9 FEBRUARY 2016



# CELL C'S COMMENTS ON DRAFT UPDATE OF THE NATIONAL RADIO FREQUENCY PLAN 2017 GG 40480

# **INTRODUCING THE CELL C TEAM**

Cell C is today represented by the following team:

Harrish Kasseepursad:Senior Manager: RegulatoryGustav Hoffman:Regional Radio Planning ManagerChristian Mhlanga:Consultant

Cell C thanks the Authority for the opportunity to present its views on the update of the National Radio Frequency Plan regulations and the extension granted for written comments. Cell C further trusts that this process will assist the Authority in refreshing the 2013 NRFP to keep it current with the WRC 15 outcomes



# **CONTENT OF THE PRESENTATION**

- 1. Introduction
- 2. Specific Comments
- 3. Conclusion



# **1. INTRODUCTION**

- Cell C commends and supports the intention of the Authority to update the existing 2013 National Radio Frequency Plan
- Cell C understands that the updates are in respect of the ITU-R WRC 15 outcomes as recorded in the Final Acts of the World Radiocommunication Conference WRC 15 Geneva 2015 - Our comments are made on this basis
- Cell C welcomes the harmonized approach adopted by the Authority both on an international and regional level
- After consultation has taken place, the final NRFP must be approved by the Minister and be unambiguous, thus ensuring regulatory certainty



## 2. SPECIFIC COMMENTS

## **Spectrum Management Principles**

Cell C recommends the following spectrum management principles:

- Ensure that the radio frequency spectrum is utilized and managed in a transparent, orderly, efficient and effective manner
- Ensure procedures are in place to eliminate harmful interference
- Create an environment for flexibility (adapt to market changes and new technologies), innovation, and rapid introduction of services
- Ensure economic efficiency where market allocation of spectrum to users, and uses that derives higher value from the spectrum resource
- Be consistent with government policy
- Ensure the harmonization of radio frequency spectrum with international, regional and national requirements and in so doing, conform to international best practice



### **Radio Frequency Regulation**

- In the period 2013 to 2016, the Authority has published the following spectrum regulations:
  - Terrestrial Broadcasting Frequency Plan
  - Radio Frequency Migration Regulations and Radio Frequency Migration Plan
  - Final International Mobile Telecommunications ("IMT") Roadmap
  - Radio Frequency Spectrum Assignment Plans
  - Amended Radio Frequency Regulations 2016 (included the E and V Bands)
- Due to the many specific requirements contained in the abovementioned regulations and the complexity of the NRFP:
  - there is a risk of incorrectly capturing all the information in the NRFP
  - there could be instances where important comments by licensees were not considered rendering the abovementioned regulations incomplete
- This complexity and overlap may result in unintended consequences such as:
  - a delay in finalizing the NRFP
  - amending the abovementioned regulations over and over again
  - confusing in interpretation and application
  - unnecessary litigation causing wasteful expenditure to all parties involved
- Cell C recommends careful management and rationalisation of regulations



#### **Compliance with proper process**

- The Authority has not indicated to what extent it has consulted with the Minister of Telecommunications and Postal Services in relation to the migration of licensees to ensure that the provisions as contemplated in subsection 34(7) of the Electronic Communications Act ("ECA") are met
- It is unclear to what extent the Authority has met this requirement as this is prescribed in terms of subsection 34(16) of the ECA for state-owned companies
- Lastly, Cell C further recommends that the NRFP be approved by the Minister in terms of all the applicable provisions of the ECA



## **Primary Allocations**

Example of concerns:

- licensees who are assigned radio frequency spectrum for a FIXED application but use the assigned spectrum allocated for MOBILE to provide IMT services. Whilst licensing is technology-neutral, the international designation of spectrum is critical to uphold to avoid interference and ensure consistency
- an entire radio frequency spectrum band may be changed where the old Primary allocation (FIXED) is required to migrate out of the band and replaced by a later ITU recommended service like MOBILE (IMT). This may lead to potential abuse or unintended consequences by licensees who are assigned radio frequency spectrum under a Primary allocation but hold on to their assignments to their benefit when an amendment occurs to the NRFP. This also applies to the 2100MHz TDD (2010MHz-2025MHz) spectrum which is currently assigned to two licensees and now designated for future IMT services



#### **Definitions and clarification**

- Cell C supports the inclusion of the IMT bands as identified by Final Acts of the World Radiocommunication Conference WRC 15 Geneva 2015.
- In particular, Cell C believes that the 450MHz, 700MHz, 800MHz, 900MHz, 1500MHz,1800MHz, 2100MHz, 2100MHz(TDD), 2300MHz, 2600 MHz, 3350MHz and 3500MHz radio frequency spectrum bands are designated for IMT in terms of the corresponding WRC resolutions (212, 223, 224, 750, 760 and 761)
- Cell C notes that the E Band (frequency range 71-76 GHz paired with 81-86 GHz) is missing from the standard letter-band designation. The Authority recently published the "Amended to the Radio Frequency Spectrum Regulations, 2015" which includes the E band and V Bands
- Cell C recommends that all the applications contained in the "typical application" as contained in Table 3, "Table of frequency allocations", be defined if not already defined in section 1. For example, the term "Government Services" is used frequently but is not defined anywhere in the document.



#### Format

For ease of reference, understanding and avoidance of ambiguity, Cell C also recommends that each column follows the following format and where each application is presented it must be accompanied with its specific spectrum sub-allocation

ITU Region 1 allocations and footnote	South Africa allocations and footnotes	Typical Applications	Notes and Comments
Spectrum Range 000-1000 MHz	Spectrum Range 000-1000 MHz		Each note and comment must be aligned to each allocation
MOBILE	MOBILE	IMT (000-500 MHz)	ΥΥΥΥΥ
FN	FN	FN	
Fixed	Fixed	Fixed Links (501-	XXXXX
FN	FN	1000MHz) FN	



## **Comments on Specific Bands**

Band	Frequency Band	Cell C Comments
	335.4- 387MHz	Cell C seeks clarity on the inclusion of Unmanned Aerial Vehicles (UAV) as an application in this sub-allocation. Furthermore, it is unclear on when and where existing licensees would move to or alternatively operate on a non- interference basis in the absence of defined power transmission limits.



## **Comments on Specific Bands**

450MHz	450-470 MHz	Cell C understands that BROADCASTING is now added in terms of the DTT restacking process. Cell C supports the migration of licensees from the IMT bands to this band however Cell C encourages the Authority to ensure that due process is followed to ensure that the prescribed requirements under section 34 of the ECA are met.
		Cell C notes the intention of the Authority to include "White Spaces" as an application in this band whilst it is still under consideration by the Authority and further consultation on this has not taken place. Cell C recommends that this be removed until a final decision is reached on "White Spaces" as it has both national and international implications. It does not currently feature in the SADC Frequency Allocation Plan.



# **Comments on Specific Bands**

Band	Frequency Band	Cell C Comments
700 MHz	694-790 MHz	Cell C supports the use of this band for IMT applications however Cell C encourages the Authority to ensure that due process is followed to ensure that the prescribed requirements under section 34 of the ECA are met.
800 MHz	790-862 MHz	Cell C supports the use of this band for IMT applications however Cell C encourages the Authority to ensure that due process is followed to ensure that the prescribed requirements under section 34 of the ECA are met.



## **Comments on Specific Bands**

Band	Frequency Band	Cell C Comments
1500 MHz	1 427-1 518 MHz	Cell C supports the use of this band for IMT applications however Cell C encourages the Authority to ensure that due process is followed to ensure that the prescribed requirements under section 34 of the ECA are met.
2100 MHz (TDD)	1900-1920 MHz, 2010- 2025 MHz	See Cell C comments under Section 2.4 in written submission.
		Cell C recommends that the Authority conduct an audit in this spectrum range and unused spectrum must be returned to the Authority for re-assignment. This will ensure efficient use of the spectrum range.



## **Comments on Specific Bands**

Band	Frequency Band	Cell C Comments_
2300 MHz	2300-2400 MHz	See Cell C comments under Section 2.4 in written
		submission.
2600 MHz	2500-2690 MHz	Cell C seeks confirmation from the Authority that the band is available as published in the RFSAP. It is unclear if the licensee which was assigned spectrum in this band has completed the in-band migration or has migrated out of the band and under what arrangements. As this forms part of the proposed packages in the ICASA ITA process (which is subject to review), clarity here is vital.
3350 MHz	3300-3400 MHz	The NRFP incorrectly references this band so as to form part of IMT Roadmap and RFSAPs of 2015 regulations. Cell C recommends that these regulations be updated to reflect the change to this band.

**Comments on Specific Bands** 

Band	Frequency Band	Cell C Comments_
3.5 GHz	3400-3600	The channeling arrangements in the NRFP contemplate an FDD arrangement whereas the RFSAP regulations indicate the TDD option as the chosen option for South Africa. Cell C seeks confirmation on the exact channeling arrangements that would be chosen for South Africa.



## **3. CONCLUSION**

Cell C supports the updates to the National Radio Frequency Plan with respect to the MOBILE allocations for IMT applications in the designated bands. These updates must be accompanied by and read with the Resolutions and Footnotes as contained in the Final Acts of the World Radiocommunication Conference WRC 15

In this respect, Cell C encourages the Authority to ensure that due process is followed to ensure that the prescribed requirements under 34 of the ECA are met

Cell C again commends the Authority for updating the NRFP and encourages the Authority to ensure that the NRFP is the foundation to which all other spectrum regulations are derived from

