By email

The Independent Communications Authority of South Africa

Attention: Mr Davis Kgosimolao Moshweunyane and Mr Manyaapelo Richard Makgotlho

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13 June 2025

Dear Sirs,

Draft National Radio Frequency Spectrum Plan, 2025

1. Introduction

1.1. Rain Proprietary Limited (**rain**) welcomes the opportunity to comment on the Draft National Radio Frequency Spectrum Plan, 2025 (**Draft NRFP**) published by the Authority in GN 3109 in *Government Gazette* 52449 of 4 April 2025.

1.2. As a leading and forward-thinking telecommunications operator, rain plays a pivotal role in South Africa's connectivity landscape. With a strong commitment to innovation and modern infrastructure, rain recognises the critical importance of an effective and harmonised spectrum management framework to support the country's digital future. Spectrum is a fundamental and scarce resource driving our digital economy, influencing the quality of communication services, economic growth and overall societal development.

1.3. rain fully supports the Authority's initiative to align the National Radio Frequency Plan, 2021 with:

1.3.1. the 2024 edition of the ITU Radio Regulations; and

1.3.2. all resolutions adopted at the 2023 World Radiocommunication Conference (WRC-23), most notably Resolution 223 (Rev.WRC-23), now reflected in ITU-R footnotes 5.434A and 5.434B and fully consistent with ITU-R Recommendation M.1036-8.

1.4. Section 30(2)(a) of the Electronic Communications Act 36 of 2005 obliges the Authority to keep the National Radio Frequency Plan aligned with international allocations. Updating the NRFP to reflect the latest WRC-23 decisions is therefore a statutory requirement that provides regulatory certainty for all licensees, including rain

2. Benefits of allocating the 3600 – 3800MHz band to IMT

2.1. Allocating the 3600–3800 MHz band to IMT would significantly contribute to South Africa's digital transformation and its broader participation in the Fourth Industrial Revolution (4IR), particularly in areas such as Artificial Intelligence (AI) and the Internet of Things (IoT). The digital economy's share of South Africa's GDP is projected to increase from approximately 8–10% in 2020 to 15–20% by 2025, driven by enhanced connectivity and the adoption of emerging technologies. This allocation would help stimulate economic growth, expand job opportunities and improve public service delivery.

2.2. Allowing IMT services in the 3600–3800 MHz band aligns with and actively supports several key South African government policies aimed at fostering digital inclusion`, economic growth, and social equity.

2.2.1. National Development Plan (NDP) 2030: The NDP envisions a "seamless information infrastructure" by 2030 to underpin a dynamic and connected information society. By enabling both fixed and IMT services in this band, we contribute to this vision by expanding broadband access, thus promoting inclusive economic participation and reducing inequality.

2.2.2. Broadband Policy and SA Connect: The national broadband policy, known as South Africa Connect, aims to ensure universal access to reliable, affordable, and secure broadband infrastructure and services. Our readiness to offer 5G services using existing 5G infrastructure directly supports this goal by accelerating the rollout of broadband services without the need for extensive new infrastructure investments.

2.2.3. Digital Economy Masterplan: The ICT and Digital Economy Masterplan emphasizes the importance of digital infrastructure in driving economic

growth and job creation. By complying to the requirement to use the 3600-3800MHz band for IMT, we enhance digital connectivity, which is a critical enabler for various sectors of the economy, including smart education, smart healthcare and digital commerce.

2.2.4. Fourth Industrial Revolution (4IR) Initiatives: South Africa's commitment to embracing the 4IR includes expanding digital infrastructure and services - from smart homes to robotics. Our deployment of 5G IMT equipment since 2019 positions us to contribute significantly to this initiative by providing advanced IMT services, such as 4IR services and AI IOT, that support emerging technologies and innovation.

2.2.5. Digital Inclusion and Equality: Government programs like Operation Phakisa and the e-Skills Institute focus on bridging the digital divide and promoting digital literacy. By complying to the requirement to use the 3600-3800MHz band for IMT, we increase access to digital tools and resources, thereby supporting these programs' objectives of enhancing digital skills and inclusion across all communities. In summary, complying to the requirement to use the 3600-3800MHz band for IMT not only aligns with but also actively advances South Africa's strategic goals for digital transformation, economic development, and social inclusion.

3. rain's network readiness

3.1. rain holds a licence for 3600 – 3680 MHz and operates an IMT compliant 5G network across this assignment. rain has deployed significant capital in building out its modern standalone 5G network. As the deployed equipment is already fully compatible with the amended allocations, rain will be able to comply with the requirements set out in the amended NRFP without requiring a migration.

3.2. rain provides network management services to Mthinte (Pty) Ltd and One Telecommunications (Pty) Ltd, each of which holds spectrum licences in the 3680 – 3740 MHz band. Under our existing commercial arrangements, these emerging operators, which are majority-owned

by historically disadvantaged persons, will likewise be positioned to meet the amended NRFP conditions and take advantage of 5G IMT application and services.

3.3. rain's existing network infrastructure is already fully compatible with IMT standards, requiring little modification to enable IMT functionality. As a result, no radio frequency migration plan is needed — avoiding years of unnecessary delay, discouraged investment, regulatory complexity, and delay the potential benefits to South Africa's participation in the Fourth Industrial Revolution.

3.4. rain is the de facto and primary user of the 3600–3680 MHz band and provides infrastructure-as-a-service to all licensees operating in the adjacent 3680–3740 MHz range. With a mature, operational presence in this spectrum, rain is uniquely positioned to support a rapid, efficient, and low-friction transition to IMT use — accelerating South Africa's digital growth.

4. Impact on other users of the band

4.1. In deploying the current equipment across the 3600-3800 MHz band, rain has already coordinated with other users in the band. The formal assignment of this band to IMT will not result in harmful interference to existing or adjacent services.

4.2. rain has adopted international best practices and adheres to the guidelines from relevant ITU-R Recommendations and WRC-23 resolutions specific to interference management and spectrum coexistence.

4.3. rain has deployed robust interference mitigation strategies, including:

4.3.1. *clear spectrum segmentation and guard bands*: Ensuring adequate separation and guard bands between other services to minimise interference.

4.3.2. *technical safeguards*: Implementing stringent power control limits, employing beamforming and directional antennas,

employing band pass filters to enforce high-quality filtering standards to reduce interference.

4.3.3. *advanced coordination*: Facilitate ongoing dialogue and rapid resolution of interference issues.

4.4. Given rain's established practices and existing infrastructure, no further mitigation or coordination measures are expected to be necessary beyond those already in place.

5. Comments to the draft NRFP

5.1. In the comments section under 3800-4000 MHz:

5.1.1. *"Fixed links (4 GHz) (**3600** – 4200 MHz)"* needs to be amended to *"Fixed links (4 GHz) (**3800** – 4200 MHz)"*

5.1.2. *"C-band downlink (VSAT/SNG/PTP links) (**3600** – 4200 MHz)"* needs to be amended to *"C-band downlink (VSAT/SNG/PTP links) (**3800** – 4200 MHz)"*

5.1.3. *"BFWA (3600 – 3800MHz)"* need to be deleted

6. Conclusion

6.1. rain appreciates the opportunity to provide input on the Draft National Radio Frequency Plan and reiterates the importance of finalising the plan without delay to unlock critical spectrum-based economic and social benefits.

6.2. We fully support the allocation of the 3600–3800 MHz band to IMT, which will enable South Africa to capitalise on the full potential of 5G technology — driving innovation, enhancing competition, and delivering meaningful benefits to consumers, small businesses and digital service providers.

6.3. As a ready and committed stakeholder with operational 5G infrastructure already aligned to IMT standards, rain stands prepared to support the successful implementation of the revised NRFP and contribute to South Africa's digital transformation.

6.4. Should the Authority require any additional information or clarification, please do not hesitate to contact the undersigned.

Yours sincerely

rain

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