

Overview of the Radio Frequency Spectrum

The radio frequency spectrum is a scarce national resource; it is therefore highly desirable that the spectrum resource is utilized in an efficient and effective manner, in order to realize the national spectrum mission and policy objectives.

The Gambia National Table of Frequency Allocations (GNFTA) divides The Gambia's radiofrequency spectrum into a number of frequency bands and specifies the general purposes for which the bands may be used. This process is referred to as the allocation of frequency bands to radiocommunication services.

Typical minor licenses include Land Mobile licenses to operate two-way (walkie-talkie) radios, Aircraft Radio licenses to operate radio equipment aboard an aircraft (civil) for safety and landing purposes, TV and Sound broadcasting licenses to operate a TV or Sound broadcasting station.

The radio spectrum is by international agreement subdivided into nine frequency bands, which are designated accordingly as shown here below. As the unit of frequency is hertz (Hz), frequencies shall be expressed:

- VLF (Very Low Frequency) : 3 to 30 KHz
- LF (Low Frequency) : 30 to 300 KHz
- MF (Medium Frequency) : 300 to 3000 KHz
- HF (High Frequency) : 3 to 30 MHz
- VHF (Very High Frequency) : 30 to 300 MHz
- UHF (Ultra High Frequency) : 300 to 3000 MHz
- SHF (Super High Frequency) : 3 to 30 GHz
- EHF (Extra High Frequency) : 30 to 300 GHz
- (No Symbol designated): 300 to 3000 GHz

The following prefixes shall be used to designate frequencies:

KHz (kilohertz) = 1,000 Hz, up to and including 3000 KHz.

MHz (Megahertz) = 1,000,000 Hz, up to and including 3000 MHz.

GHz (Gigahertz) = 1,000,000,000 Hz, up to and including 3000 GHz.

Objectives

The use of the radio spectrum needs to be strategically planned in order to create an environment, which allows for the long term planning and harmonization with international trends concerning radio services. In this regard The Gambia follows closely the work of the International Telecommunication Union (ITU) and the local Regional Organizations. The activities of other United Nations specialized agencies are also relevant, in particular the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO). Since electromagnetic radiation of radio frequencies do not respect national borders it is also necessary to take account of spectrum usage in neighboring States.

The extent to which the full benefits of the radio spectrum are realized depends on the actual use that is made of it and how efficiently it is managed. The primary objectives to be achieved with the use of radio spectrum include the following:

- To allow the development of new services to meet governmental and non-governmental demand for radio services;
- To manage the radio spectrum within The Gambia taking account of governmental requirements and the needs of the various commercial sectors;
- To harmonize spectrum use with international developments (ITU, Region 1, etc.);
- To enable liberalization of telecommunication (including radiocommunications) services and sector;
- To enable the realization of public policy objectives on safety (including emergency services), cultural (including TV and Radio broadcasting) and social issues;
- To stimulate technological innovation and competitiveness;
- To support economic growth, create employment and to promote general welfare
- To support national security and defense.

The GNTFA will be modified from time to time dependent on international and national decisions and recommendations. It is also envisaged that public consultation will feature in some future decisions on spectrum utilization and subsequent changes to the GNTFA.

Others license categories include; VSAT, Aeronautical, Aviation, Maritime, Broadcasting, telecommunications and Land Mobile Radio licenses.