



# **Radio Spectrum Guidelines**

# **Fees for Private Wireless Networks**

December 2021

Issue No. 1.0

National Telecommunications Regulatory Authority (NTRA) P O Box 12577, CAIRO, Arab Republic of Egypt (EGY) <u>www.tra.gov.eg</u>



# **Document History**

Version	Issue date
1.0 (Active)	December 2021



# **1** Introduction

In accordance with the provisions of the Egyptian Telecommunications Regulatory Law No. (10) of 2003 and NTRA board decrees, the regime included in this document is effective starting from 1<sup>st</sup> July 2020. It sets the Radio Spectrum Fees schedule for Frequency Spectrum and Wireless Equipment Authorization for private wireless network. The purpose of this regime is to ensure the efficient use of spectrum and to encourage innovation and investment in the ICT sector in Egypt.

# **2** Definitions

The terms, words and expressions used in this regulatory document shall have the defined meaning clarified in the Telecommunications Regulatory Law No. (10) of 2003. In addition, this document provides terms and phrases that are defined as follows:

- 2.1 **The State**: The Arab Republic of Egypt, including its geographical borders, territorial waters and airspace.
- 2.2 **NTRA**: National Telecommunication Regulatory Authority regulating the telecommunication sector in Egypt pursuant to the provisions of the Egyptian telecommunication law No. (10) of 2003.
- 2.3 **Applicant:** Any person who can apply for a frequency license in accordance with the Telecom Law No. (10) of 2003.
- 2.4 **Frequency Fees**: The fees to be paid to the NTRA, for any assignment of frequency.
- 2.5 **Device Fees**: The fees to be paid to the NTRA, for any authorization to use a wireless commination device.
- 2.6 **Radio**: A general term applied to the use of radio waves.
- 2.7 **Station:** One or more radiocommunication transmitters or receivers or a combination of transmitters and receivers, including the accessory equipment.
- 2.8 **Assignment (of a radio frequency or radio frequency channel)**: Authorization granted by NTRA to an applicant to use radio station or to use a radio frequency or radio frequency channel under specified conditions.
- 2.9 **BW:** Bandwidth of the assigned frequency channel
- 2.10 **Private Wireless Networks:** The network infrastructure which is used exclusively by the assigned frequencies and authorized devices.



- 2.11 **Coverage area**: The area where the applicant is authorized to use the assigned frequencies and devices.
- 2.12 **WLAN:** Wireless local area network that links two or more points using wireless communication devices within a limited area.

### **3** Legal Considerations

- 3.1 This document is issued by the National Telecommunications Regulatory Authority in accordance with the Articles of the Telecommunications Regulatory Law No. (10) of 2003 and subsequent ministerial decisions.
- 3.2 NTRA has the right to modify any of the guideline contained in this document.

### **4** Schedule of Radio Spectrum and Wireless Equipment

### Fees

#### 4.1 Terrestrial wireless communication systems:

Annual frequency fee (L.E.) = 1000 × BW factor × Coverage factor

Annual device fee (L.E.) = 500  $\times$  Service factor

Where;

BW factor = Assigned BW (KHz) divided by Reference BW as shown in the below table

Frequency Band	Reference BW	
3 – 30 MHz	3 KHz	
30 – 470 MHz	12.5 KHz	
470 – 42000 MHz	3500 KHz	
Above 42 GHz	250000 KHz	



#### 4.2 Coverage factor is determined as follows:

Frequency Band	Cove	erage Area	Coverage Factor
3 – 30 MHz	One coverage area with one frequency		35
30 – 300 MHz If more than one	handheld devices with power up to (1 Watt)		
type of wireless device is used to achieve coverage,	One coverage area with one frequency using handheld devices with power up to (5 Watt)		1
the higher factor value is selected	One coverage area with one frequency using Fixed devices with power up to (10 Watt)		2
		with one frequency using vehicles with power up to 0 Watt)	3
	One coverage area with one frequency using Fixed devices with power above (10 Watt) One coverage area with one frequency using Fixed devices above vehicles with power above (10 Watt)		3
			4
	One coverage area with one frequency entire one	Cairo – Giza – Qalyubiyah - Alexandria	7
	governorate	Other governorates	5
	Nationwide		35
300 – 470 MHz If more than one	One coverage area with one frequency using Fixed devices with power up to (10 Watt)		2
type of wireless device is used to achieve coverage,			3
the higher factor value is selected	One coverage area with one frequency using Fixed devices above vehicles with power up to (10 Watt)		4



Frequency Band	Cove	erage Area	Coverage Factor
	One coverage area with one frequency using Fixed devices with power above (10 Watt) One coverage area with one frequency using Fixed devices above vehicles with power above (10 Watt)		4
			5
	One coverage area with one frequency entire one	Cairo – Giza – Qalyubiyah - Alexandria	8
	governorate	Other governorates	6
	Nat	tionwide	36
Above 470 MHz If the frequency	Microwave point – to – point link using frequency pair above 42 GHzMicrowave point – to – point link using frequency pair between 28 – 42 GHzMicrowave point – to – point link using frequency pair between 18 – 28 GHzMicrowave point – to – point link using frequency pair between 10 – 18 GHzMicrowave point – to – point link using frequency pair between 10 – 18 GHzMicrowave point – to – point link using frequency pair between 5 – 10 GHz		35
pair falls into two different frequency bands, the higher			40
factor value is selected			60
			90
			130
		– point link using frequency veen 1 – 5 GHz	180
	Microwave point – to – point link using frequency pair below 1 GHz		240



#### 4.3 Service factor is determined as follows:

Service	Service Factor	
Receiver only (Pager)	0	
Receiver device only (Fixed / mobile - voice / data) (PMR)	0.4	
transmitter device (Fixed / mobile - voice / data) (PMR)	1	
WLAN remote device	5	
WLAN central device	5 × number of remote devices	
MW remote device	10	
MW central device	10 × number of remote devices	

# 5 Land-based Satellite Communication Systems

Annual Frequency fee for Uplink (L.E.) = 1000 × BW (MHz) (for Private Telecommunications network)

= 0 (if part of Public Telecommunications network of a Licensee)

Annual device fee (L.E.) = 500 × Service factor

Service factor is determined as follows:

Service	Service Factor
SNG	20
VSAT – GMPCS (Inmarsat – Iridium – Thuraya)	10



## 6 Wireless Communication Systems on Ships and

### Aircrafts

The Maritime and Aeronautical frequencies are not specified in the license as the radio spectrum used is internationally allocated to these services in accordance with ITU regulations and international conventions, therefore these frequencies are exempted from frequency fees and only devices fees are charged.

Device Type	
Transmit, Transmit /receive (voice or data)	500
Receive only (except GPS)	200
Satellite communication devices (voice, data, tracking Otherwise)	5000
Wireless devices for distress and rescue	0
GPS	0
Transmit, Transmit /receive (voice or data)	250
Receive only (including GPS)	0
Wireless devices for distress and rescue	0
Treated as terrestrial wireless communication systems (see first	
item)	
	Transmit, Transmit /receive (voice or data) Receive only (except GPS) Satellite communication devices (voice, data, tracking Otherwise) Wireless devices for distress and rescue GPS Transmit, Transmit /receive (voice or data) Receive only (including GPS) Wireless devices for distress and rescue Treated as terrestrial wireless communicati

Annual device fee is determined as follows:



## 7 Exempted Applications and Services

The following applications and services are fee-exempted (provided that the usage is complied with NTRA regulations):

- 7.1 Radio Amateurs are exempted from frequency and device fees.
- 7.2 Private Wi-Fi networks (Residential Closed premises) are exempted from frequency and device fees.
- 7.3 Short-range devices (SRD) are exempted from frequency and device fees.
- 7.4 GPS receiver are exempted from frequency and device fees.
- 7.5 Wireless systems operating on ships and land that use international maritime frequencies are exempted from frequency fees only.
- 7.6 Wireless systems operating on aircrafts that use international aeronautical frequencies are exempted from frequency fees only.
- 7.7 WLAN devices operating in the frequency bands 2.4 GHz and 5.8 GHz are exempted from frequency fees only.

### 8 General Provisions for Calculating and Paying Annual

### Fees

- 8.1 The annual fees include insurance fees, which equivalent to the annual fees of frequencies and devices.
- 8.2 If the applicant delays the payment of the fees due on schedule, the licensee is obliged to pay the prescribed fees in addition to a penalty delay calculated in accordance with the interest rate announced by the Central Bank of Egypt.
- 8.3 Temporary licensing fees (less than one year) for the usage of frequencies and devices are calculated in proportion to the number of months required, taking into account the fraction of a month is considered a full month.