



**Policy and Regulatory Affairs**

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**18 December 2015**

**Attention: Mr Manyapelo Richard Makgotlho**  
Independent Communications Authority of South Africa  
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E-mail: rmakgotlho@icasa.org.za

Dear Mr Makgotlho

**SABC WRITTEN SUBMISSION ON THE DISCUSSION PAPER ON THE  
FRAMEWORK FOR DYNAMIC AND OPPORTUNISTIC SPECTRUM MANAGEMENT**

The SABC hereby submits its written submission on the Discussion Paper on the framework for dynamic and opportunistic spectrum management 2015.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Ngoka Judy Monyela', written over a horizontal line.

**NGOKA JUDY MONYELA  
ACTING GENERAL MANAGER  
POLICY AND REGULATORY AFFAIRS**



**SABC WRITTEN SUBMISSION TO THE INDEPENDENT  
COMMUNICATIONS AUTHORITY OF SOUTH AFRICA ON THE  
DISCUSSION PAPER ON THE FRAMEWORK FOR DYNAMIC AND  
OPPORTUNISTIC SPECTRUM MANAGEMENT 2015 FOR  
CONSULTATION**

**18 December 2015**

## 1 Introduction

The SABC would like to thank the Independent Communications Authority of South Africa (“the Authority”) for the opportunity to make a written submission to the discussion paper on the framework for dynamic and opportunistic spectrum management 2015 for consultation (“the consultation document”). The SABC supports the Chairperson’s intention to manage the nation’s scarce natural resource (the radio frequency spectrum) and to aid in the economic developments in both the rural and urban areas of our nation. The SABC welcomes and appreciates the Chairperson’s invitation to submit written representations and contribute to the intended broadband implementation in the country.

The SABC will nevertheless largely confine its submission on this consultation document to areas which are of concern to its business as the public broadcaster and will further substantiate its initial submission.

## 2 Background

As indicated in the Introduction, the SABC supports new technologies that will enhance the efficient use of spectrum. The SABC is well aware of the advances that have been made in the cognitive radio technologies and the improved efficiencies that they can bring into spectrum usage.

In light of these Broadcasting Services have made series of concession in the past years:

- In 2007, Broadcasters relinquished the use of the 800MHz band for IMT services
- In 2012, Broadcasters again yielded the use of the 700MHz band for IMT services

These concessions have resulted in the decreased availability of spectrum usage for broadcasting and its ancillary services. Up until this point, the broadcasting services had primary allocation to this band while its ancillary services shared the band on secondary basis.

It should also be noted that within the remaining spectrum (470 -694MHz), the broadcasting services and its ancillary services are now expected to share the band with Television White Spaces (TVWS) technologies.

### **3 SABC's Concerns**

#### **3.1 Attention to Broadcast Digital Migration (BDM) process is drifting**

The following points are worthwhile noting:

- There are currently analogue services which are operating in the 700MHz and 800MHz bands.
- Even after Analogue Switch Off (ASO), there will still be digital broadcasting services which will need to be migrated to the allocated broadcasting bands (470 – 694MHz).
- Services Ancillary to Broadcasting (SABs) are also operating all over the UHF band and need to be migrated to the allocated broadcasting band.

However, before these activities have been completed, the Authority is already introducing new services into the allocated broadcasting band. The SABC submits that the priority should concentrate on the successful migration of the broadcasting and its ancillary services to the allocated band (470 – 694MHz). These processes, including allocation of frequency bands for IMT services as well as the introduction of TVWS, impede on the required resources that are needed to ensure successful BDM implementation. The Authority appears to be neglecting BDM, a process that has been underway for some time prior to the publication of the SA Connect policy.

### **3.2 Empirical evidence of sharing studies not credible**

At the moment the sharing studies of TVWS have been based on theory and tested amongst existing analogue services. It is only after the successful ASO and the migration of digital broadcasting and its ancillary services that it can be accurately assessed if sharing conditions are favourable. Until then nothing concrete can be deducted from such tests. The SABC submits that it is too early to consider the introduction of new services into the broadcasting space giving all the uncertainties.

### **3.3 Untested Theories**

The TVWS study is premised on the successful implementation of Single Frequency Network (SFN) for Digital Terrestrial Television (DTT). There is no concrete evidence in the country of successful implementation of SFNs at the moment. Based on this SFN theory, a seven Mux plan have been submitted to the ITU. Failure of this SFN theory will impact on the 7 Mux plan and lead the introduction of a multi-frequency network (MFN).

The SABC submits that there is a possibility of implementing DTT with an MFN scenario and in that case, there will be no “spaces” within the broadcasting band for sharing with TVWS and the 7 Mux plan will also be called into question. In that case, there will be less Multiplexes and therefore a reduced capacity of broadcasting services.

It is also noteworthy to point out that the discussion document makes reference to a 4 Mux plan. It has been well understood that a 4 Mux plan will not adequately cater for the future needs of broadcasters in the country, hence the submission and coordination of the 7 Mux plan. The discussion document therefore needs to make reference to the 7 Mux plan.

### **3.4 Biases against other new technologies**

There are other new technologies of equal national importance such as the digital audio broadcasting plus (DAB+) and digital radio mondiale (DRM). The interest of these technologies to the Authority seems so minimal as compared to the TVWS.

It is the SABC's submission that the Authority should have equal interest in digital radio as with the TVWS and at least initiate the development of digital radio policy.

### **3.5 Protection of Broadcasting Services**

TVWS has the potential to introduce interference into the allocated broadcasting spectrum and more especially renders SABCs potentially unusable. Section 2 (t) of the Electronic Communications Act enjoins the Authority to protect the integrity and the viability of public broadcasting services. Thus, the SABC's viability should be safeguarded in order to ensure that the public continues to have access to public interest programming.

## **4 Conclusions**

The SABC submits the following:

- The SABC submits that the priority should concentrate on the successful migration of the broadcasting and its ancillary services to the allocated band (470 – 694MHz). These processes, including allocation of frequency bands for IMT services as well as the introduction of TVWS, impedes on the required resources that are needed to ensure successful BDM implementation.
- The Authority appears to be neglecting BDM, a process that has been underway for some time prior to the publication of the SA Connect policy. The Authority should

concentrate and use its best endeavours to support the successful implementation of the BDM and thereafter resume the process of licensing the 700/800MHz frequency bands.

- The SABC submits that it is too early to consider the introduction of new services into the broadcasting space giving all the uncertainties giving that the current sharing studies cannot be relied upon as it is based on theory and analogue television services
- The SABC submits that there is a possibility of implementing DTT with an MFN scenario and in that case, there will be no “spaces” within the broadcasting band for sharing with TVWS and the 7 Mux plan will also be called into question. When that happens, there will be less Multiplexes and therefore a reduced capacity of broadcasting services.
- The SABC questions why the Authority makes reference to a 4 Mux plan instead of a 7 Mux plan.
- The Authority should have equal interest in digital radio as with the TVWS and at least initiate the development of digital radio policy.
- The SABC’s viability should be safeguarded in order to ensure that the public continues to have access to public interest programming.
- Should the Authority decide to hold public hearings on this subject matter, the SABC wishes to participate in such proceedings.