

Independent Communications Authority of South Africa Pinmill Farm, 164 Katherine Street, Sandton Private Bag X10002, Sandton, 2146 Tel: +2711 566 3000/1

## 2010 FIFA WORLD CUP

## AND

## FCC 2009

# **GUIDE TO FREQUENCY SPECTUM USE**

16 April 2009

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### 1. Introduction

ICASA is governed by the Independent Communications Authority of South Africa Act, 2000 (Act No. 13 of 2000, and the Electronic Communications Act, 2005 (Act No. 36 of 2005) ("the ECA"). The primary object of the ECA is to provide for the regulation of electronic communications in the public interest and for that purpose, amongst others to:

- 1.1 ensure efficient use of the radio frequency (RF) spectrum;
- 1.2 provide access to broadcasting signal distribution for broadcasting and encourage the development of multi-channel distribution systems in the broadcasting framework; and1.3 promote stability in the ICT sector.

In terms of section 31(1) of the ECA, "no person may transmit any signal by radio or use radio apparatus to receive any signal by radio except under and in accordance with a radio frequency spectrum licence granted by the Authority to such person in terms of the ECA".

In terms of section 32(1) of the ECA, "no person may possess any radio apparatus unless he or she is in possession of a radio frequency spectrum licence or is exempted in terms of section 31(6) of the ECA".

Frequencies are assigned as per the South African Table of Frequency Allocations (SATFA) using the Frequency Assignment Radio Licensing guidelines. The process takes approximately 4 weeks before a spectrum licence is granted and issued.

## 2. Spectrum Licensing

The Radio Frequency Spectrum Licence application forms for the FCC 2009 and 2010 FIFA World Cup can be downloaded from the following link: *www.icasa.org.za*. The application forms must be fully completed and posted, faxed or emailed to the following contact details:

Spectrum Licensing – Special Events Block A, Pin Mill Farm 164 Katherine Street Sandton, 2146 Fax: +27 11 566 3322 or +27 11 566 3332 Email: <u>special-events@icasa.org.za</u>

To expedite the application process, the applicable application fee (see table 2 below) must be paid and proof of payment must be submitted with the application form at least thirty (30) days before the start date of an event. Any application received less than thirty (30) days before the start date of an event is not guaranteed to be finalised on time. Approval of an application is subject to frequency availability and a fully completed application form accompanied by proof of payment of the application fee. Incomplete application forms will not be considered.

The following Information is required for the application:

- The type of event
- The applicant's contact with all the contact details, this should include the South African contacts as well (if not South African)
- Type of application
- Make and model of the equipment to be used

- Geographic location in South Africa where equipment and frequencies will be used. Applications will be location specific as there will be a need to be coordinate to avoid interferences. It is important to note that equipment using one frequency at a location my use another frequency at another location as that frequency may have been allocated to another user already
- All the technical parameters as per the application form
- The satellite name, orbital position etc if it's a VSAT or SNG application
- Any other relevant information

The radio frequency spectrum shall be assigned as per the geographical area of the event as listed in the Radio Frequency Spectrum Licence e.g. for 2010 FIFA world cup, if a match is taking place at FNB stadium (Johannesburg), a frequency may easily be assigned around that stadium but may not be available for use for a match at the Green point stadium (Cape Town).

Due to the extensive use of frequency spectrum throughout the country, frequency assignments will be done on a case by case basis and per area of operation e.g. assignment for two way radios at Ellis Park Stadium will only be allowed for use exactly where specified and for that specific purpose.

The following are some of the reasons that could result in frequency applications not to be approved:

- Unavailability;
- Congestion;
- Deviation from SATFA;
- Unacceptable technical parameters; and
- Incomplete application forms.

## 3. Licence Exempt Bands

The Government Gazette No. 31290 (Notice 926 of 2008) prescribes regulations in respect of licence exempt bands. Applicants are thus urged to familiarise themselves with the regulations.

#### 4. Shared and Coordinated Bands

Non licence exempt frequency bands will be treated as shared bands and will be assigned on a coordinated basis. The South African Frequency Table of Frequency Allocations can be found at *www.icasa.org.za/.* 

## 5. Frequencies to Use

Table 1 below shows spectrum bands and frequencies for identified possible radio services during the events.

Radio Service	Spectrum Bands
Radio Talkback	138-140.5 MHz paired with 141.5 – 144 MHz 146 -148.95 MHz paired with 153.05 – 156 MHz 446.1 – 450 MHz paired with 441.1 – 445 MHz 450 – 453 MHz paired with 460 – 463 MHz Low power (5W) mobile radio operates in the band 463.975 MHz - 464.425 MHz on license bases.
	The PMR 446 (446 – 446.100MHz) can be utilized without a license.
Radio Cameras - Ground based	2.400 - 2.483.5 GHz 4.695 - 4.755 GHz 10.00 - 10.15 GHz 31.010 - 31.290 GHz paired with 31.510 - 31.790 GHz
Radio Cameras - Air based	2.400 - 2.483.5 GHz 4.695 - 4.755 GHz 10.00 - 10.15 GHz 31.010 - 31.290 GHz paired with 31.510 - 31.790 GHz
Radio Microphones	36.65 - 36.75 MHz 40.65 - 40.7 MHz 53 - 54 MHz 173.965 - 174.015 MHz 402 - 406 MHz 863 - 865 MHz
Satellite Uplinks	C-Band, Ku Band. Extended C-band is not available in South Africa

 Table 1: Possible radio services and allocated spectrum bands

## 6. Type approval

6.1 In terms of section 35 (2) of the ECA:

"The Authority may prescribe the types of equipment, electronic communications facilities and radio apparatus, the use of which does not require approval where such equipment, electronic communications facilities and radio apparatus has been approved for use by the European Telecommunications Standards Associations or other competent standards body where the equipment complies with type approval standards prescribed by the Authority"

Local and foreign entities which are involved in the provisioning of electronic communications may apply for exemption from standard equipment type approval during the hosting of special events. ICASA accept test reports of the relevant European standards, provided the testing has been performed at an accredited test facility. An accredited test facility is a laboratory or a test house that is continuously being checked for among others compliance to ISO guide 25 and the qualification levels of personnel conducting such test being monitored. Normally such a routine is done once a year. Such updated information is normally obtained from national bodies.

All applicants must show that the equipment has been approved for use by the competent standards authority by providing a certificate of compliance, a declaration of conformity, etc.

All exempted equipment will be granted with a special permit and all such equipment must be clearly marked with an ICASA sticker in order to differentiate them from the illegal users. ICASA will issue the relevant sticker.

Type-approval for all equipment does not expire and the equipment can be used again in future without a need for another application for type approval.

#### 6.2 Supporting application information

The following information and documents should be submitted with the type approval application:

• Two identifying photographs of at least postcard size of the equipment to be type approved. Colour photographs are preferred. (Photocopies are not acceptable.)

- A functional description of the equipment, at least at block diagram level.
- Operating instructions.
- The original or a certified copy of the test report (both RF and EMC), issued by an accredited communication testing facility.
- Detailed circuit diagrams, approved and stamped by the test facility and highlighting any modifications which have been incorporated.
- The originals or certified copies of the test report and certificate of compliance with Radio Regulations issued by an approved test facility.
- The original or a certified copy of the test report for Safety Regulations issued by an approved safety test facility.

The turnaround time for applications will be ten working days. The absence of the application fee and/or an incomplete application form will result in the application not being processed.

## 7. Prohibited Operations

The use of any jamming device including mobile phone jamming is prohibited in South Africa. Wireless microphones working in the 1800MHz band are not allowed.

#### 8. Fees and Method of Payment

The fees for spectrum licensing and type approval are as follows:

#### 8.1 FCC 2009

Since the FCC 2009 will be taking place over a period not more than thirty (30) days, spectrum users will not be charged any spectrum fees but will be given authority or permit to use spectrum for that specified duration. The permit shall identify the equipment, frequency, venue licensed and the duration. The equipment shall be marked with the

ICASA sticker bearing the same information. The applicant will be charged an application fee as indicated in table 2 below.

#### 8.2 2010 FIFA World Cup

Since the 2010 FIFA World Cup will be taking place over a period not more than thirty (30) days, spectrum users will not be charged any spectrum fees but will be given authority or permit to use spectrum for that specified duration. The permit shall identify the equipment, frequency, venue licensed and the duration. The equipment shall be marked with the ICASA sticker bearing the same information. The applicant will be charged an application fee as indicated in table 2 below.

Service	Application Fee	Spectrum License Fee
VSAT	R1600.00	R770.00 per each MHz
		assigned as prescribed
SNG	R1460.00	R770.00 per each MHz
		assigned as prescribed
Single Frequency Channel	R620.00	R42.00 per each radio as
		prescribed
Double Frequency Channel	R1100.00	R48.00 per each radio as
		prescribed

Table 2: Frequency spectrum application and license fees

#### 8.3 Type Approval

The following fees are payable for type approval applications for each equipment type and model:

Application	Application fee
New Application	R4 000
Untested variant	R2 000
Tested variant	R2 000
Badge Engineering	R4 000

#### Table 3: Type approval application fees

#### 8.4 Method of Payment

ICASA does not accept any form of cash in its premises. All payments should be done directly to the bank using the company name and a reference. The following banking details must be used:

Bank	:	Nedbank
Account no.	:	1462002927
Branch code	:	146245
Branch	:	Corporate Client Service - Pretoria
Reference	:	eg. Imaging Innovations
Account type	:	Deposit Account
Swift Add	:	NEDSZAJJ

### 9. Spectrum Monitoring and Enforcement

ICASA technical officers and inspectors will be on site to monitor and inspect all the equipment in use to ensure that there is compliance with the issued licence and the regulations..

Inspectors will all carry special identity documents and a badge for accreditation in order to have special access to all the venues and restricted areas. They will conduct RF tests, type approval and spectrum licensing inspections on all equipment a day before the event at all accredited areas.

All applicants will be allowed only two weeks after the event to clear all the assigned frequencies and to switch off the equipment.

Enforcement officers will trace and monitor all the frequencies that were assigned in and around the venues to make sure that there are no illegal users and that all the equipment that was type approved has been switched off.

All non-licensed or licensed equipment which operates outside the license conditions will be confiscated.

#### **10.Application Forms**

All applications should be submitted on the prescribed application form. The following applications forms are attached:

- Form No. 001 Terrestrial Service
- Form No. 002 VSAT/SNG
- Form No. 003 RF Equipment Type Approval

## **11.Contact Details**

For all applications, enquiries and queries, the following people should be contacted:

Mr. Mokgadi Ledwaba	Tel: +27 11 566 3321
	Fax: +27 11 566 3322
	email: <u><i>Mledwaba@icasa.org.za</i></u>

Mr. Gert Visser

Tel: +27 11 566 3331 Fax: +27 11 566 3332 email: <u>Gvisser@icasa.org.za</u>