



COMMUNICATIONS
AUTHORITY OF KENYA

Frequency Spectrum Fees Schedule

Opening your world



FREQUENCY SPECTRUM FEE SCHEDULE - EFFECTIVE 1ST JULY 2013

	Service	Description	Annual Fees Per Station Per Frequency In Ksh.	
			MF/HF	VHF/UHF
01.	Aeronautical Fixed Station Licence	A licence to establish a radio station for carrying radio communication with aircraft station.	18,700	5,000
02.	Licence for Fixed Station Operating in Mobile Service	A licence to establish a radio communication station at a fixed location for carrying on a Mobile Radio communication Service.	18,700	5,000
03.	Mobile Station Licence	A licence to install and use radio apparatus for transmitting and receiving aboard a vehicle, aircraft, or a ship.	5,610	2,900
04.	Portable Station Licence	A licence to a portable radio communication apparatus to operate in the mobile service.	5,610	2,900
05.	Coast Station Licence	A licence to establish a station on land for carrying on a radio communication service with ship stations.	18,700	5,000
06.	Ship Station Licence	A licence to install and use radio apparatus aboard ships.	5,610	2,900
07.	Maritime Mobile Service Identity	N/A	N/A	N/A
08.	Radio Amateur Licence	A licence to install and operate an amateur radio station.	2,000	2,000
9.	Citizen Band Radio Licence	A licence to operate a low power radio apparatus operating in the frequency bands 26925 KHz to 27403 kHz.	One time licence fee of 1,000	N/A
10.	Family Radio	No licence required for band 446.0-446.1 MHz.	N/A	N/A
11.	Private Paging Service	A licence to operate a radio paging service for private use.	N/A	25,000
12.	Public Paging Service	A licence to operate a radio paging service for public use (base station).	N/A	140,000
13.	Aircraft Station Licence	A licence to establish a mobile station aboard an aircraft, to operate in the aeronautical mobile service while utilizing the civil aviation frequencies for navigation.	4,800	

14. Alarm Systems

The basic charge for each alarm unit is Kshs. 1250, but the specific charges for each particular customer is determined by using the maximum value in each grouping of 5; 5 for 1-5, 10 for 6-10, 15 for 11-15 etc.

15. 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 (Kshs.) = U x BW

Where,

U Fixed Unit Fee = Kshs. 100,000

BW Bandwidth Factor = 0.25 for ≤ 0.25 MHz

= 0.5 for BW > 0.25 MHz and ≤ 0.5 MHz

= 1 for BW > 0.5 MHz and ≤ 1 MHz

= 2 for BW > 1 MHz and ≤ 3 MHz

= 4 for BW > 3 MHz and ≤ 6 MHz

= 6 for BW > 6 MHz and ≤ 10 MHz

= 8 for BW > 10 MHz

16. Broadcasting stations

A broadcasting station 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.

*FF (Kshs.) = $(2^n - 1) \times (U \times FZ)$

Where,

n is the number of stations owned by a broadcaster per site

U is the Unit fee as per type of broadcasting service

= KSHS. 15,000 for community or public radio broadcast

= KSHS. 65,000 for private/commercial radio broadcast

= KSHS. 45,000 for community or public television broadcast

= KSHS. 180,000 for private/commercial television broadcast

FZ is the Frequency Zone Factor

= 2 for Zone A

= 1 for Zone B

***Note:** The frequency fees for Broadcast Signal Distributors (BSDs) is exempt from this formula. The fee for BSDs is based on the formula: FF (Kshs.) = $(U \times FZ)$.

17. Terrestrial Fixed Links

The annual frequency fees 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.

$$\text{The fee, F (Kshs.) per transmitter} = \frac{\text{RFBW} \times \text{K1} \times \text{Unit fee} \times \text{FZ}}{8.5 \text{ kHz}}$$

Where,

Unit fee = 574.10, as Kshs. 574.10 is the unit spectrum fee for an 8.5 kHz band.

K1 is the band factor,

- = 0.9 for frequency band ≤ 1GHz
- = 0.3 for frequency band > 1 GHz and ≤ 10 GHz
- = 0.21 for frequency band > 10 GHz and ≤ 20 GHz
- = 0.15 for frequency band > 20 GHz and ≤ 30 GHz
- = 0.1 for frequency band > 30GHz

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

FZ Frequency Zone Factor
= 1 for Zone A
= 0.5 for Zone B

18. Mobile Wireless Access Systems

The annual frequency fee for mobile wireless access systems is charged in two parts as follows:

18.1: Exclusive Spectrum Assignment Bandwidth

This is applicable to cases that have been assigned exclusive use of a specific bandwidth countrywide. This standing fee is paid annually for exclusive use of the bandwidth Annual Fee for exclusive spectrum bandwidth assignment, in addition to the usage fee that is detailed in item 18.2 below.

$$\text{Fn (KShs)} = \frac{\text{Assigned bandwidth (kHz)} \times \text{Weighting factor} \times 1043.65}{8.5 \text{ kHz}}$$

Where,

Weighting factor to be used = 6
Unit fee = Kshs. 1043.65

18.2: Spectrum usage fees

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

$$\text{Fee Fu (Kshs.)} = 43,000 \times n \times \text{Rate}$$

Where,

n is the actual or equivalent number of 200kHz duplex TRXs estimated to be in use at the end of the year in review. For 3G services, 5MHz is used instead of 200KHz.
Annual Spectrum Management cost of one Transmitter (TRX) is Kshs. 43,000

Rate = 0.75, for the first 10,000 TRXs
= 0.5, for the next 30,000 TRXs
= 0.25, for the remaining TRXs

19. Fixed Wireless Access Systems

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

19.1 Exclusive Spectrum Bandwidth Assignment fee

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

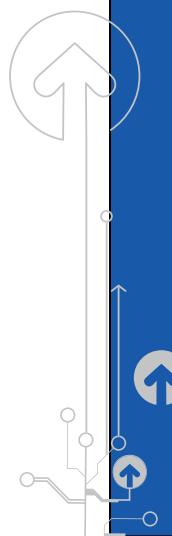
This standing fee is to be paid annually for exclusive use of the bandwidth, in addition to the usage fee that is detailed in item 19.2 below.

Annual Fee for exclusive spectrum bandwidth assignment

$$\text{Fn (KShs)} = \frac{\text{Assigned bandwidth (kHz)} \times \text{Weighting factor} \times 1043.65}{8.5 \text{ kHz}}$$

Where,

Weighting factor to be used = 6
Unit fee = Kshs. 1043.65



19.2 Spectrum Usage Fee

That the annual frequency fees payable for fixed wireless access services will be either Kshs. 240,000 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.

$$\text{Fee Fu (KShs.)} = 100,000 \times n \times \text{FB} \times \text{Rate}$$

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 KShs. 100,000

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

20. Trunked Radio Networks

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

20.1 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 20.2 below.

Annual fee for exclusive spectrum bandwidth assignment

$$\text{Fn (Kshs)} = \frac{\text{Assigned bandwidth (kHz)} \times \text{Weighting factor} \times 1043.65}{8.5 \text{ kHz}}$$

Where,

Weighting factor to be used = 6

Unit fee = Kshs. 1043.65

20.2 Spectrum Usage fee

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

$$\text{Fee Fu (Kshs)} = 43,000 \times n \times K1$$

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 Kshs. 43,000

K1 = 1, for trunked Public access mobile radio (PAMR) systems

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

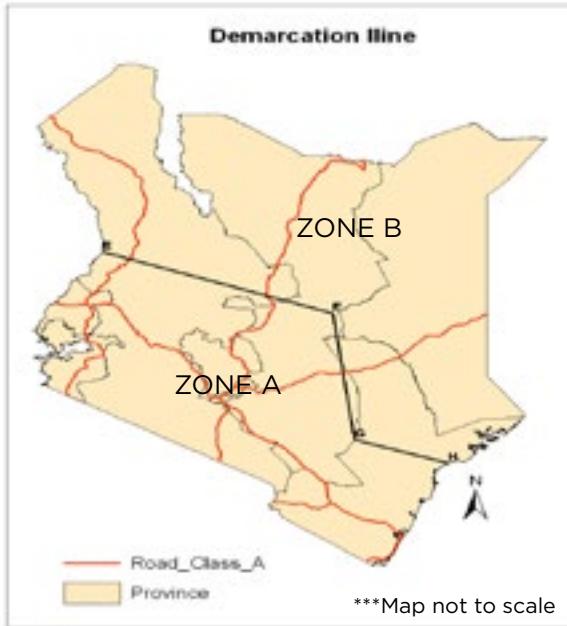
21. Wireless Access Systems (WAS) systems operating on shared non-protected basis shall attract an annual frequency fee. Currently, the annual frequency fee is KShs. 10,000 per terminal/sector. This, however, does not apply to a WAS system, with coverage and/or range that is restricted within a building and/or campus.
22. 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.
23. An application fee of Kshs. 1000/= applies to each application for a frequency in all the listed cases.
24. 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.



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 of the Frequency Charging Zones



REFERENCE	DESCRIPTION	LONGITUDE	LATITUDE
E	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" N
H	Eastern Point	40° 23' 13.768" E	02° 35' 38.65" N



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