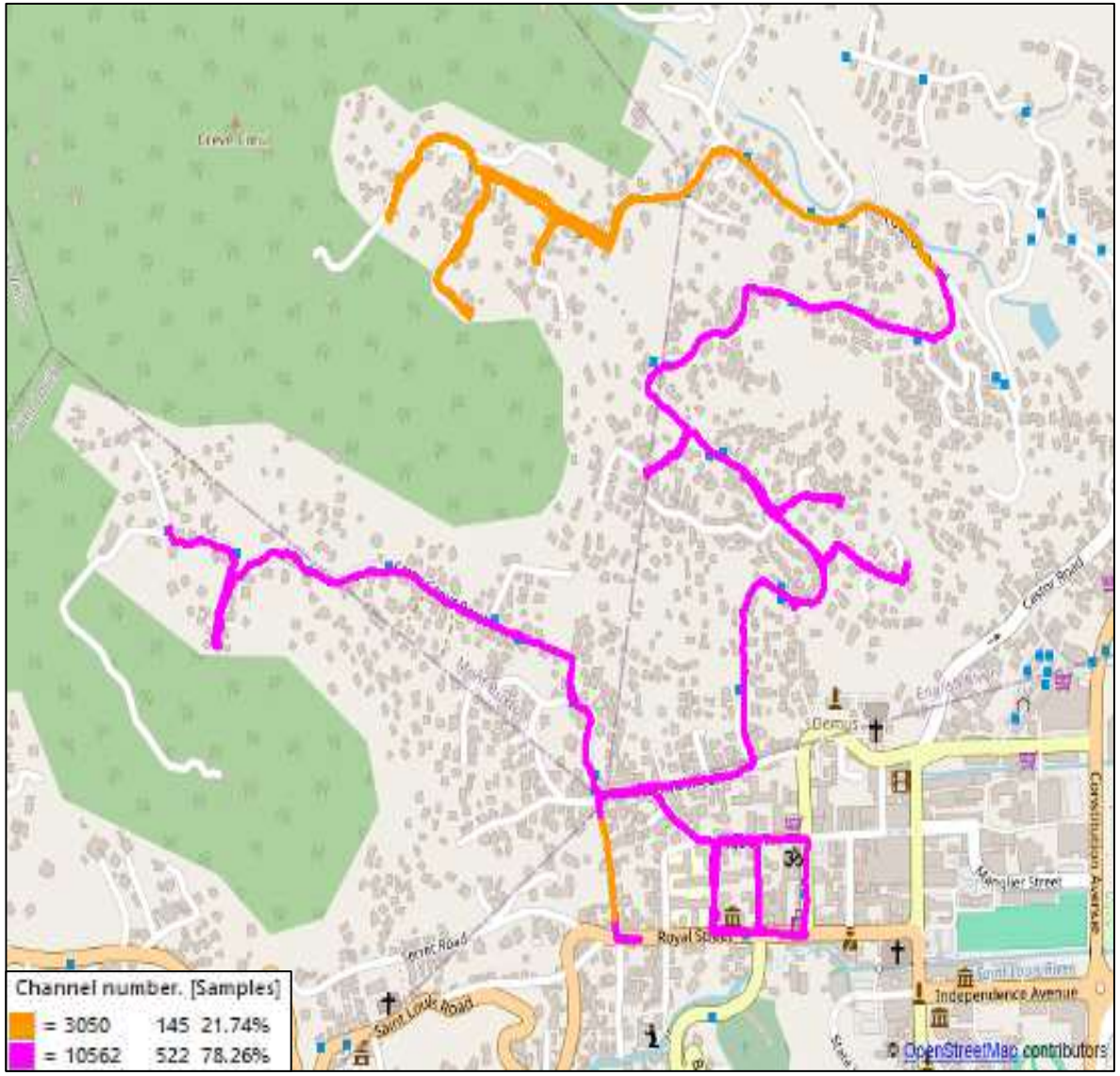


CWS Data 3G



Phase-2 3G PREFERRED DATA TEST - UARFCN PLOT

Airtel Data 3G



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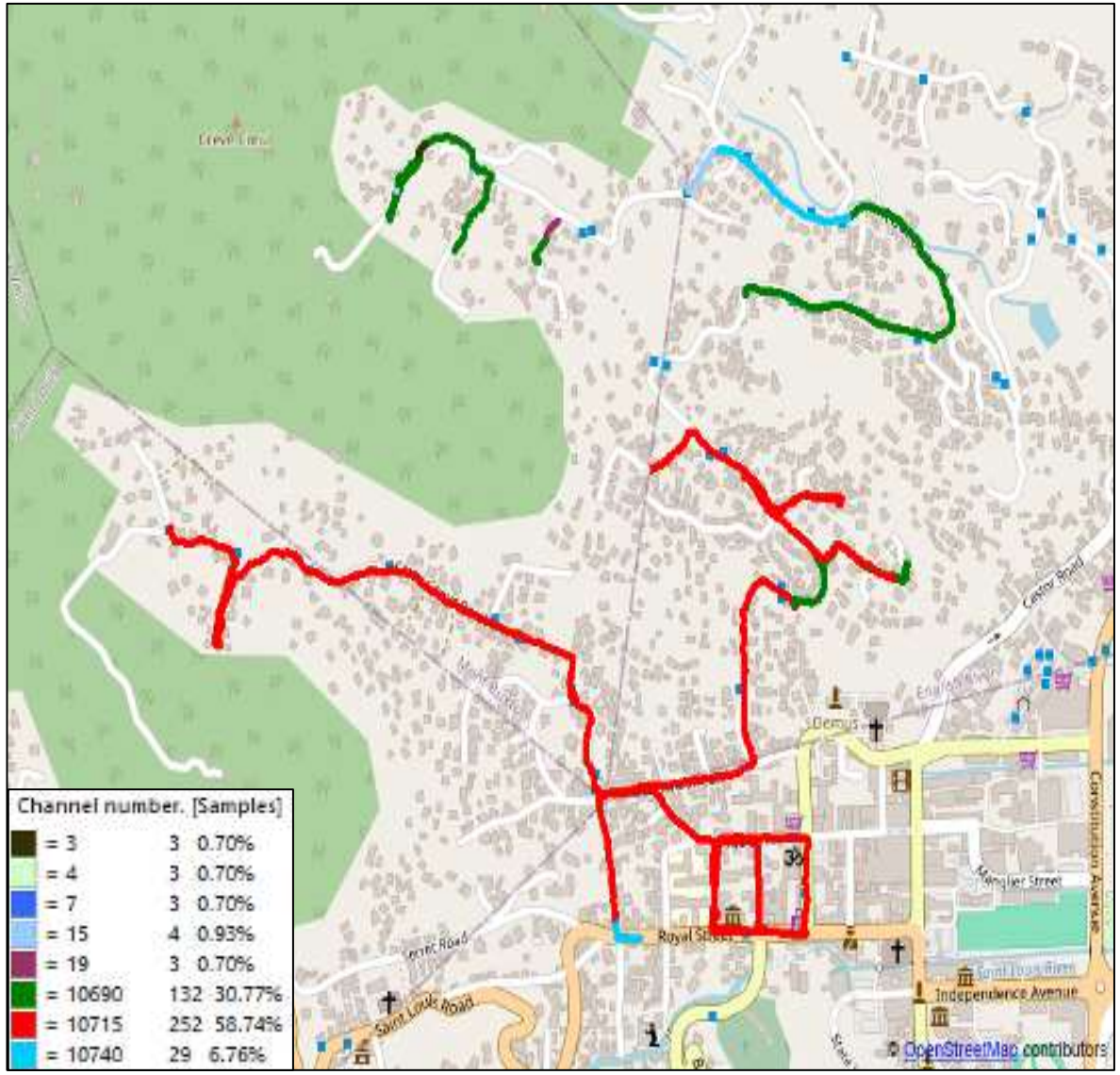
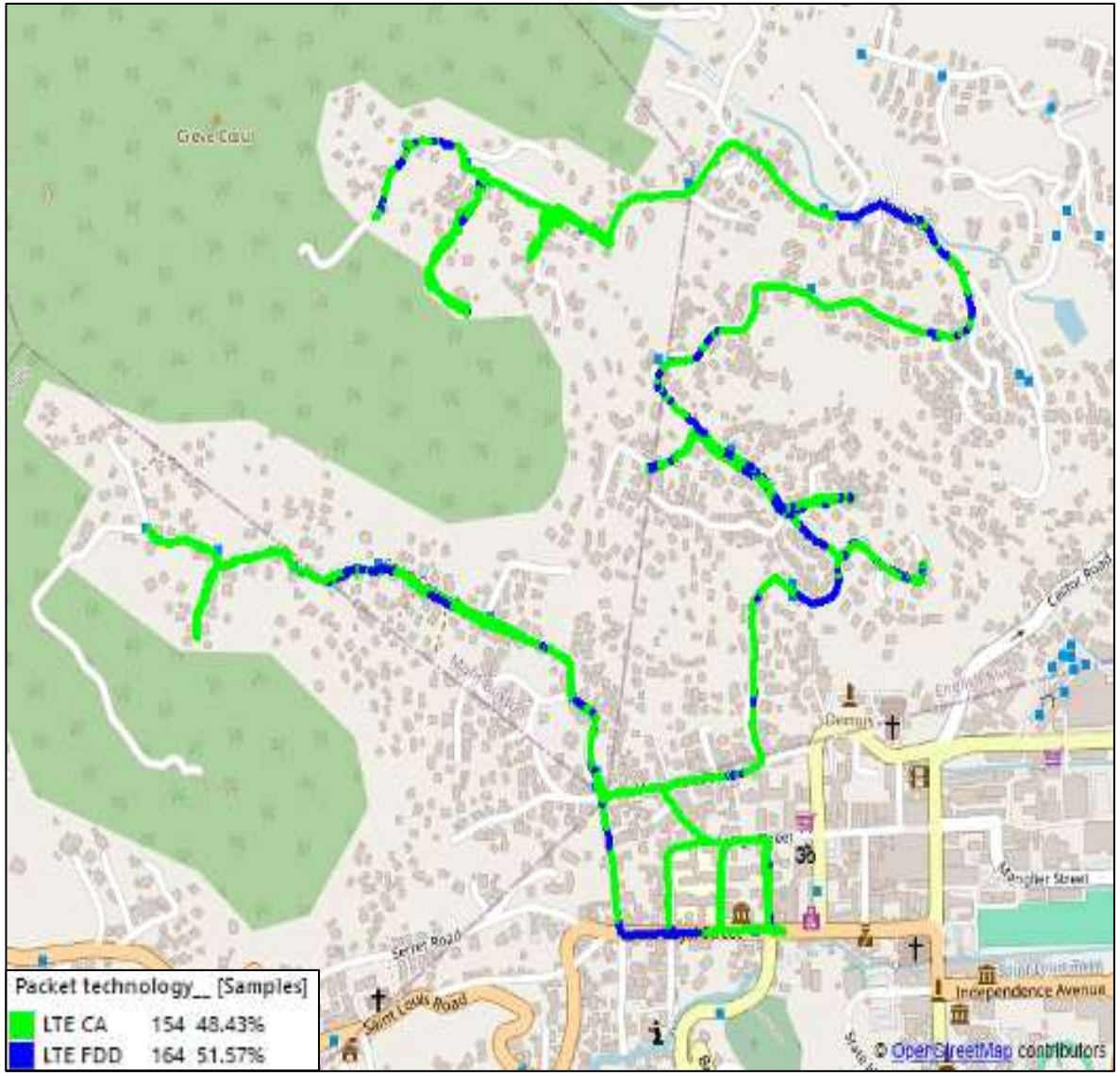


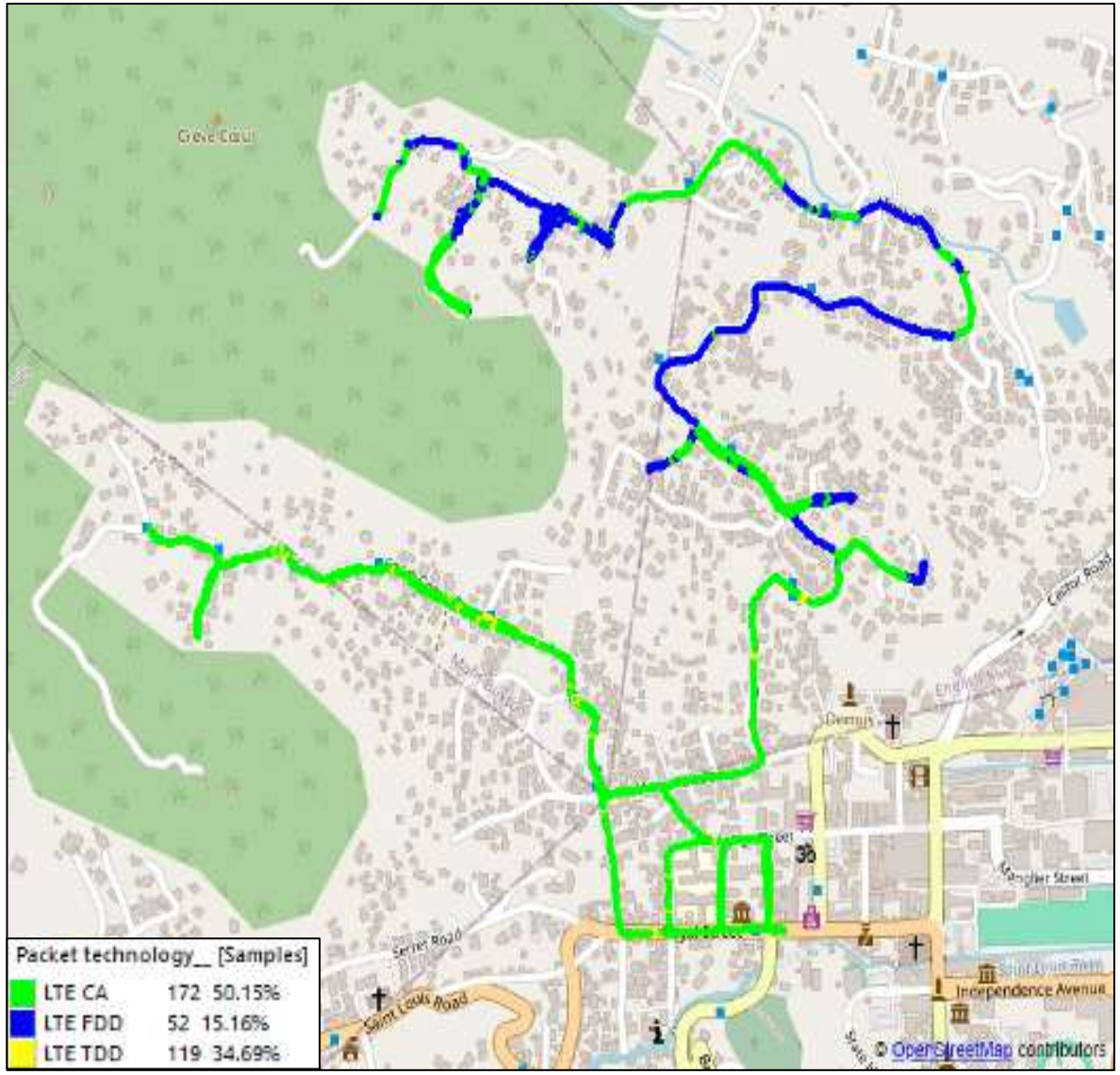
4G PREFERRED
DATA DRIVE PLOTS

Phase-1 4G PREFERRED DATA TEST - TECHNOLOGY PLOT

Airtel Data 4G

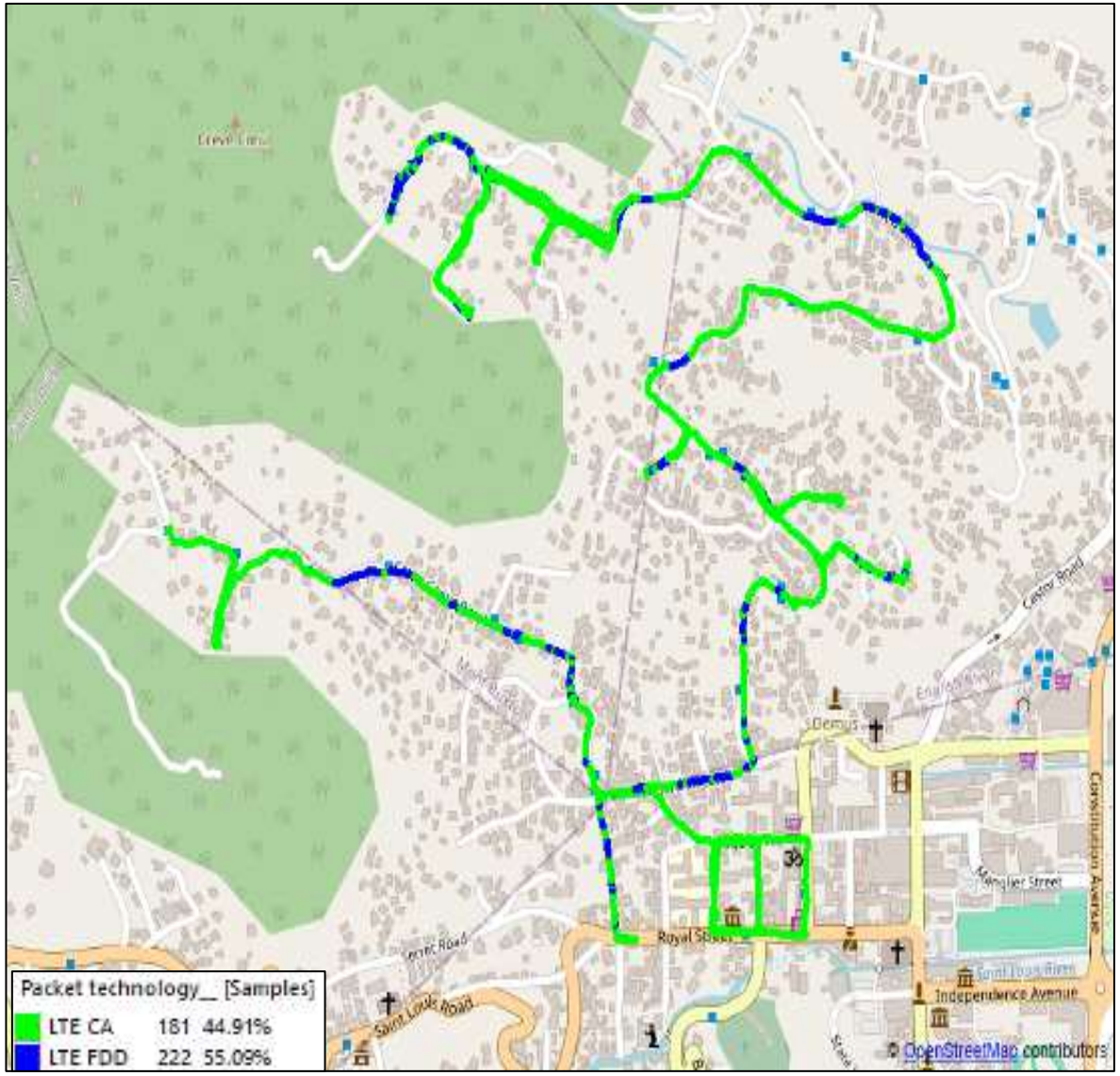


CWS Data 4G

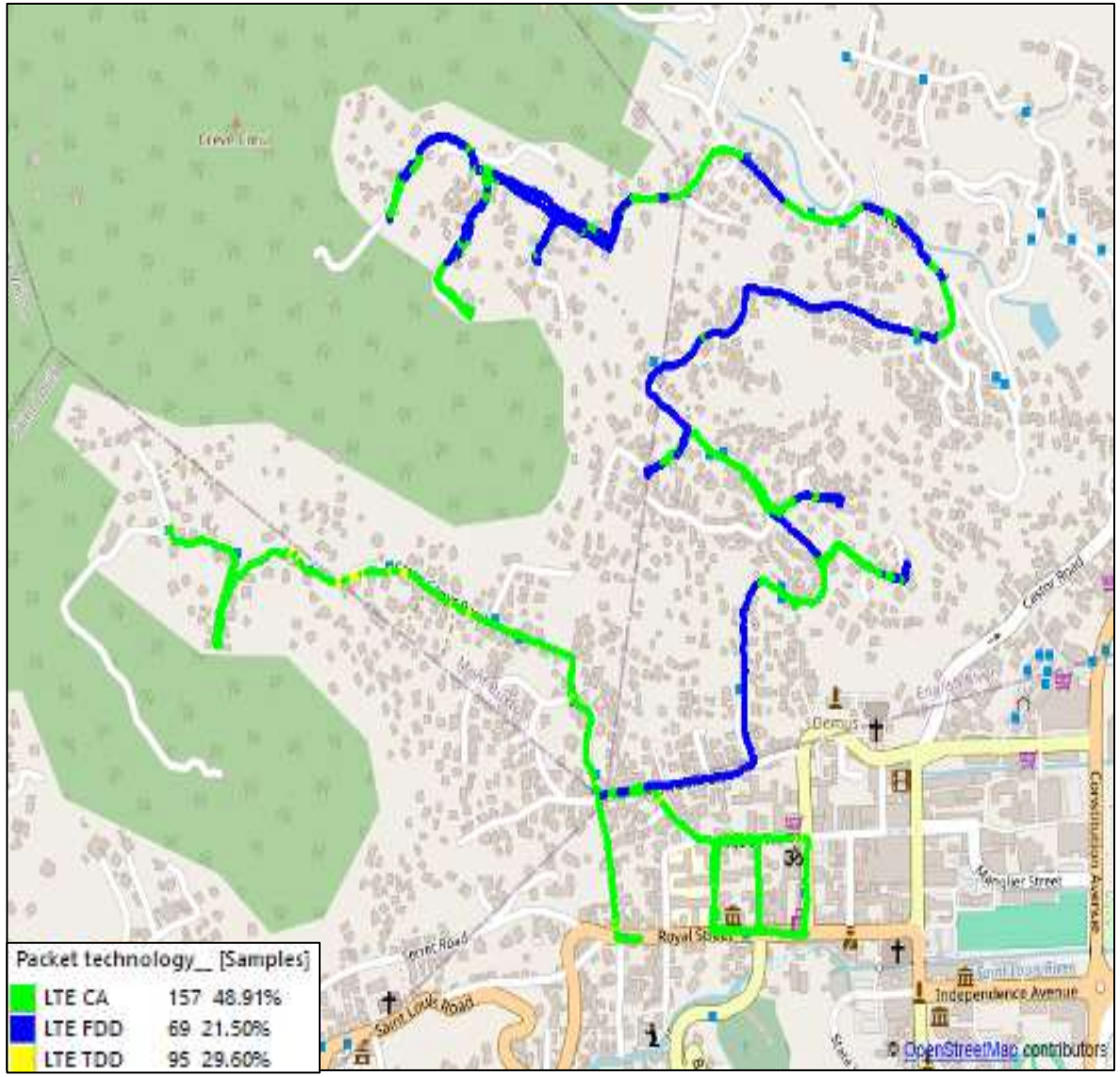


Phase-2 4G PREFERRED DATA TEST - TECHNOLOGY PLOT

Airtel Data 4G

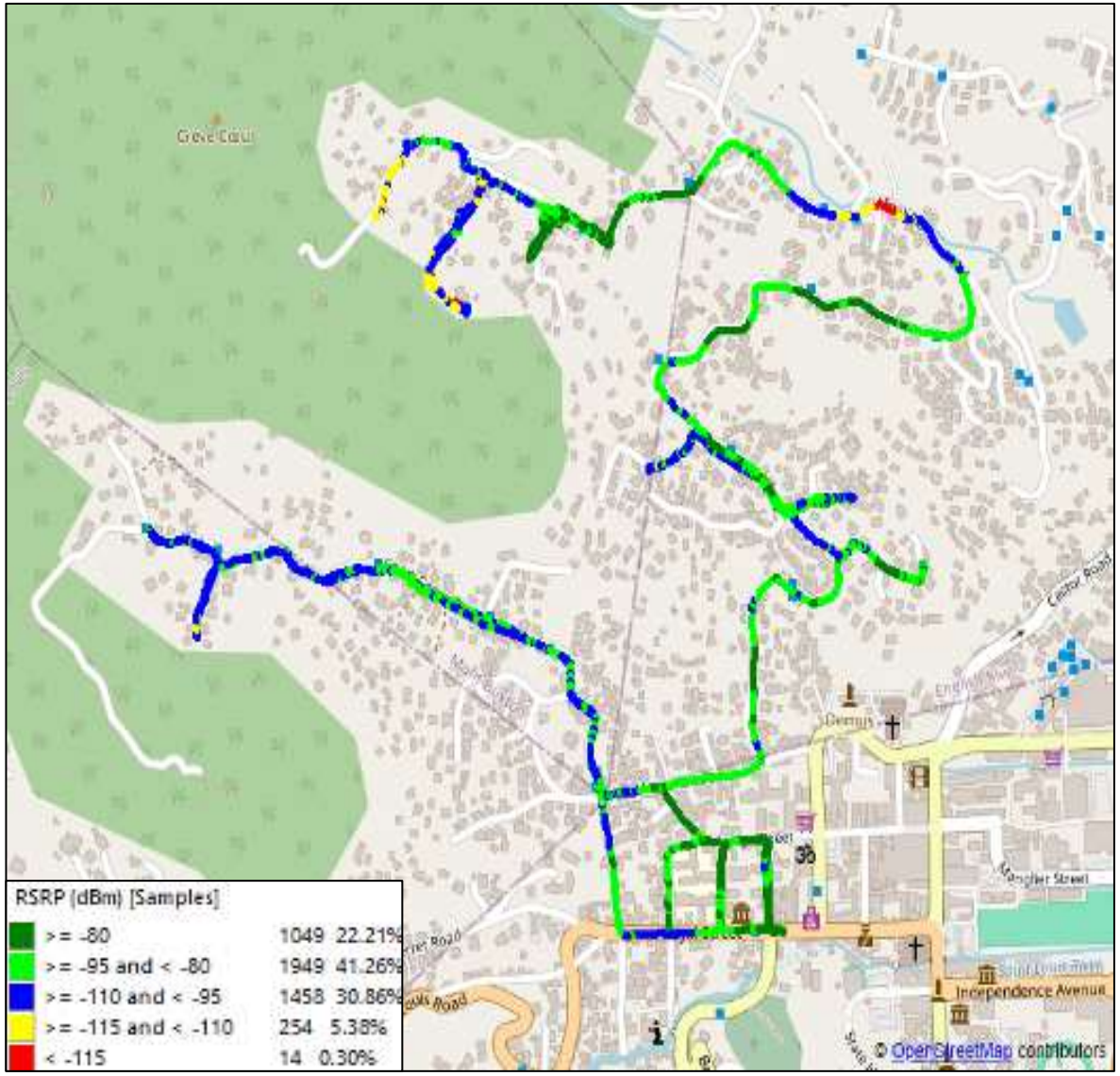


CWS Data 4G

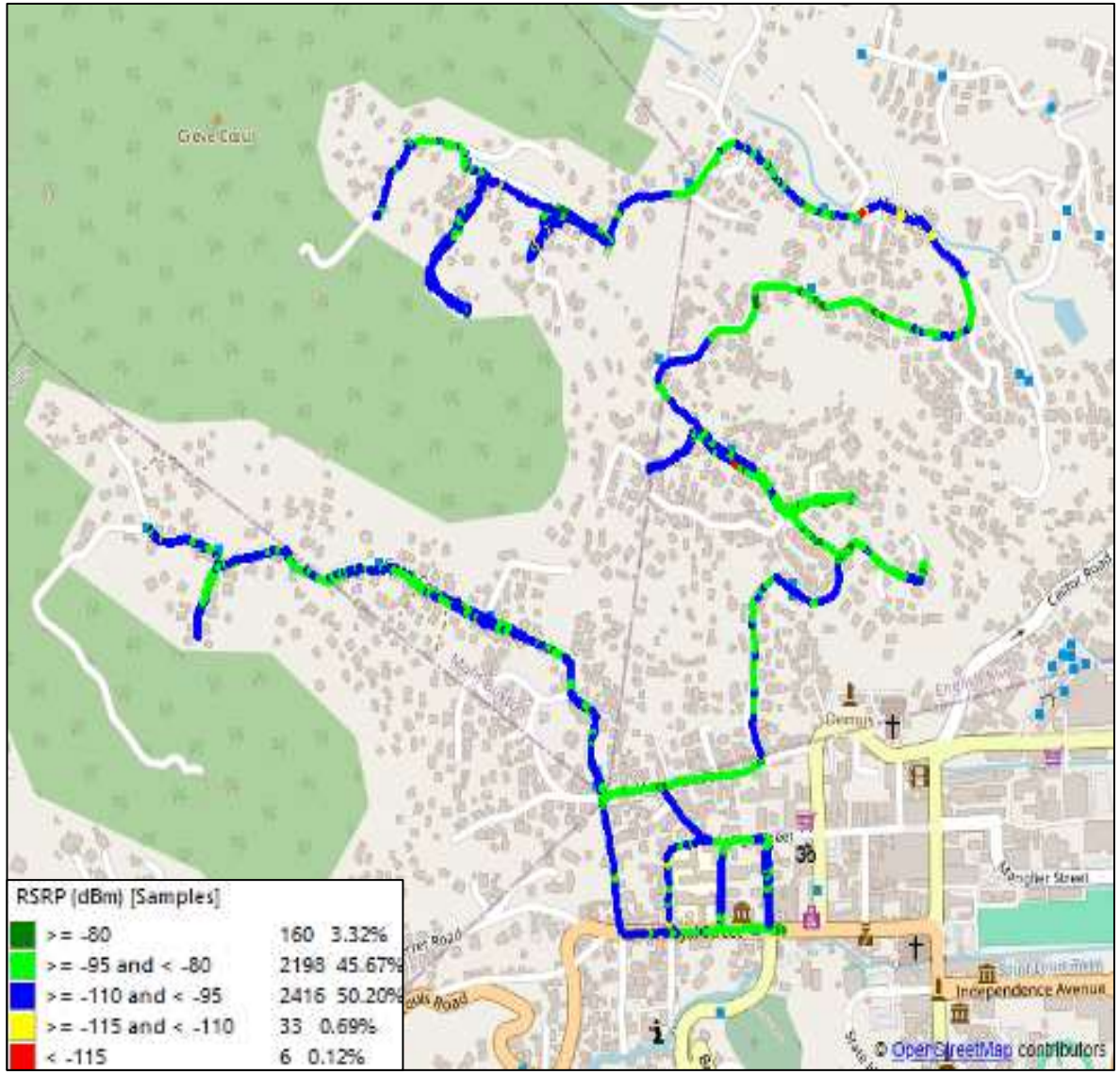


Phase-1 4G PREFERRED DATA TEST - RSRP PLOT

Airtel Data 4G

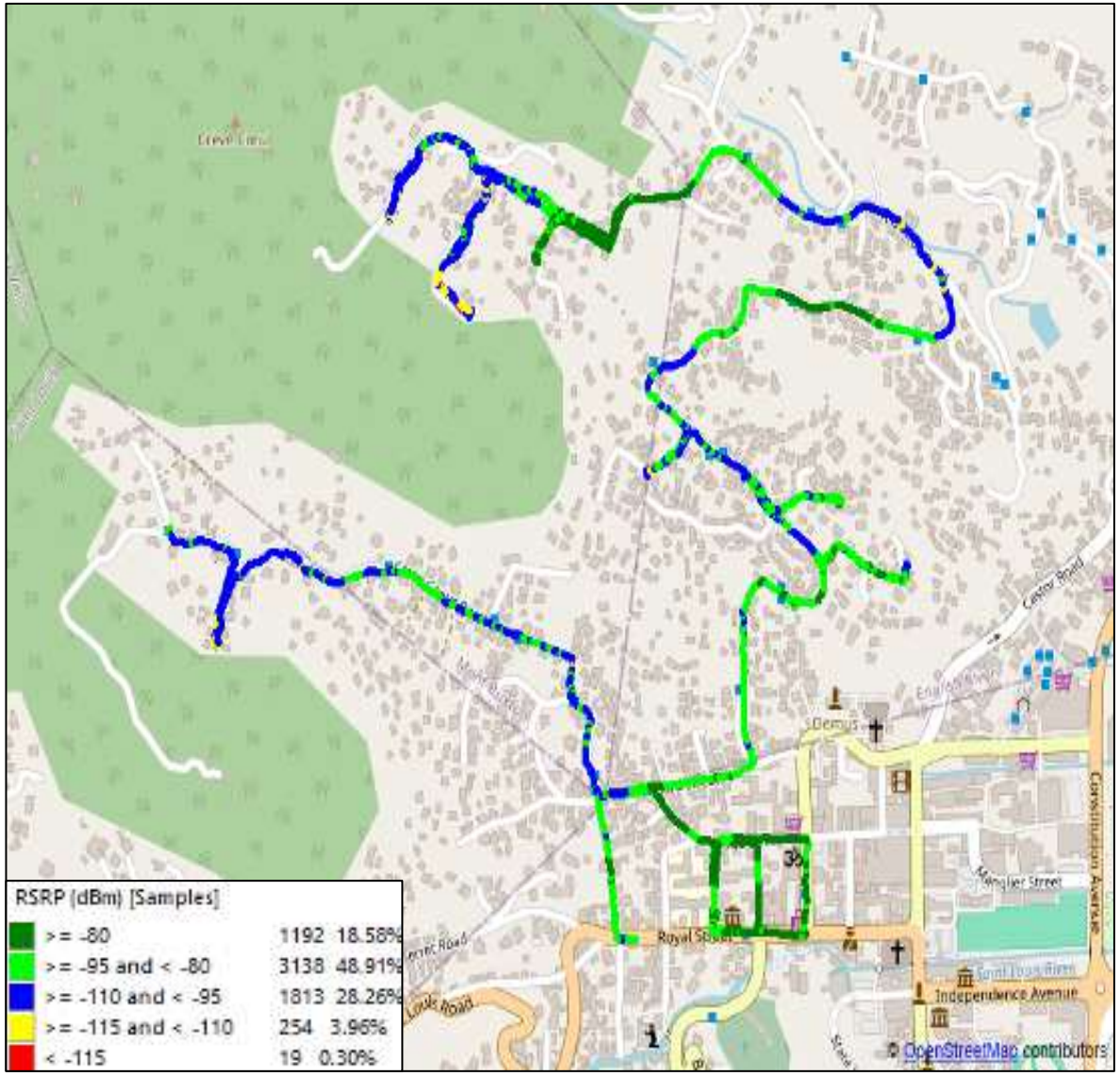


CWS Data 4G

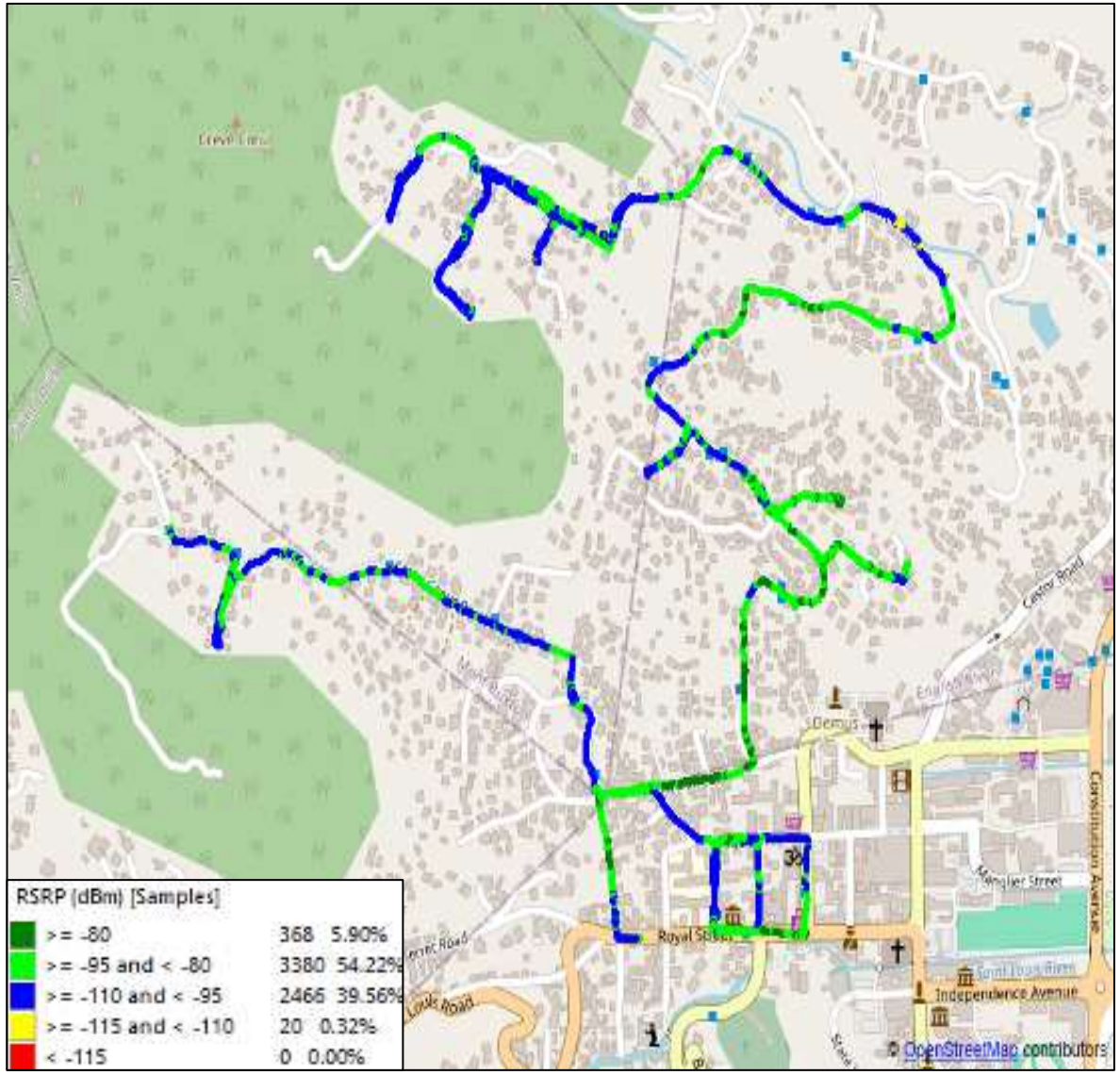


Phase-2 4G PREFERRED DATA TEST - RSRP PLOT

Airtel Data 4G

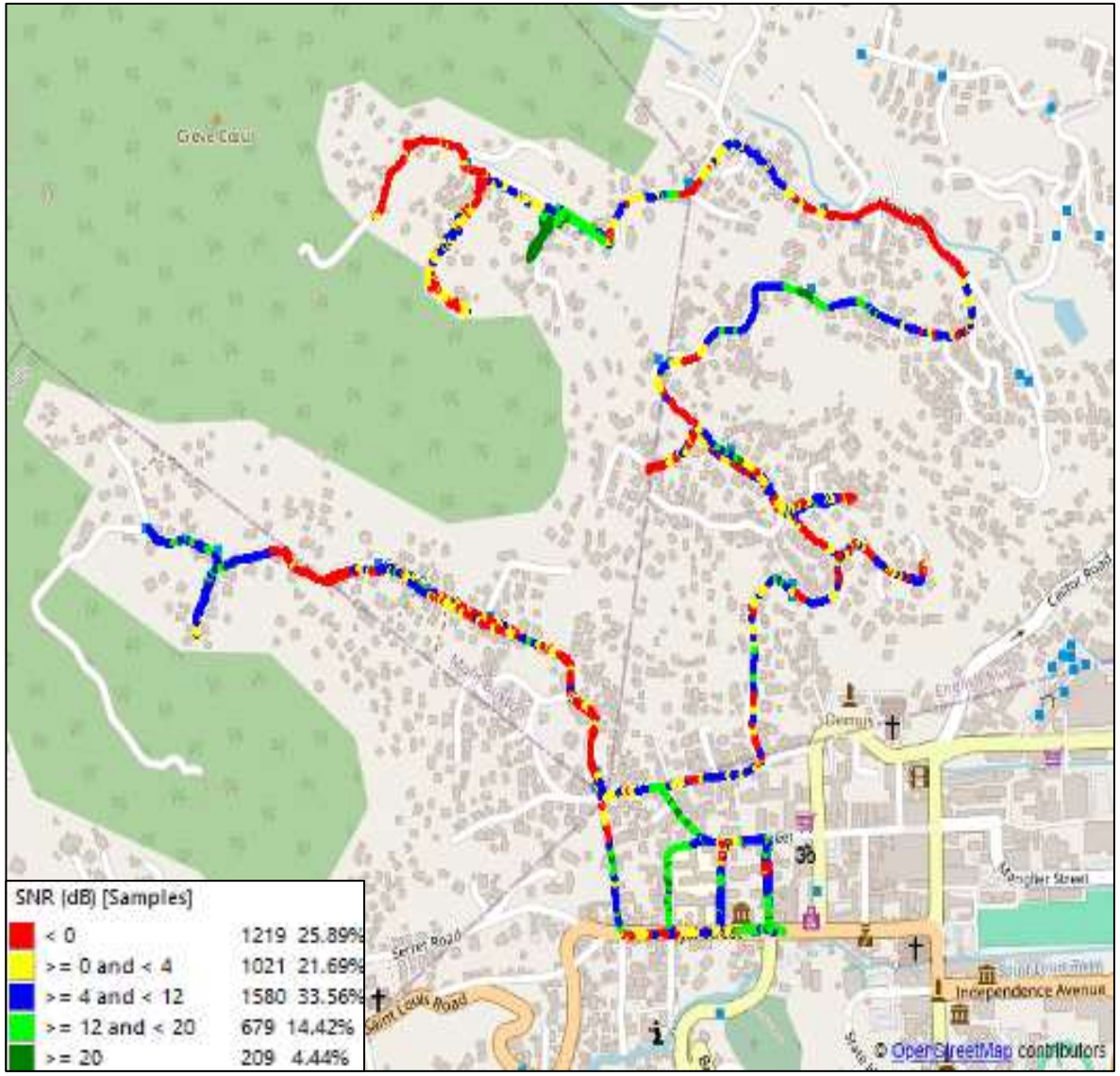


CWS Data 4G

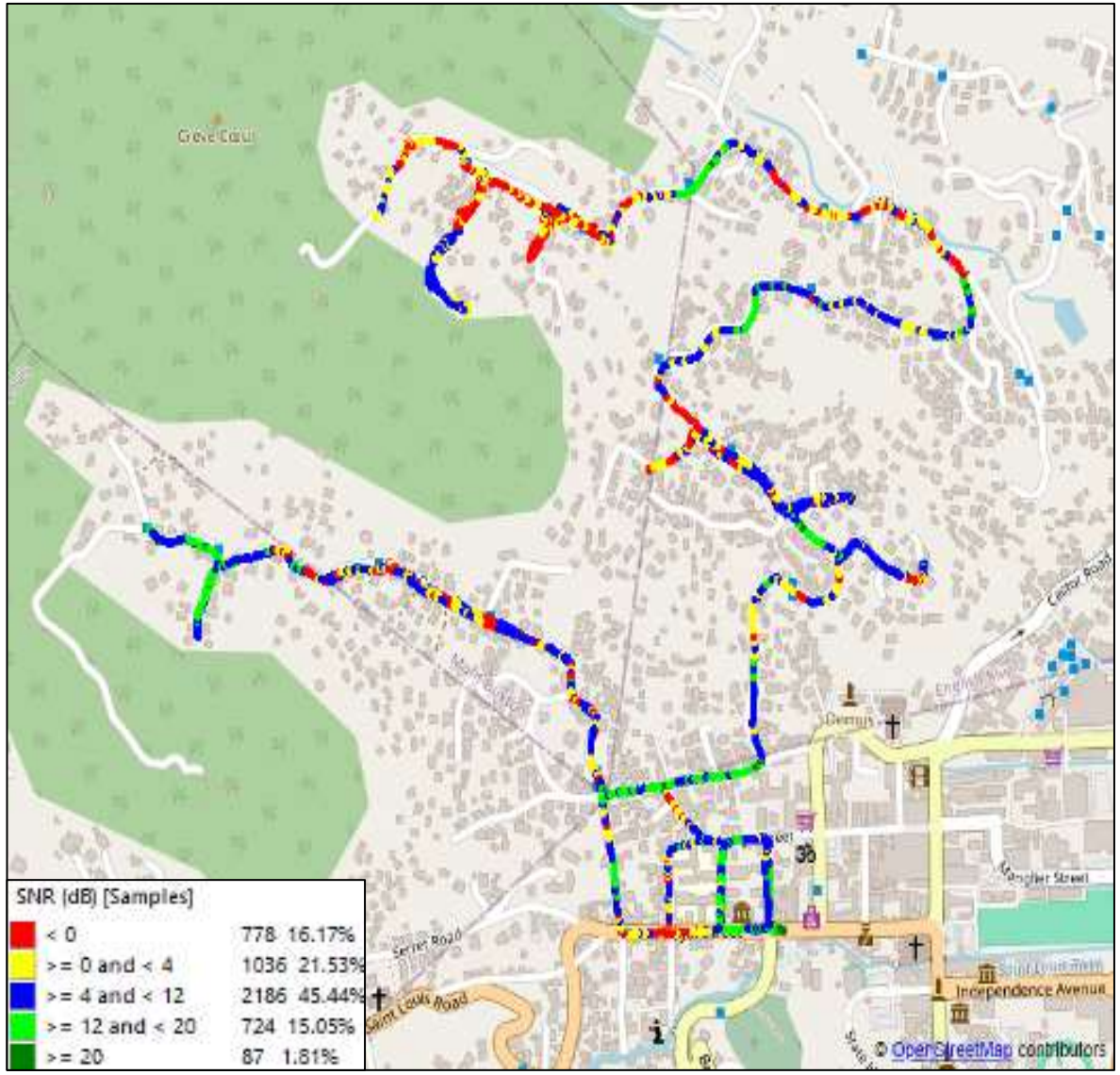


Phase-1 4G PREFERRED DATA TEST - SINR PLOT

Airtel Data 4G

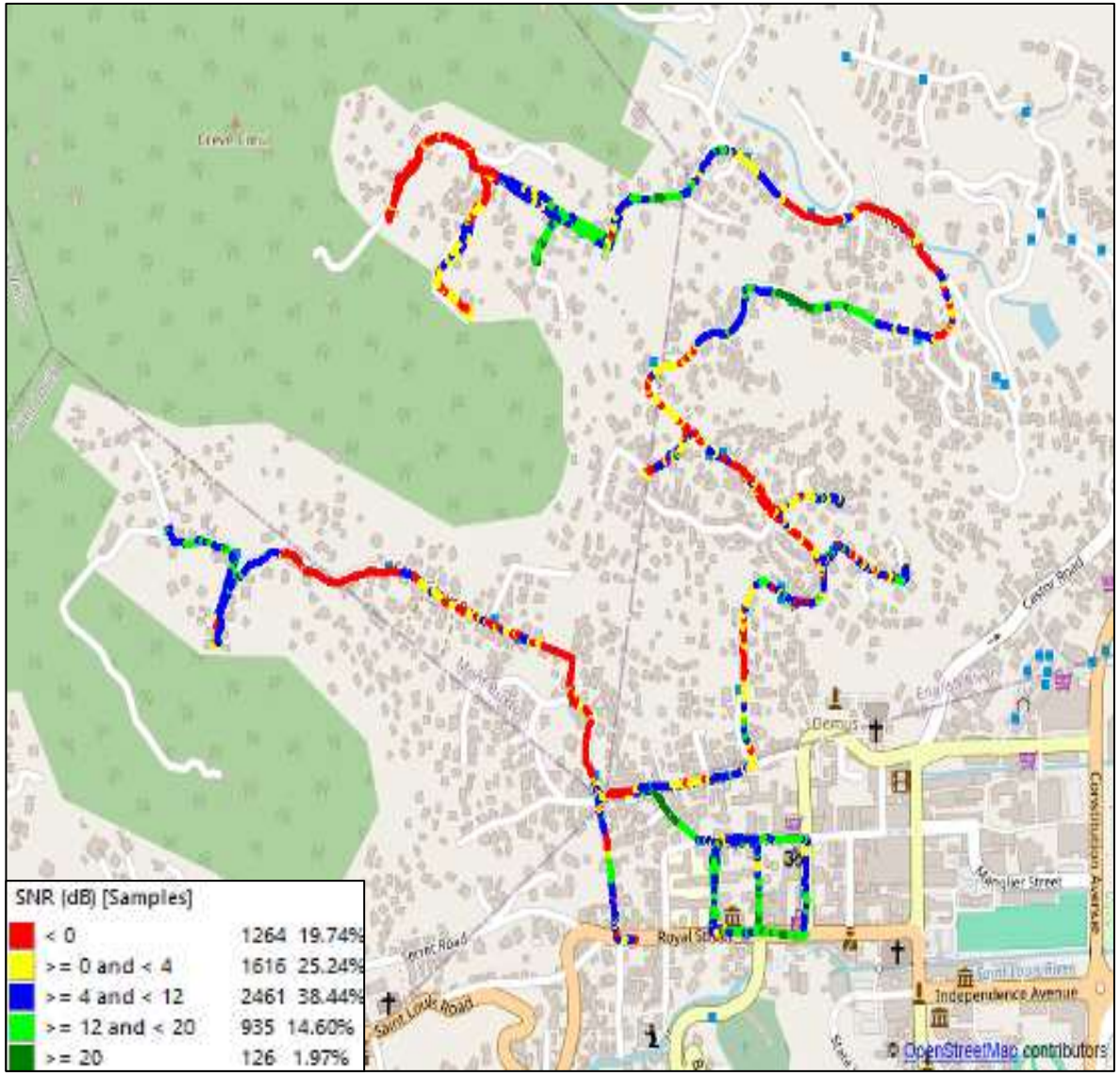


CWS Data 4G

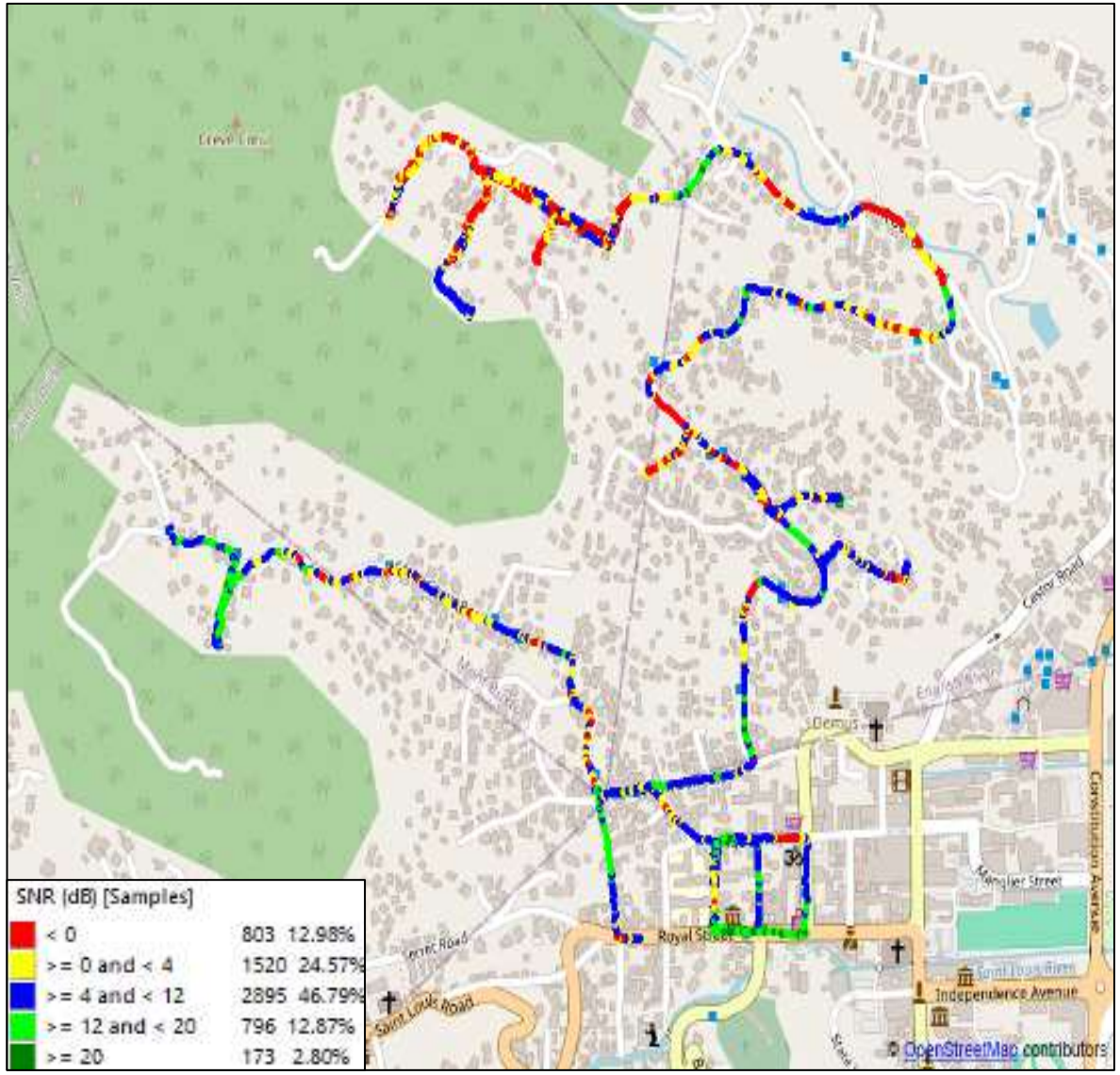


Phase-2 4G PREFERRED DATA TEST - SINR PLOT

Airtel Data 4G

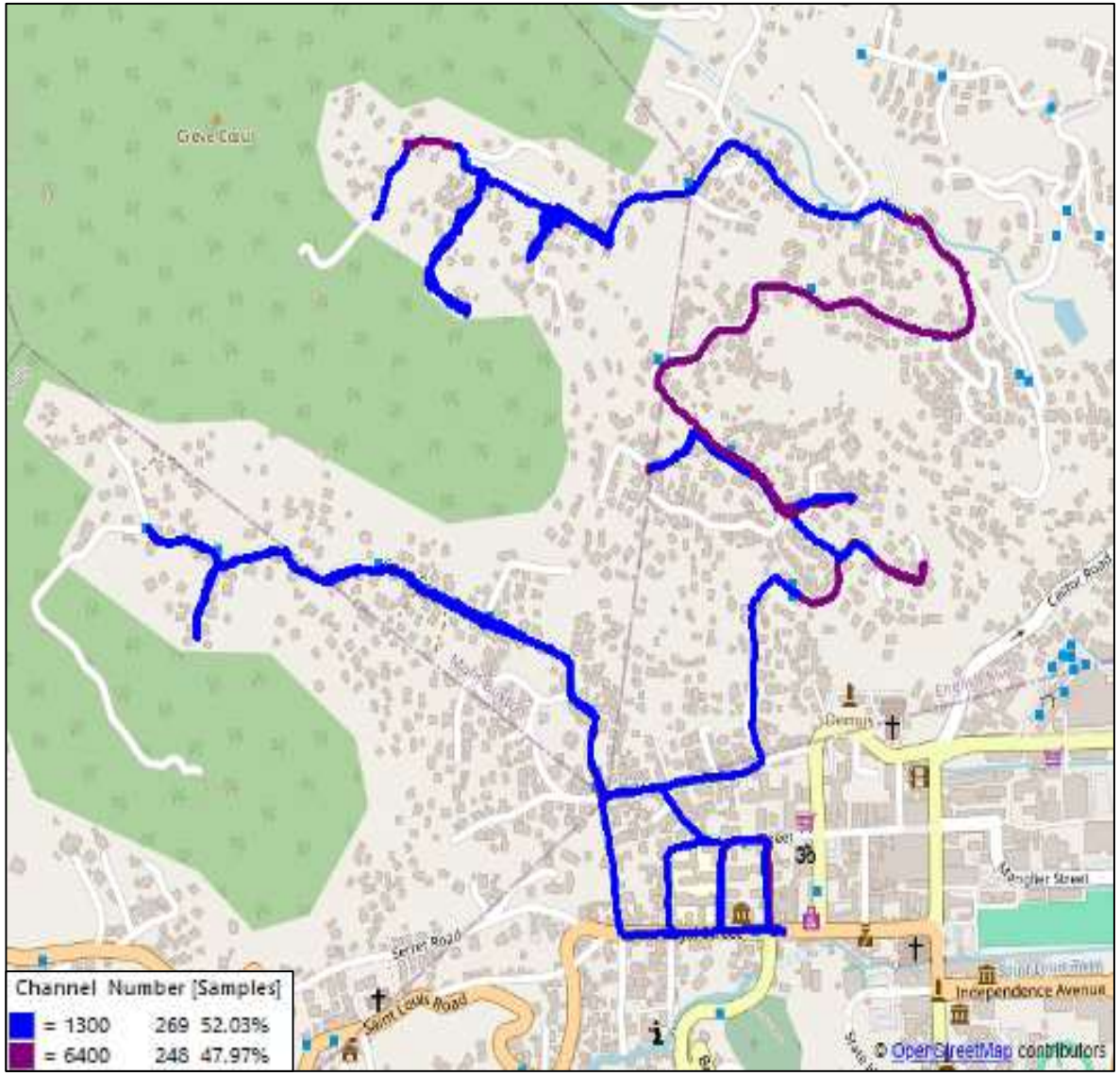


CWS Data 4G

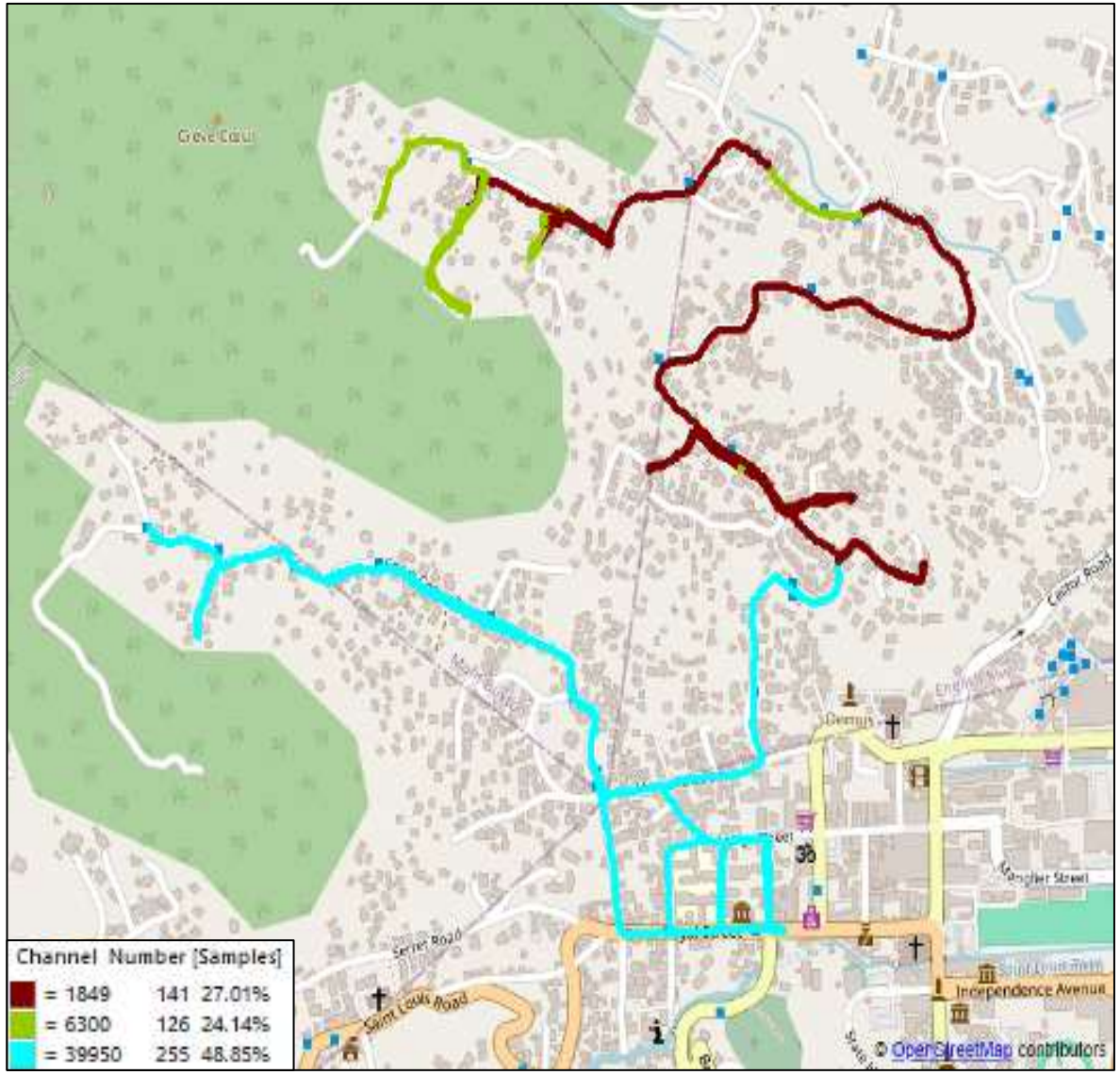


Phase-1 4G PREFERRED DATA TEST - FREQUENCY BAND PLOT

Airtel Data 4G

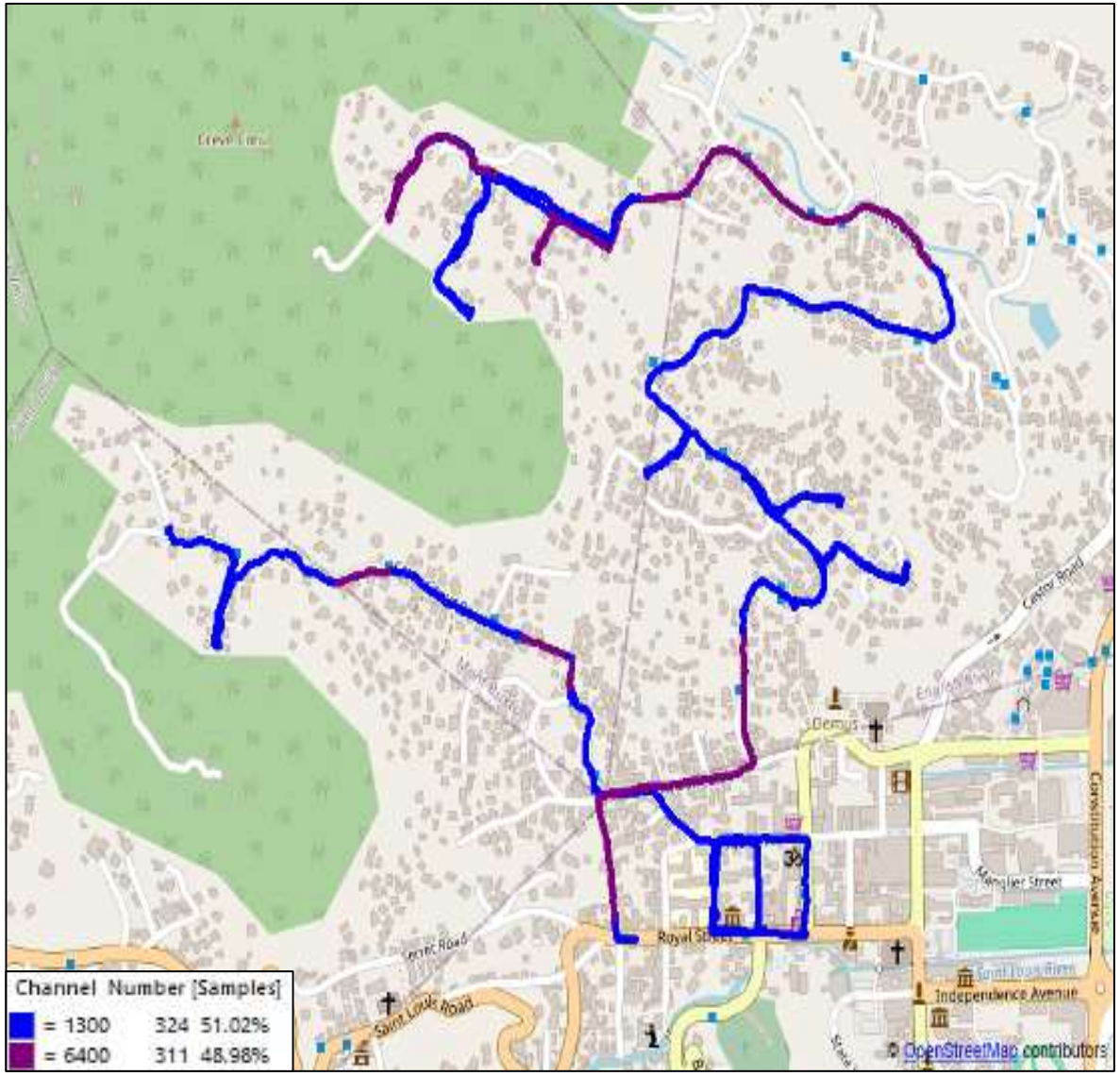


CWS Data 4G

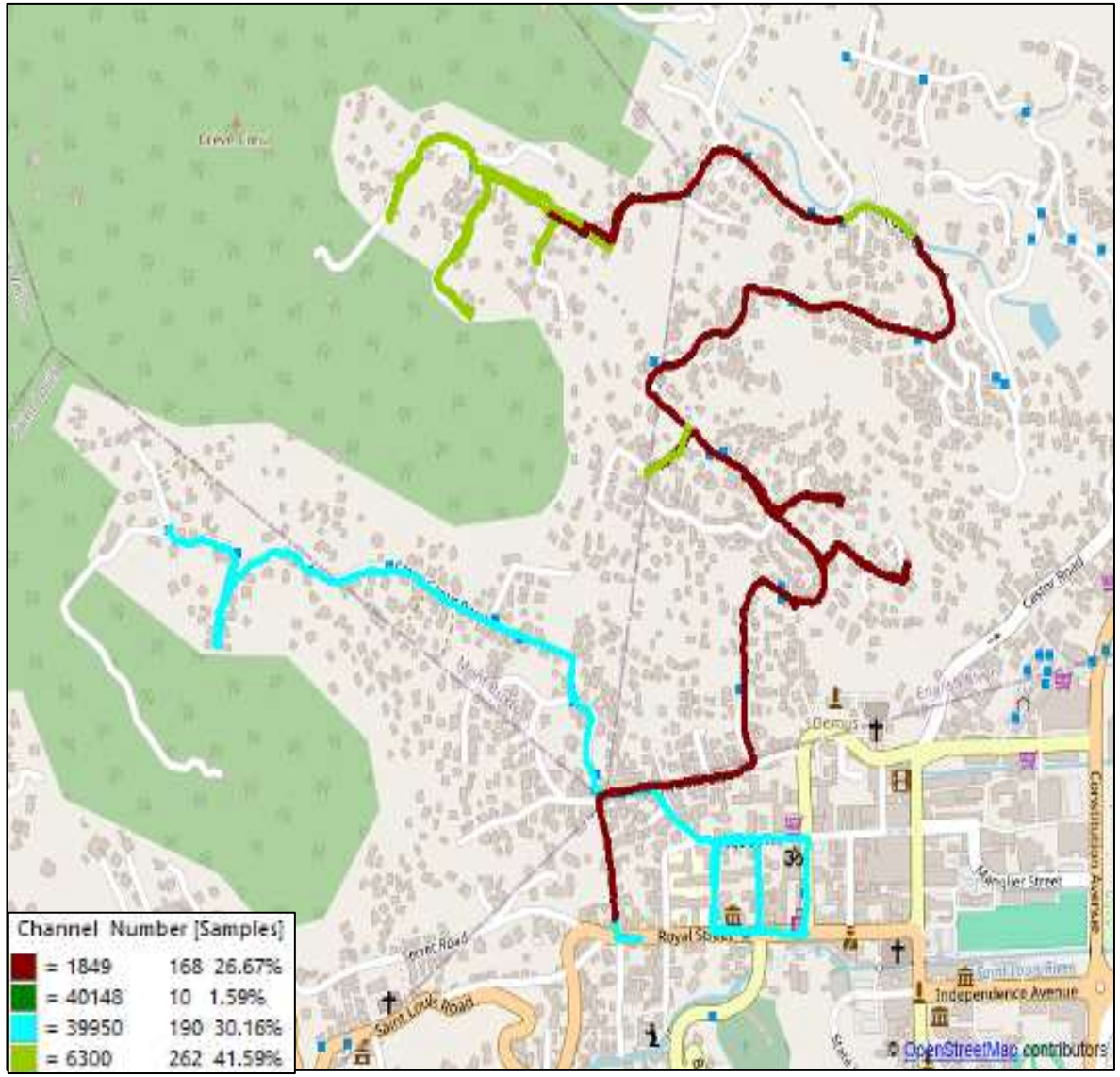


Phase-2 4G PREFERRED DATA TEST - FREQUENCY BAND PLOT

Airtel Data 4G

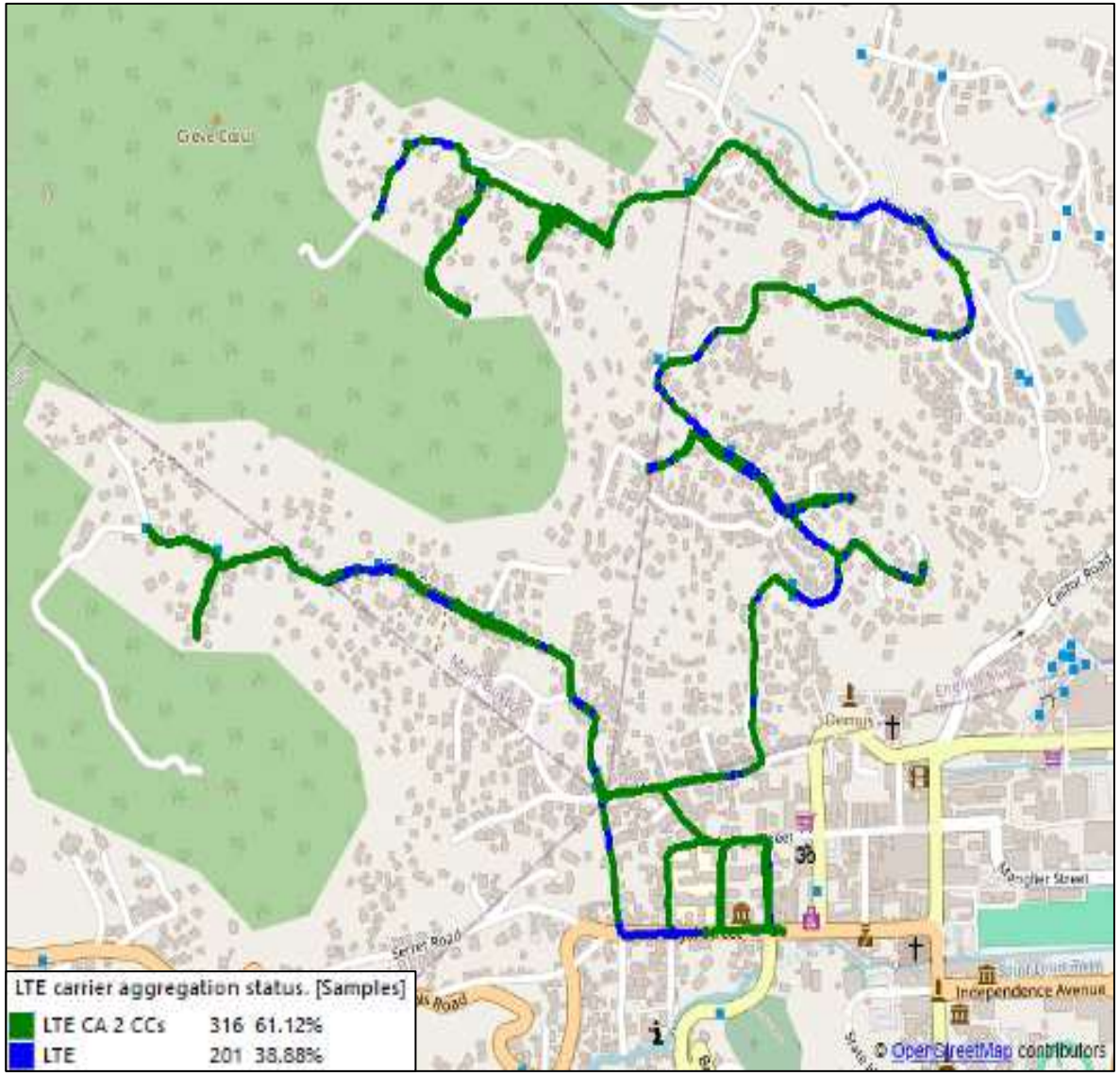


CWS Data 4G

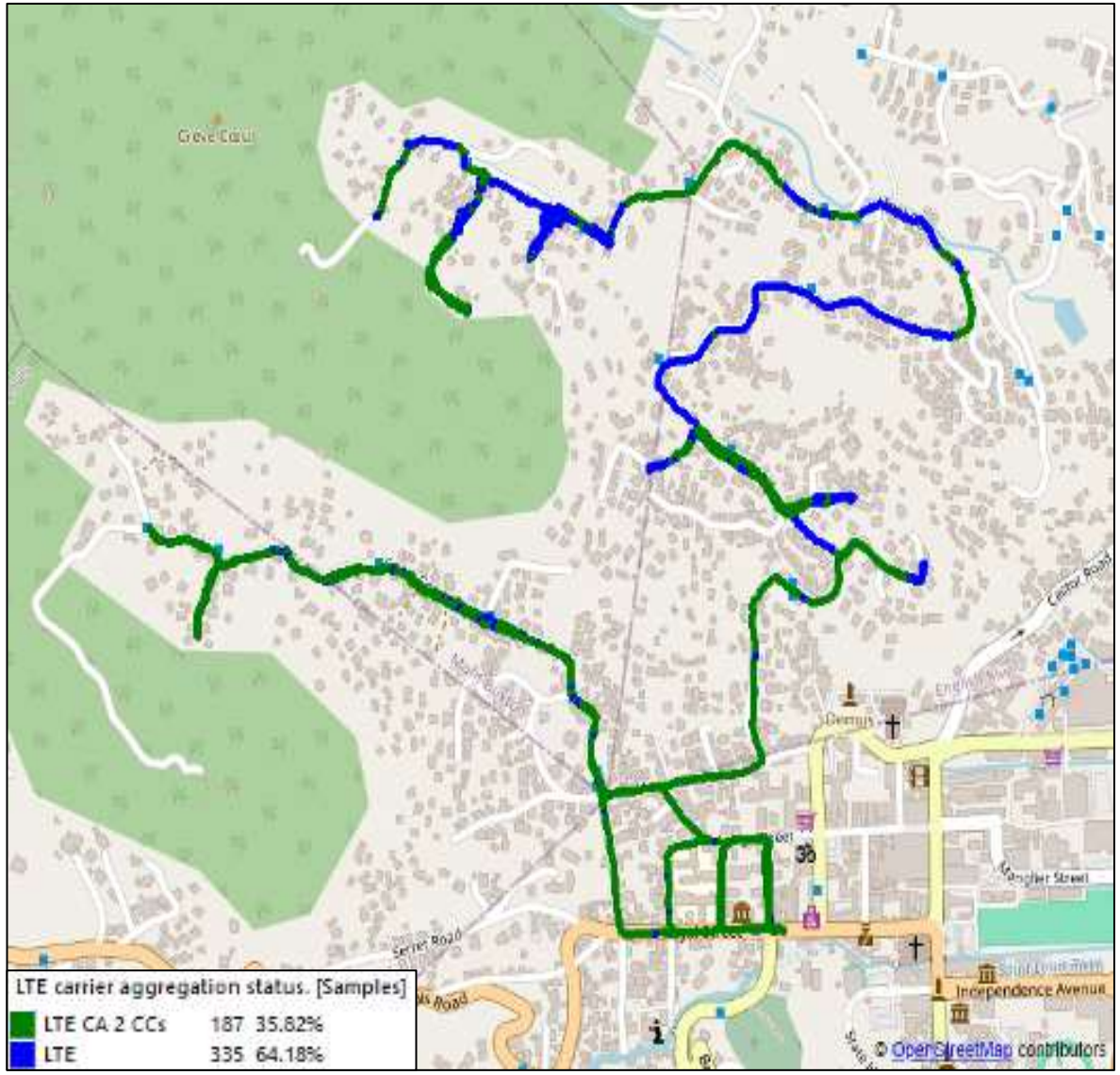


Phase-1 4G PREFERRED DATA TEST - CARRIER AGGREGATION PLOT

Airtel Data 4G

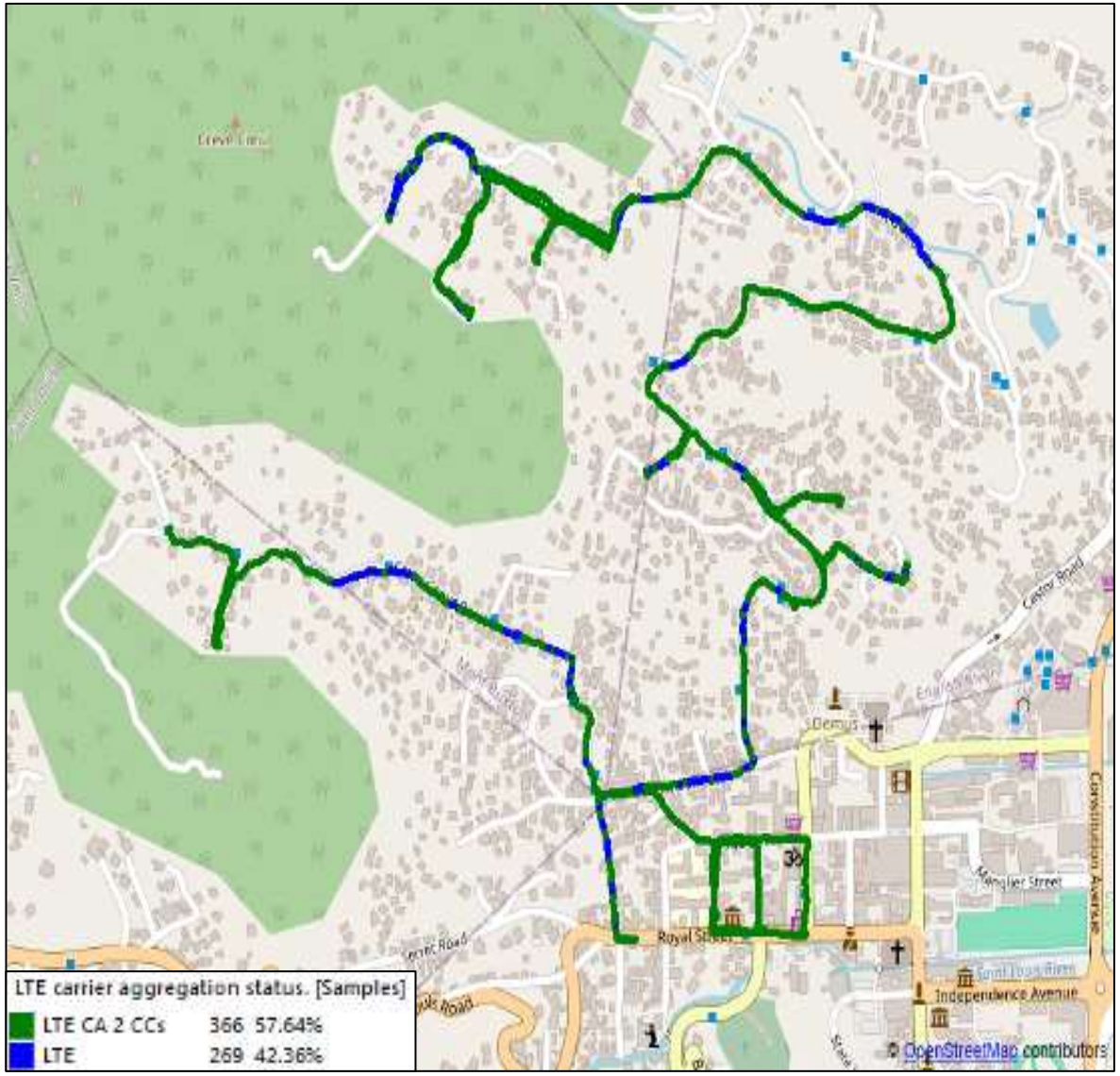


CWS Data 4G

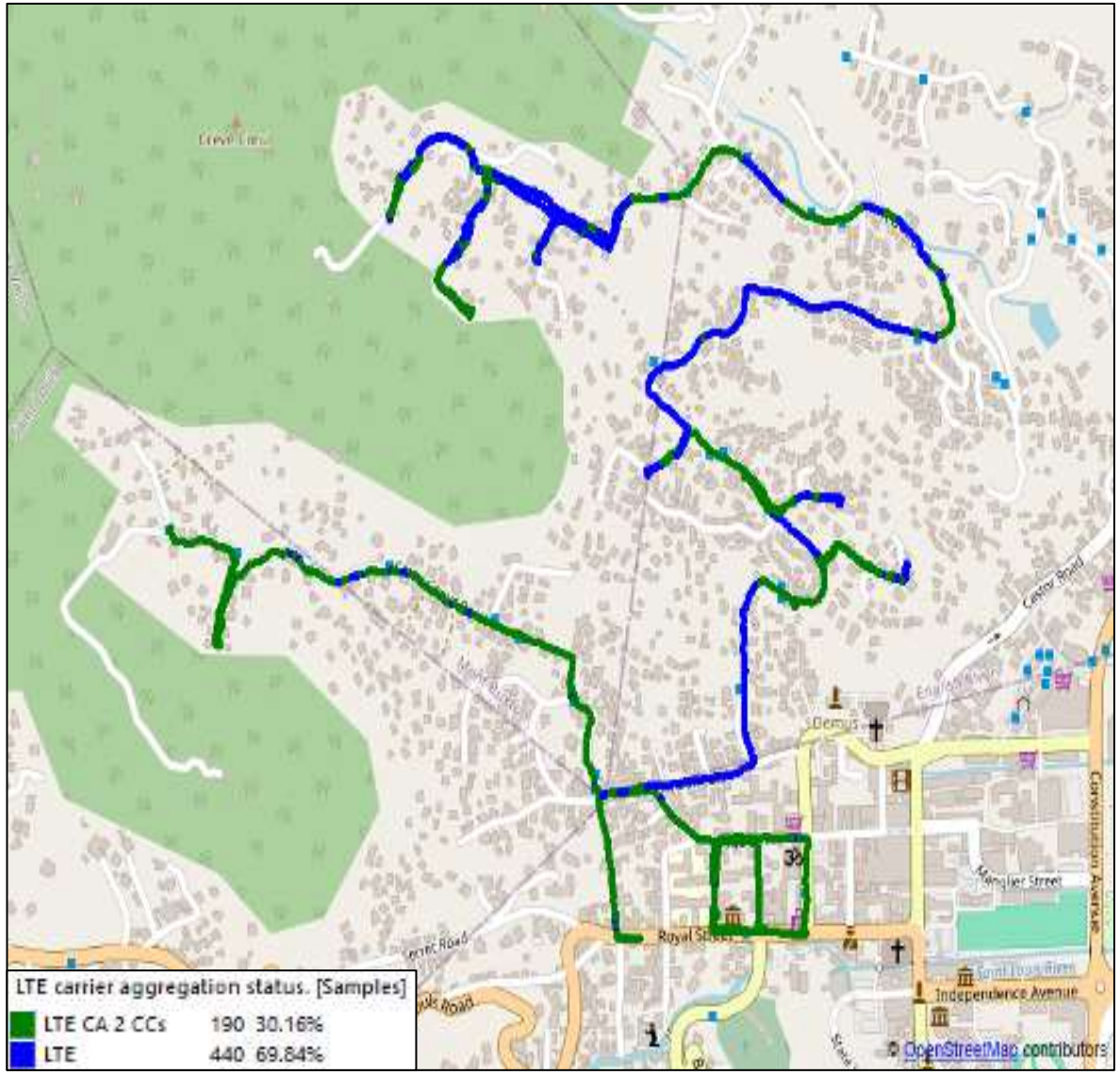


Phase-2 4G PREFERRED DATA TEST - CARRIER AGGREGATION PLOT

Airtel Data 4G

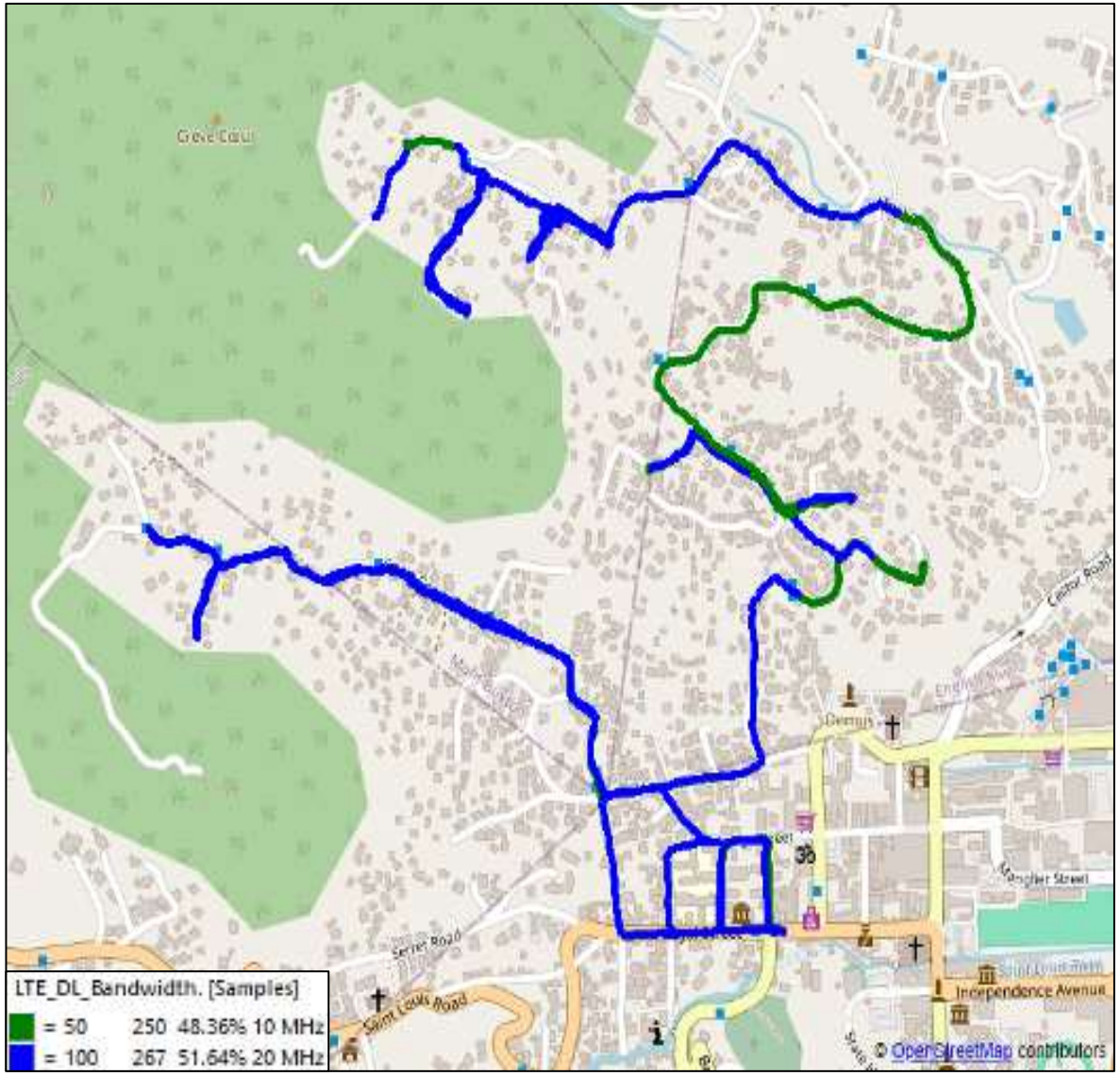


CWS Data 4G

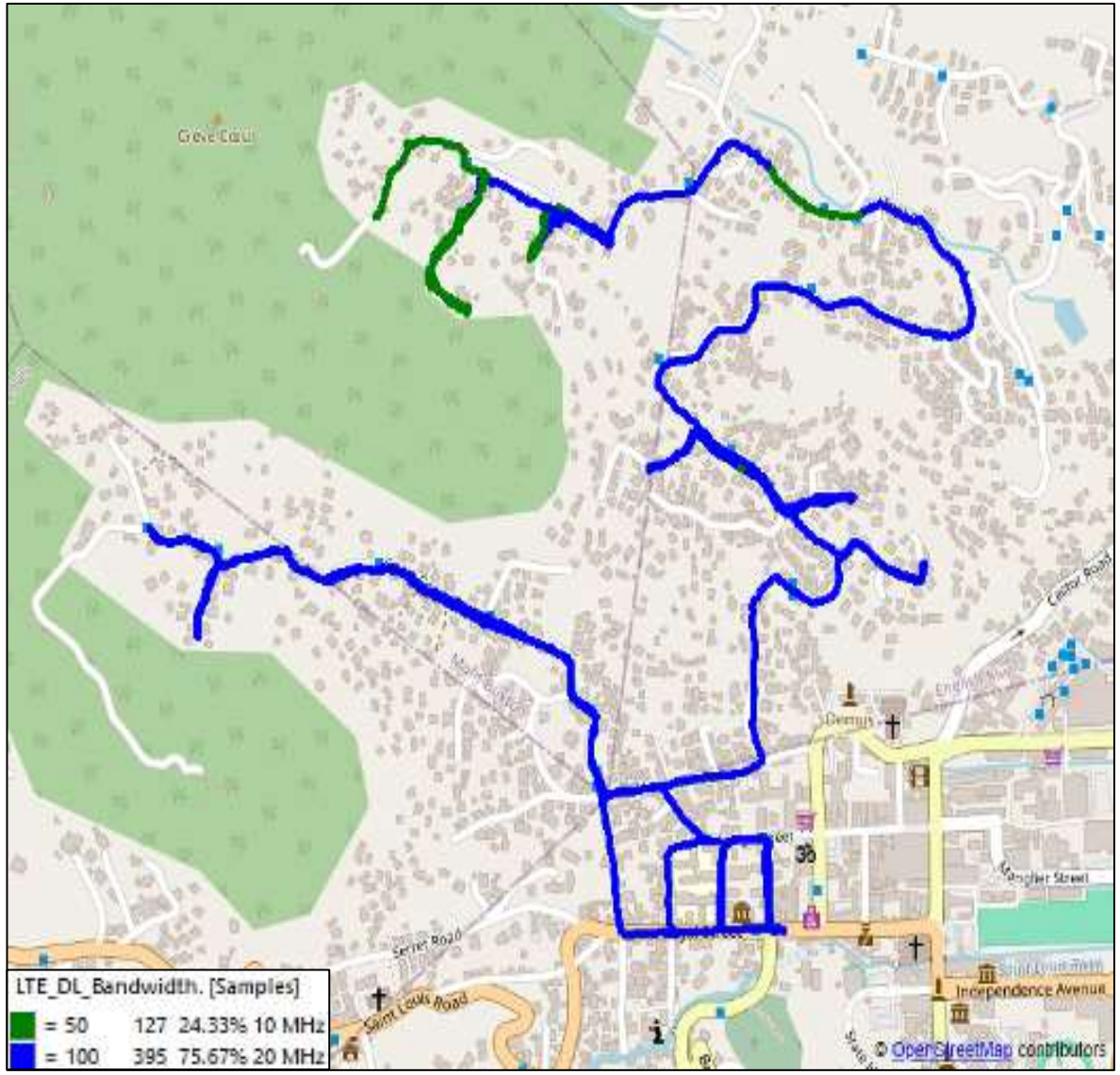


Phase-1 4G PREFERRED DATA TEST – BANDWIDTH PLOT

Airtel Data 4G

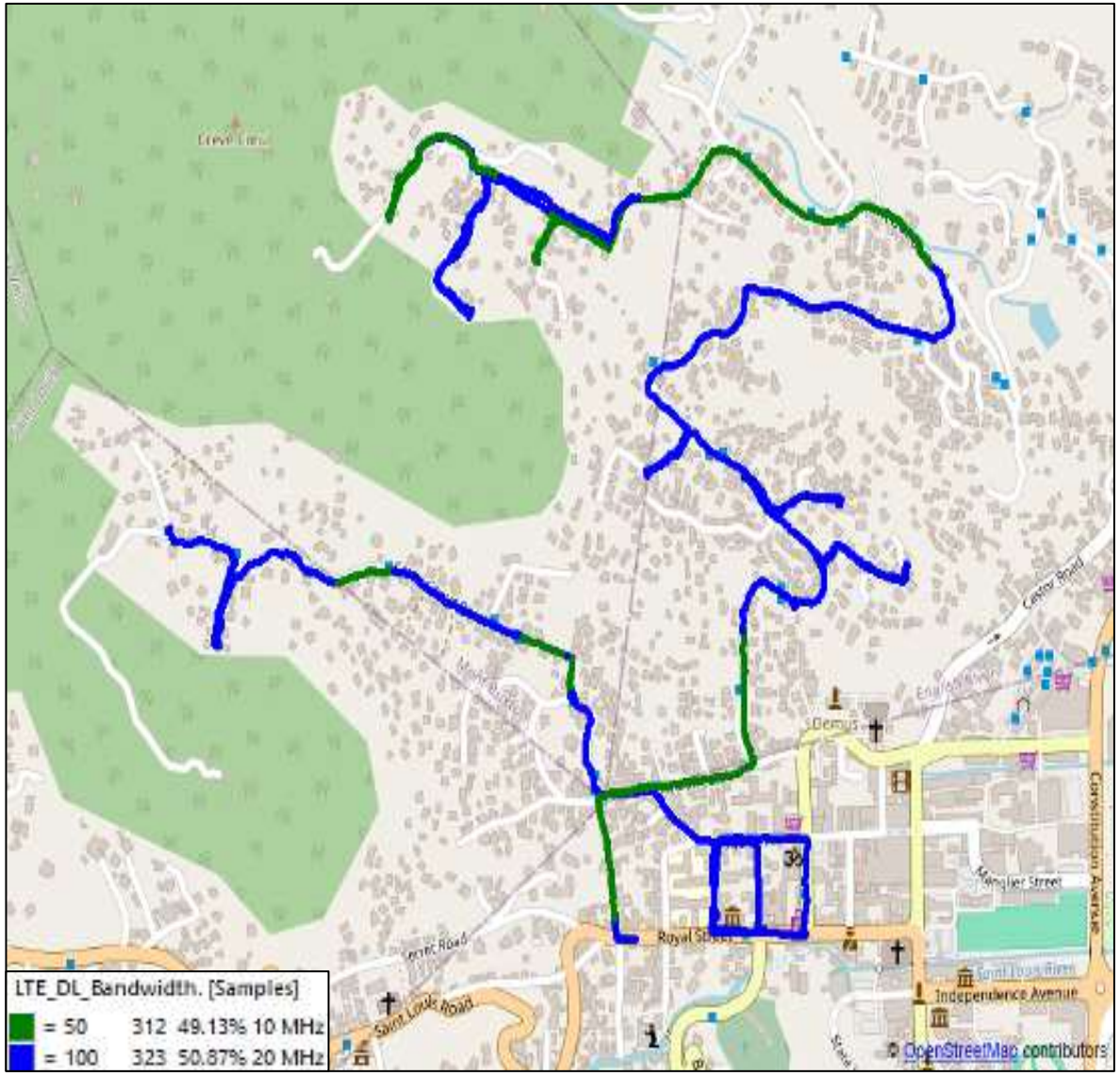


CWS Data 4G

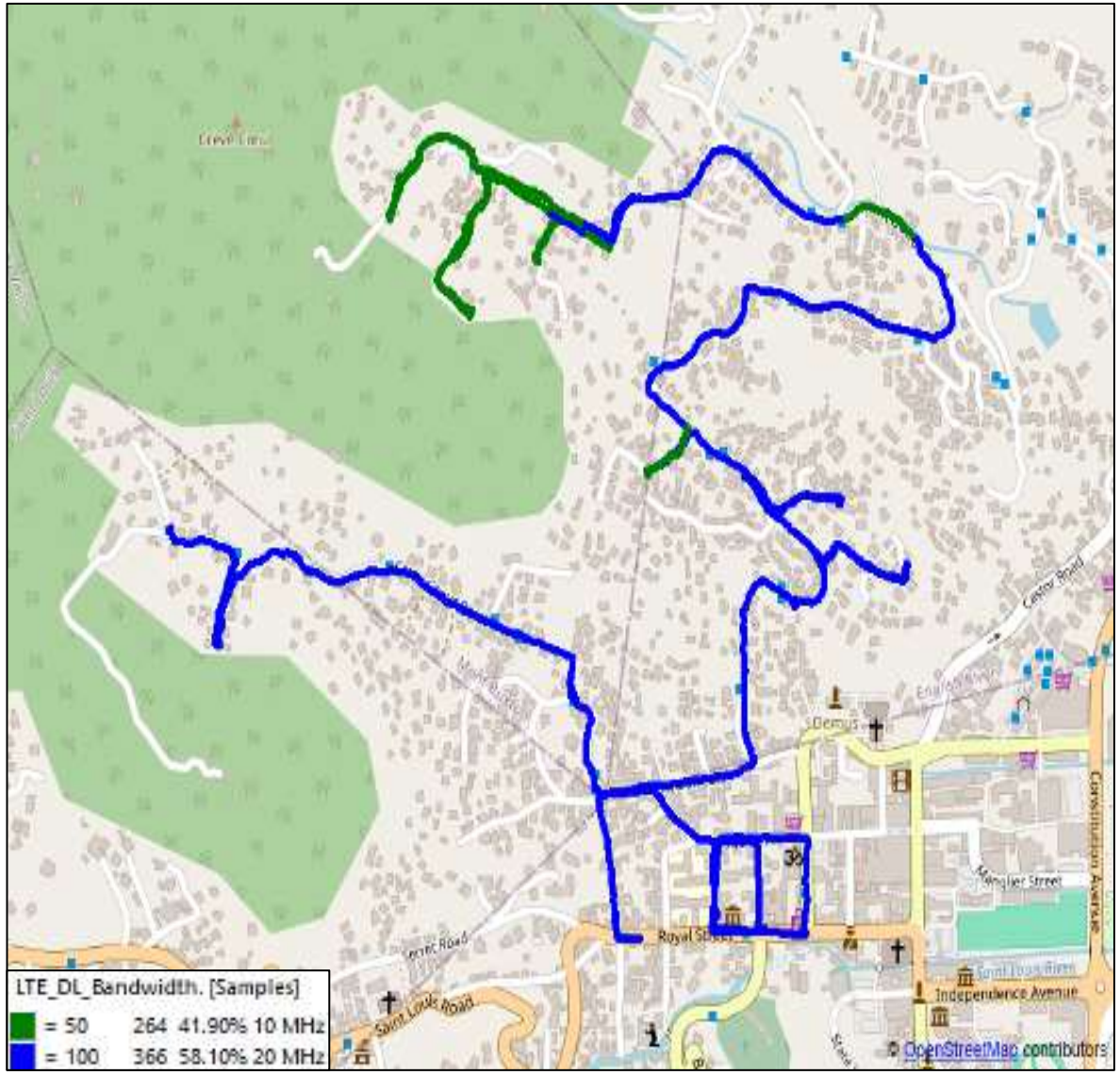


Phase-2 4G PREFERRED DATA TEST – BANDWIDTH PLOT

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	**1**
Poor Coverage	1

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

Call Drop cause from Airtel	Count
Total Call Drop	

Call Drop cause from CWS	Count
Total Call Drop	

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

	Time	System	Serving band	Cal
1.	11:26:56.626	UMTS FDD	900	Nor

	1. best active RSCP	Time	Ch	SC	1. best :
2771.	-90.7	11:26:49.421	3050	228	
2772.		11:26:49.421	3050	228	-12.9
2773.	-92.7	11:26:49.893	3050	228	
2774.		11:26:49.893	3050	228	-15.2
2775.	-86.1	11:26:50.364	3050	228	
2776.		11:26:50.364	3050	228	-9
2777.	-81.8	11:26:50.843	3050	228	
2778.		11:26:50.843	3050	228	-5.1
2779.	-85.8	11:26:51.418	3050	228	
2780.		11:26:51.418	3050	228	-8.1
2781.	-84.3	11:26:51.896	3050	228	
2782.		11:26:51.896	3050	228	-6.1
2783.	-86.4	11:26:52.468	3050	228	
2784.		11:26:52.468	3050	228	-9.5
2785.	-90.9	11:26:52.817	3050	228	
2786.		11:26:52.817	3050	228	-12.2
2787.	-91.2	11:26:53.450	3050	236	
2788.		11:26:53.450	3050	236	-11.8
2789.	-89.8	11:26:54.012	3050	236	
2790.		11:26:54.012	3050	236	-11.4
2791.	-87.6	11:26:54.479	3050	236	
2792.		11:26:54.479	3050	236	-9.8
2793.	-90.1	11:26:55.016	3050	228	
2794.		11:26:55.016	3050	228	-11.7
2795.	-87.1	11:26:55.598	3050	236	
2796.		11:26:55.598	3050	236	-9.4
2797.	-86.6	11:26:56.090	3050	228	
2798.		11:26:56.090	3050	228	-10.6
2799.	-85.5	11:26:56.629	3050	236	
2800.		11:26:56.629	3050	236	-8.7
2801.	-98	11:27:28.418	3050	228	
2802.		11:27:28.418	3050	228	-13.7
2803.	-98	11:27:29.035	3050	228	
2804.		11:27:29.035	3050	228	-11.7
2805.	-98	11:27:29.419	3050	228	
2806.		11:27:29.419	3050	220	-7.6

	Event ID	System	Transf. dir.	Time	Subchannel	Message name
10569.	RRCSM	UMTS FDD	Uplink	11:26:39.899	DCCH	UPLINK_DIRECT_TRANSFER
10570.	L3SM	UMTS FDD	Uplink	11:26:39.899	DCCH	AUTHENTICATION_RESPONSE
10571.	RRCSM	UMTS FDD	Downlink	11:26:39.996	DCCH	SECURITY_MODE_COMMAND
10572.	RRCSM	UMTS FDD	Uplink	11:26:39.996	DCCH	SECURITY_MODE_COMPLETE
10573.	RRCSM	UMTS FDD	Uplink	11:26:40.087	DCCH	UPLINK_DIRECT_TRANSFER
10574.	L3SM	UMTS FDD	Uplink	11:26:40.087	DCCH	SETUP
10575.	RRCSM	UMTS FDD	Downlink	11:26:40.096	DCCH	DOWNLINK_DIRECT_TRANSFER
10576.	L3SM	UMTS FDD	Downlink	11:26:40.096	DCCH	IDENTITY_REQUEST
10577.	RRCSM	UMTS FDD	Uplink	11:26:40.096	DCCH	UPLINK_DIRECT_TRANSFER
10578.	L3SM	UMTS FDD	Uplink	11:26:40.096	DCCH	IDENTITY_RESPONSE
10579.	RRCSM	UMTS FDD	Uplink	11:26:40.107	DCCH	MEASUREMENT_REPORT
10580.	RRCSM	UMTS FDD	Downlink	11:26:40.226	DCCH	DOWNLINK_DIRECT_TRANSFER
10581.	L3SM	UMTS FDD	Downlink	11:26:40.226	DCCH	CALL_PROCEEDING
10582.	RRCSM	UMTS FDD	Uplink	11:26:40.390	DCCH	MEASUREMENT_REPORT
10583.	RRCSM	UMTS FDD	Uplink	11:26:40.471	DCCH	MEASUREMENT_REPORT
10584.	RRCSM	UMTS FDD	Downlink	11:26:40.496	DCCH	ACTIVE_SET_UPDATE
10585.	RRCSM	UMTS FDD	Uplink	11:26:40.507	DCCH	ACTIVE_SET_UPDATE_COMPLETE
10586.	RRCSM	UMTS FDD	Downlink	11:26:40.606	DCCH	MEASUREMENT_CONTROL
10587.	RRCSM	UMTS FDD	Uplink	11:26:40.949	DCCH	MEASUREMENT_REPORT
10588.	RRCSM	UMTS FDD	Uplink	11:26:40.957	DCCH	MEASUREMENT_REPORT
10589.	RRCSM	UMTS FDD	Downlink	11:26:41.056	DCCH	ACTIVE_SET_UPDATE
10590.	RRCSM	UMTS FDD	Uplink	11:26:41.067	DCCH	ACTIVE_SET_UPDATE_COMPLETE
10591.	RRCSM	UMTS FDD	Uplink	11:26:41.111	DCCH	MEASUREMENT_REPORT
10592.	RRCSM	UMTS FDD	Downlink	11:26:41.166	DCCH	MEASUREMENT_CONTROL
10593.	RRCSM	UMTS FDD	Uplink	11:26:41.612	DCCH	MEASUREMENT_REPORT
10594.	RRCSM	UMTS FDD	Downlink	11:26:41.736	DCCH	ACTIVE_SET_UPDATE
10595.	RRCSM	UMTS FDD	Uplink	11:26:41.767	DCCH	ACTIVE_SET_UPDATE_COMPLETE
10596.	RRCSM	UMTS FDD	Uplink	11:26:42.070	DCCH	MEASUREMENT_REPORT
10597.	RRCSM	UMTS FDD	Downlink	11:26:42.856	DCCH	ACTIVE_SET_UPDATE
10598.	RRCSM	UMTS FDD	Uplink	11:26:42.887	DCCH	ACTIVE_SET_UPDATE_COMPLETE
10599.	RRCSM	UMTS FDD	Uplink	11:26:43.472	DCCH	MEASUREMENT_REPORT
10600.	RRCSM	UMTS FDD	Downlink	11:26:43.616	DCCH	ACTIVE_SET_UPDATE
10601.	RRCSM	UMTS FDD	Uplink	11:26:43.647	DCCH	ACTIVE_SET_UPDATE_COMPLETE
10602.	RRCSM	UMTS FDD	Uplink	11:26:43.730	DCCH	MEASUREMENT_REPORT
10603.	RRCSM	UMTS FDD	Downlink	11:26:44.736	DCCH	ACTIVE_SET_UPDATE
10604.	RRCSM	UMTS FDD	Uplink	11:26:44.767	DCCH	ACTIVE_SET_UPDATE_COMPLETE

Analysis:

- This call failure event occurred on short call at 12:26:56:626 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 228 and RF condition RSCP -86.6 dBm poor but Ec/No -10.6 dB are very poor.
- Need to check MT.

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

	Time	Band (MHz)	Ch	PCI	RSRP	SNR
4661.	11:27:13.848	1800	1300	61	-108.4	
4662.	11:27:13.848					-0.4
4663.	11:27:15.362	1800	1300	61	-108.4	
4664.	11:27:15.362					0.6
4665.	11:27:16.404	1800	1300	61	-106.3	
4666.	11:27:16.404					-1.3
4667.	11:27:17.705	1800	1300	61	-103.3	
4668.	11:27:17.705					1.7
4669.	11:27:18.960	1800	1300	61	-102.9	
4670.	11:27:18.960					4
4671.	11:27:20.365	1800	1300	61	-99.4	
4672.	11:27:20.365					3.6
4673.	11:27:21.521	1800	1300	61	-98.5	
4674.	11:27:21.521					7.7
4675.	11:27:23.004	1800	1300	61	-99.9	
4676.	11:27:23.004					5.5
4677.	11:27:24.421	1800	1300	61	-104.6	
4678.	11:27:24.421					2.4
4679.	11:27:25.473	1800	1300	61	-106.1	
4680.	11:27:25.473					1.7
4681.	11:27:26.749	1800	1300	61	-107	
4682.	11:27:26.749					0.8
4683.	11:27:28.364	1800	1300	61	-104.9	
4684.	11:27:28.364					4.9
4685.	11:27:29.422	1800	1300	61	-104.4	
4686.	11:27:29.422					8.3
4687.	11:27:30.807	1800	1300	61	-103.6	
4688.	11:27:30.807					4
4689.	11:27:31.228	1800	1300	61	-111.6	
4690.	11:27:31.228					4
4691.	11:27:44.578	800	6400	61	-113.6	
4692.	11:27:44.578					
4693.	11:27:44.578					-8
4694.	11:27:45.092	800	6400	61	-110.9	
4695.	11:27:45.092					-7.4
4696.	11:27:45.595	800	6400	61	-113.8	
4697.	11:27:45.595					-8.2

	Event ID	System	Transf. dir.	Time	Subchannel	Message name
10222.	RRCSM	UMTS FDD	Downlink	11:26:50.560	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_18
10223.	RRCSM	LTE FDD	Downlink	11:26:54.319	BCCH-BCH	MasterInformationBlock
10224.	RRCSM	LTE FDD	Downlink	11:26:54.352	BCCH-SCH	SystemInformationBlockType1
10225.	RRCSM	LTE FDD	Downlink	11:26:54.387	BCCH-SCH	SystemInformation - SIB2,SIB3
10226.	L3SM	LTE FDD	Uplink	11:26:54.405		TRACKING_AREA_UPDATE_REQUEST
10227.	RRCSM	LTE FDD	Uplink	11:26:54.406	CCCH	RRCConnectionRequest
10228.	RRCSM	LTE FDD	Downlink	11:26:54.484	CCCH	RRCConnectionSetup
10229.	RRCSM	LTE FDD	Uplink	11:26:54.488	DCCH	RRCConnectionSetupComplete
10230.	RRCSM	LTE FDD	Downlink	11:26:54.548	DCCH	DLInformationTransfer
10231.	RRCSM	LTE FDD	Downlink	11:26:54.549	DCCH	RRCConnectionRelease
10232.	L3SM	LTE FDD	Downlink	11:26:54.549		TRACKING_AREA_UPDATE_ACCEPT
10233.	RRCSM	LTE FDD	Downlink	11:27:22.798	PCCH	Paging
10234.	RRCSM	LTE FDD	Downlink	11:27:26.638	PCCH	Paging
10235.	RRCSM	LTE FDD	Downlink	11:27:30.478	PCCH	Paging
10236.	L3SM	LTE FDD	Uplink	11:27:30.479		EXTENDED_SERVICE_REQUEST
10237.	RRCSM	LTE FDD	Uplink	11:27:30.479	CCCH	RRCConnectionRequest
10238.	RRCSM	LTE FDD	Downlink	11:27:30.564	CCCH	RRCConnectionSetup
10239.	RRCSM	LTE FDD	Uplink	11:27:30.569	DCCH	RRCConnectionSetupComplete
10240.	RRCSM	LTE FDD	Downlink	11:27:30.604	DCCH	SecurityModeCommand
10241.	RRCSM	LTE FDD	Uplink	11:27:30.606	DCCH	SecurityModeComplete
10242.	RRCSM	LTE FDD	Downlink	11:27:30.628	DCCH	UECapabilityEnquiry
10243.	RRCSM	LTE FDD	Uplink	11:27:30.630	DCCH	UECapabilityInformation
10244.	RRCSM	UMTS FDD	Uplink	11:27:30.630		INTER_RAT_HANDOVER_INFO
10245.	RRCSM	LTE FDD	Downlink	11:27:30.677	DCCH	RRCConnectionReconfiguration
10246.	RRCSM	LTE FDD	Uplink	11:27:30.688	DCCH	RRCConnectionReconfigurationComplete
10247.	RRCSM	LTE FDD	Downlink	11:27:30.707	DCCH	RRCConnectionReconfiguration
10248.	RRCSM	LTE FDD	Uplink	11:27:30.709	DCCH	RRCConnectionReconfigurationComplete
10249.	RRCSM	LTE FDD	Uplink	11:27:31.080	DCCH	MeasurementReport
10250.	RRCSM	LTE FDD	Downlink	11:27:31.131	DCCH	RRCConnectionRelease
10251.	RRCSM	UMTS FDD	Downlink	11:27:31.459	BCCH_BCH	SYSTEM_INFORMATION_BCH
10252.	RRCSM	UMTS FDD	Downlink	11:27:31.479	BCCH_BCH	SYSTEM_INFORMATION_BCH
10253.	RRCSM	UMTS FDD	Downlink	11:27:31.499	BCCH_BCH	SYSTEM_INFORMATION_BCH
10254.	RRCSM	UMTS FDD	Downlink	11:27:31.499	BCCH	MASTER_INFORMATION_BLOCK
10255.	RRCSM	UMTS FDD	Downlink	11:27:31.519	BCCH_BCH	SYSTEM_INFORMATION_BCH
10256.	RRCSM	UMTS FDD	Downlink	11:27:31.519	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_3
10257.	RRCSM	UMTS FDD	Downlink	11:27:31.519	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_7
10258.	RRCSM	UMTS FDD	Downlink	11:27:31.520	BCCH_BCH	MASTER_INFORMATION_BLOCK

Analysis:

- On MT End, During the setup fail, UE was latched with PCI 61 and RF condition RSRP -104.4 dBm is poor but SINR 8.3 dB is good.
- Call failed at the MT end due to poor network coverage. The terminating device experienced low signal strength, leading to call failure.

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

	Time	System	Serving band	Call
1.	11:28:17.140	GSM	900	Dro

	Time	RxLev sub	ARFCN	LAC	RAC	RXQ sub
488.	11:28:04.547	-82	19	1	0	
489.	11:28:04.815	-85	19	1	0	
490.	11:28:05.489	-79	19	1	0	
491.	11:28:06.195	-84	19	1	0	
492.	11:28:06.495	-78	19	1	0	
493.	11:28:07.067	-76	19	1	0	
494.	11:28:07.640	-78	19	1	0	
495.	11:28:08.111	-81	19	1	0	
496.	11:28:08.696	-86	19	1	0	
497.	11:28:09.167	-84	19	1	0	
498.	11:28:09.523	-83	19	1	0	
499.	11:28:10.464	-66	19	1	0	
500.	11:28:10.465					5
501.	11:28:10.866	-86	19	1	0	
502.	11:28:10.935					0
503.	11:28:11.138	-76	19	1	0	
504.	11:28:11.877	-84	19	1	0	
505.	11:28:12.348	-85	19	1	0	
506.	11:28:12.818					2
507.	11:28:13.289					0
508.	11:28:13.343	-79	19	1	0	
509.	11:28:13.875	-82	19	1	0	
510.	11:28:14.418	-84	19	1	0	
511.	11:28:14.817	-82	19	1	0	
512.	11:28:15.420	-82	19	1	0	
513.	11:28:15.876	-81	19	1	0	
514.	11:28:16.691	-80	19	1	0	
515.	11:28:16.691					0
516.	11:28:16.945					7
517.	11:28:17.106	-80	24	1	0	
518.	11:28:17.106					7
519.	11:28:17.555	-80	24	1	0	
520.	11:28:17.555					
521.	11:28:18.345	-82	19	1	0	
522.	11:28:18.998			1	0	
523.	11:28:19.664	-84	19	1	0	
524.	11:28:20.615	-84	19	1	0	

	Event ID	System	Transf. dir.	Time	Subchannel	Message name
10711.	L3SM	GSM	Downlink	11:28:11.992	SACCH	SYSTEM_INFORMATION_TYPE_5
10712.	L3SM	GSM	Uplink	11:28:12.348	SACCH	MEASUREMENT_REPORT
10713.	L3SM	GSM	Downlink	11:28:12.463	SACCH	SYSTEM_INFORMATION_TYPE_5TER
10714.	L3SM	GSM	Uplink	11:28:12.818	SACCH	MEASUREMENT_REPORT
10715.	L3SM	GSM	Downlink	11:28:12.933	SACCH	SYSTEM_INFORMATION_TYPE_6
10716.	L3SM	GSM	Uplink	11:28:13.289	SACCH	MEASUREMENT_REPORT
10717.	L3SM	GSM	Downlink	11:28:13.404	SACCH	MEASUREMENT_INFORMATION
10718.	L3SM	GSM	Uplink	11:28:13.760	SACCH	MEASUREMENT_REPORT
10719.	L3SM	GSM	Downlink	11:28:13.875	SACCH	MEASUREMENT_INFORMATION
10720.	L3SM	GSM	Uplink	11:28:14.231	SACCH	MEASUREMENT_REPORT
10721.	L3SM	GSM	Downlink	11:28:14.346	SACCH	MEASUREMENT_INFORMATION
10722.	L3SM	GSM	Uplink	11:28:14.701	SACCH	MEASUREMENT_REPORT
10723.	L3SM	GSM	Downlink	11:28:14.817	SACCH	SYSTEM_INFORMATION_TYPE_5
10724.	L3SM	GSM	Uplink	11:28:15.172	SACCH	MEASUREMENT_REPORT
10725.	L3SM	GSM	Downlink	11:28:15.287	SACCH	SYSTEM_INFORMATION_TYPE_5TER
10726.	L3SM	GSM	Uplink	11:28:15.643	SACCH	MEASUREMENT_REPORT
10727.	L3SM	GSM	Downlink	11:28:15.758	SACCH	SYSTEM_INFORMATION_TYPE_6
10728.	L3SM	GSM	Uplink	11:28:16.114	SACCH	MEASUREMENT_REPORT
10729.	L3SM	GSM	Downlink	11:28:16.229	SACCH	MEASUREMENT_INFORMATION
10730.	L3SM	GSM	Downlink	11:28:16.552	DCCH	ASSIGNMENT_COMMAND
10731.	L3SM	GSM	Uplink	11:28:16.585	SACCH	MEASUREMENT_REPORT
10732.	L3SM	GSM	Uplink	11:28:16.612	DCCH	ASSIGNMENT_COMPLETE
10733.	L3SM	GSM	Uplink	11:28:16.945	SACCH	MEASUREMENT_REPORT
10734.	L3SM	GSM	Downlink	11:28:16.950	DCCH	DISCONNECT
10735.	L3SM	GSM	Uplink	11:28:17.140	DCCH	RELEASE
10736.	L3SM	GSM	Downlink	11:28:17.291	DCCH	RELEASE_COMPLETE
10737.	L3SM	GSM	Downlink	11:28:17.379	SACCH	SYSTEM_INFORMATION_TYPE_5
10738.	L3SM	GSM	Downlink	11:28:17.411	DCCH	CHANNEL_RELEASE
10739.	L3SM	GSM	Downlink	11:28:17.790	CCCH	PAGING_REQUEST_TYPE_1
10740.	L3SM	GSM	Downlink	11:28:18.898	BCCH	SYSTEM_INFORMATION_TYPE_13
10741.	L3SM	GSM	Downlink	11:28:18.998	BCCH	SYSTEM_INFORMATION_TYPE_3
10742.	L3SM	GSM	Downlink	11:28:20.014	BCCH	SYSTEM_INFORMATION_TYPE_3
10743.	L3SM	GSM	Downlink	11:28:20.315	BCCH	SYSTEM_INFORMATION_TYPE_3
10744.	L3SM	GSM	Downlink	11:28:22.964	CCCH	PAGING_REQUEST_TYPE_1
10745.	L3SM	GSM	Downlink	11:28:23.904	CCCH	PAGING_REQUEST_TYPE_1
10746.	L3SM	GSM	Downlink	11:28:25.322	CCCH	PAGING_REQUEST_TYPE_1
10747.	L3SM	GSM	Downlink	11:28:25.787	CCCH	PAGING_REQUEST_TYPE_1

Analysis:

- This call failure event occurred on short call at 11:28:17:140 time when UE was latched with 2G network.
- After sending the 'CM Service Request' message to the core network, the core network responded with a 'Call Proceeding' message. However, the call was disconnected with Cause (27): Destination out of order.
- During the call failure UE, was latched with ARFCN 19 and RF condition Rxlev -80 dBm is good but Rxqual 7 which is poor.
- Call failed due to poor network quality at the MO site. Low signal strength and degraded network quality are contributing to call failures.

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	**3**
Poor Quality	1
Poor Coverage	2

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 CWS MO

	Time	System	Serving band	
1.	8:11:49.125	UMTS FDD	2100	Drop
2.	8:57:17.594	LTE FDD	1800	Time
3.	9:05:25.594	UMTS FDD	2100	Time

	1. best active RSCP	Time	Ch	SC	1. best
928.		8:11:36.144	10690	161	-6.5
929.	-73.4	8:11:36.581	10690	161	
930.		8:11:36.581	10690	161	-5.4
931.	-61.4	8:11:37.093	10690	161	
932.		8:11:37.093	10690	161	-4.8
933.	-61.6	8:11:37.620	10690	161	
934.		8:11:37.620	10690	161	-4.9
935.	-64.8	8:11:38.060	10690	161	
936.		8:11:38.060	10690	161	-5.9
937.	-60.2	8:11:38.560	10690	161	
938.		8:11:38.560	10690	161	-4.9
939.	-73.6	8:11:39.229	10690	161	
940.		8:11:39.229	10690	161	-6.8
941.	-67.8	8:11:39.560	10690	161	
942.		8:11:39.560	10690	161	-5.2
943.	-66.4	8:11:40.060	10690	161	
944.		8:11:40.060	10690	161	-4.5
945.	-76.1	8:11:40.640	10690	161	
946.		8:11:40.640	10690	161	-6.2
947.	-76.9	8:11:41.091	10690	161	
948.		8:11:41.091	10690	161	-7.1
949.	-83.7	8:11:41.611	10690	161	
950.		8:11:41.611	10690	161	-11.8
951.	-74.5	8:11:42.175	10690	161	
952.		8:11:42.175	10690	161	-5.7
953.	-73.4	8:11:42.601	10690	161	
954.		8:11:42.601	10690	161	-5.3
955.	-74	8:11:43.228	10690	161	
956.		8:11:43.228	10690	161	-4.9
957.	-76.7	8:11:43.765	10690	161	
958.		8:11:43.765	10690	161	-6.7
959.	-78.1	8:11:44.229	10690	161	
960.		8:11:44.229	10690	161	-6.1
961.	-74.4	8:11:44.839	10690	161	
962.		8:11:44.839	10690	161	-5.9
963.	-77.2	8:11:45.191	10690	161	
964.		8:11:45.191	10690	161	-6.3

	Event ID	System	Transf. dir.	Time	Subchannel	Message name
2661.	RRCSM	UMTS FDD	Downlink	8:11:36.429	DCCH	SECURITY_MODE_COMMAND
2662.	RRCSM	UMTS FDD	Uplink	8:11:36.429	DCCH	SECURITY_MODE_COMPLETE
2663.	RRCSM	UMTS FDD	Uplink	8:11:36.500	DCCH	UPLINK_DIRECT_TRANSFER
2664.	L3SM	UMTS FDD	Uplink	8:11:36.500	DCCH	SETUP
2665.	RRCSM	UMTS FDD	Downlink	8:11:36.539	DCCH	DOWNLINK_DIRECT_TRANSFER
2666.	L3SM	UMTS FDD	Downlink	8:11:36.539	DCCH	TMSI_REALLOCATION_COMMAND
2667.	RRCSM	UMTS FDD	Uplink	8:11:36.540	DCCH	UPLINK_DIRECT_TRANSFER
2668.	L3SM	UMTS FDD	Uplink	8:11:36.540	DCCH	TMSI_REALLOCATION_COMPLETE
2669.	RRCSM	UMTS FDD	Downlink	8:11:36.659	DCCH	DOWNLINK_DIRECT_TRANSFER
2670.	L3SM	UMTS FDD	Downlink	8:11:36.659	DCCH	CALL_PROCEEDING
2671.	RRCSM	UMTS FDD	Downlink	8:11:41.459	DCCH	DOWNLINK_DIRECT_TRANSFER
2672.	L3SM	UMTS FDD	Downlink	8:11:41.459	DCCH	AUTHENTICATION_AND_CIPHERING_REQUEST
2673.	RRCSM	UMTS FDD	Uplink	8:11:41.497	DCCH	UPLINK_DIRECT_TRANSFER
2674.	L3SM	UMTS FDD	Uplink	8:11:41.497	DCCH	AUTHENTICATION_AND_CIPHERING_RESPONSE
2675.	RRCSM	UMTS FDD	Uplink	8:11:41.592	DCCH	MEASUREMENT_REPORT
2676.	RRCSM	UMTS FDD	Downlink	8:11:41.709	DCCH	ACTIVE_SET_UPDATE
2677.	RRCSM	UMTS FDD	Uplink	8:11:41.721	DCCH	ACTIVE_SET_UPDATE_COMPLETE
2678.	RRCSM	UMTS FDD	Downlink	8:11:41.829	DCCH	SECURITY_MODE_COMMAND
2679.	RRCSM	UMTS FDD	Uplink	8:11:41.829	DCCH	SECURITY_MODE_COMPLETE
2680.	RRCSM	UMTS FDD	Downlink	8:11:41.939	DCCH	MEASUREMENT_CONTROL
2681.	RRCSM	UMTS FDD	Downlink	8:11:42.169	DCCH	DOWNLINK_DIRECT_TRANSFER
2682.	L3SM	UMTS FDD	Downlink	8:11:42.169	DCCH	ROUTING_AREA_UPDATE_ACCEPT
2683.	RRCSM	UMTS FDD	Uplink	8:11:42.171	DCCH	UPLINK_DIRECT_TRANSFER
2684.	L3SM	UMTS FDD	Uplink	8:11:42.171	DCCH	ROUTING_AREA_UPDATE_COMPLETE
2685.	RRCSM	UMTS FDD	Uplink	8:11:43.842	DCCH	MEASUREMENT_REPORT
2686.	RRCSM	UMTS FDD	Downlink	8:11:43.929	DCCH	ACTIVE_SET_UPDATE
2687.	RRCSM	UMTS FDD	Uplink	8:11:43.961	DCCH	ACTIVE_SET_UPDATE_COMPLETE
2688.	RRCSM	UMTS FDD	Downlink	8:11:44.919	DCCH	MEASUREMENT_CONTROL
2689.	RRCSM	UMTS FDD	Downlink	8:11:48.129	DCCH	RADIO_BEARER_SETUP
2690.	RRCSM	UMTS FDD	Uplink	8:11:48.393	DCCH	RADIO_BEARER_SETUP_COMPLETE
2691.	RRCSM	UMTS FDD	Downlink	8:11:48.767	DCCH	MEASUREMENT_CONTROL
2692.	RRCSM	UMTS FDD	Downlink	8:11:48.767	DCCH	MEASUREMENT_CONTROL
2693.	RRCSM	UMTS FDD	Downlink	8:11:48.767	DCCH	MEASUREMENT_CONTROL
2694.	RRCSM	UMTS FDD	Downlink	8:11:48.767	DCCH	MEASUREMENT_CONTROL
2695.	RRCSM	UMTS FDD	Downlink	8:11:48.839	DCCH	DOWNLINK_DIRECT_TRANSFER
2696.	L3SM	UMTS FDD	Downlink	8:11:48.839	DCCH	DISCONNECT
2697.	RRCSM	UMTS FDD	Uplink	8:11:49.125	DCCH	UPLINK_DIRECT_TRANSFER

Analysis:

- This call failure event occurred on short call at 08:11:49:125 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 161 and RF condition RSCP -83.7 dBm and ECNO -11.8 dB are very good.
- Need to check MT End.

Phase-2 Call Attempt Failure Analysis 1 From MS8 CWS MT

	Time	Cell type	Band	Band (MHz)	Ch	PCI	RSRP	SNR
1576.	8:11:32.177							-2.2
1577.	8:11:33.235	Serving	B41	2496	40148	146	-99.6	
1578.	8:11:33.235							1
1579.	8:11:34.679	Serving	B41	2496	40148	146	-101.1	
1580.	8:11:34.679							-0.4
1581.	8:11:35.797	Serving	B41	2496	40148	146	-101.8	
1582.	8:11:35.797							0.7
1583.	8:11:37.226	Serving	B41	2496	40148	146	-100.7	
1584.	8:11:37.226							-6.1
1585.	8:11:38.454	Serving	B41	2496	40148	158	-90	
1586.	8:11:38.454							-7.3
1587.	8:11:39.640	Serving	B41	2496	40148	158	-96.1	
1588.	8:11:39.640							-5.9
1589.	8:11:41.179	Serving	B41	2496	40148	158	-100.6	
1590.	8:11:41.179							-6.9
1591.	8:11:42.190	Serving	B41	2496	40148	158	-100.4	
1592.	8:11:42.190							-5.2
1593.	8:11:43.489	Serving	B41	2496	40148	158	-101.8	
1594.	8:11:43.489							-9.9
1595.	8:11:44.230	Serving	B41	2496	40148	158	-101.8	
1596.	8:11:44.828	Serving	B41	2496	40148	146	-98.8	
1597.	8:11:44.828							-8.2
1598.	8:11:46.231	Serving	B41	2496	40148	146	-97.6	
1599.	8:11:46.231							-2.8
1600.	8:11:47.535	Serving	B41	2496	40148	146	-96.6	
1601.	8:11:47.535							-0.8
1602.	8:11:48.595	Serving	B41	2496	40148	146	-101	
1603.	8:11:48.595							-0.8
1604.	8:11:50.182	Serving	B41	2496	40148	146	-99.4	
1605.	8:11:50.182							3
1606.	8:11:51.230	Serving	B41	2496	40148	146	-105.3	
1607.	8:11:51.230							-4.7
1608.	8:11:52.439	Serving	B41	2496	40148	146	-100.9	
1609.	8:11:52.439							-3
1610.	8:11:53.855	Serving	B41	2496	40148	146	-100.4	
1611.	8:11:53.855							-0.7
1612.	8:11:55.230	Serving	B41	2496	40148	146	-96.8	

	Event ID	System	Transf. dir.	Time	Subchannel	Message name
2650.	RRCSM	LTE TDD	Downlink	8:11:09.713	BCCH-SCH	SystemInformationBlockType1
2651.	RRCSM	LTE TDD	Downlink	8:11:09.752	BCCH-SCH	SystemInformation - SIB5
2652.	RRCSM	LTE TDD	Downlink	8:11:09.948	PCCH	Paging
2653.	RRCSM	LTE TDD	Downlink	8:11:10.267	DCCH	RRCConnectionReconfiguration
2654.	RRCSM	LTE TDD	Uplink	8:11:10.268	DCCH	RRCConnectionReconfigurationComplete
2655.	RRCSM	LTE TDD	Downlink	8:11:11.228	PCCH	Paging
2656.	RRCSM	LTE TDD	Downlink	8:11:13.788	PCCH	Paging
2657.	RRCSM	LTE TDD	Downlink	8:11:15.386	DCCH	RRCConnectionRelease
2658.	RRCSM	LTE TDD	Downlink	8:11:17.868	PCCH	Paging
2659.	RRCSM	LTE TDD	Downlink	8:11:17.913	BCCH-SCH	SystemInformationBlockType1
2660.	RRCSM	LTE TDD	Downlink	8:11:17.914	BCCH-SCH	SystemInformation - SIB2,SIB3
2661.	RRCSM	LTE TDD	Downlink	8:11:17.914	BCCH-SCH	SystemInformation - SIB5
2662.	RRCSM	LTE TDD	Downlink	8:11:20.473	BCCH-SCH	SystemInformationBlockType1
2663.	RRCSM	LTE TDD	Downlink	8:11:20.474	BCCH-SCH	SystemInformation - SIB5
2664.	RRCSM	LTE TDD	Downlink	8:11:20.474	BCCH-SCH	SystemInformation - SIB2,SIB3
2665.	RRCSM	LTE TDD	Downlink	8:11:25.548	PCCH	Paging
2666.	RRCSM	LTE TDD	Downlink	8:11:26.828	PCCH	Paging
2667.	RRCSM	LTE TDD	Downlink	8:11:29.388	PCCH	Paging
2668.	RRCSM	LTE TDD	Downlink	8:11:34.508	PCCH	Paging
2669.	RRCSM	LTE TDD	Downlink	8:11:38.393	BCCH-SCH	SystemInformationBlockType1
2670.	RRCSM	LTE TDD	Downlink	8:11:38.393	BCCH-SCH	SystemInformation - SIB2,SIB3
2671.	RRCSM	LTE TDD	Downlink	8:11:38.393	BCCH-SCH	SystemInformation - SIB5
2672.	RRCSM	LTE TDD	Downlink	8:11:42.188	PCCH	Paging
2673.	RRCSM	LTE TDD	Downlink	8:11:44.793	BCCH-SCH	SystemInformationBlockType1
2674.	RRCSM	LTE TDD	Downlink	8:11:44.794	BCCH-SCH	SystemInformation - SIB5
2675.	RRCSM	LTE TDD	Downlink	8:11:44.794	BCCH-SCH	SystemInformation - SIB2,SIB3
2676.	RRCSM	LTE TDD	Downlink	8:11:45.553	BCCH-SCH	SystemInformationBlockType1
2677.	RRCSM	LTE TDD	Downlink	8:11:47.310	PCCH	Paging
2678.	RRCSM	LTE TDD	Downlink	8:11:48.590	PCCH	Paging
2679.	RRCSM	LTE TDD	Downlink	8:11:53.708	PCCH	Paging
2680.	RRCSM	LTE TDD	Downlink	8:11:54.988	PCCH	Paging
2681.	RRCSM	LTE TDD	Downlink	8:11:56.270	PCCH	Paging
2682.	RRCSM	LTE TDD	Downlink	8:11:58.830	PCCH	Paging
2683.	RRCSM	LTE TDD	Downlink	8:12:01.390	PCCH	Paging
2684.	RRCSM	LTE TDD	Downlink	8:12:03.950	PCCH	Paging
2685.	RRCSM	LTE TDD	Downlink	8:12:05.230	PCCH	Paging
2686.	RRCSM	LTE TDD	Downlink	8:12:07.790	PCCH	Paging

Analysis:

- On MT End, During the setup fail, UE was latched with PCI 158 and RF condition RSRP -101.8 dBm is ok and SINR -9.9 dB which is poor.
- As per the analysis call failure happened due to Poor quality of the network.

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

	Time	System	Serving band	
1.	8:11:49.125	UMTS FDD	2100	Drop
2.	8:57:17.594	LTE FDD	1800	Time
3.	9:05:25.594	UMTS FDD	2100	Time

	Best active RSCP	Time	Ch	SC	Best active Ec/N0
2992.		8:57:11.935	10690	84	-15.5
2993.	-100.8	8:57:12.115	10690	84	
2994.		8:57:12.115	10690	84	-17.1
2995.	-100.8	8:57:12.319	10690	84	
2996.		8:57:12.319	10690	84	-17.1
2997.	-100.8	8:57:12.358	10690	84	
2998.		8:57:12.358	10690	84	-17.1
2999.	-96.6	8:57:12.726	10690	84	
3000.		8:57:12.726	10690	84	-14.9
3001.	-96.9	8:57:13.081	10690	84	
3002.		8:57:13.081	10690	84	-14.1
3003.	-99.1	8:57:13.376	10690	84	
3004.		8:57:13.376	10690	84	-19
3005.	-97.5	8:57:13.978	10690	84	
3006.		8:57:13.978	10690	84	-17.5
3007.	-92.9	8:57:14.815	10690	84	
3008.		8:57:14.815	10690	84	-13.4
3009.	-115	8:57:15.220	10690	84	
3010.		8:57:15.220	10690	84	-22.3
3011.	-103.4	8:57:15.986	10690	84	
3012.		8:57:15.986	10690	84	-23.8
3013.	-103	8:57:49.156	10690	84	
3014.		8:57:49.156	10690	84	-14.9
3015.	-96.8	8:57:49.810	10690	84	
3016.		8:57:49.810	10690	84	-15.3
3017.	-91.9	8:57:50.139	10690	84	
3018.		8:57:50.139	10690	84	-13.4
3019.	-94.5	8:57:50.814	10690	84	
3020.		8:57:50.814	10690	84	-14.6
3021.	-89.2	8:57:51.161	10690	84	
3022.		8:57:51.161	10690	84	-11.9
3023.	-95.2	8:57:51.820	10690	84	
3024.		8:57:51.820	10690	84	-16.8
3025.	-99.4	8:57:52.248	10690	84	
3026.		8:57:52.248	10690	84	-18.8
3027.	-96.1	8:57:52.833	10690	84	
3028.		8:57:52.833	10690	84	-15.6

	Event ID	System	Transf. dir.	Time	Subchannel	Message name
10177.	RRCSM	UMTS FDD	Downlink	8:57:12.789	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_1
10178.	RRCSM	UMTS FDD	Downlink	8:57:12.789	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_3
10179.	RRCSM	UMTS FDD	Downlink	8:57:12.789	BCCH_BCH	SYSTEM_INFORMATION_BLOCK_TYPE_5
10180.	RRCSM	UMTS FDD	Downlink	8:57:13.009	BCCH_BCH	SYSTEM_INFORMATION_BCH
10181.	RRCSM	UMTS FDD	Downlink	8:57:13.029	BCCH_BCH	SYSTEM_INFORMATION_BCH
10182.	RRCSM	UMTS FDD	Downlink	8:57:13.029	BCCH	MASTER_INFORMATION_BLOCK
10183.	RRCSM	UMTS FDD	Downlink	8:57:13.029	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_7
10184.	RRCSM	UMTS FDD	Downlink	8:57:13.049	BCCH_BCH	SYSTEM_INFORMATION_BCH
10185.	RRCSM	UMTS FDD	Downlink	8:57:13.069	BCCH_BCH	SYSTEM_INFORMATION_BCH
10186.	RRCSM	UMTS FDD	Downlink	8:57:13.089	BCCH_BCH	SYSTEM_INFORMATION_BCH
10187.	RRCSM	UMTS FDD	Downlink	8:57:13.329	BCCH_BCH	SYSTEM_INFORMATION_BCH
10188.	RRCSM	UMTS FDD	Downlink	8:57:13.349	BCCH_BCH	SYSTEM_INFORMATION_BCH
10189.	RRCSM	UMTS FDD	Downlink	8:57:13.349	BCCH	MASTER_INFORMATION_BLOCK
10190.	RRCSM	UMTS FDD	Downlink	8:57:13.349	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_7
10191.	RRCSM	UMTS FDD	Downlink	8:57:13.369	BCCH_BCH	SYSTEM_INFORMATION_BCH
10192.	RRCSM	UMTS FDD	Downlink	8:57:13.369	BCCH	SYSTEM_INFORMATION_BLOCK_TYPE_11
10193.	RRCSM	LTE FDD	Downlink	8:57:16.113	BCCH-BCH	MasterInformationBlock
10194.	RRCSM	LTE FDD	Downlink	8:57:16.147	BCCH-SCH	SystemInformationBlockType1
10195.	RRCSM	LTE FDD	Downlink	8:57:16.204	BCCH-SCH	SystemInformation - SIB2,SIB3
10196.	L3SM	LTE FDD	Uplink	8:57:16.223		TRACKING_AREA_UPDATE_REQUEST
10197.	RRCSM	LTE FDD	Uplink	8:57:16.224	CCCH	RRCConnectionRequest
10198.	RRCSM	LTE FDD	Downlink	8:57:16.294	CCCH	RRCConnectionSetup
10199.	RRCSM	LTE FDD	Uplink	8:57:16.299	DCCH	RRCConnectionSetupComplete
10200.	RRCSM	LTE FDD	Downlink	8:57:16.404	BCCH-SCH	SystemInformation - SIB5
10201.	RRCSM	LTE FDD	Downlink	8:57:16.516	DCCH	DLInformationTransfer
10202.	L3SM	LTE FDD	Downlink	8:57:16.517		TRACKING_AREA_UPDATE_ACCEPT
10203.	L3SM	LTE FDD	Uplink	8:57:16.519		TRACKING_AREA_UPDATE_COMPLETE
10204.	RRCSM	LTE FDD	Uplink	8:57:16.519	DCCH	ULInformationTransfer
10205.	RRCSM	LTE FDD	Downlink	8:57:16.533	DCCH	RRCConnectionRelease
10206.	RRCSM	LTE FDD	Downlink	8:57:17.501	PCCH	Paging
10207.	L3SM	LTE FDD	Uplink	8:57:17.502		SERVICE_REQUEST
10208.	RRCSM	LTE FDD	Uplink	8:57:17.502	CCCH	RRCConnectionRequest
10209.	RRCSM	LTE FDD	Downlink	8:57:17.559	CCCH	RRCConnectionSetup
10210.	RRCSM	LTE FDD	Uplink	8:57:17.564	DCCH	RRCConnectionSetupComplete
10211.	RRCSM	LTE FDD	Downlink	8:57:17.576	DCCH	UECapabilityEnquiry
10212.	RRCSM	LTE FDD	Uplink	8:57:17.577	DCCH	UECapabilityInformation
10213.	RRCSM	UMTS FDD	Uplink	8:57:17.577		INTER_RAT_HANDOVER_INFO

Analysis:

- This call failure event occurred on short call at 08:57:17:594 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 84 and RF condition RSCP -115 dBm and Ec/No -22.3 dB both are very poor.
- As per the analysis call failed happened due to poor coverage of the network.

Phase-2 Call Attempt Failure Analysis 3 From MS7 CWS MO

	Time	System	Serving band	
1.	8:11:49.125	UMTS FDD	2100	Drop
2.	8:57:17.594	LTE FDD	1800	Time
3.	9:05:25.594	UMTS FDD	2100	Time

	1. best active RSCP	Time	Ch	SC	1. best
3305.	-104.7	9:05:20.099	10690	336	
3306.		9:05:20.099	10690	336	-17.7
3307.	-106	9:05:20.600	10690	336	
3308.		9:05:20.600	10690	336	-18.1
3309.	-98.8	9:05:21.139	10690	336	
3310.		9:05:21.139	10690	336	-14
3311.	-110.6	9:05:21.860	10690	336	
3312.	-109.2	9:05:22.099	10690	336	
3313.		9:05:22.099	10690	336	-23.5
3314.	-104.4	9:05:22.815	10690	336	
3315.		9:05:22.815	10690	336	-18.9
3316.	-105.6	9:05:23.300	10690	336	
3317.		9:05:23.300	10690	336	-20.6
3318.	-105.6	9:05:23.783	10690	336	
3319.		9:05:23.783	10690	336	-19.4
3320.	-102.2	9:05:24.324	10690	336	
3321.		9:05:24.324	10690	336	-16.5
3322.	-106.6	9:05:24.944	10690	336	
3323.		9:05:24.944	10690	336	-23.7
3324.	-106.8	9:05:25.594	10690	336	
3325.		9:05:25.594	10690	336	-21.7
3326.	-110	9:05:25.885	10690	336	
3327.		9:05:25.885	10690	336	-24.3
3328.	-104.2	9:05:26.304	10690	336	
3329.		9:05:26.304	10690	336	-18.2
3330.	-106.1	9:05:26.885	10690	336	
3331.		9:05:26.885	10690	336	-19.3
3332.	-100.8	9:05:27.599	10690	336	
3333.		9:05:27.599	10690	336	-15.2
3334.	-103.7	9:05:28.099	10690	336	
3335.		9:05:28.099	10690	336	-17.9
3336.	-103.8	9:05:28.600	10690	336	
3337.		9:05:28.600	10690	336	-19.6
3338.	-109.1	9:05:29.099	10690	336	
3339.		9:05:29.099	10690	336	-24
3340.	-110.9	9:05:29.599	10690	336	
3341.		9:05:29.599	10690	336	-24.9

	Event ID	System	Transf. dir.	Time	Subchannel	Message name
12355.	L3SM	UMTS FDD	Downlink	9:05:15.198	DCCH	CALL_PROCEEDING
12356.	RRCSM	UMTS FDD	Uplink	9:05:15.373	DCCH	MEASUREMENT_REPORT
12357.	RRCSM	UMTS FDD	Uplink	9:05:17.892	DCCH	MEASUREMENT_REPORT
12358.	RRCSM	UMTS FDD	Uplink	9:05:17.962	DCCH	MEASUREMENT_REPORT
12359.	RRCSM	UMTS FDD	Uplink	9:05:18.212	DCCH	MEASUREMENT_REPORT
12360.	RRCSM	UMTS FDD	Uplink	9:05:18.473	DCCH	MEASUREMENT_REPORT
12361.	RRCSM	UMTS FDD	Uplink	9:05:18.793	DCCH	MEASUREMENT_REPORT
12362.	RRCSM	UMTS FDD	Uplink	9:05:18.874	DCCH	MEASUREMENT_REPORT
12363.	RRCSM	UMTS FDD	Uplink	9:05:19.694	DCCH	MEASUREMENT_REPORT
12364.	RRCSM	UMTS FDD	Downlink	9:05:19.988	DCCH	DOWNLINK_DIRECT_TRANSFER
12365.	L3SM	UMTS FDD	Downlink	9:05:19.988	DCCH	AUTHENTICATION_AND_CIPHERING_REQUEST
12366.	RRCSM	UMTS FDD	Uplink	9:05:20.027	DCCH	UPLINK_DIRECT_TRANSFER
12367.	L3SM	UMTS FDD	Uplink	9:05:20.027	DCCH	AUTHENTICATION_AND_CIPHERING_RESPONSE
12368.	RRCSM	UMTS FDD	Downlink	9:05:20.288	DCCH	SECURITY_MODE_COMMAND
12369.	RRCSM	UMTS FDD	Uplink	9:05:20.289	DCCH	SECURITY_MODE_COMPLETE
12370.	RRCSM	UMTS FDD	Uplink	9:05:20.487	DCCH	MEASUREMENT_REPORT
12371.	RRCSM	UMTS FDD	Downlink	9:05:20.658	DCCH	DOWNLINK_DIRECT_TRANSFER
12372.	L3SM	UMTS FDD	Downlink	9:05:20.658	DCCH	ROUTING_AREA_UPDATE_ACCEPT
12373.	RRCSM	UMTS FDD	Uplink	9:05:20.660	DCCH	UPLINK_DIRECT_TRANSFER
12374.	L3SM	UMTS FDD	Uplink	9:05:20.660	DCCH	ROUTING_AREA_UPDATE_COMPLETE
12375.	RRCSM	UMTS FDD	Uplink	9:05:20.725	DCCH	MEASUREMENT_REPORT
12376.	RRCSM	UMTS FDD	Uplink	9:05:21.265	DCCH	MEASUREMENT_REPORT
12377.	RRCSM	UMTS FDD	Uplink	9:05:21.570	DCCH	MEASUREMENT_REPORT
12378.	RRCSM	UMTS FDD	Uplink	9:05:21.786	DCCH	MEASUREMENT_REPORT
12379.	RRCSM	UMTS FDD	Uplink	9:05:21.896	DCCH	MEASUREMENT_REPORT
12380.	RRCSM	UMTS FDD	Uplink	9:05:22.345	DCCH	MEASUREMENT_REPORT
12381.	RRCSM	UMTS FDD	Uplink	9:05:23.025	DCCH	MEASUREMENT_REPORT
12382.	RRCSM	UMTS FDD	Uplink	9:05:23.475	DCCH	MEASUREMENT_REPORT
12383.	RRCSM	UMTS FDD	Uplink	9:05:24.052	DCCH	MEASUREMENT_REPORT
12384.	RRCSM	UMTS FDD	Uplink	9:05:24.604	DCCH	MEASUREMENT_REPORT
12385.	RRCSM	UMTS FDD	Uplink	9:05:24.965	DCCH	MEASUREMENT_REPORT
12386.	RRCSM	UMTS FDD	Uplink	9:05:25.364	DCCH	MEASUREMENT_REPORT
12387.	RRCSM	UMTS FDD	Uplink	9:05:25.744	DCCH	MEASUREMENT_REPORT
12388.	RRCSM	UMTS FDD	Uplink	9:05:25.744	DCCH	UPLINK_DIRECT_TRANSFER
12389.	L3SM	UMTS FDD	Uplink	9:05:25.744	DCCH	DISCONNECT
12390.	RRCSM	UMTS FDD	Uplink	9:05:25.903	DCCH	MEASUREMENT_REPORT
12391.	RRCSM	UMTS FDD	Uplink	9:05:27.444	DCCH	MEASUREMENT_REPORT

Analysis:

- This call failure event occurred on short call at 09:05:25:594 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 336 and RF condition RSCP -106.8 dBm and Ec/No -21.7 dB both are very poor.
- As per the analysis call failed happened due to poor coverage of the network.

THANKS