Globalstar Connect smarter

**Submission by Globalstar, Inc. on the Second Draft National Radio Frequency Plan 2025 (NRFP-25)**

11 December 2025

**Attention:** Mr. Davis K. Moshweunyane and Mr. Manyaapelo R. Makgotlho

Representation in response to Government Gazette No. 53637 — Second Draft NRFP-25 (published 7 November 2025).

## Executive summary

Globalstar, Inc. ("Globalstar") hereby submits its response to the public consultation on the Second Draft of the National Radio Frequency Plan 2025, published in Government Gazette No. 53637 on 7 November 2025 by the Independent Communication Authority of South Africa ("ICASA", or the "Authority").

We appreciate the Authority's commitment to transparent spectrum management and its willingness to engage with all industry participants throughout this update of the National Radio Frequency Plan. The publication of the Second Draft NRFP-25 reflects a significant amount of technical and regulatory work, and we acknowledge the rigor with which ICASA has approached the integration of WRC-23 outcomes, regional harmonization requirements, and national priorities.

Globalstar is a leading provider of global Mobile Satellite Services ("MSS"). Operating continuously in the S-Band and L-Band for more than two decades, our low-Earth orbit ("LEO") non-Geostationary orbit ("NGSO") system supports the delivery of reliable MSS to consumers, public safety personnel, and enterprise customers globally. As an existing MSS licensee in South Africa, Globalstar welcomes the opportunity to participate in this process and to support the Authority in refining a framework that provides clarity, maintains operational certainty for incumbent systems, and advances South Africa's broader connectivity objectives.

Globalstar submits the following comments to request administrative clarity and procedural certainty for MSS operations in the C-Band, L-Band and S-Band; to request explicit treatment of the application of astronomy advantage area protections to MSS earth stations; and to propose concrete amendments to enable operational certainty.

## Background facts from NRFP-25

- ICASA has published the Second Draft NRFP-25 for consultation in Government Gazette No. 53637.

- Public hearings will be held on 15–16 January 2026. Written submissions close at 17:00 on 11 December 2025.

- The NRFP identifies the band 2483.5–2500 MHz as a band of interest in relation to satellite components of IMT and discusses associated migration and sharing implications.

- The NRFP-25 confirms the legal and regulatory regime protecting declared astronomy advantage areas, including the Karoo Core and Karoo Central Astronomy Advantage Areas (KCoreAAA and KCAAA). The Hartebeesthoek radio astronomy instruments are protected and operations within a 15 km radius must coordinate with the South African Radio Astronomy Observatory (SARAO). The draft reproduces the prohibition and restriction regime and Table 2 showing prohibited bands in declared areas (including 1 100–2 170 MHz, 2 100–6 GHz and up to 25.5 GHz for certain KCAAAs).

**Comments**

1. **Astronomy zones:** The draft reinforces strict prohibition and restriction rules for KCAAAs and related declared areas. As a result, siting and earth-station operations near declared areas are subject to Astronomy Management Authority (AMA) permit requirements. The draft does not set out how ICASA will assess MSS license applications or modifications that are adjacent to KCAAA boundaries or within the Hartebeesthoek protection radius, and the absence of process detail creates license uncertainty for incumbents and for necessary earth station relocations

   As written, the NRFP-25 risks an unclear operational interface between ICASA licensing decisions and the AMA permit regime, particularly for earth stations that are located close to KCAAA boundaries or Hartebeesthoek protected radius. This creates license uncertainty for MSS earth stations unless the NRFP explicitly defines how ICASA and AMA processes will interoperate.

   <u>Requested remedy (redline-ready text for NRFP):</u>

   Insert in Section 2 (Preamble), after 2.1 Legislative Framework:

   > "2.1.1 Treatment of MSS earth station applications near declared astronomy areas:
   >
   > Where an MSS earth station application or modification in the band 1610.00–1621.35 MHz concerns a site located within a declared astronomy advantage area or within a defined proximity threshold of such an area, the Authority shall follow a transparent, evidence-based process when assessing any potential impact on protected radio astronomy facilities. The Authority shall ensure that applicants are afforded a clear opportunity to

provide technical information, mitigation proposals and siting justifications before any licensing decision is made."

Insert in Section 5 (Radio Astronomy), after paragraph 5.6 (new paragraph 5.7):

"5.7 ASSESSMENT PROCEDURE FOR MSS APPLICATIONS NEAR ASTRONOMY FACILITIES

5.7.1 Information requirements

Where an MSS earth station application in the band 1610.00–1621.35 MHz is proposed within or near a declared astronomy area, the Authority may request technical information from the applicant, including predicted power flux-density levels, antenna characteristics and siting rationale. The Authority shall clearly specify the information required and shall identify the applicable technical thresholds relied upon in its assessment.

5.7.2 Proportionate and non-discriminatory assessment

The Authority shall evaluate the information in 5.7.1 using objective technical criteria. The Authority shall not refuse or delay an MSS licence application solely on the basis of proximity to a declared astronomy area unless it has identified a demonstrable, material interference risk supported by the technical criteria communicated to the applicant.

5.7.3 Mitigation opportunity

Where the Authority identifies a material interference concern, it shall allow the applicant to propose reasonable technical mitigations. The Authority shall consider such proposals in good faith and shall ensure that any licensing conditions imposed are proportionate to the identified risk.

5.7.4 Reasoned decisions

Any refusal or conditional approval shall include a written statement of reasons, including the technical basis for the decision and the information relied on."

2. **S-band portion identified for the satellite component of IMT:** The draft NRFP-25 identifies 2483.50–2500.00 MHz for the satellite component of IMT and notes past migration and sharing outcomes for adjacent 2.4 GHz uses, but it provides no band-specific licensing guidance for MSS operations in this range. The band also falls inside the KCAAA restriction for 2.1–6.0 GHz, which triggers sensitive treatment for earth station siting. The absence of clear classification rules for MSS terminals versus MSS earth stations and the absence of defined evidentiary requirements for earth station applications create regulatory

uncertainty for operators. Without clarification, there is a risk that mobile user terminals operating outside declared astronomy areas could be over-restricted and that earth station licensing near protected areas could be subject to inconsistent interpretation.

Requested remedy (redline-ready text for NRFP):

Insert in the 2483.50–2500.00 MHz row (under Typical Applications and Notes):

> "Satellite component of IMT and MSS operations. MSS terminals and MSS earth stations shall be classified and licensed according to their technical characteristics. Mobile MSS user terminals operating outside declared astronomy areas are treated as terminal equipment subject to equipment authorisation and are not subject to blanket geographic exclusion. Earth station applications located within 30 km of any declared Karoo Central Astronomy Advantage Area boundary or within 15 km of Hartebeesthoek shall include technical parameters and predicted power flux-density as part of the licensing submission."

Insert in the Implementation text immediately following the paragraph addressing the 2400–2500 MHz range:

> "2483.50–2500.00 MHz: For MSS operations in this band, the Authority applies a classification distinction between mobile user terminals and fixed or gateway earth stations. Mobile user terminals operating outside declared astronomy areas are treated as terminal equipment and authorised through equipment authorisation. Applications for MSS earth stations or gateways within 30 km of any declared Karoo Central Astronomy Advantage Area boundary or within 15 km of Hartebeesthoek shall include a statement of technical parameters, antenna data and predicted power flux-density at protected radio astronomy receivers. The Authority will assess such applications using objective technical criteria and will communicate any required mitigation measures to applicants in a proportionate manner."

3. **Administrative ambiguity:** The draft revises national footnotes and typical applications but does not, in all cases, expressly state the protection status for existing licensed MSS operations or the administrative timeline for coordination outcomes. In other words, it also does not clarify how long coordination should take, what happens if there is no response, or whether incumbents can block operations indefinitely. This creates business and operational risk because MSS operators cannot plan deployments with confidence.

## Conclusion

We hope that these comments, informed by more than two decades of global operational experience, and a focus on regulatory certainty, public-safety performance and responsible spectrum use, prove helpful to the Authority. Our intention is to support

ICASA as it gives effect to the WRC-23 outcomes, while also ensuring that reliable MSS services continue to have a secure and predictable place within the national framework. We trust that our long-standing commitment to compliance, service continuity and operational discipline is evident throughout this submission, and we remain deeply appreciative of the Authority's ongoing consideration of services and systems such as ours in South Africa.

Sincerely,

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