

**INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA**  
**NOTICE 317 OF 2017**



**PROVIDES STANDARD OPERATING PROCEDURES FOR THE GUIDELINES  
REGARDING THE USE OF RADIO FREQUENCY SPECTRUM IN THE E-BAND (71-76  
GHz PAIRED WITH 81-86 GHz), CONTAINED IN THE AMENDMENT TO THE RADIO  
FREQUENCY SPECTRUM REGULATIONS, 2015**

The Independent Communications Authority of South Africa (“the Authority”) on 22 November 2016 published, in Government Gazette number 40436 (Notice Number 781 of 2016), the Radio Frequency Spectrum Amendment Regulations 2016 which, amongst others, introduced the concept of light-licensing for the E band 73.375-75.875 GHz paired with 83.375-85.375GHz.

The Authority hereby published a notice on the standard operating procedures regarding the use of radio frequency spectrum in the E band8 (71 – 76 GHz) Paired with the (81 – 86 GHz).



**NOMVUYISO BATYI**  
**COUNCILLOR**

**STANDARD PROCEDURES AND GUIDELINES REGARDING THE USE OF RADIO  
FREQUENCY SPECTRUM IN THE E BAND (71-76 GHz PAIRED WITH 81-86 GHz)**

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## **1 Introduction**

The Independent Communications Authority of South Africa (“the Authority”), on 22 November 2016 published, in Government Gazette number 40436 (Notice Number 781 of 2016), the Radio Frequency Spectrum Amendment Regulations 2016 which, amongst others, introduced the concept of light-licensing for the E band 73.375-75.875 GHz paired with 83.375-85.375GHz.

Central to the light-licensing regime is that the location of and characteristics of the stations are recorded in a reference RF database on a first-come-first-served basis. The responsibility users are to ensure coordination and compatibility with previously registered stations. It is envisaged that the link registration on the reference RF database will ultimately be online. The Authority is in the process of developing such a system and has in the interim decided to introduce a manual link registration procedure as outlined in this document.

This document provides guidelines and procedures for radio spectrum applications in the E Band. It is based on the Radio Frequency Spectrum Regulations and the National Radio Frequency Plan currently in force.

## **2 Eligibility**

Eligible persons who may apply for or self-register link (s) are:

- ECNS or
- Persons who have been granted exemption from holding ECNS licences by the Authority.

## **3 Radio Spectrum Fees**

The radio spectrum fee is levied as the “minimum fees<sup>1</sup>” per annum per link per hop based on 2 x250 MHz channel or multiples thereof. As an example, a 500-MHz link will attract twice the amount paid for a 250-MHz link. Where applicable, the fees will be charged pro-rata based on the date of registration or licence issue date. The minimum fees are revised on an annual basis and are published as an amendment to the Radio Frequency Spectrum Fees Regulations.

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<sup>1</sup> Minimum fee is a fee prescribed in the Radio Spectrum Fees Regulations and is adjusted annually based on the consumer price index (CPI) prevailing at a time.

## 4 Overview

As per Radio Frequency Spectrum Regulation 2016, as amended, the utilisation of the E Band shall be segmented as follows:

### 4.1 Self-co-ordinated Block A

Channel Number	1	2	3	4	5	6	7	8	9	10
Centre frequency (GHz)	73.500	73.750	74.000	74.250	74.500	74.750	75.000	75.250	75.500	75.750
Centre frequency (GHz)	83.500	83.750	84.000	84.250	84.500	84.750	85.000	85.250	85.500	85.750

- 4.1.1 The prospective user shall notify the Authority of the geographic location and technical details of the radiocommunication link (or links) within 30 days of the deployment of the installation.
- 4.1.2 Only type-approved equipment is allowed and shall be registered on the database.
- 4.1.3 A prospective user shall perform the necessary technical assessments against the Authority's database of already registered links. The user shall only register and deploy the link if it has been established that it will not cause harmful interference to the links in the database.
- 4.1.4 Once completed, the registration forms must be e-mailed to [ebandregistrations@icasa.org.za](mailto:ebandregistrations@icasa.org.za). The date and time on the e-mail will be used to establish the order of priority in terms of interference resolutions between licensees.
- 4.1.5 Properly completed and signed notifications must be sent by e-mail to [ebandregistrations@icasa.org.za](mailto:ebandregistrations@icasa.org.za)

### 4.2 ICASA-coordinated Block B - Standard licensing procedures.

Channel Number	1	2	3	4	5	6	7	8
Centre frequency (GHz)	71.250	71.500	71.750	72.000	72.250	72.500	72.750	73.000
Centre frequency (GHz)	81.250	81.500	81.750	82.000	82.250	82.500	82.750	83.000

4.2.1 The use of Block B shall follow the Standard Application Procedure as prescribed in the Radio Frequency Spectrum Regulations as amended.

4.2.2 Technical details shall apply as contained in the Radio Frequency Spectrum Regulations.

4.2.3 Only type-approved equipment shall be registered on the database.

4.2.4 Completed and signed applications can be submitted to:

**The General Manager: Licensing**

**ICASA**

**Private Bag X 10002**

**Sandton, 2146**

**[SpecLicensing@icasa.org.za](mailto:SpecLicensing@icasa.org.za)**

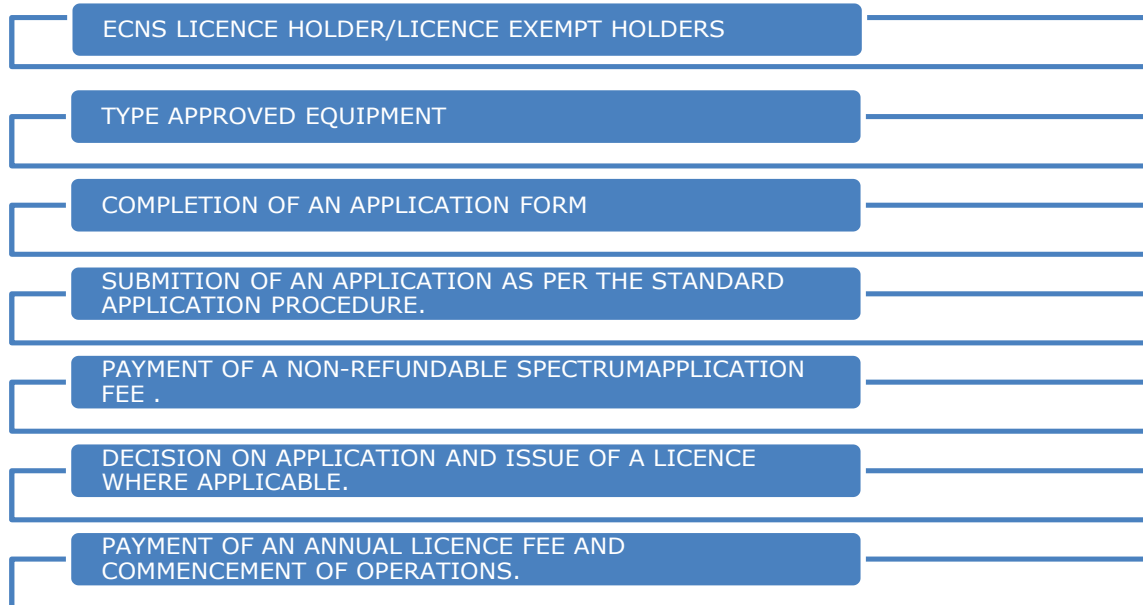
## 5 Annex 1 – Block A Application Process flow.

The following are the steps in the process of link registration for the “self-coordination framework” under Block A of the E band.



**6 Annex 2 – Block B Application Process flow.**

The following are the steps in the process of link registration for the standard application procedure under Block B of the E band.



**7 Annex 3 – Form for E-band technical parameters**

Licensee name			
The Authority's serial reference number			
Date of link registration with a time stamp			
Province			
City/Town			
Link path-length (km)			
Channel bandwidth utilised (MHz)			
Bit-rate (Mbps)			
Receiver sensitivity			
Polarisation (H, V or V&H)			
Duplexing method (FDD/TDD)			
Site A		Site B	
Geographical co-ordinates (dd:mm:ss)		Geographical co-ordinates (dd:mm:ss)	
Ground height (m ASL)		Ground height (m ASL)	
Antenna height (m AGL)		Antenna height (m AGL)	
Equipment manufacturer		Equipment manufacturer	
Equipment model number		Equipment model number	
Equipment Type Approval number (TA number)		Equipment Type Approval number (TA number)	
Antenna manufacturer		Antenna manufacturer	
Antenna model number		Antenna model number	
Antenna maximum gain (dBi)		Antenna maximum gain (dBi)	
Antenna elevation angle (deg)		Antenna elevation angle (deg)	
Antenna azimuth angle (deg)		Antenna azimuth angle (deg)	
e.i.r.p (dBm)		e.i.r.p (dBm)	
Transmit frequency carrier (MHz)		Transmit frequency carrier (MHz)	

End///