

Regulation of Air Radio Service

Appendix No. (1) Regulations for Management and Regulation of the Frequency Spectrum

Version 1.0

Article (1)

Definitions

State: The State of Kuwait

Authority: Communication and Information Technology Regulatory Authority (CITRA), established under the Law No. (37) of 2014.

The Law: The Law of establishing the Communication and Information Technology Regulatory Authority No. (37) of 2014, its amendments, and its executive regulation.

Applicant: Any person (governmental or private entity) applies for a permit according to the regulations issued by the Authority.

Application: It means a permit application from the Authority on the specified form according to the applicable procedures.

Permit: It means the radio service permit issued by the Authority which allows the authorized persons to use specific frequency bands and devices, subject to the terms set out in this regulation. **Licensee:** It means the person (governmental or private entity) who obtains the permit from the Authority.

Airport Mobile Aviation Communication System (AMACS): It means mobile radio technology used for communication with the plane while it is at the airport, according to the definition stated in Section (7) of the Volume (3) of Appendix (10), issued by the International Civil Aviation Organization (ICAO).

Aviation Mobile Service: It means the mobile service between (fixed) aviation stations and the plane stations or between plane stations, and rescue vehicle stations can participate in them, also the radio beacon stations may participate in this service to locate emergency locations at the specified distress and emergency frequencies.

Aeronautical Mobile-Satellite Service: It means the mobile satellite service, in which the mobile stations exist on board of the plane.

Aviation Mobile Service (R) It means aviation mobile service reserved for communication related to flight safety and regularity, in the first place, along national or international civil aviation routes.

Aviation Mobile Service (OR): It means aviation mobile service prepared for communication, including the communication related to coordination of flights, in the first place, outside the national or international civil aviation routes.

Aeronautical Radio Systems: It means all the radio devices in the plane that are necessary for communication, navigation and surveillance purposes.

Aviation Radio Navigation Service: It means a navigation radio service that serves the purposes of planes and the safety of its operation.

Aeronautical Radio Navigation-Satellite Service: It means navigation radio service that serves the purposes of planes, and the safety of its operations using satellites.

Air Collision Avoidance System (ACAS): It means the air collision avoidance system specified in Volume 5 of the Appendix No. 10 issued by the International Civil Aviation Organization (ICAO).

Aircraft Earth Station (AES): It means a ground Satellite station on board of the plane.

Aircraft Radio License (the license): It means the license granted by the Authority to the aircraft to allow it to operate all radio devices in the plane that are required for communication,

navigation and surveillance.

Airport Surface Detection Equipment (ASDE): It means the equipment used by air traffic control officers to detect the aircraft and vehicles on the roof of the airport.

Appendix 10 to the International Civil Aviation Convention: It means the publication of the International Civil Aviation Organization (ICAO) that consists of five volumes including Standards and Recommended Practices (SARPs) and Procedures of Air Navigation Services (PANS) and guidance materials related to aeronautical communications, navigation and air control systems.

Automatic Detection System-Broadcasting (ADS-B): It means the technology through which the aircraft detects its location by satellites and it broadcasts regularly to enable tracking it.

CN: It means communication, navigation and surveillance.

Designated Operational Coverage (DOC) It determines the size of the airspace (Specific operating range and specified operating altitude) allocated to provide the service in it through a transmitter installed on the ground.

Distance Measuring Equipment (DME): It means radio navigation technology based on a transmitter and response device and it measures the inclined range distance through measuring the

delay in transmitting radio frequency signals (VHF) or (UHF) as indicated in Volume (1) of Appendix (10), issued by the International Civil Aviation Organization (ICAO).

Ground Station: It means a station either located on the surface of the Earth or in the main part of the Earth's atmosphere and is intended for communicating with one or more space stations, or with one station or more of the same type by one or more reflecting satellites or by other space objects.

Emergency Position Indicating Radio Beacon (EPIRB): It means the station in the marine mobile service whose transmission aims at facilitating search and rescue operations.

Directorate General of Civil Aviation (DGCA): It means the Directorate General of Civil Aviation in the State of Kuwait.

Global Navigation Satellite System (GNSS): It means the navigation through the satellites that provide independent geospatial determinations of the site covering all parts of the world like GPS, Glonass, Compass, and Galileo.

Ground-Based Assistance System (GBAS): It means the system for management of aircraft landing that operates in all weather conditions based on simultaneous differential correction of GPS signals, as indicated in Volume (1) of Appendix (10), issued by the International Civil Aviation Organization (ICAO).

Instrument Landing System (ILS): It means a radio navigation system that provides horizontal and vertical guidance to the planes directly before landing and during it, and it also provides in some specific points an indication of the distance from the reference landing point.

Instrument Landing System-(ILS-Glide Path): It means a vertical guidance system integrated into the instrument landing system that indicates the plane's vertical deviation from its optimum landing.

Instrument Landing System-(ILS-Localizer): It means a horizontal guidance system integrated into the instrument landing system that indicates the plane's horizontal deviation from its optimum landing through the runway landing axis.

The International Civil Aviation Organization (ICAO): It means the International Civil Aviation Organization of the United Nations.

International Mobile Telecommunication (IMT): It means the cellular general mobile land system.

International Telecommunication Union (ITU): It means the agency specialized in information technology and communication of the United Nations.

Radio Beacon Guide: It means a transmitter in the aeronautical radio navigation service, that radiates a beam in the vertical direction to provide the aircraft with indication of location information.

Meteorological Aid Service: It means a radio communication service used for observation and tracing operations in meteorology, including hydrology.

Microwave Landing System: It means the accurate landing system that operates in all weather conditions used basically to replace the instrument landing system (ILS) or as complementary to it, as indicated in Volume (1), of Appendix (10), issued by the International Civil Aviation Organization (ICAO).

Document for the implementation of facilities and services issued by the ICAO Middle East Office (FASID MID): It means the document for the implementation of facilities and services used by the ICAO Middle East Office of the International Civil Aviation Organization (ICAO).

Mobile Communications on board of the plane: It means the radio systems installed in the plane that transmit end-user wireless communications, to the public mobile networks.

Satellite Mobile Service: It means a radio communication service between the mobile ground stations and one or more space station or between space stations that use this service or the mobile ground stations through one or more space stations.

Non-Directional Beacon (NDB): It means a transmitter in the service of aeronautical radio navigation that emits a specific type of radiation in order to provide the aircraft with an indication of the location information.

Initial Radar: It means a radio induction system based on the comparison between reference and radio signals reflected from the desired position.

Radar: It means the radio system for location discovery and scoping.

Radio Regulations (RR): It means the regulations issued by the International Communication Union after each international conference for radio communication approved by the State of Kuwait.

Radiolocation Service: It means using radio signals to detect and determine the location of remote bodies like aircraft (Radar)

Search and Rescue (SAR): it means search activities for persons in distress or in immediate danger and providing them with aid and assistance.

Secondary Radar: It means a radio induction system based on the comparison of reference and radio signals resent from the location to be specified.

Secondary Surveillance Radar (SSR): It means a radar system used in Air Traffic Control (ATC) and it does not only discover and measure the location of the plane i.e., the scope and direction, but it requests additional information from the plane itself like its identity and altitude/ This service is indicated in Volume (4) of Appendix (10), issued by the International Civil Aviation Organization (ICAO).

Selective Calling (SELCAL): It is a method of transmitting signals through which a plane can be notified that a ground station wishes to communicate with it. This service is indicated in Volume (3), second part of Appendix (10), issued by the International Civil Aviation Organization (ICAO).

Single-Sided Band (SSB): It means amending the capacity when stopping single-sided band of the amended signal for more efficient use of bandwidth.

Station: It means the radio communication equipment allocated for transmitting and receiving in order to secure radio communication service.

Ultimate Access Transmitter (UAT): It means a device that transmits location data and performance from the plane while receiving air traffic information, weather and other important information from the ground stations, as indicated in part 1 of Volume (3) of Appendix (10), issued by the International Civil Aviation Organization (ICAO).

Very High Frequency Data Link (VDL): It means a very high frequency communication system (VHF) to be used to transmit information between the aircraft and ground stations or another plane, as indicated in Volume (3) of the Appendix (10), issued by the International Civil Aviation Organization (ICAO).

Very High Frequency Omni-Directional Range Finding (VOR): It means an aircraft short range radio navigation system that allows the aircraft provided with a receiving unit to determine its location and stay on track through receiving the radio signals sent through a network of fixed ground beacons, as indicated in Volume (1), of Appendix (10), issued by the International Civil Aviation Organization (ICAO).

Wireless Access Systems on board of the Aircraft: It means the radio systems installed in the aircraft that provides the internet communication of the end user and it delivers to the public and private central networks.

Wireless Communications for Avionics inside the Aircraft: (WAIC): It means the radio communication between the wireless components integrated in the aircraft as part of the exclusive closed network required to operate the aircraft, used only for safety applications.

World Radio Conference (WRC): It means world radio communication affiliated to the International Communication Union.

Article (2)

Applications related to Aerial Radio Systems

- 2-1 The Authority regulates the issuance of all permits issued to the Air Radio Service Stations in the State.
- 2-2 The Air Radio Systems are used for the following:
 - Mobile aviation service (Land-Air/ Air-Land)
 - Mobile aviation service (Air- Air)
 - Aviation radio navigation service (Navigation assistance)
 - Aviation Satellite mobile service (AES)
 - Aviation Satellite radio navigation (Global navigation satellite systems (GNSS)
 - Radiolocation service (initial radar, secondary radar and surface movement radar)
 - Radio navigation service (radio altimeter)
 - Meteorological Assistance Services (Wind Activity Recording Radar)
 - International Mobile Telecommunication (IMT) on board of the plane.
 - WIFI systems on board of the plane.
 - Wireless Avionics Intra-Communications in the plane (WAIC)

Article (3) Technical Conditions and Terms

The following table indicates the guidelines regarding frequency bands for aeronautical radio systems, its uses and applicable terms of use:

Frequency Bands	Usage	Terms of Use	
255 .526.5 KHz	Non-directional beacons (NDB)	Chapter4-3, Volume 1, Appendix 10 of (ICAO)	
3023 KHz	Search and Rescue (SAR)	Chapter 2-2, Volume 5, Appendix 10 of (ICAO)	
5680 KHz	Search and Rescue (SAR)	Chapter 2-2, Volume 5, Appendix 10 of (ICAO)	
2.850 □ 3.000 MHz	Aviation mobile service (R)	Single-sided band (SSB), with 3KHz interval	
3.000 □ 3.025 MHz	Audio and data	Radio Regulation (RR) Appendix 27	
3.400 □ 3.500 MHz		Audio:	
4.650 □ 4.700 MHz		Chapter 4-2, Volume 3, Part 2, Appendix 10 of (ICAO)	
5.480 □ 5.680 MHz		Very High Frequency data link (HDFL)	
6.525 □ 6.685 MHz		Chapter 3, Volume 3, Appendix 10 of (ICAO)	
8.815 □ 8.965 MHz		Selective calling (SEL CAL)	
10.005 □ 10.100 MHz		Chapter 3, Volume 3, Part 2, Appendix 10 of	
11.275		(ICAO)	
□ 11.400 MHz 13.260 □			
13.360 MHz 17.900 □			
17.970			
MHz			
21.924 □ 22.000 MHz			

3.025 □ 3.155 MHz	Aviation mobile service (OR)	Single-sided band (SSB), with 3KHz interval
3.800 □ 3.960 MHz	Audio and data	Radio Regulation (RR) Appendix 26
4.700 □ 4.850 MHz		
5.450 □ 5.480 MHz		
5.680 □ 5.730 MHz		
6.685 □ 6.765 MHz		
8.965 □ 9.040 MHz		
11.175 □ 11.275 MHz		
13.200 □ 13.260 MHz		
15.010 □		
15.100 MHz 17.970 □		
18.030 MHz		
23.200 🗆 23.350 MHz		
74.8 □ 75.2 MHz	Radio beacon guide on the	Central Frequency 75 MHz
	ground	Chapter 7-1-3, Chapter 6-3, Volume 1, Appendix
		10 of (ICAO)
100 117 075) 77		, , ,
108 - 117.975 MHz	Very high frequency omni-	Very high frequency omni-directional
	directional determination of the	determination interval 50 KHz 001/KHz
	range (VOR)	Chapter 3-3, Volume 1, appendix 10 of (ICAO)
	Ground Based Assistance	Crown d Donal Assistance Court on
	System (GBAS)	Ground Based Assistance System
	Instrument landing system	Interval 25 KHz
	(ILS- Localizer)	Chapter 7-3, Volume 1, Appendix 10 of (ICAO)

	Very High frequency data link	Radio alignment with Runway
	(VDL) Emergency Use	Interval 50 KHz/100 KHz, Chapter 3-3, Volume 1, ICAO, Appendix 10, very high frequency link data Chapter 5, Volume 3, ICAO Appendix 10 Audio Direction 8.33 KHz only Chapter 3-2-1-2, Volume 3, Part 2, Appendix 10 of (ICAO) High frequency data link Chapter 6, Volume 3, Part 1, Appendix 10 of (ICAO) Selective Calling (SELL CAL) Chapter 6, Volume 3, Part 1, Appendix 10 of (ICAO) Chapter 5, Volume 3, Part 2, Appendix 10 of (ICAO) Chapter 5, Volume 3, Part 2, Appendix 10 of (ICAO)
121.5 MHz		
121.6 MHz	Communication between the pilot and the firefighting section	

117.975 □ 137 MHz	Off-track communication (from	
	air to air) between small aircraft	
	(Standby state)	
	Coordinating search and rescue	
123.1 MHz	activities (SAR)	Chapter 5, Volume 3, Part 2. Appendix 10 of
		(ICAO)
		(ie/ie)
	Off-track communication (from	
	air to air) between small aircraft	
123.350 MHz		
	(Standby state)	
230.328.6 MHz	Aviation mobile	
	communication (OR) (audio	
	and data from ground to air and	
	from air to air	
	Aviation mobile	
	communication location to	
	transfer frequencies to control	
	•	
	air traffic to transfer voice from	
	ground to air.	
243 MHz	Emergency use	Chapter 5, Volume 3, Part 2, Appendix 10 of
		(ICAO)
		(10.10)
328.6.335.4 MHz	ILS Glide Path	Interval 150 KHz or 300 KHz

		Chapter 3-1, Volume 1, Appendix 10 of (ICAO)
406 □ 406.1 MHz 960 □ 1215 MHz	Transmitter to determine emergency location (search and rescue) Distance Measurement Equipment (DME)	Chapter 5, Appendix 1 of Chapter 5, Volume 3, Part 2, Appendix 10 of (ICAO) Distance measurement equipment
	Transmitter and receiver device for ultimate Access (UAT) Secondary surveillance radar (SSR) Air Collision Avoidance System (ACAS), Global navigation satellite system (GNSS), Automatic surveillance through broadcasting (ADS-B)	Chapter 3-5 Volume 1, Appendix 10 of (IACO) Transmitter and receiver device for ultimate Access Chapter 12, Volume 3, Part 1, Appendix 10 of (ICAO) Secondary surveillance radar Chapters 3, 4, Volume 4, Appendix 10 of (ICAO) Air collision avoidance system Chapter 4, Volume 5, Appendix 10 of (ICAO), Global navigation satellite system Chapter 4, Volume 1, Appendix 10 of (ICAO), Automatic surveillance through broadcasting Chapter 5, Volume 4, Appendix 10 of (ICAO)
978 MHz	Transmitter and receiving device for ultimate Access (UAT)	
1087.7.1092.3 MHz	Automatic surveillance Using broadcasting	

1030 MHz	Secondary surveillance radar	
	(SSR) for inquiries from ground	
	to air	
109 MHz	Secondary surveillance radar	
	(SSR) for response from air to	
	ground	
	ground	
1215 □ 1400 MHz	Initial radar	Radar equipment
	Radar of recording wind	ITU-R
	activity	
		SM 329
	Global navigation system	ITUR SM 1541
	through satellites GNSS	TIOR SIVI 1341
		Global navigation system through satellites
		Chapter 4-2, Volume 1, Appendix 10 of (ICAO)
1518 □ 1559 MHz	Aviation mobile satellite	Aviation mobile satellite service (R)
	service	
1610 □ 1660.5 MHz		Chapter 4, Volume 3, Part 1, Appendix 10 of
1660 T 1675 NATE		(ICAO)
1668 □ 1675 MHz		Annondia 267 5 of Padio Populations
		Appendix 367.5 of Radio Regulations
1544 □ 1545 MHz	Disasters and safety	
1645.5 □ x1646.5 MHz	Radio beacon to determine	
	emergency locations through	
	satellite EPIRB	
1559- 1626.5 MHz	Global navigation system	Chapters 2. 2. Volume 1. Amondia 10 of (ICAO)
1337- 1020.3 IVINZ		Chapters 2, 3, Volume 1, Appendix 10 of (ICAO)
	through satellite GNSS	
1785- 1710	Mobile communication on	ECC/DEC/(06)07
	board of the plane	223.226.(30)07
	oodid of the pidile	
		<u></u>

1805 □ 1880 MHz		Allowed to be used above 10000 feet only,
1920 □ 1980 MHz		
2110 🗆 2170 MHz		
1980 🗆 2010 MHz	Aviation mobile Satellite service	
2400 □ 2483.5 MHz	Wireless access on board of aircraft	EN 300 328 100 ml watt Equivalent radiated capacity maximum EIRP
2700 □ 3300 MHz	Initial surveillance radar	Chapter 4-2-3, Volume 1, Appendix 1o of (ICAO) ITU-R SM 329 ITU-R SM 1541
4200 □ 4400 MHz	Airborne radar (Altimeter)	Altitude measurement by air radar ITU-R SM 329 ITU-R SM 1541
	Electronic wireless communication in the aircraft (WAIC)	Electronic wireless communication in the aircraft (WAIC) ITU-R M 2283 ITU-R M 2067
5030 □ 5150 MHz	Microwave landing system (MLS)	Chapter 11-3, Volume 1, Appendix 10 of (ICAO)
5030 □ 5091 MHz	Aviation mobile communication in the airport (AMACS)	Chapter 7, Volume 3, Part 1, Appendix 10 of (ICAO)

5150 □ 5350 MHz	Wireless access systems on	EN 301 893	
	board of the aircraft	200 Ml Watt EIRP Maximum	
5350 □ 5470 MHz	Weather Radar	ITU-R SM 329	
		ITU-R SM 1541	
5470 □ 5600 MHz	Wireless access systems on	EN 301 891	
	board of aircraft	500 Ml Watt EIRP Maximum	
5650 □ 5725 MHz	Wireless access systems on	EN 301 893	
	board of aircraft	500 Ml Watt EIRP Maximum	
5725 □ 5875 MHz	Wireless access systems on	EN 300 440	
	board of aircraft	50 MI EIIRP Maximum	
8750.8850 MHz	Doppler air radar	ITU-R SM 329	
		ITU-R SM 1541	
9000 □ 9500 MHz	Precision proximity radar	ITU-R SM 329	
	Airport surface detection equipment (ASDE)	ITU-R SM 1541	
	Radar of movement on the		
	surface, Weather radar		
10.7 □ 12.75 GHz	(Grounds stations of the plane		
	(Air to ground)		
13.25 □ 13.4 GHz	Doppler air radar	ITU-R SM 329	
		ITU-R SM 1541	
14.0.14.5 GHz	Ground stations of the aircraft		
	(ground to space)		

15.4 □ 15.7 GHz	Precision proximity radar	ITU-R SM 329	
	Airport surface detection equipment (ASDE)	ITU-R 1541	
19.7.20.2 GHz	Ground station of the aircraft AES (space to ground)	ITU-R Resolution 156 (WRC-15)	
24.25 🗆 24.65 GHz	Precision proximity radar	ITU-R SM 329	
	Airport surface detection equipment (ASDE)	ITU-R 1541	
29.5.30.0 GHz	Ground station of the plane AES (Ground to space)	ITU-R Resolution 156 (WRC-15)	
31.8 □ 33.4 GHz	Precision proximity radar	ITU-R SM 329	
	Airport surface detection equipment (ASDE)	ITU-R 1541	
77 GHz	Radar of movement on the	ITU-R SM 329	
	surface	ITU-R 1541	
94 GHz	Radar of movement on the	ITU-R SM 329	
	surface	ITU-R 1541	

- **3-1** Frequencies stated in the above schedule for the ground stations of the aircraft (AES) and the aviation mobile satellite service do not give the authority to the providers of the communication services to operate those services from within the State.
- 3-2 The wireless access system on board of the aircraft (registered in the State or abroad), as part of the radio license of the aircraft after obtaining a permit from the Authority to operate it, may be used, provided that it is over 10000 feet in the country's airspace.

Article (4)

Call Sign

- **4-1** Call sign for all the aircraft registered in the State of Kuwait is 9K XXX, where X represents an alphabetical letter.
- **4-2** Directorate General of Civil Aviation (DGCA) addresses the process of issuing Call Sign for all the aircraft registered in the State of Kuwait.

Article (5)

Priority of Communication

- **5-1** Article (44) of Radio Regulations (RR) gives maximum priority to the following communications:
- Distress calls and messages and distress movement.
- Communication preceded by emergency signal.
- 5-2 The following priorities of communication shall be according to the following order:
 - Communications related to finding the direction with the assistance of radio equipment
 - The messages related to the safety of flights
 - Meteorological Messages
 - Messages of the regularity of flights
 - Services communication
 - Messages related to the application of the United Nations' Charter, messages of the government that requested giving it priority.
 - Other communications related to aviation.

Article (6)

Coordinating Air Radio Service Frequencies

6-1 The Authority coordinates the frequencies of the air radio station on the local, regional and international levels, because it is the entity that is responsible for coordinating frequencies.

6-2 The Authority notifies the International Communication Union with the frequencies of these stations and registering them with it, according to the procedures indicated in the Radio Regulations and also the Technical Office of Communication of the Gulf Cooperation Council countries.

Article (7)

Validity of the Permit

- 7-1 The validity of the air radio service permit shall be for five years.
- 7-2 The permits that were not renewed for one year from the date of its expiry shall be cancelled, and the authorized entity must provide a new application to the Authority and it shall be subject to the same procedures as if it is a new applicant.

Article (8)

Service Request Requirements

The license applicant shall submit an official letter to the Authority, as well as attaching the documents indicated in Appendix No. (1) to it.

Article (9)

Responsibilities of the Licensee

- 9-1 The licensee shall ensure the use of air radio service devices and equipment according to the requirements, terms, conditions and the limits related to this regulation.
- 9-2 All the authorized users must comply with the civil aviation regulations and publications issued by the Directorate General of Civil Aviation in the State.
- 9-3 All the aircraft registered in the State must hold the radio permit for the air service, which shall be valid and issued by the State.
- 9-4 All the aircraft registered in the State must hold the published documents and records (in printed or electronic format) that include the official information related to the stations that the aircraft may use in its operation.

9-5 The authorized entity must comply with the articles and clauses of this regulation and any other instructions issued by the Authority in the future.

Article (10)

Penalties and Fines

Everyone who breaches the terms of this regulation and Law No. 37/2014, shall be subject to the penalties and fines set out in this law.

Appendix (1)

Requirements of Air Radio Service

	New	Renewal	Amendment	Cancellation
Service Description	The service through which a permit is granted to use the wireless devices on the board of the plane for the purposes of navigation and air safety.	The service through which the permit is renewed to use the wireless devices on board of the aircraft for the purposes of navigation and air safety.	The service through which the permit is amended to use the wireless devices on board of the aircraft for the purposes of navigation and air safety.	The service through which the permit is cancelled to use the wireless devices on board of the aircraft for the purposes of navigation and air safety.
Service Validity	Five years from the date of payment of the fees	Five years from the date of payment of the fees	Five years from the date of payment of the fees	Not Valid
Expected Time	30 working days to allocate aviation frequencies 5 working days for air radio permit	5 working days	5 working days	5 working days
Required Documents	- A list of all the wireless devices on board of the aircraft in detail (device trademark/model/ device transmission power/type of radio emissions class/ emission/ frequency range, and number of devices used of each model) - An official letter requesting permit addressed to the Authority	- A list of all the wireless devices on board of the aircraft in details - An official letter requesting renewal of the permit addressed to the Authority	- Attaching the technical specifications for the devices (in the event of adding devices) - A list of all the wireless devices on board of the aircraft, along with indicating the technical specifications (in the	- An official letter addressed to the Authority of cancellation of the aircraft registration by the Directorate General of Civil Aviation - An official letter requesting the cancellation of the permit addressed to the Authority

- Certificate of registering		event of adding or	
the aircraft by the		amending data)	
Directorate General of Civil			
Aviation.			
- Attaching the technical specifications of devices.	:		
- Filling and attaching the application form for the service.			



Regulations of specifications and requirements for the construction and operation of radio communication stations

Amendment No. (1)

V 1.7

December 2019

Section One Definitions

Article (1)

The words and phrases contained in the regulations and the guidance memorandum attached thereto shall have the same meanings as stated in Law No. 37 for the year 2014 with regard to the establishment of the Communication & Information Technology Regulatory Authority, as amended by Law No. 98 for the year 2015 and its Executive Regulations. The following words and phrases shall have the meanings assigned to each of them, unless the context requires otherwise:

Telecommunications Law: Law No. 37 for the year 2014, as amended by Law No. 98 for the year 2015 and its executive regulations.

Authority: The Communication & Information Technology Regulatory Authority established under the Telecommunications Law.

Regulation: The regulation of specifications and requirements for the construction and operation of a public radio communication station.

Licensee: A person who is licensed to provide one or more telecommunications services to the public, or who is licensed to manage, establish or operate a telecommunications network or Internet service to provide telecommunications services to the public, including providers of information or content that are provided through the telecommunications network.

Operator: A company that owns and operates one or more mobile phone networks.

Public Radio Communications Station: One or more transmitting or receiving devices or a common configuration thereof, including the auxiliary devices located in a specific location in order to provide radio, astronomical or broadcasting services, and the auxiliary devices, including but not limited to the site, equipment room, communication tower, antenna and the electricity generator to provide telecommunications services to users.

Communication Towers: Towers that are consisting of interconnected or single mesh iron supports on which radio frequency transmitting and receiving devices (antennas) are installed and connected to small transmission stations adjacent to them to operate radio frequency transmitters and receivers for mobile phones, and installed on buildings, on unfixed cars, or within sites that accommodate more than one service provider.

Final License: The license issued by the Authority to establish public radio communication stations in accordance with the provisions of Article (7) of the Regulations.

The stations whose status is to be rectified: The existing stations to which the provisions of Article (.....) of the Regulations shall apply.

Procedures for submitting applications for the establishment and development of public radio communication stations: The integrated review procedures carried out by the Authority and the relevant authorities to grant permits, licenses and/or certificates issued for the establishment and development of new public radio communication stations in accordance with the guidance memorandum.

No Objection Certificate: The certificate issued by each of the relevant authorities in accordance with Article (5) of the Regulations.

Annual Compliance Review Process: The annual review carried out by the Authority to ensure that all public radio communication stations comply with the provisions stipulated in the Telecommunications Law and this Regulations regarding the public radio communication stations, as well as stipulated in all other relevant resolutions issued by the Authority and related authorities; all as indicated in the guidance memorandum.

Procedures of the annual plan for the development of public radio communication stations: The procedures carried out by the Authority in coordination with the licensee and the relevant authorities to develop the annual implementation plan as stated in the guidance memorandum.

Rectification Request: The request related to the proposed rectification process for each of the existing stations and submitted to the Authority in accordance with the requirements and procedures stipulated in the guidance memorandum.

Relevant authorities: All competent official authorities - except for the authority - whose approval is required, including the municipality, the environment, civil aviation, the Ministry of Health and any other authority, as the case may be.

International Authority: The International Authority for the Protection of Non-Ionizing Radiation.

Organization: The World Health Organization.

Union: The International Telecommunication Union.

Municipality: Kuwait Municipality.

Firefighting: The Public Authority for Firefighting.

Institute: The Institute of Electrical and Electronics Engineers.

Existing stations: Public radio communication stations that were established before the date of validity of the regulations.

Antenna: Any external transmitting or receiving device installed on a tower, building or structure used in communications that transmit or receive electromagnetic waves, digital or analog signals, radio frequencies (except radar signals), wireless communications signals, or any other communications signals.

Camouflage Solution (Invisible Solutions): Hiding or camouflaging the tower in order to reduce its visible effect.

Prohibition zone: The area around the antenna in which emissions from electromagnetic fields can exceed the levels imposed by the international authority.

Prohibited Area: The area within or around the site that the public may not enter, and employees of the Licensees or any third party authorized by the Licensees may enter it to conduct surface maintenance or other works.

Large Stations: the station that offers the largest area of coverage within the boundaries of the wireless network, and provides radio coverage over varying distances, based on the frequency used, traffic and terrain.

Small Station: A small public radio communication station and includes an antenna that provides a coverage area smaller than the large station. It includes:

- Microcell Station: It is a low-power station whose coverage extends to a limited area such as commercial complexes, hotels or transportation stations.
- **Picocell Station:** It is a low-power station used to increase or enhance the wireless coverage in a building or at an outdoor point, and the coverage is usually smaller than the Microcell stations.
- Femtocell Station: It is a low-power station that is based on wireless cellular technology, providing voice and wireless broadband services within a limited range in the home or office, and the coverage of this type is usually smaller than the Picocell stations.

Wall-mounted Station: A tower or antenna that is installed on any vertical or inclined surface in a building or other existing structure, with the highest point of the antenna at a

height equal to or less than the highest point of the roof on which the antennas are installed. These stations include, for example, installation on the external walls of the building.

Temporary Public Radio Communication Stations: Public radio communication stations that are mounted on a truck, locomotive or other vehicle, or stations designed to be used as a temporary facility to be erected during special events or in emergency situations.

Guyed Mast: Any type of tower whose lower part is fixed to the ground or building with wire stakes.

Lattice Tower: The tower that consists of a network of vertical and horizontal supports and metal arches, which form the column, which is usually in the form of a quadrilateral or triangular.

Mast: Any support structure for wireless communications, which can be located on the ground floor and which is erected on any vertical surface.

Monopole Tower: A tower consisting of one pole to support antennas and related connecting accessories.

Rooftop Tower: The tower that is attached to a roof that has not been originally built or constructed for the purpose of supporting the tower, and which does not meet the definition of wall-mounted towers or a Monopole tower.

Stub Mast Tower: A tower in the form of a small column installed on the ceiling to support one antenna or a group of antennas at certain heights, provided that its height does not exceed 9 meters from the roof of the building on which it is installed, and its distance is not less than 1 meter from the nearest side edge of the roof.

Residents: Individuals and companies who reside in buildings located within a radius of (100) meters around the locations of public radio communication stations or the temporary public radio communication station.

Equipment Room: The place that accommodates radio communication equipment used in the operation of public radio communication stations.

Location: The place where the public radio communication station is located.

Construction Works Specifications: The standard specifications for carrying out building and construction works and health and safety standards issued by the municipality.

Road Utilities: A short pole (usually less than 10 meters), and usually attached to or made in the form of a road lighting pole, services and facilities or other road facilities.

Section Two Objectives and Scope of Application

Article (2)

The regulation aims to achieve the following:

- A- Establishing a framework regulating the issuance of the necessary licenses and/or certificates, which allows the design, construction, development or maintenance of public radio communication stations in accordance with the powers granted to the Authority under the Telecommunications Law and its Regulations, as well as the laws, regulations and policies related to health, safety, environment and construction issued by the competent authorities in the State of Kuwait.
- B- Setting the necessary rules and procedures regarding the establishment, operation and maintenance of public radio communication stations with the aim of achieving the following:
- 1- Ensuring adherence to standard procedures regarding the establishment, development and maintenance of public radio communication stations.
- 2- Providing best practical practices to ensure compliance with relevant levels of exposure to electromagnetic fields to protect the environment and public health.
- 3- Establishing transparent procedures for regulating the selection of locations for the construction of public radio communication stations, and the preferred types and shapes for the designs of these stations.
- 4- Determining the requirements, conditions and types of licenses and certificates granted by the relevant authorities for the establishment, operation and maintenance of public radio communication stations.
- 5- Reducing the unnecessary plurality of the existing infrastructure and facilities of public radio communication stations by encouraging the joint use of public radio communication stations among the licensees.

Article (3)

The provisions of this regulation shall apply to all construction, development or maintenance of new public radio communication stations, and on existing stations.

Article (4)

The provisions of this regulation do not apply to stations, networks and communications devices designated for military use, national security, emergency, medical purposes, civil aviation purposes, and radio and television broadcasting services.

Section Three License Requirements

Article (5)

Licenses and certificates required to establish, develop or maintain public radio communication stations

The establishment or development of public radio communication stations requires obtaining one or more of the following licenses and/or certificates, whenever necessary:

- 1- A final license issued by the Authority after obtaining the required licenses and/or certificates from the relevant authorities.
- 2- A building permit issued by the municipality in accordance with the requirements of the municipality.
- 3- A no objection certificate issued by the General Authority of Civil Aviation in the event the tower is located within the airport area.
- 4- A no objection certificate issued by the Ministry of Health to ensure the compliance with the limits of non-ionizing emissions resulting from electromagnetic fields.
- 5- A no objection certificate issued by the Public Authority for Firefighting.

Article (6)

All works of public radio communication stations for small-sized stations that are erected inside buildings are excluded from the condition of obtaining the final license and/or certificates from the relevant authorities, provided that a type approval certificate is obtained from the authority for radio communication equipment designated for those stations. The licensee shall inform the Authority about the small-sized stations located inside the buildings.

Article (7) Final license

The authority issues to the licensee, after completing the application procedures, a final and fixed-term license, which is subject to an annual review of the extent of compliance, according to which the licensee obtains its approval to implement any development or maintenance of a public radio communication station, and it shall be a comprehensive license for all other necessary licenses and certificates required from the relevant authorities in accordance with Article (5) of the Regulations.

Article (8) Temporary Public Radio Communication stations

- A- Licensees may establish temporary public radio communication stations in accordance with the provisions of the Regulations in the following cases:
- 1- Emergency cases to ensure the continuity of service in the affected areas for a period not exceeding (6) months as determined by the Authority in accordance with clause (B) of this Article. The Authority may extend that period for another (6) months as maximum limit.
- 2- Executing special events for the purpose of providing the service, provided that the licensee applies for a license for a period not exceeding (30) days. The Authority may extend this period for (6) months as a maximum limit from the date of commencement of use, provided that they are removed when no longer needed or the license period expires, whichever comes first.
- 3- Cancellation or closing of the public radio communication station for the purpose of the continuation of the service.

- B- In cases of emergency or the closure of a communications station, the following must be taken into account when constructing temporary public radio communication stations:
- 1- Being close to the idle public radio communication station or stations, as far as it is operationally feasible.
- 2- Its height shall not be higher than the idle public radio communication station or stations.
- 3- It must be removed when it is not needed and not exceeding (6) months from the beginning of its use.
- C- When constructing a temporary public radio communication station: The licensee is obligated to take all practical measures to reduce to the lowest possible level the negative impact on the public landscape, the surrounding environment and the residents.
- D- The licensee must remove the public and temporary radio communication station at their expense, and shall restore the earth to its previous state.
- E- Without prejudice to the provisions of this Article, the licensee may apply to the Authority for an extension of the period prescribed for the removal of the temporary station for more than the prescribed period in the cases that require the same, and the said extension of time shall be decided by the Authority.

Article (9) Small-sized Stations that are Erected Inside Buildings

Subject to the provisions of Article (5) of the regulations, those who are licensed to operate small-sized stations that are installed inside buildings must comply with the following:

- 1- Obtaining the Authority's approval for the equipment of these stations through the prescribed qualitative approval procedures.
- 2- The inclusion of these stations within the self-approval documents that are subject to the annual review process for the extent of compliance contained in the guidance memorandum.

Section Four Procedures for Issuing Licenses and Certificates

Article (10) Prescribed Procedures

The Regulations specify the following procedures to be carried out by the Authority in cooperation with the relevant authorities:

- 1- The procedures for requesting the final license for the establishment of new public radio communication stations in accordance with the guidance memorandum.
- 2- The procedures for the annual plan for the development of public radio communication stations that must be carried out as stated in the guidance memorandum.
- 3- The procedures for participating in the site in accordance with the regulations of interconnection and access to facilities and premises issued by the Authority.
- 4- The annual review process for the extent of compliance in accordance with the guidance memorandum.

Article (11) Link of Communication

- A- The Authority shall, to the extent possible, play the role of the link of communication between the licensees and the relevant authorities to facilitate obtaining the necessary licenses and certificates for the establishment, development and maintenance of public radio communication stations.
- B- The Authority shall endeavor, to the extent possible, to conclude separate memorandum of understanding with the relevant authorities to ensure the effective implementation of the linking function whenever it is undertaken, and to facilitate compliance with the processes and standards set forth in the Regulations.

Article (12) Station Information Management System

- A- The Authority shall prepare the Station Information Management System, which allows the licensees to submit requests for licenses and/or certificates to establish, develop and maintain public radio communication stations, submit self-approval documents for public radio communication stations, submit participation requests and respond to them electronically, and other tasks that the authority deems appropriate.
- B- The licensee is obligated to use the system to be implemented whenever the Authority requests the same.

Article (13) Permit Applications of Public Radio Communication Station

- A- The licensee will submit to the Authority applications for obtaining the final license and/or certificates using the method specified by the Authority.
- B- The licensee shall provide the Authority, as part of the applications for obtaining the final license and/or certificates for the establishment of public radio communication stations, with the following information:
- 1- A written explanation of the intended work, as necessary.
- 2- Acknowledgment that the proposed site complies with the requirements of the relevant authorities and the requirements of the international authority, institute and union, if any.
- 3- Acknowledgment by the licensee that participation in public radio communications stations has been taken into consideration before submitting an application to establish a new public radio communications station.
- 4- A structural endurance report prepared by one of the approved engineering offices when erecting public radio communication stations on the roof of an existing building or structure.
- 5- Any additional information in accordance with the requirements contained in the guidance memorandum and the directives stipulated in instructions that the authority may issue in relation to permit procedures.
- C- Licensees shall submit the drawings listed below for each public radio communication station:

- 1- Site drawings: (at a drawing scale of 1:2500 as a maximum or any other drawing scale commensurate with the size of the site) and it must contain the following matters as a minimum:
- General location with the area outlined in black.
- The position of the station within the limits of 100 meters from the site.
- Ports and streets leading to and adjacent to the site.
- 2- Station design drawings: (a drawing scale of 1:500 as maximum), showing the following:
- Site boundaries.
- Outside space layout.
- Means of entering the site.
- 3- Architectural drawings: (a drawing scale of 1:100 as maximum), showing the following:
- Floor plans, if any.
- Facades with the external appearance of the equipment and equipment storage locations in the suggested colors.
- Station side profile with elevation and level details, if available.
- Structural drawings for foundations and floors.
- Electrical, mechanical and water piping drawings with the necessary details.
- 4- Roof drawings: They are applicable to the projects of installing antennas on the roofs of buildings (a drawing scale of 1:100 is appropriate), showing the following:
- The entire roof of the building.
- Details of existing equipment to be installed, including antennas, equipment storage locations, access channels, and air conditioning equipment.
- D- The licensee shall use highly qualified engineers for the planning and designing of public radio communication stations. The licensee must also seek the assistance of engineering offices approved by the municipality in order to draw up engineering drawings and prepare the required structural accounts that must be submitted in order to obtain the required licenses and certificates.
- E- If a licensee finds that one or more of the drawings referred to in Clause (C) of this Article is not related to the license, the licensee may clarify this in his application, and that will be subject to the approval of the Authority in relation to those drawings.

Article (14) Information Update

- A- In addition to preparing the required reports as part of the self-approval process described in the guidance memorandum, licensees are obligated to update the information of their public radio communication stations in the station information management system to be implemented whenever updates are made.
- B- The licensees are obligated to inform the Authority within (48) hours of their becoming aware of any incident related to their public radio communication stations, which may pose a danger to public health and safety. The Authority is obligated to provide the licensees with the contact numbers of the persons concerned with it to inform them in such cases.

Article (15) Public Complaints Department

- A- Licensees shall establish an effective system for dealing with public complaints regarding public radio communication stations within an appropriate period of time, provided that such period does not exceed (10) working days from the date of submitting the complaint.
- B- The licensee is obligated to announce the procedures included in the system referred to in Paragraph (A) of this Article by the means determined by the Authority.
- C- In cases where the complaint is not resolved within the time frame referred to in paragraph (A) of this Article, the Authority shall resolve the complaint based on a request submitted by the complainant.
- D- Licensees must keep a record of all complaints submitted regarding each public radio communication station, and it shall contain the date on which the complaint was submitted, its nature and how it was resolved, and this record shall be kept within the stations information management system to be implemented throughout the station's operation period.

Section Five Design and Construction specifications

Article (16)

Commitment to the Best Engineering Practices and International Standards

- A- Those who are licensed to establish and manage public radio communication stations shall abide by the internationally recognized standards of the authority, the institute, the union, the organization and other relevant authorities, and the best engineering practices and the conditions followed in the State of Kuwait, as well as the requirements, principles and procedures stipulated in the relevant laws of the Regulations and the Guidance memorandum.
- B- If a Licensee finds that they are unable to fully comply with the requirements, principles and processes stipulated in the Guidance Memorandum regarding the establishment, development or maintenance of a public radio communications station, they must submit a reasoned request to the Authority, and the Authority may, at its discretion, reject that application and require the licensee to abide by the principles and processes stipulated as a condition for issuing the final license. The Authority is obligated to adequately justify the rejection of the application and clarify the alternatives in an appropriate manner to achieve compliance with the requirements, basis and procedures stipulated in the guidance memorandum.

Article (17) Security and Safety Standards

- A- The licensee shall take security and safety precautions when establishing, developing and maintaining all public radio communication stations by observing the following:
- Taking into account the prevailing weather conditions when placing rooms and equipment.
- Avoiding the need for stairs to access the rooms and making sure that there is enough space to work with the use of barriers and fall prevention systems.
- Ensure that the rotation of the equipment support structure under the influence of wind force is limited and does not exceed a maximum of 1.0 degrees, and in unusual circumstances the licensee undertakes that there is no safety risk from the use of a greater angle of rotation after the approval of the Authority.

- Ensure that towers are designed to be able to bear local climatic conditions under the maximum equipment loads.
- Ensure that all protection systems comply with the electrical grounding and lightning protection in accordance with the requirements of the lightning protection standard (BS EN 62305).
- Comply with the security, health and safety requirements stipulated in the Regulations and other applicable rules and guidelines issued by the Authority and the relevant authorities.
- Commitment to the applicable safety and firefighting standards and conditions issued by the General Firefighting Authority.
- B- Placing warning signs in places visible to the public in accordance with the standards stipulated in the regulations and the guidance memorandum.

Article (18) Health and Environmental Standards

- A- Licensees must design public radio communication stations so that emitted electromagnetic fields and residence procedures are within the permissible standards, and comply with the radio frequency exposure restrictions stipulated in the guidance memorandum, the international authority, the institute, the union, and the organization.
- B- Emissions from all radio communications equipment of all licensees in a public radio communications station and the surrounding area shall be taken into account when assessing compliance with the recommendations set by the international authority.
- C- The licensee is obligated to take the following necessary measures:
- 1- The immediate repair or removal of the telecommunications facility that violates the standards of the international authority, according to what the Authority decides in consultation with the relevant government authorities.
- 2- Preventing technically unqualified individuals from being inside the restricted area of a public radio communication station emitting fields.
- 3- Training the technical staff at public radio communication stations and spreading awareness among them about potential risks and precautionary measures.

- D- Licensees are obligated to ensure that public radio communication stations operate in a manner that ensures:
- Keeping the power of radio emissions at their lowest levels while at the same time ensuring the effectiveness of the service provided.
- The radio waves emitted by their public radio communication stations do not cause damage to other radio communication networks, resulting in an unacceptable drop in the level of service.

Article (19) Civil Aviation Standards

- A- The licensee is obligated to design and set up public radio communication stations in accordance with the requirements and specifications related to the safety of air navigation applied by the General Authority of Civil Aviation, as well as the principles and procedures contained in the guidance memorandum, in particular the commitment to the following:
- Placing warning lights in all high support structures used in public radio communications stations or painting them to reduce the risks of such facilities to air navigation. The support structures include all towers installed in the ground, in accordance with the standards and specifications applicable in the General Authority of Civil Aviation.
- The warning lights should be of appropriate intensity to be visible to air navigation, at day and night, and they must conform to the specifications required by the General Authority of Civil Aviation.
- B- In accordance with the annual compliance review process detailed in the guidance memorandum, the licensee shall provide the Authority with altitude measurements and coordinates as built in accordance with the (WGS-84) system of high support structures for all new public radio communication stations and existing stations to ensure the accuracy of the data that ensures safe air navigation.
- C- Taking into account the requirements for the participation of stations, the height of the lattice towers should not be more than 90 meters with a vertical height, and the monopole towers shall be more than 50 meters and the towers above the roofs and the antennas should not be more than 25 meters.

Article (20) Construction Designs

All construction and civil designs of public radio communication stations must comply with the requirements of the municipality of Kuwait.

Article (21) Advertisements in Sites

- A- Installing an identification signage bearing the name of the licensee and emergency contact details on all sides of the public radio communication stations.
- B- It is not permissible to place advertisements signage or other means of advertising above or inside the site without obtaining a prior approval from the municipality.

Article (22)

The site designated for the establishment of public radio communication stations

- A- The location and size of public radio communication stations must meet the operational needs of the licensee and provide an appropriate level of security and safety arrangements for the station.
- B- The reverberation distance that took place from the wall of the site fence to all the walls of the public radio communications station, towers and any other similar equipment must be maintained. The reverberation distance may not be less than 1 meter.

Section Six Site and Design Determination Standards

Article (23) Appropriate shape for public radio communication stations

A- The designs of the new public radio communications station proposed by the licensee must be appropriate, and the designs should limit the negative impact on the public landscape, the surrounding environment and residents, whenever possible, and in a manner that does not constitute a technical negative impact on the licensees.

B- To assist in determining the most appropriate design for a particular site, licensees must accompany with their license applications a master design and another alternative design for a public radio communication station, if the site permits, and it shall be consistent with the requirements of the guidance memorandum.

Article (24) Commitment to reduce the visual impact on the surrounding environment

Licensees shall, whenever possible and without a technical negative impact, limit the influence of public radio communication stations and their designs on the landscape of the surrounding environment, through:

- 1- Hiding radio communication equipment and devices inside buildings or within suitable fiberglass or other physical coverings.
- 2- Camouflaging public radio communication equipment and devices by using other forms such as trees, road facilities, or any other public artwork consistent with the general appearance.
- 3- Using completely concealed antennas and small stations, whenever possible, in populated areas.
- 4- Placing new public radio communication stations near or between trees, or studying the possibility of planting trees or plants inside the site.

Article (25) Colors and Materials

- A- The designs of the new public radio communication stations, the colors and the materials used in their construction must be consistent with the surrounding environment whenever possible. In the event that the towers extend to the top, the licensee shall paint them in a suitable non-reflective color such as light gray.
- B- The external rooms should be consistent with the rest of the facilities of the public radio communication station and painted in colors that are in line with the external surroundings whenever possible, in order to reduce the color contrast.
- C- The licensees shall work to harmonize the color of any fence erected around the site with its geographical surroundings.

D- The licensee is obligated to fence the station site with a see-through iron nets or concrete if the station is located in the desert, and at a vertical height of not more than 2.5 meters.

Article (26) Sites Choice Requirements

- A- The licensee will choose the locations of the public radio communication station in areas where:
- Do not raise objections of the residents whenever possible.
- Meet the requirements for coverage.
- B- Licensees shall provide convincing and sufficient written justifications when selecting sites that may raise reasonable objections to residents, as detailed in the site participation procedures set forth in the guidance memorandum and the regulations of interconnection and access to facilities and premises issued by the Authority.
- C- When proposing site options for setting up new public radio communication stations as part of the annual plan procedures mentioned in detail in the guidance memorandum, licensees shall conduct a survey of all sites that may be suitable within the search area and submit a detailed report thereof to the Authority, including:
- 1- Evaluation of all the proposed options for the site that may be implemented, with recommendations regarding the comparative advantages of each proposed site.
- 2- Mention a preferred location for the establishment of the new public radio communication station for approval of the Authority in consultation with the relevant authorities.
- D- In all cases, when proposing sites for the establishment of public radio communication stations, the licensees must comply with the following requirements:
- 1- The road to the site should be easy through one of the public roads for the purpose of carrying out construction, repair and periodic maintenance works.
- 2- Providing a suitable source of electrical power near the site.

- 3- The site shall be suitable to meet the technical conditions for the establishment of the new public radio communication station, whether to increase the coverage area, or to provide additional capacity in a crowded area or to strengthen weak coverage.
- 4- The site should provide a safe working environment for the operation and maintenance personnel in accordance with the applicable health, safety and security standards stipulated in Article (17) of the Regulations.
- 5- The licensee shall avoid placing the towers and their accessories above the facilities of ground services.
- 6- The site area should not exceed 500 square meters.

Article (27) Rooftop Sites

- A- When erecting a public radio communication station on the roof of a building or an actual existing structure, the licensees shall comply with the following:
- 1- Submitting an application for obtaining the final license from the authority and/or certificates from the relevant authorities, accompanied by a technical report prepared by one of the engineering offices approved by the municipality, confirming the ability of the building or structure to bear the weights of the new equipment intended to be added.
- 2- Ensuring that the effect of the installed equipment on the general view is limited whenever possible and in a manner that does not constitute a negative impact from a technical point of view.
- 3- Reducing the need to work at heights throughout the construction period of the public radio communication station, from the beginning of its construction until its dismantling.
- 4- Complying with the requirements stipulated in the guidance memorandum regarding the establishment of a public radio communication station in rooftop sites.

Article (28) Sharing Stations

- A- In accordance with the regulations of interconnection and access to facilities and premises issued by the Authority, the licensee must make the necessary efforts to work on the sharing of public radio communication stations in order to achieve the optimal use of them and avoid recurring of their construction, and to preserve the public view as long as sharing is the best solution.
- B- Clause (A) of this Article excludes the following cases, at the discretion of the Authority:
- 1- If the level of electromagnetic fields emitted by public radio communication equipment is higher than the levels permitted by the international authority and the Ministry of Health.
- 2- If the sharing or development of a public radio communication station has a greater negative impact on the general view than the increase in the number of these stations.
- 3- The existence of technical obstacles that prevent the installation of additional radio communication equipment, including, but not limited to, harmful interference from waves.
- 4- The presence of the public radio communications station in a location that is not suitable for sharing, or when the height of that station is not sufficient to provide the required coverage.
- 5- The inability of the existing tower structure to safely carry additional equipment.
- 6- The inability of the electrical power connections available at the site to provide the equipment and communication facilities with the required power supply.
- 7- Any other reasons that the licensee sees that they prevent the joint use of public radio communication stations, provided that the Authority approves them.

Section Seven Fees

Article (29)

- A- The licensee is obligated to pay the fees due on the applications, if any, the annual reviews of the extent of compliance, and the permits issued in accordance with the provisions of the regulations in accordance with the fees schedules issued by the Authority from time to time in compliance with the provisions of the Law of the Authority.
- B- The licensee is obligated to pay the annual fees due on the public radio communication stations and/or the towers affiliated to it in accordance with the resolutions issued by the Authority in this regard.

Section Eight Procedures for Verifying the Compliance

Article (30) Administrative Penalties for Violation

The Authority may take measures to verify the extent of the licensee's compliance in the event of a violation of the provisions of the regulations. Such procedures shall be taken in accordance with the authority's legal powers stipulated in Article (54) of the Law of the Authority.

Article (31) Settlement of Disputes between Licensees

- A- The Authority shall examine complaints and settle disputes that occur between licensees in accordance with the provisions of the law.
- B- As an exception to the provisions of Paragraph (A) of this Article, licensees shall make every effort to resolve any disputes that arise regarding the public radio communication stations within the framework of the procedures of the annual plan for the development of public radio communication stations as stated in the guidance memorandum and the procedures for participating in the sites mentioned in the guidance memorandum, the regulation of interconnection and access to facilities issued by the authority.

Section Nine Transitional Provisions Stations to be Rectified

Article (32)

- A- In the field of application of the provisions of the regulations, the stations whose conditions are to be rectified are the station that:
- 1- It was built without obtaining the required building permits.
- 2- It obtained the required licenses and/or certificates, but it was implemented in a way that is not in line with the requirements of the relevant government authorities.
- 3- It obtained the necessary permits in which it is proved that the construction structure of the building carrying a tower or a public radio communication station is unable to bear the resulting loads, which would cause a danger to public safety and property, and the licensees are obliged to present a certificate of bearing when required to do so.
- B- Rectification works for the stations whose conditions are to be rectified shall be carried out in accordance with the procedures set forth in the regulations and the guidance memorandum. A period of two Gregorian years (24 months) is given from the date of publishing this regulation and the guidance memorandum for the settlement of the stations whose conditions are to be rectified. The Authority has the right to renew it for another similar period after assessing the situation of the rectification plan, and the mechanism stipulated in this Section Nine of these regulations and Section Eight of the guidance memorandum shall be followed.

Article (33)

The licensees are obligated to carry out the works of rectifying the conditions of the stations to be rectified in accordance with the directives of the Authority in this regard and in accordance with the following procedures:

- 1- The licensee shall review all public radio communication stations belonging to them to ensure that they comply with the conditions stipulated in this regulation.
- 2- The licensee is obligated to rectify the conditions of each public radio communication station belonging to him, which does not comply with the

- conditions stipulated in this regulation, and the Authority may exclude stations that do not comply with some of the requirements contained in this regulation and the guidance memorandum at the discretion of the authority.
- 3- Providing assistance and all the necessary information to enable the Authority, in cooperation with the relevant authorities, to perform its duties with the necessary efficiency, with the aim of conducting a survey of all public radio communication stations to identify the violator among them.
- 4- Without prejudice to the grace period mentioned in Article 32 above, and when the Authority requests certain amendments and corrective actions in accordance with the provisions of the regulations within a reasonable period of time determined by the Authority in coordination with the relevant authorities, provided that it does not, in any case, exceed (90) days from the date of notification of the Authority stipulated in Clause 6 of this Article and after obtaining the required licenses and/or certificates from the relevant government agencies, and in the event the licensee fails to do so, the Authority and the relevant authorities shall take the necessary legal measures and procedures.
- 5- The Authority, in exceptional cases and for reasons it deems appropriate, may extend the time period stipulated in Clause (4) of this Article, for one or more times, provided that the total extensions do not exceed (90) days.
- 6- The Authority, in coordination with the relevant authorities, shall notify the appointed licensees in writing or by any other appropriate means of the violations and any other details.

Article (34)

- A- Licensees shall, during the stipulated time periods, in accordance with the relevant principles and procedures contained in the guidance memorandum, verify that all of their existing stations have been licensed and/or granted no-objection certificates to become public radio communication stations in accordance with the objectives of this regulation.
- B- In accordance with the relevant requirements, principles and procedures set out in the guidance memorandum, licensees shall prepare and submit rectification applications to the Authority to allow it to take the necessary steps to verify that each of the Licensee's existing stations:
- 1- It is maintained, managed and operated in accordance with the provisions related to public health and safety.

- 2- It shall be maintained, managed and operated in order to encourage participation and to reduce unnecessary pluralism in public radio communication stations.
- 3- It is maintained, managed and operated to reduce negative visual impacts on the environment, residents and those around it whenever possible, and in a manner that does not constitute a negative impact from a technical point of view.
- C- The Authority reviews all rectification applications and any request for additional information and/or clarifications when needed in accordance with the relevant requirements, principles and procedures.
- D- If, after reviewing the rectification applications, the authority decides that the licensee must take corrective action, it shall direct the licensee to suggest the corrective action that they can take to ensure that the station under review complies with the requirements contained in the guidance memorandum.
- E- The Authority shall coordinate with the relevant authorities regarding the need for the licensee to obtain any required licenses and/or certificates (if any) to fulfill his obligations under clause (A) and (B) of this Article.
- F- The Licensee shall, in accordance with the relevant requirements, principles and processes set out in the guidance memorandum, Coordinate with the Authority and submit additional applications as circumstances require, until the authority issues the final license for the existing station.
- G- Once the situation of an existing station has been rectified and/or the Authority has granted it a final license, this station becomes subject to the following:
- 1- Participation procedures in the sites in accordance with the regulation of the interconnection and access to facilities and premises.
- 2- The annual review process for the extent of compliance set out in the guidance memorandum.
- H- The licensee's submission of rectification applications to the Authority shall be deemed to be compliance from his part with the provisions of this regulation and the guidance memorandum regarding the stations whose status is to be rectified. In the event the licensee fails to fulfill his obligations under this Article and/or the relevant requirements, principles and processes contained in the guidance memorandum, the Authority may use the powers conferred upon it under Section Eight of these Regulations.

I- The licensee may, in exceptional circumstances, request the Authority to exempt him from certain requirements, principles and processes contained in the guidance memorandum, and the licensee shall provide an appropriate explanation for his request; and the authority shall consider the request, and if it deems that it is justified, it may grant him that exemption.

Section Ten Concluding Provisions

Article (35)

The Authority shall draw up forms for applications, grievances, certificates and documents stipulated in this regulation and reconsider these forms whenever necessary in a manner that does not violate the provisions of the regulation.

Article (36)

The attached guidance memorandum is an integral part of these regulations.