



CellC

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DRAFT RADIO FREQUENCY SPECTRUM
ASSIGNMENT PLAN FOR FREQUENCY BAND 825
TO 830 // 870 TO 875 MHz

ICASA Oral Hearings
6 September 2018

AGENDA

1. Introduction to the team
2. Cell C summary and recommendations of its submission
3. Conclusion

The team

- Mr Themba Phiri Executive Head, Regulatory
 - Mr Harrish Kasseepursad Executive: Regulatory
 - Ms Nicolette van den Heever SM: Legal & Regulatory
 - Marius Otto Senior Network Intelligence Analyst, Operations
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- Cell C would like to thank the Authority for the opportunity to present its views on the proposed draft RFSAP (IMT 850) published in GG 41082, dated 1 September 2018

SUMMARY OF CELL C SUBMISSION

Alignment with Regional and International bodies

- Cell C supports the finalization of draft RFSAP subject to:
 - the alignment of this second draft Radio Frequency Assignment Plan with the resolutions as adopted at various international, regional and national levels (ITU, ATU and SADC)
 - resulting in same spectrum bands that are commonly used country to country, which allows the same equipment, including devices, to be sold across large regions, bringing down the cost while also reducing interference and enabling international roaming
 - this is likely to enable licensees to achieve economies of scale in terms of the acquisition of subscriber equipment whilst keeping cross-border radio frequency spectrum interference disputes to a minimum
 - the relevant and appropriate sharing/compatibility studies are completed by all affected licensees/parties to ensure no or minimal disruptions/interference occurs

Requirements for the Preparation of a RFSAP

In terms of the ICASA 2013 FMP, the following process needs to be followed:

- A change in the use of RFS band(s) must be initiated through a RFSAP in the prescribe manner
- Wrt the radio frequency migration process, a RFSAP may include:
 - The process for migrating existing users and uses from their existing spectrum location, specifying the bands to which users and uses will be migrated - including in-band migration where applicable
 - The period for the reallocation of the radio frequency band in question, specifying the date at which the users to be migrated and cease transmission
- A RFSAP shall be subject to public consultation:
 - The Authority shall publish the RFSAP in GG inviting interested persons to submit written representations as specified
 - The Authority may hold a public hearings
- Cell C recommends that the above is followed and concluded

Milestones and Due Dates

- The Regulations include many milestones that do not have specific timelines for the affected users or are dependent on other timelines
- For the band to be totally cleared and for IMT 850 licensing, existing broadcasting licensees must be migrated to their appropriate bands, Liquid (Neote)/GSM-R must complete an in-band migration and finally Liquid(Neotel) should permanently vacate IMT 850 Band
- To avoid unnecessary delays, disputes, disruptions to emergency/ life critical services and ambiguity, Cell C recommends that each milestone be accompanied with a due date and steps that are likely to be required. The process and expectations in relation to migration be clearly set out as an introductory section to the RFSAP

Reasons, Assignment process

❑ Reasons Document

- Cell C notes that the Authority consulted on the migration before finalising the 2014 IMT Roadmap and 2015 RFSAP Regulations. The IMT 850 RFSAP was deferred until further notice. No reasons were provided for this decision
- In addition, the public/affected parties need to understand which licensees and what RFS bands are affected, the quantity of RFS that is assigned and what proportion of that RFS is subject to migration
- Therefore due to the complexity of this RFSAP, Cell C recommends that the Authority publish a reasons document for its decisions on this matter. This will greatly assist in understanding what is required from licensees and the framework thereof

❑ Assignment Process

- Cell C recommends that specific timelines are attached to each milestone (migration) thus providing regulatory certainty, prior to the ITA being issued, similar to the other RFSAP's
- That any regulations, specifically the framework and issuing of an ITA for spectrum in demand be held in abeyance upon such time the policy direction/s for the award of high demand spectrum are published by the Minister of DTPS , as required under the ECA

Migrating Licensees

- ❑ Cell C requests that the Authority ensures that the objective to promote competition as contained in s2 of the ECA read with Chap.5 are observed. Licensees who are required to migrate should not unfairly benefit by acquiring valuable high demand RFS (as was anticipated in the ICASA 2011 ITA process)
- ❑ Cell C is concerned that current occupants of certain bands should not be able to retain those allocations and also participate in any ITA for additional bands, as this would confer disproportionate benefits on those parties by affording them access to additional scarce resources. For example a licensee should not automatically get access to IMT 850 when cleared whilst having prior access to the 825-830//870-875 MHz
- ❑ Cell C recommends that the Minister of DTPS should be consulted on the migration of existing governmental entities or organizations as users of the spectrum in terms of a migration plan, under section 34(16) of the ECA Act. Cell C recommends that due process must be followed

Compensation and Interference

- **Compensation for Migration**

- The Authority must clearly indicate how licensees may be compensated if they stand to lose valuable spectrum after the completion of an in-band migration

- **Interference**

- The Authority's role is to approve a clear and unambiguous migration framework:
 - strict timelines,
 - co-ordination activities,
 - sharing and compatibility studies,
 - communication plans,
 - escalation process,
 - disaster management process, and
 - a fall-back process and dedicated project team
- Cell C therefore recommends a prescribed action plan and timetable for greater transparency after necessary investigation into possible interference that has taken place, so that licensees or applicants for spectrum can begin business-planning and technical-planning
- Therefore Cell C requests that it be consulted where technical planning, sharing and compatibility studies are concerned to avoid any unintended consequences or further prejudice to Cell C. Protection to primary users as prescribed in regulations must be adhered to at all times (and 2013 NRFP FN9 for 800 MHz vs 850MHz)

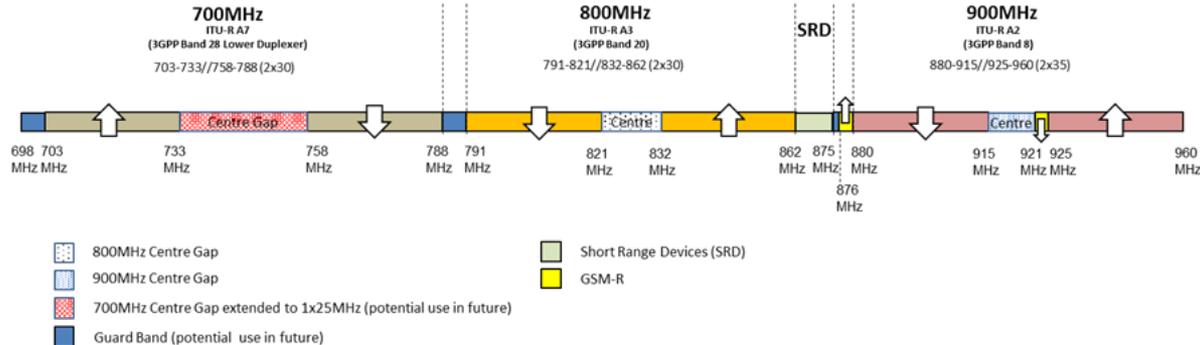
900 MHz non-contiguous

925.2-934.6 MHz paired with 880.2-889.6MHz (9.6 MHz) and 949.2-950.4MHz paired with 904.2-905.4 MHz (1.4MHz), which is a total of 11MHz.

- ❑ Cell C is a licensee at the edge of the 900MHz band, it has and is been most susceptible to radio frequency spectrum interference from the 800MHz and 850MHz Bands. Cell C has experienced RFS interference from Liquid (Neotel) transmission equipment which severely hampered Cell C's ability to deliver good quality ECS services. To mitigate against this interference, Cell C has, at its own expense, installed special high cost filters on Cell C sites to reduce the impact of the current CDMA850 interference
- ❑ The interim in-band migration by 2MHz by Neotel will result in less radio frequency spectrum interference to Cell C equipment. However anyone transmitting in the range (832-852MHz) will also impact Cell C. This is because Cell C is closest to the 800MHz range in the form of 3rd order harmonic which will interfere with the frequencies between 893MHz to 915MHz

Channel Certainty, Sharing and Compatibility Studies

- Certainty on the Channelling arrangements for 700MHz and 800 MHz bands
 - Cell C therefore seeks clarity from the Authority if it is its intention through this process to align the IMT 850 band with the SADC proposals (on 700/800MHz) and the possible timelines thereof and/or
 - the clearing out of the band and the RFS assignment process thereof



- Cell C understands that Liquid (Neotel), GSM-R, SRD Providers, Broadcasters, Telkom and Cell C are affected by this RFSAP. Clarity must be given on the Authority's short, medium and long goals into the out/in-band migration, adoption of new technologies, managing the interference (national and cross border)

Conclusion

- Cell C requests the Authority to consider Cell C's written and oral commentary with its recommendations
- Cell C understands that the road to finalising the RFSAP for IMT 850 band is complex and affects many parties and therefore requires informed processes
- The IMT 850 band process needs to be open and transparent and follow the rules consistent with the RFS Regulations
- Lastly it needs to be that these processes follow a phased approach with different milestones, such approach will be supported by Cell C