

# AMENDMENTS TO SERVICE PUBLICATIONS

Abbreviations used

<b>ADD</b>	Insert	<b>PAR</b>	Paragraph
<b>COL</b>	Column	<b>REP</b>	Replace
<b>LIR</b>	Read	<b>SUP</b>	Delete
<b>P</b>	Page(s)		

## List of International Monitoring Stations (List VIII) Edition of 2022

(Amendment No. 1)

### PART I

#### STATIONS IN THE TERRESTRIAL RADIOCOMMUNICATION SERVICES

##### QAT – Qatar

**SUP** Station: **Doha (Sumaismah) (IMS)**

**P 1** **ADD** **by alphabetical order**

Station: **Al Corniche**

Name of the station	Postal address	Telephone, Telefax, Electronic-mail
<b>Al Corniche</b>	Communications Regulatory Authority (CRA) Al Nasr Tower-B Corniche Road P.O.Box 23404 Doha Qatar	PHONE: +974 44995374 TELEFAX: +974 44830630 EMAIL: msadeq@cra.gov.qa

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
25°18'48"N 051°31'09"E	Frequency measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Measurement Accuracy: <math>\pm 1</math> Hz (absolute).</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
25°18'48"N 051°31'09"E	Field strength or power flux-density measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Measurement Accuracy: <math>\pm 3</math> dB.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
25°18'48"N 051°31'09"E	Direction-finding measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>DF Accuracy: 2 degrees RMS.</p> <hr/> <p>Dual Polarization: 20MHz - 3GHz.</p> <hr/> <p>Vertical Polarization: 3GHz - 8.5GHz.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
25°18'48"N 051°31'09"E	Bandwidth measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>x dB and B% methods, in accordance with Recommendation ITU-R SM.443-4. Instantaneous bandwidth for wideband signals (40 MHz), in accordance with Recommendation ITU-R SM.1794.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
25°18'48"N 051°31'09"E	Automatic spectrum occupancy surveys	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>

Station: **AL KHOR**

Name of the station	Postal address	Telephone, Telefax, Electronic-mail
<b>Al Khor</b>	Communications Regulatory Authority (CRA) Al Nasr Tower-B Corniche Road P.O.Box 23404 Doha Qatar	PHONE: +974 44995374 TELEFAX: +974 44830630 EMAIL: msadeq@cra.gov.qa

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
25°40'14"N 051°28'49"E	Frequency measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Measurement Accuracy: <math>\pm 1</math> Hz (absolute).</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
25°40'14"N 051°28'49"E	Field strength or power flux-density measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Measurement Accuracy: <math>\pm 3</math> dB.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
25°40'14"N 051°28'49"E	Direction-finding measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>DF Accuracy: 2 degrees RMS.</p> <hr/> <p>Dual Polarization: 20MHz - 3GHz.</p> <hr/> <p>Vertical Polarization: 3GHz - 8.5GHz.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
25°40'14"N 051°28'49"E	Bandwidth measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>x dB and <math>\beta\%</math> methods, in accordance with Recommendation ITU-R SM.443-4. Instantaneous bandwidth for wideband signals (40 MHz), in accordance with Recommendation ITU-R SM.1794.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
25°40'14"N 051°28'49"E	Automatic spectrum occupancy surveys	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>

Station: **AL WAKRAH**

Name of the station	Postal address	Telephone, Telefax, Electronic-mail
<b>Al Wakrah</b>	Communications Regulatory Authority (CRA) Al Nasr Tower-B Corniche Road P.O.Box 23404 Doha Qatar	PHONE: +974 44995374 TELEFAX: +974 44830630 EMAIL: msadeq@cra.gov.qa

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
25°01'32"N 051°27'27"E	Frequency measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Measurement Accuracy: <math>\pm 1</math> Hz (absolute).</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
25°01'32"N 051°27'27"E	Field strength or power flux-density measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Measurement Accuracy: <math>\pm 3</math> dB.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
25°01'32"N 051°27'27"E	Direction-finding measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>DF Accuracy: 2 degrees RMS.</p> <hr/> <p>Dual Polarization: 20MHz - 3GHz.</p> <hr/> <p>Vertical Polarization: 3GHz - 8.5GHz.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
25°01'32"N 051°27'27"E	Bandwidth measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>x dB and β% methods, in accordance with Recommendation ITU-R SM.443-4. Instantaneous bandwidth for wideband signals (40 MHz), in accordance with Recommendation ITU-R SM.1794.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
25°01'32"N 051°27'27"E	Automatic spectrum occupancy surveys	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>

Station: **MMS 1**

Name of the station	Postal address	Telephone, Telefax, Electronic-mail
<b>MMS 1</b>	Communications Regulatory Authority (CRA) Al Nasr Tower-B Corniche Road P.O.Box 23404 Doha Qatar	PHONE: +974 44995374 TELEFAX: +974 44830630 EMAIL: msadeq@cra.gov.qa

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
	Frequency measurements	9kHz - 8GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Measurement Accuracy: <math>\pm 1</math> Hz (absolute).</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
	Field strength or power flux-density measurements	9kHz - 8GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Measurement Accuracy: <math>\pm 3</math> dB.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
	Direction-finding measurements	9kHz - 8GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>DF Accuracy: 2 degrees RMS.</p> <hr/> <p>Dual Polarization: 20MHz - 3GHz.</p> <hr/> <p>Vertical Polarization: 3GHz - 8.5GHz.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
	Bandwidth measurements	9kHz - 8GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>x dB and B% methods, in accordance with Recommendation ITU-R SM.443-4. Instantaneous bandwidth for wideband signals (40 MHz), in accordance with Recommendation ITU-R SM.1794.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
	Automatic spectrum occupancy surveys	9kHz - 8GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>

Station: **MMS 2**

Name of the station	Postal address	Telephone, Telefax, Electronic-mail
<b>MMS 2</b>	Communications Regulatory Authority (CRA) Al Nasr Tower-B Corniche Road P.O.Box 23404 Doha Qatar	PHONE: +974 44995374 TELEFAX: +974 44830630 EMAIL: msadeq@cra.gov.qa

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
	Frequency measurements	20MHz - 8.5GHz; 8.5 - 40GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Measurement Accuracy: <math>\pm 1</math> Hz (absolute).</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
	Field strength or power flux-density measurements	20MHz - 8.5GHz; 8.5 - 40GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Measurement Accuracy: <math>\pm 3</math> dB.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>

Geographical coordinates	Types of measurements	Ranges of frequencies for each measurement	Hours of service (UTC)	Remarks
	Direction-finding measurements	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>DF Accuracy: 2 degrees RMS.</p> <hr/> <p>Dual Polarization: 20MHz - 3GHz.</p> <hr/> <p>Vertical Polarization: 3GHz - 8.5GHz.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
	Bandwidth measurements	20MHz - 8.5GHz; 8.5 - 40GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>x dB and B% methods, in accordance with Recommendation ITU-R SM.443-4. Instantaneous bandwidth for wideband signals (40 MHz), in accordance with Recommendation ITU-R SM.1794.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>
	Automatic spectrum occupancy surveys	20MHz - 8.5GHz	0400 - 1100 (UTC)	<p>Sunday to Thursday.</p> <hr/> <p>H24: on request.</p> <hr/> <p>Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.</p> <hr/> <p>All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.</p> <hr/> <p>All MMS can connect to any of the FMS &amp; TDOA sites for Geolocation.</p>