

DIRECTIVE ON PRIVATE RADIOCOMMUNICATIONS

This Directive is issued by the Ethiopian Telecommunication Agency pursuant to Article 52 Sub-article 3 of Telecommunication Services Council of Ministers Regulations No.47/1999.

PART ONE GENERAL

Section 1

Short Title, Definitions, Scope and ITU-R

1. Short Title

This Directive may be cited as the "**Ethiopian Telecommunication Agency Directive on Private Radiocommunications No. 1/2005.**"

2. Definition

In this Directive, unless the context requires otherwise:-

- a. "**Agency**" means Ethiopian Telecommunication Agency.
- b. "**Amateur**" means a person who attains the age of 18 and is issued with a license by the Agency to operate Amateur Fixed Radiocommunication Station.
- c. "**Amateur Fixed Radiocommunication Service**" means a private radiocommunication service for the purpose of self-training, intercommunication and technical investigations carried out by Amateurs solely with a personal interest.
- d. "**Amateur Fixed Radiocommunication Station**" means a private radiocommunication station in the Amateur Fixed Radiocommunication Service.
- e. "**Distress Call**" means safety radiocommunications aimed at indicating imminent danger to human life requiring immediate rescue operations.

- f. **“Fixed Radiocommunication Service”** means a private radiocommunication service between specified fixed stations. It includes a radiocommunication service between specified fixed stations for the safety and navigation or other operations of an aircraft or a ship.
- g. **“Fixed Radiocommunication Station”** means a private radiocommunication station in a fixed service.
- h. **“Harmful Interference”** means the effect of unwanted energy due to one or a combination of emissions, radiations, or induction which endangers the functioning of a radio navigation service or of other safety service or seriously degrades, obstructs, or repeatedly interrupt a radiocommunication service operating in accordance with International Telecommunication Union Radio Regulation (ITU-R).
- i. **“Inspector”** means an employee of the Agency, to be assigned as such as per Article 17 of Telecommunication Proclamation No.49/1996 (as amended).
- j. **“License”** means license issued by the Agency to possess, install and operate private radiocommunication station within a specifically assigned radio frequency. It includes a license issued for Amateur Fixed Radiocommunication Station.
- k. **“Licensee”** means the holder of a license.
- l. **“Mobile Radiocommunication Service”** means a private radiocommunication service between mobile and fixed stations and the vice versa, or among mobile stations. It includes a radiocommunication service between a fixed radiocommunication stations and an aircraft or a ship and the vice versa.
- m. **“Mobile Radiocommunication Station”** means a private radiocommunication station in a mobile radiocommunication service intended to be used while in motion or during stops at unspecified points.

- n. **“Permit”** means a temporary authorization document issued to any person by the Agency for a period of not more than 4 months for the importation of radiocommunication equipment for the purpose of exhibition, as a sample or for other similar purposes.
- o. **“Person”** means natural or juridical person.
- p. **“Private Radiocommunication Service”** means a fixed radiocommunication service or a mobile radiocommunication service which is operated for non-commercial private use. It includes Amateur Fixed Radiocommunication Services.
- q. **“Private Radiocommunication Station”** means each fixed or mobile stations in use in a private radiocommunication service.
- r. **“Radiocommunication”** means communication by means of radio waves which include High Frequency (HF), Very High Frequency (VHF) or Ultra High Frequency (UHF).
- s. **“Spread Spectrum Device”** means a device operating in the frequencies bands of:
 - i. 2.4000-2.4835 GHz
 - ii. 5.1500-5.3500 GHz, or
 - iii. 5.4700-5.7250 GHz.

3. Scope of Application

This Directive shall not be applicable to the possession, installation or operation of radiocommunication apparatus for use by the police, the armed forces or by any other services directly employed for national security.

4. Radio Regulations of the International Telecommunication Union (ITU)

The relevant provisions of the ITU Radio Regulations (ITU-R) including provisions regarding aeronautical services and maritime services shall be applicable in this Directive.

Section 2
License and obligation of the Licensee

5. Types of Stations that Require a License and Type Approval

- a. License to be issued as per this Directive shall be for Fixed Radiocommunication Station, for Mobile Radiocommunication Station or for Amateur Fixed Radiocommunication Station.
- b. The Agency may issue permit to import radiocommunication equipment for the purpose of exhibition, as a sample or for other similar purposes.
- c. The Agency shall type approve spread spectrum device.

6. License or Permit Requirement

6.1 General

- a. License shall be required from the Agency to possess, install, operate or use private radiocommunication station.
- b. No license shall be issued to import radiocommunication equipment for individual or personal use, except for Amateur Fixed Radiocommunication Station.
- c. Radiocommunication equipment to be imported for the purpose of exhibition, as a sample or for other similar purposes shall need permit from the Agency.
- d. The radiocommunication equipment imported by obtaining permit shall not be allowed to remain in the country for permanent use.
- e. The relevant provisions of Article 10 of this Directive shall also apply to the holder of a permit.

6.2 Application for License or Permit

- a. The application for a license shall be submitted to the Agency by filling the Form attached herewith as **Annex 1**.

- b. The applicant for private radiocommunication station license under 6.2 (a) above shall be obliged:
 - i. to import a radiocommunication equipment which fulfils standards set by the Agency ;
 - ii. to submit an application by attaching the relevant documents described in **Annex III** of this Directive; and
 - iii. to produce a certificate on amateur radio operation or radio operation in general, if the application is for Amateur Fixed Radiocommunication Station.
- c. When an applicant who would like to import radiocommunication equipment fulfills the conditions under sub-article 6.2 (a) and (b) of this article, the Agency may issue prior authorization to import the radiocommunication equipment and assign frequency. Such assignment and prior authorization shall remain to be valid only for a period of six months starting from the date of authorization.
- d. The radiocommunication equipment which is issued with prior authorization and frequency assignment as per sub-article 6.2 (c) of this article, before it enters into the country, shall be confirmed by the Agency, through physical examination, that it is in conformity with the prior authorization.
- e. After confirmation by the Agency as per sub-article 6.2(b) of this article the Agency shall issue a license, provided that the conditions set therein are fulfilled and, prior to installation, the radiocommunication equipment is programmed according to its assigned frequency by the Agency.
- f. The applicant of a permit shall clearly indicate, with relevant evidence, the purpose of importation, the period of stay of the radiocommunication equipment and the date of taking out of the equipment from the country.
- g. Without prejudice to the applicability of the relevant provisions of sub-article 6.2 of this article, the applicant of a permit who fails to indicate the conditions set under

sub-article 6.2(d) of this article may not be granted a permit.

6.3 Radio Frequency Assignment and Use

- a. An applicant for radiocommunication license may not import the radiocommunication equipment, unless it fulfills the conditions provided for under sub article 6.2(b) of this article.
- b. Except for spread spectrum device, an applicant for radiocommunication permit shall only use frequency assigned to it by the Agency.
- c. a application on frequency assignment shall be decided by the Agency. The decision shall, *inter alia*, be based on the Frequency Allocation Table of the Agency and on the efficient use of radio frequency spectrum.
- d. Frequency shall be assigned on first-come first-served principle on a share or exclusive basis, unless the frequency is specifically allocated to certain specific services. However, an assigned frequency may be taken back from the user by the Agency and re-assigned to a new user, if public interest so requires and request made to this effect has been accepted by the Agency, provided that :
 - i) new frequency is available and can be assigned to the user, and/or,
 - ii) any damage that might happen to the user, as a result, can be made good by the new user requesting the frequency.
- e. The right to use the assigned frequency shall not be transferred in part or in whole to any other person unless written approval is obtained from the Agency.
- f. The frequency assignment shall be valid for a period of one year. It shall be renewed every year by paying the appropriate fee after the expiry of the fiscal year of the Federal Democratic Republic of Ethiopia in which the frequency has been assigned or renewed.

- g. The spread spectrum device shall operate at frequencies or frequency bands determined by this Directive on non-exclusive basis.

7. Return of a License

- a. A Licensee may return back a license by clearing all license and frequency fees due to be paid. The frequency assigned on the basis of such license may be cancelled, if all licenses of the private radiocommunication station allowed to use such frequency have been returned to the Agency.
- b. The radiocommunication equipment which was in use before the returning back of the license as per sub-article (a) of this Article may be sealed off by the Agency, or by obtaining prior written authorization from the Agency, be taken out of the country, or transferred to a third party.

8. License Fees

The Directive of the Ministry of Infrastructure of the Federal Democratic Republic of Ethiopia shall determine payment for issuance of a license and frequency fee.

9. Content of a License

A private radiocommunication station license issued by the Agency shall, at least, indicate:-

- a. name of the Licensee
- b. operating frequencies or frequency band,
- c. call sign to be used,
- d. kind of service,
- e. type of emission,
- f. maximum power output,
- g. make and type of the transceiver,
- h. type of antenna,
- i. location of private radiocommunication station,
- j. area of reception,
- k. operating schedule.

10. Obligation of the Licensee

- a. A Licensee shall comply with the provisions of this Directive.
- b. The license shall be kept with the private radiocommunication station.
- c. The Licensee shall not use unassigned frequency and equipment not approved by the Agency.
- d. No Licensee shall transfer, in any form whatsoever, the possession or ownership of radiocommunication equipment without the prior written approval of the Agency.
- e. In the event when the radiocommunication equipment is lost or stolen, the Licensee is obliged to report the incident to the nearby police station and to the Agency as soon as possible.
- f. The Licensee shall diligently keep the equipment away from third parties that are not allowed to use or possess it.
- g. The Licensee shall not allow the private radiocommunication station or equipment to be operated by persons who do not have the proper training or experience.
- h. The Licensee shall only use the call sign approved to it by the Agency.
- i. The Licensee shall, accurately and on time, supply information requested by the Agency in relation to the private radiocommunication station or equipment.
- j. The Licensee may not relocate the radiocommunication station to a new location or area, or make any other change in the data of the radiocommunication station as indicated in the license issued or information supplied, without written prior approval from the Agency.
- k. The Licensee may not use the private radiocommunication station in other geographic locations or operating time not allowed to it by the Agency.

- l. No Licensee shall amplify beyond the power output determined under this Directive, unless specifically permitted by the Agency.
- m. The Licensee shall keep all radio equipment at a station in technically good condition.
- n. No Licensee is allowed to attach any interface that transfers or converts radio signals to the public telecommunication network and services.

11. Renewal of the License

The Licensee shall renew its License every year by fulfilling the relevant requirements indicated in Annex III of this Directive, after the expiry of the fiscal year of the Federal Democratic Republic of Ethiopia in which the license has been issued or renewed.

12. Suspension or Revocation of a License

- a. Where a Licensee fails to comply with any of the terms and conditions of this Directive, the Agency may suspend the license until the Licensee takes due corrective measures.
- b. The Agency shall notify the Licensee in writing as to the causes of the suspension of the license and the measure to be taken to rectify the shortcomings within 15 days after receipt of the notice from the Agency.
- c. The Agency shall revoke the license where the Licensee fails to rectify the shortcomings within the fixed time limit prescribed in sub-Article (b) of this Article or continues to operate the radiocommunication disregarding the suspension.
- d. The private radiocommunication station which was in use before the revocation of the license as per sub-article (c) or (e) of this Article may be sealed off by the Agency, or by obtaining prior written authorization from the Agency, may be taken out of the country, or transferred to a third party.
- e. The Agency shall revoke a license if it discovers that a Licensee got the license by false or fraudulent document or if a Licensee is bankrupt or quits operation.

Section 3 **Technical Requirements**

13. Technical requirements for radiocommunication in HF, VHF and UHF bands.

- a. The propagation of radio waves shall be sky wave and partly ground wave for HF band and space wave for VHF and UHF bands.
- b. The base band signal may be voice or data.
- c. When the base band signal of HF band is voice, the modulation shall be Single Side Band (SSB), Amplitude Modulation (A.M).
- d. When the base band signal is voice for VHF and UHF bands, the modulation shall be Frequency Modulation (FM). Amplitude Modulation (AM) may be applied for VHF bands in aeronautical service communications.
- e. When the base band signal is data, the modulation shall be one of the digital modulation techniques for all bands.
- f. The operation mode in HF band shall be half duplex for voice communication and duplex for data communication.
- g. The operation mode in VHF and UHF bands shall be half duplex for voice communication and duplex for data communication.
- h. Unless otherwise specifically permitted by the Agency, the maximum power output of the HF transmitter shall not be greater than 125 watts Peak Envelop Power (PEP).
- i. The Licensee shall ensure that spurious emission should not exceed 2nW.

14. Technical Requirements for Spread Spectrum Device

The following technical requirement shall apply on spread spectrum device:

- a. The equipment shall use Direct Sequence Spread Spectrum (DSSS) or Frequency Hopping Spread Spectrum (FHSS)

modulation techniques or physical layer technologies or the combination thereof.

- b. The equipment to be used in Ethiopia shall be designed for indoor use.
- c. The maximum allowed transmitter power shall be 100 mW (mean e.i.r.p) or -10 dBW.
- d. For equipment using FHSS modulation, the dwell time per channel shall not exceed 400m/sec.
- e. Mean e.i.r.p density for FHSS systems shall not exceed 10 mW/MHz.
- f. No repeater station may be used to extend the radio coverage of a spread spectrum device.

PART TWO
SPECIAL CONDITIONS FOR AMATEUR FIXED
RADIOCOMMUNICATION STATION AND
SPREAD SPECTRUM DEVICE

Section 1
Amateur Fixed Radiocommunication Station

15. Conditions Applicable to Amateur Fixed Radiocommunication Station

- a. An amateur fixed radiocommunication station may not be used by any other person except the Licensee.
- b. Except as indicated under sub-article (c) of this article, an amateur fixed radiocommunication station shall not be used to communicate with any station other than an amateur fixed radiocommunication station.
- c. Emergency communication between amateur fixed radiocommunication stations and with any other station is permissible to prevent loss of life and to render assistance or call for assistance in emergency situations.

- d. Communication by means of an amateur fixed radiocommunication station shall be carried on in a plain language whereby all words and expressions have the meaning usually attached to them in the language to which they belong. The use of any secret code is prohibited.
- e. No Licensee shall advertise any goods or services or anything else, or transmit any news, music on an amateur fixed radiocommunication station.
- f. An Amateur fixed radiocommunication station shall not be used to transmit or receive messages for reward or monetary consideration.
- g. The Licensee shall keep a log book, indicating a running record of the date and time of each sending period, of the frequency band that is used, of the call sign, of the output power, of the full name and address of the person making the transmission, of the subject of messages exchanged and the address from where the transmission takes place. The Licensee shall sign such entries.
- h. The logbook shall be kept available and produced on demand by the Agency who may make a note in the logbook. The logbook shall be conserved for two years after the last entry is made.
- i. The transmitting equipment used at an amateur fixed radiocommunication station shall under no circumstances or at any time be tuned to a frequency other than the frequencies assigned by the Agency to the Licensee.
- j. The Licensee shall not transmit signals and messages that may be injurious to the security of the state, or contrary to laws, public order and customs, or may constitute an offence against a foreign state. If an amateur radiocommunication station transmission disturbs public or military services, the transmission shall be discontinued immediately, when the disturbed station or a control office advises of the disturbance.
- k. The output power of an amateur radio transmitter at the input of the final stage immediately preceding the antenna shall not exceed 100 watts.

1. An amateur fixed radiocommunication station shall be equipped with measuring and checking instruments, which shall allow verification and matching the operating conditions.

Section2

Spread Spectrum Device

16. General

- a. A Spread spectrum device may be used on Wireless Local Area Networks (WLAN) such as Radio Local Area Networks(RLAN), Wireless Personal Area Networks(WPAN) and other home environment short-range applications utilizing device, and on equipment with IEEE communication standard of IEEE802.11 family and Bluetooth.
- b. A spread spectrum device shall be used for an in-building or localized on-site operation.
- c. A Spread spectrum device may not be used for commercial service provision and/or Wide Area Network (WAN).

17. Application for Type Approval

- a. Whosoever imports a spread spectrum device shall apply to the Agency for type approval.
- b. An applicant requesting type approval for spread spectrum device shall submit its application to the Agency by filling the Form attached herewith as Annex II.

18. Content of the Application Document

The application Form indicated under 17(b) of this Directive shall, at least, indicate:-

- a. operating frequencies or frequency bands
- b. maximum power output
- c. make and type of the device
- d. type of antenna
- e. location of the system (equipment and application)

19. Obligation of a possessor of type approved spread spectrum device

A person that secured type approval for spread spectrum device:-

- a. shall comply with the relevant provisions of this Directive,
- b. shall, accurately and on time, supply information requested by the Agency in relation to the operation of the spread spectrum device,
- c. shall not amplify beyond the power output determined under this Directive,

20. Liability for failing to obtain type approval for spread spectrum device

A person that fails to obtain type approval for spread spectrum device as per this Directive shall be criminally liable as per the relevant laws indicated under Article 28 of this Directive, and the device shall be forfeited to the Agency.

PART THREE
POWERS, DUTIES AND RESPONSIBILITIES OF THE
AGENCY

21. Powers, Duties and Responsibilities

Without prejudice to powers, duties and responsibilities entrusted upon the Agency by relevant laws, the Agency shall have the following powers, duties, and responsibilities under this Directive:

- a. The Agency shall issue a License for an applicant that request a license to possess, install, operate or use private radiocommunication station or radiocommunication equipment, provided that the applicant fulfills the requirements set forth under this Directive.
- b. The Agency shall type approve a spread spectrum device.
- c. The Agency shall also assign frequency with the license to be issued under sub-article (a) of this Article.

- d. The Agency may suspend or revoke a license on the basis of the provisions of this Directive.
- e. The Agency shall issue a permit, if the applicant of a permit fulfils the requirements of this Directive.
- f. The Inspector of the Agency may enter and inspect, during working hours, any place on which the inspector believes on reasonable ground that there is any radiocommunication equipment.
- g. Where any licensed or permitted radiocommunication station is found in the possession of any person in contravention with this Directive, the Agency may seal such station or any part thereof in order to prevent the use of that radiocommunication station.
- h. The Agency may conduct inspection at private radiocommunication stations to ensure interference free radiocommunication.
- i. The Agency may change any assigned frequency to ensure interference free radiocommunication.
- j. The Agency may not reveal any information of the Licensee regarding the license except in accordance with the law.
- k. The employees of the Agency shall be responsible to properly implement the provisions of this Directive.

PART FOUR
RADIO SECRECY, DISTRESS CALL AND
INTERFERENCE

22. Radio Secrecy

- a. Everyone has the right to the inviolability of his communications made by means of radiocommunication.
- b. A person who receives a radiocommunication not intended for his reception or public reception may not record it or disclose or make use of its contents or his knowledge of its existence.

23. Distress Call

- a. A user of private radiocommunication station shall immediately undertake measures necessitated by a distress call that has come to his notice and to transmit a distress call where possible.
- b. If the operation of radiocommunication equipment causes interference in the transmission or reception of a distress call, the use of said radiocommunication equipment shall immediately be discontinued.

24. Interference Prohibited

- a. No Licensee shall cause interference to any other duly authorized users by utilizing unauthorized frequency, operating time, modulation techniques or any other means.
- b. No owner of electrical or electronic equipment may cause interference to the radiocommunication services or communications of other duly authorized users.
- c. The frequency bands used by the spread spectrum device are also available for use by Industrial, Scientific and Medical (ISM) equipment and other low power devices. Interference caused by users of radiocommunication services operating within these bands shall not be considered as harmful interference.

25. Interference Investigation and Inspection

- a. The Agency shall investigate a written complaint of interference and shall render its decision.
- b. The written complaint should be comprised of but not limited to the following items:
 - i. Date and time of the occurrence of the interference.
 - ii. Nature of the interference/intrusion.
 - iii. Frequency/pattern of the occurrence of the interference.
- c. A Licensee or an owner of electrical or electronic equipment causing or suspected of causing interference to radiocommunication is obliged to allow an inspector to inspect

the equipment in order to determine whether the interference is in fact caused by the equipment.

- d. Where the Agency determines that interference to a private radiocommunication station is caused by any particular electrical or electronic equipment, it shall by notice in writing, direct the owner or user of that electrical or electronic or equipment to do, at his own expense, any one or more of the following:
 - i. take suitable measures to eliminate or reduce the interference disturbance;
 - ii. remedy a fault in or the improper operation of the equipment;
 - iii. modify or alter the equipment installation; or
 - iv. disconnect the equipment.
- e. The Agency may require any action required to be taken under sub-article (d) of this Article to be effected within such period of time as the Agency may determine having regard to the circumstances of each case.
- f. Where the Licensee fails to comply with the directive issued by the Agency under sub-article (d) or (e) of this Article, the Agency may, by notice in writing, suspend the license.
- g. Where an owner of electrical or electronic equipment fails to comply with the directive issued by the Agency under sub-article (d) or (e) of this Article, the Agency may prohibit the installation or use of the equipment.
- h. Where the interference problem has occurred between two Licensees, the Agency may assign a new frequency for the latter Licensee depending on the availability of free frequency spectrum, whereas the first Licensee will behold on its frequency.

PART FIVE
MISCELLANEOUS

26. Annexes

The Annexes which are attached with this Directive shall be considered as integral part of this Directive.

27. Repeal

This Directive shall repeal and replace Regulations for Private Radiocommunication Stations P-9 and its amendment and other customary practices which were in force before the coming into force of this Directive.

28. Offences and Penalties

The relevant provisions of Proclamation No.49/1996(as amended) and other relevant law provision shall apply for offences and penalties in relation to the licensing of private radiocommunication station, equipment or type approval of spread spectrum device.

29. Amendment

The Agency may, at any time when it deems it necessary, amend this Directive.

30. Effective Date

This Directive shall come into force on the 6th day of September, 2005.

Done at Addis Ababa on the 6th day of September, 2005

**ESHETU ALEMU
GENERAL MANAGER
ETHIOPIAN TELECOMMUNICATION AGENCY**