
GOVERNMENT NOTICE

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

No. 1141

25 August 2006

**NOTICE IN TERMS OF SECTION 46 OF ICASA AMENDMENT ACT, NO 3 OF 2006 INVITING REPRESENTATIONS WITH REGARD TO SPECTRUM REALLOCATION TO CATER FOR RADIO FREQUENCY IDENTIFICATION TECHNOLOGY.**

1. The independent Communications Authority of South Africa ("the Authority") hereby gives notice and invites written comment in terms of Section 4B of ICASA Amendment Act, No 3 of 2006 ('the Act') on spectrum reallocation to cater for Radio Frequency Identification (RFID) Technology.

2. Interested persons are hereby invited to submit written representations, including an electronic version of representation in Microsoft Word, of their views on the above Section 46 of the Act enquiry by not later than 20 November 2006.
3. Persons making representation are requested to indicate if they wish to make oral representations, the duration of which shall not exceed one hour.
4. Written representation may be posted, hand delivered or submitted electronically for the attention of:

Mr. Abel Thoobe
RF Specialist Frequency Management
Email: athoobe@icasa.org.za
Tel: +27 11 321 8420
Fax: +27 11 321 8538
Cell: + 27 83 262 7093
Private Bag X10002
Sandton
2146

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ICASA, 164 Katherine Street, Block A, Pinmill Farm, Sandton.

5. All written representations submitted to the Authority pursuant to this notice shall be made available for inspection by interested persons from 30 November 2006 at the ICASA library and copies of such representations and documents will be obtainable on payment of a fee.

6. At the request of any person who submits a written representation or document pursuant to this notice, the Authority may determine whether such representation or document, or portion thereof, relates to the financial capacity or business plan of any person, or to any other matter reasonably justifying confidentiality, in which event such presentation or document shall not be made available for inspection by members of the public. If the request for non-disclosure to public is refused, the person making the request will be allowed to withdraw the representation or document in question.

7. With respect to the documentation determined not to be open to public inspection as aforementioned in paragraph 6 above, the Authority may direct that the public or any member or category thereof, shall not be present during oral submission relating to such documentation; provided that those present shall have been notified of this intention, allowed to object thereto and after such objections had been considered by the Authority.

8. In order to provide for a wider basis for representations to be made during the enquiry, the Authority has compiled questions pertinent to this issue.

9. These questions have been incorporated into the annexure hereto entitled 'Discussion **Document - Spectrum reallocation to cater for Radio Frequency Identification (RFID) Technology** (hereinafter referred to simply as the "Discussion Document").

10. Representation may address any relevant issue, whether or not such an issue has been raised in the Discussion Document. Furthermore, it is not a prerequisite that representations should address any or all of the issues raised in the Discussion Document.

11. The findings and conclusions, if any, made by the Authority following the enquiry will be published in the Government Gazette in accordance to Section 4B of the Act.

Discussion Document on spectrum reallocation to cater for Radio Frequency Identification (RFID) Technology

Definitions.

"RFID" – A wireless system that uses radio frequency communication to automatically identify, track and manage objects, people or animals. The above wireless system 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 {text, id code, protocol etc} within its radius of operation. It is normally fixed. The readers **can** either be modulated or non-modulated.

"CT2" – Cordless Telephony currently using 864.1 – 868.1 MHz spectrum.

1. Objectives

The Authority has been inundated with spectrum allocation requests for **RFIDs** from different vendors. Recent developments within ITU Region 1 and to a lesser extend ITU Region 2 has forced the Authority to reconsider spectrum allocation for RFIDs.

The endless innovative applications of RFID Technology have the potential to contribute immensely to the National economy thus advancing the competitiveness of the telecommunications industry as an economic driver. To that end, the Authority recognizes the need of harmonizing the spectrum policy and technical requirements with regional and global activities and developments in order to ensure that maximum benefits are derived from economies of scale. In effect the most affected service by this public consultation **will** be current CT2 spectrum users. It is also important to encourage the development of innovative applications, without causing harmful interference to other services coexisting in the same spectrum.

RFIDs will therefore be required to operate in accordance with parameters selected to permit compatible co-existence between users in the same frequency band and with other services using these bands.

The Authority through this public consultation seeks to determine whether the public would be better served by permitting the use of RFIDs on the below identified frequency bands or anticipate introducing site licenses at remote locations (mines). In either instances equipment type approval is obligatory.

2. Spectrum requirements

In each of the following frequency bands kindly advise the specification i.e. Radio Frequency (RF), Electromagnetic Compatibility (EMC) & Safety specifications that the Authority must consider in granting type approval.

- 10 – 125kHz
- 13.56MHz;
- 433MHz;
- 864.1 – 868.1MHz;
- 869.4 – 869.65MHz;
- 915 – 915.2MHz;
- 915.2 – 915.4MHz;
- 915.4 – 917.4MHz;
- 917.4 – 919.4MHz;
- 919.5 – 921MHz.

Please state the appropriate channel slots and the appropriate modulation scheme in each of the chosen band above.

2.1 In your view how would you advise the Authority to treat the above identified bands? Please elaborate.

2.2 In your view what approach must the Authority use to the current CT2 users?

2.3 What issues must the Authority consider in granting site licenses?

2.4 What health risks must the Authority consider when dealing with RFID's?

2.5 The issues of authenticity, integrity as well as privacy are often raised in the context of RFID's. Please comment.
