|  |  |  |  |
| --- | --- | --- | --- |
| QAT - Qatar | | | |
| **Centralizing office** | **Postal address** | **Telephone, Telefax, Electronic-mail** | **Remarks** |
|  |  |  |  |
| Communications Regulatory Authority (CRA) | Al Nasr Tower-B Corniche Road P.O. Box 23404 Doha | PHONE: +974 44995374 TELEFAX: +974 44830630 EMAIL: msadeq@cra.gov.qa | Contact: Mr. Mohammad Sadeq Spectrum Management Dept. Manager |
|  |  |  |  |

Stations in the Terrestrial radiocommunication services

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the station** | **Postal address** | **Telephone, Telefax, Electronic-mail** | |
|  |  |  |  |
| **AL CORNICHE** | 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) | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 1 Hz (absolute).  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°18'48"N 051°31'09"E | Field strength or power flux-density measurements | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 3 dB.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°18'48"N 051°31'09"E | Direction-finding measurements | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  DF Accuracy: 2 degrees RMS.  Dual Polarization: 20MHz - 3GHz.  Vertical Polarization: 3GHz - 8.5GHz.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°18'48"N 051°31'09"E | Bandwidth measurements | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  x dB and ß% 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.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°18'48"N 051°31'09"E | Automatic spectrum occupancy surveys | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the station** | **Postal address** | **Telephone, Telefax, Electronic-mail** | |
|  |  |  |  |
| **Al Kharrara - South** | 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** |
| 24°54'13"N 051°09'54"E | Frequency measurements | 9 kHz - 30 MHz | 0400-1100 | Sunday to Thursday.  Measurement Accuracy: ± 1 Hz (absolute).  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 24°54'13"N 051°09'54"E | Direction-finding measurements | 300 kHz - 30 MHz | 0400-1100 | Sunday to Thursday.  DF antenna array of 9 active antenna elements (correlative interferometer with SSL facility).  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 24°54'13"N 051°09'54"E | Frequency measurements | 30 MHz - 8 GHz |  | H24: on request.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 24°54'13"N 051°09'54"E | Direction-finding measurements | 20 MHz - 8 GHz |  | H24: on request.  Broadband DF & Monitoring Antenna DF Accuracy: 2 degrees RMS Dual Polarization: 20 MHz - 3 GHz Vertical Polarization: 3 GHz - 8 GHz  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 24°54'13"N 051°09'54"E | Field strength or power flux-density measurements | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 3 dB.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 24°54'13"N 051°09'54"E | Bandwidth measurements | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  x dB and ß% 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.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 24°54'13"N 051°09'54"E | Automatic spectrum occupancy surveys | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the station** | **Postal address** | **Telephone, Telefax, Electronic-mail** | |
|  |  |  |  |
| **AL KHOR** | 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) | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 1 Hz (absolute).  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°40'14"N 051°28'49"E | Field strength or power flux-density measurements | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 3 dB.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°40'14"N 051°28'49"E | Direction-finding measurements | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  DF Accuracy: 2 degrees RMS.  Dual Polarization: 20MHz - 3GHz.  Vertical Polarization: 3GHz - 8.5GHz.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°40'14"N 051°28'49"E | Bandwidth measurements | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  x dB and ß% 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.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°40'14"N 051°28'49"E | Automatic spectrum occupancy surveys | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the station** | **Postal address** | **Telephone, Telefax, Electronic-mail** | |
|  |  |  |  |
| **Al Rayyan - East** | 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°19'50"N 051°21'58"E | Frequency measurements | 9 kHz - 30 MHz | 0400-1100 | Sunday to Thursday.  Measurement Accuracy: ± 1 Hz (absolute).  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°19'50"N 051°21'58"E | Direction-finding measurements | 300 kHz - 30 MHz | 0400-1100 | Sunday to Thursday.  Cross Loop DF Antenna.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°19'50"N 051°21'58"E | Frequency measurements | 30 MHz - 8 GHz |  | H24: on request.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°19'50"N 051°21'58"E | Direction-finding measurements | 20 MHz - 8 GHz |  | H24: on request.  Broadband DF & Monitoring Antenna DF Accuracy: 2 degrees RMS Dual Polarization: 20 MHz - 3 GHz Vertical Polarization: 3 GHz - 8 GHz  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°19'50"N 051°21'58"E | Field strength or power flux-density measurements | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 3 dB.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°19'50"N 051°21'58"E | Bandwidth measurements | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  x dB and ß% 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.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°19'50"N 051°21'58"E | Automatic spectrum occupancy surveys | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the station** | **Postal address** | **Telephone, Telefax, Electronic-mail** | |
|  |  |  |  |
| **Al Shamal - North** | 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** |
| 26°09'13"N 051°15'00"E | Frequency measurements | 9 kHz - 30 MHz | 0400-1100 | Sunday to Thursday.  Measurement Accuracy: ± 1 Hz (absolute).  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 26°09'13"N 051°15'00"E | Direction-finding measurements | 300 kHz - 30 MHz | 0400-1100 | Sunday to Thursday.  DF antenna array of 9 active antenna elements (correlative interferometer with SSL facility).  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 26°09'13"N 051°15'00"E | Frequency measurements | 30 MHz - 8 GHz |  | H24: on request.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 26°09'13"N 051°15'00"E | Direction-finding measurements | 20 MHz - 8 GHz |  | H24: on request.  Broadband DF & Monitoring Antenna DF Accuracy: 2 degrees RMS Dual Polarization: 20 MHz - 3 GHz Vertical Polarization: 3 GHz - 8 GHz  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 26°09'13"N 051°15'00"E | Field strength or power flux-density measurements | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 3 dB.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 26°09'13"N 051°15'00"E | Bandwidth measurements | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  x dB and ß% 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.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 26°09'13"N 051°15'00"E | Automatic spectrum occupancy surveys | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the station** | **Postal address** | **Telephone, Telefax, Electronic-mail** | |
|  |  |  |  |
| **AL WAKRAH** | 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) | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 1 Hz (absolute).  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°01'32"N 051°27'27"E | Field strength or power flux-density measurements | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 3 dB.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°01'32"N 051°27'27"E | Direction-finding measurements | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  DF Accuracy: 2 degrees RMS.  Dual Polarization: 20MHz - 3GHz.  Vertical Polarization: 3GHz - 8.5GHz.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°01'32"N 051°27'27"E | Bandwidth measurements | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  x dB and ß% 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.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
| 25°01'32"N 051°27'27"E | Automatic spectrum occupancy surveys | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the station** | **Postal address** | **Telephone, Telefax, Electronic-mail** | |
|  |  |  |  |
| **MMS 1** | 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) | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 1 Hz (absolute).  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
|  | Field strength or power flux-density measurements | 9kHz - 8GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 3 dB.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
|  | Direction-finding measurements | 9kHz - 8GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  DF Accuracy: 2 degrees RMS.  Dual Polarization: 20MHz - 3GHz.  Vertical Polarization: 3GHz - 8.5GHz.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
|  | Bandwidth measurements | 9kHz - 8GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  x dB and ß% 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.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
|  | Automatic spectrum occupancy surveys | 9kHz - 8GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the station** | **Postal address** | **Telephone, Telefax, Electronic-mail** | |
|  |  |  |  |
| **MMS 2** | 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) | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 1 Hz (absolute).  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
|  | Field strength or power flux-density measurements | 20MHz - 8.5GHz; 8.5 - 40GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 3 dB.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
|  | Direction-finding measurements | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  DF Accuracy: 2 degrees RMS.  Dual Polarization: 20MHz - 3GHz.  Vertical Polarization: 3GHz - 8.5GHz.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
|  | Bandwidth measurements | 20MHz - 8.5GHz; 8.5 - 40GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  x dB and ß% 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.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |
|  | Automatic spectrum occupancy surveys | 20MHz - 8.5GHz | 0400 - 1100 (UTC) | Sunday to Thursday.  H24: on request.  Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network.  All MMS can connect to any of the FMS & TDOA sites for Geolocation. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of the station** | **Postal address** | **Telephone, Telefax, Electronic-mail** | |
|  |  |  |  |
| **Zekreet - West** | 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°26'27"N 050°52'24"E | Frequency measurements | 9 kHz - 30 MHz | 0400-1100 | Sunday to Thursday.  Measurement Accuracy: ± 1 Hz (absolute).  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°26'27"N 050°52'24"E | Direction-finding measurements | 300 kHz - 30 MHz | 0400-1100 | Sunday to Thursday.  Cross Loop DF Antenna.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°26'27"N 050°52'24"E | Frequency measurements | 30 MHz - 8 GHz |  | H24: on request.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°26'27"N 050°52'24"E | Direction-finding measurements | 20 MHz - 8 GHz |  | H24: on request.  Broadband DF & Monitoring Antenna DF Accuracy: 2 degrees RMS Dual Polarization: 20 MHz - 3 GHz Vertical Polarization: 3 GHz - 8 GHz  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°26'27"N 050°52'24"E | Field strength or power flux-density measurements | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  Measurement Accuracy: ± 3 dB.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°26'27"N 050°52'24"E | Automatic spectrum occupancy surveys | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  Automatic measurements of spectrum occupancy in accordance with Recommendation ITU-R SM.1880 and ITU-R Spectrum Monitoring Handbook.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |
| 25°26'27"N 050°52'24"E | Bandwidth measurements | 9 kHz - 8 GHz | 0400-1100 | Sunday to Thursday.  H24: on request.  x dB and ß% 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.  All fixed monitoring stations are remotely controlled at the National Control Center (CRA building) via the highly secured MPLS/IP network. |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_