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IMPORTANT NOTICE

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CONTENTS • INHOUD

No.

Page
No. Gazette
 No.**GENERAL NOTICES****Independent Communications Authority of South Africa***General Notices*

925	Electronic Communications Act, 2005: Notice inviting comments regarding the Draft Radio Frequency Spectrum Regulations	3	33590
926	Draft Radio Frequency Spectrum Regulations: Explanatory document	63	33590

GENERAL NOTICES

NOTICE 925 OF 2010

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA



PURSUANT TO SECTION 4 (1) OF THE ELECTRONIC COMMUNICATIONS ACT 2005, (THE ACT")

HEREBY ISSUES A NOTICE INVITING COMMENTS REGARDING THE DRAFT RADIO FREQUENCY SPECTRUM REGULATIONS.

1. The Independent Communications Authority of South Africa ("the Authority") hereby gives notice and invites comments on the draft radio frequency spectrum (licence) regulations under Sections 4 (1)(d) , 4(2)(b), 31(6), 31(3) read with section 4(4) of the Electronic Communications Act 2005 ("the Act").
2. Electronic copies of the Draft Radio Frequency Spectrum Regulations are available on the Authority's website (www.icasa.org.za).
3. Interested persons are hereby invited to submit written representations, including an electronic version of the representation in Microsoft Word, of their views on the Draft Radio Frequency Spectrum Regulations by no later than 16h00 on Friday, 19 November 2010.
4. Persons making representations are further invited to indicate whether they are requesting an opportunity to make oral representations which shall not exceed one hour. The public hearings will be held on the 01 - 02 December 2010.
5. Written representations or enquiries may be directed to the Project Leader:

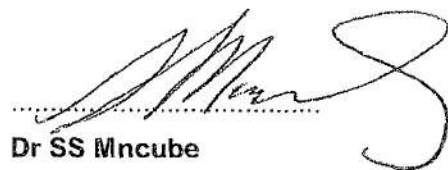
Mr. Manyapelo Richard Makgotlho
Tel: 011 566 3367
E-mail: rmakgotlho@icasa.org.za

*Pinmill Farm Block A
164 Katherine Street
South Africa*

*Private Bag XI0002
Sandton
2146*

6. All written representations submitted to the Authority pursuant to this notice shall be made available for inspection by interested persons from 04th October 2010 at the ICASA Library or website and copies of such representations and documents will be obtainable on payment of a fee.

7. Where respondents require that the representation or part thereof be treated confidential, then an applications in terms of section 4D of the ICASA Act, 2000 (Act No. 13 of 2000) must be lodged during the submission of representations. Respondents are requested to separate any confidential material into a clearly marked confidential annexure. If, however, the request for confidentiality is refused, the person making the request will be allowed to withdraw the representation or document in question.



Dr SS Mncube
CHAIRPERSON.
ICASA

DRAFT REGULATION
Radio Frequency Spectrum Regulations.

SCHEDULE

PART I - Preliminary

1 Definitions

In these Regulations, unless the context otherwise indicates, a word or expression to which a meaning has been assigned in the Act has the meaning so assigned:-

"ICASA Act" means the Independent Communications Authority of South Africa Act, 2000 (Act No 13 of 2000);

"Act" means the Electronic Communications Act, 2005 (Act No. 36 of 2005);

"aeronautical station" means a land radio station in the aeronautical mobile service which may also be on board a ship or a vehicle;

"aircraft station" means a mobile radio station in the aeronautical mobile service on board an aircraft or a spacecraft;

"amateur station" means a radio station for a service of self-tuition, intercommunication and technical investigation that is operated by an amateur;

"amateur" means a person who is interested in the radio technique solely for a private reason and not for financial gain and to whom the Authority has granted an amateur radio station licence;

"assignment" means the authorization given by the authority to use a radio frequency or radio frequency channel under specified conditions;

"Authority" means The Independent Communications Authority of South Africa established in terms of section 3 of the ICASA Act, 2000 (Act No. 13 of 2000);

"base station" means a land radio station in the land mobile service for a service with land mobile stations;

"BS" means Broadcasting Service;

"burglar alarm service" means a land mobile radio-communication service installed, maintained and operated to monitor burglar alarm signals of clients by means of a signal forwarded from a radio transmitter to a central position;

"burglar alarm transmitter" means a transmission radio station in the land mobile service that is intended to transmit automatic alarm signals to a central position;

"carrier wave power" means the average power that is supplied by the transmitter to the antenna transmission line and is measured during one radio-frequency cycle in conditions of no modulation;

"CEPT" means Conference of European Posts and Telecommunications Authorities;

"citizen-band radio service" means a private, two-way, limited coverage speech communication service in the land radio mobile service to personal and business operations, which may also be used as a paging system;

"communal radio repeater station service" means a land mobile radio-communication service installed, maintained and operated via repeater stations that are available for communal use;

"continuous tone coded squelch system (CTCSS)" means a circuit that is used to reduce cross talk interference on a shared two-way radio communication channel;

"ECNS" means Electronic Communications Network Services;

"ECS" means Electronic Communications Services;

"experimental station" means a station that uses radio waves in experiments for the purpose of developing the science or technique of communication but which is not an amateur radio station;

"GHz" means Gigahertz of Radio Frequency Spectrum;

"HAREC" means Harmonized Amateur Radio Examination Certificate issued in terms of CEPT recommendation TR61-02E;

"HF" means High Frequency;

"ISM" means Industrial, Scientific and Medical;

"ITA" means Invitation to Apply;

"ITU" means International Telecommunications Union;

"KHz" means Kilohertz of Radio Frequency Spectrum;

"land mobile service" means a mobile radio-communication service between fixed stations and mobile land stations, or between land mobile stations;

"licence year" in relation to a licence or certificate, means the period of 12 months of each year from 1 April to 31 March, both dates inclusive;

"licensee" means a person to whom a radio frequency spectrum licence has been issued in terms of the Act;

"lock-on faulty signals" means a continuous signal transmitted by a transmitter station due to faulty equipment;

"MHz" means Megahertz of Radio Frequency Spectrum;

"mobile station" means a radio station that is intended to be operated while it is in motion or while it is stationary at an unspecified place;

"paging station" means a receiving radio station in the land mobile radio service that is intended to receive selective signals from a central position;

"parrot repeater station" means a fixed station in the land mobile service used by a burglar alarm service licensee to store and forward burglar alarm signals over mountainous terrains;

"Q-Code" means a standardized collection of three-letter message encodings, all commencing with the letter "Q";

"radio trunking" means a technique by means of which free channels out of a group of radio frequency channels allocated to a base station are automatically made available for the establishment of a connection between the stations of a user;

"radio-beacon station" means a radio station whose radiation is intended to enable a mobile station to fix its position or obtain its bearing with regard to the radio beacon;

"radio-communication" means all electronic communication by means of radiowaves;

"relay or repeater station" means a land station in the land mobile radio service;

"SATFA" means South African Table of Frequency Allocations;

"service licence" means a BS, ECS or ECNS licence;

"ship station" means a mobile station in the maritime mobile service that has been erected on board a vessel other than a life boat and that is not moored permanently;

"simplex radio rental system" means a land mobile radio-communication service provided by a person and is available for communal use;

"special radio service" means a radio-communication service that is not otherwise defined in these regulations and is operated solely for specified purposes of general benefit;

"spread spectrum" means a form of wireless communications in which the frequency of the transmitted signal is deliberately varied, resulting in a much greater bandwidth than the signal would have if its frequency were not varied;

"the same area" (burglar alarm service) means a radius of 50 km around the coordinates of the repeater station;

"the same area" (communal repeater station service) means a radius of 20 km around the coordinates of the repeater station.

2 Purpose

The purpose of these regulations is:

- i. To establish the framework through which the Authority may allocate and assign radio frequency spectrum under the South African Table of Frequency Allocations.
- ii. To establish standard terms and conditions which will be applicable to all frequency bands and applications as well as Radio Frequency Spectrum Licences.
- iii. To establish transparent, fair and efficient procedures and processes for Radio Frequency Spectrum Licence applications.
- iv. To allow for greater flexibility such that special conditions and procedures for specific frequency bands can be applied.

- v. To provide for circumstances in which the use or possession of radio apparatus, does not require a radio frequency spectrum licence.
- vi. To provide for procedure and criteria for awarding radio frequency spectrum licenses for competing applications or instances where there is insufficient spectrum available to accommodate demand.

PART II – Radio Frequency Spectrum Planning

3 National Radio Frequency Plan

- (1) The National Radio Frequency Plan is the current version of the South African Table of Frequency Allocations (SATFA) or any radio frequency plan that has replaced the SATFA.
- (2) All spectrum allocations and assignments must be consistent with the current national radio frequency plan.
- (3) All users of radio frequency spectrum must comply with the provisions of the current national radio frequency plan.

4 Radio Frequency Spectrum Band Plans

- (1) The Authority may, as required under 4(2)(b) of the Act, prepare a Radio Frequency Spectrum Band Plan for specific bands of radio frequency spectrum.
- (2) Radio Frequency Spectrum Band Plans fall under the Radio Frequency Plan and must be detailed and provide a description of how the band is allocated.
- (3) Radio Frequency Spectrum Band Plans must specify the purposes for which bands may be used, arising from Government policy initiatives or public demand.
- (4) Radio Frequency Spectrum Band Plans may specify or propose for the detailed allocation of the radio frequency spectrum between types of services, may specify or propose detailed frequency channelling arrangements, may specify or propose technical and other requirements and may specify or propose principles or assignment and implementation.
- (5) Radio Frequency Spectrum Band Plans must be subject to consultation:
 - (a) the Authority must give notice of the Radio Frequency Spectrum Band Plan in the Government Gazette, inviting interested persons to submit written representations as specified by the notice in the Gazette.
 - (b) the Authority may, after any defined period for lodging written comments by interested persons has passed, hold a public hearing in respect of the application.

5 Radio Frequency Spectrum Assignment Plans

- (1) The Authority may, upon completion of the Radio Frequency Spectrum Band Plan, prepare a Radio Frequency Spectrum Assignment Plan for specific bands of radio frequency spectrum.
- (2) A Radio Frequency Spectrum Assignment Plan may consist of:
 - (a) the types of services to be provided;
 - (b) specific terms and conditions for the use of the frequency bands;
 - (c) specific qualification criteria to be met by applicants;
 - (d) the procedures and timetable to be followed for assignment and licensing, if applicable;
 - (e) the apportionment of the relevant frequency bands in the Radio Frequency Plan for exclusive or shared assignments;
 - (f) any other matter as the Authority may deem necessary.
- (3) A Radio Frequency Spectrum Assignment Plan must be subject to public consultation:
 - (a) the Authority must publish the Radio Frequency Spectrum Assignment Plan in the Government Gazette, and invite interested persons to submit written representations as specified by the notice in the Gazette.
 - (b) the Authority may, after any defined period for lodging comments by interested persons has passed, hold a public hearing in respect of the application.
- (4) A Radio Frequency Spectrum Assignment Plan may not necessarily require assignments to be issued for the whole of the radio frequency spectrum or the geographic area to which the Radio Frequency Spectrum Assignment Plan applies.
- (5) A Radio Frequency Spectrum Assignment Plan must indicate whether it is intended that licences for the assignments will be issued on a first come first served basis or on a competitive basis where there is deemed to be insufficient spectrum to accommodate demand.
- (6) The Authority may modify or vary the Radio Frequency Spectrum Assignment Plan as it deems fit and appropriate.

6 Invitation to Apply

- (1) The Authority may, upon completion of the Radio Frequency Spectrum Assignment Plan, publish an Invitation to Apply (ITA) in the Gazette for Radio Frequency Spectrum Licences for assignments in specific bands of radio frequency spectrum.
- (2) An ITA must set out the following:

- (a) the subject of the ITA;
 - (b) the place for the submission of the application;
 - (c) the application fee,
 - (d) any qualification criteria that are applicable;
 - (e) the terms and conditions relating to the application;
 - (f) the proposed licence terms and conditions;
 - (g) any other information or requirements as the Authority may deem necessary.
- (3) The Authority must at all times prepare an ITA when the Radio Frequency Spectrum licences will be awarded/granted on a competitive basis and where there is deemed to be insufficient spectrum to accommodate demand (high demand spectrum); an ITA for high demand spectrum must in addition set out the following:
- (a) the procedures for submission of the application;
 - (b) the deadline for the submission of the application;
 - (c) conditions and procedures for the amendment of an application;
 - (d) conditions and procedures for the submission of supplementary information;
 - (e) conditions for the disqualification of an applicant from the application process;
 - (f) the selection process;
 - (g) the evaluation criteria;
 - (h) any reserve price that may be set
 - (i) auction rules.

PART III – Radio Frequency Spectrum Licence Exemptions

7 Radio Frequency Spectrum Licence Exemptions

- (1) The radio apparatus and related radio frequency spectrum for which a Radio Frequency Spectrum Licence is not required under section 30(6) of the Act are stated in Annexure A to these Regulations.
- (2) Users of radio apparatus and related radio frequency spectrum that are Licence Exempt shall comply with the relevant operational rules that are stated in Annexure A to these regulations.

PART IV – Standard Terms and Conditions of Radio Frequency Spectrum Licences

8 Standard conditions for a Radio Frequency Spectrum Licence and assignment:

- (1) the licensee must use or operate only approved apparatus in the spectrum specified in the Radio Frequency Spectrum Licence;
- (2) the licensee must pay the fees for the Radio Frequency Spectrum Licence by the due date as specified in these and other regulations;
- (3) the licensee must comply with all the directions from the Authority in relation to the use of the spectrum;
- (4) the licensee must take all steps necessary to ensure that no harmful interference is caused;
- (5) the licensee must ensure that all apparatus causing harmful interference to cease operation until such time when the harmful interference has been eliminated;
- (6) the licensee must ensure that no apparatus used or operated in that spectrum exceeds the specified output powers, emission parameters, coverage area or other parameters approved for the assignment without the prior written approval of the Authority;
- (7) the licensee shall comply with the technical standard, mandatory standard or voluntary code registered by the Authority under the Act;
- (8) the licensee must comply with the Act and any related legislation made under the Act and any other relevant written laws.

9 Duration of a Radio Frequency Spectrum Licence and Renewal.

- (1) The grant of a Radio Frequency Spectrum Licence and assignment must not be construed as conferring upon the holder a monopoly of the use of the frequency or a right of continued tenure in respect of the frequency.
- (2) Unless otherwise specified in regulations, an ITA or in the licence, a Radio Frequency Spectrum Licence will remain valid from 1 April until 31 March of the year in which it was issued and is thereafter renewable by payment of the prescribed annual licence fee until 31 March of each succeeding year for a maximum period of 5 years.
- (3) Where a Radio Frequency Spectrum Licence is issued for assignment in the Amateur Radio, Aeronautical, Maritime, Citizen Band frequency bands or for Ski Boats, the Radio Frequency Spectrum Licence shall remain valid until 31 March of the year in which it was issued and is thereafter renewable by payment of the prescribed annual licence fee until 31 March of each succeeding year for a maximum period of 15 years.

- (4) Where a Radio Frequency Spectrum Licence is issued to the holder of a Broadcast Service Licence for the purposes of broadcast, the period of the licence must run concurrently.
- (5) For (1) to (4) above, renewal of a Radio Frequency Spectrum Licence is performed on an annual basis by payment of the prescribed annual licence fees, except in the case of multi-year licences where the renewal is carried out upon completion of the multi-year licence period unless the maximum period for renewal has been reached.
- (6) If the annual Radio Frequency Spectrum Licence fees are not paid by the due date then the Radio Frequency Spectrum Licence will be subject to suspension.
- (7) The licensee may, not less than sixty (60) days before the end of the maximum period for renewal of the Radio Frequency Spectrum Licence, make a new application to the Authority for a Radio Frequency Spectrum Licence.

10 Radio Frequency Spectrum Licence Fees

- (1) No applications, renewals, amendments or transfers will be permitted where it has been established that the licensee has not paid the required fees.
- (2) The Radio Frequency Spectrum Licence Fees to be paid by the holders of a Radio Frequency Spectrum Licence are contained in the Radio Frequency Spectrum Licence Fees Regulations.
- (3) The Radio Frequency Application Fees and Radio Frequency Examination and Certificate Fees are contained in Annexure E and F of this regulation.

11 Withdrawal (Suspension or cancellation) of a Radio Frequency Spectrum Licence.

- (1) The Authority may suspend or cancel a Radio Frequency Spectrum Licence and assignment in any of the following circumstances:
 - (a) upon the breach of any condition contained in the Radio Frequency Spectrum Licence;
 - (b) upon the failure to pay any fee in relation to the Radio Frequency Spectrum Licence;
 - (c) upon the breach of any technical standard imposed by the Authority under the Act;
 - (d) upon non-provision of the service licence by a licensee using the radio frequency spectrum assignment to provide a service that is subject to a service licence;
 - (e) upon the contravention of any provision of the Act or any subsidiary legislation made under the Act in relation to the assignment;
 - (f) upon failure to use the assigned radio frequencies within two years of granting of the Radio Frequency Spectrum Licence,

(g) if the suspension or cancellation is in the public interest.

12 Transfer of a Radio Frequency Spectrum Licence.

- (1) Except with the approval of the Authority, no licensee shall transfer a Radio Frequency Spectrum Licence.
- (2) A person wishing to have a radio frequency spectrum licence transferred shall apply in writing to the Authority according to regulation (20).
- (3) Where the Radio Frequency Spectrum Licence has been granted for a frequency in high demand, any amount paid by the transferee to the transferor must not exceed the value of the bid or auction price paid by the original licence holder adjusted on a pro-rata basis to the remaining duration of the licence / assignment.
- (4) The Radio Frequency Spectrum Licence shall have been held for at least one year before the application for a transfer can be made.
- (5) An application for a transfer shall only be considered if all the outstanding fees with respect to the relevant radio frequency spectrum licence or certificate have been paid.

13 Amendment of a Radio Frequency Spectrum Licence.

- (1) The amendment of Radio Frequency Spectrum Licence and Assignment may be initiated by the Authority or the licensee.
- (2) Where the Authority initiates an amendment, this will be subject to the Withdrawal of the Right to Spectrum Procedures or a specific regulations or notice.
- (3) Where the licensee initiates an amendment, this will be subject to regulation 21.

14 Leasing / Third party authorisation of a Radio Frequency Spectrum Licence Assignment

- (1) No licensee may lease the radio frequency spectrum assigned or authorised to a third party to operate transmitters unless the approval of the Authority has been obtained.
- (2) If the conditions of sub-regulation (1) have been satisfied, the following terms and conditions will apply:
 - (a) the lessee / third party undertakes to comply with the conditions of the Radio Frequency Spectrum Licence as if the lessee / third party were the licensee;
 - (b) the licensee complies with such other conditions as the Authority may impose.
 - (c) the licensee shall notify the authorised lessee / third party of any matters affecting the licensed assignment within fourteen days after the licensee is given notice of the matter by the Authority or any other relevant body.

- (d) the licensee shall be responsible for the conduct of the duly authorised lessee / third party.
- (e) the licensee shall remain responsible at all times for the prevention of harmful interference and compliance with the regulations and Radio Frequency Spectrum Licence conditions by the duly authorised lessee / third party.
- (f) any monies paid by the lessee / third party to the licensee shall not exceed the spectrum licence fee, and / or any bid or auction price paid by the original licence holder, adjusted on a pro-rata basis to the remaining duration of the licence / assignment and the spectrum assigned.

PART V – Procedures for Radio Frequency Spectrum Licensing and Assignment

15 Standard Application Procedures for a Radio Frequency Spectrum Licence and Assignment.

- (1) Standard Application procedures are applicable to the categories listed in Annexure A to these regulations.
- (2) The standard application procedures for a Radio Frequency Spectrum Licence are as specified in Annexure C to this regulation. All required details must be provided and the prescribed application fee paid to the Authority.
- (3) The Authority may at its discretion require an applicant to provide further information or to comply with the extended application procedures.
- (4) No application will be considered if there is any outstanding licence fee owed by the applicant to the Authority.

16 Extended Application Procedures

- (1) Extended application procedures are applicable to the following:
 - (a) for Services / frequency bands that are not covered under regulation (15), and for which a Radio Frequency Spectrum Licence is required. ,
 - (b) for frequency bands where an Invitation to Apply (ITA) has been issued,
- (2) The extended application procedures for a Radio Frequency Spectrum Licence are as specified in Annexure D to this regulation. All required details must be provided and the prescribed application fee paid to the Authority.
- (3) The extended procedures may be applied at the discretion of the Authority.

17 Applications for Spectrum in High Demand

- (1) In instances envisaged in section 31(3) of the Act for licences to be awarded on a competitive basis where there is deemed to be insufficient spectrum to accommodate demand, the procedures for application and other terms and conditions will be specified in the relevant ITA.

18 Procedures for Withdrawal (Suspension or cancellation) of a Radio Frequency Spectrum Licence.

- (1) Before suspending or cancelling a licence, the Authority shall notify the licensee in writing of its intention.
- (2) The licensee shall within thirty days from the date of issuance of the written notice provide a written submission to the Authority stating the reasons for not suspending or cancelling the Radio Frequency Spectrum Licence.
- (3) The Authority may hold public hearings and shall give due consideration to any submission made by the licensee before making a decision to suspend or cancel the Radio Frequency Spectrum Licence.
- (4) If the suspension or cancellation of a Radio Frequency Spectrum Licence affects members of the public, the Authority shall give due consideration to any submission made by the members of the public before making a decision to suspend or cancel the Radio Frequency Spectrum Licence.
- (5) The suspension or cancellation of a Radio Frequency Spectrum Licence shall take effect on the expiry of fourteen (14) days from the date on which the notice of suspension or cancellation is served on the licensee.
- (6) The Authority shall publish notice of the suspension or cancellation in the Government Gazette.
- (7) If the licence has been cancelled:
 - (a) the licensee shall, unless otherwise authorised by the Authority, cease all operation within the scope of the affected assignment within thirty (30) days from the date of cancellation of the Radio Frequency Spectrum Licence; and;
 - (b) the cancellation shall not prejudice or affect the rights of the Authority to recover any money or obtain any remedy arising from or in relation to any breach of any condition of the assignment or the failure to implement or comply with the Act or any subsidiary legislation made under the Act by the licensee.

19 Procedures for the Surrender of a Radio Frequency Spectrum Licence

- (1) A licensee seeking to surrender his licence must in writing submit the following to the Authority:
 - (a) A letter of application;
 - (b) the information required in the standard application procedures in Annexure C;
 - (c) a copy of the Radio Frequency Spectrum Licence and information on any other conditions imposed on the licence;

- (d) the proposed date from which the Radio Frequency Spectrum Licence shall become void, which will in any case not be any earlier than thirty (30) days from the receipt of the application for surrender;
 - (e) where the licensee does not hold a service licence, he must provide information on how any third party users or end users on his network will be informed.
- (2) The Authority shall respond to the applicant within thirty (30) days of receipt of the application for surrender of the Radio Frequency Spectrum Licence, if no response from the Authority is received then the Radio Frequency Spectrum Licence is deemed to have terminated thirty (30) days after receipt of the Application by the Authority.
- (3) The Authority may:
 - (a) request further information from the applicant;
 - (b) conduct a public consultation according to the applicable procedures specified in these regulations;
 - (c) impose conditions on the licensee with respect to the provisions for end users before the licence can be surrendered.
- (4) If the licensee has a service licence, surrender of the Radio Frequency Spectrum Licence does not absolve the licensee from any obligations he may have under the service licence.
- (5) The licensee is liable for any outstanding licence fee owed by him to the Authority up to the time of termination.

20 Procedures for the Transfer of a Radio Frequency Spectrum Licence and Assignment.

- (1) A person wishing to have a radio frequency spectrum licence transferred to him/her shall apply in writing to the Authority in the manner set out hereunder:
 - (a) written consent from the holder of the radio frequency spectrum licence must accompany the application;
 - (b) in the case of liquidation or insolvency of the transferor, the liquidator/curator must give written consent to the transfer.
 - (c) in the case of a deceased estate, the executor of the deceased estate must give written consent to the transfer.
 - (d) a duly completed application form must be submitted by the transferor or transferee, with proof of payment of the prescribed application fee, at any office of the Authority.
 - (e) where the transferee is a juristic person or an association, a certified copy of the registration certificate or constitution of the association must also be submitted with the application form.

- (2) For Radio Frequency Spectrum Licences and assignments that would be subject to an extended procedure for application, the transferee must submit the same information as for an extended application.
- (3) For Radio Frequency Spectrum Licences that would be subject to an extended procedure for application, the Authority shall conduct a public consultation according to the applicable procedures specified in these regulations.

21 Procedures for the Amendment of a Radio Frequency Spectrum Licence and Assignment by a licensee.

- (1) An application made by a licensee for an amendment shall be in writing and include the following:
 - (a) the information required in the standard application procedures;
 - (b) a copy of the Radio Frequency Spectrum Licence and information on any other conditions imposed on the licence;
 - (c) the proposed dates after which the proposed amendment shall become valid;
 - (d) details of all proposed amendments and the reasons for the proposed amendments;
 - (e) the fee, which will be same as for the applicable application fee;
- (2) The Authority may at any time request the applicant to provide further information.
- (3) The Authority shall, within a period of thirty (30) days from the date of receipt of the application or all relevant information as may have been requested, as the case may be, decide whether to approve, or reject the application.
- (4) If the Authority approves the application, the Authority shall:
 - (a) notify the applicant in writing of its decision to amend the licence and assignment;
 - (b) amend the licence and assignment accordingly;
 - (c) if the amendment relates to the spectrum assigned and the approval will cause changes to the fees which are payable, amend the fees;
 - (d) give one copy of the amended licence to the applicant.
- (5) If the Authority rejects an application, or a part of it, the Authority shall give the applicant a written notice of its decision and the reasons for the rejection.
- (6) The amendment made to the licence shall continue to have effect until its expiry.
- (7) For Radio Frequency Spectrum Licences and assignments that would be subject to an Extended Procedure for application, the Authority shall conduct a public consultation according to the applicable procedures specified in these regulations.

22 Common Procedures for Public Consultation with respect to the Surrender, Amendment or Transfer of a Radio Frequency Spectrum Licence.

- (1) Unless otherwise stated in regulations, where public consultation has been specified with respect to an application for Surrender, Amendment or Transfer of a Radio Frequency Spectrum Licence, the following shall apply:
 - (a) Upon receipt of application, the Authority shall give notice of the application for Surrender, Amendment or Transfer in the Government Gazette, and invite interested persons to submit written representations as specified by the notice in the Gazette.
 - (b) The Authority may, after any defined period for lodging comments by applicants in terms of (a) has passed, hold a public hearing in respect of the application.
- (2) The Authority shall, within a period of thirty (30) days from the date of receipt of the application, or publication of the application in the Government Gazette, or the conclusion of public hearings, as the case may be, decide whether to approve or reject the application.

PART VI – Sharing and Co-ordination of Radio Frequency Spectrum Assignments.**23 Terms and Conditions of Sharing of Radio Frequency Spectrum**

- (1) Radio Frequency Spectrum Sharing is where two or more licensees have been granted Radio Frequency Spectrum Licences for all or part of the same frequency assignment.
- (2) The Authority may require a licensee to share an assigned frequency with other licensees.
- (3) Two or more persons may apply to the Authority for Radio Frequency Spectrum Licences for spectrum assignments on a shared basis; approval is at the discretion of the Authority.

24 Procedures for co-ordination within shared frequencies

- (1) Licensees are required to make every effort to come to an agreement over the use of shared spectrum before declaring a dispute.
- (2) The Authority may at its discretion, for particular frequency bands, require that licensees, who have an assignment on a shared basis, collectively submit a spectrum sharing co-ordination agreement.
- (3) The Authority may at its discretion specify co-ordination procedures to the licensees of shared spectrum assignments.
- (4) Licensees may request the Authority to assist in co-ordination.

25 Dispute Resolution in shared frequencies

- (1) Where licensees are unable to come to an agreement on the use of shared spectrum, one or more of the licensees may declare a dispute by informing the Authority in writing, indicating the subject matter of the dispute.
- (2) The Complaints and Compliance Committee must within thirty (30) days initiate an investigation into the dispute.
- (3) The Complaints and Compliance Committee must within 30 days of initiation, carry out an investigation into the dispute that may involve a closed or public hearing involving the holders of radio frequency spectrum licences in the shared assignment.
- (4) In resolution of the dispute the Authority may:
 - (a) prescribe the removal of radio apparatus,
 - (b) impose penalties on one or more of the licensees should it be ascertained that the said licensees are in contravention of their licence conditions, regulations or Act;
 - (c) withdraw (suspend or cancel) Radio Frequency Spectrum licences in accordance with the provisions of regulation 18.
 - (d) impose other terms and conditions as required.

PART VII – Withdrawal of the Right to Spectrum.

26 Conditions for Withdrawal of the Rights to Spectrum

- (1) The Authority may undertake the withdrawal of the rights to spectrum of radio frequency spectrum under the following conditions:
 - (a) To implement a change in the allocation of Spectrum Bands by the Radio Frequency Plan;
 - (b) to implement a change in the assignment to meet the objectives of the Act;
 - (c) otherwise in the public interest.

27 Procedures for Withdrawal of the Rights to Spectrum.

- (1) The Authority may develop withdrawal of the rights to spectrum procedures applicable to a determined spectrum and in developing the procedures the Authority shall have regard to the following matters:
 - (a) The Authority shall show satisfactory evidence that the withdrawal of the rights to radio frequency spectrum is the last available method to achieve the particular objective under the Act;
 - (b) publication of a notice of the planned withdrawal of the rights to radio frequency spectrum in the Government Gazette at least one year in

advance for comments before undertaking the withdrawal of the rights and the Authority shall consider the comments made by the public when undertaking the withdrawal of the rights.

- (c) other procedures by which all licensees shall be notified of the proposed withdrawal of the rights.
- (d) the right of the affected parties, including but not limited to industry and consumer groups, to make representations on the proposed withdrawal of the rights.
- (e) identification of any alternative frequency locations for affected Radio Spectrum Licence Holders;

PART IX – Regulations for Specific Services

28 Electronic Communication Equipment Dealer.

Electronic communication equipment dealer certificate

- (1) The Authority may issue to any person an electronic communication equipment dealer certificate and raise a fee as prescribed by it.
- (2) A person who does business personally or as a representative, agent or employee of someone else or who, as employee of such representative, agent or employee of someone else, sells, hires out, donates, supplies in any other manner or repairs or installs for someone or who requests, solicits or accepts orders for sale, hiring-out or supply of electronic communication facilities and electronic communication equipment other than a sound radio or television set shall in his own capacity also be in possession of an electronic communication equipment dealer certificate.
- (3) All electronic communication equipment in the possession of an electronic communication equipment dealer shall be disconnected from any power supply and antenna, except in cases where a radio frequency spectrum licence has been issued by the Authority to that dealer.
- (4) An electronic communication equipment dealer may demonstrate the workings of any equipment only when the Authority has issued a radio frequency spectrum licence for that purpose to him.
- (5) No electronic communication equipment dealer may sell, hire out, donate or in any manner supply or install any electronic communication equipment to any person, or effect any repairs to any electronic communication equipment for any person, unless that person is entitled to have that equipment in his possession.
- (6) An electronic communication equipment dealer shall, in respect of all types of electronic communication facilities and electronic communication equipment other than a sound radio or television set that he has sold, hired out, donated or

supplied in any other manner or has repaired or installed for any person, keep a register in which the following are recorded:

- (a) Name and address of the person to whom such equipment was sold, hired out, donated or supplied or for whom the repairs or installation was done.
 - (b) Date of the transaction by virtue of which such equipment was sold, hired out, donated or supplied or the date on which the repairs or installation were carried out and the nature of such repairs.
 - (c) A description of the type and nature of the equipment involved and, in the case of radio apparatus, the serial number as well as the frequency on which it operates, for example, XYZ two-way radio 1358706 on the frequency 83.5000 MHz
 - (d) The number or, where applicable, the call sign and the expiry date of the licence issued to the person to whom such radio apparatus was sold, hired out, donated or supplied or for whom the repairs or installation was carried out or the call sign or number and expiry date of the licence, electronic communication equipment dealer registration certificate or particulars of permit by virtue of which the person to whom the equipment was supplied or for whom the repairs or installation was carried out was exempted from an obligation to be a holder of an appropriate licence for the possession of such apparatus.
- (7) The register referred to in sub-regulation (6) shall be retained by the electronic communication equipment dealer for a period of at least eighteen (18) months after the date of the transaction by virtue of which the required records were made.
- (8) Electronic communication facilities and electronic communication equipment other than a sound radio or television set shall not be handed over or returned by the electronic communication equipment dealer to a person or any other electronic communication equipment dealer unless the electronic communication equipment dealer is satisfied that such apparatus is tuned to only that frequency or those frequencies which the licensee may use in terms of the conditions of his licence or which the Authority has otherwise prescribed.

Procedure in respect of applying for an electronic communication equipment dealer certificate

- (9) The relevant application form, obtainable at any office of the Authority, shall be completed and submitted with proof of payment of the prescribed application fee.
- (10) In the event that the applicant is a natural person, a certified copy of the applicant's identity document shall also be submitted with the application form.
- (11) In the event that the applicant is a juristic person or an association, a certified copy of the applicant's company or closed corporation registration certificate or constitution of the association must also be submitted with the application form.

- (12) Electronic communication equipment dealer certificates may only be issued to South African residents or South African registered companies, closed corporations and associations.
- (13) The issuing of an electronic communication equipment certificate does not grant sole rights with regard to the supply of any particular type of electronic communication equipment.

29 Amateur Communications

Conditions for the issuing of amateur radio station radio frequency spectrum licences

- (1) The Authority may, subject to these regulations and on the conditions that are set out in this Chapter, issue a Class A or Class B licence for the use of an amateur radio station.
- (2) A Class A licence (ZS – CEPT Class 1) may be issued to a person who-
 - (a) has furnished proof of his or her ability to correctly set up, adjust and operate an amateur HF transceiver; and
 - (b) is in possession of a HAREC issued or recognised by the Authority.
- (3) A Class B licence (ZU) may be issued to a person who-
 - (a) has furnished proof of his or her ability to correctly set up, adjust and operate an amateur HF transceiver; and
 - (b) is in possession of a radio operator certificate specified for a class-B licence.
 - (c) is under the age of twenty (20) years.
- (4) A Holder of a Class B novice licence should write and pass the Class A examination before his/her 25th birthday after which the Class B novice licence will be cancelled.
- (5) The Authority shall issue call signs to licensed amateur radio stations and no other person shall acquire call signs on behalf of a group of persons or amateur radio stations.
- (6) The Authority may issue an amateur radio station licence to a person who is in possession of a valid foreign amateur radio station licence or amateur operator certificate, equivalent to the relevant class of South African licence or certificate, issued by a recognised competent foreign authority and where there is a reciprocal agreement between South Africa and the other country.
- (7) For the purposes of this regulation, "a person" shall mean a natural person and shall not include a juristic person or an association: provided that an amateur radio station licence may be issued to a licensed radio amateur acting on behalf of a duly founded amateur radio association.

Use of amateur radio stations

- (8) An amateur radio station shall only be used by the holder of the amateur radio station licence issued by the Authority.
- (9) The holder of an amateur radio station licence may use an amateur radio station other than his or her own with the permission of the licensee concerned.
- (10) An amateur radio listener's licence authorizes the holder thereof to acquire and be in possession of radio apparatus for the broadcast of amateur radio signals only.

Communication by amateur radio stations

- (11) The licensee is permitted:
 - (a) To engage in communication with other licensed amateur radio stations, using the permitted amateur bands, and such communication shall be restricted to comments on technical investigations, remarks of a personal nature and other items of a common interest which shall not include commercial or business communication for which an electronic communication service would have been used had the amateur radio communication not been available;
 - (b) in the case of an emergency and where the safety of life or limb is at stake, to communicate with amateur stations or any other stations to prevent loss of life, to render assistance, to call for assistance or convey health and welfare messages directly connected with the emergency;
 - (c) to practice emergency and event related communication, by providing communication for cycle, motor, marathon rallies and general community service: provided that the station engaged in the practise, is a holder of the appropriate class licence, for the frequency used;
 - (d) to carry out communication in plain language or Q Code;
 - (e) to send signals un-enciphered that form part of or relate to the transmission of messages.
- (12) An amateur radio station shall not advertise any goods or services or anything else, or transmit any news or messages on behalf of a third person on an amateur radio station: provided that the Authority may authorize a licensee to transmit:
 - (a) reports on behalf of or by a third person during events that are in the public interest;
 - (b) information bulletins that are of direct interest to amateurs; and

- (c) Morse Code for reception by persons learning Morse Code operation or for improving their competence in Morse.
- (13) An amateur radio station shall not be used to transmit or receive messages for reward for communication for monetary consideration.
- (14) For the purposes of this regulation, messages and signals include communication by any of the modes or types of modulation permitted in the national radio frequency plan.
- (15) The Authority may permit stations registered with the Authority as educational stations to demonstrate amateur radio to persons who do not hold an amateur radio station licence by allowing them to speak and operate the station under the supervision of a licensed amateur, whilst participating in a special educational event or at educational institutions.

Log book for amateur radio station activities

- (16) The licensee shall keep a log book recording the activities of the amateur radio station used by him or her or any other person under supervision of the licensee, except when operating a station in the VHF and UHF bands.
- (17) Details recorded in the log book referred to in sub-regulation (16) shall include-
 - (a) the date, time and nature of each transmission: provided that the date with regard to each individual day's operation need to be recorded only once and for the purposes of this paragraph "time of each transmission" shall mean the time that a specific station is called and the time at which the communication with such station is terminated;
 - (b) the full name and address of the person making the transmission: provided that the name of the licensee who regularly uses the amateur radio station need to be recorded only once in the log book with an explicit statement that all transmissions are made by him, except where stated otherwise;
 - (c) the call sign of every station: provided that it need not be recorded repeatedly for calls made to the station during the course of the communication;
 - (d) the transmitter power that is used;
 - (e) the frequency band that is used: provided that it need to be recorded in the log book only once until a change of frequency to another authorized band takes place; and
 - (f) the address from where the transmission takes place: provided that such address needs to be recorded only once, should the place of transmission not change.

Terms and conditions for amateur licences

- (18) No person shall transmit by way of an amateur radio station, using a mode of emission or at a power level, other than that indicated in the national radio frequency plan, unless authorised by the Authority.
- (19) Where the amateur service allocation is on a secondary basis, frequency spectrum bands shall be shared with other services, subject to the condition that:
(i) amateur radio stations shall not interfere with these services and (ii) users of these frequency bands shall unconditionally accept interference from Industrial, Scientific and Medical (ISM) equipment.
- (20) The transmit apparatus used at an amateur radio station may not be tuned to a frequency other than a frequency for amateur services referred to in the national radio frequency plan.
- (21) The frequencies required by the licensee shall be selected in such a manner that no energy is radiated at frequencies other than those referred to in the national frequency plan, provided that the bandwidth of emissions on bands that have been allocated to the amateur radio service in terms of these regulations shall be restricted to the minimum.

Limitation in respect transmissions by an amateur radio station

- (22) No person may use an amateur radio station for the transmission of any form of entertainment, including music transmissions, television broadcasts and spread spectrum communication.
- (23) No person may operate an amateur radio station using frequency bands, modes of emission or at power levels other than those specified in the national radio frequency plan.
- (24) Class-B emission (damped waves) by an amateur radio station is not permissible.
- (25) An amateur or experimental radio station shall not be used for the simultaneous retransmission, by automatic or other means of programs or signal originating from a commercial radio station: provided that the holder of an amateur radio station licence or experimental station licence may relay legal signals by automatic or other means that originate from a licensed amateur or experimental radio station.
- (26) An amateur radio station shall not be erected in or on a vehicle which is used for public transport.

Music transmissions

- (27) No form of entertainment shall be transmitted from an amateur radio station, provided that music transmissions for experimental purposes shall be permissible on condition that-
- (a) Such transmissions shall last no longer than three (3) minutes;
 - (b) at least five (5) minutes shall elapse before any further music is transmitted from the same station;
 - (c) when commercial recordings are used, the make, name or title of such recordings shall not be mentioned; and
 - (d) such transmissions shall not take place in bands other than those indicated in the national radio frequency plan.

Television transmissions

- (28) The Authority may, subject to the conditions as it may deem fit, authorize the holder of an amateur radio station licence to transmit television, provided that such approval shall only be granted to the licensee after at least 12 months have elapsed since the date of issue of such licence.

Spread-spectrum communication

- (29) The Authority may, subject to the condition that interference is not caused to other users of the same frequency band and such other conditions as it may deem necessary, on application, authorize the holder of an amateur radio station licence to employ spread-spectrum communication.
- (30) The frequency (band edges) and the modulation technique/emission designation to be used shall be furnished in the application referred to in sub-regulation (29).

Teleprinter working

- (31) Teleprinter operation with call sign identification in teleprinter code between amateur radio stations is permissible without prior approval from the Authority: provided that the maximum operating speed shall be restricted to 300 baud in the HF bands and to 9 600 baud in the bands above 50 MHz
- (32) In the case of teleprinter operation the call sign identification in teleprinter code shall be given at the beginning and end of each transmission and at least once every fifteen (15) minutes in the case where a transmission lasts longer than one hour.

Transmitter power output of amateur radio stations

- (33) The maximum power output of the transmitter, as measured at the antenna port, shall not exceed the levels specified in the national radio frequency plan for the relevant licence classes and linearity shall be maintained.
- (34) An adequately filtered direct-current power supply shall be used for all the transmitting equipment.

- (35) The coupling between the antenna and the transmitter shall be such that no direct potential danger to life exists at a power supply frequency on or at the antenna.
- (36) The antenna system shall furthermore comply with the requirements of the relevant local municipality.

Frequency measuring equipment

- (37) Every amateur or experimental radio station shall have frequency measuring equipment with accuracy of at least 0.1 per cent, unless the frequencies of all transmitters of the station are crystal controlled and are accurate to at least 0.1 per cent.

Mobile amateur radio station

- (38) An amateur holding a Class A or B licence may use a mobile amateur radio station within the boundaries of the Republic of South Africa.
- (39) When a mobile amateur radio station is used in an amateur radio zone other than that in which the amateur resides, the call sign allocated to the main station shall-
 - (a) In the case of continuous-wave radiotelegraphy, be followed by the signal, the letter M and the number of the zone from where the station is operated; and
 - (b) in the case of radiotelephony be followed by the word "mobile" followed by the number of the zone from where the station is operated.
- (40) For the application of the provisions of sub-regulation (39) in respect of zone the different zones of the Republic of South Africa are indicated in Annexure G of the Regulations.

Amateur radio operator certificate

- (41) No person shall obtain a HAREC or a certificate specified for a Class B licence unless he or she has passed an examination in the Republic of South Africa for Class A or Class B licences.
- (42) Any person who is not prohibited by sub-regulation (3)(c) from qualifying may sit for the examination referred to in sub-regulation (41).
- (43) The examination shall be conducted at least once a year.
- (44) HAREC and a certificate specified for Class B licences shall be issued to a candidate who passes the examination and such certificate is not recognised for any purpose other than an amateur radio station licence.
- (45) The possession of a HAREC or certificate specified for a Class B licence shall not entitle the user thereof to an amateur radio station licence.
- (46) The following conditions are applicable to the radio amateur examination:
 - (a) The syllabuses for the examination referred to in sub-regulation (41) must be kept and provided to anybody on request.

- (b) Three (3) hours shall be allowed for the examination paper consisting of various parts.
- (c) To pass the examination, a candidate must obtain at least 50 percent in each of the relevant parts with a total average of 65 percent.
- (d) A candidate who passes either of the parts referred to above and passes the remaining part within three successive attempts, which shall commence with the examination immediately after the one in which the candidate was unsuccessful, is exempt from writing the whole examination again.

30 Communal Repeater Station Services.

- (1) A communal radio repeater station service may not be provided to one client only.
- (2) No person shall interconnect a communal radio repeater station service without the approval of the Authority: provided that such approval shall only be considered in cases where multi-channel allocations are already in use on a communal radio repeater station service.
- (3) The Authority may issue an additional assignment for a communal radio station service to a licensee if the licensee's existing communal radio repeater stations in the same area serves no less than 10 clients and 100 two-way radios.
- (4) If the licensee's existing communal radio repeater station service or services does not or do not comply with the requirements specified in sub-regulation (3), an assignment may be issued by the Authority if proof of channel occupancy to justify the application is furnished.
- (5) A licensee of a communal radio repeater station service who is experiencing coverage obstacles should submit proof that he or she has resorted to alternative technical solutions to no avail to overcome such obstacles, when he applies for an additional communal radio repeater station service assignment in the same working area.

Technical requirements for the operation of a communal radio repeater station

- (6) No person shall operate or use a communal radio repeater station service unless:
 - (a) Tone signalling is built into all stations in the system: provided that if the CTCSS signalling method is not used, some other method of automatic tone control shall be used to ensure that contact with the repeater station is maintained at the end of each message in order to enable the recipient of the message to reply;

- (b) each station is equipped with a 2-minute forced repeater-release facility, provided that the forced release shall not be exclusively dependant on the discontinuance of the carrier;
- (c) the communal radio repeater station has a facility to prevent any user group from re-engaging it within one minute of completing a call;
- (d) all transceivers have a built-in facility to prevent the transmission of a carrier while the communal radio repeater station is being used by other clients and by means of which it can be ascertained whether the system is engaged; and
- (e) the transmitter power is set at the levels as approved by the Authority.

Licensee's responsibility to keep a register of users of a communal radio repeater station service

- (7) The licensee of a communal radio repeater station service shall keep a register of:
 - (a) each user connected to the service, reflecting the user's name and address as well as the address of the base station when applicable;
 - (b) any additional users connected to the service during the previous calendar year;
 - (c) particulars of persons, who had cancelled the use of the service during the course of the said calendar year.
- (8) A copy of the register referred to in sub-regulation (7) shall be made available to the Authority on request and shall, if an application is made for a licence for an additional communal radio repeater station in a specific area, accompany such application in confirmation, as prescribed in sub-regulation (7), of the clients and stations served by an existing system in that area.
- (9) At the end of each calendar year, the licensee must send a copy of the register referred to in sub-regulation (7) by certified post to the Authority to reach it not later than 31 January of the following year.

31 Burglar Alarm Services.

Burglar alarm service

- (1) The Authority assigns a frequency on a technology neutral basis to burglar alarm services and it will, except in exceptional circumstances, be assigned so as to allow for a maximum operating area of 50 km radius around the coordinates of a control station.
- (2) Radio frequency spectrum for the purposes of providing burglar alarm services will be assigned on a shared basis and the various manufacturers or suppliers of

the burglar alarm equipment have a responsibility to coordinate the use thereof between the different licensees.

- (3) All signals between burglar alarm transmitters and control stations shall be unidirectional from the transmitters only.
- (4) All alarm equipment must be capable of being programmed with codes in order to allow for the efficient use by multiple controls and parrot repeater stations.
- (5) All lock-on faulty signals and transmitters shall be investigated and rectified by a licensee or licensees affected.
- (6) An assignment for additional frequency spectrum in the licensed area may be issued by the Authority if each of the licensee's existing burglar alarm systems in the same area services no less than 20 control stations and 20 000 burglar alarm transmitter stations.
- (7) If the licensee's existing burglar alarm service does not comply with the requirements specified in sub-regulation (6), a license may be issued by the Authority if proof of channel occupancy is furnished to justify the application.

Lease of burglar alarm service frequency spectrum

- (8) A licensee of a spectrum assigned to provide a burglar alarm service may lease the frequency spectrum to a third party within the licensed 50 km area of operation subject to regulation 14
- (9) Approval must be obtained from the Authority before any parrot repeater station or control station may be supplied and/or installed on a burglar alarm service.
- (10) Parrot repeater stations must be made available to all users listed on the applicable Radio Frequency Spectrum licence.
- (11) Any parrot repeaters licensed on a rented frequency shall remain the property of the licensee and must be maintained by the licensee.
- (12) The Authority will not intervene in contractual disputes between the licensee and the third party sub-users and a control station will only be cancelled from a Radio Frequency Spectrum Licence upon agreement of the licensee and the sub-user involved or in terms of a court order.

Licensee's responsibility to keep a register of clients of burglar alarm service

- (13) A licensee providing a burglar alarm service using radio frequency spectrum assigned for that purpose shall keep a register of each client connected to its service and provide a copy of this register to the Authority on request.
- (14) The licensee shall send a copy of the register referred to in sub-regulation (13) by certified post at the end of each calendar year to reach the Authority not later than 31 January; the register shall clearly indicate any additional burglar alarm transmitters connected to a licensee's system during the preceding year and clearly indicate burglar alarm transmitters that were cancelled during the preceding year.

32 Simplex Radio Rental Services.

- (1) A Radio Frequency Spectrum Licence for a simplex radio rental system will be for a minimum of 50 two-way radio stations.
- (2) A licensee of a spectrum assigned to provide a simplex radio rental system may rent simplex radio apparatus subject to regulation 14.
- (3) The frequency spectrum for a simplex radio rental system will be assigned on a shared basis allowing for a maximum operating area of 50 km radius from the coordinates provided to the licensee.
- (4) All equipment of a simplex radio rental system must operate with Continuous Tone Coded Squelch System (CTCSS).
- (5) Permission must be obtained from the Authority before any equipment may be rented for use outside the licensed operational area.

33 Citizen Band Services.

Licences for the operation of a citizen-band radio station

- (1) A Radio Frequency Spectrum licence issued for citizen band radio services confers on the licensee the right to use a citizen-band radio station from a mobile or fixed point.
- (2) The following persons may also be permitted by the licensee to use his citizen-band radio station on the authority of the licence issued:
 - (a) a member of the licensee's household who resides with him;
 - (b) an employee of a licensee, provided the communication concerns the business of the licensee only;
 - (c) every partner or employee of a partnership which is a licensee: provided the communication concerns the business of the partnership only;
 - (d) every member of an association and employee of an association which is a licensee: provided the communication concerns the business of the association only;
 - (e) every member or employee of a closed corporation which is a licensee: provided the communication concerns the business of the corporation;
 - (f) every official, director or employee of a company which is a licensee: provided that the communication concerns the business of the company only;
 - (g) any other person authorized by the Authority.
- (3) In sub-regulation (2)(b) to (e) above, communication between fixed points for business purposes is prohibited.

Frequencies for transmitting over the citizen-band radio service

- (4) No person may transmit in the citizen-band on any frequency other than those indicated in the national radio frequency plan:
- (5) Although any channel may be used for emergency communication or for assistance to travellers, the emergency channel may not be used for purposes other than emergency communication or travellers' assistance.
- (6) All channels are for the common use of all licensees and no channel may be reserved for the private or exclusive use of any particular station or group of stations.
- (7) Users of the citizen-band radio service who work within the limits of the frequency band 26.96 MHz to 27.28 MHz shall accept harmful interference from Industrial, Scientific and Medical (ISM) users.

Communication between citizen-band radio stations

- (8) Citizen-band radio stations may only be used to communicate with other licensed citizen-band radio stations.
- (9) Reception of as well as transmission to foreign radio stations and radio stations not licensed in the citizen-band radio service is prohibited.
- (10) Communication in the citizen-band radio service must be by means of two-way conversations in plain language or the 10 code.
- (11) No person shall use the citizen-band radio service to-
 - (a) transmit material intended for direct or indirect transmission over a broadcasting station;
 - (b) communicate for business purposes between fixed points; or
 - (c) operate the system in such a way as to cause interference to any other radio station.
- (12) No licensee or any other person may accept remuneration for the transmission or reception of messages over the citizen-band radio service.
- (13) Users of the citizen-band radio service shall be obliged to give priority to emergency communication at all times.
- (14) Communication between citizen-band stations must be as brief as practicable and must not exceed five continuous minutes except in the case of an emergency.

Use of a handle, station indicator or other special identification

- (15) A handle, station indicator or other special identification may be used in addition to, but not instead of the call sign allocated to the station by the Authority. Similarly, the phonetic alphabet may be used as an aid to identification.

Modification/adjustment of citizen-band radio apparatus

- (16) No person shall effect any modification or adjustment to an approved citizen band radio apparatus without the approval of the Authority.
- (17) All repairs or approved adjustments shall be made by or under the direct supervision of a registered electronic communication equipment dealer.

Technical requirements that citizen-band radio apparatus must satisfy

- (18) Citizen-band radio apparatus shall satisfy all technical requirements as specified in the national radio frequency plan and on the radio frequency licence.
- (19) No person shall connect or use a linear or additional radio-frequency amplifier to a citizen-band radio station.
- (20) The Authority will seize all unsealed linear or additional radio frequency amplifiers found in the possession or in the premises of the user for examination and safe custody.

PART X – Miscellaneous**34 Allocation and display of call sign**

- (1) Where the Authority allocates a call sign to a radio station, the said call sign shall be conspicuously displayed on the said radio set by the licensee and the call sign must be transmitted at least once during each separate transmission.

35 Modifications to a station

- (1) A licensee shall be obliged to effect at his or her own cost any modifications to his radio-communication system that the Authority has directed and the Authority shall by no means be liable to the licensee or any other person for any costs or damages arising from such modifications.

36 Interference, condition of station and compliance with requirements of the Authority and local municipality

- (1) The licensee shall be obliged to maintain all radio apparatus in a good technical condition and to ensure at all times that it satisfies the requirements of the Authority and does not cause harmful interference.
- (2) The antenna system shall comply with any requirements of the relevant local municipality.

37 Indecent language and fraudulent transmissions over stations prohibited

- (1) No person shall transmit language which, judged within context:
 - (a) Violates the dignity or privacy of a person;

- (b) amounts to profanity;
 - (c) amounts to obscenity;
 - (d) amounts to propaganda for war;
 - (e) amounts to incitement of imminent violence;
 - (f) amounts to the advocacy of hatred based on race, ethnicity, religion or gender and that constitutes incitement to cause harm;
- (2) Sub-regulation (1) shall not apply to bona fide literature, drama, documentary or scientific material or to bona fide religious debate.

38 Distress signal

- (1) No person shall transmit a distress signal without justifiable reason.

39 Change of address

- (1) Every licensee who changes his address shall advise the Authority of his new address within 14 days of the change.

40 Radio receiving apparatus with continuous tuning

- (1) No person shall use or have in his possession any radio receiving apparatus which is capable of continuous tuning and be tuned to bands above 30 MHz other than the international broadcasting and amateur bands except where the Authority's prior approval was obtained.

41 Operation of radio apparatus on board ship while it is in harbour

- (1) The master of a ship shall ensure that the radio installation on board is not used for radio-communication while the ship is berthed or anchored in a harbour in the Republic, except for the purposes of type F3 transmissions in the VHF maritime mobile band to communicate with-
- (a) the nearest coast station in the Republic that is open for public correspondence;
 - (b) the port operations service; and
 - (c) a vessel on its way to the harbour or berth provided the communication is limited to navigational safety.
- (2) The restriction contained in sub-regulation (1) shall not apply to the apparatus used on board ships for establishing communication via any satellite of the INMARSAT organization.

42 Recognition of licences issued by other countries

- (1) Notwithstanding provisions to the contrary in these regulations the Authority may issue a radio frequency spectrum licence as required by the Act or these

Regulations to a person who, in the opinion of the Authority, possesses a similar licence issued by another country despite the fact that such person does not satisfy specific requirements stipulated by these regulations for the acquisition of the licence or certificate.

43 Permit for possession of radio apparatus without a spectrum licence being issued.

- (1) Under section 31(6)(b) of the Act, the Authority may on request from a person who wishes to possess a radio apparatus without a radio frequency spectrum licence being issued, issue a permit authorizing such possession.
- (2) An application for a permit referred to in sub-regulation (1) above shall be accompanied by the prescribed application fee and shall contain the following:
 - (a) Full name, address and contact details of the applicant.
 - (b) If the applicant is a juristic person or an association, a copy of the registration certificate for the company or the constitution for the association shall be supplied.
 - (c) The storage location of the radio apparatus for which the permit is applied.
 - (d) The make and model number of the radio apparatus.
 - (e) The number of units in question.
 - (f) Technical parameters of such radio apparatus, including, but not limited to, frequency, power and applicable standard.
- (3) Where the radio apparatus is not type-approved for use in South Africa and is intended for export purposes only, the applicant shall provide an affidavit stating the following:
 - (a) The country from where the equipment originates.
 - (b) Country(ies) to where the radio apparatus will be exported.
 - (c) That the radio apparatus and containers thereof are sealed.
 - (d) That the radio apparatus is not intended for use, sale or distribution in South Africa.

PART VIII – Other

44 Rights

- (1) Assignment of Radio Frequency Spectrum and the issuance of licences to use Radio Frequency Spectrum is at the discretion of the Authority and applicants for Radio Frequency Spectrum shall furnish all information to support their application as required by the Authority.

45 Offences and Penalties

- (1) Any person who fails to comply with these regulations is liable on conviction by the Complaints and Compliance Commission to a fine not exceeding R 200,000 unless stated otherwise in regulations.
- (2) Any person who fails to comply with the regulations regarding the licence exempt bands / radio apparatus is liable on conviction by the Complaints and Compliance Commission to a fine not exceeding R 500,000 unless stated otherwise in regulations.

46 Short title and commencement

- (1) These Regulations may be cited as the Radio Frequency Spectrum Regulations 2010.

47 Repealed Regulations and Notices

- (1) The Radio Regulations promulgated by Government Notice R. 2862, dated 28 December 1979 as amended, are hereby repealed;
- (2) The Regulations with respect to applications for Radio Frequency licences, station certificates and authorities promulgated by Government Notice R. 291, dated 6th March 2002 as amended, are hereby repealed;
- (3) The Regulations for obtaining a permit for the possession of radio apparatus promulgated by Government Notice R. 294, dated 6th March 2002 as amended, are hereby repealed;
- (4) The High Demand Radio Frequency Spectrum Licensing Framework Regulations promulgated by Government Notice R. 469, dated 28th May 2010 as amended, are hereby repealed;

Annexure

Annexure A. Apparatus exempts from Radio Frequency Spectrum Licences.

1 Application

These regulations are applicable to the identified frequency bands below. They set out the operational rules of various bands.

2 Definitions

Unless otherwise defined herein, all words and phrases shall have the meaning ascribed to them in the Electronic Communications Act, 2005 (Act No. 36 of 2005) and related legislation as may be amended from time to time.

"Base Station" means a transmitting receiving station in a fixed location used for wireless communications with end user terminals;

"CEPT/ERC/REC 70-03" means ERC Recommendation 70-03 relating to the use of short range devices (SRD);

"Cordless Phone" means portable telephone with a wireless handset that communicates via radio waves with a base station connected to a fixed telephone line, within a limited range of its base station. There are various kinds of cordless phone depending on the operating spectrum. The different kinds and their respective operating frequencies are listed below:

CTO - Low power cordless telephone 46 - 49MHz;

CT2 - Second generation cordless telephone 864.1 - 868.1 MHz;

DECT - Digitally enhanced cordless telephone 1880 - 1900MHz;

"Duty Cycle" means the ratio, expressed as a percentage, of the maximum transmitter "on" time on one carrier frequency, relative to a one-hour period unless otherwise mentioned in the relevant specifications under columns D & E;

"Dynamic Frequency Selection" ("DFS") means the mechanism that allows the coexistence of wireless networks with weather radar systems in the 5GHz band;

"Direct Sequence Spread Spectrum" ("DSSS") means a modulation scheme whereby radio signals are passed through and distributed over the entire band at once.;

"e.i.r.p" means effective isotropically radiated power;

"e.r.p" means effective radiated power, the product of the power supplied to an antenna and its gain relative to a half wave dipole in a given direction;

"Field Disturbance and Doppler Apparatus" ("FDDA") means radio apparatus which operates by producing a radiated field and responding to any disturbance of that field caused by an intrusion or movement within the field by other devices, objects or persons;

"Frequency Hopping Spread Spectrum" ("FHSS") means a modulation scheme that rapidly switches a carrier among many given frequency channels, using a pseudorandom sequence known to both the transmitter and receiver;

"Inductive Loop Systems" means radio apparatus which operate by producing a controlled magnetic field within which a predetermined recognisable signal is formed;

"LBT" means Listen Before Talk is a mechanism, used of continuously searching for a free open channel to initiate communication. Used extensively for coexistence without causing harmful interference between SRD's and RFID systems;

"Low Power Radio" means radio apparatus, normally hand-held radios used for short range two-way voice communications;

"Model Control apparatus" means radio apparatus used to control the movement of the model in the air, on land or over or under the water surface;

"Non specific Short Range Devices" means radio apparatus used for general telemetry, telecommand, alarms and data applications with a preset duty cycle ($0.1\% \leq \text{duty cycle} < 100\%$);

"Public Mobile Radio" (PMR) means radio apparatus used for short range two-way voice communications;

"Road Transport and Traffic Telematics" ("RTTT") means radio apparatus used for traffic management. Applications include automatic road toll collection, route guidance systems, vehicle or container identification, instant traffic information, parking management, advance incident warning and on-vehicle anti-collision radar;

"Short Range Device" ("SRD") means a piece of apparatus which includes a transmitter, and/or a receiver and or parts thereof, used in alarm, telecommand and telemetry applications, etc, operating with analogue speech/music or data (analogue and/or digital) or with combined analogue speech/music and data, using any modulation type;

"RFID System" ("Radio Frequency identification") a wireless system that uses radio frequency communication to automatically identify, track and manage objects, people or animals. It consist of two main components viz, tag and a reader which are tuned to the same frequency;

"Radio Local Access Network" ("RLAN") means the high data rate two way (duplex) wireless data communications network;

"Radio Telecommand" means the use of radio apparatus for the transmission of signals to initiate, modify or terminate functions of equipment at a distance;

"Telemetry" means the transmission of remotely measured data;

"The Authority TE - Specifications" means specifications that the Authority published, with a certain number prefixed by "TE" and which is obligatory for the device or application in question;

"Transmitter Power Control" ("TPC") a technical mechanism used within some networking devices in order to prevent too much unwanted interference between wireless networks;

"Video Surveillance Equipment" means radio apparatus used for security camera purposes to replace the cable between a camera and a monitor;

"Wideband Wireless Systems" means radio apparatus that uses spread spectrum techniques and has high bit rate;

"Wireless Access Systems" ("WAS") means end-user radio connections to public or private core networks;

"Wireless Audio Systems" means radio apparatus used to replace the wired headphones or speakers in hi-fi systems; and

"Wireless Microphones" means radio apparatus used to transmit speech or music over short distances to a remote receiver in places like studios and theatres.

3 Radio Frequency Spectrum Licence Exemptions.

The use or possession of the radio apparatus listed in Column B below, in accordance to all specifications listed in Columns, A, C, D and E of the Table below shall not require a radio frequency spectrum licence:

4 Table of Radio Frequency Spectrum Licence Exemptions

Column A Frequency Bands K=kHz M=MHz G=GHz	Column B Type of Device	Column C Maximum Radiated Power or Field Strength Limits & Channel spacing	Column D Relevant Standard	Column E Additional Requirements
9-59.75K	Inductive Loop System.	72 dBµA/m @ 10m. No duty cycle restriction. No channel spacing.	EN 300 330 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
59.75-60.25K	Inductive Loop System.	42 dBµA/m @ 10m. No restrictions on duty cycle No channel spacing.	N 300 330 EN 301 489-1,3 EN 60950 ISO/ IEC 18047-2	CEPT/ERC/REC 70-03 ASK, FSK, & PSK

60.25-70K	inductive Loop System.	72 dB μ A/m @ 10m. No restrictions on duty cycle No channel spacing.	EN 300 330 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
70-119K	Inductive Loop System.	42 dB μ A/m @ 10m. No restrictions on duty cycle No channel spacing.	N 300 330 EN 301 489-1,3 EN 60950 ISO/ IEC 18047-2	CEPT/ERC/REC 70-03 ASK, FSK, & PSK
119-135K	Inductive Loop System X	72 dB μ A/m @ 10m. No restrictions on duty cycle No channel spacing.	EN 300 330 EN 301 489-1,3 EN 60950 ISO/ IEC 18047-2	CEPT/ERC/REC 70-03 ASK, FSK, & PSK
740-8800K	Inductive Loop System	9 dB μ A/m @ 10m. No restrictions on duty cycle No channel spacing.	EN 300 330 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
6.765-6.795M	Inductive Loop System	42 dB μ A/m @ 10m. No restrictions on duty cycle No channel spacing.	EN 300 330 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
13.553-13.567M	Inductive Loop System	42 dB μ A/m @ 10m. No restrictions on duty cycle No channel spacing.	EN 300 330 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03 ASK, FSK, & PSK
26.957-27.283M	Inductive Loop System	42 dB μ A/m @ 10m. No restrictions on duty cycle No channel spacing.	EN 300 330 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
26.957-27.283M	Non-specific SRD.	10 mW erp No restrictions on duty cycle. No channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
26.995; 27.045; 27.095; 27,145; 27.195M	Surface Model Control.	100 mW erp. No restrictions on	EN 300 220 EN 301 489-1,3	CEPT/ERC/REC 70-03

		duty cycle. 10 kHz channel spacing.	EN 60950	
35.00 – 25.25M	Aircraft Model Control.	100 mW erp. No restrictions on duty cycle. 10 kHz channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
36.65 – 36.75M	Wireless Microphones.	100 mW erp. 100% duty cycle. No channel spacing.	EN 300 422 EN 301 489-9 EN 60950	CEPT/ERC/REC 70-03
40.65 – 40.70M	Wireless Microphones.	100 mW erp 100% duty cycle No channel spacing.	EN 300 422 EN 301 489-9 EN 60950	CEPT/ERC/REC 70-03
40.665, 40.675, 40.685, 40.695	Surface Model Control.	100mW erp. No restriction on duty cycle. 10 kHz channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
40.66 – 40.7M	Non-specific SRD.	10 mW erp. No duty cycle restriction. No channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
46.61 – 46.97M 49.67 – 49.97M	CT0 Cordless Phones.	10 mW eirp	The Authority TE-013	Government Gazette 22443 of 4th July 2001
53 – 54M	Wireless Microphones.	50 mW erp for class 1 equipment 100 mW erp 100% duty cycle No channel spacing	EN 300 422 EN 301 489-1,9 EN 60950	CEPT/ERC/REC 70-03
54.4500; 54.4625; 54.4750; 54.4875; 54.500; 54.5125; 54.5250; 54.5375;	Model Control.	5W erp 12.5kHz channel spacing	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03

54.5500M 141 – 142M	Remote Control Industrial Apparatus.	100mW erp	EN 300 220 EN 301 489-1,3 EN 60950	
148 – 152M	Wildlife telemetry Tracking.	25mW erp	EN 300 220 EN 301 489-1,3 EN 60950	The use of this band is restricted to National game Parks.
169.4 – 169.475M	Meter Reading	500mW erp 50kHz channel spacing < 10% duty cycle	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03 ECC/DEC (05)02
173.2125 – 173.2375M	Non-specific SRD – telecommand only.	10 mW erp 25 kHz channel spacing	EN 300 220 EN 301 489-1,3 EN 60950	
173.2375 – 173.2875M	Non-specific SRD.	10 mW erp. 25 kHz channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	
173.965 – 174.015M	Wireless Microphones and assistive listening devices.	2 mW eirp. 100% duty cycle. No channel spacing.	EN 300 220 EN 301 489-9 EN 60950	CEPT/ERC/REC 70-03
402 – 405M	Medical Implants.	25 µW erp. No duty cycle restriction for devices with LBT, otherwise ≤ 1%. 25 kHz channel spacing.	EN 300 839 EN 301 489-1,3 EN 60950	ITU-R RS.1346 CEPT/ERC/DEC (01)17
402 – 406M	Doppler shift movement detectors, wireless microphones, garage	10 mW erp. No channel spacing.	EN 300 422 EN 300 220	

	door openers and motor car alarm systems.	100% duty cycle.	EN 301 489-1,3 EN 60950	
433.05 – 434.79M	Non specific SRD	1 mW erp. No channel spacing. 100% duty cycle	EN 300 220 EN 301 489-1,3 EN 60950 ISO/IEC 18047-7	CEPT/ERC/REC 70-03 ASK, FSK, PSK, & FHSS
433.05 – 434.79M	Non specific SRD	10mW erp duty cycle < 10% No channel spacing	EN 300 220 EN 301 489-1,3 EN 60950 ISO/IEC 18047-7	CEPT/ERC/REC 70-03 ASK, FSK, PSK, & FHSS
433.05 – 434.79M	Non specific SRD	10 mW erp 100% duty cycle Up to 25kHz channel spacing.	EN 300 220 EN 301 489-3 EN 60950 ISO/IEC 18047-7	CEPT/ERC/REC 70-03
446 - 446.1 M includes the following eight channels. 446.00625M; 446.01875M; 446.03125M; 446.04375M; 446.05625M; 446.06875M; 446.08125M; 446.09375M;	Public Mobile Radio (PMR).	500mW. 12,5 kHz channel spacing	EN 300 296 EN 301 489-5 EN 60950	
463.975M; 464.125M; 464.175M; 464.325M; 464.375M;	Low Power Radio.	500mW. 12,5 kHz channel spacing	EN 300 296 EN 301 489-5 EN 60950	CEPT/ERC/REC 70-03

863 – 865M	Wireless Audio Systems.	10 mW erp. 100 % duty cycle. No channel spacing.	EN 300 357 EN 301 489-9 EN 60950	CEPT/ERC/REC 70-03 CEPT/ERC/DEC (01) 18
863 – 865M	Wireless Microphones	10 mW erp. 100 % duty cycle. No channel spacing.	EN 300 422 EN 301 489-9 EN 60950	CEPT/ERC/REC 70-03
864.1 – 868.1M	CT2 cordless telephones	10 mW eirp.	EN 301 797 EN 301 489-1,10 The Authority TE - 012	CEPT/ERC/REC 70-03
868 – 868.6M	Non specific SRD	25 mW erp. < 1% duty cycle or LBT.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03 CEPT/ERC/DEC (01) 04
868.6 – 868.7M	Alarms.	10 mW erp. < 1 % duty cycle. 25 kHz channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03 CEPT/ERC/REC (01) 09
868.7 – 869.2M	Non specific SRD	25 mW erp. < 0.1 % duty cycle or LBT. No channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03 CEPT/ERC/REC (01) 04
869.25 – 869.3M	Alarms.	10 mW erp. < 0.1 % duty cycle. 25 kHz channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
869.4 – 869.65M	Non-specific SRD.	500mW erp. < 10% duty cycle or LBT. 25 kHz channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03

869.65 – 869.7M	Alarms	25 mW erp. 10 % duty cycle. 25 kHz channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
869.7 – 870.0M	Non-specific SRD.	5 mW erp. 100 % duty cycle. No channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
1880 – 1900M	DECT cordless hones.	250 mW eirp (peak). 1.728 MHz channel spacing.	EN 300 406 EN 301 489-1,6 EN 60950 The Authority TE 001	
2400 – 2483.5M	Non-specific SRD	10 mW erp. No duty cycle. No channel spacing.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
2400 – 2483.5M	FDMA	25 mW erp. No duty cycle. No channel spacing.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
2400 – 2483.5M	Low power Video Surveillance	100 mW erp. No duty cycle. No channel spacing.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
5150 – 5350M	Wireless Access Systems / Radio Local Access Network (WAS & RLAN) indoor use only.	200 mW eirp. Dynamic Frequency Selection (DFS) & Transmitter Power Control Obligatory.	EN 300 893 EN 301 489-1,17 EN 60950	ITU-R M.1625
5470 – 5725M	Wireless Access Systems / Radio Local Access Network (WAS & RLAN): indoor use	1 W eirp. Dynamic Frequency Selection (DFS) &	EN 300 893 EN 301 489-1,17 EN 60950	ITU-R M.1625

	only.	Transmitter Power Control Obligatory.		
5725 – 5875M	Non-specific SRD.	25 mW eirp. No duty cycle restriction. No channel spacing.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
5725 – 5875M		1 watt peak eirp Any modulation		
5725 – 5875M		4 watt peak eirp Frequency hopping or digital modulation only		
5725 – 5875M		200 watt peak eirp with a max 1 watt peak transmitter power. Digital modulation only Fixed Radio Link devices only Peak power spectral density must not exceed 17dBm/MHz.		
5795 – 5805M	RTTT data	2 W eirp. No duty cycle restriction. No channel spacing.	EN 300 674 EN 301 489-1,3 EN 60950	ITU-R M.1453 CEPT/ERC/DEC (92)02
5805 – 5815M	RTTT data.	2 W eirp. No duty cycle restriction. No channel spacing.	EN 300 674 EN 301 489-1,3 EN 60950	ITU-R M.1453 CEPT/ERC/DEC (92)02
9200 – 9500M	FDDA.	25 mW eirp. No duty cycle restriction. No channel spacing.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
9500 – 9975M	FDDA.	25 mW eirp. No duty cycle	EN 300 440 EN 301 489-1,3	CEPT/ERC/REC 70-03

		restriction. No channel spacing.	EN 60950	
10.5 – 10.6G	FDDA.	500 mW eirp. No duty cycle restriction. No channel spacing.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
13.4 – 14G	FDDA.	25 mW eirp. No duty cycle restriction. No channel spacing.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
17.1 – 17.3G	Wireless Access Systems / Radio Local Access Network (WAS & RLAN).	100 mW eirp.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
24.00 – 24.25G	Non-specific SRD.	100 mW eirp. No duty cycle restriction. No channel spacing.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
24.05 – 24.25G	FDDA.	100 mW eirp. No duty cycle restriction. No channel spacing.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
76-77G	RTTT radar	55dBm peak No duty cycle restriction No channel spacing	EN 300 091 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03

Use and possession of all radio apparatus exempt in terms of the above table must comply with the following:

- (a) All radio apparatus must be type-approved by the Authority in accordance with section 35 of the Act;
- (b) The frequencies, transmitting power and external high-gain antenna of the radio apparatus must not be altered without a new type approval certificate being issued by the Authority;

Draft Radio Frequency Spectrum Regulation

- (c) The radio apparatus must be operated within, and not exceed, the technical parameters set out in each of the applicable columns C and D of the Table with respect to the frequency band; maximum radiated power or field strength limits and channel spacing; relevant standard; and duty cycles and antennas to be used as contained in Column E.
- (d) The antenna of the radio apparatus must not be higher or above average ground level than the lowest point of the place where the radio apparatus operates effectively.
- (e) The radio apparatus must not cause interference to any person issued with a radio frequency spectrum licence by the Authority.
- (f) The user of the radio apparatus in the licence-exempt frequency spectrum operates on a non-interference and zero protection basis from interference.

Annexure B. Categories subject to the Standard Application Procedure.

- (1) Unless otherwise stated in regulations or an Invitation to Apply, Standard Application procedures apply to the following:
 - (a) Amateur Radio;
 - (b) Marine Band;
 - (c) Aeronautical Band;
 - (d) Citizen Band Radio;
 - (e) Ski Boats;
 - (f) Two way Radio without repeaters; (including Short Range Business Portable radio);
 - (g) Shared simplex HF;
 - (h) Communal Repeaters;
 - (i) Radio Frequency Spectrum Licence for assignment in the broadcast bands to the holder of a Broadcast Service Licence;
 - (j) For frequencies above 40 GHz;
 - (k) Any other services or frequency bands that the Authority may specify.
- (2) In addition, where a Licensee already has assignments for point to point links under his licence, he may apply for new links to be assigned as an amendment to his licence using the Standard Application Procedure.
- (3) The Authority may at any time require an applicant to submit his application using the extended procedures.
- (4) The Standard Application Procedures are contained in Annexure C to these regulations.

Annexure C. Standard Application Procedures

- (1) The relevant application form obtainable at any office of the Authority shall be completed in full and submitted with the prescribed application fee at any office of the Authority.
- (2) For applications subject to the standard application procedures, the following information shall be provided unless otherwise specified in these or other regulations.
- (3) If the information to be supplied is not applicable, then the term 'not applicable' shall be written with a short explanation.

(i) APPLICANT DETAILS

No.	Information Required
1	<p>Name, address, identification number telephone number and Email address of applicant</p> <ul style="list-style-type: none"> • If the applicant is a South African citizen a copy of the identity document shall be submitted to the Authority. • If the applicant is a foreigner a copy of the passport as well as proof of status shall be submitted to the Authority. <p>In the case of companies</p> <ul style="list-style-type: none"> ▪ A certified copy of the Company's registration certificate ▪ Name and address of directors and/ or principal executives
2	<p>When applying for an Radio Frequency Spectrum Licence for Amateur Radio, the following shall be supplied by the applicant in addition to that specified in 1:</p> <ul style="list-style-type: none"> ▪ A copy of the applicant's Amateur Radio Operator's Certificate.
3	<p>When applying for a Radio Frequency Spectrum Licence for a high frequency (HF Band) cross border communication system in the Southern African Development Community, the following must be supplied by the applicant addition to that specified in (1):</p> <ul style="list-style-type: none"> • The registration numbers of any vehicles in which the radio apparatus may be installed.
4	<p>When applying for a Radio Frequency Spectrum Licence for a high frequency (HF Band) cross-border communication system in a territory other than in the Southern African Development Community, the following shall be supplied by the applicant in addition to that specified in (1):</p> <ul style="list-style-type: none"> • A copy of the Radio Frequency Spectrum Licence issued in the foreign country. • Proof of validity of the foreign Radio Frequency Spectrum Licence. • A completed form of notice (AP1/A15) in respect of a transmitting terrestrial station.

(iii) TECHNICAL INFORMATION (SYSTEM DESIGN)

No.	Information Required	
1	Site names	Name of place where equipment is located
2	Site code	Code assigned to place
3	Site coordinates	Geographic coordinates to locate places on maps in degrees, minutes and seconds (ddmmss)
4	Frequency (Hz)	Airwaves through which the radio waves are transmitted
5	Bandwidth (MHz)	Amount of frequency occupied by the transmitted signal (RF bandwidth)
6	Modulation scheme	Method of transmitting radio signals
7	Bit rate (bits/s)	Speed of transmitting radio signals
8	Antenna site	Where antenna is situated
9	Antenna type	Type of antenna
10	Antenna diameter (m)	Diameter of antenna
11	Antenna gain (dB)	Gain of antenna in terms of decibels (dB)
12	Antenna polarization (H/ V)	Horizontally or vertically polarized
13	Transmit power (dbm/ Watt)	Transmitted power at the output of antenna
14	Receiver sensitivity threshold (dBm)	Lowest value of signal detected by receiver
15	Fixed loss (dB): transmit and receive	Percentage of lost power
16	Type of service	Data service, voice, paging, telemetry etc
17	Area and direction of operation	Geographical area of service

18	▪ Applicants must provide diagrams or sketches of proposed operations
19	▪ Adherence to EMC specifications
20	▪ Equipment specifications, type approval certificates

Annexure D. Extended Application Procedures

- (1) The relevant application form obtainable at any office of the Authority shall be completed in full and submitted with the prescribed application fee at any office of the Authority.
- (2) For applications subject to the extended application procedures, the following information shall be provided unless otherwise specified in these or other regulations.
- (3) If the information to be supplied is not applicable, then the term 'not applicable' shall be written with a short explanation.

(I) APPLICANT DETAILS

No.	Information Required
1	<p>Name, address, identification number telephone number and Email address of applicant</p> <ul style="list-style-type: none"> • If the applicant is a South African citizen a copy of the identity document shall be submitted to the Authority. • If the applicant is a foreigner a copy of the passport as well as proof of status shall be submitted to the Authority. <p>In the case of companies</p> <ul style="list-style-type: none"> ▪ A certified copy of the Company's registration certificate ▪ Name and address of directors and/ or principal executives
2	<ul style="list-style-type: none"> ▪ Annual report of the applicant and its main shareholders from the previous three years (where available)
3	<ul style="list-style-type: none"> ▪ Full particulars of the experience and expertise of the applicant, its partners, shareholders, suppliers and contractors in the business contemplated
4	<ul style="list-style-type: none"> ▪ Extent of beneficial ownership of the applicant by the historically disadvantaged ▪ Extent of beneficial ownership by women ▪ Extent of beneficial ownership by the disabled

(II) DESCRIPTION OF SERVICE

No.	Information Required
1	<ul style="list-style-type: none"> ▪ Description of service to be provided

2	▪ Proposed annual coverage, rollout indicating the exact areas and location covered
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(III) CONSTRUCTION OF THE NETWORK (RADIO COMPONENT)

No.	Information Required
1	▪ Availability and experience of planning and project management capabilities required for construction of the network
2	▪ Mechanisms used for the planning of any radio component of the network
3	▪ Plans to acquire resources such as access to sites, other property, technology, personnel and capital

(IV) BUSINESS PLAN

Should a Radio Frequency Spectrum Licence be issued, the information contained in the business plan may be incorporated as license conditions.

No.	Information Required
1	▪ Fundamental assumptions for the business plan with financial forecasts for a minimum period of three years.
2	▪ A market analysis of the services contemplated to be offered through the radio frequency spectrum licence applied for, including forecast demand.
3	▪ Description of products and services to be offered through the radio frequency spectrum licence applied for.
4	▪ Description of pricing strategy for products and services to be offered through the radio frequency spectrum licence applied for.

(V) TECHNICAL INFORMATION (RADIO SYSTEM DESIGN)

No.	Information Required
1	▪ Full information of the technology to be implemented
2	▪ Approach to network development and expansion

3	▪ Description of all the interfaces in the network	
4	▪ Requirements for interconnection to other telecommunication networks or services and transmission medium and links required	
5	▪ Upgrade of the network to accommodate new standards and technology developments	
6	▪ Compliance with recognized international standards and specifications	
7	▪ Details of radio planning including methods to reserve frequency	
7.1	Site names	Name of place where equipment is located
7.2	Site code	Code assigned to place
7.3	Site coordinates	Geographic coordinates to locate places on maps in degrees, minutes and seconds (ddmmss)
7.4	Frequency (Hz)	Airwaves through which the radio waves are transmitted
7.5	Bandwidth (MHz)	Amount of frequency occupied by the transmitted signal (RF bandwidth)
7.6	Modulation scheme	Method of transmitting radio signals
7.7	Bit rate (bits/s)	Speed of transmitting radio signals
7.8	Antenna site	Where antenna is situated
7.9	Antenna type	Type of antenna
7.10	Antenna diameter (m)	Diameter of antenna
7.11	Antenna gain (dB)	Gain of antenna in terms of decibels (dB)
7.12	Antenna polarization (H/ V)	Horizontally or vertically polarized
7.13	Transmit power (dbm/ Watt)	Transmitted power at the output of antenna
7.14	Receiver sensitivity threshold (dBm)	Lowest value of signal detected by receiver
7.15	Fixed loss (dB): transmit and receive	Percentage of lost power

7.16	Type of service	Data service, voice, paging, telemetry etc
7.17	Area and direction of operation	Geographical area of service
8	▪ Applicants must provide diagrams or sketches of proposed operations	
9	▪ Adherence to EMC specifications	
10	▪ Theoretical traffic volume forecasts and alternative routing and redundancy requirements	
11	▪ Numbering plan for the service	
12	▪ Quality systems deployed and quality targets used	
13	▪ Details of fixed network planning	
14	▪ Presentation of network planning data in the form of schedules, diagrams, tables and maps for the initial phase and two subsequent phases	
15	▪ Network management, fault detection, service and maintenance mechanisms	
16	▪ Equipment specifications, type approval certificates	
17	▪ Regulatory requirements (ITU and Act)	
18	▪ Technical expertise	
19	▪ Service monitoring capabilities	

Annexure E. Radio Frequency Spectrum Application and Permit Fees**1. Application Fees by Type of Radio-Communications Services**

1. Amateur Radio Service	
Type of Service	Fees (Rand)
All classes of licences	140
Beacon	100
Repeater station including radio link	100
Digipeater/Bulletin Board	100
Listeners	100
Experimental station for weather satellite reception and retransmission	210
Guest or special event licence	100
Change of call sign on request	100

2. Aeronautical Service	
Type of Service	Fees (Rand)
Aircraft frequency band	480
Beacon frequency	480
Ground station frequency	480
Relay station frequency	170

3. Maritime Service	
Type of Service	Fees (Rand)
Ship frequency spectrum	480
Coast station frequency - Non commercial	480

Coast Station Frequency -- Commercial	600
Beacon frequency	480

4. Land Mobile Service

Type of Service	Fees (Rand)
Citizen band frequencies	210
<i>Civil Defence/Marinet (VHF band)</i>	
- without a private frequency	210
- with a private frequency	620
<i>27/29 MHz frequency band</i>	210
Simplex frequency in the VHF and UHF bands	620
<i>High frequency band</i>	
- Cross Border	830
- Cross Border – SADC	1040
- Local HF	620

5. Fixed Service

Type of Service	Fees (Rand)
Experimental or test licence	830
Special Radio Service	830
Microwave Link frequencies (per application)	830
All other fixed services	830

6. Radio-Communication Systems

Type of Service	Fees (Rand)
Alarm System	980
Load Management System	1000
Telemetry System	730
Message Handling System	1230
Paging System	1430
Radio Trunking System (per frequency channel)	275
Repeater System	1100
Wide Area Network	1660
Wireless Local Loop System	650

7. Satellite Service

Type of Service	Fees (Rand)
Fixed Satellite Earth Station – Uplink	1600
Transportable Satellite News Gathering Station – SNG	1600
VSAT	1600

8. Miscellaneous

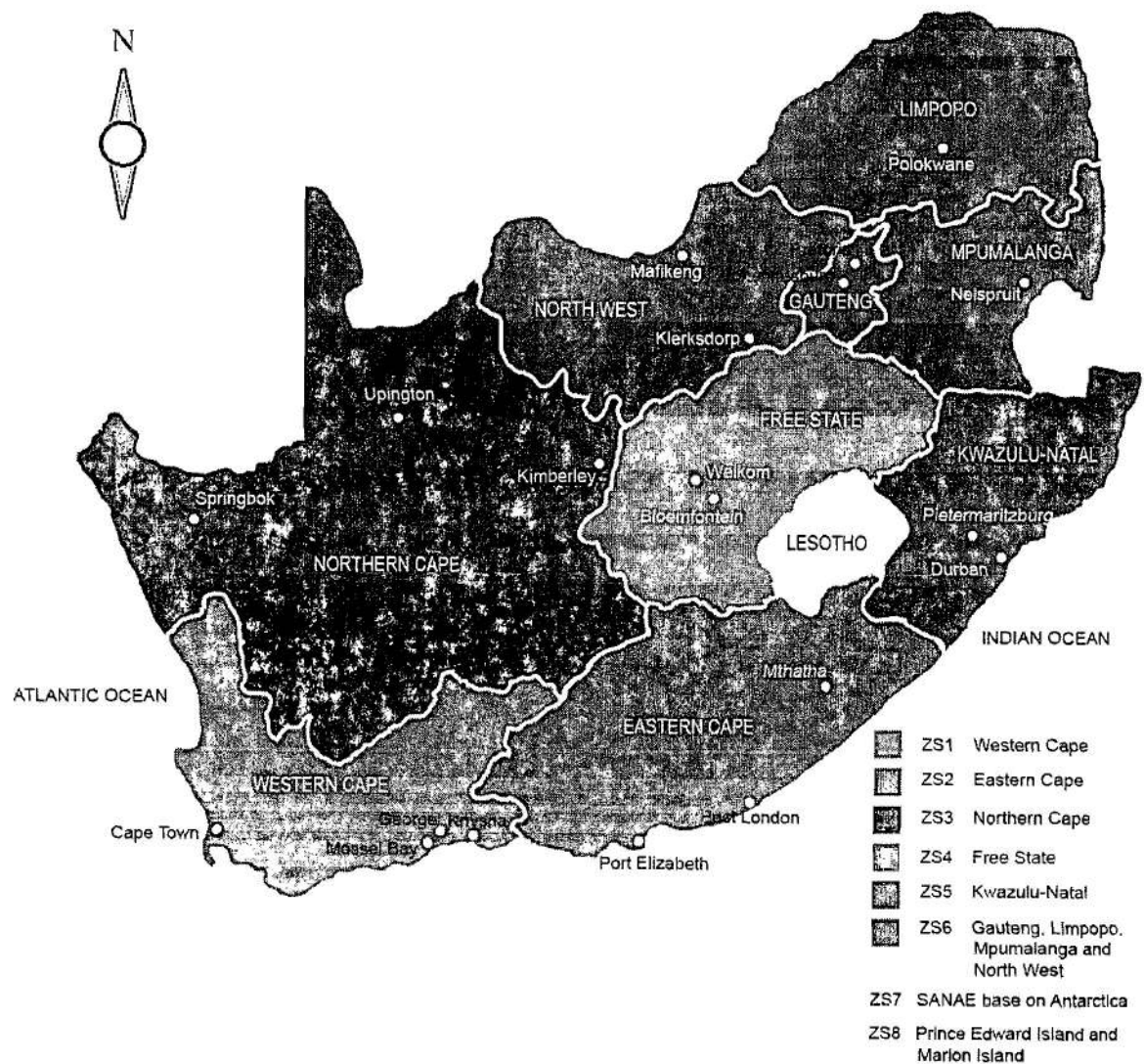
Type of Service	Fees (Rand)
Electronic Communication Equipment Dealer Certificate Application	100
Maritime Certificate Application	100
Computer printout per licence/certificate	100
Duplicate per licence/certificate	100

Change of name and/or title of the licensee	100
Modification to licence – Administrative (excluding address changes)	100
Modification to Licence – Technical	410

2. Permit Fees

Permits for possession of Radio Apparatus subject to Radio Frequency Spectrum Licences without a licence being issued	Fees (Rand)
(i) Application Fee for Permit	100
(ii) Fee for Permit	100

Annex G. Call Sign Zones



NOTICE 926 OF 2010

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA



DRAFT RADIO FREQUENCY SPECTRUM REGULATIONS

EXPLANATORY DOCUMENT

REASONS DOCUMENT

1 Introduction

The objects of these Radio Frequency Spectrum Regulations are as follows:

- (1) To establish Radio Frequency Spectrum Regulations that are compliant with the Electronic Communications Act, 2005 (Act No. 36 of 2005) and cover as wide a range of issues as possible under a single legislative instrument.
- (2) To repeal and substitute a range of regulations promulgated under previous legislative or statutory frameworks including the now repealed Telecommunications Act, 1996 (Act No. 103 of 1996).
- (3) To incorporate the High Demand Regulations and Licence Exempt Regulations into a single body of regulations.
- (4) To act as an umbrella set of Radio Frequency Spectrum regulations that is in principle applicable to all areas of the radio frequency spectrum and to all types of licensed services.

2 Part 1 - General Principles

- (1) These regulations as a general rule are applicable to all frequency bands. Regulations for certain services that were covered in the radio regulations have been included as these are relatively stable and affect a large number of small individual licensees.
- (2) Additional rules that are applicable to specific services or frequency bands will be covered in specific regulations contained within Invitations to Apply, or individual licences.
- (3) These regulations are drafted in such a way as not to hamstrung future developments in spectrum management such as spectrum trading, spectrum management rights, collaborative spectrum sharing etc.
- (4) These regulations accordingly allow the Authority considerable freedom or leeway to promote advanced uses of the spectrum in future regulations including Invitations to Apply.
- (5) While there is no requirement that the regulations for Radio Frequency Spectrum Licences be according to the same format as the Service Licences, the same grouping of topics is adopted as far as possible.
- (6) The term 'licences' in these regulations applies only to radio frequency spectrum licences and assignments. These regulations do not address the 'service licences' (BS, ECNS and ECS licences) which are covered in separate regulations. The radio frequency spectrum regulations are intended to be independent from changes in the service licensing regime.

3 Part II – Radio Frequency Spectrum Planning

- (1) These regulations empower the Authority to develop plans for the use of specific frequency bands services. Part II sets out the process by which a radio frequency spectrum band can be identified as being required for a specific purpose, the applicable technical parameters defined and the method of assignment determined along with the consultation process.
- (2) The guiding document is always the **National Radio Frequency Plan** which is typically updated every four years after a ITU-World Radio Conference.
- (3) The next step on the process is a **Radio Frequency Spectrum Band Plan**, which looks at a specific frequency band (or possibly service) in the Radio Frequency Plan and offers more detail regarding technical parameters and specific proposals as to which technologies should be deployed. It is the intention of the Authority to ensure that these Radio Frequency Spectrum Band plans will be subject to public consultation.
- (4) It is further envisaged that the Authority may develop a **Radio Frequency Spectrum Assignment Plan** which reflects the Radio Frequency Spectrum Band plan and provides more detail as to which service(s) could be offered and makes proposals as to how the frequency may be assigned. The Radio Frequency Spectrum Assignment Plan aims to depart from the fragmented approach which has characterised spectrum usage in the past. The assignment plan may well propose that the frequency will have to be cleared and reassigned with proposals regarding the movement or migration of existing users into other frequency bands. The consultation on the band plan may have already indicated that demand is going to exceed supply and propose a competitive process. These assignment plans (sometimes termed marketing plans) have a key role as consultation documents.
- (5) Following on from the assignment plan consultation, the Authority will issue an **Invitation to Apply (ITA)** which prescribes the final set of rules regarding the use of the frequency with instructions on how to apply. The ITA is not necessarily for a competitive process such as an Auction, but when it is, it must set out the rules for the competitive process.
- (6) This whole process will take some time and considerable consultation as it may eventually involve taking the particular frequency band from existing users. Users do not have any right of tenure of a frequency, however to cater for all possibilities, supporting regulations on Withdrawal of the Right of Use have been drafted.
- (7) The instrument for assigning the specific frequencies is the ITA. The ITA can specify either a first come first served mechanism or a competition such as an auction. In this way the high demand regulations are absorbed into these regulations.

4 PART III – Radio Frequency Spectrum Licence Exemptions

- (1) The existing licence exemption regulations have been incorporated and attached in the Annexure A, and there is one change in the 5725 – 5875 MHz band (See Table of frequency spectrum licence exemptions).

5 Part IV - Standard Terms and Conditions of Radio Frequency Spectrum Licences

- (1) The standard terms and conditions are intended to cover any spectrum licences.
- (2) The regulations on duration and renewal are an extension of the previous radio regulations and intended to meet the following objectives:
 - i. Be consistent with the Spectrum Pricing Regulations, including the provisions for multi-year licenses.
 - ii. Reflect the technological cycle by requiring a new application to be made after 5 years as a general rule.
 - iii. Reduce the burden on users and administration by allowing renewal up to **10** years for those pre-assigned services which include the majority of smaller licences.
 - iv. Where required, an ITA or a licence may indicate a specific maximum period for renewal.
- (3) It must be stressed that in most cases, a 'fresh' application for the frequency will be approved and any exceptions to this will be the result of a spectrum planning process as mentioned above.
- (4) The regulations on transfer and leasing / third party authorisations make it possible for the Authority to introduce flexible spectrum management methods in the future through an ITA's for specific bands. However, it will not be possible for a licensee to transfer or lease spectrum for a profit. Introducing the possibility of trading for profit is not, at this stage, regarded as compatible with the aim of making spectrum available to all groups for the benefit of society as a whole.

6 PART V – Procedures for Radio Frequency Spectrum Licensing and Assignment

- (1) The Standard procedures are meant to be as simple as possible, they are limited to the identity of the applicant/ registrant and where he/she will be locating transmitters. The standard procedures are intended to apply to the maximum number of categories with the qualification that the Authority can demand that applicant/ registrant submits an extended procedure if required.
- (2) The purpose of the extended procedures is to cover the small number of situations where there is no radio frequency spectrum band plan or ITA, but an application for spectrum has been made which needs to be thoroughly evaluated in terms of the background and capabilities of the applicant.
- (3) The procedures for applications for frequency in High Demand will be contained in a specific ITA, including the rules that were contained in the repealed High Demand regulations.
- (4) Generally speaking, the application procedures have not changed significantly from the existing practice.

7 PART VI – Sharing and Co-ordination of Radio Frequency Spectrum**Assignments.**

- (1) The regulations are intended to ensure that sharing can be maximised and to allow the Authority to introduce innovative technologies and spectrum management approaches.
- (2) The regulations allow the Authority to impose sharing and to demand that the licensees who are sharing an assignment to sort out their internal coordination. This is also an essential component of ensuring the most efficient use is made of spectrum resources.

8 PART VII – Withdrawal of the Right to Spectrum.

- (1) These regulations enforce the right of the Authority to take spectrum away from existing users in order to allow it to be used for another purpose of greater benefit to society as a whole.
- (2) These regulations will only be invoked in exceptional circumstances as a last resort and will be subject to consultation. Existing users of the frequency to be so acquired will, where possible, be assigned frequencies in other bands.

9 PART VIII– Radio Regulations for Specific Services

- (1) These are the revised and updated radio regulations for specific services. These services are specified because they are well established, generally stable and applicable to a large number of licensees.
 - (2) The regulations for Electronic Communication Equipment Dealers replace those for radio dealers and are contained in these regulations because the equipment in question is generally radio equipment.
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