

INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA (ICASA)

350 Witch-Hazel Avenue
Eco Point Office Park
Centurion
South Africa

Attention: Mr. Mandla Mchunu (satlicensing@icasa.org.za)

November 12, 2024

Dear Mr. Mchunu

Pinkmatter Solutions (Pty) Ltd response to ICASA re: "Consultation on the proposed new Licensing Framework for Satellite Services", notice 2678 of 2024.

Thank you for the opportunity to take part in the consultation. We commend ICASA for developing a transparent and streamlined regulatory framework with clear rules to establish regulatory certainty for potential satellite operators in South Africa.

Pinkmatter Solutions (Pty) Ltd provides antenna hosting services at our teleport facility in the East of Pretoria, South Africa. We are focussed on Earth Observation (EO) satellite missions.

In the comments below, for the sake of brevity, we focus only on the S-band spectrum. Still, the same considerations should be applied to the X-band and Ka-band spectrum dedicated for use by Earth Observation satellites.

QUESTION 1: *These are the policy principles from the ATU that ICASA seeks to align with. Kindly provide comment(s) on the proposed policy principles and any further recommendations listed in the above section.*

1. In response to **Question 1**, specifically considering point 4.g on page 16 (government gazette page reference), the current cost and when it is applied to spectrum licensing for Earth Observation satellites as provided for in the Act is unclear. Section 8.1 (page 22) puts forth a structure currently applied to government security agencies as a "security factor" (SEC factor) and proposes a similar fee formula for Gateway Earth Station frequencies above 17.3 GHz. To this end, we would like to add:
 - a. We request that clarity is provided on whether a spectrum license is required for downlink-only Ground Stations. Several Earth Observation satellites, particularly those used for meteorological and related observations, are "always on" and constantly transmit data to the visible side of the Earth, regardless of whether someone is "listening" to that data. We believe a spectrum license should only be required if the Ground Station is actively transmitting on that spectrum.

This sentiment is echoed in several sections in the document, such as the “Measures to limit unauthorised uplink transmissions from Earth stations” included in the introduction of the Consultation document.

- b. The EO Spectrum, as defined by ITU regulations, contains a set of bands within the block of spectrum that are available for use. A Ground Station that wishes to receive data for a variety of satellites typically supports all the allowable modulation schemes and various polarisation configurations for antennas across the entire block of the spectrum. It should not be necessary to apply for specific subsets of the spectrum, and the cost (for uplink) should be such that it is feasible to obtain access to the entire block of spectrum allocated for this purpose. This will dramatically reduce the administrative burden on the Ground Station to apply for and update spectrum licenses as and when the operations of the Ground Station change.
2. Further to the goal of improving investment in South Africa by private companies internationally, clarity is sought on whether the equipment used by Ground Stations (including the antenna, demodulator and related components) must be owned by South African legal entities. In our view, it should be made clear that the holder of the relevant licenses in South Africa must be a legal person or entity in South Africa, but that the ownership of such equipment may belong to the foreign entity. This will allow foreign companies to, for example, lease land and services from a South African entity (providing a “hosting service”) while the equipment remains the property of the foreign entity.

QUESTION 2: Do you agree with the exclusions of radio navigation satellite services, amateur satellite services, earth exploration, space research satellite services and radio astronomy services indicated above and others if applicable? If not, please explain your reasoning and propose an alternative to this proposal.

1. We provide feedback about Earth Observation (EO) satellites specifically. We recommend that Earth Observation also receive due consideration, if not within this consultation, in a similar process. Specifically, as one of the broader objectives of this consultation is a “transparent and streamlined regulatory framework”.

QUESTION 3: Do you agree with the proposed approach of having a separate licence/authorisation (where applicable) for each segment of the Satellite Communication value chain? Please elaborate.

1. We agree. Considering the content of section 10.1 and other comments made in this response, the concept of a Space Segment, in our case specific to EO, would be hugely beneficial. Reference to section 10.1: “the Authority seeks to introduce what can be termed a “List of Authorised Space Stations “where registration shall be a simple administrative process that does not constitute a licence or permit to provide telecommunication services or to operate telecommunications networks in South Africa. A once-off nominal fee may be levied to cover the administrative cost of managing the “List of authorised Space Stations” for the duration or lifespan of the satellite network.”
2. Kindly consider a ring fenced “Space Segment” for EO teleport facilities. The objective would be to achieve a simplified site, spectrum and Type Approval licencing framework.

QUESTION 4: Please provide your comments on the proposals in the preceding paragraph and the duration of the Gateway Earth Station licences.

1. Linked to the proposed concept in our response to Question 3, we would recommend that the Gateway Earth Station Licences for Earth Observation remain valid for 10 years from the date of issue.

QUESTION 5: Please comment on the above-mentioned alternative proposals to levy the spectrum fees for Gateway Earth Stations and indicate your preferred option. The Authority understands that there are other spectrum fee calculation methodologies used elsewhere in the world. Please give details of the methodologies which you believe would be most suitable for South Africa.

1. In response to **Question 5**, this is a step in the right direction. We request that the Earth Observation spectrum be considered part of this new levy structure. We support a more favourable spectrum levy structure as provided for in the Consultation document. Our recommendation would be that for Gateway Earth Station Licences for Earth Observation, one should consider the specific spectrum blocks that are applicable to EO only and provide a fixed annual spectrum levy. We would recommend combining that with a simplified or exempt Type Approval and a EO teleport site specific license valid for 10-years.

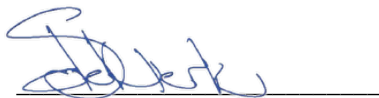
OTHER: Other considerations and regulations in the public domain

1. A revision of the Type Approval National Regulations should also be considered. The publication of **Equipment Authorisation Regulations, 2022** although not effective yet, provides for low-risk equipment to be exempt from equipment authorisation. Commercial off-the-shelf (COTS) radio equipment is becoming commonplace. Furthermore, software-defined radios can operate in various conditions that may or may not be relevant to the Ground Station's operations. Obtaining Type Approval for equipment, especially COTS and software-defined radios, is infeasible. The regulation does not clearly separate obtaining Type Approvals for end-user devices (such as mobile phones) or devices used by a single operator at Ground Stations.

Pinkmatter would like to express our appreciation to ICASA for creating a mechanism which allows for transparent stakeholder engagement in respect of proposed regulatory framework changes. We look forward to participating in future engagements and we support ICASA in this simplification and global alignment process.

Authorized by: *Chief Financial Officer*

Name: *Stefan de Klerk*



Signature