



CITRA

الهيئة العامة لتنظيم الاتصالات وتقنية المعلومات
COMMUNICATION & INFORMATION TECHNOLOGY REGULATORY AUTHORITY

Fixed Radio Service Regulation

V1.5

Article (1) **Definitions**

- 1-1 State:** State of Kuwait
- 1-2 Authority:** Communication & Information Technology Regulatory Authority, established under the Law No. (37) of 2014, its amendments and its executive regulation.
- 1-3 Applicant:** Person (governmental or private entity) who applies for a license according to the regulations issued by the Authority:
- 1-4 Application:** Licensing application from the Authority in the form determined according to the applicable procedures.
- 1-5 License:** The Radio Service license issued by the Authority which allows the licensee to use frequency bands and certain devices, subject to the terms stated in this regulation.
- 1-6 Licensee:** Person (governmental or private entity) holding the license from the Authority.
- 1-7 Allocating frequencies:** A license given by the Authority to use the frequencies according to specific conditions.
- 1-8 Broadband Radio Access Networks:** It means the networks that use the devices conforming to the specific technical specifications in the two Standards ETSI EN302 567, ETSI EN 301 893.
- 1-9 Broadband Wireless Connection:** The technologies that provide broadband access to the data through wireless means for the consumer and business markets.
- 1-10 ETSI:** European Telecommunications Standards Institute that sets up the standards globally applied to information and communication technologies (ICT) including fixed technologies, and technologies of mobile and radio devices, Convergent Technologies, Broadcasting Technologies and the Internet.
- 1-11 Fixed Wireless Communication:** Wireless communication where the end-user's location must be connected to the network's access point in the form of one of the following radio communications:
- 1-12 (ICNIRP)** The International Committee for the Protection of Non-Ionizing Radiation.
- 1-13 IEEE:** Institute of Electrical and Electronics Engineers.
- 1-14** International Telecommunication Union (ITU)
- 1-15 Mesh Network:** A method for transferring data and voice between nodes, which allows communication and reconfiguration through the blocked paths to another until the destination is reached or blocked by jumping from one node to another.



CITRA

الهيئة العامة لتنظيم الاتصالات وتقنية المعلومات
COMMUNICATION & INFORMATION TECHNOLOGY REGULATORY AUTHORITY

- 1-16 Person:** Legal entities in addition to natural persons.
- 1-17 Point-to-Point Link:** The communication provided by one link between two stations located at two specified fixed points, or multiple backward links established by a number of repeaters with low or no partial load input via radio relay.
- 1-18 Point to Multiple Points (PMP):** A means of communication between a series of transmitters and receivers via a central transmitter and receiver.
- 1-19 Radio Communication Service:** Sending and/or receiving radio frequencies that can be used to transmit data, messages, voices or visual images or to operate machines, devices and control them.
- 1-20 Radio Local Area Network (RLAN):** It means the devices that conform to the technical specifications specified in the two Standards: (ETSI EN 302 567), (ETSI EN 301 893).
- 1-21 Radio Regulations (RR):** It means the regulations issued by the International Telecommunication Union after each global conference for radio communications and approved by the State of Kuwait.
- 1-22 Peripheral Foundation:** It means the radio telecommunication service that does not cause harmful interference to the basic service stations and cannot demand protection from harmful interference from the basic service stations and this service appears in small letters in the National Frequency Spectrum Plan.
- 1-23 Station:** Radio-communication devices allocated to transmit and receive radio-communication service.
- 1-24 Broadband Data Transmission:** It means the devices conforming to the technical specifications stated in the Standard ETSI EN 300 328).
- 1-25 Wireless Local Area Networks (WLAN):** It means a network of devices that are connected wirelessly.
- 1-26 Harmful Interference:** It means an interference through a wireless signal or any other sources which obstructs or stops one of the radio services operating in accordance with the National Frequency Spectrum Plan and this Regulation on a frequent or continuous basis.



CITRA

الهيئة العامة لتنظيم الاتصالات وتقنية المعلومات
COMMUNICATION & INFORMATION TECHNOLOGY REGULATORY AUTHORITY

Scope of this Regulation

Article (2)

This regulation applies to:

- 2-1 Governmental entities requesting fixed radio service such as ministries, companies and institutions.
- 2-2 Private companies and institutions requesting the fixed radio service.
- 2-3 Licensee by the Authority to provide fixed radio-communications services.

Fixed Radio Uses

Article (3)

- The application for fixed radio service is submitted for the following uses including but not limited to:

- Connection links from point to point (P-P)
- Fixed broadband wireless connection.
- Connection links from one point to multiple points (PMP)
- Mesh network

Requirements of obtaining the Fixed Radio Service

Article (4)

4-1 The entity requesting the license of the fixed frequencies must be registered with the Authority.

4-2 The service application is registered through the Authority's website, along with attaching an official letter with the application.

4-3 Filling out the model prepared for technical specifications in Appendix (2).

4-4 Attach all technical specifications, catalogues of the fixed radio devices required to be installed, including the following:



CITRA

الهيئة العامة للاتصالات وتقنية المعلومات
COMMUNICATION & INFORMATION TECHNOLOGY REGULATORY AUTHORITY

- The trademark of the device and its model.
- Device transmission power.
- The number of the devices that need to be used.
- A list of all the locations in which the devices to be installed with its geographical coordinates.
- Plan of the network to be installed.
- Any additional information and documents required by the Authority after reviewing the application.

Verification and Approval of the Application

Article (5)

5-1 The Authority studies the application submitted regarding the required frequencies and its conformity with the required service according to the National Frequency Spectrum Scheme and Registry.

5-2 Examining all the technical specifications and ensuring that the communication devices are compatible with the approved technical standards at the Authority.

Technical Conditions

Article (6)

6-1 Fixed radio stations must be operated according to the provisions of Radio Regulations and the relevant recommendations from the radio communications sector affiliated to the International Telecommunication Union, and also according to the regulations and decisions issued by the Authority.

6-2 The table attached to Appendix No. (1) Indicates the frequency bands of the fixed service according to the national plan for distribution of frequencies.



CITRA

الهيئة العامة لتنظيم الاتصالات وتقنية المعلومات
COMMUNICATION & INFORMATION TECHNOLOGY REGULATORY AUTHORITY

Technical Obligations

Article (7)

7-1 Commitment to use the radio systems including the antennas that conform with the specifications stated in the set of Standards (ETSI EN 302 217)- Fixed Radio Systems – the specifications and requirements related to the devices and antennas from point to point, and the devices must conform to the ETSI standards related to Spectral Efficiency Class 2 and above.

7-2 The licensee shall adhere to the coordinates stated in the permit granted for the links from point to point and from point to multiple points.

7-3 Directional antennas are allowed only for links from point to point.

7-4 The licensee undertakes not to affect the other bodies permitted with the same frequencies of the allocated links.

7-5 The licensee undertakes to notify the Authority immediately upon making any change or technical modification on the location of the connection links.

7-6 The licensee is obligated to notify the Authority immediately upon making any technical modification on the radio devices for the connection links.

7-7 The licensee undertakes that the transmission of the radio devices in the fixed stations and the emissions from them are within the limits stated in the guidelines published by the International Committee for the Protection of Non-Ionizing Radiation (CNIRP), so that it shall not pose a threat to the public health.

Coordination of the Fixed Radio Service Frequencies

Article (8)

8-1 The allocation of the frequencies of fixed radio service links is subject to the availability of the frequency band and the successful coordination for the frequencies to the allocated frequency links.



CITRA

الهيئة العامة للاتصالات وتقنية المعلومات
COMMUNICATION & INFORMATION TECHNOLOGY REGULATORY AUTHORITY

8-2 Coordination of the frequencies of the fixed radio stations is made through the Authority for being the authorized entity for allocating and registering frequencies, which shall conform with the regulation of the Frequency Spectrum Regulation issued by the Authority.

Interferences

Article (9)

Any licensee that causes any harmful interference for another licensee, it must immediately take the prompt actions required to eliminate this harmful interference.

Validity of the License

Article (10)

The validity of the license of the fixed radio service shall be for one year (device/frequency) starting from the date of issuing the license.

Renewal of the License

Article (11)

11-1 The license renewal application is submitted within (3) months before its expiry through the electronic website of the Authority.

11-2 After the expiry of the license, the Authority shall have the right to terminate the license and to request the licensee to remove the devices.

License Amendment

Article (12)

12-1 The licensee submits an official letter through the Authority's website requesting the amendment of its license in the following cases:

- Cancellation of some of the devices licensed to it.
- Addition of devices to the license.
- Changing the locations of devices installation.



CITRA

الهيئة العامة للاتصالات وتقنية المعلومات
COMMUNICATION & INFORMATION TECHNOLOGY REGULATORY AUTHORITY

12-2 The licensee must provide all the technical data related to the devices to be added or cancelled or to change their locations with the coordinates of the location required to cancel devices from or install them.

License Cancellation

Article (13)

13-1 The licensee submits an official application through the Authority's website for cancellation of its license.

13-2 The licensee attaches a list of all the devices, their serial numbers as licensed by the Authority and a letter of cancelling frequencies programming from all the devices.

13-3 The Authority shall inspect all the previously licensed locations to ensure the removal of devices from them.

13-4 Commitment not to dispose of the devices except after obtaining the approval of the Authority.

General Provisions

Article (14)

14-1 The Authority is not responsible for any damages or compensations for any losses resulting from harmful interferences.

14-2 The Authority may amend the provisions of this regulation for business interest.

14-3 The licensee must adhere to the articles and clauses of this regulation and any instructions, regulations or decisions issued by the Authority.

14-4 The Authority, in the event of breaching the provisions of this regulation, may apply the penalties and fines stated in the Law No. (37) of 2014 for the establishment of the Communication & Information Technology Regulatory Authority amended by the Law No. (98) of 2015.



CITRA

الهيئة العامة للإذاعات ونظم المعلومات
COMMUNICATION & INFORMATION TECHNOLOGY REGULATORY AUTHORITY

Appendix (A)

Frequency Band	Recommendation of Radio Communication Sector affiliated to International Telecommunication Union
2400-2483.5 MHz *	
5725-5850 MHz*	ETSI EN 302 502
7.11 – 7.725 GHz	ITU-R F 385
7.725- 8.725 GHz	ITU-R F386
10.7-11.7 GHz	ITU- R F 387
12.75- 13.25 GHz	ITU-R F 497
14.4- 15.35 GHz	ITU R F 636
17.7 – 18.7 GHz	ITU-R F 595
21.2 – 23.6 GHz	ITU-R F 637
27.5- 29.5 GHz	ITU-R F 748
31-31.3 GHz	ITU-R F 746
31.8- 33.4 GHz	ITU-R F 746
36.0- 40.5 GHz	ITU-R F 749
51.4- 52.6 GHz	ITU-RF 1496
55.78- 66 GHz	ITU-RF 1497
71-76 GHz/81-86 GHz	ITU-RF 2006
92-94 GHz	ITU-RF 2004
* Peripheral Foundation	



CITRA

الهيئة العامة للاتصالات وتقنية المعلومات
COMMUNICATION & INFORMATION TECHNOLOGY REGULATORY AUTHORITY

Appendix (2)

(Application Model for Technical Specifications)

Radio application Form- Microwave

1- USER Information

Company:

Address:

Phone:

E-mail

2- Site Data

A- Site Name (start of link)

Address:

Phone:

Latitude:

Longitude: (m):

Altitude (m):

Building Height (m):

Tower Height (m):

No. of Equipment:

B- Site Name (end of link)

Address:

Phone:



CITRA

الهيئة العامة للاتصالات وتقنية المعلومات
COMMUNICATION & INFORMATION TECHNOLOGY REGULATORY AUTHORITY

Latitude:

Longitude: (m):

Altitude (m):

Building Height (m):

Tower Height (m):

No. of Equipment:

3- Equipment Specifications

Manufacturer:

Type:

Freq. Range (MHz):

Band Width (MHz)

Power (Watt):

Modulation Type:

Type of Emission: Voice/ Video/ Data

4- Antenna Specifications

Manufacturer:

Type:

Ant. Height (m):

Azimuth (Deg.):

Elevation (Deg.)

Gain (dB):



CITRA

الهيئة العامة للاتصالات وتقنية المعلومات
COMMUNICATION & INFORMATION TECHNOLOGY REGULATORY AUTHORITY

Polarization: Vertical/ Horizontal/ Others

Max. Power (mw):

EIRP (mw):

Received Power (mw):

Beam Width (Deg.):

Ant. Freq. Range (MHz):

Insertion Loss (dB):

Transmission Loss (dB):

I, the undersigned, acknowledge the validity of the given and attached data

Name:

Job Title:

Signature

Stamp

Date: / /

- The data of this form shall be filled out for each link.

- The devices' catalogues shall be attached.