



Draft National Radio Frequency Plan 2025

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1. Introduction

- 1.1. SENTECH thanks the Independent Communications Authority of South Africa (ICASA) (“Authority”) for the opportunity to submit on the *Draft National Radio Frequency Plan 2025*, published in Government Gazette No.52449 on 04 April 2025 (“Draft NRFP”).

2. Preamble: Legislative Framework

- 2.1. SENTECH argues for the explicit inclusion of the ITU **Radio Regulations Board (RRB)** due to its critical oversight and interpretative role in the implementation of the ITU Radio Regulations (RR), the international treaty that governs the use of the radio-frequency spectrum and satellite orbits.
- 2.2. The RRB is responsible for the following
 - 2.2.1. Translation of new or revised treaty provisions into practice, often through updated RoP or clarifying interpretations between WRCs.
 - 2.2.2. Issuing Rules of Procedure (RoP) to clarify how specific provisions of the Radio Regulations should be applied. These RoP are essential for ensuring uniform and fair application of the RR by the ITU Radiocommunication Bureau (BR) and Member States.
 - 2.2.3. Reviewing and deciding on cases of regulatory disputes (e.g., coordination disagreements or claims of harmful interference).
 - 2.2.4. Serving as a quasi-judicial body within the ITU framework, although its decisions are not binding in the same way as a court ruling.
 - 2.2.5. Through its decisions and published RoP, the RRB ensures that all ITU Member States have a clear and predictable regulatory environment, helping maintain international trust and cooperation in spectrum management and satellite coordination.

2.3. Proposal for Paragraph 6

The National Radio Frequency Plan 2025 (NRFP-25) incorporates the decisions taken by the 2023 World Radiocommunication Conferences (WRC-23), **including supporting Circular Letters from the BR**. The revision reflects the 2024 version of the ITU Radio Regulations edition, including the frequency allocations relevant to Region 1 and its associated footnotes. It also includes updates on the Table of Frequency Allocations extending up to 3000 GHz and South African National Footnotes.

2.4. Proposal for Paragraph 8

The following updates and amendments amongst others have been implemented in NRFP - 25:

- National footnotes have been revised.

- The resolutions and decisions taken by World Radiocommunication Conferences preceding WRC-23.
- The resolutions and decisions taken by the WRC-23, as ratified by South Africa (Republic of), have been reflected.
- Incorporated references to the SADC Frequency Allocation Plan (FAP) and SADC Harmonised Guidelines
- Incorporated the published RFSAP's where applicable.
- **Circular Letters from the BR.**

The Circular Letters from the BR will be incorporated into the NRFP-25 website (https://www.icasa.org.za/uploads/files/NRFP-Web_29032022.html#Footnotes)

3. Land Mobile Services vs Mobile Services

- 3.1. The Electronic Communications Act 36 of 2005 (as amended) ("ECA") imposes the obligation on the Independent Communications Authority of South Africa (ICASA) ("Authority") to "assign radio frequencies consistent with the national radio frequency plan for the use of radio frequency spectrum by licence holders and other services that may be provided pursuant to a licence exemption".
- 3.2. Through the *Regulations on the Use of Television White Spaces* as published in Government Gazette No. 41512 of 23 March 2018 ("TVWS Regulations"), the Authority implemented the regulatory framework for the dynamic spectrum assignment (DSA) of TVWS in the radio frequency band 470 – 694 MHz on a secondary basis for "affordable broadband services and access by the underserved".
- 3.3. The TVWS Regulations define DSA as follows

a mechanism used to assign the unused spectrum within a frequency band of interest to secondary users, secondary spectrum assignment is done in such a way that they don't cause any harmful interference with primary user or licensee.
- 3.4. The *National Radio Frequency Plan 2021* (NRFP-21) as published in Government Gazette No. 46088 on 25 March 2022, and the Draft NRFP have an allocation of **Land Mobile Services** on a secondary basis in the radio frequency band 470 – 694 MHz.
- 3.5. The Draft NRFP and NRFP-21 define **Land Mobile Service** as follows

A mobile service between base stations and land mobile stations, or between land mobile stations.
- 3.6. The *Draft Regulations on Dynamic Spectrum Access and Opportunistic Spectrum Management in the Innovation Spectrum 3800 – 4200 MHz and 5925 – 6425 MHz*, published in Government Gazette No.52415 on 28 March 2025 ("Draft DSA Regulations"),

is proposing what is termed “a technology-agnostic regulatory framework through which the Authority may authorise the implementation of DSA approach”.

3.7. The NRFP-21 and the Draft NRFP have an allocation of **Mobile Services** on a secondary basis in the radio frequency band 3800 - 4200 MHz.

3.8. The Draft NRFP and NRFP-21 define **Mobile Service** as follows

A station in the mobile service intended to be used while in motion or during halts at unspecified points.

3.9. Since the implementation of DSA for TVWS, broadband services have been commissioned for commercial purposes within the **Land Mobile Services** allocation with the knowledge and approval of the Authority.

3.10. With the *Draft Regulations on Dynamic Spectrum Access and Opportunistic Spectrum Management in the Innovation Spectrum 3800 – 4200 MHz and 5925 – 6425 MHz*, the Authority is proposing the same methodology for “satellite and fixed” white spaces

3.11. Is the Authority confirming that terrestrial broadband services can be provided within the allocation of both **Mobile and Land Mobile Services** on a secondary basis?

4. Draft Regulations on Dynamic Spectrum Access and Opportunistic Spectrum Management in the Innovation Spectrum 3800 – 4200 MHz and 5925 – 6425 MHz

4.1. SENTECH requests the Authority to provide clarity on issues of allocation, PRIMARY and secondary, as the *Draft Regulations on Dynamic Spectrum Access and Opportunistic Spectrum Management in the Innovation Spectrum 3800 – 4200 MHz and 5925 – 6425 MHz* is proposing a principle not consistent with the National Radio Frequency Plan.

4.2. The proposed sub-regulation 11 (1) and 11 (2) of the *Draft Regulations on Dynamic Spectrum Access and Opportunistic Spectrum Management in the Innovation Spectrum 3800 – 4200 MHz and 5925 – 6425 MHz* is concerning.

4.3. Additionally, sub-regulation 11 (1), 12 (1), and 12 (6) of the *Draft Regulations on Dynamic Spectrum Access and Opportunistic Spectrum Management in the Innovation Spectrum 3800 – 4200 MHz and 5925 – 6425 MHz* contradict the EC Act sub-sections 34(3), namely (own emphasis):

*34 (3) The Authority must assign radio frequencies consistent with the **national radio frequency plan** for the use of radio frequency spectrum by licence holders and other services that may be provided pursuant to a licence exemption.*

4.3.1. The National Radio Frequency Plan outlines rules concerning the **Structure of the Table of Frequency Allocations**, especially **Column 1: ITU Region 1 Allocations and footnotes**, and **Column 2: South African allocations and footnotes**:

Column 1 - ITU Region 1 Allocations and footnotes

This column shows the type of radiocommunications service allocated to the frequency band by ITU. These allocations are defined in the ITU Radio Regulations. Entries in UPPER CASE denote primary services while entries in lower case denote secondary services as defined in the ITU Radio Regulations. Footnotes (e.g., 5.149) are the footnotes to the Table of Frequency Allocations as detailed in Article 5 of the Radio Regulations.

*... **Secondary services** are on a non-interference and non-protection basis (NINP) to the **primary services**. Spectrum assigned on a secondary basis means that the secondary station: (i) cannot cause harmful interference to stations of primary services to which frequencies are already assigned or to which frequencies may be assigned at a later date; (ii) cannot claim protection from harmful interference from stations of a primary service to which frequencies are already assigned or may be assigned at a later date, however; (iii) can claim protection from interference from stations of the secondary service(s) to which frequencies may be assigned at a later date.*

Column 2 – South African allocations and footnotes

This column indicates the allocations of radiocommunication service(s) specified for South Africa, based on Article 5 of the ITU Radio Regulations. Names of services are based on the definitions in the ITU Radio Regulations and footnotes relevant to South Africa are included. The allocations highlighted with UPPER-CASE letters correspond to primary status allocations; the allocations with secondary status are written in lower-case.

5. 3400 – 3800 MHz

- 5.1. One of the main discussion points at WRC-23 related to ensuring a standard process for the calculation of the protection criteria, PDF limits, due to the high number of incidents resulting in an impasse when striving to secure a coordination agreement.
- 5.2. SENTECH, therefore, requests the Authority to include a reference to the relevant ITU RRB RoP (Rules of Procedure).

6. Radio Regulations Board Rules of Procedure

- 6.1. The ITU RRB, through the Circular letter CCRR/78, is specific Rules of Procedure (RoP) governing how the Radiocommunication Bureau should apply coordination procedures in the 3600–3800 MHz band, as part of the WRC-23 framework.

- 6.2. For the 3600–3800 MHz band, which now has co-primary allocations to Mobile, Fixed, and Fixed-Satellite Services—and with the addition of IMT/Mobile in some regions—these RoP seeks to ensure:
 - 6.2.1. Consistent application of coordination requirements between administrations.
 - 6.2.2. Implementation of PFD triggers, particularly for protecting adjacent-country satellite earth stations.
 - 6.2.3. Clear handling of coordination for border-PFD rules, via footnotes retained from 3400 - 3600 MHz.
 - 6.2.4. Publication clarity for national assignments under Article 11 of the RR.
- 6.3. Therefore, by referencing the relevant ITU RRB RoP, the applicability of the NRFP is enhanced.

7. Conclusion

- 7.1. SENTECH, again, thanks the Authority for the opportunity to submit on the Draft NRFP.
- 7.2. SENTECH advocates for the explicit inclusion of the ITU Radio Regulations Board (RRB) due to its vital role in interpreting and overseeing international radio-frequency spectrum usage and satellite orbits.
- 7.3. The submission also highlights concerns regarding the distinction between "Land Mobile Services" and "Mobile Services" in the context of dynamic spectrum assignment (DSA) for broadband services.
- 7.4. Furthermore, SENTECH requests clarity on the primary and secondary allocation of spectrum, particularly within the 3800-4200 MHz band, where proposed DSA regulations appear inconsistent with existing national frequency plans.
- 7.5. Finally, SENTECH seeks the inclusion of relevant ITU RRB Rules of Procedure (RoP) for the 3400-3800 MHz band to ensure consistent application of coordination requirements and protect satellite earth stations.