
GENERAL NOTICE

NOTICE 926 OF 2008



INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

**ELECTRONIC COMMUNICATIONS ACT, 2005 (ACT NO 36 OF 2005):
REGULATIONS**

**REGULATIONS IN RESPECT OF LICENCE EXEMPTIONS IN TERMS OF
SECTION 6 OF THE ELECTRONIC COMMUNICATIONS ACT READ WITH
SECTION 31(6) IN RESPECT OF RADIO FREQUENCY SPECTRUM, ECS
AND/OR ECNS**

The Independent Communications Authority of South Africa, in terms of section 6 read with section 31(6) of the Electronic Communications Act, 2005 (Act No 36 of 2005), hereby prescribes regulations in the schedule.

PARIS MASHILE

CHAIRPERSON

ICASA

SCHEDULE

1 PURPOSE OF THESE REGULATIONS

These regulations are applicable to the identified frequency bands. 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.

In these regulations, terms used have the same meaning as in the Electronic Communications Act, 2005 (Act No 36 of 2005), unless the context indicates otherwise:

“**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:

CT0 - Low power cordless telephone	46 - 49MHz;
CT2 – Second generation cordless telephone	864.1 – 868.1MHz;
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.
;

“**ICASA Act**” means the Independent Communications Authority of South Africa Act, Act No 13 of 2000, as amended;

“**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

- (1) 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:

TABLE OF RADIO FREQUENCY SPECTRUM LICENSE 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 @ 10 m. 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
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.	EN 300 330 EN 301 489-1,3 EN 60950 ISO /IEC 18047-2	CEPT/ERC/REC 70-03 ASK, FSK & PSK

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
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
7400 – 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 – 13.567 M	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 AND 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

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
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 duty cycle. 10 kHz channel spacing.	EN 300 220 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
35.00 – 35.25M	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 – 40.7M	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

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
40.665, 40.675, 40.685, 40.695M	Surface Model Control.	100mW erp. No restriction on duty cycle. 10kHz 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 4 th 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

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
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 – 169.475MHz	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 300 422 EN 301 489-9 EN 60950	CEPT/ERC/REC 70-03

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
402 – 405M	Medical Implants.	25 μ W erp. No duty cycle restriction for devices with LBT, otherwise \leq 1%. 25 kHz channel spacing.	EN 301 839 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.	1mW 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

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 – 434.79M	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 – 446.1M 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	
463.975 M; 464.125 M; 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 301 357 EN 301 489-9 EN 60950	CEPT/ERC/REC 70-03 CEPT/ERC/DEC (01) 18

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
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 phones.	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/DEC (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/DEC (01) 04

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
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 phones.	250 mW eirp (peak). 1.728 MHz channel spacing.	EN 301 406 EN 301 489-1,6 EN 60950 The Authority TE 001	

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
2400 – 2483.5M	Non-specific SRD.	10 mW eirp. No duty cycle restriction. No channel spacing.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03
2400 – 2483.5M	FDMA.	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
2400 – 2483.5M	Low Power Video Surveillance.	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
5150 – 5350M	Wireless Access Systems/ Radio Local Access Network (WAS & RLAN) indoor use only.	200 mW eirp. Dynamic Frequency Selection (DFS) & Transmitter Power Control (TPC) obligatory.	EN 301 893 EN 301 489-1,17 EN 60950	ITU-R M.1625
5470 – 5725M	Wireless Access Systems/ Radio Local Access Network (WAS & RLAN) : Indoor and outdoor use	1 W eirp. Dynamic Frequency Selection (DFS) & Transmitter Power Control obligatory	EN 301 893 EN 301 489-1,17 EN 60950	ITU-R M.1625

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
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
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 restriction. No channel spacing.	EN 300 440 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03

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
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

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
76 – 77G	RTTT radar.	55dBm peak. No duty cycle restriction. No channel spacing.	EN 301 091 EN 301 489-1,3 EN 60950	CEPT/ERC/REC 70-03

(2) Use and possession of all radio apparatus exempt in terms of sub-regulation

(1) 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 must 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 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 no protection basis from interference.

4. REPEALED REGULATIONS

Government Gazette 26193 of 24 March 2004 (Notice 533 of 2004);

Government Gazette 19472 of 25 May 1999;

Government Gazette 20087 of 15 May are all hereby withdrawn.

5. OFFENCES AND PENALTIES

5.1 Any person who fails to comply with these regulations, is liable on conviction by the Complaints and Compliance Commission (CCC) to a fine not exceeding R20 000.

5.2 Should the Commission be of the view that a fine is not appropriate in the circumstances, it may recommend any penalty or order consistent with the provisions of section 17E (2) of the ICASA Act, (Act No. 13 of 2000), as amended.

6. SHORT TITLE AND COMMENCEMENT

These regulations will be known as **Radio Frequency Spectrum Licence Exemptions** regulations and it will come into operation upon publication thereof in the Government Gazette.

7. AMENDMENT AND REPEAL OF REGULATION

The Authority may amend or repeal this regulation by notice in the Government Gazette.
