

| | | |
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| 7.7 | Applicant's telefax number/s: | |
| 7.8 | E-mail address of the designated contact person: | |

8. OTHER LICENCES HELD BY APPLICANT

8.1 Indicate whether the applicant holds An ECS or BS Licence. If so, provide details of the expiry date of such licence.

8.2 A separate application to renew the applicant's ECS or BS Licence must be submitted to the Authority prior to the expiry of that Licence in terms of the applicable regulations.

9. FAILURE TO COMPLY WITH REQUIREMENTS

9.1 Provide details of any action taken in relation to the applicant by the Authority or any other person due to a breach or alleged breach by the licensee of the Act and related legislation.

9.2 Provide details of any finding by the Complaints and Compliance Committee against the applicant, as well as details of the sanction imposed by the Authority, if any.

10. UNDERTAKINGS

10.1 Specify any undertakings which the applicant is prepared to make in order to promote the objects of the Act, if its Licence is renewed.

11. LATE FILING OF APPLICATION

11.1 Indicate if this application is filed with the Authority within the time period specified in the Regulations:

11.2 Where this application is filed outside of this time period, set out the reasons for the late

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| filing: |
| |
| 12. GENERAL |
| 12.1 Provide details of any matter which, in the applicant's view, the Authority should consider: |
| |
| 12.2 Attach a resolution authorising the person signing this application to sign this application, marked clearly as Annexure A of FORM B 2 . |

The person signing the registration on behalf of the applicant must acknowledge as follows:

I acknowledge that the Authority reserves the right to have any Licence amended pursuant to this application set aside, should any material statement made herein, at any time, be found to be false.

Signed

(APPLICANT)

I certify that this declaration was signed and sworn to before me aton
the day of 20..., by the deponent who acknowledged that he/she:

1. knows and understands the contents hereof;
2. has no objection to taking the prescribed oath or affirmation; and
3. considers this oath or affirmation to be truthful and binding on his/her conscience.

COMMISSIONER OF OATHS

Name:

Address:

Capacity:

FORM C**APPLICATION TO TRANSFER A RADIO FREQUENCY SPECTRUM LICENCE****(See Regulation 10)**

- Note: (a) Applicants must refer to the Electronic Communications Act, 2005 (Act No. 36 of 2005) ("the Act") and any regulations published under that Act with regard to the requirements to be fulfilled by applicants.*
- (b) Information required in terms of this Form which does not fit into the space provided may be included in an appendix attached to the Form. Each appendix must be numbered with reference to the part of the Form.*
- (c) Where any information in this Form does not apply to the applicant, the applicant must indicate that the relevant information is not applicable.*

| | |
|-----------|--|
| 1. | PARTICULARS OF LICENCE |
| 1.1 | Licence number: |
| 1.2 | Nature of services authorised to be provided in terms of the Licence: |
| 1.3 | Attach a copy of the Licence that is the subject of this application. The copy of the Licence must be marked clearly as ANNEXURE A of FORM C 1 . |

| | |
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| 2. | PARTICULARS OF THE APPLICANT (LICENSEE) |
| 2.1 | Full name of the applicant: |
| 2.2 | Designated contact person: |
| 2.3 | Applicant's street address: |
| 2.4 | Applicant's principal place of business (if different from street address): |
| 2.5 | Applicant's postal address: |
| 2.6 | Designated contact person's tel. number/s: |
| 2.7 | Designated contact person's telefax number/s: |

| | | |
|-----|--|--|
| 2.8 | E-mail address of designated contact person: | |
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|-------------------------------------|--|--|
| 3. PARTICULARS OF TRANSFEREE | | |
| 3.1 | Full name of transferee: | |
| 3.2 | Designated contact person: | |
| 3.3 | Transferee's street address: | |
| 3.4 | Transferee's principal place of business (if different from street address): | |
| 3.5 | Transferee's postal address: | |
| 3.6 | Telephone number/s: | |
| 3.7 | Telefax number/s: | |
| 3.8 | E-mail address of the designated contact person: | |

| | | |
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| 4. LEGAL FORM OF TRANSFEREE | | |
| 4.1 | Indicate if the transferee is: | |
| | (i) a natural person | |
| | (ii) a partnership | |
| | (iii) a juristic person | |
| | (iv) other (specify) | |
| 4.2 | If the transferee is a natural person or a partnership: | |
| 4.2.1 | Provide the identity number of the transferee or each partner in the transferee: | |
| 4.2.2 | Attach a certified copy of the identity document of the transferee or certified copies of the identity document of each partner in the transferee marked clearly as Annexure A of FORM C 2 . | |
| 4.3 | If the transferee is a juristic person: | |
| 4.4 | Indicate the legal form of the transferee (e.g. private company incorporated in terms of the Companies Act, 1973): | |
| 4.5 | Registration number of transferee: | |

- 4.6 Attach certified copies of the transferee's certificate of incorporation and memorandum and articles of association or other constitutive and/or other governing documents of the transferee (e.g. memorandum and articles of association, association agreement, constitution) marked clearly as **ANNEXURE A of FORM C 3**.
- 4.7 If the transferee is not a juristic person but intends to operate as one if this application is granted:
- 4.8 Provide a written undertaking that the transferee will comply with section 5(8) (b) of the Act marked clearly as **ANNEXURE A of FORM C 4**.
- 4.9 Indicate when and how the transferee will comply with section 5(8) (b) of the Act.

V. OWNERSHIP AND MANAGEMENT OF APPLICANT

5. Provide details of all ownership interests in the applicant and the identity and address of each holder of an ownership interest in the applicant. Where an applicant is a juristic person, only shareholdings (or equivalent) of 5% or more of the total issued shares (or equivalent) in the applicant are relevant.
- 5.1 Indicate whether the applicant is listed on any stock exchange, and provide details of any such listing:
- 5.2 In respect of each holder of any ownership interest in any person holding an ownership interest in the applicant, provide the details required in 6.1 in respect of each such holder:
- 5.3 Indicate the extent to which any ownership interest referred to above is held by an historically disadvantaged person
- 6.5. Indicate whether the holder of any ownership interest in the applicant is a foreign citizen or an entity registered or incorporated in any country other than South Africa:

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| 6.6. Indicate whether any person holding an ownership interest in the applicant holds a Licence issued in terms of the Act or holds an ownership interest in any other licensee licensed to provide a service similar to that to which this application relates: |
| 6.7. Provide particulars of any interest held by the applicant in another licensee licensed in terms of the Act: |
| 6.8. Provide details (including name, nationality, identification or passport number, position and address) of each member of the applicant's: <ul style="list-style-type: none"> (i) board of directors or similar body; and (ii) senior management. |
| 7. OWNERSHIP AND BUSINESS PLAN |
| 7.1 Indicate details of ownership and control by historically disadvantaged persons. |
| 7.2 Provide details of the transferee's business plan in respect of the licensed service outlining details as per format in Annexure D (ii-v) marked clearly as ANNEXURE A of FORM C 5 : |
| 7.3 Provide details of how the following will be achieved by the licensee: <ul style="list-style-type: none"> I. Technical efficiency II. Functional efficiency III. Economic efficiency |
| 7.4 Provide separately and mark clearly as ANNEXURE A of FORM C 6 , copies of the transferee's audited annual financial statements for the previous three years: |
| 8. APPLICANT'S LICENCE OBLIGATIONS |
| 8.1 Indicate those obligations of the applicant in terms of the Licence which have |

been discharged and those which will assumed by the transferee, should this application be granted:

8.2 Provide separately and mark clearly as **ANNEXURE A** of **FORM C 7**, a written undertaking given by the transferee, through its duly authorised representative, that it will comply with the applicant's Licence obligations in the event of the transfer application being approved by the Authority.

8.3. Provide reasons for the transfer of the Radio Frequency Spectrum Licence

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8.4. Indicate if Transferor obtained Licence through:

First Come First Serve ☐
 Auction ☐
 Beauty Contest ☐

Amount paid: R....

8.5. Indicate which Radio Frequency Spectrum is currently licensed to the transferor, and attach supporting documents.

9. UNDERTAKINGS

9.1 Specify any undertakings which the transferee is prepared to make in order to promote the objects of the Act, if the Licence is transferred.

The persons signing the application on behalf of the applicant and the transferee must acknowledge as follows:

I, the applicant, acknowledge that the Authority reserves the right to have any Licence amended pursuant to this application set aside, should any material statement made herein, at any time, be found to be false.

Signed

(APPLICANT)

I certify that this declaration was signed and sworn to before me aton
the day of 20..., by the deponent who acknowledged that he/she:

1. knows and understands the contents hereof;
2. has no objection to taking the prescribed oath or affirmation; and
3. considers this oath or affirmation to be truthful and binding on his/her conscience.

COMMISSIONER OF OATHS

Name:

Address:

Capacity:

Signed

(TRANSFEE)

I certify that this declaration was signed and sworn to before me aton
the day of 20..., by the deponent who acknowledged that he/she:

1. knows and understands the contents hereof;
2. has no objection to taking the prescribed oath or affirmation; and
3. considers this oath or affirmation to be truthful and binding on his/her conscience.

COMMISSIONER OF OATHS

Name:

Address:

FORM D**NOTICE OF SURRENDER OF RADIO FREQUENCY SPECTRUM LICENCE****(Regulation 11)****INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA**

- Note: (a) Applicants must refer to the Electronic Communications Act, 2005 (Act No. 36 of 2005) ("the Act") and any regulations published under that Act with regard to the requirements to be fulfilled by applicants.*
- (b) Information required in terms of this Form which does not fit into the space provided may be included in an appendix attached to the Form. Each appendix must be numbered with reference to the part of the Form.*
- (c) Where any information in this Form does not apply to the licensee, the licensee must indicate that the relevant information is not applicable.*

| | | |
|-----------|--|--|
| 1. | PARTICULARS OF LICENCE | |
| 1.1 | Licence number | |
| 1.2 | Nature of services authorised to be provided in terms of the Licence: | |
| 1.3 | Expiry date of Licence: | |
| 1.4 | Date on which surrender of Licence is to take effect: | |
| 1.5 | Attach a copy of the Licence that is the subject of this notice marked clearly as Annexure A of FORM D 1 . | |

| | | |
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| 2. | PARTICULARS OF LICENSEE | |
| 2.1 | Full name of licensee: | |
| 2.2 | Designated contact person: | |
| 2.3 | Licensee's street address: | |
| 2.4 | Licensee's principal place of business (if different from street address): | |
| 2.5 | Licensee's postal address: | |
| 2.6. | Licensee's telephone number/s: | |
| 2.7. | Licensee's telefax number/s: | |
| 2.8. | E-mail address of designated contact person: | |

| | |
|-----------|---|
| 3. | PARTICULARS OF OTHER LICENCES |
| 3.1. | Indicate if the licensee holds any other Licences issued in terms of the Act and whether the licensee intends also to surrender any such Licences. If so, separate notices of surrender in respect of such Licences must be submitted in this regard. |
| | |

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| 4. | STEPS TO INFORM SUBSCRIBERS AND END-USERS |
| 4.1. | Provide details of the steps the licensee proposes to take to inform end-users of the proposed cessation of the services in respect of which the Licence was granted. |
| | |

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| 5. | FEES PAYABLE |
| 5.1 | Indicate those fees and contributions which will be due and payable by the date on which the surrender of the Licence is to take effect and, the amount of such fees and contributions. |
| | |
| 5.2 | Specify the number of months which will have elapsed from the date on which the Licence was issued or from the last anniversary of the date on which the Licence was |

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| | issued, as the case may be: |
| | |
| 5.3 | Indicate those annual fees and contributions payable at a date subsequent to the date on which the surrender of the Licence will take effect, and the proportionate amount which must be paid to the Authority, where this can be calculated as at the date of this notice. |
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| 6. GENERAL |
| 6.1 Provide details of any other matter of which, in the licensee's view, the Authority should be aware and attach a copy of the Radio Frequency Spectrum Licence issued to the licensee: |
| |
| 6.2 Attach a resolution authorising the person signing this notice to sign this notice, marked clearly as Annexure A of FORM D 2 . |

Signed

(LICENSEE)

I certify that this declaration was signed and sworn to before me at on the day of 20..., by the deponent who acknowledged that he/she:

1. knows and understands the contents hereof;
2. has no objection to taking the prescribed oath or affirmation; and
3. considers this oath or affirmation to be truthful and binding on his/her conscience.

COMMISSIONER OF OATHS

Name:

Address:

Capacity:

FORM E**REQUEST FOR INTERVENTION BY THE AUTHORITY FOR PURPOSES OF
COORDINATING RADIO FREQUENCY SPECTRUM USE OR RESOLVING DISPUTES****(Regulation 13)****INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA**

- Note: (a) Applicants must refer to the Electronic Communications Act, 2005 (Act No. 36 of 2005) ("the Act") and any regulations published under that Act with regard to the requirements to be fulfilled by applicants.*
- (b) Information required in terms of this Form which does not fit into the space provided may be included in an appendix attached to the Form. Each appendix must be numbered with reference to the part of the Form.*

| | | |
|-----------|--|--|
| 1. | PARTICULARS OF LICENCEES | |
| 1.1 | Number of Licensees | |
| 1.2 | Licence number of each Licensee | |
| 1.3 | Nature of services authorised to be provided in terms of the Licence: | |
| 1.4 | Expiry date of Licence of each Licensee: | |
| 1.5 | Date on which coordination agreement , if any, was concluded: | |
| 1.6 | Date/s on which ADR was attempted: | |
| 1.7 | Attach a copy of the coordination agreement, if any, marked clearly as Annexure A of FORM E1. | |

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| 2. | PARTICULARS OF LICENSEE/ APPLICANT 1 | |
| 2.1 | Full name of licensee: | |

| | | |
|------|--|--|
| 2.2 | Designated contact person: | |
| 2.3 | Licensee's street address: | |
| 2.4 | Licensee's principal place of business (if different from street address): | |
| 2.5 | Licensee's postal address: | |
| 2.6. | Licensee's telephone number/s: | |
| 2.7. | Licensee's telefax number/s: | |
| 2.8. | E-mail address of designated contact person: | |

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| 3. | PARTICULARS OF LICENSEE OR APPLICANT 2 | |
| 3.1 | Full name of licensee: | |
| 3.2 | Designated contact person: | |
| 3.3 | Licensee's street address: | |
| 3.4 | Licensee's principal place of business (if different from street address): | |
| 3.5 | Licensee's postal address: | |
| 2.6. | Licensee's telephone number/s: | |
| 2.7. | Licensee's telefax number/s: | |
| 2.8. | E-mail address of designated contact person: | |

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| 4. | PARTICULARS OF LICENSEE/APPLICANT 3 | |
| 4.1 | Full name of licensee: | |
| 4.2 | Designated contact person: | |
| 4.3 | Licensee's street address: | |
| 4.4 | Licensee's principal place of business (if different from street address): | |
| 4.5 | Licensee's postal address: | |

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| 2.6. Licensee's telephone number/s: | |
| 2.7. Licensee's telefax number/s: | |
| 2.8. E-mail address of designated contact person: | |

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| 5. PROPOSED AMENDMENT TO THE LICENCE |
| 5.1 Each applicant must set out the following:. |
| <ul style="list-style-type: none"> a. Operator site (coordinates) b. Frequencies in use c. Technology in use d. Power (EIRP) e. Antenna gain f. Height of antennas |
| 5.2 Each applicant must set out the reasons for the dispute and attach the statements of fact supporting the claims, and documented proof of previous attempts to resolve the dispute by negotiation between the parties marked clearly as Annexure A of FORM E2 . |
| |
| 5.3 Each applicant must explain the implications (if any) if the dispute is not resolved and propose options for resolution of the coordination issue: |
| |

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| 6. RADIO FREQUENCY SPECTRUM |
| 6.1 Indicate whether the applicants all hold a radio frequency spectrum Licence. If so, provide details thereof and attach a copy of the radio frequency spectrum Licences marked clearly as Annexure A of FORM E3 . |
| |
| 6.2 In the event that an amendment to the applicant's radio frequency spectrum Licence is |

necessary, a separate application to amend the applicant's radio frequency spectrum Licence must be submitted to the Authority in this regard at the same time as this application.

7. UNDERTAKINGS

7.1 Provide details of undertakings (if any) and other matters which, in the applicants view, the Authority may need to take into consideration:

7.2 Attach a resolution authorising the person signing this application. The resolution must be marked clearly as **Annexure A** of **FORM E4**.

The person signing the application on behalf of the applicant must acknowledge as follows:

I acknowledge that the Authority reserves the right to cease intervention should any material statement made herein, at any time, be found to be false..

Signed 1.....

2.....

3.....

(APPLICANTS)

We certify that this declaration was signed and sworn to before me aton the day of 20..., by the deponent who acknowledged that he/she:

- knows and understands the contents hereof;
- has no objection to taking the prescribed oath or affirmation; and
- considers this oath or affirmation to be truthful and binding on his/her conscience.

COMMISSIONER OF OATHS

Name:

Address:

Capacity:

Annexure B - Apparatus exempt from radio frequency spectrum licenses

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

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 dB μ A/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 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 |
| 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. | N 300 330 EN 301 489-1,3 | CEPT/ERC/REC 70-03 |

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

| | | | | |
|---|-------------------------|--------------------------------|----------------|--------------------|
| | | No restrictions on duty cycle. | EN 301 489-1,3 | |
| | | No channel spacing. | EN 60950 | |
| 26.995; 27.045; 27.095; 27,145; 27.195M | Surface Model Control. | 100 mW erp. | EN 300 220 | CEPT/ERC/REC 70-03 |
| | | No restrictions on duty cycle. | EN 301 489-1,3 | |
| | | 10 kHz channel spacing. | EN 60950 | |
| 35.00 – 25.25M | Aircraft Model Control. | 100 mW erp. | EN 300 220 | CEPT/ERC/REC 70-03 |
| | | No restrictions on duty cycle. | EN 301 489-1,3 | |
| | | 10 kHz channel spacing. | EN 60950 | |
| 36.65 – 36.75M | Wireless Microphones. | 100 mW erp. | EN 300 422 | CEPT/ERC/REC 70-03 |
| | | 100% duty cycle. | EN 301 489-9 | |
| | | No channel spacing. | EN 60950 | |
| 40.65 – 40.70M | Wireless Microphones. | 100 mW erp | EN 300 422 | CEPT/ERC/REC 70-03 |
| | | 100% duty cycle | EN 301 489-9 | |
| | | No channel spacing. | EN 60950 | |
| 40.665, 40.675, 40.685, 40.695 | Surface Model Control. | 100mW erp. | EN 300 220 | CEPT/ERC/REC 70-03 |
| | | No restriction on duty cycle. | EN 301 489-1,3 | |
| | | 10 kHz channel spacing. | EN 60950 | |
| 40.66 – 40.7M | Non-specific SRD. | 10 mW erp. | EN 300 220 | CEPT/ERC/REC 70-03 |
| | | No duty cycle restriction. | EN 301 489-1,3 | |
| | | No channel spacing. | EN 60950 | |

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| 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; 54.5500M | Model Control. | 5W erp 12.5kHz channel spacing | EN 300 220 EN 301 489-1,3 EN 60950 | CEPT/ERC/REC 70-03 |
| 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 – | Non-specific | 10 mW erp | EN 300 220 | |

| | | | | |
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| 173.2375M | SRD – telecom and only. | 25 kHz channel spacing | 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 door openers and motor car alarm systems. | 10 mW erp. No channel spacing. 100% duty cycle. | EN 300 422 EN 300 220 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 | CEPT/ERC/REC 70-03 ASK, FSK, PSK, & FHSS |

| | | | | |
|---|-------------------------------|---|--|---|
| | | | ISO/IEC 18047-7 | |
| 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 | |
| 464.5375M | Security systems | 1W 25 kHz channel spacing. | EN 300 296 EN 301 489-5 EN 60950 | |

| | | | | |
|---|----------------------------|--|--|--|
| 464.500 – 464.5875 | Non-specific SRD | 100mW No channel spacing | EN 300 220 EN 301 489-3 EN 60950 ISO/IEC 18047-7 | |
| 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 | EN 300 220 EN 301 489-1,3 | CEPT/ERC/REC 70-03 CEPT/ERC/DEC (01) 04 |

| | | | | |
|-----------------|-------------------|---|--|--|
| | | LBT. | EN 60950 | |
| 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. | EN 300 220 EN 301 489-1,3 EN 60950 | CEPT/ERC/REC 70-03 |

| | | | | |
|----------------|---|---|---|--------------------|
| | | No channel spacing. | | |
| 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 | Wideband Wireless Systems WLAN Wideband Data Transmission Applications (WBDS) Model Control. | 100 Mw eirp. No duty Cycle. No channel spacing. | EN 300 328 EN 301 489 - 1,3 EN 60950 | CEPT/ERC/REC 70-03 |
| 2400 – 2483.5M | FDDA | 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 | 200 mW eirp. | EN 300 893 | ITU-R M.1625 |

| | | | | |
|--------------|---|--|---|---|
| | Systems / Radio Local Access Network (WAS & RLAN) indoor use only. | Dynamic Frequency Selection (DFS) & Transmitter Power Control Obligatory. | EN 301 489-1,17 EN 60950 | |
| 5470 – 5725M | Wireless Access Systems / Radio Local Access Network (WAS & RLAN): indoor use only. | 1 W eirp. Dynamic Frequency Selection (DFS) & Transmitter Power Control Obligatory. | EN 300 893 EN 301 489-1,17 EN 60950 | ITU-R M.1625 |
| 5725 – 5875M | | 1 watt peak eirp Any modulation | | |
| 5725 – 5875M | | 4 watt peak eirp Frequency hopping or digital modulation only | | |
| 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 | FDMA. | 25 mW eirp. No duty cycle restriction. | EN 300 440 EN 301 489-1,3 EN 60950 | CEPT/ERC/REC 70-03 |

| | | | | |
|----------------|--|---|--|--------------------|
| | | No channel spacing. | | |
| 9500 – 9975M | 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 |
| 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 | EN 300 440 EN 301 489-1,3 EN 60950 | CEPT/ERC/REC 70-03 |

| | | spacing. | | |
|--------|------------|---|--|--------------------|
| 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;
- (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 non-interference and zero protection bases from interference.

Annexure C. 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:
 - i. Amateur Radio;
 - ii. Marine Band;
 - iii. Aeronautical Band;
 - iv. Citizen Band Radio;
 - v. Ski Boats;
 - vi. Two way Radio without repeaters; (including Short Range Business Portable radio);
 - vii. Shared simplex HF;
 - viii. Communal Repeaters;
 - ix. Radio Frequency Spectrum Licence for assignment in the broadcast bands to the holder of a Broadcast Service Licence;
 - x. For frequencies above 40 GHz;
 - xi. Microwave Point to Point
 - xii. Point to Multipoint Point fixed links bands
 - xiii. Satellite Bands Direct Links
 - xiv. 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.

Annexure D. 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's 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"> (3) A certified copy of the Company's registration certificate (4) 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"> (5) 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 in 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. |

(ii) 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 digital 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 E. 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> <ol style="list-style-type: none"> a. A certified copy of the Company's registration certificate b. Name and address of directors and/ or principal executives |
| 2 | Annual report of the applicant and its main shareholders from the previous three years (where available) |
| 3 | Full particulars of the experience and expertise of the applicant, its partners, shareholders, suppliers and contractors in the business contemplated |
| 4 | <p>Extent of beneficial ownership of the applicant by the historically disadvantaged persons</p> <p>Extent of beneficial ownership by women</p> <p>Extent of beneficial ownership by the youth</p> <p>Extent of beneficial ownership by the disabled</p> |

(II) DESCRIPTION OF SERVICE

| No. | Information Required |
|-----|---|
| 1 | Description of service to be provided |
| 2 | Proposed annual coverage, rollout indicating the exact areas and location covered |

(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 Licensee issued, the information contained in the business plan may be incorporated as licence 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 relevant or important 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 | <table border="1"> <tr> <td>Site names</td><td>Name of place where equipment is located</td></tr> </table> | Site names | Name of place where equipment is located |
| 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 |
| 20 | <p style="text-align: center;">Critical Efficiency Factors</p> <p>a. Technical (spectral efficiency) - defined in terms of maximum volume of traffic (voice/ data) within a given spectrum resource (erlangs/MHz/km² or Mbits/MHz/km²) for voice and data respectively. Technical efficiency indicators include the following:</p> <ol style="list-style-type: none"> i. Bandwidth efficiency (expressed in bits/ Hz) defined as the amount of information contained in a finite spectrum . ii. Reuse which dictates to what extent the spectrum can be simultaneously used at multiple locations (reuse factor of 1 is the highest). iii. Time; since applications do not typically use information on a continuous basis and can share resources by time multiplexing. (40 points) <p>b. For broadcast services technical efficiency is defined in terms of ability to address maximum potential audience (coverage) with the minimum amount of spectrum.</p> <p>c. Functional efficiency defined in terms of extent to which the use of spectrum meets the users needs (<i>evaluated by defined key performance indicators (KPI): the KPI for the particular band will be defined by the Authority and provided as part of the Invitation to Apply (ITA) as deemed necessary</i>). (30 points)</p> <p>d. Economic efficiency defines the monetary gain in terms of revenue, profit and value which the licensee derives from that portion of spectrum.(30 point)</p> <p style="text-align: center;">Total score for efficiencies =.....</p> |

Annexure F – 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) |
| Radio apparatus 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 license– Administrative (excluding address changes) | 100 |
| Modification to License– 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 |

Annexure G- Radio Frequency Spectrum Examination and Certificate Fees

1. The fees below are payable when sitting for the examination indicated or to acquire the certificate shown.

Certificate, purpose for which it is required and examination fee unless otherwise stated:

| | Fees (Rand) |
|---|--|
| 1 General Operator's Certificate (Maritime): Performing duties on a ship subject to the requirements of the Global Maritime Distress and Safety System: Issue of certificate | 30 |
| 2 Restricted Radiotelephone Operator's Certificate (Maritime): Operation of a radiotelephone installation on a ship, provided that- (i) the carrier-wave power of the transmitter does not exceed BOW; or (ii) the operation of the transmitter requires only the use of simple external switching devices, any manual tuning of the elements determining the frequency is excluded, and the stability of the frequencies is maintained within the prescribed tolerance limits by the transmitter itself, the peak envelope power of which does not exceed 1,5Kw • Issue of certificate • Per repeated subject | 30 18 |
| 3 Restricted Operator's Certificate (Maritime): Performing duties on a ship subject to the requirements of the Global Maritime Distress and Safety System: Issue of certificate | 30 |

Annexure H - Table of amateur modes of emission.

| No. | Mode | Explanation |
|------------|-------------|--|
| i. | A1A | Telegraphy without the use of a modulating audio frequency (by on/off keying) for aural reception |
| ii. | A3C | Facsimile (with modulation of the main carrier either directly or by frequency modulated sub-carrier |
| iii. | A3E | Double sided telephony |
| iv. | C3F | Television by analogue modulation and vestigial-sideband operation. |
| v. | F1A | Telegraphy for aural reception is including DATA by means of frequency shift keying without the use of a modulating audio frequency one or two frequencies being emitted at any instant. |
| vi. | F1B | Telegraphy including DATA by means of frequency shift keying without the use of a modulating audio frequency one or two frequencies being emitted at any instant. |
| vii. | F1D | Data transmissions by means of frequency shift keying without the use of a modulating audio frequency, with one frequency been emitted at any instant. |
| viii. | F2A | Telegraphy for aural reception including RTTY and DATA by the on/off keying of a frequency or by means of the on/off keying off keying of a frequency modulated emission. |
| ix. | F2B | Telegraphy including RTTY and DATA by the on/off keying of frequency modulating audio frequency or by means f the on/off keying of a frequency modulated emission. |
| x. | F3C | Facsimile by direct frequency modulation of the carrier |
| xi. | F3E | Frequency modulated telephony. |
| xii. | G3E | Phase modulated telephony. |
| xiii. | J3E | Single sideband suppressed carrier telephony. |
| xiv. | J3F | Single sideband suppressed carrier, modulated by slow scan television audio frequencies. |
| xv. | NON | Emission of an unmodulated carrier |
| xvi. | R3E | Single sideband, reduced or variable level carrier telephony |
| xvii. | W9E | Digital speech multiplexed up to twelve channels. |
| xviii. | J2D | Data transmission with the use of a modulating auto frequency |
| xix. | J2E | Digital telephony with the use of a modulating audio frequency |

Annexure I – Amateur radio frequency bands

| Frequency bands in MHz | The Amateur Service | Maximum Power in dB relative to 1 watt PEP | Satellite | Permitted types of transmission | Remarks |
|--|---------------------|---|-----------|---------------------------------|--|
| 0.1357 – 0.378 | Secondary | CLASS A 1 Watt e.i.r.p | | All except pulse or fast scan | |
| 1 810-1.850 | Primary | A1 = 26 dBW A2 = 20 dBW | | All except pulse or fast scan | No Class B operation |
| 3.500 - 3.800 | Co-primary | A1 = 26 dBW A1 = 26 dBW B = 13 dBW | | All except pulse or fast scan | |
| 7.000 - 7.200 | Primary. | A1 = 26 dBW A2 = 20 dBW B = 13 dBW | Allocated | All except pulse or fast scan | |
| 10 100 - 10.150 | Secondary | A1 = 26 dBW | | All except pulse or fast scan | No Class A2 or Class B operation International Band |
| 14.000 - 14.350 14.070 – 14.099 14.225 -14.250 | Primary | A1 = 26 dBW A2 = 20 dBW A2 = 20 dBW | Allocated | All except pulse or fast scan | No Class B operation International Band |
| 18.068 - 18.168 | Primary | A1 = 26 dBW | Allocated | All except pulse or fast scan | No Class A2 or Class B operation International Band |
| 21.000 - 21.450 21.070 – 21.120 21.300 – 21.145 | Primary | A1 = 26 dBW A2 = 20 dBW A2 = 13 dBW | Allocated | All except pulse or fast scan | No Class B operation International Band |

| | | | | | |
|--------------------|-----------|----------------------------|-----------|-------------------------------------|---|
| 24.890 - 24.990 | Primary | A1 = 26 dBW | Allocated | All except pulse or fast scan | No Class A2 or Class B operation International Band |
| 28.000 - 29.700 | Primary | A1 = 26 dBW A2 = 20 dBW | Allocated | All except pulse or fast scan | No Class B operation International Band |
| 28.050 - 28.150 | Primary | A2 = 20 dBW B = 20 dBW | Allocated | All except pulse or fast scan | No Class B operation International Band |
| 28.300 - 28.500 | Primary | A2 = 20 dBW B = 20 dBW | Allocated | All except pulse or fast scan | No Class B operation International Band |
| 29.700 - 30.000 | Secondary | 26 dBW | | All | Secondary basis during disaster exercises and emergency |

Annexure J - Call sign zones.