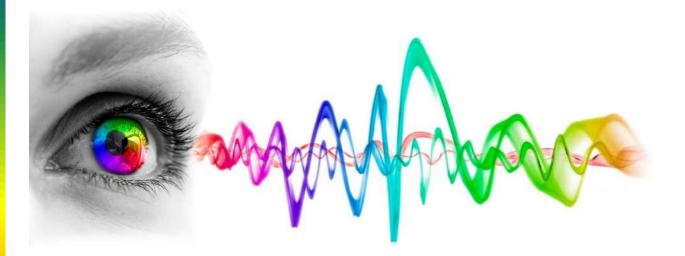
FINAL REPORT: LSSA/SC/2019/2

MEASUREMENT OF NON-IONIZING RADIATION FOR 2G/3G/4G NETWORKS FOR DEPARTMENT OF INFORMATION COMMUNICATIONS TECHNOLOGY (DICT) - SEYCHELLES

Presented to Mr Benjamin Choppy Principal Secretary Department of Information Communications Technology (DICT)



29 January 2020

Contact

Vaughan Taylor Tel: +27 (0)11 958 5153 Email: VTaylor@LSofSA.co.za LS of South Africa Radio Communication (Pty) Ltd. 131 Gelding Avenue Ruimsig Johannesburg South Africa

> E-mail: info@LSofSA.co.za Web: www.LSofSA.co.za

Dear Mr Choppy

It is our pleasure to present you with the final report detailing our findings for the measurement of nonionizing radiation (EMF) at 25 identified locations within Seychelles, Praslin and La Digue.

We trust that our findings will meet with your approval.

Yours sincerely,

Klehutte

Koenie Schutte Chief Executive Officer LS of South Africa Radio Communication (Pty) Ltd.

LS telco

V.L. Taylor

Vaughan Taylor Pr. Tech Eng. Transmission Specialist LS of South Africa Radio Communication

Table of Contents

GLOSSARY	OF TERMS	8
1 EXECU	ITIVE SUMMARY	9
2 OBJEC	TIVE	
2.1 S	HORTLISTING OF THE SITES/LOCATIONS TO BE MEASURED	10
	RE-QUALIFICATION INFORMATION FOR THE MEASUREMENT OF THE IDENTIFIED SITES/LOCATIONS	
	RIPTION OF MEASUREMENT POINTS (MPS)	
4 MEAS	UREMENT PROTOCOL	
	ACKGROUND	
	1easurement quantities for RF fields	
4.3 N	IEASUREMENT EQUIPMENT AND PROCEDURE	
4.3.1	Measurement methodologies	
	ALCULATION OF MINIMAL AND MAXIMAL EXPOSURE	
4.5 N	1EASUREMENT UNCERTAINTY	
5 RESUL	TS	
5.1 G	OOGLE EARTH IMAGES PER MEASUREMENT REGION	26
5.1 G	Region One	
5.1.1	Region Two	
5.1.2	Region Three	
5.1.5 5.1.4	Region Four	
5.1.4	Region Five	
5.1.6	Region Six	
5.1.7	Region Eight	
5.1.8	Region Ten	
5.1.8	5	
5.1.8		
_		
6 APPEN	IDICES	45
6.1 A	PPENDIX A1 - IDENTIFICATION OF THE MEASUREMENT POINTS (PER THE WEBGIS PORTAL) AND PHO	DTOS OF THE
MEASURE	MENT POINT LOCATIONS	
6.1.1	Machabee Hill (CWS)	
6.1.2	Carana Hill (CWS)	
6.1.3	North East Point (Airtel)	
6.1.4	Villa Fond de Lianes	
6.1.5	Bel Ombre (Airtel)	
6.1.6	Bel Ombre (Dan Zil) (CWS)	
6.1.7	Sorento (Airtel)	
6.1.8	La Batie (Airtel)	
6.1.9	Perseverance (Airtel)	
6.1.10		
6.1.11		
6.1.12		
6.1.13		
6.1.14		
6.1.15	Dr. Chetty's Rooms (Airtel)	83

6.1.	6 Seychelles Main Hospital (CWS) and SBC Hermitage (Airtel)	
6.1.	17 Plaisance (Airtel)	
6.1.	18 Copolia (Airtel)	
6.1.	19 Roche Caiman (CWS/Airtel)	
6.1.	20 Sunshine House (CWS)	
6.1.	21 Seychelles International Airport (CWS/Airtel)	
6.1.	22 Port Launay (Airtel)	
6.1.	23 Grand Anse (Praslin – CWS/Airtel)	
6.1.	24 Pt. Cabris (Praslin – CWS/Airtel)	
6.1.	25 Anse Reunion (La Digue – CWS/Airtel)	
6.2	APPENDIX A2 – RESULT TABLES	
6.2.	Machabee Hill (CWS)	
6.2.	2 Carana Hill (CWS)	
6.2.	3 North East Point (Airtel)	
6.2.4	Villa Fond de Lianes (Airtel)	
6.2.	5 Bel Ombre	
6.2.	5 Bel Ombre (Dan Zil) (CWS)	
6.2.	7 Sorento (Airtel)	
6.2.	3 La Batie (Airtel)	
6.2.	9 Perserverance (Airtel)	
6.2.	10 Espace building (Airtel)	
6.2.	11 Ma Constance (Airtel)	
6.2.	12 Mt. Buxton (Airtel)	
6.2.	13 SACOS Tower (CWS)	
6.2.	14 Stad Popiler and Central Bank Building (Airtel/CWS)	
6.2.	15 Dr Chetty's Rooms	
6.2.	6 Seychelles Main Hospital (CWS) and SBC Hermitage (Airtel)	
6.2.	17 Plaisance (Airtel)	
6.2.	18 Copolia (Airtel)	
6.2.	19 Roche Caiman (CWS/Airtel)	
6.2.	20 Sunshine House (CWS)	
6.2.	21 Seychelles International Airport (CWS/Airtel)	
6.2.	22 Port Launay (Airtel)	
6.2.	23 Grand Anse – Praslin (CWS/Airtel)	
6.2.	24 Pt. Cabris – Praslin (CWS/Airtel)	
6.2.	25 Anse Reunion – La Digue (CWS/Airtel)	
6.3	APPENDIX A3 - EXPLANATION OF THE EXPOSURE LIMITS	
6.4	APPENDIX A4 – DESKTOP STUDIES	
6.4.	Mitigation studies for Mont Buxton	
6.4.	Predicted increases in EM levels with the addition of a new operator	
6.5	APPENDIX A5 – LIST OF TOWER SITES	210
7 REF	RENCES	21/

Tables

TABLE 1 - APPLICABLE INFORMATION PER EACH MOBILE TELEPHONY SERVICE IDENTIFIED THROUGH PRE-QUALIFICATION	10
TABLE 2 – MEASUREMENT POINT (MP) LOCATIONS AS IDENTIFIED PER REGION IN THE SEYCHELLES	28
TABLE 3 - MEASUREMENT EQUIPMENT USED	30
TABLE 4 - APPLICABLE NARROW-BAND ANALYSER SETUP INFORMATION	31
TABLE 5 – COLOUR-CODES PER HIGHEST EMF VALUES	34
TABLE 6 – HIGHEST EMF EXPOSURE RESULTS (ELECTRIC FIELD STRENGTH IN % OF THE ICNIRP 98 REFERENCE LEVEL	35
TABLE 7 - REFERENCE LEVELS FOR GENERAL PUBLIC EXPOSURE IN THE FREQUENCY RANGE RELEVANT TO GSM AND UMTS BASE	
STATIONS [ICNIPR 98].	. 203
TABLE 8 - ICNIRP 98 REFERENCE LEVELS FOR THE MOBILE PHONE BASE STATION FREQUENCY BANDS.	. 204
TABLE 9 – COMPARATIVE RESULTS FOR THE PREDICTED INCREASE IN EXPOSURE LEVELS WITH THE ADDITION OF A NEW OPERATOR.	. 209

FIGURES

FIGURE 1 - MACHABEE HILL: MEASUREMENT POINTS (WEBGIS)	47
FIGURE 2 - MACHABEE HILL: AS IDENTIFIED FROM MP1 AND MP2 LOCATIONS	48
FIGURE 3 - MACHABEE HILL: MP2 LOCATION (ADJACENT PROPERTY)	48
FIGURE 4 - CARANA HILL: MEASUREMENT POINT (WEBGIS)	49
FIGURE 5 - CARANA HILL: MP1 LOCATION	49
FIGURE 6 – NORTH EAST POINT: MEASUREMENT POINTS (WEBGIS)	50
FIGURE 7 – NORTH EAST POINT: AT MP1 LOCATION	50
FIGURE 8 – NORTH EAST POINT: AT MP2 LOCATION	51
FIGURE 9 – VILLA FOND DE LIANES: MEASUREMENT POINTS (WEBGIS)	52
FIGURE 10 – VILLA FOND DE LIANES: MP1 LOCATION	52
FIGURE 11 – VILLA FOND DE LIANES: MP2 LOCATION (BEHIND BASE STATION)	53
FIGURE 12 - BEL OMBRE: MEASUREMENT POINTS (WEBGIS)	54
FIGURE 13 – BEL OMBRE – MP2 LOCATION (LE MÉRIDIEN FISHERMAN'S COVE)	55
FIGURE 14 - BEL OMBRE (DZ): MEASUREMENT POINTS (WEBGIS	56
FIGURE 15 – BEL OMBRE (DZ): MP1 LOCATION	57
FIGURE 16 - BEL OMBRE (DZ): MP2 LOCATION	58
FIGURE 17 – SORENTO: MEASUREMENT POINTS (WEBGIS)	59
FIGURE 18 – SORENTO: VIEW OF BASE STATION	59
FIGURE 19 - SORENTO: MP1 LOCATION (TOP FLOOR)	60
FIGURE 20 - SORENTO: MP2 LOCATION (LOWER LEVEL)	60
FIGURE 21 – SORENTO: MP3 LOCATION (SUB-BASEMENT)	61
FIGURE 22 – SORENTO: MP4 LOCATION (GROUND LEVEL)	61
FIGURE 23 - LA BATIE: MEASUREMENT POINTS (WEBGIS)	62
FIGURE 24 - LA BATIE: VIEW OF BASE STATION FROM MP1	63
FIGURE 25 - LA BATIE: MP1 LOCATION	63
FIGURE 26 - LA BATIE: MP2 LOCATION	64
FIGURE 27 - PERSEVERANCE: MEASUREMENT POINTS (WEBGIS)	65
FIGURE 28 - PERSEVERANCE: MP1 LOCATION	65
FIGURE 29 - PERSEVERANCE: VIEWED FROM MP2 LOCATION	
FIGURE 30 - ESPACE BUILDING: MEASUREMENT POINTS (WEBGIS)	67
FIGURE 31 - ESPACE: SECTOR ANTENNA VIEWED FROM ES2/MP1 AND ES1/MP3 RESPECTIVELY	67
FIGURE 32 - ESPACE: SECTOR ANTENNA AS SEEN FROM ES1/MP1 AND ES1/MP2 RESPECTIVELY	68
FIGURE 33 - ESPACE: ES1/MP3 LOCATION	68
FIGURE 34 – ESPACE: ES3/MP1 LOCATION.	69

FIGURE 35 – ESPACE: ES1/MP4 LOCATION	60
FIGURE 35 – ESPACE: EST/MIP4 LOCATION	
FIGURE 37 - MA CONSTANCE: MERSONEMENT FORMS (WEBCIS)	
FIGURE 38 - MA CONSTANCE: AS SEEN FROM MP1/MP2	
FIGURE 39 - MA CONSTANCE: AS SEEN FROM IN 17/01 2	
FIGURE 40 - MT. BUXTON: MEASUREMENT POINTS (WEBGIS)	
FIGURE 41 - MT. BUXTON: PROXIMITY OF BASE STATION TO MP1	
FIGURE 42 - MT. BOATON: PROXIMITED BASE STATION TO MITE	
FIGURE 43 - MT. BUXTON: PROXIMITY TO BASE STATION AT MP2 (LOUNGE WINDOW)	-
FIGURE 44 - MT. BUXTON: MP3 LOCATION (BEDROOM)	
FIGURE 45 - MT. BUXTON: MP3 LOCATION (BEDROOM)	
FIGURE 46 - SACOS TOWER: MEASUREMENT POINTS (WEBGIS)	
FIGURE 40 - SACOS TOWER. MEASUREMENT POINTS (WEBGIS)	
FIGURE 47 - SACOS: MP4 LOCATION FIGURE 48 - SACOS TOWER: BASE STATION VIEW FROM MP2-MP4	
FIGURE 49 - SACOS TOWER, BASE STATION VIEW FROM IVIP2-IVIP4	
FIGURE 50 - STAD POPILER TERRAIN: MEASUREMENT POINTS (WEBGIS) FIGURE 51 - CBS BUILDING: MEASUREMENT POINTS (WEBGIS)	
FIGURE 52 - CBS (CWS): BASE STATION IDENTIFICATION	
FIGURE 53 - STAD POPILER (AIRTEL): MP1 LOCATION FIGURE 54 - CBS (CWS): MP2 LOCATION	
FIGURE 54 - CBS (CWS): MP2 LOCATION FIGURE 55 - CBS (CWS): MP3 LOCATION	
FIGURE 56 - CBS (AIRTEL): MP4/MP5 LOCATIONS	
FIGURE 57 – STAD POPILER: MP6 LOCATION	
FIGURE 58 – DR. CHETTY'S ROOMS: MEASUREMENT POINTS (WEBGIS)	
FIGURE 59 – DR CHETTY: IDENTIFICATION OF BASE STATION	
FIGURE 60 – DR CHETTY: MP1 LOCATION (AT PRE-SCHOOL/CRÈCHE –ON BALCONY)	
FIGURE 61 – DR. CHETTY: MP2 LOCATION (AT PRE-SCHOOL – INSIDE CLASSROOM)	
FIGURE 62 – DR. CHETTY: MP3 LOCATION (OUTSIDE PRE-SCHOOL)	
FIGURE 63 – DR. CHETTY: MP4 LOCATION (BELOW BASE STATION)	
FIGURE 64 - DR. CHETTY: MP5 LOCATION	
FIGURE 65 - SEYCHELLES MAIN HOSPITAL: MEASUREMENT POINTS (WEBGIS)	
FIGURE 66 – SEYCHELLES MAIN HOSPITAL: IDENTIFICATION OF BASE STATION	
FIGURE 67 – SEYCHELLES MAIN HOSPITAL: MP1 LOCATION	
FIGURE 68 – SEYCHELLES MAIN HOSPITAL: MP2 LOCATION	
FIGURE 69 – SEYCHELLES MAIN HOSPITAL: HERMITAGE (SBC) BASE STATION LOCATION	
FIGURE 70 – SEYCHELLES MAIN HOSPITAL: MP3 LOCATION	
FIGURE 71 - SBC HERMITAGE MEASUREMENT POINT (WEBGIS)	
FIGURE 72 – HERMITAGE (SBC): IDENTIFICATION OF BASE STATION	
FIGURE 73 – HERMITAGE (SBC): MP1 LOCATION	
FIGURE 74 - PLAISANCE MEASUREMENT POINTS (WEBGIS)	
FIGURE 75 – PLAISANCE: MP1 LOCATION	-
FIGURE 76 – PLAISANCE: IDENTIFICATION OF BASE STATION	
FIGURE 77 – PLAISANCE: AT MP2 LOCATION	
FIGURE 78 – COPOLIA: MEASUREMENT POINTS (WEBGIS)	
FIGURE 79 – COPOLIA: MP1 LOCATION	
FIGURE 80 – COPOLIA: IDENTIFICATION OF BASE STATION.	
FIGURE 81 – COPOLIA: MP2 LOCATION.	
FIGURE 82 – COPOLIA: MP3 LOCATION.	
FIGURE 83 – ROCHE CAIMAN (RC1): MEASUREMENT POINTS (WEBGIS)	

FIGURE 84 – ROCHE CAIMAN (RC2): MEASUREMENT POINTS (WEBGIS)	99
FIGURE 85 – ROCHE CAIMAN (RC1): MP1 LOCATION	
FIGURE 86 – ROCHE CAIMAN (RC1): MP2 LOCATION	
FIGURE 87 – ROCHE CAIMAN (RC2): MP1 LOCATION (NEXT TO PUC)	
FIGURE 88 – ROCHE CAIMAN (RC2): MP2 LOCATION	
FIGURE 89 – SUNSHINE HOUSE: MEASUREMENT POINTS (WEBGIS)	
Figure 90 – Sunshine House: MP1 location	
Figure 91 – Sunshine House: identification of base station at MP1	
FIGURE 92 – SUNSHINE HOUSE: IDENTIFICATION OF BASE STATION AT MP2	
Figure 93 – Sunshine House: MP2 location	
FIGURE 94 – SEYCHELLES INT. AIRPORT (MAIN TERMINAL): MEASUREMENT POINTS (WEBGIS)	
FIGURE 95 – SEYCHELLES INT. AIRPORT: MP1 LOCATION	
FIGURE 96 – SEYCHELLES INT. AIRPORT: MP2 LOCATION	
FIGURE 97 – SEYCHELLES INT. AIRPORT: IDENTIFICATION OF BASE STATION	
FIGURE 98 – SEYCHELLES INT. AIRPORT: MP3 LOCATION	
FIGURE 99 – SEYCHELLES INT. AIRPORT: MP4 LOCATION	
FIGURE 100 – SEYCHELLES INT. AIRPORT (DOMESTIC TERMINAL): MEASUREMENT POINTS (WEBGIS)	
FIGURE 101 – SEYCHELLES INT. AIRPORT: MP1 LOCATION	
FIGURE 102 – SEYCHELLES INT. AIRPORT: MP2 LOCATION	
FIGURE 103 – PORT LAUNAY: MEASUREMENT POINTS (WEBGIS)	
FIGURE 104 – PORT LAUNAY: AT MP1 LOCATION	
FIGURE 105 – PORT LAUNAY: IDENTIFICATION OF BASE STATION	
FIGURE 106 – PORT LAUNAY: MP2 LOCATION	
FIGURE 107 – GRAND ANSE: MEASUREMENT POINTS (WEBGIS)	
FIGURE 108 – GRAND ANSE: MP1 LOCATION (AIRTEL)	
FIGURE 109 – GRAND ANSE: MP2 LOCATION (CWS)	
FIGURE 110 – GRAND ANSE: MP3 LOCATION (AIRTEL)	
FIGURE 111 - GRAND ANSE: IDENTIFICATION OF BASE STATION (AIRTEL)	
FIGURE 112 – GRAND ANSE: BASE STATION (AIRTEL) ADJACENT TO MP4 LOCATION	
FIGURE 113 – GRAND ANSE: MP4 LOCATION	
FIGURE 114 – PORT CABRIS: MEASUREMENT POINTS (WEBGIS)	
FIGURE 115 – PORT CABRIS: IDENTIFICATION OF BASE STATION (CWS)	
FIGURE 116 – PORT CABRIS: IDENTIFICATION OF BASE STATION (AIRTEL)	
FIGURE 117 – PORT CABRIS: MP1 LOCATION	
FIGURE 118 – PORT CABRIS: MP2 THRU MP4 LOCATION/S	
FIGURE 119 – REUNION: MEASUREMENT POINTS (WEBGIS)	
FIGURE 120 – REUNION: IDENTIFICATION OF BASE STATION (CWS)	
FIGURE 121 – REUNION: IDENTIFICATION OF BASE STATION (AIRTEL)	120
FIGURE 122 – REUNION: MP1 LOCATION	
FIGURE 123 – REUNION: MP2 LOCATION	121
FIGURE 124 - SUGGESTED TRANSMITTING ANTENNA (KATHREIN TYPE 80010767) RADIATION PATTERN	206

Glossary of Terms

3GT4GFARFCNABCCHBCPICHC	Second Generation cellular technology. Covering GSM bands 880-960MHz. Third Generation cellular technology Fourth Generation cellular technology Absolute Radio Frequency Channel Number Broadcast Control Channel (in GSM networks) Common Pilot Channel (in UMTS and other CDMA communication systems) Department of Information Communications Technology Downlink Divided Technology
4GFARFCNABCCHBCPICHC	Fourth Generation cellular technology Absolute Radio Frequency Channel Number Broadcast Control Channel (in GSM networks) Common Pilot Channel (in UMTS and other CDMA communication systems) Department of Information Communications Technology Downlink
ARFCN A BCCH B CPICH C	Absolute Radio Frequency Channel Number Broadcast Control Channel (in GSM networks) Common Pilot Channel (in UMTS and other CDMA communication systems) Department of Information Communications Technology Downlink
BCCH B CPICH C	Broadcast Control Channel (in GSM networks) Common Pilot Channel (in UMTS and other CDMA communication systems) Department of Information Communications Technology Downlink
СРІСН С	Common Pilot Channel (in UMTS and other CDMA communication systems) Department of Information Communications Technology Downlink
	Department of Information Communications Technology Downlink
	Downlink
	Digital Terrestrial Television
	Enhanced Data Rates for GSM Evolution
EMF E	Electromagnetic Field
EIRP E	Equivalent Isotropic Radiated Power
ERP E	Effective Radiated Power
FSL F	Free Space Loss
GSM G	Global System for Mobile Communications
	Guidelines for Limiting Exposure to Time-Varying Electric, Magnetic and Electromagnetic Fields (up to 300 GHz), Health Physics, vol. 74 no. 4, S. 494-522, (1998).
IEC Ir	International Electrotechnical Commission
ITU Ir	International Telecommunications Union
LTE L	Long Term Evolution
MIMO N	Multiple-input and Multiple-output
PAPR P	Peak-to-Average Power Ratio
RBW R	Resolution Bandwidth
RF R	Radio Frequency
RMS R	Root Mean Square
RS R	Reference Signal (in LTE)
SBC S	Seychelles Broadcasting Corporation
SFN S	Single frequency network
тсн т	Traffic Channel (in GSM networks)
UMTS U	Universal Mobile Telecommunication System
VBW V	Video Bandwidth
VBWF V	Video Bandwidth Filter

1 Executive Summary

LS of South Africa (Pty) Ltd was appointed by the Department of Information Communications Technology (DICT) in the Seychelles to undertake the complete measurement of non-ionizing electromagnetic field (EMF) exposure at 25 identified sites/locations – the details of which are recorded in Appendix A5 of this report.

The primary aim of the measurement task was to perform narrowband EMF measurements across the entire base of mobile telephony technologies that are being used by the two licensed operators, these being Cable and Wireless (Seychelles) Ltd (CWS) and Airtel (Seychelles) Ltd (Airtel) respectively.

The results of each measurement have been tabulated and the computed results compared against the International Commission for Non-ionizing Radiation (ICNIRP) published guidelines. The comparative results would be for public exposure limits only. As a revision of the ICNIRP guidelines is currently underway – reference is drawn to the "Guidelines for limiting exposure to time-varying electric, magnetic and electromagnetic fields (up to 300GHz)", Health Physics 74 (4): pp. 494-522; 1998. As ICNIRP is a health standard, the applicable methodologies applied in the studies have been developed through industry best practise approaches which are aligned with [ITU-T K.100] and [IEC 62232:2017] industry standards as applicable.

A summary of the results of all the measurement points is presented under Appendix A2 of this report and expressed as percentages of the reference levels. The highest exposure levels as measured were at Mont Buxton (MP2 – 58.31% and MP4 – 61.71% respectively) and whilst these are below the ICNIRP limits, they are reason for some concern. As this is a special case, we recommend that the present tower structure at Mont Buxton on which the antennae are installed onto be extended high enough above ground level (i.e. by a further 11m, by the applicable mobile operator) for limiting the degree of exposure on the occupants within the dwelling below the site – some of the rooms are directly opposite and/or very near to the antennae in question. We further suggest that the azimuth of the antennae be optimised again for the purposes of limiting exposure. The recommendations are presented for Mont Buxton around the fact that that at the MP4 location, the inhabitants are within the boundary distance (\pm 6.5m) of the radiating near field and would be exposed to such electromagnetic fields for extended time periods. It is important to note that RF measurements for public exposure are usually done in the far field as the public should not be living in the near field of antennas.

The basis of the results from this study may provide further insight into the present exposure levels that are being emitted at present for the purposes of evaluating the expected increase in exposure levels when additional operators/services are proposed for the region. We present the maximal (i.e. worst case) exposure levels throughout this document as it is difficult to determine the extent of traffic levels that may be in force at any given instant with the base station/s and its users.

Where some measurements have displayed results that approach levels of 20% and above, these installations should be carefully evaluated for increase of exposure levels with the addition of further 2G/3G/4G services. We suggest that these studies be handled on a case-by-case basis where the addition of new operators/services is anticipated – we however present a set of results for the predicted increase in EMF values (i.e. for the measurement points at which the highest values were recorded) in the event that a new operator is licensed by the DICT.

We furthermore recommend that all base station facilities be appropriately secured (i.e. fenced off appropriately) and marked with internationally-accepted warning signage.

2 Objective

To achieve the specific outcomes as required for the completion of the project being the complete measurement of non-ionizing radiation emanating from operational mobile telephony base station infrastructure within the Seychelles, the following preliminary steps were put into place. These in brief were the following:

2.1 Shortlisting of the sites/locations to be measured

A shortlist of 25 sites was developed (from the current database) on the basis of their locality to public areas (schools, stadiums, hospitals/health-care centres, residential areas, airports, etc.) along with consideration of feedback as was received from concerned parties., and that from the operators, being Cable and Wireless Seychelles Limited, and Airtel Seychelles Limited.

2.2 Pre-qualification information for the measurement of the identified sites/locations

It was accepted that the service information for several of the sites/locations that were to be measured were unknown and therefore the following process was used for the identification and subsequent measurement of the service information at these sites.

In all instances the primary parameters of the mobile telephony service/s were identified (per Table 1 below) using the Snyper-LTE network analyser at each site that was to be measured. The final details as are presented in the report are for spectrum where services are presently being provisioned in.

Parameters for inspection	GSM-E900 (2G)	UMTS (3G)	LTE (4G)
Operating frequencies as identified (in MHz)			
Code-selective information	Not applicable to E900.	Scrambling codes as applicable per service.	MIMO information not available from Snyper.

Note: For UMTS (3G) and LTE (4G) technologies – only the centre frequencies of each of the services are shown above.

Table 1 - Applicable information per each mobile telephony service identified through pre-qualification

The results developed through the process in 2.2 above, were subjected for further evaluation using the Narda SRM 3006, narrow-band field strength analyser – all measurement results were documented and have been assessed against the ICNIRP 98 exposure reference levels.

It was noted throughout the measurements that the applicable mobile phone base stations remained in operation and therefore were in proximity to the measurement points (typically labelled as MP1, MP2, etc.) which were identified. Where co-located, operational DVB-T2 sites were encountered – these results have been recorded and factored into the results.

3 Description of measurement points (MPs)

The measurements were performed from 05.04.2019 to 17.04.2019 inclusively at each of the measurement points, as agreed between the DICT and LSSA respectively.

Appendix A5 provides a comprehensive listing of all sites and mobile telephony services being provided to the respective regions. Table 2 (overleaf) summarise the particulars of all the measurement points per region – the sites are numbered in accordance with the site schedule in A5.

The selection criteria used for the determination of the number of measurement points took briefly the following into account;

- Facilities that were of a 'public focus' (e.g. sports stadiums, public concourses, kindergartens, airports, office areas, etc.) and located in close proximity to mobile base station infrastructure required that several measurement points to be taken
- In those instances where the limit consumption values were observed during the campaign to reach excessive values – several measurement points were taken to characterise the results obtained, and
- Where measurements where undertaken at remote base stations away from areas of public focus these were limited to one measurement point (i.e. at the main entry point to the facility) which could sufficiently characterise the results as were measured.

An overlay of the surrounding terrain, marking the position/s of the base station and the measurement points has been provided courtesy of the Seychelles WebGIS portal (<u>https://www.webgis.gov.sc</u>) – this is indicated for all the measurement sites. Note that most of the map overlays that are presented on the portal are based on aerial photos dating from 2011 and therefore may not reflect the present status of all building developments, sites, locations, etc. that were earmarked for measurement. In some instances, we have applied the snapshots from the latest resource (i.e. 2018) as available.

Applicable snapshots of the WebGIS and the measurement point/s are presented in Appendix A1. The base station location/s are identified by a red/yellow 'marker' per the Lat. /Long coordinates provided in the schedules in Appendix A5. Where two (or more) base stations are depicted within a study – the base station/s are then denoted by red 'circles' placed around them.

Site No.	Region	Operator/s	Meas. point number/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers}	Description	Approx. distance to base station site (in meters)	Line of sight visibility to base station	Relative height above ground level (AGL)
					REGION ONE			
1.	Glacis	CWS	N/A	47	Machabee Hill – WebGIS snapshot			
1/1	Glacis	cws	MP1	48	Machabee Hill – Outside double-storey home(under car- port)	≈50	Partial visibility	Ground
1/2	Glacis	CWS	MP2	48	Machabee Hill – balcony of adjacent {white house} property)	≈63	Partial visibility	Ground
2.	Glacis	cws	N/A	49	Carana Hill – WebGIS snapshot			
2/1	Glacis	CWS	MP1	49	Carana Hill – in front of base station entrance.	≈25	Yes	Ground
3.	Glacis	Airtel	N/A	50	North East Point – WebGIS snapshot			
3/1	Glacis	Airtel	MP1	50	North East Point – at base-station entrance	≈10	Yes	Ground
3/2	Glacis	Airtel	MP2	51	North East Point – in front of house at road intersection –	≈40	Yes	Ground
4	Glacis	Airtel	N/A	52	Villa Fond de Lianes – WebGIS snapshot			

				R	EGION ONE (CONTINUED)			
4/1	Glacis	Airtel	MP1	52	Villa Fond de Lianes – On North Coast Road (below site)	≈10	Yes	Ground
4/2	Glacis	Airtel	MP2	53	Villa Fond de Lianes – property adjacent to base station.	≈40	Yes	Ground

Site No.	Region	Operator/s	Meas. point number/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers}	Description	Approx. distance to base station site (in meters)	Line of sight visibility to base station	Relative height above ground level (AGL)
					REGION TWO			
5.	Bel Ombre	Airtel	N/A	54	Bel Ombre – WebGIS snapshot			
5/1	Bel Ombre	Airtel	MP1	54	Bel Ombre – adjacent to base station site	≈25	Yes	Ground
5/2	Bel Ombre	Airtel	MP2	55	Bel Ombre – within car park of Le Méridien Fisherman's Cove	≈90	Yes	Ground
6	Bel Ombre (DZ)	CWS	N/A	56	Bel Ombre (DZ) – WebGIS snapshot			
6/1	Bel Ombre (Dan Zil)	CWS	MP1	57	Bel Ombre (Dan Zil) Bottom of double- track road leading to base-station	≈60	Yes	Ground
6/2	Bel Ombre (Dan Zil)	CWS	MP2	58	Bel Ombre (Dan Zil) – below base station	≈30	Yes	Ground

Site No.	Region	Operator/s	Meas. point number/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers}	Description	Approx. distance to base station site (in meters)	Line of sight visibility to base station	Relative height above ground level (AGL)
					REGION TWO (CONTINUE	ED)		
7.	Glacis	Airtel	N/A	59	Sorento – WebGIS snapshot and base station view.	determined as	te WebGIS point a result of the ag resource availabl	e of the WebGIS
7/1	Glacis	Airtel	MP1	60	Sorento (Home under construction) On balcony. Base-station is directly below.	≈70	Yes	Top floor
7/2	Glacis	Airtel	MP2	60	Sorento Lower balcony facing base station (directly below)	30	Yes	Lower level
7/3	Glacis	Airtel	MP3	61	Sorento – on sub-basement level Facing base-station (directly below).	≈25	Yes	Sub-basement
7/4	Glacis	Airtel	MP4	61	Sorento – inside guardhouse	≈20	Yes	Ground.

					REGION TWO (CONTINUED)			
8.	Beau Vallon	Airtel	N/A	62	La Batie – WebGIS snapshot			
8/1	Beau Vallon	Airtel	MP1	63	La Batie – In front of white house (under construction).	≈70	Partial visibility.	Ground.
8/2	Beau Vallon	Airtel	MP2	64	La Batie – at cul-de-sac in road (adjacent to base station)	≈30	Yes	Ground.

Site No.	Region	Operator/s	Meas. point number/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers}	Description	Approx. distance to base station site (in meters)	Line of sight visibility to base station	Relative height above ground level (AGL)
					REGION THREE			
9.	Pers.	Airtel	N/A	65	Perserverance – WebGIS snapshot			
9/1	Pers.	Airtel	MP1	65	Perserverance – adjacent to base station.	≈38	Yes	Ground
9/2	Pers.	Airtel	MP2	66	Adjacent to convenience store –on street corner	≈ 62	Yes	Ground
10.	Eng. River	Airtel	N/A	67	Espace building – WebGIS snapshot		nas multiple sect and identified ac	
10/1	Eng. River	Airtel	ES1-MP1	68	Espace building-In front- Approx. below sector antenna panel.	≈15	Yes	
10/2	Eng. River	Airtel	ES1-MP2	68	Espace building-at road turning into the open parking area	≈45	Yes	Ground
10/3	Eng. River	Airtel	ES1-MP3	68	Espace building- on steps of open area.	≈35	Yes	Ground
10/4	Eng. River	Airtel	ES1-MP4	69	Espace building-On balcony of dance studio. Three-storey building.	≈10	No	Top floor.

Site No.	Region	Operator/s	Meas. point number/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers}		Approx. distance to base station site	Line of sight visibility to base station	Relative height above ground level (AGL)
				REG	ION THREE (CONTINUED)			
10/5	Eng. River	Airtel	ES2-MP1	67	Espace building- Open area in front of retail stores (restaurants)	≈15	Yes	Ground
10/6	Eng. River	Airtel	ES3-MP1	68	Espace building-Outside restaurant area	ı. ≈10	Yes	Ground
11.	Anse Etoile	Airtel	N/A	70	Ma Constance – WebGIS snapshot/base station identification	9		
11/1	Anse Etoile	Airtel	MP1	71	Ma Constance – adjacent to base statior	n. ≈12	Yes	Ground
11/2	Anse Etoile	Airtel	MP2	71	Ma Constance- at furthest end of propert (adjacent to base station)	y ≈25	Yes	Ground
12.	Mt. Buxton	Airtel	N/A	72	Mt. Buxton – WebGIS snapshot/base station identification			
12/1	Mt. Buxton	Airtel	MP1	72	Mt Buxton – outside kitchen back-door (closest to base-station)	≈10	Yes	Ground

	REGION THREE (CONTINUED)											
12/2	Mt. Buxton	Airtel	MP2	73	Mt Buxton – inside living room	≈6	Yes (through house window)	Ground				
12/3	Mt. Buxton	Airtel	MP3	74	Mt Buxton- inside girl's bedroom	≈6	Yes (through house window)	Ground				
12/4	Mt. Buxton	Airtel	MP4	74	Mt Buxton – inside house loft	≈6	No	Upper level (inside loft				

Site No.	Region	Operator/s	Meas. Point/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers)	Description	Approx. distance to base station site (in meters)	Line of sight to base station	Height above ground level (AGL)
					REGION FOUR			
13.	Victoria	CWS	N/A	75	SACOS Tower – WebGIS snapshot			
13/1	Victoria	CWS	MP1	75	Adjacent to SACOS Tower. At street level.	≈25	Yes	Ground
13/2	Victoria	CWS	MP2	77	SACOS Tower. Adjacent three-storey building. On balcony.	≈25	Yes	Top floor
13/3	Victoria	CWS	MP3	77	SACOS Tower. Adjacent three-storey building. On balcony.	≈25	Yes	Top floor
13/4	Victoria	CWS	MP4	75	SACOS Tower. Adjacent three-storey building. On balcony.	≈25	Yes	Top floor
14.	Victoria	Airtel/CWS	N/A	78	Stad. Popiler/CBS – WebGIS snapshot/s.			
14/1	Victoria	Airtel/ CWS	MP1	80	Victoria (Stad Popiler)/CBS. Car park behind bank.	≈50	Yes	Ground
14/2	Victoria	Airtel/ CWS	MP2	80	Victoria (Stad Popiler)/CBS. Roof of CBS. Below base station (under photovoltaic panels). Three-storey.	≈10	Yes (for CWS)	Roof

14/3	Victoria	Airtel	MP3	81	Victoria (Stad Popiler)/CBS. CBS roof – HVAC equipment storeroom.	≈15	Yes (for CWS)	Roof
		CWS			TTAO equipment storeroom.			
14/4	Victoria	Airtel/	MP4	81	Victoria (Stad Popiler)/CBS. CBS	≈25	Yes (for Airtel)	First floor
		CWS			Canteen. Large window facing Airtel base station.			
14/5	Victoria	Airtel/	MP5	81	Victoria (Stad Popiler)/CBS. CBS	≈30	Yes (for Airtel)	First floor
		CWS			canteen. Balcony facing onto sports stadium.			
14/6	Victoria	Airtel/	MP6	82	Victoria (Stad Popiler)/CBS. Outside in	≈30	Yes – for Airtel	Ground
		cws			sport stadium (on grandstand).		only.	
15.	St Louis	Airtel	N/A	83	Dr Chetty Clinic/neighbouring crèche –			
					WebGIS snapshot			
15/1	St	Airtel	MP1	84	Dr Chetty Clinic/surrounds. Pre-school	≈35	Yes	First floor
	Louis				-on balcony facing base station.			
15/2	St.	Airtel	MP2	84	Dr Chetty Clinic/surrounds. Inside pre-	≈35	Yes	First floor
	Louis				school classroom.			
5/3	St.	Airtel	MP3	85	Dr Chetty Clinic/surrounds. In front of	≈40	Yes	Ground
	Louis				pre-school. Facing the base station.			
15/4	St.	Airtel	MP4	85	Dr Chetty Clinic/surrounds. Below	≈10	No	Top floor
	Louis				base-station. Top of stairwell. Three			
					storey building.			
15/5	St.	Airtel	MP5	86	Dr Chetty Clinic/surrounds. Office floor	≈15	No	Third floor
	Louis				level.			

Site No.	Region	Operator/s	Meas. Point/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers)	Description	Approx. distance to base station site (in meters)	Line of sight to base station	Height above ground level (AGL)
					REGION FOUR (CONTINUED)			
16 (A)	Mt. Fleuri	CWS	N/A	87	Seychelles Hospital. WebGIS snapshot			
16/1	Mt. Fleuri	CWS	MP1	88	Seychelles Hospital. In front of mortuary building.	≈25	Yes	Ground
16/2	Mt. Fleuri	CWS	MP2	88	Seychelles Hospital. Open 'green' recreational area.	≈20	No	Ground
16/3	Mt. Fleuri	CWS/Airtel	MP3	90	Seychelles Hospital – in front of two- storey office building.	≈10	Yes	Ground
16 (B)	Mt. Fleuri	Airtel	N/A	90	Hermitage (SBC) – WebGIS snapshot			
16/4	Mt. Fleuri	Airtel	MP1	91	Hermitage (SBC). In car park in front of building.	20	Yes	Ground

Site No.	Region	Operator/s	Meas. Point/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers}	Description	Approx. distance to base station site (in meters)	Line of sight to base station	Height above ground level (AGL)
					REGION FIVE			
17.	Plaisance	Airtel	N/A	92	Plaisance – WebGIS snapshot			
17/1	Plaisance	Airtel/	MP1	92	Plaisance – closest to cemetery (at T- junction in road)	≈26	Yes	Ground
17/2	Plaisance	Airtel/	MP2	93	Plaisance – in front of base station (closest point).	≈13	Yes	Ground
18.	Plaisance	Airtel	N/A	94	Copolia – WebGIS snapshot			
18/1	Plaisance	Airtel	MP1	95	Copolia – in front of house (S-bend in road)	≈100	Yes	Ground
18/2	Plaisance	Airtel	MP2	97	Copolia. In front of base-station (closest to base station – solar panel on roof as identifier).	≈ 25	Yes	Ground
18/3	Plaisance	Airtel	MP3	98	Copolia. In front of white three-storey house (facing base station)	≈ 38	Yes	Ground

Site No.	Region	Operator/s	Meas. Point/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers}	Description	Approx. distance to base station site (in meters)	Line of sight to base station	Height above ground level (AGL)
					REGION FIVE (CONTINUE	ED)		
19.	Roche Caiman	Airtel/CWS	N/A	99	Roche Caiman. WebGIS snapshot	Note: there are two sets of base station infrastructure, namely RC1 and RC2.		
19/1	Roche Caiman	Airtel/ CWS	RC1/MP1	100	Roche Caiman. Public area behind stadium	≈25	Yes	Ground
19/2	Roche Caiman	Airtel/ CWS	RC1/MP2	100	Roche Caiman. Inside stadium – on racetrack.	≈20	Yes	Ground
19/3	Roche Caiman	Airtel/ CWS	RC2/MP1	101	Roche Caiman. Outside wall of PUC/base-station.	≈15	Yes	Ground
19/4	Roche Caiman	Airtel/ CWS	RC2/MP2	101	Roche Caiman. Outside tennis courts/swimming complex.	≈45	Yes	Ground

Site No.	Region	Operator/s	Meas. Point/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers)	Description	Approx. distance to base station site (in meters)	Line of sight to base station	Height above ground level (AGL)
					REGION SIX & SEVEN			
20.	Providence	CWS	N/A	102	Sunshine House. WebGIS snapshot			
20/1	Providence	CWS	MP1	102	Sunshine house. Outside building next to sub-station.	≈40	Yes	Ground
20/2	Providence	CWS	MP2	104	Sunshine house. Below base station (under atrium).	≈25	Yes	Top floor
21(A)	Pointe Larue	CWS	N/A	105	Seychelles Int. Airport. WebGIS snapshot			
21/1	Pointe Larue	CWS	MP1	105	Seychelles Intl. Airport. Next to base station (Air Seychelles building).	≈25	Yes	Ground
21/2	Pointe Larue	CWS	MP2	106	Seychelles Intl. Airport. In front of VIP terminal – start of terminal building.	≈90	Yes	Ground
21/3	Pointe Larue	CWS	MP3	107	Seychelles Intl. Airport. Baggage handling area.	≈160	Yes	Ground
21/4	Pointe Larue	CWS	MP4	107	Air Seychelles office block. Inside office area. Three Storey building.	≈35	Yes	Top floor

Site No.	Region	Operator/s	Meas. Point/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers)	Description	Approx. distance to base station site (in meters)	Line of sight to base station	Height above ground level (AGL)
					REGION SIX & SEVEN (CONT	INUED)		
21 (B)	Pointe Larue	Airtel	N/A	108	Seychelles Int. Airport – Domestic Terminal. WebGIS snapshot			
21/5	Pointe Larue	Airtel	MP1	108	Seychelles International Airport – domestic terminal. Car park outside.	≈50	Yes	Ground
21/6	Pointe Larue	Airtel	MP2	109	Seychelles International Airport – Domestic terminal. Drop-off zone.	≈70	Yes	Ground
					REGION EIGHT			
22.	Port Glaud	Airtel	N/A	110	Port Launay – WebGIS snapshot.			
22/1	Port Glaud	Airtel	MP1	110	Port Launay – below base station In front of house (with off-yellow exterior walls).	≈90	Yes	Ground
22/2	Port Glaud	Airtel	MP2	111	Port Launay – below base station (behind dwellings).	≈40	Yes	Ground

Site No.	Region	Operator/s	Meas. Point/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers)	Description REGION TEN (PRASLIN AND LA	Approx. distance to base station site (in meters) A DIGUE)	Line of sight to base station	Height above ground level (AGL)
23.	Praslin	Airtel/CWS	N/A	112	Grand Anse – WebGIS snapshot		asurement location e station site locat	
23/1	Praslin	Airtel/	MP1	113	Grand Anse – in front of auto-parts shop. Facing Airtel base-station.	≈75	Yes	Ground
23/2	Praslin	Airtel/CWS	MP2	113	Grand Anse – in front of auto-parts shop. Facing CWS base station.	≈35	Yes	Ground
23/3	Praslin	Airtel/CWS	MP3	114	Grand Anse. Closest point to Airtel base station (across road)	≈40	Yes	Ground
23/4	Praslin	Airtel/CWS	MP4	115	Grand Anse – at retail store entrance.	≈80	Yes	Ground
24.	Praslin	Airtel	N/A	116	Pt. Cabris – WebGIS snapshot			
24/1	Praslin	Airtel	MP1	118	Pt. Cabris – at access road into property.	≈30	Yes	Ground
24//2	Praslin	Airtel/	MP2	118	Pt. Cabris. In front of woodworking area.	≈40	Yes	Ground

Site No.	Region	Operator/s	Meas. Point/s	Seychelles WebGIS/ Meas. point/photo references in Appendix A1 {Page numbers}	Description	Approx. distance to base station site (in meters)	Line of sight to base station	Height above ground level (AGL)	
			REGION TEN (CONTINUED)						
24/3	Praslin	Airtel/ CWS	MP3	118	Pt. Cabris – in front of open area on property.	≈50	Yes	Ground	
24/4	Praslin	Airtel/CWS	MP4	118	Pt. Cabris – under carport (closest to main dwelling).	≈55	Yes	Ground	
25.	La Digue	CWS/Airtel	N/A	119	Anse Reunion – WebGIS snapshot.	Note: this measurement location considers two base station site locations.			
25/1	La Digue	CWS	MP1	120	Anse Reunion – adjacent to fence of CWS compound.	≈20	Yes	Ground	
25/2	La Digue	Airtel	MP2	121	Anse Reunion – outside main entrance (distance shown is approximate to Airtel base station).	≈60	Yes	Ground	

Table 2 – Measurement point (MP) locations as identified per region in the Seychelles

The measurements were performed from 04.04.2019 to 17.04.2019 inclusively between 10:00 and 15:30 on each of the days.

The measurements were undertaken primarily by representatives of the DICT under the supervision of Mr Vaughan Taylor (Project Manager) to fulfil the practical requirement of the training programme which was also offered as part of the exercise. The DICT personnel as were responsible for undertaking the measurements and gathering the information were the following;

- Mr Sivarajan Chetty
- Mr Yannick Julie
- Mr Michael Esparon
- Mr Abdoulaye Diallo

Regular reporting to the Director of Radio Communications Section, Mr Paul Pierre was ensured around progress of the campaign.

4 Measurement Protocol

4.1 Background

The applicable methodologies applied in these studies were developed through industry best practise approaches which are aligned with [ITU-T K.100] and [IEC 62232:2017] industry standards as applicable.

4.2 Measurement quantities for RF fields

For conducting exposure assessments around operational RF radio transmitting facilities, the following quantitative indicators were used;

- Electric field strength E in V/m (root-mean-square {or rms} value)
- Magnetic field strength H in A/m (rms value)
- Power density S in W/m² (linear mean value)

In the far field of a transmitted signal, the electric and magnetic field strength along with the power density are coupled by a constant ratio. For measurements around mobile phone base stations – it is acceptable for these to be done in the far-field because the measurements will be performed at some distance away from the radiating antenna systems.

Therefore for exposure assessments - the measurement of one of the three quantities may be sufficient. In the report of the conducted measurements, primarily the electric field strength and its reference level consumption are used as exposure quantities.

4.3 Measurement equipment and procedure

The following equipment was used throughout the measurement campaign in the Seychelles:

Equipment	Manufacturer	Туре	Serial number	
SRM-3006	Narda STS	Portable spectrum analyser 9 kHz - 6 GHz with additional UMTS and LTE code selective measurement option/s	G-0007	
3AX 420M- 6G	Narda STS	Three-axis measuring antenna 420 MHz - 6 GHz	B-0212	
Snyper Siretta LTE		Signal strength analyser utilised for surveying 4G/LTE, 3G/UMTS & 2G/GSM. For European networks.	359852054679759	

Table 3 - Measurement equipment used

4.3.1 Measurement methodologies

Using the information as obtained from each pre-qualification assessment, the applicable mobile telephony service information was accurately recorded using the SRM3006 and its companion three-axis antenna.

Table 4 (below) briefly describes the applicable measurement methodology that was applied per telephony technology.

Applicable setup for SRM-3006	E900 GSM (2G)	UMTS950/IMT2100 (3G) – code selective	LTE (4G) – code selective	
Operational Mode/s	Spectrum Analyser	UMTS P-CPICH demodulation	LTE demodulation	
Result type/s	MIN and MAX traces	MAX and ACT.	MAX and ACT.	
Stop/start and centre frequencies	Set 'start' and 'stop' frequencies as required (Split the GSM band into two sub- bands for 900/1800MHz (if required)	Centre frequency of the UMTS signal (For accurate demodulation – precise adjustment is necessary!)	Centre frequency of the LTE signal	
Resolution bandwidth (RBW) and detection.	200kHz. Use the 2kHz Video Bandwidth (VBW) filter for RMS smoothing for EDGE modulation.	5MHz and RMS detection are automatically switched 'in' for the measurements	A channel bandwidth (CBW) of 1.4MHz is sufficient. RMS detection is automatically switched on.	
Measurement range	Dependent on the field strength of strongest signal	Must be higher than the <i>Analog</i> ' value displayed in the result table	Shall be a minimum of 30dB above the ' <i>Analog</i> ' value in result table	
Signals to be measured (worst case approach)	Measurement of BCCH signals. Apply extrapolation factor based on power ratio between the BCCH signal relative to the maximum power radiated by the antenna.	Measurement of the CPICH signals. Apply extrapolation factor.	Measurement of the RS0/RS1 for two MIMO. Apply extrapolation factor.	
Antenna	Use three-axis througho	ut.		

Table 4 - Applicable narrow-band analyser setup information

The measurement equipment used was previously calibrated by the manufacturer and has been subject to regular calibration cycles.

With the spectrum analyser and a suitable receiving antenna, the operational frequencies and receive levels of the investigated radio services at the measurement point were assessed. No additional interconnecting cables were used between the antenna and spectrum analyser i.e. the antenna was directly connected to the analyser.

During the measurements, the sweeping method was used: The receive antenna is swept slowly through the measurement volume (height 0.75 m - 1.75 m, diameter at least 1 m) with continuous variation of the orientation and polarization of the antenna. The spectrum analyser is operated in the "max hold" mode. The measurement was performed until no changes in the measurement display could be observed. This method reliably finds and records the maximal exposure inside the measurement volume. During the sweeping process, a distance of at least 0.5 m was maintained between the measurement antenna and the immediate ground below it. In addition to this, the antenna was kept away from any metallic objects, windows and other reflective surfaces.

GSM signals were measured with the SRM-3006 set to 'spectrum analyser' mode - a RBW of 200 kHz was selected. A VBW filter at 2 kHz was used to provide for additional RMS smoothing for EDGE modulation. For UMTS and LTE signals the code selective modes of the instrument were used.

All single exposure values were summarized to a total exposure in correspondence with the summation formula given in Appendix A3. Radio Frequency electromagnetic exposure values that were measured at levels of 80 dB μ V/m and below do not contribute significantly (i.e. the resultant levels are for all practical purposes at 80 dB μ V/m and smaller would be 20dB lower than the largest measured value) to the total exposure and therefore may be disregarded.

4.4 Calculation of minimal and maximal exposure

The electromagnetic fields generated from mobile phone base station sites are non-constant in time and vary in proportion to the traffic throughput and established connection qualities to the respective end-users. In off-peak hours, the generated exposure may subside to a minimal nominal value, this being only produced through permanent signalisation information by the base station and will vary in terms of the mobile telephony system/standard in question. Due to worst-case considerations, the exposure at highest operational state of the site is to be determined. This was done at follows:

GSM sites

GSM sites with more than one transmit channel operate with a transmit power control from channel 2 on, whereas channel 1 (broadcast control channel, BCCH) works permanently with maximal transmit power. To extrapolate from the measured instantaneous exposure to the maximal possible exposure, the exposure contributed by the BCCH of each sector was combined with the maximal possible number of the channels and as such only these values are documented.

The maximal exposure, documented in this report, therefore contains an extrapolation factor, to determine the maximal operational state of the base station as may be determined by its network operators. As such – the maximal exposure levels are reflected throughout the document. The typical total number of radio channels in one GSM cell is two to four (therefore four radio channels in one GSM cell allows for approximately 30 simultaneous telephone connections for a given cell). This in turn advises an extrapolation factor of 3 to 6 dB which may be applied on the BCCH measurement results. As the exact number of radio channels was not stated by the operators a 6dB extrapolation factor was decided upon throughout the exercise – the resultant limits were continuously evaluated and found in most instances to be within accepted norms.

The result tables in the report (in section 6.2) perform an automatic computation to 6dB, using the formula 10 log (4).

UMTS sites

At UMTS sites - a signalization signal ("Common Pilot Channel", or CPICH) exists, which is transmitted with defined and constant power regardless of the traffic patterns, which are non-constant in nature. The field strength of each existing CPICH was determined by a code selective measurement. The *minimal exposure* results from the *CPICH exposure with an addition of 3 dB* (factor of 2 with regard to power), to account for other permanently transmitted signalization channels. For the minimal exposure all channels presently in operation are accounted for.

The maximal exposure results from a multiplication of the measured CPICH exposure with a factor, determined by the maximal approved transmit power of the frequency channel and the presently used power of the CPICH. This factor (e.g. 10 with regard to the power) was advised from the network operators and is referred to as the Peak to Average Power Ratio (or PAPR). The exposure determined this way may then be extrapolated to the maximal approved spectrum occupancy (regardless of whether during the measurement that less than the maximal possible channels were in operation) through the addition of 10dB to the measured results – and demonstrated in the result tables (in section 6.2).

LTE sites

Both UMTS and LTE utilise modulation schemes that present high peak-to average power ratios and similarly to UMTS described above- a special code selective measurement technique was used to determine the field strength of the reference signal (or RS) for each sector antenna with defined and constant power and thus regardless of traffic patterns. From the exposure value of these signals again an extrapolation to maximum and minimum traffic load is possible. An extrapolation factor of 600 (i.e. 27.8dB) being identical to the number of subcarriers, as applicable for a signal bandwidth of 9MHz – this is indicated for maximum traffic load conditions. It was further considered that as these systems were based upon two MIMO antenna approaches, the MIMO channel which exhibits the maximum value for the RS signal is therefore extrapolated by an additional factor of 3dB (which in effect is the measurement uncertainty factor in 4.5 below) – and is added to the measurement results in section 6.2.

4.5 Measurement uncertainty

The measurement uncertainty for the exposure measurements was calculated to be ± 3 dB (expanded uncertainty for k=2, i.e. confidence interval 95%). Here, uncertainties for the calibration of measurement antenna, spectrum analyser and cable as well as for the limited repeatability of the measurements were taken into account.

As the measured values are for the most part significantly below the ICNIRP limit threshold, the measurement uncertainty factor is included into the results as the effect of including it is innocuous on the final results.

5 Results

In Table 6 (overleaf) the maximum exposure values have been derived from the <u>highest values</u> of the measurement point sets which then extrapolated with reference to section 4.3. We present the maximal (i.e. worst case) exposure levels throughout this document as it is difficult to determine the extent of traffic levels that may be in force at any given instant with the base station/s and its users. For ease of reference, the results are 'colour-coded' for demonstrating compliance with the ICNIRP 98 reference levels (per Table 5 below).

Legend	Highest EMF Value/s		
	[Colour Code]		
Highest EMF value >26%	(Red – highest)		
Highest EMF value 16 - 25%	(Orange - mid)		
Highest EMF value - > 6% ≤ 15%	(Yellow – low-mid)		
Highest EMF value ≤ 5.7%	(Light Green – lowest)		

Table 5 – colour-codes per highest EMF values

Note that the results in the Table 6 are not the actual exposure levels, but the percentage values related to the reference levels of ICNIRP 98. Detailed tables with absolute values for field strength (in V/m) and power density (in mW/m^2) are documented in Appendix A2. The colour-coding as has been applied in Tables 5 and 6 should not be interpreted that 'red' for example indicates a dangerous condition – they are recorded in this fashion to provide for easy grading of the results as were obtained.

Table 6 shows that whilst all the exposure levels as measured and referenced to ICNIRP 98 are within specification, there are some concerns around the values that were measured at Mt. Buxton – the highest value as recorded was at MP4 (61.71%) respectively. For remedial action, we present our remedial actions for reducing the exposure values under Appendix A4.

The geographical locations (per region) of the sites are presented in individual 'Google Earth' images on which the site locations are marked and colour-coded as per Table 6. The region images immediately follow the Table for easy reference in Section 5.1.

The basis of the results from this study may provide further insight into the present exposure levels that are being emitted at present for the purposes of evaluating the expected increase in exposure levels when additional operators/services are proposed for the region. We present the maximal (i.e. worst case) exposure levels throughout this document as it is difficult to determine the extent of traffic levels that may be in force at any given instant with the base station/s and its users.

Where some measurements have displayed results that approach levels of 20% and above, these installations may be evaluated for increase of exposure levels with the addition of further 2G/3G/4G services. Through desktop analyses, we have provided some predictive indicators as to what the further increases may be with the addition of a new operator – these results are displayed in Appendix A4 (Table 9).

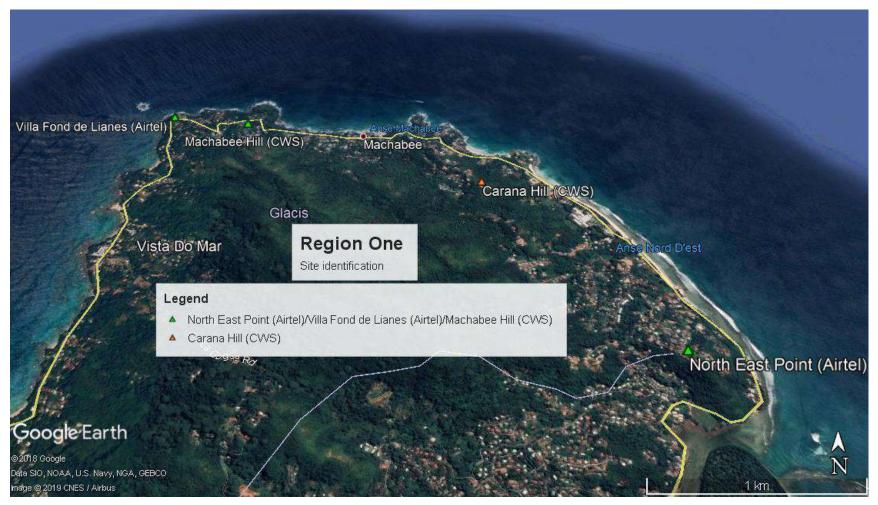
Site Lat.	Site Long.	Site Name/s	Operator/s	Highest EMF exposure values (in percentages)			
				≤ 5.7%	<mark>6% ≤ 15%</mark>	16% - 25%	>26%
-4.5639000000	55.4389990000	Machabee Hill	CWS	4.3 (MP2)			
-4.5697000000	55.4537960000	Carana Hill	CWS			19 <i>(MP1)</i>	
-4.5820620000	55.4630140000	North East Point	Airtel	4.15 <i>(MP2)</i>			
-4.5631690000	55.4341130000	Villa Fond de Lianes	Airtel	5.64 (MP1)			
-4.6171990000	55.4212980000	Bel Ombre	Airtel	4.44 (MP1)			
-4.6213000000	55.4031000000	Bel Ombre (Dan Zil)	CWS		9.81 <i>(MP2)</i>		
-4.5904170000	55.4374650000	Sorento	Airtel		8.43 (MP4)		
-4.6007222200	55.4373527800	La Batie (Mare Anglaise)	Airtel		7.88 (MP2)		
-4.6047780000	55.4619400000	Perseverance	Airtel	3.7 (MP2)			
-4.6178690000	55.4575000000	Espace Building (Hospital Opposite)	Airtel		14.7 (ES1- MP1)		
-4.6014305600	55.4558777800	Ma Constance	Airtel		13.16 <i>(MP1)</i>		
-4.6157280000	55.4500110000	Mt Buxton	Airtel				61.71 (MP4)
-4.6200000000	55.4540940000	SACOS Tower	CWS	4.88 (MP4)			
-4.6236970000	55.4538150000	Victoria (Stad Popiler)	Airtel		7.36 (MP1)		
-4.6234000000	55.4540000000	Central Bank Seychelles	CWS			22.27 (MP2)	
-4.6217000000	55.4493000000	Dr. Chetty Clinic	Airtel		11.46 (MP4)		
-4.6320000000	55.4556000000	Seychelles Hospital	CWS		10.11 <i>(MP3)</i>		
-4.6318000000	55.4539000000	Hermitage (SBC)	Airtel		6.95 <i>(MP1)</i>		
-4.6385040000	55.4630350000	Plaisance	Airtel	5.47 (MP1)			
-4.6427800000	55.4592100000	Copolia	Airtel	4.11 <i>(MP2)</i>			
-4.6358000000	55.4713000000	Roche Caiman (RC1)	Airtel	5.36 (MP2)			
-4.6328000000	55.4677000000	Roche Caiman (RC2)	CWS	5.45(MP2)			
-4.6513000000	55.4841650000	Sunshine House	CWS		11.96 (MP2)		
-4.6707430000	55.5103940000	Airport Car Park/domestic terminal	Airtel		9.73 (MP2)		
-4.6716000000	55.5130420000	Airport main terminal	CWS		11.71 <i>(MP2)</i>		
-4.6498160000	55.3990890000	Port Launay	Airtel	2.31 <i>(MP2)</i>			
-4.3262500000	55.7143888900	Grand Anse	Airtel	3.39 (MP3)			
-4.3518490000	55.7663490000	Pt. Cabris	Airtel		8.12 (MP3)		
-4.3531300000	55.8273300000	Anse Reunion	Airtel	2.3 (MP1)			
-4.3529000000	55.8265000000	Anse Reunion (CWS)	CWS	2.59 (MP2)			

Table 6 – Highest EMF Exposure results (Electric field strength in % of the ICNIRP 98 reference level

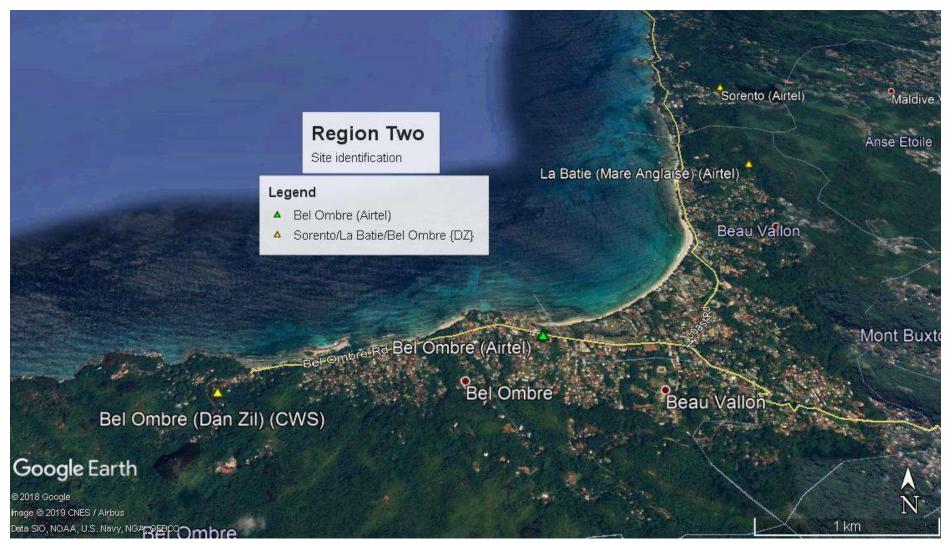
FINAL REPORT: LSSA/SC/2019/2

5.1 Google Earth images per measurement region

5.1.1 Region One



5.1.2 Region Two



5.1.3 Region Three



5.1.4 Region Four



5.1.5 Region Five



5.1.6 Region Six



5.1.7 Region Eight

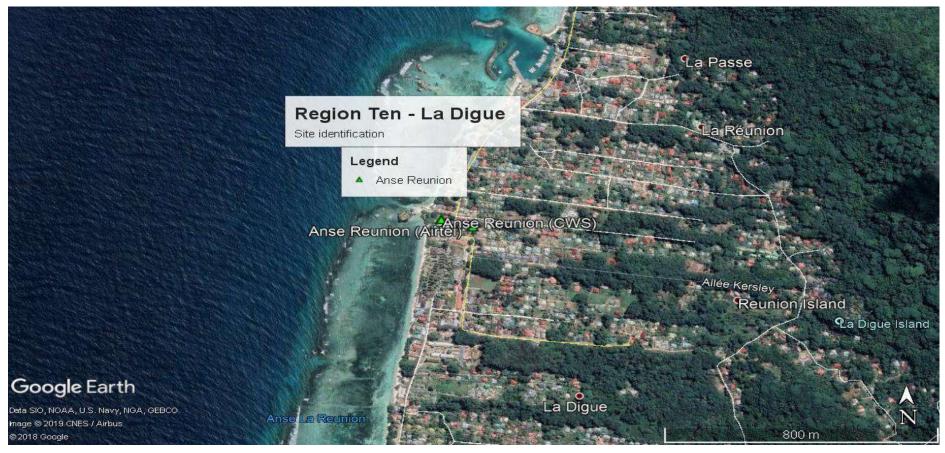


5.1.8 Region Ten

5.1.8.1 Praslin



5.1.8.2 La Digue



6 Appendices

6.1 Appendix A1 - Identification of the measurement points (per the WebGIS portal) and photos of the measurement point locations.

6.1.1 Machabee Hill (CWS)

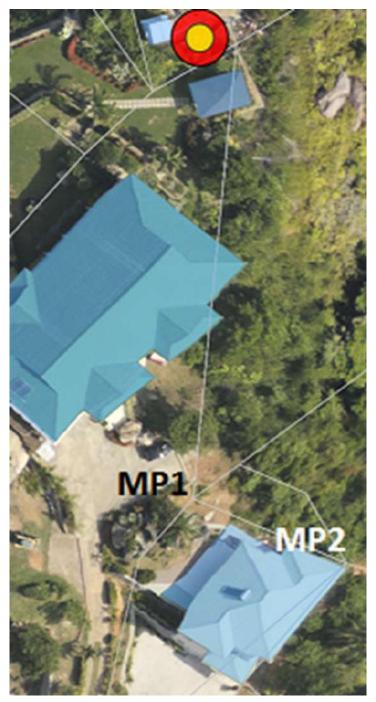


Figure 1 - Machabee Hill: measurement points (WebGIS)



Figure 2 - Machabee Hill: as identified from MP1 and MP2 locations



Figure 3 - Machabee Hill: MP2 location (adjacent property)

6.1.2 Carana Hill (CWS)



Figure 4 - Carana Hill: measurement point (WebGIS)



Figure 5 - Carana Hill: MP1 location

6.1.3 North East Point (Airtel)

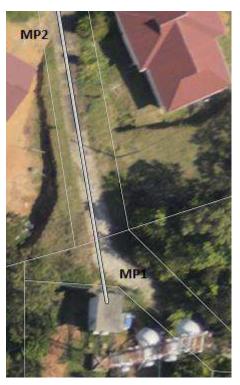


Figure 6 – North East Point: measurement points (WebGIS)



Figure 7 – North East Point: At MP1 location



Figure 8 – North East Point: At MP2 location

6.1.4 Villa Fond de Lianes



Figure 9 – Villa Fond de Lianes: measurement points (WebGIS)



Figure 10 – Villa Fond de Lianes: MP1 location



Figure 11 – Villa Fond de Lianes: MP2 location (behind base station)

6.1.5 Bel Ombre (Airtel)



Figure 12 - Bel Ombre: measurement points (WebGIS)

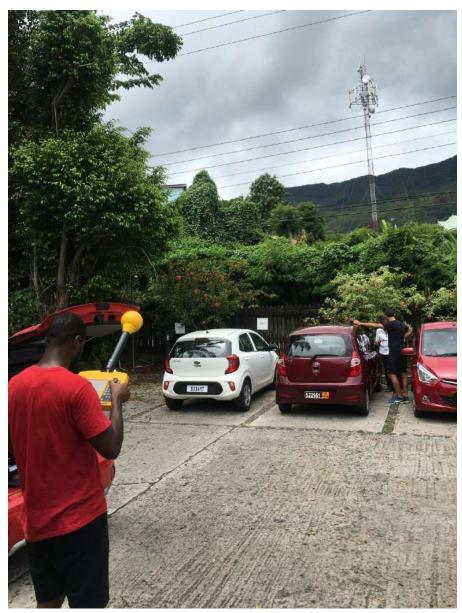


Figure 13 – Bel Ombre – MP2 location (Le Méridien Fisherman's Cove)

6.1.6 Bel Ombre (Dan Zil) (CWS)



Figure 14 - Bel Ombre (DZ): measurement points (WebGIS



Figure 15 – Bel Ombre (DZ): MP1 location



Figure 16 - Bel Ombre (DZ): MP2 location

6.1.7 Sorento (Airtel)

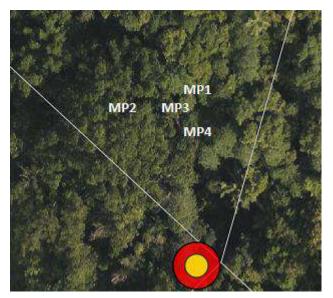


Figure 17 – Sorento: measurement points (WebGIS)



Figure 18 – Sorento: view of base station



Figure 19 - Sorento: MP1 location (top floor)



Figure 20 - Sorento: MP2 location (lower level)



Figure 21 – Sorento: MP3 location (sub-basement)



Figure 22 – Sorento: MP4 location (ground level)

6.1.8 La Batie (Airtel)



Figure 23 - La Batie: measurement points (WebGIS)



Figure 24 - La Batie: view of base station from MP1



Figure 25 - La Batie: MP1 location



Figure 26 - La Batie: MP2 location

6.1.9 Perseverance (Airtel)



Figure 27 - Perseverance: measurement points (WebGIS)



Figure 28 - Perseverance: MP1 location



Figure 29 - Perseverance: viewed from MP2 location

6.1.10 Espace building (Airtel)

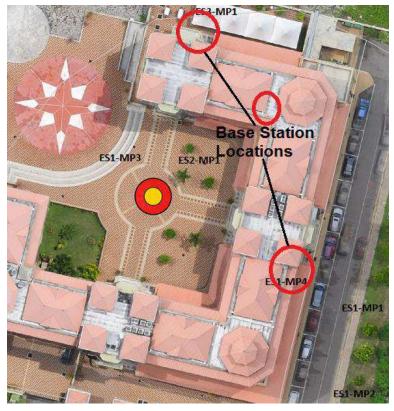


Figure 30 - Espace building: measurement points (WebGIS)



Figure 31 - Espace: sector antenna viewed from ES2/MP1 and ES1/MP3 respectively.



Figure 32 - Espace: sector antenna as seen from ES1/MP1 and ES1/MP2 respectively.



Figure 33 - Espace: ES1/MP3 location



Figure 34 – Espace: ES3/MP1 location.



Figure 35 – Espace: ES1/MP4 location

6.1.11 Ma Constance (Airtel)



Figure 36 - Ma Constance: measurement points (WebGIS)



Figure 37 - Ma Constance: base station infrastructure



Figure 38 - Ma Constance: as seen from MP1/MP2



Figure 39 - Ma Constance: at MP1 location

6.1.12 Mt. Buxton (Airtel)

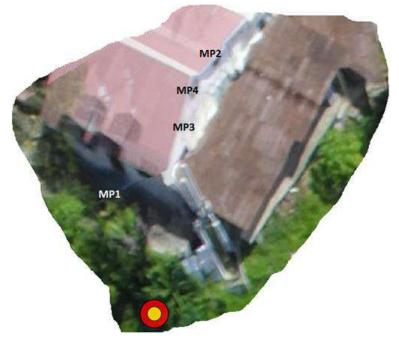


Figure 40 - Mt. Buxton: measurement points (WebGIS)



Figure 41 - Mt. Buxton: proximity of base station to MP1



Figure 42 - Mt. Buxton: base station infrastructure at MP1



Figure 43 - Mt. Buxton: proximity to base station at MP2 (lounge window)



Figure 44 - Mt. Buxton: MP3 location (bedroom)



Figure 45 - Mt. Buxton: MP4 location (inside loft)

6.1.13 SACOS Tower (CWS)



Figure 46 - SACOS Tower: measurement points (WebGIS)



Figure 47 - SACOS: MP4 location



Figure 48 - SACOS Tower: base station view from MP2-MP4



Figure 49 - SACOS: MP2/MP3 locations

6.1.14 Stad Popiler and Central Bank Building (Airtel/CWS)



Figure 50 - Stad Popiler terrain: measurement points (WebGIS)



Figure 51 - CBS building: measurement points (WebGIS)



Figure 52 - CBS (CWS): base station identification



Figure 53 - Stad Popiler (Airtel): MP1 location



Figure 54 - CBS (CWS): MP2 location



Figure 55 - CBS (CWS): MP3 location



Figure 56 - CBS (Airtel): MP4/MP5 locations



Figure 57 – Stad Popiler: MP6 location

6.1.15 Dr. Chetty's Rooms (Airtel)

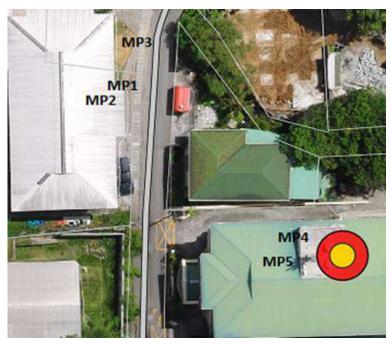


Figure 58 – Dr. Chetty's Rooms: measurement points (WebGIS)



Figure 59 – Dr Chetty: identification of base station



Figure 60 - Dr Chetty: MP1 location (at pre-school/crèche -on balcony)



Figure 61 – Dr. Chetty: MP2 location (at pre-school – inside classroom)



Figure 62 - Dr. Chetty: MP3 location (outside pre-school)



Figure 63 – Dr. Chetty: MP4 location (below base station)



Figure 64 - Dr. Chetty: MP5 location



6.1.16 Seychelles Main Hospital (CWS) and SBC Hermitage (Airtel)

Figure 65 - Seychelles main hospital: measurement points (WebGIS)



Figure 66 – Seychelles main hospital: identification of base station



Figure 67 – Seychelles main hospital: MP1 location



Figure 68 – Seychelles main hospital: MP2 location



Figure 69 – Seychelles main hospital: Hermitage (SBC) base station location



Figure 70 – Seychelles main hospital: MP3 location



Figure 71 - SBC Hermitage measurement point (WebGIS)



Figure 72 – Hermitage (SBC): identification of base station



Figure 73 – Hermitage (SBC): MP1 location

6.1.17 Plaisance (Airtel)



Figure 74 - Plaisance measurement points (WebGIS)

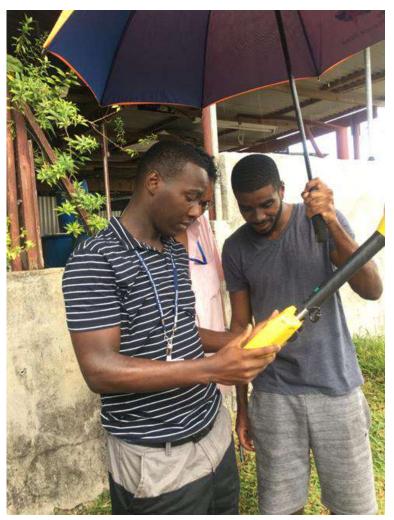


Figure 75 – Plaisance: MP1 location



Figure 76 – Plaisance: identification of base station



Figure 77 – Plaisance: at MP2 location

6.1.18 Copolia (Airtel)

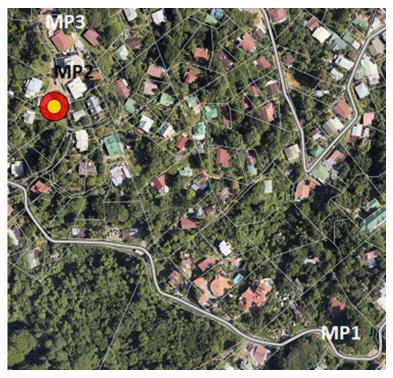


Figure 78 – Copolia: measurement points (WebGIS)

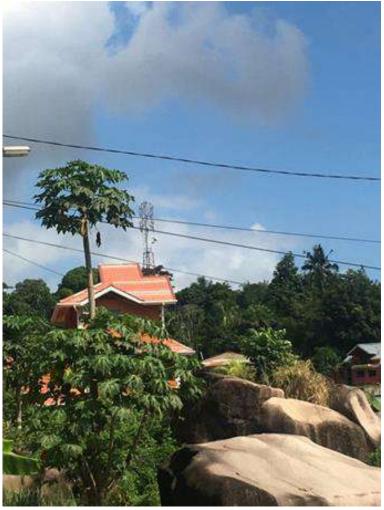


Figure 79 – Copolia: MP1 location



Figure 80 – Copolia: identification of base station



Figure 81 – Copolia: MP2 location



Figure 82 – Copolia: MP3 location

6.1.19 Roche Caiman (CWS/Airtel)

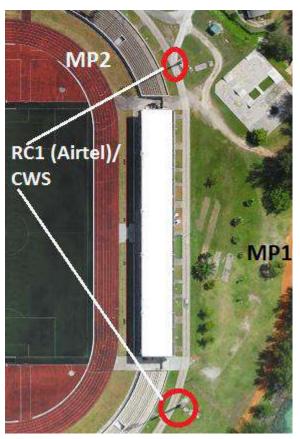


Figure 83 – Roche Caiman (RC1): measurement points (WebGIS)



Figure 84 – Roche Caiman (RC2): measurement points (WebGIS)



Figure 85 – Roche Caiman (RC1): MP1 location



Figure 86 – Roche Caiman (RC1): MP2 location



Figure 87 – Roche Caiman (RC2): MP1 location (next to PUC)



Figure 88 – Roche Caiman (RC2): MP2 location

6.1.20 Sunshine House (CWS)



Figure 89 – Sunshine House: measurement points (WebGIS)



Figure 90 – Sunshine House: MP1 location



Figure 91 – Sunshine House: identification of base station at MP1



Figure 92 – Sunshine House: identification of base station at MP2



Figure 93 – Sunshine House: MP2 location



Figure 94 – Seychelles Int. Airport (main terminal): measurement points (WebGIS)



Figure 95 – Seychelles Int. Airport: MP1 location



Figure 96 – Seychelles Int. Airport: MP2 location



Figure 97 – Seychelles Int. Airport: identification of base station



Figure 98 – Seychelles Int. Airport: MP3 location



Figure 99 – Seychelles Int. Airport: MP4 location



Figure 100 – Seychelles Int. Airport (Domestic terminal): measurement points (WebGIS)



Figure 101 – Seychelles Int. Airport: MP1 location



Figure 102 – Seychelles Int. Airport: MP2 location

6.1.22 Port Launay (Airtel)



Figure 103 – Port Launay: measurement points (WebGIS)



Figure 104 – Port Launay: at MP1 location



Figure 105 – Port Launay: identification of base station



Figure 106 – Port Launay: MP2 location

6.1.23 Grand Anse (Praslin – CWS/Airtel)



Figure 107 – Grand Anse: measurement points (WebGIS)



Figure 108 – Grand Anse: MP1 location (Airtel)



Figure 109 – Grand Anse: MP2 location (CWS)



Figure 110 - Grand Anse: MP3 location (Airtel)



Figure 111 – Grand Anse: identification of base station (Airtel)



Figure 112 – Grand Anse: base station (Airtel) adjacent to MP4 location



Figure 113 – Grand Anse: MP4 location



Figure 114 – Port Cabris: measurement points (WebGIS)



Figure 115 – Port Cabris: identification of base station (CWS)



Figure 116 – Port Cabris: identification of base station (Airtel)



Figure 117 – Port Cabris: MP1 location



Figure 118 - Port Cabris: MP2 thru MP4 location/s

6.1.25 Anse Reunion (La Digue – CWS/Airtel)



Figure 119 – Reunion: measurement points (WebGIS)



Figure 120 – Reunion: identification of base station (CWS)



Figure 121 – Reunion: identification of base station (Airtel)



Figure 122 – Reunion: MP1 location



Figure 123 – Reunion: MP2 location

6.2 Appendix A2 – Result Tables

Column	Description
1	Frequency/channel number of the signalization channel
2	Scrambling code (Cell ID) for UMTS (3G) and LTE (4G) services.
3	Name of operator and measurement point {MP} number.
4	Reference level for this frequency in V/m (according to ICNIRP 98)
5	Measured field strength of BCCH (GSM)/ CPICH (UMTS) or RS (LTE) signals expressed in $dB\mu V/m$ Remark: The BCCH values were only used for the GSM measurements.
6	Measurement uncertainty in dB (if uncertainty is not added, its value would be set to 0)
7	 Factors for extrapolation of maximal exposure: For GSM – this corresponds to an extrapolation figure as based upon the number of radio channels assigned to a given cell. As the information was not provided – we assumed a factor of 6dB be applied throughout. The factor stated in the tables is converted automatically through the formula 10 log (4) in column 8. For UMTS - an extrapolation of the CPICH power to the maximal channel power is carried out. We assigned a factor of 10 in this regard. For LTE – it is the ratio of the maximum power of the transmitter divided by the power of the reference signals (RS). We assigned a factor of 600 in this regard and is equal to the number of sub-carriers.
8	Maximal exposure in dBµV/m: <column 8=""> = <column 5=""> + <column 6=""> + 10·log <column 7=""></column></column></column></column>
9	Conversion from dBµV/m to V/m.
10	Maximal exposure in percentage of the reference level: <column 10=""> = 100 %.<column 9=""> / <column 4=""></column></column></column>
11	Maximal exposure as power flux density in mW/m ² .

6.2.1 Machabee Hill (CWS)

Location:	Machabee Hill	Time:	11:05 - 11:30
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE+DTT	Analyzer:	SRM-3006
Date:	2019/04/09	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.5	86.67	3	4	95.7	0.06	0.14	0.01	GSM-90
		Airtel	42.5	82.77	3	4	91.8	0.04	0.09	0.00	GSM-90
		CWS	42.1	109.75	3	4	118.8	0.87	2.06	2.00	GSM-90
		CWS	42.1	101.12	3	4	110.1	0.32	0.76	0.27	GSM-90
		CWS	42.1	103.48	3	4	112.5	0.42	1.00	0.47	GSM-90
		Airtel	42.4	87.13	3	10	100.1	0.10	0.24	0.03	UMTS
		Airtel	42.4	83.17	3	10	96.2	0.06	0.15	0.01	UMTS
		Airtel	61.0	82.01	3	10	95.0	0.06	0.09	0.01	UMTS
		Airtel	61.0	81.48	3	10	94.5	0.05	0.09	0.01	UMTS
		CWS	61.0	104.21	3	10	117.2	0.73	1.19	1.40	UMTS
		CWS	61.0	94.03	3	10	107.0	0.22	0.37	0.13	UMTS
		CWS	61.0	85.09	3	10	98.1	0.08	0.13	0.02	UMTS
		CWS	59.5	85.18	3	600	116.0	0.63	1.06	1.05	LTE
		SBC	30.2	99.61	3	1	102.6	0.14	0.45	0.05	
								1.43	2.97	5.45	-

Location:	Machabee Hill	Time:	11:05 - 11:30
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE+DTT	Analyzer:	SRM-3006
Date:	2019/04/09	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									
		Airtel	42.5	80.97	3	4	90.0	0.03	0.07	0.00	GSM-900
		Airtel	42.5	90.00	3	4	99.0	0.09	0.21	0.02	GSM-900
		CWS	42.1	114.30	3	4	123.3	1.47	3.48	5.70	GSM-900
		CWS	42.1	109.00	3	4	118.0	0.80	1.89	1.68	GSM-900
		CWS	42.1	105.48	3	4	114.5	0.53	1.26	0.75	GSM-900
		Airtel	42.4	86.25	3	10	99.3	0.09	0.22	0.02	UMTS
		Airtel	42.4	81.45	3	10	94.5	0.05	0.12	0.01	UMTS
		Airtel	61.0	82.01	3	10	95.0	0.06	0.09	0.01	UMTS
		Airtel	61.0	80.84	3	10	93.8	0.05	0.08	0.01	UMTS
		CWS	61.0	99.41	3	10	112.4	0.42	0.68	0.46	UMTS
		CWS	61.0	86.98	3	10	100.0	0.10	0.16	0.03	UMTS
		CWS	59.5	81.12	3	600	111.9	0.39	0.66	0.41	LTE
		SBC	30.2	99.35	3	1	102.35	0.13	0.43	0.05	DTT
								1.86	4.30	9.14	

6.2.2 Carana Hill (CWS)

Location:	Carana Hill	Time:	14:00 - 14:30
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/09	Antenna:	3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
									MP1		Point No.
GSM-	2.57	2.32	0.99	119.9	4	3	110.85	42.5	Airtel	The state of the state	
GSM-	1.19	1.58	0.67	116.5	4	3	107.51	42.5	Airtel		
GSM-	0.28	0.76	0.32	110.2	4	3	101.14	42.5	Airtel		
GSM-	0.55	1.08	0.46	113.2	4	3	104.15	42.1	CWS		
GSM-	3.42	2.70	1.14	121.1	4	3	112.08	42.1	CWS		
GSM-	0.21	0.67	0.28	109.0	4	3	100.00	42.0	CWS		
UMT	2.18	2.14	0.91	119.2	10	3	106.15	42.4	Airtel		
UMT	3.56	2.73	1.16	121.3	10	3	108.28	42.4	Airtel		
UMT	0.44	0.96	0.41	112.2	10	3	99.15	42.4	Airtel		
UMT	1.99	1.42	0.87	118.8	10	3	105.76	61.0	Airtel		
UMT	0.72	0.86	0.52	114.4	10	3	101.35	61.0	Airtel		
UMT	1.10	1.06	0.64	116.2	10	3	103.19	61.0	Airtel		
UMT	1.99	1.42	0.87	118.8	10	3	105.76	61.0	CWS		
UMT	0.72	0.86	0.52	114.4	10	3	101.35	61.0	CWS		
UMT	0.28	0.53	0.32	110.2	10	3	97.17	61.0	CWS		
UMT	1.10	1.06	0.64	116.2	10	3	103.19	61.0	CWS		
LTE	1.80	2.11	0.82	118.3	600	3	87.53	39.0	CWS		
LTE	121.85	17.36	6.78	136.6	600	3	105.84	39.0	CWS		
LTE	3.70	3.01	1.18	121.4	600	3	90.66	39.3	Airtel		
LTE	0.65	1.26	0.50	113.9	600	3	83.13	39.3	Airtel		
LTE	2.44	2.44	0.96	119.6	600	3	88.86	39.3	Airtel		
	152.75	19.00	7.59								

6.2.3 North East Point (Airtel)

Location:	North East Point	Time:	14:55 - 15:47
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/09	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									-
		Airtel	42.5	110.96	3	4	120.0	1.00	2.35	2.64	GSM-90
		Airtel	42.5	100.53	3	4	109.6	0.30	0.71	0.24	GSM-90
		CWS	42.1	100.00	3	4	109.0	0.28	0.67	0.21	GSM-900
		Airtel	42.4	100.95	3	10	114.0	0.50	1.18	0.66	UMTS
		Airtel	42.4	100.11	3	10	113.1	0.45	1.07	0.54	UMTS
		Airtel	42.4	84.58	3	10	97.6	0.08	0.18	0.02	UMTS
		Airtel	61.0	102.43	3	10	115.4	0.59	0.97	0.93	UMTS
		Airtel	61.0	100.23	3	10	113.2	0.46	0.75	0.56	UMTS
		Airtel	61.0	91.41	3	10	104.4	0.17	0.27	0.07	UMTS
		Airtel	61.0	93.11	3	10	106.1	0.20	0.33	0.11	UMTS
		Airtel	61.0	103.16	3	10	116.2	0.64	1.05	1.10	UMTS
		Airtel	61.0	100.75	3	10	113.8	0.49	0.80	0.63	UMTS
		CWS	61.0	92.37	3	10	105.4	0.19	0.30	0.09	UMTS
		CWS	61.0	92.62	3	10	105.6	0.19	0.31	0.10	UMTS
and the second		Airtel	39.3	81.25	3	600	112.0	0.40	1.02	0.42	LTE
								1.77	3.70	8.31	

Location:	North East Point	Time:	14:55 - 15:47
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/09	Antenna:	3AX400M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									
		Airtel	42.5	105.33	3	4	114.4	0.52	1.23	0.72	GSM-900
		Airtel	42.5	113.01	3	4	122.0	1.26	2.97	4.23	GSM-900
		CWS	42.1	90.00	3	4	99.0	0.09	0.21	0.02	GSM-900
		Airtel	42.4	96.67	3	10	109.7	0.30	0.72	0.25	UMTS
		Airtel	42.4	92.88	3	10	105.9	0.20	0.46	0.10	UMTS
		Airtel	42.4	93.49	3	10	106.5	0.21	0.50	0.12	UMTS
		Airtel	61.0	106.86	3	10	119.9	0.98	1.61	2.57	UMTS
		Airtel	61.0	95.58	3	10	108.6	0.27	0.44	0.19	UMTS
		Airtel	61.0	107.17	3	10	120.2	1.02	1.67	2.76	UMTS
		Airtel	61.0	96.56	3	10	109.6	0.30	0.49	0.24	UMTS
		CWS	61.0	80.17	3	10	93.2	0.05	0.07	0.01	UMTS
								2.06	4.15	11.21	

6.2.4 Villa Fond de Lianes (Airtel)

Location:	Villa Fond de Lianes	Time:	11:40 - 12:15
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/09	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.5	105.28	3	4	114.3	0.52	1.22	0.71	GSM-900
		Airtel	42.5	108.87	3	4	117.9	0.78	1.85	1.63	GSM-900
		Airtel	42.4	101.89	3	10	114.9	0.56	1.31	0.82	UMTS
		Airtel	42.4	95.61	3	10	108.6	0.27	0.64	0.19	UMTS
		Airtel	42.4	91.88	3	10	104.9	0.18	0.41	0.08	UMTS
		Airtel	61.0	101.53	3	10	114.5	0.53	0.87	0.75	UMTS
		Airtel	61.0	97.81	3	10	110.8	0.35	0.57	0.32	UMTS
		Airtel	61.0	87.98	3	10	101.0	0.11	0.18	0.03	UMTS
		Airtel	61.0	101.93	3	10	114.9	0.56	0.91	0.83	UMTS
		Airtel	61.0	97.98	3	10	111.0	0.35	0.58	0.33	UMTS
		Airtel	61.0	89.46	3	10	102.5	0.13	0.22	0.05	UMTS
		Airtel	39.3	93.40	3	600	124.2	1.62	4.12	6.95	LTE
		Airtel	39.3	88.34	3	600	119.1	0.90	2.30	2.17	LTE
								2.37	5.64	14.86	

Location:	Villa Fond de Lianes	Time:	11:40 - 12:15
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/09	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									
	Company of the local	Airtel	42.5	101.40	3	4	110.4	0.33	0.78	0.29	GSM-900
		Airtel	42.5	113.91	3	4	122.9	1.40	3.30	5.21	GSM-900
		CWS	42.1	93.74	3	4	102.8	0.14	0.33	0.05	GSM-900
		CWS	42.1	83.06	3	4	92.1	0.04	0.10	0.00	GSM-900
		Airtel	42.4	101.60	3	10	114.6	0.54	1.27	0.76	UMTS
		Airtel	42.4	100.82	3	10	113.8	0.49	1.16	0.64	UMTS
		Airtel	42.4	93.60	3	10	106.6	0.21	0.50	0.12	UMTS
		Airtel	61.0	108.23	3	10	121.2	1.15	1.89	3.52	UMTS
		Airtel	61.0	97.60	3	10	110.6	0.34	0.56	0.30	UMTS
		Airtel	61.0	91.70	3	10	104.7	0.17	0.28	0.08	UMTS
		Airtel	61.0	101.90	3	10	114.9	0.56	0.91	0.82	UMTS
		Airtel	61.0	98.00	3	10	111.0	0.35	0.58	0.33	UMTS
		Airtel	61.0	89.50	3	10	102.5	0.13	0.22	0.05	UMTS
		Airtel	39.3	85.90	3	600	116.7	0.68	1.74	1.24	LTE
		Airtel	39.3	80.20	3	600	111.0	0.35	0.90	0.33	LTE
		Airtel	39.3	86.01	3	600	116.8	0.69	1.76	1.27	LTE
								2.38	5.19	15.02	

6.2.5 Bel Ombre

Location: Responsible: Signals:	Bel Ombre Vaughan Taylor GSM+UMTS+LTE	Time: Weather:	11:13 - 11:58 Partly cloudy, dry
Date:	2019/04/08	Analyzer: Antenna:	SRM-3006 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	1
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.5	107.62	3	4	116.6	0.68	1.60	1.22	GSM-900
		Airtel	42.5	105.20	3	4	114.2	0.51	1.21	0.70	GSM-900
		Airtel	42.4	92.30	3	4	101.3	0.12	0.27	0.04	GSM-900
		Airtel	42.5	110.00	3	4	119.0	0.89	2.10	2.12	GSM-900
		CWS	42.1	83.50	3	4	92.5	0.04	0.10	0.00	GSM-900
	STATISTICS NOTICE	CWS	42.1	80.00	3	4	89.0	0.03	0.07	0.00	GSM-900
		Airtel	42.4	98.60	3	10	111.6	0.38	0.90	0.38	UMTS
		Airtel	42.4	93.80	3	10	106.8	0.22	0.52	0.13	UMTS
		Airtel	42.4	89.30	3	10	102.3	0.13	0.31	0.05	UMTS
		Airtel	61.0	106.50	3	10	119.5	0.94	1.55	2.36	UMTS
		Airtel	61.0	98.50	3	10	111.5	0.38	0.62	0.37	UMTS
		Airtel	61.0	87.30	3	10	100.3	0.10	0.17	0.03	UMTS
		Airtel	61.0	106.00	3	10	119.0	0.89	1.46	2.11	UMTS
		Airtel	61.0	98.50	3	10	111.5	0.38	0.62	0.37	UMTS
		Airtel	61.0	85.20	3	10	98.2	0.08	0.13	0.02	UMTS
		CWS	61.0	81.40	3	10	94.4	0.05	0.09	0.01	UMTS
		CWS	61.0	80.20	3	10	93.2	0.05	0.07	0.01	UMTS
		Airtel	39.3	86.00	3	600	116.8	0.69	1.76	1.26	LTE
		Airtel	39.3	83.00	3	600	113.8	0.49	1.24	0.63	LTE
								2.11	4.44	11.82	

ocation: esponsible: ignals: ate:	Bel Ombre Vaughan Taylor GSM+UMTS+LT 2019/04/08	E					Time: Weather: Analyzer: Antenna:	11:13 - 11:58 Partly cloudy, SRM-3006 3AX420M-6G	dry		
1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max.emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									
		Airtel	42.5	92.36	3	4	101.4	0.12	0.28	0.04	GSN
		Airtel	42.5	87.50	3	4	96.5	0.07	0.16	0.01	GSN
		Airtel	42.4	82.80	3	4	91.8	0.04	0.09	0.00	GSN
		Airtel	42.5	87.50	3	4	96.5	0.07	0.16	0.01	GSN
		Airtel	42.4	92.30	3	10	105.3	0.18	0.43	0.09	UN
		Airtel	42.4	83.93	3	10	96.9	0.07	0.17	0.01	UN
		Airtel	42.4	88.34	3	10	101.3	0.12	0.28	0.04	UN
		Airtel	61.0	98.50	3	10	111.5	0.38	0.62	0.37	UN
	이러 그는 것을 물 것을	Airtel	61.0	86.30	3	10	99.3	0.09	0.15	0.02	UN
		Airtel	61.0	89.40	3	10	102.4	0.13	0.22	0.05	UN
		Airtel	61.0	90.72	3	10	103.7	0.15	0.25	0.06	UN
		Airtel	61.0	97.50	3	10	110.5	0.33	0.55	0.30	UN
		Airtel	61.0	84.50	3	10	97.5	0.07	0.12	0.01] UN
								0.62	1.12	1.02	-91 (2011)

- . -

6.2.6 Bel Ombre (Dan Zil) (CWS)

Location:	Ben Ombre (Dan Zil)	
Responsible:	Vaughan Taylor	
Signals:	GSM+UMTS+LTE	
Date:	2019/04/08	

Time:	10:05 - 10:45
Weather:	Partly cloudy, dry
Analyzer:	SRM-3006
Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.5	113.42	3	4	122.4	1.32	3.12	4.65	GSM-900
		Airtel	42.4	96.90	3	4	105.9	0.20	0.47	0.10	GSM-900
		Airtel	42.5	100.00	3	4	109.0	0.28	0.67	0.21	GSM-900
		CWS	42.1	109.13	3	4	118.2	0.81	1.92	1.73	GSM-900
		CWS	42.1	102.00	3	4	111.0	0.36	0.84	0.34	GSM-900
		CWS	42.1	87.00	3	4	96.0	0.06	0.15	0.01	GSM-900
		Airtel	42.4	104.87	3	10	117.9	0.78	1.85	1.62	UMTS
		Airtel	42.4	87.12	3	10	100.1	0.10	0.24	0.03	UMTS
		Airtel	42.4	86.00	3	10	99.0	0.09	0.21	0.02	UMTS
		Airtel	61.0	106.40	3	10	119.4	0.93	1.53	2.31	UMTS
		Airtel	61.0	92.60	3	10	105.6	0.19	0.31	0.10	UMTS
		Airtel	61.0	82.00	3	10	95.0	0.06	0.09	0.01	UMTS
		Airtel	61.0	104.60	3	10	117.6	0.76	1.24	1.53	UMTS
		Airtel	61.0	94.00	3	10	107.0	0.22	0.37	0.13	UMTS
		Airtel	61.0	89.00	3	10	102.0	0.13	0.21	0.04	UMTS
		CWS	61.0	109.70	3	10	122.7	1.36	2.24	4.94	UMTS
		CWS	61.0	97.10	3	10	110.1	0.32	0.52	0.27	UMTS
		CWS	39.0	87.30	3	600	118.1	0.80	2.05	1.71	LTE
	and the second second	Airtel	39.3	89.30	3	600	120.1	1.01	2.57	2.70	LTE
								2.91	6.21	22.45	

Location:Bel Ombre (Dan Zil)Responsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/08

 Time:
 10:05 - 10:45

 Weather:
 Partly cloudy, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	1
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									
		Airtel	42.5	117.50	3	4	126.5	2.12	4.99	11.90	GSM-900
		Airtel	42.4	93.10	3	4	102.1	0.13	0.30	0.04	GSM-900
		Airtel	42.5	92.70	3	4	101.7	0.12	0.29	0.04	GSM-900
		CWS	42.1	116.30	3	4	125.3	1.85	4.39	9.03	GSM-900
		CWS	42.1	108.40	3	4	117.4	0.74	1.76	1.46	GSM-900
		CWS	42.1	95.80	3	4	104.8	0.17	0.41	0.08	GSM-900
	노동물 전 날 없	Airtel	42.4	103.00	3	10	116.0	0.63	1.49	1.06	UMTS
		Airtel	42.4	84.50	3	10	97.5	0.07	0.18	0.01	UMTS
		Airtel	42.4	86.40	3	10	99.4	0.09	0.22	0.02	UMTS
		Airtel	61.0	104.00	3	10	117.0	0.71	1.16	1.33	UMTS
		Airtel	61.0	89.50	3	10	102.5	0.13	0.22	0.05	UMTS
		Airtel	61.0	85.90	3	10	98.9	0.09	0.14	0.02	UMTS
		Airtel	61.0	105.80	3	10	118.8	0.87	1.43	2.01	UMTS
		Airtel	61.0	90.60	3	10	103.6	0.15	0.25	0.06	UMTS
		Airtel	61.0	85.70	3	10	98.7	0.09	0.14	0.02	UMTS
	아이스 공동	CWS	61.0	117.40	3	10	130.4	3.31	5.43	29.08	UMTS
		CWS	61.0	98.50	3	10	111.5	0.38	0.62	0.37	UMTS
		CWS	61.0	92.10	3	10	105.1	0.18	0.29	0.09	UMTS
		CWS	39.0	89.00	3	600	119.8	0.98	2.50	2.52	LTE
and the second	and the second	Airtel	39.3	89.30	3	600	120.1	1.01	2.57	2.70	LTE
								4.83	9.81	61.92	

6.2.7 Sorento (Airtel)

Location:	Sorento	Time:	13:00 - 14:00
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/13	Antenna:	3AX420M-6G

1	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
									MP1		Point No.
GSM-900	8.12	4.11	1.75	124.9	4	3	115.84	42.6	Airtel		
GSM-900	0.73	1.24	0.53	114.4	4	3	105.40	42.5	Airtel		
GSM-900	1.62	1.84	0.78	117.9	4	3	108.83	42.4	Airtel		
GSM-900	0.04	0.30	0.13	101.9	4	3	92.92	42.1	CWS	말감말했다.	
GSM-900	0.01	0.11	0.05	93.2	4	3	84.18	42.1	CWS		
GSM-900	0.17	0.60	0.25	108.1	4	3	99.03	42.4	Airtel		
UMTS	0.26	0.73	0.31	109.8	10	3	96.84	42.4	Airtel		
UMTS	0.55	1.07	0.45	113.1	10	3	100.13	42.4	Airtel		
UMTS	2.61	1.63	0.99	119.9	10	3	106.93	61.0	Airtel		
UMTS	1.05	1.03	0.63	116.0	10	3	102.99	61.0	Airtel		
UMTS	0.60	0.78	0.48	113.6	10	3	100.58	61.0	Airtel		
UMTS	1.48	1.23	0.75	117.5	10	3	104.47	61.0	Airtel		
UMTS	0.53	0.73	0.45	113.0	10	3	100.00	61.0	Airtel		
UMTS	0.73	0.86	0.52	114.4	10	3	101.38	61.0	Airtel		
LTE	1.47	1.89	0.74	117.4	600	3	86.65	39.3	Airtel		
LTE	1.31	1.79	0.70	116.9	600	3	86.15	39.3	Airtel		
LTE	0.40	0.99	0.39	111.8	600	3	80.99	39.3	Airtel		
	21.67	6.23	2.86								

Responsible: Signals: Date:	Vaughan Taylor GSM+UMTS+LT 2019/04/13	E					Weather: Analyzer: Antenna:	Sunshine, dry SRM-3006 3AX420M-6G			
1	2	3	4	5	6	7	8	9	10	11	1
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									
		Airtel	42.6	110.14	3	4	119.2	0.91	2.13	2.19	GSM-900
	ada se	Airtel	42.5	107.70	3	4	116.7	0.69	1.61	1.25	GSM-900
		Airtel	42.4	101.89	3	4	110.9	0.35	0.83	0.33	GSM-900
		CWS	42.1	81.78	3	4	90.8	0.03	0.08	0.00	GSM-900
		CWS	42.1	89.80	3	4	98.8	0.09	0.21	0.02	GSM-900
	YLLU 전 전망율이	Airtel	42.4	104.29	3	10	117.3	0.73	1.73	1.42	UMTS
	승규는 것이라. 운영	Airtel	42.4	103.75	3	10	116.8	0.69	1.62	1.26	UMTS
	날았던 모르크	Airtel	42.4	93.79	3	10	106.8	0.22	0.52	0.13	UMTS
		Airtel	61.0	105.99	3	10	119.0	0.89	1.46	2.10	UMTS
		Airtel	61.0	106.76	3	10	119.8	0.97	1.59	2.51	UMTS
		Airtel	61.0	101.13	3	10	114.1	0.51	0.83	0.69	UMTS
		Airtel	61.0	108.05	3	10	121.1	1.13	1.85	3.38	UMTS
		Airtel	61.0	105.89	3	10	118.9	0.88	1.44	2.05	UMTS
		Airtel	61.0	104.45	3	10	117.5	0.75	1.22	1.47	UMTS
		Airtel	39.3	88.22	3	600	119.0	0.89	2.27	2.11	LTE
		Airtel	39.3	88.96	3	600	119.7	0.97	2.47	2.50	LTE
								2.97	6.11	23.40	

Time:

13:00 - 14:00

Location:

Soremto

Location:	Sorento	Time:	13:00 - 14:00
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/13	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP3									
		Airtel	42.6	102.29	3	4	111.3	0.37	0.86	0.36	GSM-900
		Airtel	42.5	99.85	3	4	108.9	0.28	0.65	0.20	GSM-900
		Airtel	42.4	98.62	3	4	107.6	0.24	0.57	0.15	GSM-900
		CWS	42.1	82.19	3	4	91.2	0.04	0.09	0.00	GSM-900
		Airtel	42.4	96.60	3	10	109.6	0.30	0.71	0.24	UMTS
		Airtel	42.4	97.30	3	10	110.3	0.33	0.77	0.28	UMTS
		Airtel	42.4	93.52	3	10	106.5	0.21	0.50	0.12	UMTS
	2층 등 6 (2) (2)	Airtel	61.0	98.07	3	10	111.1	0.36	0.59	0.34	UMTS
	그는 분석이	Airtel	61.0	96.92	3	10	109.9	0.31	0.51	0.26	UMTS
	[것 및 상품적]	Airtel	61.0	97.01	3	10	110.0	0.32	0.52	0.27	UMTS
		Airtel	61.0	95.71	3	10	108.7	0.27	0.45	0.20	UMTS
		Airtel	61.0	98.53	3	10	111.5	0.38	0.62	0.38	UMTS
		Airtel	61.0	96.23	3	10	109.2	0.29	0.47	0.22	UMTS
		Airtel	39.3	83.65	3	600	114.4	0.53	1.34	0.74	LTE
		Airtel	39.3	82.56	3	600	113.3	0.46	1.18	0.57	LTE
								1.28	2.78	4.34	

Location:	Sorento	Time:	13:00 - 14:00
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/13	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP4									
		Airtel	42.6	102.37	3	4	111.4	0.37	0.87	0.37	GSM-900
		Airtel	42.5	111.58	3	4	120.6	1.07	2.52	3.05	GSM-900
		Airtel	42.4	95.27	3	4	104.3	0.16	0.39	0.07	GSM-900
		CWS	42.1	83.42	3	4	92.4	0.04	0.10	0.00	GSM-900
		Airtel	42.4	107.53	3	10	120.5	1.06	2.51	3.00	UMTS
		Airtel	42.4	96.70	3	10	109.7	0.31	0.72	0.25	UMTS
		Airtel	42.4	96.10	3	10	109.1	0.29	0.67	0.22	UMTS
		Airtel	61.0	114.01	3	10	127.0	2.24	3.67	13.32	UMTS
	개도 물건 옷을	Airtel	61.0	103.31	3	10	116.3	0.65	1.07	1.13	UMTS
		Airtel	61.0	100.13	3	10	113.1	0.45	0.74	0.55	UMTS
		Airtel	61.0	108.86	3	10	121.9	1.24	2.03	4.07	UMTS
		Airtel	61.0	103.69	3	10	116.7	0.68	1.12	1.24	UMTS
		Airtel	61.0	104.69	3	10	117.7	0.77	1.26	1.56	UMTS
		Airtel	39.3	95.92	3	600	126.7	2.16	5.51	12.41	LTE
		Airtel	39.3	87.22	3	600	118.0	0.79	2.02	1.67	LTE
								4.02	8.43	42.90	

6.2.8 La Batie (Airtel)

Location:	La Batie	Time:	14:40 - 15:00
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/13	Antenna:	3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
-									MP1		Point No.
GSM-9	0.90	1.37	0.58	115.3	4	3	106.30	42.5	Airtel		
GSM-9	0.10	0.46	0.19	105.8	4	3	96.76	42.5	Airtel		
GSM-9	0.05	0.33	0.14	102.9	4	3	93.86	42.5	Airtel		
GSM-9	0.17	0.61	0.25	108.1	4	3	99.10	42.0	CWS		
UMTS	0.45	0.97	0.41	112.3	10	3	99.26	42.4	Airtel		
UMTS	0.22	0.67	0.29	109.1	10	3	96.11	42.4	Airtel		
UMTS	0.09	0.43	0.18	105.2	10	3	92.23	42.4	Airtel		
UMTS	0.17	0.42	0.26	108.2	10	3	95.16	61.0	Airtel		
UMTS	0.60	0.78	0.47	113.5	10	3	100.52	61.0	Airtel		
UMTS	0.06	0.25	0.15	103.6	10	3	90.61	61.0	Airtel		
UMTS	0.80	0.90	0.55	114.8	10	3	101.82	61.0	Airtel		
UMTS	0.24	0.49	0.30	109.5	10	3	96.49	61.0	Airtel		
UMTS	0.09	0.31	0.19	105.4	10	3	92.40	61.0	Airtel		
LTE	0.44	1.04	0.41	112.2	600	3	81.46	39.3	Airtel		
LTE	0.77	1.37	0.54	114.6	600	3	83.83	39.3	Airtel		
	5.15	3.02	1.39								

Location:	La Batie	Time:	14:40 - 15:00
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/13	Antenna:	3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	f [MHz]
									MP2		Point No.
GSM-900	0.20	0.65	0.28	108.9	4	3	99.85	42.5	Airtel		
GSM-900	0.35	0.85	0.36	111.2	4	3	102.15	42.5	Airtel		
GSM-900	0.06	0.34	0.15	103.2	4	3	94.21	42.5	Airtel		
GSM-900	0.00	0.07	0.03	90.0	4	3	80.94	42.0	CWS		
UMTS	2.26	2.18	0.92	119.3	10	3	106.30	42.4	Airtel		
UMTS	10.25	4.64	1.97	125.9	10	3	112.87	42.4	Airtel		
UMTS	0.52	1.04	0.44	112.9	10	3	99.92	42.4	Airtel		
UMTS	6.02	2.47	1.51	123.6	10	3	110.56	61.0	Airtel		
UMTS	0.57	0.76	0.46	113.3	10	3	100.33	61.0	Airtel		
UMTS	1.60	1.27	0.78	117.8	10	3	104.81	61.0	Airtel		
UMTS	1.94	1.40	0.86	118.6	10	3	105.64	61.0	Airtel		
UMTS	2.70	1.65	1.01	120.1	10	3	107.07	61.0	Airtel		
UMTS	0.95	0.98	0.60	115.5	10	3	102.53	61.0	Airtel		
LTE	6.01	3.83	1.51	123.6	600	3	92.77	39.3	Airtel		
LTE	0.81	1.40	0.55	114.8	600	3	84.05	39.3	Airtel		
LTE	1.20	1.71	0.67	116.6	600	3	85.78	39.3	Airtel		
	35.43	7.88	3.65								

6.2.9 Perserverance (Airtel)

Location:	Perserverance	Time:	14:15 - 14:50
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/10	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.5	101.95	3	4	111.0	0.35	0.83	0.33	GSM-900
		Airtel	42.4	101.16	3	4	110.2	0.32	0.76	0.28	GSM-900
		Airtel	42.5	99.07	3	4	108.1	0.25	0.60	0.17	GSM-900
		CWS	42.1	97.09	3	4	106.1	0.20	0.48	0.11	GSM-900
		CWS	42.1	94.06	3	4	103.1	0.14	0.34	0.05	GSM-900
		Airtel	42.4	84.92	3	10	97.9	0.08	0.19	0.02	UMTS
		Airtel	42.4	94.05	3	10	107.1	0.23	0.53	0.13	UMTS
		Airtel	42.4	92.74	3	10	105.7	0.19	0.46	0.10	UMTS
		Airtel	61.0	100.22	3	10	113.2	0.46	0.75	0.56	UMTS
		Airtel	61.0	97.68	3	10	110.7	0.34	0.56	0.31	UMTS
		Airtel	61.0	90.30	3	10	103.3	0.15	0.24	0.06	UMTS
		Airtel	61.0	100.69	3	10	113.7	0.48	0.79	0.62	UMTS
		Airtel	61.0	97.38	3	10	110.4	0.33	0.54	0.29	UMTS
		Airtel	61.0	94.11	3	10	107.1	0.23	0.37	0.14	UMTS
		Airtel	61.0	100.23	3	10	113.2	0.46	0.75	0.56	UMTS
		CWS	61.0	84.94	3	10	97.9	0.08	0.13	0.02	UMTS
		CWS	61.0	85.65	3	10	98.7	0.09	0.14	0.02	UMTS
		CWS	61.0	80.33	3	10	93.3	0.05	0.08	0.01	UMTS
		Airtel	39.3	83.29	3	600	114.1	0.51	1.29	0.68	LTE
								1.29	2.60	4.44	

Location:	Perserverance			Time:	14:15 - 14:50	
Responsible:	Vaughan Taylor			Weather:	Sunshine, dry	
Signals:	GSM+UMTS+LTE			Analyzer:	SRM-3006	
Date:	2019/04/10			Antenna:	3AX420M-6G	

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									1
		Airtel	42.5	101.82	3	4	110.8	0.35	0.82	0.32	GSM-90
	드린 모음감 것	Airtel	42.4	114.87	3	4	123.9	1.57	3.69	6.50	GSM-90
		Airtel	42.5	99.75	3	4	108.8	0.27	0.65	0.20	GSM-90
		CWS	42.1	97.43	3	4	106.5	0.21	0.50	0.12	GSM-90
		CWS	42.1	97.59	3	4	106.6	0.21	0.51	0.12	GSM-90
		Airtel	42.4	104.54	3	10	117.5	0.75	1.78	1.51	UMTS
		Airtel	42.4	94.91	3	10	107.9	0.25	0.59	0.16	UMTS
		Airtel	42.4	86.69	3	10	99.7	0.10	0.23	0.02	UMTS
		Airtel	61.0	101.24	3	10	114.2	0.52	0.84	0.70	UMTS
		Airtel	61.0	103.25	3	10	116.3	0.65	1.06	1.12	UMTS
		Airtel	61.0	84.53	3	10	97.5	0.08	0.12	0.02	UMTS
		Airtel	61.0	102.81	3	10	115.8	0.62	1.01	1.01	UMTS
		Airtel	61.0	103.40	3	10	116.4	0.66	1.08	1.16	UMTS
		Airtel	61.0	98.20	3	10	111.2	0.36	0.60	0.35	UMTS
		Airtel	61.0	100.50	3	10	113.5	0.47	0.78	0.59	UMTS
		CWS	61.0	84.59	3	10	97.6	0.08	0.12	0.02	UMTS
		CWS	61.0	83.64	3	10	96.6	0.07	0.11	0.01	UMTS
		Airtel	39.3	88.20	3	600	119.0	0.89	2.26	2.10	LTE
								1.82	3.70	16.03	

6.2.10 Espace building (Airtel)

Location:	Espace building	Time:	15:30 - 16:15
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/10	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	1
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		ES1-MP1									
		Airtel	42.4	117.21	3	4	126.2	2.05	4.83	11.14	GSM-900
		Airtel	42.5	115.20	3	4	124.2	1.63	3.83	7.01	GSM-900
		Airtel	42.5	94.54	3	4	103.6	0.15	0.35	0.06	GSM-900
		Airtel	42.6	85.83	3	4	94.9	0.06	0.13	0.01	GSM-900
		CWS	42.1	114.49	3	4	123.5	1.50	3.56	5.95	GSM-900
		CWS	42.1	91.58	3	4	100.6	0.11	0.25	0.03	GSM-900
		CWS	42.1	98.05	3	4	107.1	0.23	0.54	0.14	GSM-900
		Airtel	42.4	107.76	3	10	120.8	1.09	2.58	3.16	UMTS
		Airtel	42.4	89.71	3	10	102.7	0.14	0.32	0.05	UMTS
		Airtel	42.4	81.76	3	10	94.8	0.05	0.13	0.01	UMTS
		Airtel	61.0	118.56	3	10	131.6	3.78	6.20	37.99	UMTS
		Airtel	61.0	121.79	3	10	134.8	5.49	9.00	79.92	UMTS
		CWS	61.0	105.32	3	10	118.3	0.82	1.35	1.80	UMTS
		CWS	61.0	106.66	3	10	119.7	0.96	1.58	2.45	UMTS
		CWS	61.0	81.07	3	10	94.1	0.05	0.08	0.01	UMTS
		Airtel	39.3	96.49	3	600	127.3	2.31	5.88	14.15	LTE
								7.86	14.70	163.87	

Location:	Espace building	Time:	15:30 - 16:15
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/10	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		ES1-MP2									11
		Airtel	42.4	120.75	3	4	129.8	3.08	7.26	25.16	GSM-900
		Airtel	42.5	117.27	3	4	126.3	2.06	4.86	11.29	GSM-900
		Airtel	42.5	93.76	3	4	102.8	0.14	0.32	0.05	GSM-900
		CWS	42.6	87.84	3	4	96.9	0.07	0.16	0.01	GSM-900
		CWS	42.1	110.52	3	4	119.5	0.95	2.25	2.39	GSM-900
		CWS	42.1	106.21	3	4	115.2	0.58	1.37	0.88	GSM-900
		CWS	42.1	94.67	3	4	103.7	0.15	0.36	0.06	GSM-900
		Airtel	42.4	115.64	3	10	128.6	2.70	6.38	19.39	UMTS
		Airtel	42.4	86.65	3	10	99.7	0.10	0.23	0.02	UMTS
		Airtel	42.4	85.83	3	10	98.8	0.09	0.21	0.02	UMTS
		Airtel	61.0	109.58	3	10	122.6	1.35	2.21	4.80	UMTS
		Airtel	61.0	85.47	3	10	98.5	0.08	0.14	0.02	UMTS
		Airtel	61.0	109.29	3	10	122.3	1.30	2.13	4.49	UMTS
		Airtel	61.0	87.23	3	10	100.2	0.10	0.17	0.03	UMTS
		CWS	61.0	104.81	3	10	117.8	0.78	1.27	1.60	UMTS
	36 회원의 5개 - 1	CWS	61.0	92.41	3	10	105.4	0.19	0.31	0.09	UMTS
		CWS	61.0	87.37	3	10	100.4	0.10	0.17	0.03	UMTS
		CWS	61.0	104.64	3	10	117.6	0.76	1.25	1.54	UMTS
		CWS	61.0	92.90	3	10	105.9	0.20	0.32	0.10	UMTS
		CWS	61.0	88.93	3	10	101.9	0.12	0.20	0.04	UMTS
		CWS	61.0	91.89	3	10	104.9	0.18	0.29	0.08	UMTS
		CWS	39.0	85.05	3	600	115.8	0.62	1.59	1.02	LTE
		CWS	39.0	82.66	3	600	113.4	0.47	1.20	0.59	LTE
		CWS	39.0	80.90	3	600	111.7	0.38	0.98	0.39	LTE
		Airtel	39.3	92.14	3	600	122.9	1.40	3.56	5.20	LTE
								5.47	12.45	79.31	

Location:	Espace building	Time:	15:30 - 16:15
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/10	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		ES1-MP3									
		Airtel	42.4	98.18	3	4	107.2	0.23	0.54	0.14	GSM-900
		Airtel	42.5	96.15	3	4	105.2	0.18	0.43	0.09	GSM-900
		Airtel	42.5	84.47	3	4	93.5	0.05	0.11	0.01	GSM-900
		Airtel	42.6	87.00	3	1	90.0	0.03	0.07	0.00	GSM-900
		CWS	42.1	100.70	3	4	109.7	0.31	0.73	0.25	GSM-900
		CWS	42.1	89.62	3	4	98.6	0.09	0.20	0.02	GSM-900
		CWS	42.1	83.70	3	4	92.7	0.04	0.10	0.00	GSM-900
		Airtel	42.4	80.28	3	10	93.3	0.05	0.11	0.01	UMTS
		Airtel	42.4	82.60	3	10	95.6	0.06	0.14	0.01	UMTS
		Airtel	61.0	88.60	3	10	101.6	0.12	0.20	0.04	UMTS
		Airtel	61.0	84.64	3	10	97.6	0.08	0.12	0.02	UMTS
		Airtel	61.0	87.63	3	10	100.6	0.11	0.18	0.03	UMTS
		Airtel	61.0	86.12	3	10	99.1	0.09	0.15	0.02	UMTS
		CWS	61.0	81.07	3	10	94.1	0.05	0.08	0.01	UMTS
								0.49	1.10	0.64	

Location:	Espace building	Time:	13:30 - 14:15
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/12	Antenna:	3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+No of MIMO path (LTE)	f [MHz]
									ES1-MP4		Point No.
GSM-900	4.71	3.14	1.33	122.5	4	3	113.47	42.4	Airtel		
GSM-900	1.72	1.90	0.81	118.1	4	3	109.11	42.5	Airtel		
GSM-900	0.09	0.44	0.19	105.4	4	3	96.40	42.5	Airtel		
GSM-900	0.02	0.21	0.09	98.9	4	3	89.90	42.6	Airtel		
GSM-900	0.08	0.42	0.18	104.9	4	3	95.90	42.1	CWS		
GSM-900	0.05	0.31	0.13	102.4	4	3	93.40	42.1	CWS		
UMTS	2.29	2.19	0.93	119.4	10	3	106.36	42.4	Airtel		
UMTS	0.60	0.78	0.47	113.5	10	3	100.51	61.0	Airtel		
UMTS	0.18	0.43	0.26	108.3	10	3	95.31	61.0	Airtel		
UMTS	0.01	0.08	0.05	93.7	10	3	80.72	61.0	CWS		
UMTS	0.01	0.12	0.07	97.3	10	3	84.30	61.0	CWS		
UMTS	0.01	0.08	0.05	93.6	10	3	80.57	61.0	CWS		
UMTS	0.02	0.16	0.10	99.6	10	3	86.64	61.0	CWS		
LTE	0.66	1.27	0.50	114.0	600	3	83.18	39.3	Airtel		
	10.45	4.61	1.98								

Location:Espace, MaheTime:Responsible:Vaughan TaylorWeatherSignals:GSM+UMTS+LTEAnalyzDate:2019/04/10Antenn

ime:	15:30 - 16:15
Veather:	Sunshine, dry
nalyzer:	SRM-3006
ntenna:	3AX420M-6G

1	11	10	9	8	7	6	5	4	3	2	1
-	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+No of MIMO path (LTE)	f [MHz]
									ES2-MP1		Point No.
GSM-900	0.00	0.10	0.04	92.2	4	3	83.19	42.4	Airtel		
GSM-900	0.00	0.07	0.03	89.7	4	3	80.67	42.5	Airtel		
GSM-900	0.30	0.79	0.34	110.6	4	3	101.53	42.5	Airtel		
GSM-900	5.99	3.53	1.50	123.5	4	3	114.52	42.6	Airtel		
GSM-900	3.43	2.70	1.14	121.1	4	3	112.09	42.1	CWS		
GSM-900	0.11	0.48	0.20	106.2	4	3	97.17	42.1	CWS		
UMTS	2.92	2.47	1.05	120.4	10	3	107.41	42.4	Airtel		
UMTS	0.10	0.46	0.20	105.9	10	3	92.86	42.4	Airtel		
UMTS	1.30	1.15	0.70	116.9	10	3	103.91	61.0	Airtel		
UMTS	0.02	0.13	0.08	98.0	10	3	85.02	61.0	Airtel		
UMTS	1.36	1.17	0.72	117.1	10	3	104.10	61.0	Airtel		
UMTS	0.01	0.12	0.07	97.5	10	3	84.47	61.0	Airtel		
UMTS	0.64	0.80	0.49	113.8	10	3	100.82	61.0	CWS		
UMTS	0.67	0.83	0.50	114.1	10	3	101.05	61.0	CWS		
LTE	3.94	3.12	1.22	121.7	600	3	90.94	39.0	CWS		
LTE	4.84	3.44	1.35	122.6	600	3	91.83	39.3	Airtel		
	25.65	7.25	3.11								

Location: Espa	ce, Mahe	Time:	11:20 - 11:50
Responsible: Vaug	han Taylor	Weather:	Sunshine, dry
Signals: GSM	+UMTS+LTE	Analyzer:	SRM-3006
Date: 2019	04/12	Antenna:	3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+No of MIMO path (LTE)	f [MHz]
									ES3-MP1		Point No.
GSM-900	5.97	3.53	1.50	123.5	4	3	114.50	42.5	Airtel		
GSM-900	0.05	0.33	0.14	103.0	4	3	93.99	42.6	Airtel		
GSM-900	2.11	2.12	0.89	119.0	4	3	109.98	42.1	CWS		
GSM-900	0.17	0.61	0.25	108.1	4	3	99.11	42.1	CWS		
GSM-900	0.04	0.28	0.12	101.4	4	3	92.42	42.1	CWS		
UMTS	5.39	3.36	1.43	123.1	10	3	110.08	42.4	Airtel		
UMTS	0.04	0.28	0.12	101.3	10	3	88.34	42.4	Airtel		
UMTS	0.01	0.12	0.05	94.4	10	3	81.42	42.4	Airtel		
UMTS	0.42	0.65	0.40	112.0	10	3	98.95	61.0	Airtel		
UMTS	0.04	0.19	0.12	101.2	10	3	88.23	61.0	Airtel		
UMTS	0.04	0.20	0.12	101.9	10	3	88.85	61.0	Airtel		
UMTS	0.07	0.27	0.16	104.3	10	3	91.31	61.0	Airtel		
UMTS	0.63	0.80	0.49	113.8	10	3	100.78	61.0	CWS		
UMTS	0.08	0.29	0.18	104.9	10	3	91.90	61.0	CWS		
UMTS	0.02	0.13	0.08	98.2	10	3	85.18	61.0	CWS		
UMTS	0.01	0.10	0.06	95.3	10	3	82.33	61.0	CWS		
UMTS	0.04	0.21	0.13	102.1	10	3	89.14	61.0	CWS		
UMTS	0.48	0.69	0.42	112.5	10	3	99.54	61.0	CWS		
UMTS	0.11	0.33	0.20	106.0	10	3	92.99	61.0	CWS		
UMTS	0.02	0.15	0.09	99.0	10	3	85.98	61.0	CWS		
UMTS	0.07	0.26	0.16	104.1	10	3	91.06	61.0	CWS	성상은 모두 물기	
UMTS	0.01	0.09	0.05	94.5	10	3	81.54	61.0	CWS		
UMTS	0.02	0.15	0.09	99.0	10	3	86.01	61.0	CWS		
LTE	2.38	2.43	0.95	119.5	600	3	88.75	39.0	CWS		Brightes -
	18.20	6.07	2.62								

6.2.11 Ma Constance (Airtel)

Location:	Ma Constance	Time:	13:30 - 13:55
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/10	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	1
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
TRAIN DESIDE		Airtel	42.6	110.58	3	4	119.6	0.96	2.24	2.42	GSM-900
		Airtel	42.5	117.54	3	4	126.6	2.13	5.01	12.01	GSM-900
		Airtel	42.5	104.30	3	4	113.3	0.46	1.09	0.57	GSM-900
		Airtel	42.5	99.01	3	4	108.0	0.25	0.59	0.17	GSM-900
		CWS	42.1	102.32	3	4	111.3	0.37	0.88	0.36	GSM-900
	양 아 _{리 안} 등 이	CWS	42.1	91.87	3	4	100.9	0.11	0.26	0.03	GSM-900
		CWS	42.1	88.02	3	4	97.0	0.07	0.17	0.01	GSM-900
		Airtel	42.4	110.53	3	10	123.5	1.50	3.54	5.98	UMTS
		Airtel	42.4	92.81	3	10	105.8	0.20	0.46	0.10	UMTS
		Airtel	42.4	100.91	3	10	113.9	0.50	1.17	0.65	UMTS
		Airtel	61.0	111.40	3	10	124.4	1.66	2.72	7.31	UMTS
		Airtel	61.0	106.66	3	10	119.7	0.96	1.58	2.45	UMTS
		Airtel	61.0	109.49	3	10	122.5	1.33	2.18	4.71	UMTS
		Airtel	61.0	113.43	3	10	126.4	2.10	3.44	11.66	UMTS
		Airtel	61.0	112.23	3	10	125.2	1.83	2.99	8.84	UMTS
		Airtel	61.0	111.40	3	10	124.4	1.66	2.72	7.31	UMTS
		Airtel	39.3	85.10	3	600	115.9	0.62	1.58	1.03	LTE
		Airtel	39.3	98.49	3	600	129.3	2.91	7.40	22.43	LTE
	and the second second second	Airtel	39.3	95.30	3	600	126.1	2.01	5.13	10.76	LTE
								6.10	13.16	98.80	

Location:Ma ConstanceResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/10

 Time:
 13:30 - 13:55

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									
		Airtel	42.6	108.64	3	4	117.7	0.76	1.80	1.55	GSM-900
		Airtel	42.5	109.40	3	4	118.4	0.83	1.96	1.84	GSM-900
		Airtel	42.5	94.60	3	4	103.6	0.15	0.36	0.06	GSM-900
		CWS	42.5	92.67	3	4	101.7	0.12	0.29	0.04	GSM-900
		CWS	42.1	94.90	3	4	103.9	0.16	0.37	0.07	GSM-900
		CWS	42.1	82.95	3	4	92.0	0.04	0.09	0.00	GSM-900
		Airtel	42.4	97.91	3	10	110.9	0.35	0.83	0.33	UMTS
		Airtel	42.4	103.61	3	10	116.6	0.68	1.60	1.22	UMTS
		Airtel	61.0	106.74	3	10	119.7	0.97	1.59	2.50	UMTS
		Airtel	61.0	93.55	3	10	106.6	0.21	0.35	0.12	UMTS
		Airtel	61.0	101.28	3	10	114.3	0.52	0.85	0.71	UMTS
	나라는 기계	Airtel	61.0	104.58	3	10	117.6	0.76	1.24	1.52	UMTS
		Airtel	61.0	103.19	3	10	116.2	0.64	1.06	1.10	UMTS
		Airtel	61.0	98.11	3	10	111.1	0.36	0.59	0.34	UMTS
		CWS	39.0	86.38	3	600	117.2	0.72	1.85	1.38	LTE
		Airtel	39.3	93.54	3	600	124.3	1.64	4.19	7.17	LTE
		Airtel	39.3	91.66	3	600	122.4	1.32	3.37	4.65	LTE
		Airtel	39.3	82.83	3	600	113.6	0.48	1.22	0.61	LTE
								3.08	7.13	25.22	

6.2.12 Mt. Buxton (Airtel)

Location:	Mt. Buxton	Time:	10:15 - 11:45
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/10	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	1
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	[V/m]Emax	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1			1						1
		Airtel	42.5	123.75	3	4	132.8	4.35	10.24	50.20	GSM-900
		Airtel	42.5	119.92	3	4	128.9	2.80	6.59	20.78	GSM-900
		Airtel	42.5	116.46	3	4	125.5	1.88	4.42	9.37	GSM-900
		CWS	42.1	83.13	3	4	92.2	0.04	0.10	0.00	GSM-900
		CWS	42.1	89.22	3	4	98.2	0.08	0.19	0.02	GSM-900
		CWS	42.1	84.94	3	4	94.0	0.05	0.12	0.01	GSM-900
		Airtel	42.4	115.82	3	10	128.8	2.76	6.51	20.21	UMTS
		Airtel	42.4	114.49	3	10	127.5	2.37	5.59	14.88	UMTS
		Airtel	42.4	106.91	3	10	119.9	0.99	2.34	2.60	UMTS
		Airtel	61.0	84.95	3	10	98.0	0.08	0.13	0.02	UMTS
		Airtel	61.0	80.02	3	10	93.0	0.04	0.07	0.01	UMTS
		Airtel	61.0	81.15	3	10	94.2	0.05	0.08	0.01	UMTS
		Airtel	61.0	119.10	3	10	132.1	4.03	6.60	43.02	UMTS
		Airtel	61.0	108.58	3	10	121.6	1.20	1.97	3.82	UMTS
		Airtel	61.0	115.54	3	10	128.5	2.67	4.38	18.95	UMTS
		CWS	61.0	84.60	3	10	97.6	0.08	0.12	0.02	UMTS
		CWS	61.0	82.82	3	10	95.8	0.06	0.10	0.01	UMTS
	Sterne Sta	CWS	61.0	80.06	3	10	93.1	0.04	0.07	0.01	UMTS
		CWS	61.0	82.93	3	10	95.9	0.06	0.10	0.01	UMTS
		CWS	61.0	81.93	3	10	94.9	0.06	0.09	0.01	UMTS
		CWS	61.0	80.15	3	10	93.2	0.05	0.07	0.01	UMTS
		Airtel	39.3	93.92	3	600	124.7	1.72	4.37	7.83	LTE
		Airtel	39.3	100.40	3	600	131.2	3.62	9.22	34.82	LTE
								9.24	20.44	226.60	

Location:Mt. BuxtonResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/10

 Time:
 10:15 - 11:45

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	[V/m]Emax	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	f [MHz]
									MP2		Point No.
GSM-900	5.33	3.33	1.42	123.0	4	3	114.01	42.5	Airtel		
GSM-900	1348.09	53.10	22.54	147.1	4	3	138.04	42.5	Airtel		
GSM-900	1.97	2.03	0.86	118.7	4	3	109.68	42.5	Airtel		
GSM-900	0.01	0.11	0.05	93.4	4	3	84.39	42.1	CWS		
GSM-900	0.01	0.15	0.06	96.2	4	3	87.19	42.1	CWS		
GSM-900	0.01	0.12	0.05	94.2	4	3	85.18	42.1	CWS	친구는 것이 같은 것이 없다.	
UMTS	254.48	23.11	9.79	139.8	10	3	126.82	42.4	Airtel		
UMTS	0.53	1.05	0.45	113.0	10	3	99.99	42.4	Airtel	. 이는 것으로 같아.	
UMTS	22.94	4.82	2.94	129.4	10	3	116.37	61.0	Airtel		
UMTS	0.17	0.42	0.25	108.1	10	3	95.13	61.0	Airtel		
UMTS	0.75	0.87	0.53	114.5	10	3	101.49	61.0	Airtel		
LTE	0.44	1.04	0.41	112.2	600	3	81.41	39.3	Airtel	فقر ويلا بخديدة	
LTE	1.73	2.06	0.81	118.1	600	3	87.36	39.3	Airtel		
	1 636.45	58.31	24.84								

f [MHz]	Scr. Code (UMTS) / Cell- ID+No of	Operator	Limit	E (measured)	Meas. Uncert.	Factor max.	Emax		Emax Limit	
1	2	3	4	5	6	7	8	9	10	
Date:	2019/04/10						Antenna:	3AX420M-6G		
Signals:	GSM+UMTS+LTE	E					Analyzer:	SRM-3006		
Responsible:	Vaughan Taylor						Weather:	Sunshine, dry		
Location:	Mt. Buxton						Time:	10:15 - 11:45		

f [MHz]	ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	[V/m]Emax	Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP3								-	
		Airtel	42.5	122.49	3	4	131.5	3.76	8.85	37.56	GSM-900
		Airtel	42.5	130.25	3	4	139.3	9.19	21.66	224.24	GSM-900
		Airtel	42.5	112.53	3	4	121.6	1.20	2.81	3.79	GSM-900
		CWS	42.1	82.62	3	4	91.6	0.04	0.09	0.00	GSM-900
		CWS	42.1	91.48	3	4	100.5	0.11	0.25	0.03	GSM-900
		CWS	42.1	84.35	3	4	93.4	0.05	0.11	0.01	GSM-900
		Airtel	42.4	120.31	3	10	133.3	4.63	10.92	56.84	UMTS
		Airtel	42.4	110.54	3	10	123.5	1.50	3.55	5.99	UMTS
		Airtel	42.4	104.32	3	10	117.3	0.73	1.73	1.43	UMTS
		Airtel	61.0	82.40	3	10	95.4	0.06	0.10	0.01	UMTS
		Airtel	61.0	101.18	3	10	114.2	0.51	0.84	0.69	UMTS
		Airtel	61.0	100.62	3	10	113.6	0.48	0.79	0.61	UMTS
		Airtel	61.0	96.66	3	10	109.7	0.30	0.50	0.25	UMTS
		CWS	61.0	84.32	3	10	97.3	0.07	0.12	0.01	UMTS
		CWS	61.0	82.12	3	10	95.1	0.06	0.09	0.01	UMTS
		CWS	61.0	81.17	3	10	94.2	0.05	0.08	0.01	UMTS
		Airtel	39.3	90.96	3	600	121.7	1.22	3.11	3.96	LTE
		Airtel	39.3	88.97	3	600	119.8	0.97	2.47	2.51	LTE
								11.29	26.60	337.95	

Location:	Mt. Buxton	Time:	10:15 - 11:45
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/10	Antenna:	3AX420M-6G

2	3	4	5	6	7	8	9	10	11	
r. Code S) / Cell- +No of IO path LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	[V/m]Emax	Emax Limit consumpt. [%]	Smax [mW/m²]	
	MP4									
	Airtel	42.5	118.36	3	4	127.4	2.34	5.50	14.51	GSM-900
	Airtel	42.5	138.78	3	4	147.8	24.55	57.83	1 598.52	GSM-900
	Airtel	42.5	109.58	3	4	118.6	0.85	2.00	1.92	GSM-900
	CWS	42.1	80.94	3	4	90.0	0.03	0.07	0.00	GSM-900
	CWS	42.1	83.06	3	4	92.1	0.04	0.10	0.00	GSM-900
	CWS	42.1	85.96	3	4	95.0	0.06	0.13	0.01	GSM-900
	Airtel	42.4	124.29	3	10	137.3	7.32	17.27	142.12	UMTS
	Airtel	42.4	105.36	3	10	118.4	0.83	1.95	1.82	UMTS
	Airtel	42.4	95.94	3	10	108.9	0.28	0.66	0.21	UMTS
	Airtel	61.0	123.47	3	10	136.5	6.66	10.92	117.67	UMTS
	Airtel	61.0	109.49	3	10	122.5	1.33	2.18	4.71	UMTS
	Airtel	39.3	85.41	3	600	116.2	0.65	1.64	1.10	LTE
							26.64	61.71	1 882.60	

6.2.13 SACOS Tower (CWS)

Location:	SACOS Tower (ground level)	Time:	11:35 - 12:15
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/15	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1						1			
		Airtel	42.5	99.34	3	4	108.4	0.26	0.62	0.18	GSM-900
		Airtel	42.5	100.51	3	4	109.5	0.30	0.71	0.24	GSM-900
		Airtel	42.5	89.13	3	4	98.2	0.08	0.19	0.02	GSM-900
		CWS	42.1	106.11	3	4	115.1	0.57	1.36	0.86	GSM-900
		CWS	42.1	94.01	3	4	103.0	0.14	0.34	0.05	GSM-900
		CWS	42.1	95.90	3	4	104.9	0.18	0.42	0.08	GSM-900
	장기원 김 김부님	CWS	42.1	87.55	3	4	96.6	0.07	0.16	0.01	GSM-900
		Airtel	42.4	88.88	3	4	97.9	0.08	0.19	0.02	GSM-900
		Airtel	61.0	91.84	3	10	104.8	0.17	0.29	0.08	UMTS
		Airtel	61.0	84.90	3	10	97.9	0.08	0.13	0.02	UMTS
		Airtel	61.0	91.47	3	10	104.5	0.17	0.27	0.07	UMTS
	19 년 15 년	Airtel	61.0	85.40	3	10	98.4	0.08	0.14	0.02	UMTS
		CWS	61.0	99.08	3	10	112.1	0.40	0.66	0.43	UMTS
		CWS	61.0	102.17	3	10	115.2	0.57	0.94	0.87	UMTS
		CWS	61.0	91.81	3	10	104.8	0.17	0.29	0.08	UMTS
		CWS	61.0	85.10	3	10	98.1	0.08	0.13	0.02	UMTS
		CWS	61.0	98.43	3	10	111.4	0.37	0.61	0.37	UMTS
		CWS	61.0	103.89	3	10	116.9	0.70	1.15	1.30	UMTS
		CWS	61.0	80.02	3	10	93.0	0.04	0.07	0.01	UMTS
		CWS	61.0	104.60	3	10	117.6	0.76	1.24	1.53	UMTS
		CWS	61.0	95.73	3	10	108.7	0.27	0.45	0.20	UMTS
		CWS	39.0	91.51	3	600	122.3	1.30	3.34	4.50	LTE
								2.03	4.39	10.94	

Location:SACOS TowerResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/15

 Time:
 11:35 - 12:15

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									
		Airtel	42.5	93.77	3	4	102.8	0.14	0.32	0.05	GSM-90
		Airtel	42.5	91.53	3	4	100.6	0.11	0.25	0.03	GSM-90
		Airtel	42.5	82.12	3	4	91.1	0.04	0.08	0.00	GSM-90
		CWS	42.1	109.00	3	4	118.0	0.80	1.89	1.68	GSM-900
		CWS	42.1	103.76	3	4	112.8	0.44	1.03	0.50	GSM-90
		CWS	42.1	98.94	3	4	108.0	0.25	0.59	0.17	GSM-90
		CWS	42.1	82.93	3	4	92.0	0.04	0.09	0.00	GSM-90
		Airtel	42.4	81.07	3	10	94.1	0.05	0.12	0.01	UMTS
		Airtel	61.0	86.23	3	10	99.2	0.09	0.15	0.02	UMTS
		Airtel	61.0	86.79	3	10	99.8	0.10	0.16	0.03	UMTS
		Airtel	61.0	81.82	3	10	94.8	0.06	0.09	0.01	UMTS
		CWS	61.0	99.60	3	10	112.6	0.43	0.70	0.48	UMTS
		CWS	61.0	87.71	3	10	100.7	0.11	0.18	0.03	UMTS
		CWS	61.0	98.35	3	10	111.4	0.37	0.61	0.36	UMTS
		CWS	61.0	88.25	3	10	101.3	0.12	0.19	0.04	UMTS
		CWS	61.0	90.26	3	10	103.3	0.15	0.24	0.06	UMTS
		CWS	61.0	88.43	3	10	101.4	0.12	0.19	0.04	UMTS
	이번부, 방송님	CWS	61.0	97.08	3	10	110.1	0.32	0.52	0.27	UMTS
		CWS	61.0	92.12	3	10	105.1	0.18	0.30	0.09	UMTS
	역별 누 성 옷이	CWS	61.0	95.89	3	10	108.9	0.28	0.46	0.21	UMTS
		CWS	61.0	96.09	3	10	109.1	0.28	0.47	0.22	UMTS
		CWS	39.0	89.46	3	600	120.2	1.03	2.63	2.80	LTE
		CWS	39.0	89.83	3	600	120.6	1.07	2.75	3.05	LTE
								1.96	4.64	10.14	

Location:	SACOS Tower	Time:	11:35 - 12:15
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/15	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	5
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP3									
		Airtel	42.5	95.03	3	4	104.1	0.16	0.37	0.07	GSM-900
		Airtel	42.5	96.35	3	4	105.4	0.19	0.44	0.09	GSM-900
		Airtel	42.5	86.10	3	4	95.1	0.06	0.13	0.01	GSM-900
		CWS	42.1	94.26	3	4	103.3	0.15	0.35	0.06	GSM-900
		CWS	42.1	107.87	3	4	116.9	0.70	1.66	1.30	GSM-900
		CWS	42.1	101.53	3	4	110.6	0.34	0.80	0.30	GSM-900
		CWS	42.1	0.00	3	4	9.0	0.00	0.00	0.00	GSM-900
		Airtel	42.4	83.54	3	10	96.5	0.07	0.16	0.01	UMTS
		Airtel	61.0	86.74	3	10	99.7	0.10	0.16	0.02	UMTS
		Airtel	61.0	84.82	3	10	97.8	0.08	0.13	0.02	UMTS
		Airtel	61.0	87.27	3	10	100.3	0.10	0.17	0.03	UMTS
		Airtel	61.0	83.90	3	10	96.9	0.07	0.11	0.01	UMTS
	6.33314	CWS	61.0	93.94	3	10	106.9	0.22	0.36	0.13	UMTS
		CWS	61.0	96.80	3	10	109.8	0.31	0.51	0.25	UMTS
		CWS	61.0	92.62	3	10	105.6	0.19	0.31	0.10	UMTS
		CWS	61.0	100.93	3	10	113.9	0.50	0.82	0.66	UMTS
	전 방송한 나는요?	CWS	61.0	82.59	3	10	95.6	0.06	0.10	0.01	UMTS
	실험 성장에 바늘이	CWS	61.0	96.87	3	10	109.9	0.31	0.51	0.26	UMTS
		CWS	61.0	100.46	3	10	113.5	0.47	0.77	0.59	UMTS
		CWS	61.0	88.56	3	10	101.6	0.12	0.20	0.04	UMTS
		CWS	61.0	94.90	3	10	107.9	0.25	0.41	0.16	UMTS
		CWS	61.0	95.61	3	10	108.6	0.27	0.44	0.19	UMTS
	전화 전 영상 등 방법	CWS	61.0	100.15	3	10	113.2	0.45	0.75	0.55	UMTS
		CWS	39.0	90.41	3	600	121.2	1.15	2.94	3.49	LTE
								1.77	3.95	8.34	,

Location:	SACOS Tower	Time:	11:35 - 12:15
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/15	Antenna:	3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
9			7						MP4		Point No.
GSM-900	0.18	0.61	0.26	108.3	4	3	99.29	42.5	Airtel		
GSM-900	0.17	0.60	0.25	108.1	4	3	99.09	42.5	Airtel		
GSM-900	0.01	0.11	0.05	93.5	4	3	84.49	42.5	Airtel		
GSM-900	4.35	3.04	1.28	122.2	4	3	113.13	42.1	CWS		
GSM-900	0.11	0.49	0.21	106.3	4	3	97.26	42.1	CWS		
GSM-900	0.82	1.32	0.56	114.9	4	3	105.90	42.1	CWS		
GSM-900	0.00	0.09	0.04	91.5	4	3	82.47	42.1	CWS		
UMTS	0.05	0.33	0.14	102.9	10	3	89.92	42.4	Airtel		
UMTS	0.12	0.34	0.21	106.4	10	3	93.43	61.0	Airtel		
UMTS	0.07	0.27	0.17	104.5	10	3	91.45	61.0	Airtel		
UMTS	0.03	0.17	0.10	100.3	10	3	87.27	61.0	Airtel		
UMTS	0.01	0.11	0.07	96.9	10	3	83.90	61.0	Airtel		
UMTS	2.86	1.70	1.04	120.3	10	3	107.32	61.0	CWS		
UMTS	0.38	0.62	0.38	111.6	10	3	98.55	61.0	CWS	ISA SHEET LEVE	
UMTS	0.52	0.73	0.44	113.0	10	3	99.95	61.0	CWS		
UMTS	2.40	1.56	0.95	119.6	10	3	106.57	61.0	CWS		
UMTS	0.32	0.57	0.35	110.9	10	3	97.88	61.0	CWS		
UMTS	1.96	1.41	0.86	118.7	10	3	105.69	61.0	CWS		
LTE	0.02	0.14	0.09	98.7	10	3	85.69	61.0	CWS		
LTE	1.17	1.70	0.67	116.5	600	3	85.68	39.0	CWS		
	15.57	4.88	2.42								

ocation: sponsible: gnals: ite:	Stad Popiler Vaughan Taylor GSM+UMTS+LT 2019/04/15	E					Time: Weather: Analyzer: Antenna:	14:00 - 14:20 Sunshine, dry SRM-3006 3AX420M-6G			
1	2	3	4	5	6	7	8	9	10	11	1
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.4	109.16	3	4	118.2	0.81	1.91	1.74	GSM-90
		Airtel	42.5	98.67	3	4	107.7	0.24	0.57	0.16	GSM-90
		Airtel	42.5	99.50	3	4	108.5	0.27	0.63	0.19	GSM-90
		CWS	42.1	90.37	3	4	99.4	0.09	0.22	0.02	GSM-90
		CWS	42.1	113.23	3	4	122.3	1.30	3.08	4.45	GSM-90
		CWS	42.1	102.36	3	4	111.4	0.37	0.88	0.36	GSM-90
		CWS	42.0	105.33	3	4	114.4	0.52	1.24	0.72	GSM-90
		Airtel	42.4	92.04	3	10	105.0	0.18	0.42	0.08	GSM-90
		Airtel	42.4	83.64	3	10	96.6	0.07	0.16	0.01	UMTS
		Airtel	42.4	86.01	3	10	99.0	0.09	0.21	0.02	UMTS
		Airtel	61.0	108.34	3	10	121.3	1.17	1.91	3.61	UMTS
		Airtel	61.0	97.52	3	10	110.5	0.34	0.55	0.30	UMTS
		Airtel	61.0	88.08	3	10	101.1	0.11	0.19	0.03	UMTS
		Airtel	61.0	108.34	3	10	121.3	1.17	1.91	3.61	UMTS
		Airtel	61.0	97.27	3	10	110.3	0.33	0.53	0.28	UMTS
		Airtel	61.0	84.73	3	10	97.7	0.08	0.13	0.02	UMTS
		CWS	61.0	102.40	3	10	115.4	0.59	0.97	0.92	UMTS
		CWS	61.0	99.55	3	10	112.6	0.42	0.70	0.48	UMTS
		CWS	61.0	96.57	3	10	109.6	0.30	0.49	0.24	UMTS
	and Survey	CWS	61.0	100.47	3	10	113.5	0.47	0.77	0.59	UMTS
		CWS	61.0	97.86	3	10	110.9	0.35	0.57	0.32	UMTS
		CWS	61.0	96.21	3	10	109.2	0.29	0.47	0.22	UMTS
		CWS	61.0	94.61	3	10	107.6	0.24	0.39	0.15	UMTS
		CWS	61.0	98.71	3	10	111.7	0.39	0.63	0.39	UMTS
		CWS	61.0	98.39	3	10	111.4	0.37	0.61	0.37	UMTS
		CWS	39.0	94.52	3	600	125.3	1.84	4.72	8.99	LTE
		Airtel	39.3	85.08	3	600	115.9	0.62	1.58	1.02	LTE
		Airtel	58.6	83.79	3	600	114.6	0.54	0.91	0.76	LTE
		Airtel	58.6	81.30	3	600	112.1	0.40	0.69	0.43	LTE
								3.39	7.36	30.51	

6.2.14 Stad Popiler and Central Bank Building (Airtel/CWS)

Location: CBS - Roof of building Responsible: Vaughan Taylor Signals: GSM+UMTS+LTE Date: 2019/04/15

 Time:
 14:35 - 14:45

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
									MP2		Point No.
GSM-900	0.09	0.42	0.18	105.1	4	3	96.05	42.4	Airtel		
GSM-900	0.02	0.19	0.08	98.2	4	3	89.16	42.5	Airtel		
GSM-900	1.12	1.53	0.65	116.3	4	3	107.24	42.5	Airtel		
GSM-900	3.83	2.86	1.20	121.6	4	3	112.58	42.1	CWS		
GSM-900	0.10	0.45	0.19	105.6	4	3	96.58	42.1	CWS		
GSM-900	0.24	0.71	0.30	109.5	4	3	100.52	42.1	CWS		
UMTS	28.62	7.81	3.28	130.3	10	3	117.33	42.0	Airtel	김 영국 영국 (
UMTS	0.30	0.80	0.34	110.6	10	3	97.59	42.4	Airtel		
UMTS	0.05	0.22	0.13	102.5	10	3	89.50	61.0	Airtel		
UMTS	0.25	0.51	0.31	109.8	10	3	96.81	61.0	Airtel		
UMTS	0.01	0.10	0.06	95.9	10	3	82.90	61.0	Airtel		
UMTS	0.34	0.59	0.36	111.1	10	3	98.05	61.0	Airtel		
UMTS	0.05	0.22	0.13	102.6	10	3	89.57	61.0	Airtel		
UMTS	86.43	9.36	5.71	135.1	10	3	122.13	61.0	CWS		
UMTS	0.29	0.55	0.33	110.4	10	3	97.44	61.0	CWS		
UMTS	7.99	2.85	1.74	124.8	10	3	111.79	61.0	CWS		
UMTS	89.67	9.53	5.81	135.3	10	3	122.29	61.0	CWS		
UMTS	6.87	2.64	1.61	124.1	10	3	111.13	61.0	CWS		
UMTS	1.02	1.02	0.62	115.9	10	3	102.86	61.0	CWS		
UMTS	54.53	7.43	4.53	133.1	10	3	120.13	61.0	CWS		
UMTS	5.87	2.44	1.49	123.5	10	3	110.45	61.0	CWS		
LTE	2.33	2.40	0.94	119.4	600	3	88.66	39.0	CWS		
LTE	50.68	11.20	4.37	132.8	600	3	102.03	39.0	CWS		
LTE	7.62	4.31	1.69	124.6	600	3	93.80	39.3	Airtel		
LTE	1.23	1.73	0.68	116.7	600	3	85.88	39.3	Airtel		
LTE	12.07	3.64	2.13	126.6	600	3	95.80	58.6	Airtel		and the
	361.62	22.27	11.68								

Location:CBS - HVAC store-roomResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/16

-

 Time:
 14:50 - 15:00

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f (MHz)
									MP3		Point No.
GSM-90	0.02	0.21	0.09	98.9	4	3	89.90	42.4	Airtel		
GSM-90	0.01	0.14	0.06	95.3	4	3	86.31	42.5	Airtel		
GSM-90	0.10	0.45	0.19	105.7	4	3	96.63	42.5	Airtel		
GSM-900	0.75	1.26	0.53	114.5	4	3	105.47	42.1	CWS		
GSM-900	0.04	0.29	0.12	101.7	4	3	92.71	42.1	CWS		
GSM-900	0.06	0.36	0.15	103.6	4	3	94.62	42.1	CWS		
UMTS	2.13	2.13	0.90	119.1	10	3	106.05	42.0	Airtel		
UMTS	0.03	0.25	0.10	100.4	10	3	87.39	42.4	Airtel		
UMTS	0.01	0.16	0.07	96.6	10	3	83.55	42.4	Airtel		
UMTS	0.01	0.15	0.06	95.9	10	3	82.89	42.4	Airtel		
UMTS	0.03	0.16	0.10	99.9	10	3	86.92	61.0	Airtel		
UMTS	0.01	0.08	0.05	93.2	10	3	80.22	61.0	Airtel		
UMTS	0.01	0.10	0.06	95.5	10	3	82.54	61.0	Airtel		
UMTS	0.01	0.11	0.07	96.8	10	3	83.78	61.0	Airtel		
UMTS	0.03	0.17	0.11	100.5	10	3	87.46	61.0	Airtel		
UMTS	0.01	0.08	0.05	93.7	10	3	80.68	61.0	Airtel		
UMTS	0.01	0.09	0.06	94.8	10	3	81.81	61.0	Airtel		
UMTS	4.50	2.14	1.30	122.3	10	3	109.30	61.0	CWS		
UMTS	1.50	1.23	0.75	117.5	10	3	104.51	61.0	CWS	에는 그는 것을 통을	
UMTS	0.07	0.26	0.16	104.1	10	3	91.09	61.0	CWS		
UMTS	2.23	1.50	0.92	119.2	10	3	106,24	61.0	CWS		
UMTS	2.26	1.51	0.92	119.3	10	3	106.30	61.0	CWS		
UMTS	0.12	0.34	0.21	106.4	10	3	93.40	61.0	CWS		
UMTS	1.47	1.22	0.74	117.4	10	3	104.44	61.0	CWS		
UMTS	1.28	1.14	0.69	116.8	10	3	103.82	61.0	CWS		
UMTS	0.07	0.26	0.16	103.9	10	3	90.93	61.0	CWS		
LTE	0.68	1.30	0.51	114.1	600	3	83.30	39.0	CWS		
LTE	2.97	2.71	1.06	120.5	600	3	89.71	39.0	CWS		
LTE	0.81	1.41	0.55	114.9	600	3	84.09	39.3	Airtel		
LTE	0.58	1.19	0.47	113.4	600	3	82.64	39.3	Airtel		
LTE	0.38	0.65	0.38	111.6	600	3	80.82	58.6	Airtel		
LTE	0.57	0.79	0.46	113.3	600	3	82.52	58.6	Airtel		
	22.73	5.83	2.93								

Location:	CBS - canteen (1)	Time:	15:05 - 15:15
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/16	Antenna:	3AX420M-6G

0	9	9	10	11
nit	Emax [V/m]			imax W/m ⁻]
95	0.83	0.83	1.95	1.82 GSM-
38	0.16	0.16	0.38	0.07 GSM-
18	0.20	0.20	0.48	0.11 GSM-
)9	0.04	0.04	0.09	0.00 GSM-
54	0.23	0.23	0.54	0.14 GSM-
29	0.12	0.12	0.29	0.04 GSM-
39	0.16	0.16	0.39	0.07 UM1
39	0.38	0.38	0.89	0.37 UM1
3	0.05	0.05	0.13	0.01 UMT
26	0.11	0.11	0.26	0.03 UM1
10	0.24	0.24	0.40	0.16 UM1
36	0.22	0.22	0.36	0.13 UMT
)9	0.06	0.06	0.09	0.01 UMT
85	0.21	0.21	0.35	0.12 UM1
12	0.26	0.26	0.42	0.17 UM1
2	0.07	0.07	0.12	0.01 UMT
22	0.14	0.14	0.22	D.05 UM1
7	0.10	0.10	0.17	D.03 UMT
2	0.07	0.07	0.12	0.01 UMT
8	0.05	0.05	0.08	0.01 UMT
3	0.08	0.08	0.13	0.02 UMT
3	0.08	0.08	0.13	0.02 UM1
5	0.09	0.09	0.15	0.02 UMT
32	0.20	0.20	0.32	D.10 UM7
)7	0.04	0.04	0.07	D.01 UMT
3	0.08	0.08	0.13	0.02 UM1
8	0.05	0.05	0.08	0.01 UMT
4	0.09	0.09	0.14	0.02 UM1
)1	0.39	0.39	1.01	0.41 LTE
91	0.53	0.53	0.91	0.75 LTE
29	1.33	1 33	2.89	4.72

Location:CBS - canteen (2)Responsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/16

Time:	15:15 - 15:25
Weather:	Sunshine, dry
Analyzer:	SRM-3006
Antenna:	3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
-									MP5		Point No.
GSM-9	2.43	2.26	0.96	119.6	4	3	110.60	42.4	Airtel		
GSM-9	0.09	0.44	0.19	105.4	4	3	96.36	42.5	Airtel		
GSM-9	0.05	0.33	0.14	103.0	4	3	93.94	42.5	Airtel		
GSM-9	0.00	0.07	0.03	89.8	4	3	80.77	42.1	CWS		
GSM-9	3.51	2.73	1.15	121.2	4	3	112.20	42.1	CWS		
GSM-9	0.16	0.57	0.24	107.7	4	3	98.66	42.1	CWS		
UMTS	0.29	0.79	0.33	110.4	10	3	97.40	42.0	Airtel		
UMTS	0.47	1.00	0.42	112.5	10	3	99.52	42.4	Airtel		
UMTS	0.02	0.22	0.09	99.5	10	3	86.52	42.4	Airtel		
UMTS	0.03	0.26	0.11	100.8	10	3	87.78	42.4	Airtel		
UMTS	1.36	1.18	0.72	117.1	10	3	104.11	61.0	Airtel		
UMTS	0.02	0.15	0.09	99.3	10	3	86.29	61.0	Airtel		
UMTS	0.01	0.12	0.07	97.0	10	3	83.96	61.0	Airtel		
UMTS	1.26	1.13	0.69	116.8	10	3	103.75	61.0	Airtel		
UMTS	0.01	0.09	0.05	94.8	10	3	81.77	61.0	Airtel		
UMTS	0.03	0.18	0.11	100.7	10	3	87.69	61.0	Airtel		
UMTS	0.57	0.76	0.46	113.3	10	3	100.30	61.0	CWS		
UMTS	0.58	0.76	0.47	113.4	10	3	100.37	61.0	CWS		
UMTS	0.31	0.56	0.34	110.6	10	3	97.64	61.0	CWS		
UMTS	0.53	0.73	0.45	113.0	10	3	100.03	61.0	CWS		
UMTS	0.58	0.77	0.47	113.4	10	3	100.41	61.0	CWS		
UMTS	0.29	0.54	0.33	110.4	10	3	97.39	61.0	CWS		
UMTS	0.39	0.63	0.38	111.6	10	3	98.64	61.0	CWS		
UMTS	0.54	0.74	0.45	113.1	10	3	100.11	61.0	CWS		
UMTS	0.02	0.15	0.09	99.0	10	3	86.04	61.0	CWS		
LTE	5.39	3.65	1.43	123.1	600	3	92.30	39.0	CWS		
LTE	0.70	1.31	0.51	114.2	600	3	83.43	39.3	Airtel		
LTE	0.61	0.82	0.48	113.6	600	3	82.81	58.6	Airtel		
LTE	0.43	0.68	0.40	112.1	600	3	81.28	58.6	Airtel		
	20.69	6.14	2.79								

Location:Stad PopilerResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/15

 Time:
 15:30 - 15:40

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f (MHz)	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m³]	
Point No.		MP6									
		Airtel	42.4	104.64	3	4	113.7	0.48	1.14	0.62	GSM-90
		Airtel	42.5	90.85	3	4	99.9	0.10	0.23	0.03	GSM-90
		Airtel	42.5	96.11	3	4	105.1	0.18	0.42	0.09	GSM-90
		CWS	42.1	92.31	3	4	101.3	0.12	0.28	0.04	GSM-90
		CWS	42.1	103.36	3	4	112.4	0.42	0.99	0.46	GSM-90
		CWS	42.1	94.23	3	4	103.3	0.15	0.35	0.06	GSM-900
		Airtel	42.0	104.87	3	10	117.9	0.78	1.86	1.62	UMTS
		Airtel	42.4	102.63	3	10	115.6	0.60	1.43	0.97	UMTS
		Airtel	42.4	86.69	3	10	99.7	0.10	0.23	0.02	UMTS
		Airtel	42.4	82.20	3	10	95.2	0.06	0.14	0.01	UMTS
		Airtel	42.4	80,10	3	10	93.1	0.05	0.11	0.01	UMTS
		Airtel	61.0	100.13	3	10	113.1	0.45	0.74	0.55	UMTS
		Airtel	61.0	101.39	3	10	114.4	0.52	0.86	0.73	UMTS
		Airtel	61.0	90.42	3	10	103.4	0.15	0.24	0.06	UMTS
		Airtel	61.0	100.23	3	10	113.2	0.46	0.75	0.56	UMTS
		Airtel	61.0	99.86	3	10	112.9	0.44	0.72	0.51	UMTS
		Airtel	61.0	87.23	3	10	100.2	0.10	0.17	0.03	UMTS
		CWS	61.0	96.58	3	10	109.6	0.30	0.49	0.24	UMTS
		CWS	61.0	88.68	3	10	101.7	0.12	0.20	0.04	UMTS
		CWS	61.0	94.64	3	10	107.6	0.24	0.40	0.15	UMTS
		CWS	61.0	91.30	3	10	104.3	0.16	0.27	0.07	UMTS
		CWS	61.0	96.71	3	10	109.7	0.31	0.50	0.25	UMTS
		CWS	61.0	90.29	3	10	103.3	0.15	0.24	0.06	UMTS
		CWS	61.0	90.04	3	10	103.0	0.14	0.23	0.05	UMTS
		CWS	61.0	93.39	3	10	106.4	0.21	0.34	0.12	UMTS
		CWS	61.0	94.27	3	10	107.3	0.23	0.38	0.14	UMTS
		CWS	61.0	92.34	3	10	105.3	0.18	0.30	0.09	UMTS
		CWS	61.0	86.29	3	10	99.3	0.09	0.15	0.02	UMTS
		CWS	61.0	91.29	3	10	104.3	0.16	0.27	0.07	UMTS
		CWS	39.0	83.34	3	600	114.1	0.51	1.30	0.69	LTE
		CWS	39.0	83.66	3	600	114.4	0.53	1.35	0.74	LTE
		Airtel	39.3	84.42	3	600	115.2	0.58	1.47	0.88	LTE
		Airtel	58.6	86.48	3	600	117.3	0.73	1.25	1.41	LTE
				and the second se				2.07	4.39	11.36	

6.2.15 Dr Chetty's Rooms

Location:	Dr Chetty's Rooms	Time:	09:45 - 10:45
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/15	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.5	104.97	3	4	114.0	0.50	1.18	0.66	GSM-900
		Airtel	42.5	119.42	3	4	128.4	2.64	6.21	18.52	GSM-900
		Airtel	42.5	96.90	3	4	105.9	0.20	0.46	0.10	GSM-900
		Airtel	42.5	92.66	3	4	101.7	0.12	0.29	0.04	GSM-900
		CWS	42.1	92.95	3	4	102.0	0.13	0.30	0.04	GSM-900
		CWS	42.1	94.89	3	4	103.9	0.16	0.37	0.07	GSM-900
	물론 명화 등	CWS	42.4	107.02	3	4	116.0	0.63	1.50	1.07	GSM-900
		Airtel	42.4	101.46	3	10	114.5	0.53	1.25	0.74	UMTS
	Read and a	Airtel	61.0	105.31	3	10	118.3	0.82	1.35	1.80	UMTS
		Airtel	61.0	93.15	3	10	106.2	0.20	0.33	0.11	UMTS
		Airtel	61.0	100.42	3	10	113.4	0.47	0.77	0.58	UMTS
		Airtel	61.0	104.30	3	10	117.3	0.73	1.20	1.42	UMTS
		Airtel	61.0	100.02	3	10	113.0	0.45	0.73	0.53	UMTS
		Airtel	61.0	93.20	3	10	106.2	0.20	0.33	0.11	UMTS
		Airtel	61.0	80.68	3	10	93.7	0.05	0.08	0.01	UMTS
		CWS	61.0	83.12	3	10	96.1	0.06	0.10	0.01	UMTS
		CWS	61.0	86.64	3	10	99.6	0.10	0.16	0.02	UMTS
		CWS	61.0	80.41	3	10	93.4	0.05	0.08	0.01	UMTS
		CWS	61.0	80.62	3	10	93.6	0.05	0.08	0.01	UMTS
		CWS	61.0	80.78	3	10	93.8	0.05	0.08	0.01	UMTS
		Airtel	39.3	80.25	3	600	111.0	0.36	0.91	0.34	LTE
fice all the		Airtel	39.3	81.53	3	600	112.3	0.41	1.05	0.45	LTE
				14				3.17	7.13	26.65	

 Time:
 09:45 - 10:45

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									
		Airtel	42.5	100.93	3	4	110.0	0.31	0.74	0.26	GSM-900
		Airtel	42.5	107.49	3	4	116.5	0.67	1.57	1.19	GSM-900
		Airtel	42.5	86.20	3	4	95.2	0.06	0.14	0.01	GSM-900
		Airtel	42.5	82.25	3	4	91.3	0.04	0.09	0.00	GSM-900
		CWS	42.1	86.21	3	4	95.2	0.06	0.14	0.01	GSM-900
		CWS	42.1	89.59	3	4	98.6	0.09	0.20	0.02	GSM-900
		Airtel	42.4	100.83	3	10	113.8	0.49	1.16	0.64	UMTS
		Airtel	42.4	92.87	3	10	105.9	0.20	0.46	0.10	UMTS
	그 것 소문을 같다.	Airtel	61.0	87.36	3	10	100.4	0.10	0.17	0.03	UMTS
		Airtel	61.0	86.99	3	10	100.0	0.10	0.16	0.03	UMTS
	하는 것이 했다.	Airtel	61.0	81.22	3	10	94.2	0.05	0.08	0.01	UMTS
		Airtel	61.0	90.59	3	10	103.6	0.15	0.25	0.06	UMTS
	양도 교통하는	Airtel	61.0	87.71	3	10	100.7	0.11	0.18	0.03	UMTS
		CWS	61.0	84.82	3	10	97.8	0.08	0.13	0.02	UMTS
		CWS	61.0	80.40	3	10	93.4	0.05	0.08	0.01	UMTS
		CWS	61.0	84.31	3	10	97.3	0.07	0.12	0.01	UMTS
		CWS	61.0	100.84	3	10	113.8	0.49	0.81	0.64	UMTS
								1.08	2.35	3.07	

Time:	09:45 - 10:45
Weather:	Sunshine, dry
Analyzer:	SRM-3006
Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP3									
		Airtel	42.5	103.56	3	4	112.6	0.43	1.00	0.48	GSM-900
		Airtel	42.5	116.32	3	4	125.3	1.85	4.35	9.07	GSM-900
		Airtel	42.5	100.81	3	4	109.8	0.31	0.73	0.26	GSM-900
		Airtel	42.5	92.51	3	4	101.5	0.12	0.28	0.04	GSM-900
		CWS	42.1	84.02	3	4	93.0	0.04	0.11	0.01	GSM-900
		Airtel	42.4	108.27	3	10	121.3	1.16	2.73	3.55	UMTS
		Airtel	42.4	101.79	3	10	114.8	0.55	1.30	0.80	UMTS
		Airtel	42.4	88.08	3	10	101.1	0.11	0.27	0.03	UMTS
		Airtel	61.0	105.95	3	10	119.0	0.89	1.45	2.08	UMTS
		Airtel	61.0	93.20	3	10	106.2	0.20	0.33	0.11	UMTS
		Airtel	61.0	86.75	3	10	99.8	0.10	0.16	0.03	UMTS
		Airtel	61.0	105.30	3	10	118.3	0.82	1.35	1.79	UMTS
		Airtel	61.0	94.24	3	10	107.2	0.23	0.38	0.14	UMTS
		Airtel	61.0	88.14	3	10	101.1	0.11	0.19	0.03	UMTS
		CWS	61.0	83.38	3	10	96.4	0.07	0.11	0.01	UMTS
		CWS	61.0	80.16	3	10	93.2	0.05	0.07	0.01	UMTS
		CWS	61.0	83.98	3	10	97.0	0.07	0.12	0.01	UMTS
		CWS	61.0	86.94	3	10	99.9	0.10	0.16	0.03	UMTS
		CWS	61.0	80.30	3	10	93.3	0.05	0.08	0.01	UMTS
		CWS	61.0	83.49	3	10	96.5	0.07	0.11	0.01	UMTS
		CWS	61.0	80.78	3	10	93.8	0.05	0.08	0.01	UMTS
		Airtel	39.3	81.32	3	600	112.1	0.40	1.03	0.43	LTE
		10						2.67	5.92	18.94	

Time:	09:45 - 10:45
Weather:	Sunshine, dry
Analyzer:	SRM-3006
Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP4									
		Airtel	42.5	107.87	3	4	116.9	0.70	1.64	1.30	GSM-900
		Airtel	42.5	122.24	3	4	131.3	3.66	8.59	35.46	GSM-900
		Airtel	42.5	112.23	3	4	121.3	1.15	2.72	3.54	GSM-900
		Airtel	42.5	110.43	3	4	119.5	0.94	2.21	2.34	GSM-900
		CWS	42.1	109.69	3	4	118.7	0.86	2.05	1.97	GSM-900
		CWS	42.1	88.09	3	4	97.1	0.07	0.17	0.01	GSM-900
		Airtel	42.4	110.02	3	10	123.0	1.42	3.34	5.32	UMTS
		Airtel	42.4	104.06	3	10	117.1	0.71	1.68	1.35	UMTS
		Airtel	42.4	101.87	3	10	114.9	0.55	1.31	0.81	UMTS
		Airtel	42.4	93.96	3	10	107.0	0.22	0.53	0.13	UMTS
		Airtel	61.0	108.30	3	10	121.3	1.16	1.90	3.58	UMTS
		Airtel	61.0	97.52	3	10	110.5	0.34	0.55	0.30	UMTS
		Airtel	61.0	92.95	3	10	106.0	0.20	0.33	0.10	UMTS
		Airtel	61.0	105.95	3	10	119.0	0.89	1.45	2.08	UMTS
		Airtel	61.0	97.84	3	10	110.8	0.35	0.57	0.32	UMTS
		Airtel	61.0	85.55	3	10	98.6	0.08	0.14	0.02	UMTS
		Airtel	61.0	93.38	3	10	106.4	0.21	0.34	0.12	UMTS
		CWS	61.0	101.34	3	10	114.3	0.52	0.85	0.72	UMTS
		CWS	61.0	90.47	3	10	103.5	0.15	0.24	0.06	UMTS
		CWS	61.0	100.23	3	10	113.2	0.46	0.75	0.56	UMTS
		CWS	61.0	90.11	3	10	103.1	0.14	0.23	0.05	UMTS
		CWS	61.0	80.33	3	10	93.3	0.05	0.08	0.01	UMTS
		CWS	61.0	100.84	3	10	113.8	0.49	0.81	0.64	UMTS
		CWS	39.0	89.43	3	600	120.2	1.02	2.62	2.78	LTE
		Airtel	39.3	87.74	3	600	118.5	0.84	2.15	1.89	LTE
		Airtel	39.3	84.34	3	600	115.1	0.57	1.45	0.86	LTE
			•					5.00	11.46	66.32	

Time:	09:45 - 10:45
Weather:	Sunshine, dry
Analyzer:	SRM-3006
Antenna:	3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]		emission [dBuV/m] [V/m]		E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	f [MHz]		
									MP5		Point No.
GSM-900	0.04	0.29	0.12	101.8	4	3	92.76	42.5	Airtel		
GSM-900	0.17	0.59	0.25	108.1	4	3	99.03	42.5	Airtel		
GSM-900	0.22	0.68	0.29	109.3	4	3	100.25	42.5	Airtel		
GSM-900	0.06	0.35	0.15	103.5	4	3	94.49	42.5	Airtel		
GSM-900	0.01	0.17	0.07	97.3	4	3	88.26	42.1	CWS		
UMTS	0.04	0.30	0.13	102.2	10	3	89.16	42.4	Airtel	등장 이상 정말	
UMTS	0.02	0.20	0.09	98.7	10	3	85.66	42.4	Airtel	분이 많이요?	
UMTS	0.06	0.36	0.15	103.7	10	3	90.71	42.4	Airtel		
UMTS	0.01	0.10	0.06	96.0	10	3	82.97	61.0	Airtel		
UMTS	0.02	0.13	0.08	97.9	10	3	84.90	61.0	Airtel		
UMTS	0.02	0.15	0.09	99.0	10	3	86.03	61.0	Airtel		
UMTS	0.02	0.15	0.09	99.2	10	3	86.23	61.0	Airtel		
	0.70	1.18	0.51								

6.2.16 Seychelles Main Hospital (CWS) and SBC Hermitage (Airtel)

Location:	Seychelles Main Hospital	Time:	15:30 - 17:15
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/12	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. Emax Emax Emax Limit [dBµV/m] [V/m]	IdBl emission IdBuV/ml IV/ml Limit	IdBl emission IdBuV/ml IV/ml Limit ImW/m	Emax [V/m] Limit	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.5	88.80	3	4	97.8	0.08	0.18	0.02	GSM-900
		Airtel	42.5	84.43	3	4	93.5	0.05	0.11	0.01	GSM-900
	1 8 75 3V Statut	Airtel	42.5	83.68	3	4	92.7	0.04	0.10	0.00	GSM-900
		Airtel	42.5	80.83	3	4	89.9	0.03	0.07	0.00	GSM-900
	전에 있는 영화	CWS	42.1	107.08	3	4	116.1	0.64	1.52	1.08	GSM-900
		CWS	42.1	110.31	3	4	119.3	0.93	2.20	2.27	GSM-900
		CWS	42.1	118.38	3	4	127.4	2.34	5.57	14.58	GSM-900
		CWS	61.0	108.03	3	10	121.0	1.13	1.85	3.36	UMTS
	연설가 드렸다.	CWS	61.0	102.74	3	10	115.7	0.61	1.00	0.99	UMTS
		CWS	61.0	91.27	3	10	104.3	0.16	0.27	0.07	UMTS
		CWS	61.0	108.51	3	10	121.5	1.19	1.95	3.76	UMTS
		CWS	61.0	103.35	3	10	116.4	0.66	1.08	1.14	UMTS
		CWS	61.0	90.64	3	10	103.6	0.15	0.25	0.06	UMTS
		CWS	61.0	106.60	3	10	119.6	0.95	1.57	2.42	UMTS
		CWS	39.0	95.02	3	600	125.8	1.95	5.00	10.09	LTE
								3.88	8.67	39.86	

Location:Seychelles Main HospitalResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/12

 Time:
 15:30 - 17:15

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]		[dBuV/m] [dB] emission [dBuV/m] [V/m] Limit [mW/m2]	IdBuV/m] [dB] emission [dBuV/m] [V/m] Limit	E Factor max. Emax Emax Limit S	Smax [mW/m²]	-		
Point No.		MP2									
		Airtel	42.5	95.73	3	4	104.8	0.17	0.41	0.08	GSM-900
		Airtel	42.5	100.89	3	4	109.9	0.31	0.74	0.26	GSM-900
		Airtel	42.5	96.52	3	4	105.5	0.19	0.45	0.09	GSM-900
		CWS	42.1	95.38	3	4	104.4	0.17	0.39	0.07	GSM-900
		Airtel	42.4	92.10	3	10	105.1	0.18	0.42	0.09	UMTS
		Airtel	42.4	90.42	3	10	103.4	0.15	0.35	0.06	UMTS
		Airtel	42.4	85.27	3	10	98.3	0.08	0.19	0.02	UMTS
		Airtel	61.0	101.80	3	10	114.8	0.55	0.90	0.80	UMTS
		Airtel	61.0	88.30	3	10	101.3	0.12	0.19	0.04	UMTS
		Airtel	61.0	101.37	3	10	114.4	0.52	0.86	0.73	UMTS
		Airtel	61.0	87.29	3	10	100.3	0.10	0.17	0.03	UMTS
		CWS	61.0	83.33	3	10	96.3	0.07	0.11	0.01	UMTS
		CWS	61.0	85.11	3	10	98.1	0.08	0.13	0.02	UMTS
								0.93	1.74	2.29	

Location:Seychelles Main HospitalTime:Responsible:Vaughan TaylorWeather:Signals:GSM+UMTS+LTEAnalyzer:Date:2019/04/12Antenna:

1	2	3	4	5	6	7	8	9	10	11		
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]			Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Limit	Smax [mW/m²]	
Point No.		MP3										
		Airtel	42.5	102.76	3	4	111.8	0.39	0.91	0.40	GSM-900	
		Airtel	42.5	94.30	3	4	103.3	0.15	0.34	0.06	GSM-900	
		Airtel	42.5	88.76	3	4	97.8	0.08	0.18	0.02	GSM-900	
		CWS	42.1	105.59	3	4	114.6	0.54	1.28	0.77	GSM-900	
		CWS	42.1	106.21	3	4	115.2	0.58	1.37	0.88	GSM-900	
		CWS	42.1	118.88	3	4	127.9	2.48	5.90	16.36	GSM-900	
		Airtel	42.4	95.50	3	10	108.5	0.27	0.63	0.19	UMTS	
		Airtel	42.4	88.09	3	10	101.1	0.11	0.27	0.03	UMTS	
		Airtel	42.4	82.87	3	10	95.9	0.06	0.15	0.01	UMTS	
		Airtel	61.0	103.30	3	10	116.3	0.65	1.07	1.13	UMTS	
		Airtel	61.0	101.74	3	10	114.7	0.55	0.89	0.79	UMTS	
		Airtel	61.0	85.91	3	10	98.9	0.09	0.14	0.02	UMTS	
		CWS	61.0	98.39	3	10	111.4	0.37	0.61	0.37	UMTS	
		CWS	61.0	90.04	3	10	103.0	0.14	0.23	0.05	UMTS	
		CWS	61.0	88.13	3	10	101.1	0.11	0.19	0.03	UMTS	
		CWS	61.0	82.75	3	10	95.8	0.06	0.10	0.01	UMTS	
		CWS	61.0	99.36	3	10	112.4	0.41	0.68	0.46	UMTS	
		CWS	61.0	89.80	3	10	102.8	0.14	0.23	0.05	UMTS	
		CWS	61.0	90.88	3	10	103.9	0.16	0.26	0.06	UMTS	
		CWS	61.0	83.80	3	10	96.8	0.07	0.11	0.01	UMTS	
		CWS	61.0	98.74	3	10	111.7	0.39	0.63	0.40	UMTS	
		CWS	39.0	98.39	3	600	129.2	2.87	7.36	21.92	LTE	
		Airtel	39.0	87.85	3	600	118.6	0.85	2.19	1.94	LTE	
								4.16	10.11	45.95		

15:30 - 17:15

Sunshine, dry

SRM-3006

3AX420M-6G

Location:Hermitage (SBC)Responsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/16

 Time:
 09:31 - 10:14

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	IV/m] [dBuV/m] [dB] emission [dBuV/m] [V/m]		Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]				
									MP1		Point No.
GSM-	3.93	2.86	1.22	121.7	4	3	112.69	42.5	Airtel		
GSM-	1.66	1.86	0.79	118.0	4	3	108.94	42.5	Airtel		
GSM-	1.09	1.51	0.64	116.2	4	3	107.13	42.5	Airtel		
GSM-	0.02	0.20	0.08	98.5	4	3	89.52	42.1	CWS	이 기관되었는	
GSM-	0.01	0.18	0.07	97.5	4	3	88.47	42.1	CWS		
UMT	0.41	0.93	0.39	111.9	10	3	98.90	42.4	Airtel		
UMT	0.63	1.15	0.49	113.8	10	3	100.78	42.4	Airtel		
UMT	0.32	0.82	0.35	110.9	10	3	97.86	42.4	Airtel		
UMT	7.58	2.77	1.69	124.6	10	3	111.56	61.0	Airtel		
UMT	0.92	0.97	0.59	115.4	10	3	102.41	61.0	Airtel		
UMT	1.59	1.27	0.77	117.8	10	3	104.77	61.0	Airtel		
UMT	9.07	3.03	1.85	125.3	10	3	112.34	61.0	Airtel		
UMT	1.99	1.42	0.87	118.8	10	3	105.76	61.0	Airtel		
UMT	1.14	1.07	0.65	116.3	10	3	103.32	61.0	Airtel		
UMT	0.01	0.10	0.06	95.6	10	3	82.62	61.0	CWS		
UMT	0.01	0.10	0.06	96.0	10	3	82.97	61.0	CWS		
LTE	2.80	2.62	1.03	120.2	600	3	89.46	39.3	Airtel		
LTE	0.43	1.03	0.40	112.1	600	3	81.32	39.3	Airtel		
LTE	0.36	0.94	0.37	111.3	600	3	80.54	39.3	Airtel		
	33.99	6.95	3.58								

6.2.17 Plaisance (Airtel)

Location:		Time:	13:10 - 13:58
Responsible:		Weather:	Cloudy, isolated showers
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/05	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]		IdBi emission [dBuV/m] [V/m]	IdBuV/m1 [V/m] Lim	mission [dBuV/m] [V/m] Limit	Limit	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.4	114.65	3	4	123.7	1.53	3.60	6.18	GSM-900
		Airtel	42.5	91.60	3	4	100.6	0.11	0.25	0.03	GSM-900
		Airtel	42.5	111.00	3	4	120.0	1.00	2.36	2.67	GSM-900
		Airtel	42.5	102.00	3	4	111.0	0.36	0.84	0.34	GSM-900
		Airtel	42.4	100.85	3	10	113.9	0.49	1.16	0.64	UMTS
		Airtel	42.4	86.85	3	10	99.9	0.10	0.23	0.03	UMTS
		Airtel	42.4	88.49	3	10	101.5	0.12	0.28	0.04	UMTS
		Airtel	42.4	86.43	3	10	99.4	0.09	0.22	0.02	UMTS
		Airtel	61.0	102.64	3	10	115.6	0.61	0.99	0.97	UMTS
		Airtel	61.0	99.75	3	10	112.8	0.43	0.71	0.50	UMTS
		Airtel	61.0	94.03	3	10	107.0	0.22	0.37	0.13	UMTS
		Airtel	61.0	102.60	3	10	115.6	0.60	0.99	0.96	UMTS
	2 같은 비 문 문 같이	Airtel	61.0	99.75	3	10	112.8	0.43	0.71	0.50	UMTS
		Airtel	61.0	94.03	3	10	107.0	0.22	0.37	0.13	UMTS
		Airtel	39.3	88.76	3	600	119.5	0.95	2.42	2.39	LTE
								2.42	5.47	15.53	

Location:PlaisanceResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/05

Time:13:10 - 13:58Weather:Cloudy, isolated showersAnalyzer:SRM-3006Antenna:3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1	
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]				Limit E (measured) [V/m] [dBµV/m]		Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
									MP2		Point No.	
GSM-90	0.77	1.27	0.54	114.6	4	3	105.59	42.4	Airtel			
GSM-90	0.03	0.24	0.10	100.3	4	3	91.24	42.5	Airtel			
GSM-90	1.10	1.52	0.64	116.2	4	3	107.16	42.5	Airtel			
GSM-90	0.03	0.24	0.10	100.3	4	3	91.24	42.5	Airtel			
UMTS	0.75	1.25	0.53	114.5	10	3	101.49	42.4	Airtel			
UMTS	0.18	0.61	0.26	108.3	10	3	95.25	42.4	Airtel			
UMTS	0.07	0.38	0.16	104.1	10	3	91.09	42.4	Airtel			
UMTS	0.01	0.11	0:05	93.2	10	3	80.22	42.4	Airtel			
UMTS	0.43	0.66	0.40	112.1	10	3	99.05	61.0	Airtel			
UMTS	0.51	0.72	0.44	112.8	10	3	99.83	61.0	Airtel			
UMTS	0.55	0.75	0.45	113.2	10	3	100.15	61.0	Airtel			
UMTS	0.48	0.70	0.43	112.6	10	3	99.59	61.0	Airtel			
UMTS	0.73	0.86	0.53	114.4	10	3	101.41	61.0	Airtel			
UMTS	0.36	0.61	0.37	111.4	10	3	98.37	61.0	Airtel			
LTE	1.47	1.89	0.74	117.4	600	3	86.65	39.3	Airtel			
	7.45	3.58	1.68									

6.2.18 Copolia (Airtel)

Location:	Copolia	Time:	09:42 - 11:22
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/05	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.5	112.63	3	4	121.7	1.21	2.84	3.88	GSM-900
	Sector States	Airtel	42.5	92.20	3	4	101.2	0.12	0.27	0.04	GSM-900
		Airtel	42.4	102.15	3	10	115.2	0.57	1.35	0.87	UMTS
		Airtel	61.0	104.06	3	10	117.1	0.71	1.17	1.35	UMTS
		Airtel	61.0	105.44	3	10	118.4	0.84	1.37	1.85	UMTS
								1.73	3.64	7.98	

4	2	2	-	-		
Date:	2019/04/05				Antenna:	3AX420M-6G
Signals:	GSM+UMTS+LTE				Analyzer:	SRM-3006
Responsible:	Vaughan Taylor				Weather:	Sunshine, dry
Location:	Copolia				Time:	09:42 - 11:22

	11	10	9	8	1	6	5	4	3	2	
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
									MP2		Point No.
GSM-900	0.02	0.22	0.09	99.3	4	3	90.30	42.5	Airtel		
GSM-900	0.02	0.19	0.08	97.9	4	3	88.92	42.5	Airtel		
GSM-900	0.22	0.68	0.29	109.2	4	3	100.18	42.5	Airtel		
UMTS	0.11	0.47	0.20	106.0	10	3	92.98	42.4	Airtel		
UMTS	0.04	0.30	0.13	102.2	10	3	89.18	42.4	Airtel		
UMTS	0.02	0.22	0.10	99.6	10	3	86.56	42.4	Airtel		
UMTS	2.05	1.44	0.88	118.9	10	3	105.89	61.0	Airtel		
UMTS	0.56	0.76	0.46	113.3	10	3	100.27	61.0	Airtel		
UMTS	1.09	1.05	0.64	116.1	10	3	103.13	61.0	Airtel		
UMTS	2.20	1.49	0.91	119.2	10	3	106.18	61.0	Airtel		
UMTS	1.30	1.15	0.70	116.9	10	3	103.89	61.0	Airtel		
UMTS	0.75	0.87	0.53	114.5	10	3	101.49	61.0	Airtel		
LTE	1.61	1.99	0.78	117.8	600	3	87.06	39.3	Airtel		
LTE	3.64	2.00	1.17	121.4	600	3	90.59	58.6	Airtel		
	13.63	4.11	2.27								

 Location:
 Copolia
 Time:
 09:42 - 11:22

 Responsible:
 Vaughan Taylor
 Weather:
 Sunshine, dry

 Signals:
 GSM+UMTS+LTE
 Analyzer:
 SRM-3006

 Date:
 2019/04/05
 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	wred) Meas. Uncert. /m] [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP3									
		Airtel	42.5	104.00	3	4	113.0	0.45	1.05	0.53	GSM-900
		Airtel	42.5	88.27	3	4	97.3	0.07	0.17	0.01	GSM-900
		Airtel	42.5	107.50	3	4	116.5	0.67	1.58	1.19	GSM-900
		Airtel	42.4	97.96	3	10	111.0	0.35	0.83	0.33	UMTS
		Airtel	42.4	82.15	3	10	95.2	0.06	0.14	0.01	UMTS
		Airtel	61.0	107.42	3	10	120.4	1.05	1.72	2.92	UMTS
		Airtel	61.0	98.13	3	10	111.1	0.36	0.59	0.34	UMTS
		Airtel	61.0	91.57	3	10	104.6	0.17	0.28	0.08	UMTS
		Airtel	61.0	109.27	3	10	122.3	1.30	2.13	4.47	UMTS
			61.0	98.06	3	10	111.1	0.36	0.59	0.34	UMTS
			61.0	93.11	3	10	106.1	0.20	0.33	0.11	UMTS
		Airtel	39.3	85.08	3	600	115.9	0.62	1.58	1.02	LTE
100 A 10		Airtel	58.6	82.75	3	600	113.5	0.47	0.81	0.60	LTE
								2.12	3.98	11.96	

6.2.19 Roche Caiman (CWS/Airtel)

Location: Roche Caiman-1 Responsible: Vaughan Taylor Signals: GSM+UMTS+LTE Date: 2019/04/05
 Time:
 14:40 - 15:50

 Weather:
 Partly cloudy, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
									RC1 MP1		Point No.
GSM-900	0.02	0.21	0.09	99.0	4	3	90.00	42.5	Airtel		
GSM-900	1.54	1.79	0.76	117.6	4	3	108.62	42.5	Airtel		
GSM-900	0.41	0.93	0.39	111.9	4	3	102.90	42.5	Airtel		
GSM-900	0.00	0.09	0.04	91.7	4	3	82.64	42.5	Airtel		
GSM-900	0.19	0.63	0.27	108.5	4	3	99.46	42.1	CWS		
GSM-900	0.24	0.71	0.30	109.5	4	3	100.50	42.1	CWS		
GSM-900	0.01	0.12	0.05	94.3	4	3	85.29	42.1	CWS		
UMTS	0.49	1.01	0.43	112.6	10	3	99.63	42.4	Airtel		
UMTS	0.16	0.58	0.25	107.8	10	3	94.83	42.4	Airtel		
UMTS	0.01	0.17	0.07	97.1	10	3	84.13	42.4	Airtel		
UMTS	0.03	0.26	0.11	100.7	10	3	87.71	42.4	Airtel		
UMTS	0.03	0.18	0.11	100.8	10	3	87.81	61.0	Airtel		
UMTS	0.01	0.08	0.05	94.2	10	3	81.20	61.0	Airtel		
UMTS	0.03	0.18	0.11	100.7	10	3	87.72	61.0	Airtel		
UMTS	0.01	0.08	0.05	93.4	10	3	80.36	61.0	Airtel		
UMTS	0.01	0.08	0.05	93.7	10	3	80.71	61.0	Airtel		
UMTS	0.15	0.40	0.24	107.7	10	3	94.66	61.0	CWS		
UMTS	0.04	0.20	0.12	101.6	10	3	88.56	61.0	CWS		
UMTS	0.27	0.53	0.32	110.2	10	3	97.15	61.0	CWS		
UMTS	0.13	0.36	0.22	106.9	10	3	93.90	61.0	CWS	친, 않 감, 문 !	
UMTS	0.01	0.10	0.06	95.7	10	3	82.65	61.0	CWS		
UMTS	0.18	0.43	0.26	108.3	10	3	95.28	61.0	CWS		
UMTS	0.01	0.08	0.05	93.8	10	3	80.83	61.0	CWS		
UMTS	0.08	0.29	0.18	104.9	10	3	91.91	61.0	CWS		
UMTS	0.03	0.19	0.11	101.2	10	3	88.19	61.0	CWS		
UMTS	0.60	0.78	0.48	113.5	10	3	100.54	61.0	CWS		
UMTS	0.11	0.34	0.21	106.4	10	3	93.37	61.0	CWS		
LTE	0.59	1.21	0.47	113.5	600	3	82.71	39.0	CWS		
LTE	0.59	0.81	0.47	113.5	600	3	82.70	58.6	Airtel	San Institute of the	
	5.99	3.22	1.50								

179

Location:Roche Caiman-1Responsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/05

 Time:
 14:40 - 15:50

 Weather:
 Partly cloudy, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	1
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No		RC1 MP2						-			
		Airtel	42.5	103.97	3	4	113.0	0.45	1.05	0.53	GSM-900
		Airtel	42.5	106.86	3	4	115.9	0.62	1.47	1.03	GSM-900
	distants ette	Airtel	42.5	108.75	3	4	117.8	0.77	1.82	1.59	GSM-900
		Airtel	42.5	89.78	3	4	98.8	0.09	0.21	0.02	GSM-900
		CWS	42.1	104.99	3	4	114.0	0.50	1.19	0.67	GSM-900
		CWS	42.1	89.53	3	4	98.6	0.08	0.20	0.02	GSM-900
		CWS	42.1	89.72	3	4	98.7	0.09	0.21	0.02	GSM-900
		Airtel	42.4	102.12	3	10	115.1	0.57	1.35	0.86	UMTS
		Airtel	42.4	96.64	3	10	109.6	0.30	0.72	0.24	UMTS
		Airtel	42.4	90.98	3	10	104.0	0.16	0.37	0.07	UMTS
		CWS	61.0	114.69	3	10	127.7	2.42	3.97	15.58	UMTS
		CWS	61.0	97.23	3	10	110.2	0.32	0.53	0.28	UMTS
		CWS	61.0	100.10	3	10	113.1	0.45	0.74	0.54	UMTS
		CWS	61.0	83.23	3	10	96.2	0.06	0.11	0.01	UMTS
		CWS	61.0	81.71	3	10	94.7	0.05	0.09	0.01	UMTS
		CWS	61.0	95.87	3	10	108.9	0.28	0.46	0.20	UMTS
		CWS	61.0	88.33	3	10	101.3	0.12	0.19	0.04	UMTS
	والمحج والمحج والمحج	CWS	39.0	82.10	3	600	112.9	0.44	1.13	0.52	LTE
								2.89	5.36	22.22	

Location:Roche Caiman-2Responsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/05

Time:	15:55 - 16:30
Weather:	Partly cloudy, dry
Analyzer:	SRM-3006
Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max.emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		RC2 MP1									
		Airtel	42.5	108.30	3	4	117.3	0.73	1.73	1.43	GSM-900
		Airtel	42.5	107.35	3	4	116.4	0.66	1.55	1.15	GSM-90
		Airtel	42.1	99.72	3	4	108.7	0.27	0.65	0.20	GSM-900
		CWS	42.1	81.06	3	4	90.1	0.03	0.08	0.00	GSM-900
		CWS	42.1	109.15	3	4	118.2	0.81	1.92	1.74	GSM-900
		CWS	42.1	101.43	3	4	110.5	0.33	0.79	0.29	GSM-900
		Airtel	42.4	101.73	3	10	114.7	0.55	1.29	0.79	UMTS
		Airtel	42.4	98.07	3	10	111.1	0.36	0.84	0.34	UMTS
		CWS	61.0	102.05	3	10	115.1	0.57	0.93	0.85	UMTS
		CWS	61.0	87.01	3	10	100.0	0.10	0.16	0.03	UMTS
		CWS	61.0	90.01	3	10	103.0	0.14	0.23	0.05	UMTS
		CWS	61.0	89.81	3	10	102.8	0.14	0.23	0.05	UMTS
		CWS	61.0	95.44	3	10	108.4	0.26	0.43	0.19	UMTS
		CWS	61.0	102.75	3	10	115.8	0.61	1.01	1.00	UMTS
		CWS	61.0	94.97	3	10	108.0	0.25	0.41	0.17	UMTS
		CWS	61.0	88.22	3	10	101.2	0.12	0.19	0.04	UMTS
	33. 문제작품 [CWS	61.0	83.97	3	10	97.0	0.07	0.12	0.01	UMTS
	Constitution of the	CWS	61.0	92.97	3	10	106.0	0.20	0.33	0.10	UMTS
	김상 같은 것이다.	CWS	61.0	101.61	3	10	114.6	0.54	0.88	0.77	UMTS
		CWS	61.0	93.81	3	10	106.8	0.22	0.36	0.13	UMTS
		CWS	39.0	82.02	3	600	112.8	0.44	1.12	0.51	LTE
	및 '도통(통) (종)	CWS	39.0	86.73	3	600	117.5	0.75	1.92	1.50	LTE
		Airtel	58.6	83.35	3	600	114.1	0.51	0.87	0.69	LTE
		Airtel	58.6	80.34	3	600	111.1	0.36	0.61	0.34	LTE
								2.16	4.69	12.35	

Location:Roche Caiman-2Responsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/05

 Time:
 15:55 - 16:30

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	1
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		RC2 MP2									
		Airtel	42.5	113.74	3	4	122.8	1.37	3.23	5.01	GSM-90
	공기 공동 영남 중 (Airtel	42.5	102.10	3	4	111.1	0.36	0.85	0.34	GSM-90
		Airtel	42.5	113.18	3	4	122.2	1.29	3.03	4.40	GSM-900
		Airtel	42.5	87.95	3	4	97.0	0.07	0.17	0.01	GSM-900
		CWS	42.1	100.32	3	4	109.3	0.29	0.70	0.23	GSM-900
		CWS	42.1	83.93	3	4	93.0	0.04	0.11	0.01	GSM-900
		CWS	42.1	108.87	3	4	117.9	0.78	1.86	1.63	GSM-900
		CWS	42.1	97.96	3	4	107.0	0.22	0.53	0.13	GSM-900
	을 다 물건을 다.	Airtel	42.4	102.93	3	10	115.9	0.63	1.48	1.04	UMTS
		Airtel	42.4	96.41	3	10	109.4	0.30	0.70	0.23	UMTS
		Airtel	61.0	81.88	3	10	94.9	0.06	0.09	0.01	UMTS
		Airtel	61.0	84.91	3	10	97.9	0.08	0.13	0.02	UMTS
		CWS	61.0	89.24	3	10	102.2	0.13	0.21	0.04	UMTS
	~~ 물건 물이 걸	CWS	61.0	85.58	3	10	98.6	0.08	0.14	0.02	UMTS
	등 영문 문제	CWS	61.0	92.95	3	10	106.0	0.20	0.33	0.10	UMTS
		CWS	61.0	84.38	3	10	97.4	0.07	0.12	0.01	UMTS
		CWS	61.0	92.45	3	10	105.5	0.19	0.31	0.09	UMTS
		CWS	61.0	85.90	3	10	98.9	0.09	0.14	0.02	UMTS
		CWS	61.0	81.42	3	10	94.4	0.05	0.09	0.01	UMTS
		CWS	61.0	85.11	3	10	98.1	0.08	0.13	0.02	UMTS
		CWS	61.0	84.62	3	10	97.6	0.08	0.12	0.02	UMTS
		CWS	61.0	92.37	3	10	105.4	0.19	0.30	0.09	UMTS
		Airtel	58.6	85.57	3	600	116.4	0.66	1.12	1.15	LTE
		Airtel	58.6	83.20	3	600	114.0	0.50	0.85	0.66	LTE
								2.40	5.45	15.30	

6.2.20 Sunshine House (CWS)

Location:	Sunshine House (CWS)	Time:	13:33 - 13:57
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/11	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.5	98.18	3	4	107.2	0.23	0.54	0.14	GSM-900
		Airtel	42.5	84.47	3	4	93.5	0.05	0.11	0.01	GSM-900
		CWS	42.1	116.25	3	4	125.3	1.83	4.35	8.93	GSM-900
		CWS	42.1	110.32	3	4	119.3	0.93	2.20	2.28	GSM-900
		CWS	42.1	99.23	3	4	108.3	0.26	0.61	0.18	GSM-900
		Airtel	42.4	84.90	3	10	97.9	0.08	0.19	0.02	UMTS
		CWS	61.0	105.63	3	10	118.6	0.85	1.40	1.93	UMTS
		CWS	61.0	101.85	3	10	114.9	0.55	0.91	0.81	UMTS
		CWS	61.0	106.84	3	10	119.8	0.98	1.61	2.56	UMTS
		CWS	61.0	101.74	3	10	114.7	0.55	0.89	0.79	UMTS
		CWS	61.0	83.04	3	10	96.0	0.06	0.10	0.01	UMTS
		CWS	39.0	87.26	3	600	118.0	0.80	2.04	1.69	LTE
		CWS	39.0	89.29	3	600	120.1	1.01	2.58	2.70	LTE
								2.88	6.45	22.03	

Location:Sunshine House (CWS)Responsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/11

Time:	13:33 - 13:57
Weather:	Sunshine, dry
Analyzer:	SRM-3006
Antenna:	3AX420M-6G

R	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
									MP2		Point No.
GSM-900	0.03	0.23	0.10	99.8	4	3	90.78	42.5	Airtel		
GSM-900	0.00	0.08	0.04	91.0	4	3	81.97	42.5	Airtel		
GSM-900	38.79	9.08	3.82	131.7	4	3	122.63	42.1	CWS		
GSM-900	1.65	1.87	0.79	117.9	4	3	108.92	42.1	CWS		
GSM-900	8.76	4.32	1.82	125.2	4	3	116.17	42.1	CWS		
UMTS	0.02	0.22	0.09	99.5	10	3	86.53	42.4	Airtel		
UMTS	0.33	0.58	0.35	111.0	10	3	97.99	61.0	CWS		
UMTS	0.63	0.80	0.49	113.8	10	3	100.75	61.0	CWS		
UMTS	1.53	1.25	0.76	117.6	10	3	104.61	61.0	CWS		
UMTS	2.94	1.73	1.05	120.5	10	3	107.45	61.0	CWS		
UMTS	0.45	0.67	0.41	112.3	10	3	99.29	61.0	CWS		
UMTS	0.85	0.93	0.57	115.1	10	3	102.07	61.0	CWS		
LTE	3.92	3.11	1.21	121.7	600	3	90.91	39.0	CWS		
LTE	7.29	4.25	1.66	124.4	600	3	93.61	39.0	CWS		
LTE	1.52	1.94	0.76	117.6	600	3	86.79	39.0	CWS		
	68.72	11.96	5.09								

6.2.21 Seychelles International Airport (CWS/Airtel)

cation: sponsible: gnals: ite:		irport (Main Term E	,				Time: Weather: Analyzer: Antenna:	09:48 - 11-51 Sunshine, dry SRM-3006 3AX420M-6G			
1	2	3	4	5	6	7	8	9	10	11	1
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
	A DESCRIPTION OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER	Airtel	42.5	104.24	3	4	113.3	0.46	1.08	0.56	GSM-90
		Airtel	42.5	108.72	3	4	117.7	0.77	1.81	1.58	GSM-90
		Airtel	42.6	107.47	3	4	116.5	0.67	1.57	1.18	GSM-90
		CWS	42.1	115.11	3	4	124.1	1.61	3.82	6.87	GSM-90
		CWS	42.1	101.64	3	4	110.7	0.34	0.81	0.31	GSM-90
		CWS	42.1	99.54	3	4	108.6	0.27	0.64	0.19	GSM-90
		Airtel	42.4	103.66	3	10	116.7	0.68	1.61	1.23	UMTS
		Airtel	42.4	95.83	3	10	108.8	0.28	0.65	0.20	UMTS
		Airtel	42.4	98.17	3	10	111.2	0.36	0.85	0.35	UMTS
		Airtel	42.4	95.13	3	10	108.1	0.25	0.60	0.17	UMTS
		Airtel	42.4	88.82	3	10	101.8	0.12	0.29	0.04	UMTS
		Airtel	61.0	101.59	3	10	114.6	0.54	0.88	0.76	UMTS
		Airtel	61.0	106.60	3	10	119.6	0.95	1.57	2.42	UMTS
		Airtel	61.0	94.86	3	10	107.9	0.25	0.41	0.16	UMTS
		Airtel	61.0	90.43	3	10	103.4	0.15	0.24	0.06	UMTS
		Airtel	61.0	102.07	3	10	115.1	0.57	0.93	0.85	UMTS
		Airtel	61.0	107.47	3	10	120.5	1.06	1.73	2.96	UMTS
		Airtel	61.0	92.10	3	10	105.1	0.18	0.29	0.09	UMTS
		Airtel	61.0	95.86	3	10	108.9	0.28	0.45	0.20	UMTS
		CWS	61.0	105.94	3	10	118.9	0.89	1.45	2.08	UMTS
		CWS	61.0	93.93	3	10	106.9	0.22	0.36	0.13	UMTS
		CWS	61.0	90.81	3	10	103.8	0.16	0.25	0.06	UMTS
		CWS	61.0	105.50	3	10	118.5	0.84	1.38	1.88	UMTS
		CWS	61.0	96.72	3	10	109.7	0.31	0.50	0.25	UMTS
		CWS	61.0	96.16	3	10	109.2	0.29	0.47	0.22	UMTS
		CWS	61.0	95.65	3	10	108.7	0.27	0.44	0.19	UMTS
		CWS	39.0	97,09	3	600	127.9	2.48	6.34	16.25	LTE
		CWS	39.0	80.38	3	600	111.2	0.36	0.93	0.35	LTE
		Airtel	39.3	89.40	3	600	120.2	1.02	2.60	2.77	LTE
		Airtel	58.6	91.88	3	600	122.7	1.36	2.32	4.90	LTE
		Airtel	58.6	86.76	3	600	117.5	0.75	1.29	1.51	LTE

Location:	Seychelles Intl Airport (Main Term.)	Time:	09:48 - 11-51	
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry	
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006	
Date:	11/04/2019	Antenna:	3AX420M-6G	

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
									MP2		Point No.
GSM	24.53	7.16	3.04	129.7	4	3	120.64	42.5	Airtel		
GSM	0.30	0.79	0.33	110.5	4	3	101.45	42.5	Airtel		
GSM	0.04	0.30	0.13	102.3	4	3	93.23	42.6	Airtel		
GSM	0.04	0.29	0.12	101.7	4	3	92.72	42.1	CWS		
GSM	1.50	1.78	0.75	117.5	4	3	108.49	42.1	CWS		
GSM	0.02	0.22	0.09	99.5	4	3	90.45	42.1	CWS		
UM	20.97	6.63	2.81	129.0	10	3	115.98	42.4	Airtel		
UM	0.06	0.35	0.15	103.4	10	3	90.40	42.4	Airtel		
UM	16.21	4.05	2.47	127.9	10	3	114.86	61.0	Airtel		
UM	13.70	3.73	2.27	127.1	10	3	114.13	61.0	Airtel		
UM	0.03	0.18	0.11	100.8	10	3	87.77	61.0	Airtel		
UM	0.01	0.09	0.05	94.3	10	3	81.31	61.0	Airtel		
UM	0.10	0.32	0.19	105.7	10	3	92.72	61.0	CWS		
UM	0.02	0.15	0.09	99.4	10	3	86.44	61.0	CWS		
UM	0.01	0.12	0.07	97.0	10	3	83.97	61.0	CWS		
UM	0.07	0.27	0.16	104.3	10	3	91.27	61.0	CWS		
UM	0.01	0.10	0.06	95.8	10	3	82.83	61.0	CWS		
UM	0.03	0.16	0.10	99.8	10	3	86.79	61.0	CWS		
UM	0.10	0.32	0.20	105.8	10	3	92.81	61.0	CWS		
LT	2.21	2.34	0.91	119.2	600	3	88.42	39.0	CWS		
LT	0.47	1.07	0.42	112.5	600	3	81.70	39.3	Airtel		
LT	0.32	0.60	0.35	110.9	600	3	80.07	58.6	Airtel		
	80.75	11.71	5.52								

Location:	Seychelles Intl Airport (Main Term.)	Time:	09:48 - 11-51
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	11/04/2019	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP3		1							1
		Airtel	42.5	102.55	3	4	111.6	0.38	0.89	0.38	GSM-900
		Airtel	42.5	90.53	3	4	99.6	0.09	0.22	0.02	GSM-900
		Airtel	42.6	84.97	3	4	94.0	0.05	0.12	0.01	GSM-900
		CWS	42.1	99.80	3	4	108.8	0.28	0.66	0.20	GSM-900
		Airtel	42.4	95.26	3	10	108.3	0.26	0.61	0.18	UMTS
		Airtel	42.4	84.44	3	10	97.4	0.07	0.18	0.01	UMTS
		Airtel	42.4	82.80	3	10	95.8	0.06	0.15	0.01	UMTS
		Airtel	61.0	97.71	3	10	110.7	0.34	0.56	0.31	UMTS
		Airtel	61.0	97.90	3	10	110.9	0.35	0.58	0.33	UMTS
		CWS	61.0	88.15	3	10	101.2	0.11	0.19	0.03	UMTS
		CWS	61.0	88.50	3	10	101.5	0.12	0.19	0.04	UMTS
		CWS	61.0	89.55	3	10	102.6	0.13	0.22	0.05	UMTS
							S	0.77	1.58	1.57	

Location:	Seychelles Intl Airport (Main Term.)	Time:	09:48 - 11-51
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	11/04/2019	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP4									
		Airtel	42.5	96.01	3	4	105.0	0.18	0.42	0.08	GSM-90
		Airtel	42.5	99.39	3	4	108.4	0.26	0.62	0.18	GSM-90
		Airtel	42.6	99.54	3	4	108.6	0.27	0.63	0.19	GSM-900
		CWS	42.1	103.01	3	4	112.0	0.40	0.95	0.42	GSM-900
		CWS	42.1	90.53	3	4	99.6	0.09	0.23	0.02	GSM-900
		CWS	42.1	94.80	3	4	103.8	0.16	0.37	0.06	GSM-900
		Airtel	42.4	97.51	3	10	110.5	0.34	0.79	0.30	UMTS
		Airtel	42.4	87.16	3	10	100.2	0.10	0.24	0.03	UMTS
		Airtel	42.4	89.19	3	10	102.2	0.13	0.30	0.04	UMTS
		Airtel	42.4	90.90	3	10	103.9	0.16	0.37	0.07	UMTS
		Airtel	42.4	81.23	3	10	94.2	0.05	0.12	0.01	UMTS
		Airtel	61.0	94.46	3	10	107.5	0.24	0.39	0.15	UMTS
		Airtel	61.0	91.35	3	10	104.4	0.17	0.27	0.07	UMTS
		Airtel	61.0	88.04	3	10	101.0	0.11	0.18	0.03	UMTS
		Airtel	61.0	82.44	3	10	95.4	0.06	0.10	0.01	UMTS
		Airtel	61.0	93.58	3	10	106.6	0.21	0.35	0.12	UMTS
	영생 비밀망	Airtel	61.0	94.24	3	10	107.2	0.23	0.38	0.14	UMTS
	그는 것이 같아요.	Airtel	61.0	86.70	3	10	99.7	0.10	0.16	0.02	UMTS
		Airtel	61.0	83.96	3	10	97.0	0.07	0.12	0.01	UMTS
		CWS	61.0	98.72	3	10	111.7	0.39	0.63	0.39	UMTS
		CWS	61.0	96.71	3	10	109.7	0.31	0.50	0.25	UMTS
		CWS	61.0	80.31	3	10	93.3	0.05	0.08	0.01	UMTS
	김 김 씨랑 그에	CWS	61.0	80.91	3	10	93.9	0.05	0.08	0.01	UMTS
		Airtel	39.3	89.40	3	600	120.2	1.02	2.60	2.77	LTE
								1.43	3.31	5.39	

Location:	Seychelles Int. Airport (Domestic term.)	Time:	14:30 - 14:54
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	11/04/2019	Antenna:	3AX420M-6G

	2.72	10	9	8	7	6	5	4	3	2	1
		i i mit	mil (dB) emission (dB)/(m) D/(m) Limit (m)/(m)	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]			
-									MP1		Point No.
GSM-9	2.72	2.38	1.01	120.1	4	3	111.09	42.5	Airtel		
GSM-9	0.44	0.96	0.41	112.2	4	3	103.21	42.4	Airtel		
GSM-9	0.34	0.84	0.36	111.0	4	3	102.01	42.5	Airtel		
GSM-9	0.14	0.54	0.23	107.3	4	3	98.25	42.5	Airtel		
GSM-9	0.03	0.24	0.10	100.3	4	3	91.23	42.1	CWS		
UMT	2.19	2.14	0.91	119.2	10	3	106.16	42.4	Airtel		
UMT	0.21	0.67	0.28	109.1	10	3	96.07	42.4	Airtel		
UMT	0.03	0.27	0.11	101.1	10	3	88.12	42.4	Airtel		
UMT	0.93	0.97	0.59	115.5	10	3	102.45	61.0	Airtel		
UMT	0.29	0.54	0.33	110.4	10	3	97.41	61.0	Airtel		
UMT	0.02	0.14	0.09	98.9	10	3	85.88	61.0	Airtel		
UMT	2.27	1.52	0.93	119.3	10	3	106.33	61.0	Airtel		
UMT	0.42	0.65	0.40	112.0	10	3	99.03	61.0	Airtel		
UMT	0.06	0.25	0.15	103.5	10	3	90.51	61.0	Airtel		
UMT	0.01	0.12	0.07	97.3	10	3	84.28	61.0	CWS		
UMT	0.02	0.14	0.09	98.7	10	3	85.66	61.0	CWS		
UMT	0.01	0.11	0.07	96.6	10	3	83.63	61.0	CWS	에도의 무너지 않는	
LTE	4.04	3.14	1.23	121.8	600	3	91.05	39.3	Airtel		
- 0	14.19	5.17	2.31								

Responsible: Vaughan Taylor Signals: GSM+UMTS+LTE Date: 11/04/2019	Location:	Seychelles Intl Airport (Domestic Term.)
	Responsible:	Vaughan Taylor
Date: 11/04/2019	Signals:	GSM+UMTS+LTE
	Date:	11/04/2019

Time:14:30 - 14:54Weather:Sunshine, dryAnalyzer:SRM-3006Antenna:3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]		Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
									MP2		Point No.
GSM-900	3.63	2.75	1.17	121.4	4	3	112.34	42.5	Airtel		
GSM-900	1.65	1.86	0.79	117.9	4	3	108.91	42.4	Airtel		
GSM-900	0.14	0.54	0.23	107.3	4	3	98.28	42.5	Airtel		
GSM-900	0.63	1.15	0.49	113.8	4	3	104.77	42.5	Airtel		
GSM-900	0.02	0.18	0.08	97.6	4	3	88.57	42.1	CWS		
UMTS	1.37	1.70	0.72	117.1	10	3	104.13	42.4	Airtel		
UMTS	0.76	1.26	0.53	114.6	10	3	101.55	42.4	Airtel		
UMTS	5.59	2.38	1.45	123.2	10	3	110.24	61.0	Airtel		
UMTS	1.78	1.34	0.82	118.3	10	3	105.26	61.0	Airtel		
UMTS	5.90	2.44	1.49	123.5	10	3	110.47	61.0	Airtel		
UMTS	1.69	1.31	0.80	118.1	10	3	105.05	61.0	Airtel		
LTE	21.82	7.30	2.87	129.2	600	3	98.37	39.3	Airtel		
LTE	3.69	3.00	1.18	121.4	600	3	90.65	39.3	Airtel		
	48.66	9.73	4.28								

6.2.22 Port Launay (Airtel)

4	2	2	4	5	6	7	0		40	
Date:	2019/04/13						Antenna:	3AX420M-6G		
Signals:	GSM+UMTS+LTE						Analyzer:	SRM-3006		
Responsible:							Weather:	Sunshine, dry		
Location:	Port Launay						Time:	10:33 - 11:00		

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
		Airtel	41.7	102.86	3	4	111.9	0.39	0.94	0.41	GSM-900
		Airtel	41.7	98.86	3	4	107.9	0.25	0.59	0.16	GSM-900
		Airtel	41.7	90.29	3	4	99.3	0.09	0.22	0.02	GSM-900
		CWS	41.7	85.44	3	4	94.5	0.05	0.13	0.01	GSM-900
		CWS	41.7	85.27	3	4	94.3	0.05	0.12	0.01	GSM-900
	문 방법 국왕 문입	Airtel	41.7	96.16	3	10	109.2	0.29	0.69	0.22	UMTS
		Airtel	41.7	87.14	3	10	100.1	0.10	0.24	0.03	UMTS
		Airtel	61.0	93.82	3	10	106.8	0.22	0.36	0.13	UMTS
		Airtel	61.0	82.75	3	10	95.8	0.06	0.10	0.01	UMTS
								0.61	1.41	0.99	

Location:Port LaunayResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/13

Time:10:33 - 11:00Weather:Sunshine, dryAnalyzer:SRM-3006Antenna:3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11			
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]		imit	IdBl emission IdBuV/ml IV/ml Limit ImW//	IdBl emission IdBuV/ml IV/ml Limit			BuV/m1 D//m1	Limit	Smax [mW/m²]	
Point No.		MP2											
		Airtel	41.7	99.85	3	4	108.9	0.28	0.67	0.20	GSM-900		
		Airtel	41.7	102.15	3	4	111.2	0.36	0.87	0.35	GSM-900		
		Airtel	41.7	94.21	3	4	103.2	0.15	0.35	0.06	GSM-900		
		CWS	41.7	80.94	3	4	90.0	0.03	0.08	0.00	GSM-900		
		CWS	41.7	83.06	3	4	92.1	0.04	0.10	0.00	GSM-900		
	비 분석 문화 경망이	Airtel	41.7	94.03	3	10	107.0	0.22	0.54	0.13	UMTS		
		Airtel	41.7	95.17	3	10	108.2	0.26	0.61	0.17	UMTS		
		Airtel	41.7	95.97	3	10	109.0	0.28	0.67	0.21	UMTS		
		Airtel	61.0	101.18	3	10	114.2	0.51	0.84	0.69	UMTS		
		Airtel	61.0	100.62	3	10	113.6	0.48	0.79	0.61	UMTS		
		Airtel	61.0	96.66	3	10	109.7	0.30	0.50	0.25	UMTS		
带上的空气		Airtel	39.2	82.27	3	600	113. 1	0.45	1.15	0.54	LTE		
							_	1.10	2.31	3.22	~		

6.2.23 Grand Anse – Praslin (CWS/Airtel)

Location:	Grand Anse, Praslin	Time:	09:31 - 10:14
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/16	Antenna:	3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1	
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]			Meas. Uncert. F [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
									MP1		Point No.	
GSM	0.12	0.50	0.21	106.6	4	3	97.58	42.5	Airtel			
GSM	0.12	0.49	0.21	106.4	4	3	97.42	42.5	Airtel			
GSM	0.05	0.34	0.14	103.1	4	3	94.09	42.5	Airtel	회사는 관계적이		
GSM	0.20	0.65	0.27	108.7	4	3	99.66	42.1	CWS	양말을 만들었		
GSM	0.22	0.69	0.29	109.3	4	3	100.24	42.1	CWS	이 이 것 이 것 같아.		
GSM	0.01	0.16	0.07	96.7	4	3	87.68	42.1	CWS	이 물건 알고 말을		
UM	0.04	0.29	0.12	101.9	10	3	88.90	42.4	Airtel			
UM	0.01	0.16	0.07	96.8	10	3	83.78	42.4	Airtel			
UM	0.02	0.19	0.08	98.2	10	3	85.24	42.4	Airtel			
UM	0.16	0.41	0.25	107.9	10	3	94.93	61.0	Airtel			
UM	0.11	0.34	0.20	106.2	10	3	93.21	61.0	Airtel			
UM	0.04	0.21	0.13	102.0	10	3	88.98	61.0	Airtel			
UM	1.78	1.34	0.82	118.3	10	3	105.26	61.0	CWS			
UM	0.01	0.12	0.07	97.0	10	3	84.04	61.0	CWS			
LT	0.39	0.98	0.38	111.7	600	3	80.87	39.0	CWS		i si si .	
	3.29	2.19	1.11	140								

Location:Grand Anse, PraslinResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/16

 Time:
 09:31 - 10:14

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

Í	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	f [MHz]
									MP2		Point No.
GSM-900	0.09	0.43	0.18	105.2	4	3	96.13	42.5	Airtel		
GSM-900	0.05	0.31	0.13	102.3	4	3	93.28	42.5	Airtel		
GSM-900	0.09	0.43	0.18	105.2	4	3	96.21	42.5	Airtel		
GSM-900	0.47	1.00	0.42	112.5	4	3	103.48	42.1	CWS		
GSM-900	0.25	0.73	0.31	109.8	4	3	100.76	42.1	CWS		
GSM-900	0.02	0.20	0.09	98.7	4	3	89.67	42.1	CWS		
UMTS	0.01	0.12	0.05	93.9	10	3	80.91	42.4	Airtel		
UMTS	0.02	0.20	0.08	98.6	10	3	85.58	42.4	Airtel		
UMTS	0.01	0.17	0.07	97.1	10	3	84.12	42.4	Airtel		
UMTS	0.02	0.15	0.09	99.2	10	3	86.24	61.0	Airtel		
UMTS	0.20	0.45	0.28	108.8	10	3	95.81	61.0	Airtel		
UMTS	0.10	0.32	0.20	105.9	10	3	92.86	61.0	Airtel		
UMTS	2.41	1.56	0.95	119.6	10	3	106.59	61.0	CWS		
UMTS	0.21	0.46	0.28	109.1	10	3	96.05	61.0	CWS		
UMTS	0.02	0.13	0.08	98.0	10	3	85.03	61.0	CWS		
	3.97	2.27	1.22								

Location:Grand Anse. PraslinResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/16

Time:	09:31 - 10:14
Weather:	Sunshine, dry
Analyzer:	SRM-3006
Antenna:	3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+No of MIMO path (LTE)	f [MHz]
									MP3		Point No.
GSM-9	0.41	0.92	0.39	111.9	4	3	102.83	42.5	Airtel		
GSM-9	0.12	0.50	0.21	106.5	4	3	97.48	42.5	Airtel	지 않는 것이 같이 많이 많이 많이 많이 많이 했다.	
GSM-9	0.06	0.37	0.16	103.8	4	3	94.81	42.5	Airtel		
GSM-9	0.26	0.74	0.31	109.9	4	3	100.89	42.1	CWS		
GSM-9	0.99	1.45	0.61	115.7	4	3	106.68	42.1	CWS		
GSM-9	0.03	0.24	0.10	100.1	4	3	91.05	42.1	CWS		
UMTS	0.19	0.63	0.27	108.6	10	3	95.56	42.4	Airtel		
UMTS	0.02	0.22	0.09	99.5	10	3	86.50	42.4	Airtel	집에 알고 같을	
UMTS	0.02	0.19	0.08	98.1	10	3	85.12	42.4	Airtel		
UMTS	0.09	0.29	0.18	105.1	10	3	92.07	61.0	Airtel		
UMTS	0.02	0.13	0.08	97.7	10	3	84.67	61.0	Airtel		
UMTS	0.04	0.20	0.12	101.7	10	3	88.66	61.0	Airtel		
UMTS	1.08	1.05	0.64	116.1	10	3	103.10	61.0	CWS		
UMTS	0.24	0.49	0.30	109.5	10	3	96.50	61.0	CWS		
UMTS	0.01	0.12	0.07	97.2	10	3	84.15	61.0	CWS		
UMTS	0.05	0.23	0.14	102.8	10	3	89.77	61.0	CWS		
LTE	0.75	1.36	0.53	114.5	600	3	83.74	39.0	CWS		
LTE	1.20	1.72	0.67	116.6	600	3	85.77	39.0	CWS		
LTE	0.33	0.61	0.36	111.0	600	3	80.23	58.6	Airtel		
LTE	0.33	0.61	0.36	111.0	600	3	80.23	58.6	Airtel		
	6.23	3.39	1.53				[

Location:Grand Anse, PraslinResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/16

 Time:
 09:31 - 10:14

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	6
f [MHz]	Scr. Code (UMTS) / Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP4									
		Airtel	42.5	85.31	3	4	94.3	0.05	0.12	0.01	GSM-900
		Airtel	42.5	100.80	3	4	109.8	0.31	0.73	0.25	GSM-900
		Airtel	42.5	107.01	3	4	116.0	0.63	1.49	1.06	GSM-900
		CWS	42.1	88.29	3	4	97.3	0.07	0.17	0.01	GSM-900
		CWS	42.1	103.82	3	4	112.8	0.44	1.04	0.51	GSM-900
		CWS	42.1	105.02	3	4	114.0	0.50	1.20	0.67	GSM-900
		Airtel	42.4	91.45	3	10	104.5	0.17	0.39	0.07	UMTS
		Airtel	42.4	93.10	3	10	106.1	0.20	0.48	0.11	UMTS
		Airtel	61.0	92.27	3	10	105.3	0.18	0.30	0.09	UMTS
		Airtel	61.0	84.77	3	10	97.8	0.08	0.13	0.02	UMTS
		Airtel	61.0	97.33	3	10	110.3	0.33	0.54	0.29	UMTS
		CWS	61.0	97.29	3	10	110.3	0.33	0.54	0.28	UMTS
		CWS	61.0	88.29	3	10	101.3	0.12	0.19	0.04	UMTS
		CWS	61.0	90.72	3	10	103.7	0.15	0.25	0.06	UMTS
		CWS	61.0	92.74	3	10	105.7	0.19	0.32	0.10	UMTS
		CWS	39.0	81.26	3	600	112.0	0.40	1.02	0.42	LTE
		CWS	39.0	84.25	3	600	115.0	0.56	1.45	0.84	LTE
		Airtel	58.6	83.92	3	600	114.7	0.54	0.93	0.78	LTE
		Airtel	58.6	81.61	3	600	112.4	0.42	0.71	0.46	LTE
								1.52	3.33	6.09	

6.2.24 Pt. Cabris - Praslin (CWS/Airtel)

Location:	Pt Cabris, Praslin	Time:	10:54 - 11:48
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/16	Antenna:	3AX420M-6G

	11	10	9	8	7	6	5	4	3	2	1
	Smax [mW/m²]	Emax Limit consumpt. [%]	Emax [V/m]	Emax [dBµV/m]	Factor max. emission	Meas. Uncert. [dB]	E (measured) [dBµV/m]	Limit [V/m]	Operator	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	f [MHz]
									MP1		Point No.
GSM-900	14.25	5.45	2.32	127.3	4	3	118.28	42.5	Airtel		
GSM-900	1.57	1.81	0.77	117.7	4	3	108.70	42.5	Airtel		
GSM-900	0.83	1.32	0.56	115.0	4	3	105.94	42.4	Airtel		
GSM-900	1.11	1.54	0.65	116.2	4	3	107.19	42.1	CWS		
GSM-900	0.02	0.19	0.08	98.1	4	3	89.12	42.1	CWS		
GSM-900	0.06	0.35	0.15	103.3	4	3	94.28	42.1	CWS		
UMTS	7.48	3.96	1.68	124.5	10	3	111.50	42.4	Airtel		
UMTS	0.37	0.88	0.37	111.4	10	3	98.41	42.4	Airtel		
UMTS	0.37	0.89	0.38	111.5	10	3	98.49	42.4	Airtel		
UMTS	0.86	0.93	0.57	115.1	10	3	102.09	61.0	Airtel		
UMTS	0.67	0.83	0.50	114.0	10	3	101.04	61.0	Airtel		
UMTS	0.13	0.36	0.22	106.8	10	3	93.77	61.0	Airtel		
UMTS	0.89	0.95	0.58	115.2	10	3	102.24	61.0	Airtel		
UMTS	1.21	1.11	0.68	116.6	10	3	103.59	61.0	Airtel		
UMTS	0.08	0.29	0.17	104.8	10	3	91.84	61.0	Airtel		
UMTS	0.07	0.27	0.17	104.5	10	3	91.45	61.0	CWS		
UMTS	0.02	0.16	0.10	99.7	10	3	86.71	61.0	CWS		
UMTS	0.01	0.10	0.06	95.6	10	3	82.57	61.0	CWS		
UMTS -	0.02	0.13	0.08	98.1	10	3	85.14	61.0	CWS		
UMTS	0.01	0.10	0.06	95.5	10	3	82.45	61.0	CWS		
UMTS	0.01	0.09	0.05	94.5	10	3	81.54	61.0	CWS		
LTE	5.22	2.40	1.40	122.9	600	3	92.16	58.6	Airtel		
LTE	0.67	0.86	0.50	114.02	600	3	83.24	58.6	Airtel		
	35.91	8.06	3.68								

Location:Pt Cabris, PraslinResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/16

 Time:
 10:54 - 11:48

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	1
f (MHz)	Scr. Code (UMTS)/ Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									
		Airtel	42.5	115.85	3	4	124.9	1.75	4.12	8.14	GSM-90
		Airtel	42.5	107.13	3	4	116.2	0.64	1.51	1.09	GSM-90
		Airtel	42.4	103.19	3	4	112.2	0.41	0.96	0.44	GSM-900
		CWS	42.1	105.37	3	4	114.4	0.52	1.25	0.73	GSM-900
		CWS	42.1	88.32	3	4	97.3	0.07	0.17	0.01	GSM-900
		CWS	42.1	92.65	3	4	101.7	0.12	0.29	0.04	GSM-900
		Airtel	42.4	109.86	3	10	122.9	1.39	3.28	5.12	UMTS
		Airtel	42.4	99.38	3	10	112.4	0.42	0.98	0.46	UMTS
		Airtel	42.4	94.65	3	10	107.7	0.24	0.57	0.15	UMTS
		Airtel	61.0	99.97	3	10	113.0	0.45	0.73	0.53	UMTS
		Airtel	61.0	96.75	3	10	109.8	0.31	0.50	0.25	UMTS
		Airtel	61.0	91.71	3	10	104.7	0.17	0.28	0.08	UMTS
		Airtel	61.0	86.24	3	10	99.2	0.09	0.15	0.02	UMTS
		Airtel	61.0	95.81	3	10	108.8	0.28	0.45	0.20	UMTS
		Airtel	61.0	92.86	3	10	105.9	0.20	0.32	0.10	UMTS
		CWS	61.0	93.87	3	10	106.9	0.22	0.36	0.13	UMTS
		CWS	61.0	85.02	3	10	98.0	0.08	0.13	0.02	UMTS
		CWS	61.0	81.77	3	10	94.8	0.05	0.09	0.01	UMTS
		CWS	61.0	87.99	3	10	101.0	0.11	0.18	0.03	UMTS
		CWS	61.0	83.42	3	10	96.4	0.07	0.11	0.01	UMTS
	그 태양은 말씀 말	CWS	61.0	82.31	3	10	95.3	0.06	0.10	0.01	UMTS
a sources		CWS	39.0	81.53	3	600	112.3	0.41	1.06	0.45	LTE
								2.61	6.04	18.04	

Location:Pt Cabris, PraslinResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/16

Time:	10:54 - 11:48
Weather:	Sunshine, dry
Analyzer:	SRM-3006
Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP3									
		Airtel	42.5	118.95	3	4	128.0	2.50	5.89	16.62	GSM-900
		Airtel	42.5	101.95	3	4	111.0	0.35	0.83	0.33	GSM-90
		Airtel	42.4	110.31	3	4	119.3	0.93	2.18	2.27	GSM-900
		CWS	42.1	100.00	3	4	109.0	0.28	0.67	0.21	GSM-900
		CWS	42.1	85.02	3	4	94.0	0.05	0.12	0.01	GSM-900
		CWS	42.1	92.93	3	4	102.0	0.13	0.30	0.04	GSM-900
		Airtel	42.4	110.67	3	10	123.7	1.53	3.60	6.18	UMTS
		Airtel	42.4	100.51	3	10	113.5	0.47	1.12	0.60	UMTS
		Airtel	42.4	104.64	3	10	117.6	0.76	1.80	1.54	UMTS
		Airtel	61.0	99.79	3	10	112.8	0.44	0.71	0.50	UMTS
		Airtel	61.0	92.81	3	10	105.8	0.20	0.32	0.10	UMTS
		Airtel	61.0	91.22	3	10	104.2	0.16	0.27	0.07	UMTS
		Airtel	61.0	100.59	3	10	113.6	0.48	0.78	0.61	UMTS
		Airtel	61.0	87.61	3	10	100.6	0.11	0.18	0.03	UMTS
		Airtel	61.0	91.75	3	10	104.8	0.17	0.28	0.08	UMTS
		CWS	61.0	90.34	3	10	103.3	0.15	0.24	0.06	UMTS
		CWS	61.0	84.57	3	10	97.6	0.08	0.12	0.02	UMTS
		CWS	61.0	85.14	3	10	98.1	0.08	0.13	0.02	UMTS
		CWS	39.0	83.74	3	600	114.5	0.53	1.36	0.75	LTE
		Airtel	58.6	87.31	3	600	118.1	0.80	1.37	1.71	LTE
		Airtel	58.6	83.58	3	600	114.4	0.52	0.89	0.72	LTE
-		Airtel	58.6	87.19	3	600	117.97	0.79	1.35	1.66	LTE
								3.59	8.12	34.13	

Location:Port Cabris, PraslinResponsible:Vaughan TaylorSignals:GSM+UMTS+LTE+DTTDate:2019/04/16

Time:	10:54 - 11:48
Weather:	Sunshine, dry
Analyzer:	SRM-3006
Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	
f [MHz]	Scr. Code (UMTS) / Cell- ID+No of MIMO path (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP4									
		Airtel	42.5	108.62	3	4	117.6	0.76	1.79	1.54	GSM-900
		Airtel	42.5	100.74	3	4	109.8	0.31	0.72	0.25	GSM-900
		Airtel	42.4	111.54	3	4	120.6	1.07	2.51	3.02	GSM-900
		CWS	42.1	94.91	3	4	103.9	0.16	0.37	0.07	GSM-900
		CWS	42.1	78.49	3	4	87.5	0.02	0.06	0.00	GSM-900
		CWS	42.1	94.90	3	4	103.9	0.16	0.37	0.07	GSM-900
		Airtel	42.4	99.14	3	10	112.1	0.40	0.95	0.43	UMTS
		Airtel	42.4	104.14	3	10	117.1	0.72	1.70	1.37	UMTS
		Airtel	42.4	89.49	3	10	102.5	0.13	0.31	0.05	UMTS
		Airtel	61.0	100.15	3	10	113.2	0.45	0.75	0.55	UMTS
		Airtel	61.0	94.31	3	10	107.3	0.23	0.38	0.14	UMTS
		Airtel	61.0	84.58	3	10	97.6	0.08	0.12	0.02	UMTS
		Airtel	61.0	99.06	3	10	112.1	0.40	0.66	0.43	UMTS
		Airtel	61.0	91.68	3	10	104.7	0.17	0.28	0.08	UMTS
		Airtel	61.0	87.68	3	10	100.7	0.11	0.18	0.03	UMTS
		CWS	61.0	84.35	3	10	97.4	0.07	0.12	0.01	UMTS
		CWS	61.0	84.43	3	10	97.4	0.07	0.12	0.01	UMTS
		CWS	61.0	83.21	3	10	96.2	0.06	0.11	0.01	UMTS
	이번 모양 것이	CWS	39.0	81.26	3	600	112.0	0.40	1.02	0.42	LTE
		Airtel	58.6	82.25	3	600	113.0	0.45	0.77	0.53	LTE
		SBC	32.6	105.64	3	1	108.64	0.27	0.83	0.19	DVB-T2
								1.87	4.23	9.23	

6.2.25 Anse Reunion – La Digue (CWS/Airtel)

Location:	Anse Reunion, LaDigue	Time:	15:01 - 15:18
Responsible:	Vaughan Taylor	Weather:	Sunshine, dry
Signals:	GSM+UMTS+LTE	Analyzer:	SRM-3006
Date:	2019/04/16	Antenna:	3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	6
f [MHz]	Scr. Code (UMTS) / Cell- ID+MIMO (LTE)	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP1									
		Airtel	42.5	98.10	3	4	107.1	0.23	0.53	0.14	GSM-900
		Airtel	42.5	87.48	3	4	96.5	0.07	0.16	0.01	GSM-900
		Airtel	42.5	87.65	3	4	96.7	0.07	0.16	0.01	GSM-900
		CWS	42.0	103.59	3	4	112.6	0.43	1.02	0.48	GSM-900
		CWS	42.1	104.36	3	4	113.4	0.47	1.11	0.58	GSM-900
		CWS	42.1	96.26	3	4	105.3	0.18	0.44	0.09	GSM-900
	같아. 김 동년 문화	Airtel	42.4	87.07	3	10	100.1	0.10	0.24	0.03	UMTS
		Airtel	61.0	81.62	3	10	94.6	0.05	0.09	0.01	UMTS
		Airtel	61.0	80.04	3	10	93.0	0.04	0.07	0.01	UMTS
		Airtel	61.0	83.52	3	10	96.5	0.07	0.11	0.01	UMTS
		CWS	61.0	99.62	3	10	112.6	0.43	0.70	0.48	UMTS
	25년26년 191	CWS	61.0	91.17	3	10	104.2	0.16	0.26	0.07	UMTS
	방지는 한 문제에 물	CWS	61.0	85.98	3	10	99.0	0.09	0.15	0.02	UMTS
		CWS	61.0	104.66	3	10	117.7	0.76	1.25	1.55	UMTS
		CWS	61.0	95.67	3	10	108.7	0.27	0.44	0.20	UMTS
		CWS	61.0	87.35	3	10	100.4	0.10	0.17	0.03	UMTS
	12:500 22 23	CWS	61.0	89.69	3	10	102.7	0.14	0.22	0.05	UMTS
								1.19	2.30	3.76	

Location:Anse Reunion, LaDigueResponsible:Vaughan TaylorSignals:GSM+UMTS+LTEDate:2019/04/16

 Time:
 15:00 - 15:18

 Weather:
 Sunshine, dry

 Analyzer:
 SRM-3006

 Antenna:
 3AX420M-6G

1	2	3	4	5	6	7	8	9	10	11	1
f [MHz]	UMTS Scr. Code/Cell ID+MIMO path	Operator	Limit [V/m]	E (measured) [dBµV/m]	Meas. Uncert. [dB]	Factor max. emission	Emax [dBµV/m]	Emax [V/m]	Emax Limit consumpt. [%]	Smax [mW/m²]	
Point No.		MP2									
		Airtel	42.5	99.87	3	4	108.9	0.28	0.65	0.21	GSM-900
		Airtel	42.5	86.62	3	4	95.6	0.06	0.14	0.01	GSM-900
		Airtel	42.5	88.58	3	4	97.6	0.08	0.18	0.02	GSM-900
		CWS	42.0	90.58	3	4	99.6	0.10	0.23	0.02	GSM-900
		CWS	42.1	95.95	3	4	105.0	0.18	0.42	0.08	GSM-900
		CWS	42.1	93.54	3	4	102.6	0.13	0.32	0.05	GSM-900
		Airtel	42.4	94.15	3	10	107.2	0.23	0.54	0.14	UMTS
		Airtel	42.4	86.52	3	10	99.5	0.09	0.22	0.02	UMTS
		Airtel	42.4	84.72	3	10	97.7	0.08	0.18	0.02	UMTS
		Airtel	61.0	92.47	3	10	105.5	0.19	0.31	0.09	UMTS
	성기 (신) 동안 및	Airtel	61.0	80.55	3	10	93.6	0.05	0.08	0.01	UMTS
		Airtel	61.0	93.14	3	10	106.1	0.20	0.33	0.11	UMTS
		Airtel	61.0	81.50	3	10	94.5	0.05	0.09	0.01	UMTS
		CWS	61.0	85.91	3	10	98.9	0.09	0.14	0.02	UMTS
		CWS	61.0	104.36	3	10	117.4	0.74	1.21	1.44	UMTS
		CWS	61.0	99.11	3	10	112.1	0.40	0.66	0.43	UMTS
		CWS	61.0	103.70	3	10	116.7	0.68	1.12	1.24	UMTS
		CWS	61.0	98.18	3	10	111.2	0.36	0.59	0.35	UMTS
	"… 나랑님니?	CWS	61.0	88.95	3	10	102.0	0.13	0.21	0.04	UMTS
		CWS	61.0	102.15	3	10	115.2	0.57	0.94	0.87	UMTS
		CWS	39.0	80.47	3	600	111.3	0.37	0.94	0.35	LTE
								1.44	2.59	5.53	

6.3 Appendix A3 – Explanation of the Exposure Limits

The measured and documented exposure in this report was assessed with regard to the ICNIRP's "GUIDELINES FOR LIMITING EXPOSURE TO TIME-VARYING ELECTRIC, MAGNETIC, AND ELECTROMAGNETIC FIELDS (UP TO 300 GHz)" [ICNIRP 98]. The ICNIRP is the International Commission on Non-Ionizing Radiation Protection.

The main objective of this publication was to establish guidelines for limiting EMF exposure that will provide protection against known adverse health effects. An adverse health effect causes detectable impairment of the health of the exposed individual or of his or her off- spring; a biological effect, on the other hand, may or may not result in an adverse health effect.

Restrictions on the effects of exposure are based on established health effects and are termed basic restrictions. In the RF region, the physical quantity used to specify the basic restrictions on exposure to EMF is the specific absorption rate (SAR). Protection against adverse health effects requires that these basic restrictions are not exceeded. Reference levels (electric field strength E, magnetic field strength H) of exposure are provided for comparison with measured values of physical quantities; compliance with all reference levels given in these guidelines will ensure compliance with basic restrictions. If measured values are higher than reference levels, it does not necessarily follow that the basic restrictions have been exceeded, but a more detailed analysis is necessary to assess compliance with the basic restrictions.

	RMS value, geometricall	y averaged over any 6-min period
Frequency f in MHz	Electric field strength E_{eff} in V/m	Magnetic field strength H _{eff} in A/m
400 - 2000	1.375•√f	0.0037∙√f

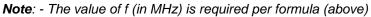


Table 7 - Reference levels for general public exposure in the frequency range relevant to GSM andUMTS base stations [ICNIPR 98].

In the far-field as generated by a transmitting source, the electric and magnetic field strength are combined via the free space impedance $Z_0 \approx 377 \ \Omega$. Therefore, in the far-field it is sufficient to only measure the electric or the magnetic field component. The product of electric and magnetic field strength in the far-field gives the power density S. Because S contains the same information as E and H, it is often used alternatively in exposure assessment. Table 8 summarizes the relevant reference values of ICNIRP 98 in the downlink frequency ranges of the mobile phone services LTE-800, GSM-R, GSM-900, GSM-1800/LTE-1800 and UMTS-2100. For the analysis in this report, the service specific reference level is used, which is valid for the lowest frequency end of the respective frequency range.

Mobile phone/DTT services (freq. ranges)	Electric field strength E _{eff} in V/m	Magnetic field strength H _{eff} in A/m	Equivalent power density S in W/m²
LTE-800	38.7	0.10	4.0
GSM-900, GSM-R	41.7	0.11	4.6
GSM-1800 / LTE- 1800	58.4	0.16	9.0
UMTS-2100	61.0	0.17	10
DVB-T2 (Band IV CH21-CH37) E.g. CH22	30.2	0.0812	2.45

Note: For the analysis in this report, the reference level is mathematically determined per the actual mobile telephony and digital television systems (DVB-T2 – where applicable) frequencies per individual evaluation.

Table 8 - ICNIRP 98 reference levels for the mobile phone base station frequency bands.

In situations of simultaneous exposure to fields of different frequencies, the different exposures relative to the reference levels have to be added appropriately. Referring to [ICNIRP 98], the resulting total exposure (relative to the reference values) TEX_RL for frequencies above 100 kHz has to be computed as follows:

$$TEX_RL = \sqrt{\sum_{i=100kHz}^{1 MHz} \left(\frac{E_i}{c}\right)^2 + \sum_{i>1 MHz}^{300GHz} \left(\frac{E_i}{E_{L,i}}\right)^2}$$
(A1)

with

E_i electric field strength at frequency *i*;

 $E_{L,i}$ electric field reference level from table A1 and A2;

c 87/ \sqrt{f} (f in MHz) for general public exposure

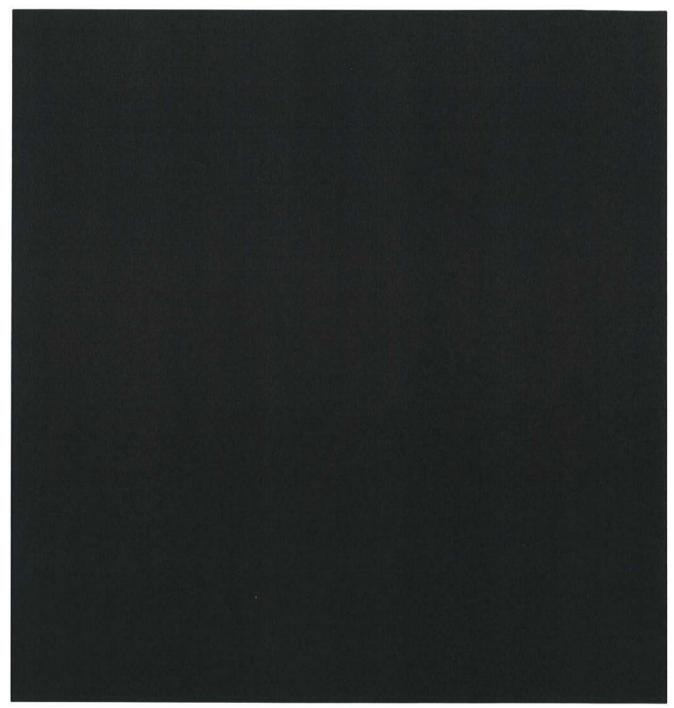
Note: Table A1 and A2 are referenced to Table 7 and Table 8 respectively.

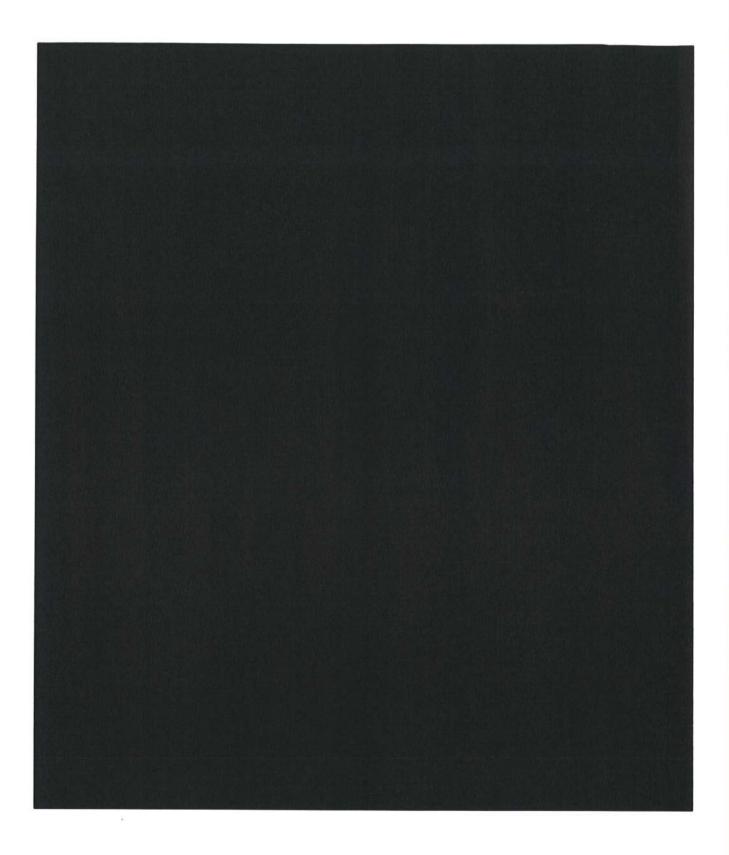
The total exposure relative to the reference level, TEX_RL, multiplied by a factor 100, is the total exposure in per cent of the reference level and must not exceed the value 100.

6.4 Appendix A4 – Desktop studies

The desktop studies in this section are complementary actions and serve to provide additional insight into the non-ionizing electromagnetic field (EMF) exposure measurements that took place at 25 identified sites/locations within the Seychelles. The results as depicted in this section were calculated through using computing methods and therefore have not been verified through measurement using appropriate test instrumentation.

6.4.1 Mitigation studies for Mont Buxton





6.4.2 Predicted increases in EM levels with the addition of a new operator

The measured results as were obtained from the campaign by surveying 25 site locations within the Seychelles, provided a point of reference for expressing the range of values for the two mobile telephony operators, being Airtel and CWS respectively.

Table 9 (overleaf) indicates the maximum values that were derived at the measurement points along with the predicted increase/s in the EMF values at these locations should an additional operator be awarded a licence for the provision of mobile telephony services. The predictions have been made through first-order calculation/simulation processes.

Note that these predictions bear no relationship whatsoever to the proposed addition of 5G services, as the studies are based upon the usage of the RF spectrum which is allocated for 2G/3G/4G telephony services.

The colour-coding as has been applied in Table 9, should not be interpreted that 'red' for example indicates a dangerous condition – they are recorded in this manner to provide for easy grading of the results as were obtained.

Site Name/s	Existing Operator/s	Note: prec		values are show	values (in pero wn for the additi- nent of mobile te (i.e. not 5G ser	on of a new no	etwork operat		ne <u>same</u>
		Measured value/s	Predicted increase	Measured Value/s	Predicted increase	Measured value/s	Predicted increase	Measured value/s	Predicted increase
		≤ 5.7%	3.25% ≤ 8%	6% ≤ 15%	9.8%≤ 20.8%	16% ≤ 25%	26.8% ≤ 31.5%	>3	2%
		LOWEST	VALUES	LOW-MI	D VALUES	MID V.	ALUES	HIGHEST	VALUES
Machabee Hill	CWS	4.3 (MP2)	6.08 (MP2)						
Carana Hill	CWS					19 (MP1)	26.83 (MP1)		
North East Point	Airtel	4.15 (MP2)	5.86 (MP2)						
Villa Fond de Lianes	Airtel	5.64 (MP1)	7.97 (MP1)						
Bel Ombre	Airtel	4.44 (MP1)	6.27 (MP1)						
Bel Ombre (Dan Zil)	CWS			9.81 (MP2)	13.85 (MP2)				
Sorento	Airtel			8.43 (MP4)	11.91 (MP4)				
La Batie (Mare Anglaise)	Airtel			7.88 (MP2)	11.14 (MP2)				
Perseverance	Airtel	3.7 (MP2)	5.23 (MP2)						
Espace Building	Airtel			14.7 (ES1- MP1)	20.77 (ES1- MP1)				
Ma Constance	Airtel			13.16 (MP1)	18.59 (MP1)				
Mt Buxton	Airtel							61.71 (MP4)	87.16 (MP4)
SACOS Tower	CWS	4.88 (MP4)	6.90(MP4)						
Victoria (St. Popiler)	Airtel			7.36 (MP1)	10.40 (MP1)				
Central Bank Seychelles	CWS					22.27 (MP2)	31.45 (MP2)		
Dr. Chetty Clinic	Airtel			11.46 (MP4)	16.19 (MP4)				
Seychelles Hospital	CWS			10.11 (MP3)	14.28 (MP3)				
Hermitage (SBC)	Airtel			6.95 (MP1)	9.81 (MP1)				
Plaisance	Airtel	5.47 (MP1)	7.72 (MP1)						
Copolia	Airtel	4.11 (MP2)	5.81 (MP2)						

Roche Caiman (RC1)	Airtel	5.36 (MP2)	7.57 (MP2)				
Roche Caiman (RC2)	Airtel	5.45(MP2)	7.70 (MP2)				
Sunshine House	CWS			11.96 (MP2)	16.89 (MP2)		
Airport (Dom. Term)	Airtel			9.73 (MP2)	13.74 (MP2)		
Airport main terminal	CWS			11.71 (MP2)	16.53 (MP2)		
Port Launay	Airtel	2.31 (MP2)	3.26 (MP2)				
Grand Anse	Airtel	3.39 (MP3)	4.79 (MP3)				
Pt. Cabris	Airtel			8.12 (MP3)	11.48 (MP3)		
Anse Reunion	Airtel	2.3 (MP1)	3.25 (MP1)				
Anse Reunion	CWS	2.59 (MP2)	3.66 (MP2				

Table 9 – Comparative results for the predicted increase in exposure levels with the addition of a new operator

6.5 Appendix A5 – List of Tower Sites

The sites as were measured in this campaign are presented per region in the following tables (see overleaf).

Quantity	Site Name	Operator	Operator Site Number/Code	District	Coor	dinates	Services (GSM, 3G, 4G)	Frequency Band of Operation	Sites located very near residential areas or within the	Sites located near or within the	Sites located near or within the compound	Sites which have resulted in concerns being
		Sec.	State -		LAT	LONG			yards of residential homes	compound of schools;	of hospitals	raised by members of the public.
					Region - 1							
1	Machabee Hill	CWS	100452532	Glacis	-4.5639	55.438999						
2	Carana Hill	CWS		Glacis	-4.5697	55,453796			Sector Sector	All Sand		
3	North East Point	Ainel		Glacis	-4.582062	55.463014			Yes	No	No	Yes
4	Villa Fond de Lianes	Ainel		Glacis	-4.563169	55.434113			Yes	No	No	Na
				1	Region - 2							
5	Bel Ombre	Airtel		Bel Ombre	-4.617199	55,421298			Yes	No	No	No
•	Bel Ombre (Dan Zil)	CWS		Bel Ombre	-4.6213	55,4031			Yes	No	No	No
7	Sorento	Ainel		Glacis	-4,590417	55,437465			Yes	No	No	No
	La Batic (Marc Anglaisc)	Airtel		Beau Vallon	4.60072222	55.43735278			Yes	No	No	Yes

TOWER SITE DETAILS

		and the second se				and the state
				B	tegion - 3	
•	Perseverance	Ainel		Perseverance	-4.604778	55,46194
10	Espace Building (Hospital Opposite)	Airtel		English River	-4.617869	55.4575
п	Ma Constance	Aintel		Anse Etoile	4.60143056	55,45587778
12	Mt Buxton	Ainel		Mont Buxton	4.615728	55.450011
				B	tegion - 4	
13	Sacos Tower	CWS		Victoria	-4.62	55.454094
14	Victoria (Stad Popiler)	Ainel		Victoria	-4.623697	55,453815
	Central Bank Roof	CWS		Victoria	-4.6234	55.454
15	Dr. Chetty Clinic	Ainel		St Louis	-4.6217	55,4493
10	Seychelles Hospital	CWS		Mont Fleuri	-4.632	55.4556
16	Hermitage	Ainel		Mont Fleuri	-4.6318	55,4539
				B	tegion - 5	
17	Plaisance	Airtel	North Installing	Plaisance	-4.638504	55.463035

18	Copolia	Aintel		Plaisance	-4.64278	55.45921				
19	Roche Caiman	Aintel		Roche Caiman	-4.6358	55.4713				
	Roche Caiman	CWS		Roche Caiman	-4.6328	55.4677				
Region - 6										
20	Sumhine House	CWS		Providence	-4.6513	55.484165				
				F	tegion - 7					
21	Airport Car Park	Ainel		Pointe Larue	-4.670743	55.510394				
	Airport	CWS		Pointe Larue	-4.6716	55.513042				
				F	tegion - 8					
22	Port Launay	Airtel		Port Glaud	-4.649816	55,399089				
			Re	gion - 10 -	Praslin	& La Digu				
23	Grand Anse	Airtel		Grand Anse Praslin	-4.32625	55.71438889				
24	Pt Cabris	Ainel		Baie Ste Anne Praslin	-4.351849	55.766349				
25	Anse Reunion -	Ainel		La Digue	-4.35313	55.82733				

7 REFERENCES

[ICNIRP 98] ICNIRP Guidelines, Guidelines for Limiting Exposure to Time-Varying Electric, Magnetic and Electromagnetic Fields (up to 300 GHz), Health Physics, vol. 74 no. 4, S. 494-522, (1998).

[ITU-T K.100] Measurement of radio frequency electromagnetic fields to determine compliance with human exposure limits when a base station is put into service (2019-0714).

[IEC 62232:2017] Determination of RF field strength, power density and SAR in the vicinity of radio communication base stations for the purpose of evaluating human exposure.

END OF DOCUMENT