

2024

DRAFT FREQUENCY SPECTRUM FEE SCHEDULE

Date: 15 - 05 - 2024

Email: spectrumpricing@ca.go.ke



1. Aeronautical Station Licence

A licence to establish a radio station for carrying radiocommunication with aircraft station. The annual frequency fee for aeronautical station licence is charged per station per frequency:

MF / HF: KES 6,000VHF / UHF: KES 6,000

2. Aircraft Station Licence

A licence to establish a mobile station aboard an aircraft, to operate in the aeronautical mobile service. The annual frequency fee for an aircraft station licence is KES 6,000.

3. Licence for Fixed Station operating in Mobile Service

A licence to establish a radiocommunication station at a fixed location for carrying on a Mobile Radiocommunication Service. The annual frequency for fixed station operating in mobile service is charged per station per frequency:

MF / HF: KES 22,500VHF / UHF: KES 6,000

4. Mobile Station Licence

A licence to install and use radio apparatus for transmitting and receiving aboard a vehicle, aircraft, or a ship. The annual frequency fee for mobile station licence is charged per station per frequency:

- MF / HF: KES 7,000 - VHF / UHF: KES 3,500

5. Portable Station Licence

A licence to operate a portable radio communication apparatus in the mobile service. The annual frequency fee for portable station licence is charged per station per frequency:

MF / HF: Not applicableVHF / UHF: KES 3,500

6. Coast Station Licence

A licence to establish a station on land for carrying on a service with ship stations. The annual frequency fee for coast station licence is charged per station per frequency:

MF / HF: KES 22,500VHF / UHF: KES 7,000



7. Ship Station Licence

A licence to install and use radio apparatus aboard ships:

MF / HF: KES 7,000VHF / UHF: KES 3,500

8. Radio Amateur Licence

A licence to install and operate an amateur radio station:

MF / HF: KES 2,000VHF / UHF: KES 2,000

9. Citizen Band Radio

A licence to operate a low power radio apparatus operating in the 27 MHz band (26925 KHz to 27403 kHz). The one-time frequency fee for a Citizen Band Radio is charged per station:

- MF / HF: KES 1,000

- VHF / UHF: Not Applicable

10. Alarm Systems

A licence to install and operate an Alarm unit. The annual frequency fee for each Alarm unit is:

- MF / HF: Not Applicable

- VHF / UHF: KES 1,500

11. Fixed Satellite Earth Stations

The annual frequency fee payable for satellite ground stations transmitter or carrier is charged as per the following formulae that uses a unit fee and takes into account the frequency bandwidth.

Fee FF (KES) = $U \times BW$

Where,

U is the Fixed Unit Fee = KES 120,000

BW is the Bandwidth Factor = $0.25 \text{ for } \le 0.25 \text{ MHz}$

= $0.5 \text{ for BW} > 0.25 \text{ MHz and} \le 0.25 \text{ MHz}$

= $2 \text{ for BW} > 1 \text{ MHz and} \le 3 \text{ MHz}$

= $4 \text{ for BW} > 3 \text{ MHz and} \le 6 \text{ MHz}$

= $6 \text{ for BW} > 6 \text{ MHz and} \le 10 \text{ MHz}$

= 8 for BW> 10 MHz



12. Broadcasting Stations

12.1 Sound Broadcasting Stations

A broadcasting transmitter is charged annual frequency fees as per the following formulae that takes into account the type of licensed service and frequency zone factor as per the geographical zones given in Figure 1 in Annex 1.

a) FF (KES) =
$$(2^n - 1)$$
 (U x FZ)

Where,

n is the number of frequencies per site

U is the Unit fee as per type of broadcasting service

- = KES 18,000 for community or public radio broadcast or low power gap filler
- = KES 78,000 for private/commercial radio broadcast

FZ is the Frequency Zone Factor

- = 2 for Zone A
- = 1 for Zone B

12.2 TV Broadcasting Stations

A broadcasting station transmitter is charged annual frequency fees as per the following formulae that takes into account a Unit Fee and a Frequency Zone Factor as per the geographical zones given in Figure 1 in Annex 1.

a)
$$FF(KES) = U \times FZ$$

Where.

U is the Unit fee = KES 220,000

FZ is the Frequency Zone Factor

- = 2 for Zone A
- = 1 for Zone B
- b) An administrative fee of KES 12,000 per frequency per site for each additional low power transmitter (Effective Radiated Power (ERP) of no more than 1000 watts) that reuses the main frequencies as gap fillers within the same coverage area of the main frequency to enhance digital signal coverage.

13. Terrestrial Fixed Links

The annual frequency fee for fixed links is charged per transmitter in each and every location as per the following formulae that uses a Unit Fee and takes into account the RF



bandwidth, frequency Band Factor and Frequency Zone factor as per the geographical zones given in Figure 1 in Annex 1.

Fee, F (KES) per transmitter

= Assigned Bandwidth (kHz) \times Band Factor \times Unit Fee \times FZ

Where,

Unit Fee = 80

The band factor is:

- = 0.9 for frequency band \leq 1GHz
- = 0.3 for frequency band > 1 GHz and \leq 10 GHz
- = 0.15 for frequency band > 10 GHz and \leq 16 GHz
- = 0.12 for frequency band > 16 GHz and \leq 20 GHz
- = 0.1 for frequency band > 20 GHz and \leq 24 GHz
- = 0.05 for frequency band > 24 GHz and \leq 40 GHz
- = 0.001 for frequency band > 40 GHz and ≤ 100 GHz

RFBW is RF bandwidth in kHz subject to a minimum of 500 kHz

FZ Frequency Zone Factor

= 1 for Zone A

= 0.5 for Zone B

14. Mobile Wireless Access Systems

The annual frequency fee for mobile wireless access systems is as follows:

F(KES) = Unit Fee x Band Factor x Assigned Bandwidth (MHz)

Where,

Unit Fee = KES 17,000,000 Band Factor = Low band (\leq 1GHz) 1 Medium band (> 1 GHz and \leq 4 GHz) 0.4 High band (> 4 GHz) 0.01



15. Fixed Wireless Access Systems

The annual frequency fee for Fixed Wireless Access systems is charged as follows:

15.1 Exclusive Spectrum Bandwidth Assignment Fee

This is applicable to cases that have been assigned exclusive use of a specific bandwidth countrywide.

This standing fee is to be paid annually for exclusive use of the bandwidth, in addition to the usage fee that is detailed in item 15.2 below.

Annual Fee for exclusive spectrum bandwidth assignment

F_n (KES) = Assigned Bandwidth (kHz) x Weighting Factor x Unit Fee

Where,

Weighting Factor to be used = 6

Unit Fee = KES 125

15.2 Spectrum Usage Fee

The annual frequency fees payable for fixed wireless access services will be either KES 288,000 for every assigned one (1) MHz frequency pair or the amount derived from the following formulae that depends on the number of transmitters, whichever is higher.

Fee F_u (KES) = 120,000 x n x FB x Rate

Where,

n is the actual or equivalent number of 1.75MHz duplex TRXs estimated to be in use at the end of the year in review

Annual Spectrum Management cost of one 1.75 MHz duplex TRX is KES 120,000

FB (Frequency Band Factor):

- = 0.8, for frequency band \leq 1GHz
- = 0.7, for frequency band > 1GHz and \leq 6 GHz
- = 0.6, for frequency band > 6 GHz and \leq 10 GHz
- = 0.5, for frequency band > 10 GHz and \leq 20 GHz
- = 0.4, for frequency band > 20 GHz and \leq 30 GHz
- =0.3, for frequency band > 30 GHz

Rate = 1 for the first 50 TRXs

- = 0.75 for the next 50 TRXs
- = 0.5 for the remaining TRXs



16. Trunked Radio Networks

The annual frequency fee for trunked radio networks is charged as follows:

16.1 Exclusive Spectrum Bandwidth Assignment Fee

This is applicable to cases that have been assigned exclusive use of a specific bandwidth countrywide.

This standing fee is to be paid annually for exclusive use of the bandwidth, in addition to the usage fee that is detailed in item 16.2 below.

Annual fee for exclusive spectrum bandwidth assignment

F_n (KES) = Assigned bandwidth (kHz) x Weighting Factor x Unit Fee

Where,

Weighting Factor to be used = 6

Unit Fee = KES 150

16.2 Spectrum Usage Fee

This is based on the actual usage of the spectrum and depends on the number of TRXs in the network.

Fee Fu (KES) = $50,000 \times n \times K_1$

Where,

n is the actual or equivalent number of 25kHz duplex TRXs estimated to be in use at the end of the year in review

Annual Spectrum Management cost of one 25kHz duplex transmitter is KES 50,000

 $K_1 = 1$, for trunked Public access mobile radio (PAMR) systems

= 3.5, for trunked Private mobile radio (PMR) systems

- 17. Wireless Access Systems (WAS) systems operating on shared non-protected basis shall attract an annual frequency fee. Currently, the annual frequency fee is KES 12,000 per terminal/sector. This, however, does not apply to a WAS system, with coverage and/or range that is restricted within a building and/or campus.
- 18. The Authority is not bound to use any or all of the above formulas if in its opinion the service involved require technical or other considerations. Spectrum fees for radio equipment not covered in the above schedule shall be determined at the time of application.
- **19.** Application fee of KES 1,200 applies to each application for a frequency in all the listed cases



20. The frequency fee charging methodologies are subject to change from time to time and the users are advised to check with the Authority to verify the status of any methodology in this document.

Notes:

a) These services: Maritime Mobile Service Identity, Family Radio, Private Paging Service and Public Paging Service, which appeared in previous Fee Schedules have been removed.





ANNEX 1: Frequency Charging Geographical Zones

Zone A is the High Congestion Zone and comprise the area South of the demarcation line appearing on the map, while **Zone B** is the Low Congestion Zone, and comprise the area North of the demarcation line appearing on the map.

Figure 1: Geographical Zones – Demarcation line for Frequency Charging Zones

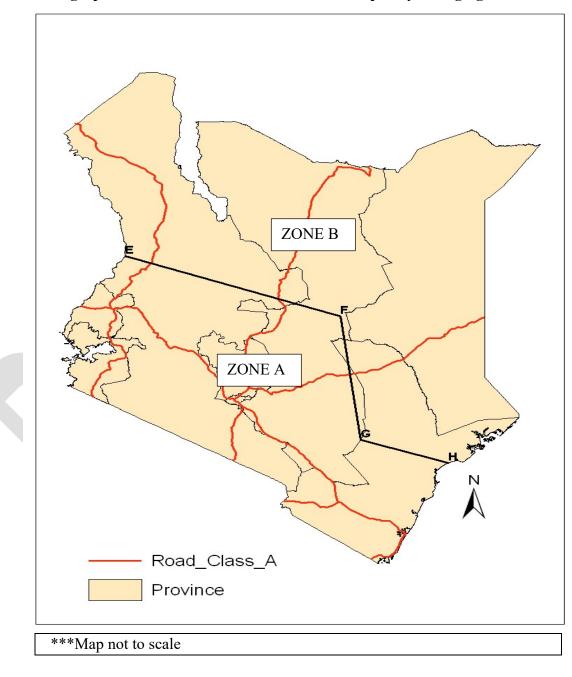




Table 1: Description of the Proposed Geographical Zones

REFERENCE	DESCRIPTION	LONGITUDE	LATITUDE
Е	Western Point	34° 59' 49.647" E	01° 40' 43.094" N
F	Central Point	38° 34' 50.041" E	0° 26' 9.212" N
G	South Central Point	38° 55' 19.21" E	2°7' 19.023" S
Н	Eastern Point	40° 23' 13.768" E	02° 35' 38.65" S

