
GENERAL NOTICE

NOTICE 1114 OF 2007



INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

NOTICE OF INTENTION TO MAKE REGULATIONS IN RESPECT OF LICENCE EXEMPTIONS IN TERMS OF SECTION 6 OF THE ELECTRONIC COMMUNICATIONS ACT NO 36 OF 2005 READ WITH SECTION 31(6) and SECTION 32 IN RESPECT OF RADIO FREQUENCY SPECTRUM, ECS AND/OR ECNS

The Independent Communications Authority of South Africa ("the Authority"), hereby gives notice make regulations in respect of Licence Exempt in terms of Chapter 3 of the Electronic Communications Act, 2005 (No. 36 of 2005).

A copy of the proposed general terms and conditions for the class and individual licences is available on the Authority's website (www.icasa.org.za) and in the ICASA Library at 164 Katherine Street, Pin Mill Farm, First Floor, Block D between 10h00 and 16h30, Monday to Friday.

Interested persons are hereby invited to submit written comments or written representations with regard to the proposed regulations, to be received **by no later than 16h30 on 02 October 2007** by post, hand delivery or facsimile transmission for the attention of:

Mathibela Selepe
Independent Communications Authority of South Africa,
Private Bag X10002
SANDTON
2046

Or
Block A, Pin Mill Farm
164 Katherine Street
SANDTON
2196

Tel: (011) 321 8342
Fax: (011) 321 8547
E-mail: mselepe@icasa.org.za

**PARIS MASHILE
CHAIRPERSON
ICASA**

1. 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.

“Baby Monitors” means radio apparatus used to transmit sound to a remote receiver to monitor the sound or movement of infants;

“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. In this way it can detect or monitor the movement of objects or persons. Alarm systems sometimes use this type of equipment for intruder detection;

“High Performance Radio Local Area Network” (“Hiperlan”) means radio apparatus, utilising spread-spectrum modulation techniques, to link computer nodes within a network;

“Inductive Loop Systems” means radio apparatus which operate by producing a controlled magnetic field within which a predetermined recognisable signal is formed. Examples include shop anti-theft tagging systems, car immobiliser keys and door access tokens;

“Low Power Radio” means radio apparatus used for short range two-way voice communications e.g. toy walkie talkies;

“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 with a low duty cycle (<1.0%);

“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 ;

“RFID “ – A wireless system that uses radio frequency communication to automatically identify, track and manage objects, people or animals. The above system wireless consist of two main components viz, tag and a reader;

“ Tag” – Small chip with an embedded intelligence and the ability to energize a reader within its radius of operation. It can either be passive or battery assisted. It is mobile;

“Reader” – A gadget that can decode exact specifications/ structure {text, id code, protocol etc} within its radius of operation. It normally fixed. The readers can either be modulated or non-modulated;

“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;

“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 are general-purpose high bit rate spread spectrum radio systems;

“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.

1. RADIO FREQUENCY SPECTRUM LICENCE EXEMPTIONS

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

TABLE

Column A	Column B	Column C	Column D	Column E
Frequency Bands K=kHz M=MHz G=GHz	Type of Device	Maximum Radiated Power or Field Strength Limits & Channel spacing	Relevant Standard	Additional Requirements
9 – 59.75K	Inductive Loop System	72 dB μ A/m @ 10 m	EN 300 330 EN 301 489-1,3	CEPT/ERC/REC 70-03
59.75-60.25K	Inductive Loop System including RFID	42 dB μ A/m @ 10m No restrictions on duty cycle No channel spacing	EN 300 330 EN 301 489-1,3 EN 60950 ISO 18000-2	CEPT/ERC/REC 70-03 ASK, FSK & PSK
60.25-70K	Inductive Loop System	72 dB μ A/m @ 10 m	EN 300 330 EN 301 489-1,3	CEPT/ERC/REC 70-03
70-119K	Inductive Loop System. Including RFID	42 dB μ A/m @ 10 m. No channel spacing	EN 300 330 EN 301 489-1,3 EN 60950 ISO – 18000-2	CEPT/ERC/REC 70-03 ASK, FSK & PSK
119-135K	Inductive Loop System including RFID's	72 dB μ A/m @ 10 m. No channel spacing	EN 300 330 EN 301 489-1,3 EN 60950 ISO – 18000-2	CEPT/ERC/REC 70-03. ASK, FSK, PSK
1606.5– 1610 K	Baby Alarms, Wireless Record Players	1W eirp		
7400 – 8800 K	Inductive Loop System	9 dB μ A/m @ 10 m	EN 300 330 EN 301 489-1,3	CEPT/ERC/REC 70-03
6.765 – 6.795 M	Inductive Loop System	42 dB μ A/m @ 10 m	EN 300 330 EN 301 489-1,3	CEPT/ERC/REC 70-03
13.553 – 13.567 M	Inductive Loop System including RFID's.	42 dB μ A/m @ 10 m. ASK, FSK & PSK	EN 300 330 EN 301 489-1,3 EN 60950 ISO 18000-3	CEPT/ERC/REC 70-03.
26.957 – 27.283 M	Inductive Loop System	42 dB μ A/m @ 10 m	EN 300 330 EN 301 489-1,3	CEPT/ERC/REC 70-03
26.957 – 27.283 M	Non-specific SRD	10 mW erp	EN 300 220 EN 301 489-1,3	CEPT/ERC/REC 70-03
26.99 – 27.20 M	Surface Model Control	100 mW erp	EN 300 220-1 EN 301 489-1,3	CEPT/ERC/REC 70-03
35.00 – 35.25 M	Aircraft Model Control Only	100 mW erp	EN 300 220-1 EN 301 489-1,3	CEPT/ERC/REC 70-03
36.65 – 36.75 M	Wireless Microphones.	100 mW erp	EN 300 422	
40.65 – 40.7 M	Wireless Microphones.	100 mW erp	EN 300 422	
40.66 – 40.7 M	Non-specific SRD	10 mW erp	EN 300 220-1 EN 301 489-1,3	CEPT/ERC/REC 70-03
46.61 –46.97M 49.67 – 49.97M	CT0 Cordless Phones.	10 mW eirp	the authority TE-013	
53 –54 M	Wireless Microphones	100 mW erp	EN 300 422	

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
54.4500; 54.4625; 54.4750; 54.4875; 54.500; 54.5125; 54.5250; 54.5375; 54.5500; 60.0250; 60.0375; 60.0500; 60.0625; 60.0750; 60.0875; 60.1000; 60.1125 60.1250M	Model Control.	5W erp	EN 300 220-1	
60.1375 – 60.3750M	Aircraft Model Control Only	5W erp	EN 300 220-1	This band is to be gradually phased out according to SABRE1
141 – 142 MHz	Remote control Industrial Apparatus.	100mW	EN 300 220-1	
148 – 152 MHz	Wildlife telemetry Tracking	25mW		The use of this band is restricted to National game Parks.
173.2125 – 173.2375M	Non-specific SRD - telecommand only	10 mW erp :	EN 300 220-1 EN 301 489-1,3	Channel spacing = 25KHz
173.2375 – 173.2875M	Non-specific SRD	10 mW erp :	EN 300 220-1 EN 301 489-1,3	Channel spacing =25KHz
173.7 – 175.1 M	Wireless Microphones	10 mW eirp	EN 300 422	CEPT/ERC/REC 70-03
402 – 405 M	Medical Implants	25 μ W erp	EN 300 220-1 EN 301 489-1,3	CEPT/ERC/REC 70-03
402 – 406 M	Doppler shift movement detectors, wireless microphones ,garage door openers, motor car alarm systems	10 mW erp	EN 300 422 EN 300 220-1 EN 301 489-1,3	
433.05 – 434.790 M	Non specific SRDs	10mW erp Duty Cycle < 10% No channel spacing	EN 300 220-1 EN 301 489-1,3 EN 60950 ISO 18000-7	CEPT/ERC/REC 70-03 ASK, FSK, PSK & FHSS

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
433.05 – 434.790 M	Non specific SRD	1mW erp Duty Cycle up to 100%	EN 300 220-1 EN 301 489-1,3 EN 60950 ISO – 18007	CEPT/ERC/REC 70-0 ASK, FSK PSK & FHSS
433.05 – 434.79 M	Non-specific SRD	100 mW erp	EN 300 220-1 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
463.975 M, 464.125 M, 464.175M, 464.325M 464.375M	Low Power Radio.	500mW,		Channel spacing =12.5KHz
863 – 865 M	Wireless Audio Systems	10 mW erp	EN 301 357	CEPT/ERC/REC 70-03
863 – 865 M	Wireless Microphones	10 mW erp	EN 300 422	CEPT/ERC/REC 70-03
864.1 – 868.1M	CT2 cordless phones	10 mW eirp	I-ETS 300 131 EN 301 489-1,10 the authority TE – 012	
865 – 868 M	RFID	Channels 1,2,3,5,6,8,9,11,12,14 & 15. 25 mW erp. 200kHz channel spacing	EN 302 208 - 2 EN 301 489-1,3	CEPT/ERC/REC 70-03 Listen Before Talk (LBT) mandatory
865 – 868 M	RFID	Channels 4, 7, 10 & 13. 2 Watts erp. 200 kHz channel spacing.	EN 302 208-2 EN 301 489-1,3	CEPT/ERC/REC 70-03 No LBT required.
868 – 868.6 M	Non-specific SRD	25 mW erp	EN 300 220-1 EN 301 489-1,3	CEPT/ERC/REC 70-03
868.6 – 868.7 M	Alarms	10 mW erp :	EN 300 220-1 EN 301 489-1,3	CEPT/ERC/REC 70-03
868.7 – 869.2 M	Non-specific SRD	25 mW erp	EN 300 220 EN 301 489-1,3	CEPT/ERC/REC 70-03
869.25 – 869.3 M	Alarms	10 mW erp :	EN 300 220-1 EN 301 489-1,3	CEPT/ERC/REC 70-03
869.4 – 869.65 M	Non-specific SRD & RFID	500 mW erp : 10% Duty cycle . Channel Spacing = 25 kHz	EN 300 220-1 EN 301 489-1,3	CEPT/ERC/REC 70-03,
869.65 – 869.7 M	Alarms	25 mW erp :	EN 300 220-1 EN 301 489-1,3	CEPT/ERC/REC 70-03
869.7 – 870.0 M	Non-specific SRD	5 mW erp	EN 300 220 EN 301 489-1,3	CEPT/ERC/REC 70-03

Column A	Column B	Column C	Column D	Column E
Frequency Bands K=kHz M=MHz G=GHz	Type of Device	Maximum Radiated Power or Field Strength Limits & Channel spacing	Relevant Standard	Additional Requirements
915 – 915.2 M	Real Time Location Systems (RTLS)	25mW	EN 300 086 EN 301 489 EN 60950	
915.2 – 915.4 M	Passive Tags	100 mW, 10 x 20 kHz wide channels	Current installations to migrate within two years from the date of publication. To serve as a Guard Band in future.	
915.4 – 919.0 M	Modulating RFID Systems (FHSS)	4 Watts eirp & 200 kHz	FCC CFR 47 PART 15.247 18000-6C	200 kHz Channel Spacing;
919.0 – 919.2 M	Tag Backscatter Guard Band			
919.2 – 921.0 M	Non Modulating RFID Systems	4 Watts eirp; CW only @ 920.0 MHz	Spectral masks as in EN 302 208-2 EN 301 489-1,3	
1880 – 1900 M	DECT cordless phones	250 mW eirp (peak)	EN 300 175 EN 301 489-1,6	
2400 – 2483.5 M	Non-specific SRD	10 mW eirp	EN 300 328-2 EN 301 489-1,3	CEPT/ERC/REC 70-03
2400 – 2483.5 M	Wideband Wireless Systems. WLAN.	100 mW eirp	ETS 300 328 EN 301 489-1,17	CEPT/ERC/REC 70-03
2400 – 2483.5 M	FDMA	25 mW eirp	I-ETS 300 440 EN 301 489-1,3	CEPT/ERC/REC 70-03
2400 – 2483.5 M	Low Power Video Surveillance.	100 mW eirp	EN 300 440 EN 301 489-1,3	CEPT/ERC/REC 70-03
5150 – 5350M	Hiperlan: indoor use only	200 mW eirp	EN 300 836-1 EN 301 489-1,17	CEPT/ERC/REC 70-03 CEPT /ERC/DEC (99)23
5470 – 5725M	Hiperlan: indoor and outdoor use	1 W eirp	EN 300 836-1 EN 301 489-1,17	CEPT/ERC/DEC (99)23 CEPT /ERC/DEC (99)23
5725 – 5875 M	Non-specific SRD	25 mW eirp	I-ETS 300 440 EN 301 489-1,3	CEPT/ERC/REC 70-03
5795 – 5805 M	RTTT data	2 W eirp	EN 300 674 ES 201 674	CEPT/ERC/REC 70-03 CEPT /ERC/DEC (92)02
5805 – 5815 M	RTTT data	2 W eirp	EN 300 674 ES 201 674	CEPT/ERC/REC 70-03 CEPT /ERC/DEC (92)02
9200 – 9500 M	FDMA	25 mW eirp	I-ETS 300 440	CEPT/ERC/REC 70-03

Column A	Column B	Column C	Column D	Column E
Frequency Bands K=kHz M=MHz G=GHz	Type of Device	Maximum Radiated Power or Field Strength Limits & Channel spacing	Relevant Standard	Additional Requirements
9500 – 9975 M	FDDA	25 mW eirp	I-ETS 300 440	CEPT/ERC/REC 70-03
10.5 – 10.6 G	FDDA	500 mW eirp	I-ETS 300 440	CEPT/ERC/REC 70-03
13.4 – 14 G	FDDA	25 mW eirp	I-ETS 300 440	CEPT/ERC/REC 70-03
17.1 – 17.3 G	Hiperlan	100 mW eirp		CEPT/ERC/REC 70-03 CEPT /ERC/DEC (99)23
24.00 – 24.25 G	Non-specific SRD	100 mW eirp	I-ETS 300 440	CEPT/ERC/REC 70-03
24.05 – 24.25 G	FDDA	100 mW eirp	I-ETS 300 440	CEPT/ERC/REC 70-03
76 – 77 G	RTTT radar	55dBm peak eirp	EN 301 091	CEPT/ERC/REC 70-03

(b) The use and possession of all radio apparatus exempt in terms of sub-clause (a) must comply with the following:

- (i) All radio apparatus must be type-approved by the Authority in accordance with section 35 of the Act.
- (ii) 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.
- (iii) The antenna of the radio apparatus must not be higher above average ground level than the lowest point of the place where the radio apparatus operates effectively.
- (iv) The radio apparatus must not cause interference to any person issued a radio frequency spectrum licence by the Authority.
- (v) The user of radio apparatus in licence-exempt frequency spectrum cannot claim protection in respect of interference.

(c) The person exempted from having a radio frequency spectrum licence in terms of sub-clause (a) is still required to have the necessary ECS and/or ECNS licences, as appropriate.

2. LICENCE EXEMPTION: ELECTRONIC COMMUNICATIONS SERVICES (ECS)

- (a) An entity which is non-commercial and in which the state has less than 25% of the share capital thereof, does not require an ECS licence to provide ECS on a non-profit basis.
- (b) An entity in which the state has less than 25% of the share capital thereof, providing ECS services on a re-sale basis does not require an ECS licence.
- (c) The ECS provider exempted from having an ECS licence in terms of sub-clause (a) or (b) is still required to have the necessary radio frequency spectrum and/or ECNS licences, as appropriate.
- (d) All equipment used in respect of the exempted service referred in sub-clause (a) or (b) must be type-approved by the Authority in accordance with section 35 of the Act.

3. EXEMPTION: ELECTRONIC COMMUNICATIONS NETWORKS

(a) Small Electronic Communications Networks

- (i) A small electronic communications network such as a local area network is exempt from licensing.
- (ii) For the purposes of sub-clause (i) a small electronic communications network is one that is situated on a single or contiguous pieces of land and in respect of wireless small electronic communications networks, falls within the specifications set out in the Table above.

(b) Private Electronic Communications Networks ("PECN")

- (i) A PECN used principally for or integrally related to the internal operations of the network operator is exempt from licensing.
- (ii) Where a PECN operator referred to in sub-clause (i) resells or provides any capacity on its network to any third person, it requires an ECNS licence to do so.

- (c) The ECN operator exempted in terms of this clause is still required to have the necessary ECS, ECNS and/or radio frequency spectrum licences, as appropriate.

4. REPEAL

This regulations repeals regulations in Notice 533 of 2004 published in Government Gazette No. 26193
