



June 29, 2026

Via E-Mail

Attn: Mr. Mandla Mchunu – Project Manager

The Independent Communications Authority of South Africa (ICASA)

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Subject: AST & Science Comments on Draft Amendments to the Radio Frequency Spectrum Regulations, 2015 and Radio Frequency Spectrum Fees Regulations, 2010

Dear Sirs,

AST & Science, LLC (“AST SpaceMobile”), is leading the way as satellite manufacturer and operator in bringing space-based mobile broadband connectivity directly to unmodified devices, such as cell phones throughout South Africa and the globe. To date, we have joined forces with over 50 mobile network operators – serving nearly 6 billion subscribers combined – to seamlessly integrate our satellite network with their ground infrastructure.

Introduction

AST SpaceMobile’s mobile broadband satellite connectivity serves as supplementary extension of the terrestrial mobile networks, with the aim of improving service continuity and expanding coverage, in commercial partnership with nationally authorized mobile operators, to unserved and underserved areas such as rural, remote, or hard-to-reach areas where geographic and economic constraints limit the deployment of terrestrial infrastructure. The technical architecture and spectrum strategy adopted by AST SpaceMobile is designed to support a range of deployment scenarios, allowing implementation in accordance with national regulatory frameworks and market conditions. This approach ensures that satellite mobile broadband connectivity can be efficiently integrated into the broader communications landscape, while supporting different service implementation models consistent with national policy objectives and regulations.

AST SpaceMobile would like to express its appreciation to the Independent Communications Authority of South Africa (ICASA) for publishing the Draft Amendments to the Radio Frequency



Spectrum Regulations, 2015 and the Radio Frequency Spectrum Fees Regulations, 2010 (Draft Regulations)

AST SpaceMobile welcomes the progressive direction reflected in the draft regulations and recognizes the Authority's efforts to enhance the regulatory framework. We further acknowledge and appreciate the transparent and consultative approach adopted by the Authority throughout the process. Such transparency contributes positively toward regulatory certainty, industry confidence, and constructive engagement between the Authority and stakeholders.

The proposed framework represents an important milestone toward enhancing regulatory certainty, encouraging investment in advanced satellite systems, and aligning South Africa with evolving international regulatory practices applicable to satellite-enabled connectivity architectures.

In this regard, AST SpaceMobile respectfully submits the following for the Authority's kind consideration:

1. Proposed Foreign Satellite Space Segment Registration Framework

AST SpaceMobile welcomes the introduction of the proposed registration mechanism for foreign satellite space segment operators through the proposed "Form F" process. AST understands and supports this mechanism as an administrative transparency measure intended to provide ICASA with visibility of satellite systems operating or intending to operate in South Africa, while avoiding unnecessary market entry barriers. This administrative approach should operate with appropriate regulatory oversight consistent with South Africa's established ECS/ECNS licensing frameworks.

AST SpaceMobile further welcomes that the proposed registration is free of charge and does not constitute market access authorization. In this context, AST SpaceMobile supports ICASA's proposal that the registration process would be limited to the verification and acknowledgment of the information submitted by the satellite operator, including the relevant ITU filings and recording references, and would not involve a separate technical, coordination, or market access assessment beyond the information required under Form F.



This approach is appropriate and proportionate, as it supports regulatory visibility, facilitates communication between ICASA and satellite operators, and preserves South Africa's attractiveness for satellite investment and innovation.

AST SpaceMobile further understands that the proposed registration framework is intended to complement, and not replace or duplicate, existing licensing frameworks applicable to ECS and ECNS operators in South Africa.

AST SpaceMobile would appreciate the Authority's confirmation that the proposed registration mechanism is intended to remain administrative in nature, limited to the acknowledgment and verification of the submitted ITU-related information and recording references.

2. Radio Astronomy Protection

AST SpaceMobile acknowledges the importance of protecting Radio Astronomy operations and Radio Quiet Zones (RQZs) in South Africa and supports the Authority's objective of ensuring coexistence between satellite systems and protected astronomy services. AST SpaceMobile has actively engaged with the radio astronomy community and has participated in coordination efforts with leading astronomy institutions to assess and mitigate potential impacts of satellite operations on radio astronomy observations. These activities have included technical discussions and interference testing initiatives associated with radio telescope facilities in the United States, as well as engagement related to the protection of radio astronomy sites associated with the Square Kilometre Array (SKA) program. AST SpaceMobile also supports broader industry initiatives aimed at advancing the principles of Dark and Quiet Skies and promoting the sustainable coexistence of satellite communications and scientific services. Therefore, with respect to the SKA facilities and other protected radio astronomy sites in South Africa, AST SpaceMobile welcomes the opportunity to extend and strengthen this coordination with South African authorities and the radio astronomy community to ensure the continued protection of these important scientific assets while enabling innovative satellite communications services.

AST SpaceMobile further welcomes the Authority's recognition, within its findings, of the need for a balanced approach that safeguards Radio Astronomy interests while also facilitating satellite connectivity, innovation, and compliance with international standards.

AST SpaceMobile notes that the proposed framework requires satellite space segment operators to coordinate with the relevant Management Authority prior to commencing operations and



further references ITU-R Recommendation RA.769-2 and the Radio Astronomy Protection Levels Regulations (No. R.90 of 2012).

In this regard, AST SpaceMobile understands that the applicable protection and coordination requirements are intended to be implemented in accordance with the ITU Radio Regulations and the associated internationally recognized ITU-R protection criteria applicable to Radio Astronomy services,

AST SpaceMobile would appreciate the Authority's confirmation of this understanding.

3. Gateway Spectrum Fee Framework

AST SpaceMobile welcomes the proposed revision of the gateway earth station fee framework and the reduced fee weighting applicable to higher frequency bands, which represents a significant improvement compared to the previous framework and supports the deployment of Gateway Earth Stations in South Africa.

AST SpaceMobile would appreciate clarification regarding the below operational aspects of the proposed fee methodology:

a. "BW" factor:

We request clarification on how bandwidth would be calculated for NGSO gateway systems utilizing multiple simultaneous feeder beams. Modern NGSO gateway architectures may utilize multiple feeder beams operating across different portions of the authorized frequency range, where the operational bandwidth may not necessarily be contiguous across the entire assigned band.

In this regard, AST SpaceMobile respectfully proposes that the bandwidth calculation methodology be applied at the Earth Station site level, taking into consideration the total bandwidth licensed to the NGSO operator rather than assuming continuous occupation of the full frequency range.

b. "SEC" factor:

AST SpaceMobile requests clarification regarding the SEC factor within the proposed formula, including whether a default value applies for NGSO gateway operations.

We also request confirmation that a default SEC value of "1" will be applied under the proposal to standard commercial NGSO Earth Station operations, unless otherwise reduced by the



Authority based on specific governmental, strategic, public-interest, or national connectivity considerations. The applicable criteria associated with such assessment would benefit from additional implementation guidance to support regulatory certainty and investment predictability.

4. MSS / D2D / IMT-NTN Considerations

AST SpaceMobile notes that the current draft regulations do not explicitly establish a regulatory framework applicable to Mobile Satellite Services (“MSS”), Direct-to-Device (“D2D”), or IMT-NTN operations. AST SpaceMobile requests that these issues be addressed in the near term. However, AST SpaceMobile recognizes the overall positive direction of the Authority toward enabling NGSO satellite systems, encouraging innovation, and modernizing the satellite regulatory environment in South Africa.

AST SpaceMobile further notes that the proposed framework introduces important regulatory concepts associated with foreign satellite space segment registration, gateway earth station deployment, and streamlined satellite operational frameworks, which can support future evolution toward MSS/NTN and satellite-mobile integration use cases within the existing Electronic Communications Service (“ECS”) and Electronic Communications Network Service (“ECNS”) licensing environment.

In this regard, AST SpaceMobile would appreciate confirmation from the Authority that MSS/NTN and D2D architectures will be enabled within the current ECS/ECNS framework through appropriately licensed operators and spectrum holders, including satellite-mobile integration utilizing unmodified mobile devices and IMT spectrum integration. For IMT spectrum D2D services, AST SpaceMobile supports requirements that satellite operators have an agreement with the wireless licensee to use their spectrum.

AST SpaceMobile also requests that the Authority maintain a technology-neutral and service-neutral regulatory approach capable of accommodating developments associated with satellite-mobile convergence, IMT-NTN evolution, and next-generation satellite connectivity architectures. This approach should also respect existing spectrum assignments, licensing obligations and competitive market dynamics, including the need to avoid market distortions. This clarification will provide long-term regulatory certainty and facilitate future planning associated with emerging NTN technologies and next-generation satellite-mobile connectivity capabilities.



Conclusion

AST SpaceMobile appreciates the opportunity to provide these comments and welcomes the Authority's efforts to establish a transparent and proportionate regulatory framework for satellite services in South Africa. In this context, AST SpaceMobile respectfully submitted comments regarding the administrative nature of the proposed foreign satellite space segment registration framework, the implementation of Radio Astronomy protection requirements in accordance with applicable ITU Radio Regulations and internationally recognized protection criteria, clarification associated with the practical application of the proposed gateway earth station spectrum fee methodology, and considerations relating to MSS, D2D, and IMT-NTN integration within the existing ECS/ECNS regulatory environment.

AST SpaceMobile remains at the Authority's disposal for any further engagement and process for the adoption of the Draft Amendments to the Radio Frequency Spectrum Regulations, 2015 and Radio Frequency Spectrum Fees Regulations, 2010.

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