



GUIDELINES ON THE IMPLEMENTATION OF FIXED WIRELESS LINKS (FWLs) ON NON PROTECTED BASIS

1. INTRODUCTION

Wireless technologies are today being utilized as a cost effective means to deliver communication services to end-users.

In an effort to provide more choice to the public for access to communications services, the Commission issues these guidelines for operation of FWLs on non protected no interference shared basis.

2. TYPE OF AUTHORISATION

Under this authorisation, all the FWLs shall operate in the same spectrum segment on a shared basis and are subject to the same conditions. These guidelines specify the frequencies that may be used, equipment standards/features, technical and operational parameters.

The FWLs users shall be required to obtain prior approval from the Commission for installation and use of individual transmitter stations in each and every site and to pay an annual frequency fee.

The FWLs shall operate on non-protected no interference shared basis. The FWLs shall not cause interference to other radio communication services and shall accept interference from other radio communication services including Industrial, Scientific, and Medical (ISM) equipment.

3. FWL STANDARDS

In order to maintain standards, the Commission shall type approve the equipment to be utilized for FWLs against minimum technical characteristics including but not limited to; operating frequency, frequency range, type of modulation and RF power. The users and vendors shall be required to ensure that the equipment intended for the Kenyan market complies with these guidelines.

4. FREQUENCY BANDS AND POWER

Frequency Band (MHz)	Maximum Equivalent Isotropically Radiated Power (EIRP)	Power spectral density
5725-5775	2W	100mW/MHz

5. EQUIPMENT FEATURES

Time Division Multiplex (TDD) is the mandatory duplex method. As a minimum, the FWLs shall be required to employ Transmit Power Control (TPC) and Dynamic Frequency Selection (DFS) so as to ensure that the systems transmission is spread as evenly as possible over the available frequency range, and only at the necessary power.

6. INTERFERENCE MANAGEMENT

The FWLs shall not cause interferences to other radio communications services. Upon notification by the Commission, the FWLs shall cease all transmissions until the interference is eliminated. FWLs shall however comply with the set standards and shall take reasonable measures to ensure that no interference is caused to other users within or outside the ISM band.

The FWLs shall not be accorded any protection from interferences by other radio communications services and the Commission shall not investigate complaints of interferences. It is however recommended that best practice implementation be adhered to, in order to retain value in the quality of service of the FWLs. The Commission may from time to time carry out tests to ensure that best practice implementation is adhered to.

7. NETWORK RETURNS

Network returns on FWLs shall be regularly submitted to the Commission on network parameters such as network layout/configuration, site coordinates, number of radio terminals, Tx/Rx frequencies, EIRP power, polarization, cell radius/link length, antenna height/type/pattern, number of sectors, number of RF's per sector and bandwidth/bit rate.

8. FREQUENCY FEES

The FWLs shall attract an annual frequency fee. Currently, the annual frequency fee is KShs. 10,000 per terminal.

9. BREACH OF GUIDELINES

FWLs users and vendors are strictly required to comply with these guidelines. Any violation of these guidelines shall result in the Commission taking the necessary regulatory measures.

10. OTHER CONDITIONS

These guidelines are subject to review by the Commission from time to time.

As well as specific conditions spelt out in these guidelines, the operation of the FWLs is also subject to other regulatory provisions such as the Kenya Communications Act 1998 and Kenya Communications Regulations 2001