FREQUENCY SPECTRUM FEE SCHEDULE – EFFECTIVE 1ST JULY 2018

	SERVICE.	DESCRIPTION	ANNUAL FEES PER STATION PER FREQUENCY IN Kshs.	
			MF/HF	VHF/UHF
1.	**AERONAUTICAL STATION LICENCE**	A licence to establish a radio station for carrying radiocommunication with aircraft station.	Kshs. 4,800	Kshs. 4,800
2.	**AIRCRAFT STATION LICENCE.**	A licence to establish a mobile station aboard an aircraft, to operate in the aeronautical mobile service.	Kshs. 4,800	Kshs. 4,800
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.	Kshs.18,700	Kshs. 5,000
4.	**MOBILE STATION LICENCE.**	A licence to install and use radio apparatus for transmitting and receiving aboard a vehicle, aircraft, or a ship.	Kshs. 5,610	Kshs. 2,900
5.	**PORTABLE STATION LICENCE.**	A licence to a portable radio communication apparatus to operate in the mobile service.	Kshs. 5,610	Kshs. 2,900
6.	**COAST STATION LICENCE.**	A licence to establish a station and land for carrying on a service with ship stations.	Kshs. 18,700	Kshs. 5,000

	SERVICE.	DESCRIPTION	ANNUAL FEES PER STATION PER FREQUENCY IN Kshs.	
			MF/HF	VHF/UHF
7.	**SHIP STATION LICENCE.**	A licence to install and use radio apparatus aboard ships.	Kshs. 5,610	Kshs. 2,900
8.	**MARITIME MOBILE SERVICE IDENTITY**	N/A	N/A	N/A
9.	**RADIO AMATEUR LICENCE.**	A licence to install and operate an amateur radio station.	Kshs. 2,000	Kshs. 2,000
10.	**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 Kshs. 1,000	N/A
11.	**FAMILY RADIO**	No licence required for band 446.0-446.1 MHz	N/A	N/A
12.	**PRIVATE PAGING SERVICE.**	A licence to operate a radio paging service for private use.	N/A	Kshs. 25,000
13.	**PUBLIC PAGING SERVICE.**	A licence to operate a radio paging service for public use (base station)	N/A	Kshs. 140,000

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

16.1 FM Sound Broadcasting Stations

That 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.

FF (Kshs.) = $(2^n - 1)$ (U x FZ)

Where,

n is the number of frequencies per site

U is the Unit fee as per type of broadcasting service

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

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

FZ is the Frequency Zone Factor

= 2 for Zone A

= 1 for Zone B

16.2 TV Broadcasting Stations

That 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.

a) FF (Kshs.) = U × FZ

Where,

U is the Unit fee as per type of broadcasting service
= 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

b) An administrative fee of Kshs. 10,000/= 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.

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.

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

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

Note
Terrestrial Fixed links in the E – band (70/80 GHz) operating on shared non-protected basis shall attract an annual frequency fee. Currently, the annual frequency fee is KShs. 10,000 per terminal.

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.

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

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.

Fee F_u (KShs.) = 43,000 x n x 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. For 4G services, 10MHz is used instead of 200kHz.

Annual Spectrum Management cost of one 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

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

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.

Fee F_u (KShs.) = 100,000 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 KShs. 100,000

FB Frequency Band Factor

= 0.8, for frequency band ≤ 1GHz
= 0.7, for frequency band > 1GHz and ≤ 6 GHz
= 0.6, for frequency band > 6 GHz and ≤ 10 GHz
= 0.5, for frequency band >10 GHz and ≤ 20 GHz
= 0.4, for frequency band > 20 GHz and ≤ 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

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

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.

Fee F_u (Kshs) = 43,000 x n x 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 Kshs. 43,000

K_1 = 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.

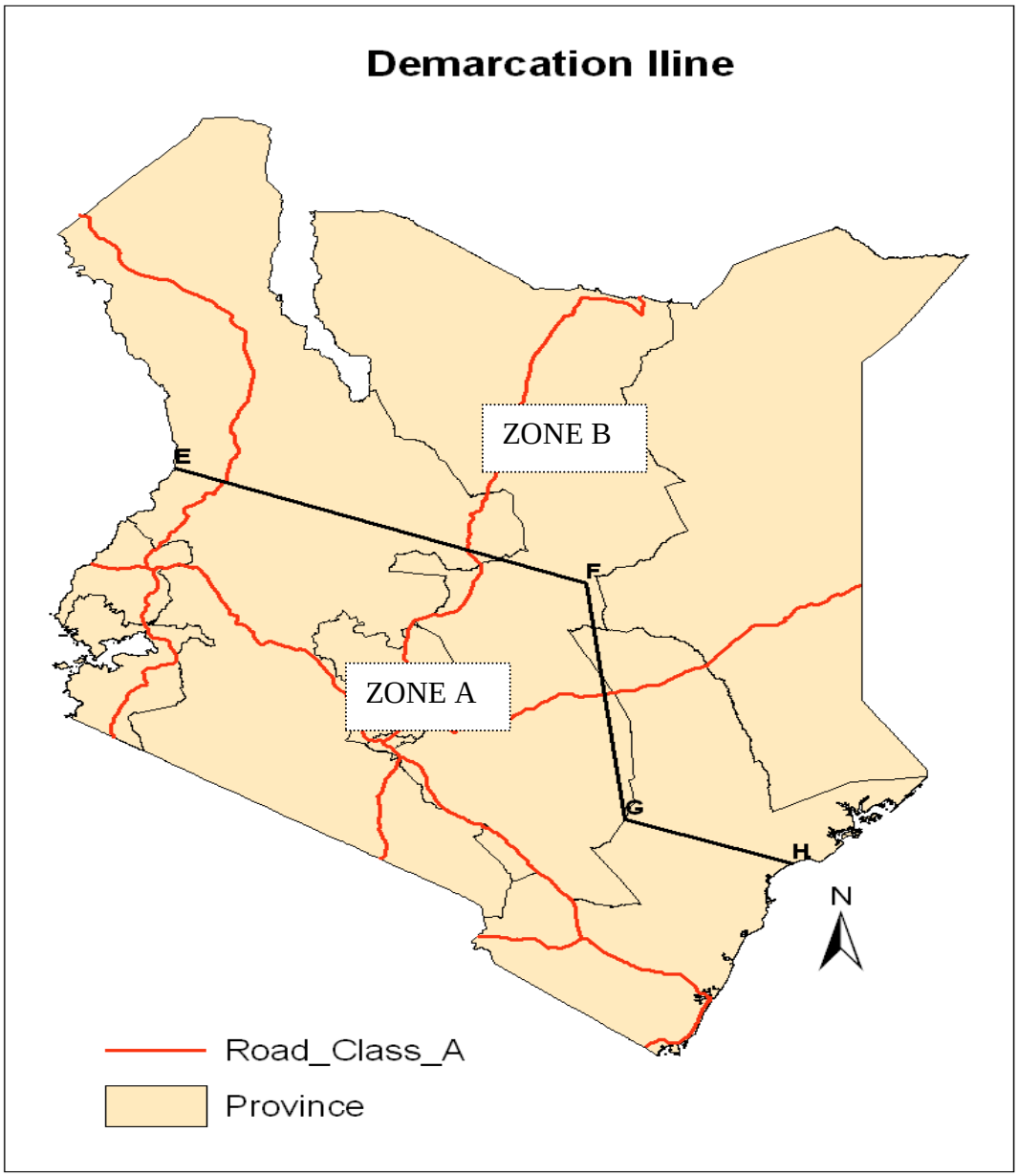
23. Application fee of Kshs. 1000/= applies to each application for a frequency in all the listed cases

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



***Map not to scale

Table 1: Description of the Proposed Geographical Zones

REFERENCE	DESCRIPTION	LONGITUDE	LATITUDE
E	Western Point	34º 59’ 49.647” E	01º 40’ 43.094” N
F	Central Point	38º 34’ 50.041” E	0º 26’ 9.212” N
G	South Central Point	38º 55’ 19.21” E	2º 7’ 19.023” N
H	Eastern Point	40 º 23’ 13.768” E	02º 35’ 38.65” N