



## PUBLIC NOTICE

**The Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ) advises the public of the following Regulatory Requirements for Low Power Devices including Wideband Data Transmission Systems**

**Operating in the 2.4 GHz and 5GHz Bands**

### **1 GENERAL**

#### **1.1 Scope of Directive**

This Directive defines the Regulatory Requirements for low-power radiocommunications equipment using Frequency Hopping Spread Spectrum (FHSS), Direct Sequence Spread Spectrum (DSS) or digital modulation and operating in the 2.4 GHz and 5 GHz bands. The requirements apply to both the portable unit and the Access Point (AP) of the wide band data transmission system.

The Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ)

*Declares*

- a. That the frequency bands 2400 - 2483.5 MHz (ISM), 5.15 – 5.35 GHz and 5.470 –5.725 GHz are designated for the use of Short Range Devices (SRDs)

including Radio Local Area Networks (RLANs) which comply with the technical characteristics shown in the table below.

- b. That SRDs including RLANs covered by and operating in compliance with this Directive are exempt from individual licensing;
- c. That the new operating thresholds, rules and requirements enunciated in this notice will enter into force immediately;

## 2 DIRECTIVE

The Authority directs the following:

### 2.1. Minimum requirements for operation within Zimbabwe

The use of the bands 2400-2483.5 MHz (2.4 GHz) and 5.15 – 5.35 GHz and 5.470 –5.725 GHz by SRDs in Zimbabwe shall be in compliance with technical and regulatory requirements specified in the table below

### 2.2. Type Approval and Authorisation

All equipment operating in this band is subject to Type Approval by the Authority against technical specifications stipulated in the table below and against stipulated standards as appropriate.

### 2.3. Internet Cafes (Hot spots)

All internet cafes operating RLANs otherwise known as Hot Spots shall register with the Authority prior to the establishment of such RLANs. Existing operators of Hot spots are given up to 30 June 2011 to comply with this directive.

### 2.4. Status with respect to other services

SRDs including RLANs utilising this band operate on a **secondary basis**. Accordingly SRDs shall neither cause harmful interference nor claim protection from licensed systems operating within or outside the bands. Systems causing harmful interference shall cease to operate with immediate effect.

### 2.5. POTRAZ Authorisation

Operation of systems that exceed power limits provided in Table 1 without an express authorisation from POTRAZ shall result in prosecution in terms of the Postal and Telecommunications Act [Chapter 12:05]

### 3 TECHNICAL AND REGULATORY REQUIREMENTS FOR SRDs IN 2.4. and 5GHz.

The following technical requirements shall apply for the use of 2.4 and 5 GHz bands by SRDS Including RLANS

Table 1

Frequency band	POWER	EMC Standard	Spectrum Access and Mitigation Requirement	Application
(a) 2400-2483.5MHz	Maximum - <b>100 mW</b> E.I.R.P  For FHSS, the maximum spectrum power density is limited to -10dBW/100 kHz  For DSSS and other modulation schemes the maximum spectrum power density is limited to -20 dBW/1MHz.	ETSI (EN 300328) <i>'Electromagnetic compatibility and Radio spectrum Matters (ERM); Data transmission</i>	The equipment shall implement an adequate spectrum sharing mechanism in order to facilitate sharing between the various technologies and applications covered by this Directive.	Both indoor and outdoor <i>(under normal propagation conditions a compliant unit will provide a coverage radius <math>d &lt; 100m</math>)</i>
(b) 5.15 – 5.35 GHz	Maximum – 200mW The maximum mean e.i.r.p. density shall be limited to 10mW/MHz in any 1 MHz band.	ETSI (EN 301 893) V1.4.1 <i>"Broadband Radio Access Networks (BRAN); 5 GHz high performance RLAN; Harmonized EN covering essential requirements of article 3.2 of the R&amp;TTE Directive"</i>	DFS and TPC Mandatory	Restricted to indoor use.
(c) 5.470 – 5.725 GHz	1W mean E.I.R.P The maximum mean e.i.r.p. density shall be limited to 50mW/MHz in any 1 MHz band.	ETSI (EN 301893) V1.4.1 <i>"Broadband Radio Access Networks (BRAN); 5 GHz high performance RLAN; Harmonized EN covering essential requirements of article 3.2 of the R&amp;TTE Directive"</i>	DFS and TPC Mandatory	Both Indoor and out door  <i>(under normal propagation conditions a compliant unit will provide a coverage radius <math>d &lt; 300m</math>)</i>

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