
Regulations

Frequency Spectrum Fees

Version 4.0

Document Date: 25 December 2019

Telecommunications Regulatory Authority (TRA)
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TRA Regulations for Spectrum Fees, Version 4.0

Article (1)

Purpose

- 1.1 In accordance with the with the provisions of the UAE Federal Law by Decree No 3 of 2003 (Telecom Law) as amended and its Executive Order., these Regulations effective 1st January 2021, sets the Frequency Spectrum Fees schedule for Frequency Spectrum and Wireless Equipment Authorization. The purpose of these regulations is to ensure the efficient use of spectrum resource and to encourage innovation and investment in the ICT sector in the UAE.

Article (2)

Definitions

- 2.1 The terms, words and phrases used in these Regulations shall have the same meaning as is ascribed to them in the UAE Federal Law by Decree No 3 of 2003 (Telecom Law) as amended and its Executive Order; unless these Regulations expressly provide otherwise for, or the context in which those terms, words and phrases are used in these Regulations indicates otherwise. The following terms and words shall be interpreted, as follows:
- 2.1.1 **“Applicant”** means any Person who has applied for a License or an Authorization in accordance with the Telecom Law or other regulations issued by the Authority.
- 2.1.2 **“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.
- 2.1.3 **“Application Fees”** means the fees paid for the request for processing a new, renew or modification of a License or an Authorization, received at the TRA as per the procedure.
- 2.1.4 **“Authority”** or **“TRA”** means the General Authority for Regulating the Telecommunication Sector of the UAE known as Telecommunications Regulatory Authority (TRA) established pursuant to the provisions of Article 6 of Federal Law by Decree No. 3 of 2003 (as amended).
- 2.1.5 **“Authorization”** or **“Frequency Spectrum Authorization”** means a valid frequency spectrum authorization issued by the Authority and permits the use of radio frequency subject to terms and conditions as stipulated by the TRA.
- 2.1.6 **“Authorized User”** means a Person that has been granted an Authorization by the TRA.
- 2.1.7 **“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 TRA.
- 2.1.8 **“Person”** will include ‘juridical entities’ as well as ‘natural persons’.

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- 2.1.9 **“Frequency Spectrum Fees”** means the fees to be paid to the Authority. It has two components: Application Fees and Frequency Fees.
- 2.1.10 **“Frequency Fees”** means the fees to be paid to the Authority, on the issue, modify or renewal of an Authorization or covered within this regulation.
- 2.1.11 **“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.
- 2.1.12 **“Station”** means one or more transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment, necessary at one location for carrying on a radiocommunication service.
- 2.1.13 **“Temporary Authorization”** means an Authorization issued by the TRA for a period from 1 to 90 days.
- 2.1.14 **“UAE”** or **“State”** means the United Arab Emirates including its territorial waters and the airspace above.
- 2.1.15 **“UAE Spectrum Regulations”** means the technical regulations and specifications with details on objective procedures and criteria for regulating the use of frequency spectrum in the UAE.
- 2.1.16 **“Wireless Equipment”** means a category of Telecommunication Apparatus used for Radiocommunication Service.

Article (3)

Schedule of Frequency Spectrum Fees

- 3.1 Frequency Spectrum Fees in the following schedule shall be non-refundable and collected for applying, registering, authorizing, issuing or renewing Authorization on yearly basis, unless specified in these Regulations.

| | Fees Types | Fees (AED) | Remarks |
|---|--|--|----------------|
| 1 | Application Fees | 100 | Refer Note 1 |
| 2 | Authorization cancellation | Application Fees and Frequency Fees = 0 | Refer Note 2 |
| 3 | Temporary Authorization | Fees = Frequency Fees x Number of days / 365 | Refer Note 3 |
| 4 | Public Land Mobile (Cellular) | Frequency Fees = (FF x CF x P x BW) / 4000 | Refer Note 4 |
| 5 | Private Mobile Radio, Paging, and Trunking | Frequency Fees = $= \frac{BW * CF}{6.25} + \sum 500 * WE * PF$ | Refer Note 5 |

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| | | | |
|----|---|---|---------------|
| 6 | Public Access Mobile Radio (PAMR): 380-400 MHz | Frequency Fees = (BW x CF x 50) | Refer Note 6 |
| 7 | Fixed (point to point) links above 30 MHz | Frequency Fees = FF x BW x 1600 | Refer Note 7 |
| 8 | HF Fixed (point to point) links below 30 MHz | Frequency Fees = BW x 1000 | Refer Note 8 |
| 9 | FWA, BWA and Fixed (point-to-multipoint) links including (WLL and Mesh) | Frequency Fees = BW x CF x FF | Refer Note 9 |
| 10 | Global Mobile Personal Communications by Satellite (GMPCS) | Frequency Fees = BW x 10000 | Refer Note 10 |
| 11 | Amateur Radio | Frequency Fees = 100 | Refer Note 11 |
| 12 | Aircraft/Helicopter | Frequency Fees = 2000 | Refer Note 12 |
| 12 | Gliders/Balloons | Frequency Fees = 500 | |
| 14 | Fishing Boat | Frequency Fees = 100 | Refer Note 13 |
| 15 | Pleasure Boat | Frequency Fees = 500 | Refer Note 14 |
| 16 | Ships and Rigs | Frequency Fees = 1000 | Refer Note 15 |
| 17 | Marine buoys | Application Fees and Frequency Fees = 0 | |
| 18 | Earth Station (including Feeder link) | Frequency Fees = 25000 | Refer Note 16 |
| 19 | Very Small Aperture Antenna (VSAT) | 0 (if part of Public Telecommunications network of a Licensee) 5000 (for Private Telecommunications network) | |
| 20 | Digital Satellite News Gathering (DSNG) | Frequency Fees = 5000 | Refer Note 17 |
| 21 | Earth Station on board Vessels (ESV), Aircraft Earth Station (AES) and Earth Station in Motion (ESIM) | Frequency Fees = 0 | Refer Note 18 |
| 22 | Television Receive Only (TVRO) | Frequency Fees = 0 | |
| 23 | Radionavigation, Radiolocation, Radio Astronomy Station | Frequency Fees = 500 | Refer Note 19 |
| 24 | Terrestrial Sound and Television Broadcasting | Frequency Fees (per Station) = B + (P x ST x H) | Refer Note 20 |
| 25 | HF Seasonal Sound Broadcasting | Frequency Fees (per transmitter) = 20,000 | |

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| | | | |
|----|---|--|---------------|
| 26 | Wireless Camera Links | Frequency Fees = (BW x FF x 200) + (CF x 5) | Refer Note 21 |
| 27 | Ultra Wide Band and Short Range Devices | Frequency Fees = 0 | Refer Note 22 |
| 28 | Low Power Devices | Frequency Fees = 200 (per Device) | Refer Note 23 |
| 29 | Free Space Optics (FSO) and Laser links | Frequency Fees = 0 | |
| 30 | Emergency and Distress frequencies | Application Fees and Frequency Fees = 0 | Refer Note 24 |
| 31 | Interference complaints processing and monitoring Fees | Application Fees and Frequency Fees = 0 | |
| 32 | Site Surveys | Frequency Fees = 2500 (per day for each visit) | |
| 33 | Foreign Embassies, Consulates and Diplomatic Missions (official use) | Application Fees and Frequency Fees = 0 | Refer Note 25 |
| 34 | Technology Trials | Frequency Fees = 500 (per day) | Refer Note 26 |
| 35 | Public Protection and Disaster Relief (PPDR) | Fees = Frequency Fees x (number of commercial subscribers / PPDR network operator's total number of subscribers) | Refer Note 27 |
| 36 | Satellite Network Coordination Request (CR Notice) to International Telecommunication Union (ITU) | Frequency Fees = 5000 | Refer Note 28 |
| 37 | Satellite Network Notification to International Telecommunication Union (ITU) | Frequency Fees = 100,000 | Refer Note 29 |

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Note 1: Application Fees

Applicable for new, renew or modification of Authorization. Where modification means a change to the Authorization.

Application Fees shall apply to each Application in a batch.

Note 2: Authorization cancellation

At the cancellation of an Authorization, no refund of Frequency Spectrum Fees shall be made. Even in the case of re-farming of assignments mandated by the TRA, no refund of Frequency Spectrum Fees shall be made.

Note 3: Temporary Authorization

Frequency Fees for Temporary Authorization shall be calculated based on pro-rata for a period from 1 to 90 days with a minimum fees of AED 100.

Note 4: Details on formula factors for Public Land Mobile (Cellular)

- P = Price per MHz, set at 1.15 Million AED per year
- FF = Frequency range factor which will be as follows:

| Frequency Range | Lower Edge | Upper Edge | Frequency Factor -FF |
|-----------------|-------------|------------|----------------------|
| | - | <470 MHz | 1 |
| 700 MHz | >=470 MHz | <791 MHz | 1 |
| 800 MHz | >=791 MHz | <862 MHz | 1 |
| 900 MHz | >=862 MHz | <1000 MHz | 1 |
| 1 - 1.9 GHz | >=1000 MHz | <1900 MHz | 0.7 |
| 1.9 - 2.3 GHz | >=1900 MHz | <2300 MHz | 0.6 |
| 2.3 - 2.4 GHz | >=2300 MHz | <2400 MHz | 0.15 |
| 2.4 - 2.7 GHz | >=2400 MHz | <2700 MHz | 0.2 |
| 2.7 - 6 GHz | >=2700 MHz | <6000 MHz | 0.1 |
| 6 - 15.4 GHz | >=6000 MHz | <15400 MHz | 0.05 |
| 15.4 - 30 GHz | >=15400 MHz | <30000 MHz | 0.015 |
| Above 30 GHz | >=30000 MHz | - | 0.01 |

- BW = Assigned bandwidth in MHz where BW for frequency division duplex of 2x20 MHz shall be taken as 40 MHz.

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- CF = coverage factor depending on area as determined by the TRA which will be as follows:

| Coverage Area | CF for Cellular |
|----------------------------|-----------------|
| Railways | 100 |
| Circular Area 3 km radius | 500 |
| Circular Area 10 km radius | 1000 |
| Emirate Wide | 2000 |
| All UAE | 4000 |

Coverage Factor (CF) of Railways is applicable to one specific user 'Etihad Railways' for the GSM-R spectrum (873-880/918-925 MHz) authorization only. CF of "Emirate wide" refers to a situation where coverage is extended to the whole of one Emirate, even with spill over into small portions of neighbouring Emirates. Any area wider than Circular Area with 10 km radius will also be treated as Emirate wide.

Note 5: Private Mobile Radio, Paging, and Trunking

- BW = the total bandwidth (addition of all channels) of the authorization (in kHz).
- WE = Wireless Equipment (including handhelds) will be included in the calculation.
- $\sum (WE \times 500 \times PF) =$ Total sum of (each Wireless Equipment multiplied by 500 multiplied by Power Factor).
- PF= Power Factor depending on the authorized effective radiated power (ERP) for the equipment, as follows:

| Description | Less than 1 Watt* | 1 Watt and less than or equal to 5 Watts | Above 5 Watts and less than or equal to 10 Watts | Above 10 Watts and less than or equal to 20 Watts | Above 20 Watts |
|-------------|-------------------|--|--|---|----------------|
| PF | 0.2 | 1 | 2 | 3 | 4 |

*PF is 0.2 for Taxis, or 'heritage and recreation activities' (e.g. camel racing or horse racing, etc.), or Networks with Vehicle only equipment (with Base Station or with portable), and Trainside (Urban Rail, Metro, Tram, etc.)

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- CF= Coverage Factor depending on the geographical area as determined by the TRA as follows:

| Sub Service/ Area | Coverage | CF for PMR |
|-------------------------|-------------------------|------------|
| Heritage and recreation | 100 km | 500 |
| Shore to ship | Open | 500 |
| Ground to Air | Open | 500 |
| Trackside | Open | 500 |
| Area within Emirate | 10 km | 500 |
| Emirate wide | >10 km or Whole Emirate | 2000 |
| All UAE | All UAE territory | 10000 |

A change to the ownership, or frequency range (e.g. VHF to UHF), or coverage area or location beyond 10 km as given in the authorization shall require a new authorization. Any other change may be considered as a modification.

Note 6: Public Access Mobile Radio (PAMR)

This note is for Networks in the frequency range of 380-400 MHz,

- BW = the total bandwidth of the authorization (in MHz).
- CF= Coverage Factor depending on the geographical area as determined by the TRA as follows:

| Area | Area within Emirate | Emirate wide | All UAE |
|-------------|---------------------|--------------|---------|
| CF for PAMR | 500 | 2,000 | 4,000 |

The PAMR is used by Public Protection and Disaster Recovery (PPDR) or public safety entities and therefore the PPDR provision will also apply.

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Note 7: Fixed (point to point) links above 30 MHz

FF= Frequency range factor as follows: BW= Bandwidth factor as follows:

| Frequency Range | FF |
|------------------------|-----|
| >= 0.03 GHz to <=3 GHz | 5 |
| >3 GHz to <=14 GHz | 3 |
| >14 GHz to <=48 GHz | 2 |
| >48 GHz to <=66 GHz | 0.5 |
| Above 66 GHz | 1 |

| Bandwidth | BW Factor |
|------------------------|-----------|
| Less than 28 MHz | 1 |
| >=28 MHz to < 56 MHz | 2 |
| >=56 MHz to <= 112 MHz | 3 |
| More than 112 MHz | 4 |

Where bandwidth is the total bandwidth. Change in ownership, FF, site coordinates and add frequency is considered as new authorization. Any other change to parameters in the Authorization is considered as modification.

Note 8: HF Fixed (point to point) links below 30 MHz

- BW is the total bandwidth in kHz for all channels of that link

Note 9: FWA, BWA and Fixed (point-to-multipoint) links including (WLL and Mesh)

- BW = Total Bandwidth in MHz
For Fixed (point-to-multipoint) links including (WLL and Mesh) in 2400-2483.5 MHz /5725-5925 MHz/60 GHz bands only, if BW>100 then BW=100 will be used irrespective of total bandwidth with FF=5 due to frequency hopping and direct spread spectrum features.
- CF= Coverage Factor depending on the geographical area as determined by the TRA as follows:

| Sub Service/ Area | Coverage | CF for FWA, BWA, PMP, WLL, Mesh |
|--|-------------------------|---------------------------------|
| Trackside* | Open | 100 |
| Outdoor WLAN/RLAN (e.g. Outdoor Wi-Fi)** | Open | 100 |
| Area within Emirate | 30 km | 100 |
| Emirate wide | >30 km or Whole Emirate | 1000 |
| All UAE | All UAE territory | 4000 |

* Trackside is applied only for Urban Rail, Metro, Tram, etc.** in 2400-2483.5 MHz /5725-5925 MHz/60 GHz bands only.

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- FF= Frequency Factor for range of less than 2 GHz =500, where for other ranges will be determined as follows:

| Frequency Range | Frequency Factor (FF) |
|-----------------------|-----------------------|
| >= 2 GHz to <= 6 GHz | 5 |
| > 6 GHz to <= 11 GHz | 4 |
| > 11 GHz to <= 14 GHz | 3 |
| > 14 GHz to <= 40 GHz | 2 |
| Above 40 GHz | 1 |

Change in ownership, coverage area and location is considered as new authorization. Any other change to parameters in the Authorization is considered as modification.

Note 10: GMPCS

- BW = the assigned bandwidth in MHz

Note 11: Amateur

A change to the ownership as given in the authorization shall require a new authorization. Any other change may be considered as a modification.

Note 12: Aircraft/ Helicopter

A change to the ownership as given in the authorization shall require a new authorization. Any other change may be considered as a modification.

Unmanned aircraft systems including drones or remotely piloted aircraft systems treated as category 3 platforms by the UAE General Civil Aviation Authority will require an aircraft radio license and subject to fees as per this regulation.

Note 13: Fishing Boat

A change to the ownership as given in the authorization shall require a new authorization. Any other change may be considered as a modification.

Note 14: Pleasure Boat

A change to the ownership as given in the authorization shall require a new authorization. Any other change may be considered as a modification.

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Note 15: Ships and rigs

A change to the ownership as given in the authorization shall require a new authorization. Any other change may be considered as a modification.

Note 16: Earth station (including feeder links)

Applicable to any Earth Station, either receive only or transmit only or transmit and receive.

Note 17: DSNG

A change to the ownership, or frequency range or wireless equipment as given in the authorization shall require a new authorization. Any other change may be considered as a modification.

Note 18: ESV, AES and ESIM

Any Earth Station on board Vessel or ESIM if used on land or not included in the ship license will be treated as VSAT (private telecommunications network)

Note 19: Radio navigation, Radiolocation and Radio Astronomy

A change to the ownership, or frequency range or coverage as given in the authorization shall require a new authorization. Any other change may be considered as a modification.

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Note 20: Terrestrial Sound and Television Broadcasting

- B = Basic Fee = 40,000 AED
- P = Power Factor shall be the power; expressed in decibels relative to 1 kilowatt (dBW) equals the transmitter output power (in case of LF or MF transmitters) and Effective Radiated Power (ERP) in all other cases
- H = Antenna Height Factor is the Antenna Height above ground level in metres including buildings and towers
- ST = Service Type Factor shall be calculated as follows:

| Sound Broadcasting Service | | | |
|-----------------------------------|------------------------|------------------|---------------------------------|
| Service Type | Frequency Range | Bandwidth | Service Type Factor (ST) |
| LF/MF Sound Broadcasting | 148.5 – 283.5 kHz | 9 kHz | 4.5 |
| | 526.5 – 1,606.5 kHz | 9 kHz | |
| VHF Sound Broadcasting | 87.5 – 108 MHz | 200 kHz | 11 |
| | 174 – 230 MHz | 1.536 MHz | 21 |

Table 1 –Service Type Factors (ST) for Sound Broadcasting Services

| TV Broadcasting Service | | | |
|--|------------------------|------------------|----------------------------------|
| Service Type | Frequency Range | Bandwidth | Service Type Factor (ST)* |
| Terrestrial Digital TV Broadcasting | 174 – 230 MHz | 7 MHz | 60 |
| | 470 – 694 MHz | 8 MHz | 68 |
| Terrestrial Mobile TV Broadcasting | 174 – 230 MHz | 7 MHz | 119 |
| | 470 – 694 MHz | 8 MHz | 136 |

Table 2 –Service Type Factors (ST) for TV Broadcasting Services

*Service Type Factor can be calculated with respect to above mentioned bandwidth and closest frequency range if similar Broadcasting Service is required to be authorized in any frequency band not mentioned above.

A change to the ownership, or location as given in the authorization shall require a new authorization. Any other change may be considered as a modification.

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Note 21: Wireless Camera Links

- BW is the total bandwidth in MHz for each link.
- FF = Frequency Range Factor

| Frequency Range | >= 1 GHz to <= 3 GHz | >3 GHz to <= 14 GHz | >14 GHz to <= 48 GHz | Above 48 GHz |
|-----------------|----------------------|---------------------|----------------------|--------------|
| FF | 5 | 3 | 2 | 1 |

- CF= Coverage Factor depending on the geographical area as determined by the TRA as follows:

| Area | Area within one Emirate | Emirate wide | All UAE |
|-------------------------------------|-------------------------|--------------|---------|
| CF for Wireless Camera Links | 500 | 2000 | 4000 |

A change to the ownership, or frequency range as given in the authorization shall require a new authorization. Any other change may be considered as a modification.

Note 22: UWB and SRD

Any change to the class authorization shall require a new authorization.

Note 23: Low Power Devices

The criteria for Low Power Devices will be determined in the relevant regulations issued by the TRA. For Temporary Authorization a minimum fee of AED 100 per device will be charged. A change to the ownership, or frequency range or wireless equipment as given in the class authorization shall require a new authorization. Any other change may be considered as a modification.

Note 24: Emergency and Distress frequencies

Applicable to uses of frequencies by radiocommunication services or systems for emergency and distress in accordance with the Radio Regulations.

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Note 25: Foreign Embassies, Consulates and Diplomatic Missions (official use)

This applies on the condition reciprocal basis where it is available for the UAE Embassy, Consulate and Mission in the country of origin. The TRA will consider it as available to UAE unless notified by Ministry of Foreign Affairs.

Note 26: Technology Trials

Applicable to demonstration of new technologies as:

- Demonstration of new technologies at conferences, exhibitions or trial area.
- Has no commercial subscribers during trial.
- The TRA has requested that the trial to confirm aspects of a network, compatibility, interference analysis, technical study, to put UAE as the first in ICT, etc. In this case, there can be limited commercial subscribers.

The authorization is not applicable to development and enhancement activity on existing networks e.g. regular network updates, new software releases, antenna testing, carrier aggregation testing.

Note 27: PPDR

Frequency Fees are applied on the PPDR networks which include but not limited to the following: International Mobile Telecommunication (IMT) networks, fixed links, etc. and relevant frequency fees to be used.

Note 28: Satellite Network Coordination Request (CR Notice)

Applicable for each satellite network coordination request (CR Notice) to ITU by the UAE.

Note 29: Satellite Network Notification

Applicable for each notification request to ITU by the UAE for satellite networks that are subject to coordination.

Article (4)

- 4.1 The TRA shall have the authority to interpret and apply the Frequency Spectrum Fees Regulations.