Regulations Private Mobile Radio (PMR) Service

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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 as amended its Executive Order and Radiocommunications Policy :
- 1.1 . 1 " Applicant " means any Person who has applied for a License or an Authorization in accordance with the Telecom Law or other Regulatory Instruments Issued by the Authority .
- 1.1 . 2 " 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 .
- 1.1.3 " Assigned frequency " means the centre of the frequency band assigned to a station by the TRA .
- 1.1 . 4 " Authorization " means a frequency spectrum Authorization granted by the TRA .
- 1.1 . 5 " Authorized User " means a Person that has been granted an Authorization by the TRA .
- 1.1 . 6 " Base Station " means a land mobile radio which is fixed .
- 1.1 . 7 " Class Authorization " means the Authorization which permits the operation of Wireless Equipment by any Person within designated frequency bands subject to the terms and conditions stipulated by the TRA .
- 1.1 . 8 " Family Radio Service FRS " means a land mobile system in the frequency range of 462 467 MHz using one set of programmed frequencies .
- 1.1.9 " General Mobile Radio Service GMRS" means a land mobile system in the frequency range of 462 467 MHz using a set of programmed frequencies
- 1.1 . 10 " Person " will include ' juridical entities' as well as ' natural persons' .
- $1.1\cdot11$ " PMR446" means a land mobile radio system using pre defined eight frequencies in the range of 446.00 446.10 MHz with 12.5 kHz channel and maximum radiated power limited to 500 mW
- 1.1 . 12 "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 . 13 " 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 . 14 " Repeater Station " means a Base Station for receiving and retransmitting the frequencies to increase coverage .

- 1.1 . 15 " Secondary Basis " means not to cause harmful interference to other radio stations and not to claim protection from other radio stations ,
- 1.1 . 16 " Station " means an installation operated by an Authorized User , for carrying on a Radiocommunication Service .
- 1.1 . 17 " Temporary Authorization " means an Authorization issued by the TRA which permits the use of assigned frequency for a period up to 90 days .
- 1.1 . 18 " Assignment (of a radio frequency or radio frequency channel)" means an Authorization given by The Authority for a radio station to use a radio frequency or radio frequency channel under specified conditions .
- 1.1 . 19 " 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 . 20 " UAE " means the United Arab Emirates including its territorial waters and the airspace above .
- 1.1 . 21 " Wireless Equipment " means a category of Telecommunication Apparatus used for Radiocommunication Service .

Article 2 - Permitted Usage

Usage of private mobile radio is allowed for the following, subject to terms and conditions as given on the TRA Authorization and applicable Regulatory Instruments.

- 2.1 . 1 Land mobile radio .
- 2.1 . 2 Aeronautical mobile radio (Ground to Air)
- 2.1 . 3 Maritime mobile radio (Shore to ship)
- 2.1 . 4 In house Paging systems .
- 2.1 . 5 Trunking mobile radio systems .

Article 3 - Radio Frequency usage

خدمات الراديو	نطاقات
	التردد
	الراديوي
	الراديو <i>ي</i> الفرعية

	1
- المتنقل للطيران (ارض – جو)	30 - 2 ميجاهر
- المتنقل الارضىي	: · · تز تز
- المتنقل البحري (شاطىء – سفينة)	
- المتنقل الارضى	30 - 47 ميجاهر تز
- المتنقل الارضى	87.5 - 66 ميجاهر تز
- المتنقل للطيران (R)	975 117 137 – میجاهر تز
- المتنقل الارضىي	- 137 144
- المتنقل للطيران (OR)	میجاهر تز
- المتنقل الارضىي	- 146 156
- المتنقل البحري	150 میجاهر تز
- المتنقل البحري	

	
- المتنقل الارضىي (على اساس ثانوي فقط وللمناطق البعيدة عن مياه الدولة) - المتنقل البحري	- 156 162.1 میجاهر تز
- المتنقل الارضىي - المتنقل البحري	- 162.1 174 میجاهر تز
- المتنقل الارضىي (سباقات الهجن على اساس ثانوي مع الاستخدام الحكومي الاولي)	- 350 380 ميجاهر تز
- المتنقل الارضي (دوائر خطوط ارسال الشبكة للاستخدام الحكومي)	- 380 400 ميجاهر تز
- المتنقل الارضىي (على اساس ثانوي مع الحماية لخدمة مساعدات لأرصاد الجوية)	- 400.15 406 میجاهر تز
- المتنقل الارضي (مع قوة بث عليا تعادل 5 واط)	- 406.1 410

	میجاهر تز
- المتنقل الارضي (دوائر خطوط ارسال الشبكة للاستخدام التجاري) ويستخدم ايضا للتخصيصات الثنائية (Duplex) غير المتعلقة بدوائر خطوط ارسال الشبكة (- non Trunking	-410 430 ميجاهر تز
- المتنقل الإرضى	- 430 433.05 میجاهر تز
- المتنقل الارضىي (اجهزة قصيرة المدى)	- 433.05 434.79 ميجاهر تز
- المتنقل الارضى	434.79 450 میجاهر تز
- المتنقل الارضىي (الاستخدام الحكومي)	- 450 470

		میجاهر تز

Article 4 - Land mobile radio usage

- 4.1 Land mobile radio consists of a network of radios which may contain one or more Base Stations, Repeaters, vehicle mounted radio and handheld (walkie talkie). All these radios are for terrestrial use. The Base Station and Repeaters are fixed while vehicle mounted radio and handheld are mobile.
- 4.2 The land mobile radio application (titled 'private mobile radio') can be applied by a Person for a network to be operated at any location within the UAE. The network can be indoor or outdoor at a specific location.
- 4.3 The issued Authorization shall contain the Authorized User name and address, site data for authorized location, Assignments, technical and Wireless Equipment parameters.
- 4.4 For coverage requirements beyond 1 square kilometre , detailed justification shall be submitted to the TRA with the application as it is a burden on the spectrum re use . The TRA shall evaluate such requests and regret if adequate justification to the satisfaction of the TRA is not provided .
- 4.5 General Mobile Radio Service (GMRS) and Family Radio Service (FRS) operating in the frequency range of 462.55 467.725 MHz are not allowed in the UAE as the band 450 470 MHz is reserved for Government use .
- 4.6 PMR 446 is allowed in the UAE subject to the same Application and Authorization procedure as required for other land mobile radio .
- 4.7 The frequency range of 470 512 MHz is used for broadcasting service in the UAE and therefore is not available for land mobile radio .
- 4.8 Amateurs can use land mobile radio only in the 144 146 MHz band if the land mobile radio is authorized in the Amateur Authorization .
- 4.9 Class Authorization can be applied for land mobile radios (LPD433) in the 433.05 434.79 MHz with maximum radiated power of 10 mW and for land mobile radios (SRD860) in the 868
- 870 MHz with maximum radiated power of 5 mW in accordance with the TRA regulations for Short range devices .
- 4.10 For camel race tracks and camel race training areas , the TRA preference to assign frequencies shall be in the range of 350 380 MHz . Till such time that Wireless Equipment

availability issues can be resolved and existing Authorized Users for camel race can be transferred to the 350 - 380 MHz , the existing Authorizations will continue to be renewed and used in the 138 - 140 MHz range .

- 4.11 For crane operations simplex frequencies can be assigned with a maximum radiated power of 1 Watt . Only in cases where the concrete structure limits the propagation , higher radiated power can be considered by the TRA .
- 4.12 For networks requiring more than ten frequency Assignments , it is preferred to consider using trunking systems to increase spectral efficiency . The TRA may reject an application if more than ten frequency Assignments is requested without due consideration to the trunking system option .
- 4.13 For networks using repeaters , duplex frequencies can be requested but the Applicant shall justify the number of channels required for transmission through Base Station or Repeater . Minimum number of frequencies shall be allowed for coverage beyond 1 square kilometre .
- 4.14 For taxi companies, wider coverage can be applied.
- 4.15 All Governmental Entities are encouraged to use the Government digital trunking networks in the 380 400 MHz .
- 4.16 Surveying equipment requiring data radio for relaying differential GPS data can be applied in the frequency ranges of land mobile radio . Since some of this equipment is available only in 450 451 MHz reserved for Government use , depending on location and radiated power , such systems may be considered by the TRA .

Article 5 - Aeronautical mobile radio

5.1 For the use of Aeronautical mobile radios please refer to TRA regulations for Aeronautical Radio Service .

Article 6 - Maritime mobile radio

6.1 For the use of maritime mobile radios please refer to TRA regulations for Maritime Radio Service .

Article 7 - Paging and in - house paging

7.1 Public paging service is limited to Licensees . Private in - house paging can be applied in the VHF range of 169 - 170 MHz and in the UHF range of 440 - 441 MHz with maximum radiated power of 5 Watts . The frequency range of 929 - 932 MHz is not allowed in the UAE for in - house paging .

Article 8 - Trunking systems

8.1 The TRA does not support any particular trunking standard or technology . Therefore any trunking system can be applied for land mobile radio in the given frequency ranges .

Article 9 - Technical Conditions

- 9.1 The TRA allows the channel bandwidth of 6.25 kHz and 12.5 kHz . 25 kHz is not preferred and only allowed for digital trunking . By the year 2012 (01 January), the TRA plans to allow only 6.25 kHz channel bandwidth for all new applications .
- 9.2 For higher coverage areas and for high rise buildings, preference shall be to use directional antenna for Base Stations and Repeaters rather than dipoles.
- 9.3 The maximum radiated power shall be calculated with due consideration for the building penetration losses. Preference shall be to use several Repeaters with lower radiated power rather than single Base Station with high radiated power.
- 9.4 The TRA shall assign the frequencies to other users after the re use distance depending on the coverage authorized to any Authorized User and there is no exclusivity.

Article 10 - Spectrum coordination

10.1 All Assignments which require coordination with neighbouring countries shall require more processing time and the technical parameters shall be decided based on the coordination .

Article 11 - Penalties

11.1 The penalties of the Federal Law by Decree No . 3 of 2003 as amended and its Executive Order shall apply to any violation of these Regulations or to any breach of a term of an Authorization .