



Policy and Regulatory Affairs

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ATT: Mr. Manyapelo Richard Makgotlho

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Per email: rmakgotlho@icasa.org.za

Dear Mr. Makgotlho

THE SABC WRITTEN SUBMISSION ON THE DRAFT NATIONAL RADIO FREQUENCY PLAN 2017

The SABC would like to submit its written representation with regard to the Draft National Radio Frequency Spectrum 2017.

Yours Sincerely

A handwritten signature in black ink, appearing to be 'Philly Moilwa', written over a horizontal line.

Philly Moilwa
General Manager
Policy and Regulatory Affairs Department



**SABC WRITTEN SUBMISSION TO THE INDEPENDENT
COMMUNICATIONS AUTHORITY OF SOUTH AFRICA**

**ON DRAFT NATIONAL RADIO FREQUENCY PLAN 2017
(NRFP 2017)**

3 February 2017

1 Introduction

The SABC would like to thank the Independent Communications Authority of South Africa (“the Authority”) for the opportunity to make representations on the Draft Document on National Radio Frequency Plan 2017 “the draft Plan”. The draft plan was published in the government gazette on 9 December 2017 with gazette number 40480. The SABC will like to be given the opportunity to substantiate its written submissions through oral hearing which has been scheduled for 9 and 10 February 2017.

The SABC supports the Chairperson’s intentions to amend and update the National Radio Frequency Plan in order to keep the plan current and in the interest of orderly spectrum management.

As the only public broadcaster within the Republic of South Africa charged with a specific mandate set out in Chapter IV of the Broadcasting Act No. 4 of 1999. The Public Broadcasting Service Charter not only obliges the SABC to provide radio and television programming that informs, educates and entertains; but further states that these are to be made available throughout the Republic. This places a unique obligation on the SABC that requires adequate radio frequency spectrum and protection in order to fulfil this mandate. This also means that the SABC will from time to time test new technologies such as the DAB+ and will require spectrum test license to do so. Currently, the SABC provides 5 TV Channels and 18 Radio Stations to its audience.

The SABC will largely confine its submission on this draft NRFP-17 plan to areas which pertain to its business as the public broadcaster.

2 SABC’s Inputs

2.1 General

The draft plan notes that different colours of Green, Red and Yellow were respectively used to signify new additions based on resolutions taken at the WRC-15; modifications to existing

resolutions by the WRC-15 and suppression of existing resolutions by the WRC-15. It further notes that a strike through will also be used to signify texts that is to be deleted in the National Radio Frequency Plan of 2013 (NRFP 2013). This implies that the “base” plan is the NRFP-2013 and all insertions and deletions will be clearly marked either with a colour code or a strike through.

However, this was not followed up in writing the draft plan. For example, in the band 11.7 to 12.5 GHz and under Notes and Comments, whole new additions have been added which were not part of the NRFP-2013 and they are not colour coded, though they might have been a good explanation to the NRFP-2013. It is recommended that in the interest of transparency, all new additions and deletion to the NRFP-2013 should be clearly marked as such.

2.2 GE89 Conversion to GE06 174 – 223 MHz

The statement of Broadcasting Allotments in accordance with GE89 Plan being in the process of conversion to GE06 in the Notes and Comments section in this band is inaccurate and not factual. The two agreements are separate and each is complete. The process of analogue switch-off and restacking of the spectrum below 694 MHz does not make the plans to be also in the process of being converted. The Authority is being requested to “clean” the draft plan and correct these statements.

2.3 470 – 694 MHz

2.3.1 Misleading Digital Migration Timelines

The only migration timeline that is known to the Corporation is the ITU timeline in Resolution 224 which was taken at the WRC -12. Since the Country missed the deadline of 17 June 2015, there is no knowledge of another agreed timeline especially in the SADC. The Authority is being requested to clarify this statement under Notes and Comments referring to “analogue television to migrate to digital television in line with SADC timeline”.

2.3.2 DTT migration challenges

The progress of the Broadcast Digital Migration (BDM) has been slow and challenging. Some of the challenges do not only include the availability of set top boxes (STBs) in the retail space but also digital to digital migration or the restacking of the frequencies to below 694MHz. The cost estimates as well as the availability of technical expertise to carry out the restacking exercises were articulated in the JSAG meetings over two (2) years ago when it was still functional. It is therefore important to emphasise that the Corporation, while it is committed to migrate to

digital platform, still has analogue television transmissions in this band and in the band 174 – 238 and 246 - 254 MHz and adequate protection in the interim is still required.

2.3.3 TV White Spaces

The Corporation has earlier on expressed its objection to the introduction of TV White spaces in this band especially ahead of successful BDM. The risks in this case need to be pointed out that digital to digital migration might result in massive changes to any such implementation. It is also important to express that the Corporation does not support the introduction of nomadic or mobile TV White Spaces devices in this band at all. Such devices even when they are agile present some forms of interference which are difficult to detect and control. The use of TV White Spaces can only be supported if it is non-mobile, coordinated and licenced within a geographic boundary. Further and separate engagements on the introduction of TV White Spaces are required.

2.3.4 SAB/SAP

The Corporation supports the use of this band for Services Ancillary to Broadcasting and Services Ancillary to Program making (SAB/SAP) only if each use is coordinated and licenced. The band needs to be protected for digital terrestrial broadcasting use and hence making the band licence free could result in an uncontrolled interference that will be difficult to trace and resolve. In UK, “site” licence is required for SAB/SAP devices in this UHF DTT band.

The SABC supports licence-free SAB/SAP devices in the frequency bands 863 – 865 MHz, 1785 – 1805 MHz and 1880 – 1900 MHz. The band 863 – 865 MHz has already been allocated in the draft plan. However, the bands 1785 – 1805 MHz and 1880 – 1900 MHz have been allocated to Mobile and Fixed services on Primary basis. The Corporation is seeking for a secondary allocation for the SAB/SAP services in these bands and on non-interference and non-protection basis and as license exempt bands. These allocations are in line with some of the European countries - in Germany, these bands 1785 – 1805 MHz and 1880 – 1900 MHz are used as licence exempt for wireless microphones.

2.3.5 STLs

Station to Transmitter links (STL) is a very integral part of broadcasting services. For many years the links have been accommodated in this band on license exempt basis. However, this draft plan has been silent on this service. The Authority is being requested to clarify the STL allocations.

2.4 2300 – 2450MHz

The Corporation has been licenced to use this band for its Television Outside Broadcasting (TVOB) and Electronic News Gathering services. However, this band is unusable as it has also been licenced to other operators as well. An alternative band for this service will be required possibly in the band 2025-2110 MHz. The Authority has been notified of this situation and the Corporation is looking forward to a feasible solution.

2.5 3600 – 4200 MHz (C-Band)

The sharing of the sub-band (3600 – 3800 MHz) between Broadband Fixed Wireless Access (BFWA) and Very Small Aperture Terminal (VSAT) was not a decision of the WRC-15 as the draft plan has indicated under the Notes and Column section of this band. This is another misleading statement from the Authority. A position of “no change” to this band was adopted as a National position as well as at the WRC-15. The draft plan also proposed that VSAT system migrate out of the band to the Ku band. It is important to stress that the C-band is used by Broadcasters for distribution of signal from the Signal Distributor’s uplink facility to the various terrestrial transmission sites. A loss of signal at a terrestrial transmission site or anywhere in the transmission path can mean millions of viewers being affected. The Ku band cannot be used for such key signal distribution function due to its high susceptibility to attenuation especially the typical heavy rainfalls that are experienced in South Africa. A network of fibre links to the various terrestrial transmission sites is also not feasible due to the high financial cost involved. Research has shown that it will cost R12bn to lay fibre network to cover all the Sentech’s terrestrial transmission sites.

This band is not only used by Broadcasters. There is a serious misconception that the band is hardly used in South Africa. There are other Government departments including department of Minerals Resources, Air Traffic Navigation Services etc. that use this band for mission critical operations.

Besides, this draft plan cannot be the “place” for such a proposal to be introduced. A proper consultation with the Users of the band should have been conducted before being introduced in this draft Plan.

3 Recommendations

- The Corporation's require an urgent re-allocation of the band 2025-2110 MHz for its TVOB operations as the band 2300 – 2450MHz which it has currently been licenced for is rendered unusable due to many licensees in that band. A letter to this effect has been sent to the Authority.
- The introduction of TV White Spaces in the band 470 – 694MHz ahead of successful BDM is unsupported as this can result in interferences that are difficult to trace and control especially during the restacking process.
- C-band (part of) is used by Broadcasters for signal distribution from the Signal Distributor's uplink facility to the various terrestrial transmission sites. A loss of signal at a terrestrial transmission site or anywhere in the transmission path can mean millions of viewers being affected negatively. Therefore the sharing of the sub-band (3600 – 3800 MHz) BFWA is unsupported.