

# **REGULATIONS**

For

# **Spectrum Monitoring & Enforcement**

Version 1.0

Issue Date: 23 July 2008

Copyright © 2008 Telecommunications Regulatory Authority (TRA). All rights reserved. P O Box 26662, Abu Dhabi, United Arab Emirates (UAE) <a href="https://www.tra.gov.ae">www.tra.gov.ae</a>



### Article (1)

#### **Definitions**

- 1.1 In applying these Regulations, the following terms shall have the following meanings unless the context requires otherwise, whereas any term undefined in the following shall be defined in line with the Federal Law by Decree No. 3 of 2003, its Executive Order and Radiocommunications Policy:
  - 1.1.1 "Allocation" means the entry of a designated frequency or frequency band in the National Spectrum Plan for use by one or more users for a terrestrial or space radiocommunication service in the UAE.
  - 1.1.2 "Applicant" means any Person who has applied for a License or an Authorization in accordance with the Telecom Law or other Policy Instruments issued by the Authority.
  - 1.1.3 "Application" means the request for issuance of a License or an Authorization, received at the Authority on prescribed forms as per the procedure in vogue.
  - 1.1.4 "Assigned frequency" means the centre of the frequency band assigned to a station by the Authority.
  - 1.1.5 "Assigned frequency band" means the frequency band within which the emission of a station is authorized by the Authority.
  - 1.1.6 "Authorization" means a Frequency Spectrum Authorization granted by the Authority.
  - 1.1.7 "Authorized User" means a Person that has been granted a Frequency Spectrum Authorization by the Authority.
  - 1.1.8 "Class Authorization" means the Frequency Spectrum Authorization which permits the operation of Wireless Equipment by any Person within designated frequency bands subject to the terms and conditions stipulated by the Authority.
  - 1.1.9 "Harmful Interference" means Interference which impairs the functioning of a radiocommunication service or which materially degrades or obstructs or repeatedly interrupts Radiocommunication.



- 1.1.10 "International Regulations" means Regulations, rules, standards, specifications, definitions, recommendations or agreements recognized by the UAE at the international level.
- 1.1.11 "ITU" means International Telecommunication Union, a leading United Nations agency for information and communication technologies.
- 1.1.12 "National Spectrum Plan" means Radio Frequency Allocation plan for the UAE approved by the Supreme Committee and any modifications thereof.
- 1.1.13 "National Telecom Policy" means the Policy issued by the Supreme Committee regarding the telecom sector.
- 1.1.14 "Person" will include 'juridical entity' as well as 'natural person'.
- 1.1.15 "Primary Services" means Radiocommunication Services having a higher priority and protection from harmful interference when notified than secondary Radiocommunication Services. The name of these Radiocommunication Services appears as capital letters in the National Spectrum Plan.
- 1.1.16 "Radiocommunication Service" means the transmitting or receiving of Radio Frequency which may be used for the conveyance of data, or messages or voice or visual images, or for the operation or control of machinery or apparatus.
- 1.1.17 **"Radio Frequency"** means radiated electromagnetic energy measured in Hz or cycles / sec.
- 1.1.18 "Frequency Spectrum Authorization" means an authorization, which permits the use of Radio Frequency subject to terms and conditions as stipulated by the Authority.
- 1.1.19 **"Radio Regulations"** means a publication by ITU, adopted by the World Radiocommunication Conference and ratified by the UAE.
- 1.1.20 "Regulatory Instruments" means any instrument issued by the Authority under its powers, and includes without limitation; Regulations, violation decisions, directives, instructions, guidance and recommendations and regulatory policies.



- 1.1.21 "Secondary Services" means Radiocommunication Services which shall not cause harmful interference to stations of Primary Services. These services appear as lower case in the National Spectrum Plan.
- 1.1.22 "**Station**" means an installation operated by an Authorized User, for carrying on a Radiocommunication Service.
- 1.1.23 "**Temporary Authorization**" means Frequency Spectrum Authorization issued by the Authority which permits the use of assigned frequency for a period up to 90 days.
- 1.1.24 "The Authority" means the General Authority for Regulating the Telecommunication Sector known as Telecommunications Regulatory Authority (TRA) established pursuant to the provisions of Article 6 of Federal Law by Decree No. 3 of 2003.
- 1.1.25 "**UAE**" means the United Arab Emirates including its territorial waters and the airspace above.
- 1.1.26 "Wireless Equipment" means a category of Telecommunication Apparatus used for Radiocommunication service.

# Article (2)

### **Spectrum Monitoring and Enforcement**

- 2.0 The Authority has the sole discretion to measure, monitor, evaluate, analyze, overhear and decode all types of Radio Frequency emitted or received in the UAE.
- 2.1 The spectrum monitoring and enforcement shall be undertaken but not limited to the following broad objectives:
  - 2.1.1 To facilitate spectrum planning through spectrum usage reports.
  - 2.1.2 To enable detailed radio planning and technical studies.
  - 2.1.3 To eliminate or minimize Harmful Interference to Authorized Users.
  - 2.1.4 To protect the emergency and disaster frequencies from misuse.
  - 2.1.5 To verify adherence to the terms and conditions and the technical parameters of the Frequency Spectrum Authorization.



- 2.1.6 To measure the field strength levels of emissions and electromagnetic compatibility studies for sharing between different radio services.
- 2.1.7 To measure adjacent channel power, necessary bandwidth, spurious emissions and out of band emissions.
- 2.1.8 To detect the illegal users.
- 2.1.9 To localize and identify installation and usage of un-authorized Wireless Equipment.
- 2.1.10 To measure the radiation levels to verify health and safety standards.
- 2.1.11 To participate in International Monitoring programs.
- 2.1.12 To monitor frequencies where requests to do so are received from the ITU or any other Administration (State).
- 2.1.13 To work with the dealers authorized by the Authority for market surveillance.

# **Article 3**

# **Integrated Spectrum Management and Monitoring**

3.1 In accordance with the international best practices and ITU-R Recommendations, the Authority may use an integrated spectrum management and monitoring system to facilitate spectrum monitoring and enforcement.

#### Article 4

# **Support for Spectrum Planning**

- 4.1 The following tasks of enforcement will facilitate the spectrum planning:
  - 4.1.1 Channel occupancy measurements are a common technique used to observe the spectrum utilization. It shall facilitate in ensuring that assignments are brought into use within the timeframe stipulated for such use and not beyond the validity period.
  - 4.1.2 Coverage analysis and power level measurements shall facilitate the planning and perform technical studies for propagation, etc.



#### Article 5

### **Support for Spectrum Coordination**

- 5.1 Spectrum coordination is an important activity for frequency sharing between different Authorized Users and an obligation to reduce spill over into the neighboring countries.
- 5.2 One of the tasks of coordination with the neighboring countries requires performing drive tests for checking signal levels to establish the penetration, coverage and spill over of electromagnetic energy. Such drive tests can also be performed to check the coverage and usage of spectrum assigned to different Authorized Users within the UAE.

#### **Article 6**

### **Compliance Enforcement**

- 6.1 Spectrum enforcement shall facilitate the verification of the following:
  - 6.1.1 Compliance to the parameters authorized by the Authority;
  - 6.1.2 Usage of approved equipment;
  - 6.1.3 Measurement of bandwidth, inter-modulation intercepts, out of band emissions, spurious emissions and power levels.
- 6.2 The spectrum enforcement will also include measurements on health and safety standards for emissions and the performance quality standards as and when published by the Authority.

### **Article 7**

# **Inspection of Stations**

7.1 Inspection of Stations is an effective means of spectrum enforcement. It will be performed on random sampling or on the visual observation of any peculiar antenna or tower not found in the spectrum database. It can also be undertaken to verify the physical quantities of Stations in use against the Frequency Spectrum Authorization.



#### **Article 8**

#### **Inspection on Request of Authorized User**

8.1 The Authority may conduct site survey upon request from the Authorized User on payment of such fees as determined spectrum fees policy.

### **Article 9**

#### **Market Surveillance**

- 9.1 Market Surveillance can help the Authority to keep itself updated of market activities regarding the sale of Wireless Equipment. At the sole discretion of the Authority, the Authority may:-
  - 9.1.1 check if any unauthorized Wireless Equipment is being sold or offered for sale in the UAE;
  - 9.1.2 monitor the media advertisements for the publicity of unauthorized Wireless Equipment;
  - 9.1.3 participate at events to monitor the publicity and demonstration of unauthorized Wireless Equipment;
- 9.2 The Authority may undertake measures to prevent the sale and distribution of such unauthorized Wireless Equipment within the UAE by working with the authorized dealers and custom authorities for improved mechanism to prevent import of unauthorized Wireless Equipment into the country.

#### Article 10

# **Data Exchange with Other Countries**

10.1 The Authority may exchange monitoring information where it deems appropriate with other countries in a mutually agreed format. For regional data exchange, the Authority may also inform the GCC Telecommunication Bureau whenever required.



10.2 The Authority may designate any of its monitoring station to participate in the international monitoring system. In such cases, the Authority will forward to ITU required details for publishing the station details in the 'List of International Monitoring stations'.

#### Article 11

#### **Actions by the Authority**

- 11.1 Whenever the Authority ascertains to its satisfaction that a breach of any of the following has occurred, it shall proceed against the Person involved in the breach:-
  - 11.1.1 Violation of the Frequency Spectrum Authorization terms and conditions issued by the Authority to an Authorized User;
  - 11.1.2 Unauthorized use of Radio Frequency;
  - 11.1.3 Unauthorized installation or establishment of Wireless Equipment;
  - 11.1.4 Unauthorized manufacture, import, use, sale or offer for sale or use of the Wireless Equipment; and/or
  - 11.1.5 Violation of any of the Regulatory Instruments issued by the Authority.
- 11.2 The Person identified by the Authority involved in the aforementioned breach, shall be issued a show cause order by the Authority. The show cause order will require the Person to explain in writing within the specified time that why further action should not be taken by the Authority according to provisions of the Federal Law by Decree No. (3) of 2003 as amended and other Regulatory Instruments in force at the time.
- 11.3 If after the expiry of the response time mentioned in the order to show cause, the Authority determines that the breach is willful i.e. conscious and deliberate, it shall initiate further necessary legal action according to provisions of the Federal Law by Decree No. (3) of 2003 as amended and other Regulatory Instruments in force at the time. This may result in fine and imprisonment or both including the seizure of equipment used for the aforesaid breach.



- 11.4 In the event if it is difficult to identify the Person involved in the aforementioned breach or otherwise, the Authority may request the relevant Police or other Law Enforcement Authorities to initiate action for entering such suspicious premises as identified by the Authority and seize or detain such equipment which has been used in the aforementioned breach.
- 11.5 The Authority may also take legal steps for the closure of the premises where the breach is being carried out.
- 11.6 The equipment so seized shall vest to the Authority and the Authority may request the Customs Authorities to keep in custody all such equipment which falls under its control. Such equipment may be destroyed on an order from the Court.