



12 November 2024

**Independent Communications Authority of South Africa**

Attention: Mr. Mandla Mchunu  
350 Witch-Hazel Avenue  
Eco Point Office Park, Eco Park  
Centurion

By Email: [satlicensing@icasa.org.za](mailto:satlicensing@icasa.org.za)

CC: [Mmchunu@icasa.org.za](mailto:Mmchunu@icasa.org.za)

Dear Madam/Sir

**SUBMISSION TO INQUIRY INTO THE LICENSING FRAMEWORK FOR SATELLITE SERVICES**

**1. Introduction**

- 1.1. Liquid Telecommunications South Africa (Pty) Ltd trading as Liquid Intelligent Technologies (LIT) is a business of Cassava Technologies, a pan-African technology group present in more than 20 countries, mainly in sub-Saharan Africa.
- 1.2. LIT has firmly established itself as the leading provider of pan-African digital infrastructure with an extensive fibre broadband network covering over 110,000 km, leveraging its digital network to provide cloud and cyber security solutions through strategic partnerships with leading global players.
- 1.3. LIT is a comprehensive technology solutions group that provides customised digital solutions to public and private sector enterprises and SMEs across the continent.
- 1.4. LIT welcomes the opportunity to participate in the Authority's Inquiry into the licensing framework for Satellite Services which was published on 14 August 2024 ("the Satellite Services Inquiry") and notes its interest in participating in both future inquiries related to Licensing Framework for Satellite Services and any possible regulatory measures that may be introduced and any public hearings and/or workshops which those processes may include.
- 1.5. LIT's response to each of the questions that have been posed by the Authority in its the Satellite Services Inquiry follow below.

**2. QUESTION 1:**

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

- 2.1. As a pan-African operator LIT has noted the Authority's adoption of the policy principles developed by the African Telecommunications Union (ATU) relating to the development of national satellite licensing frameworks and which are detailed in the Satellite Services Inquiry.
- 2.2. LIT would support any policy principle that seeks to increase the ease and efficiency of satellite service deployment within ATU member states but notes that the satellite services forming the subject of the Satellite Services Inquiry originate outside of the ATU and are therefore of an international character.
- 2.3. LIT recommends that the Authority consider the adoption of a further policy principle which calls for a licensing process that both recognises the importance of and seeks to incentivise foreign investment in South Africa.

**3. 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 other if applicable? If not, please explain your reasoning and propose an alternative to this proposal.**

- 3.1. LIT supports the proposed scope of the Satellite Services Inquiry and more specifically the exclusion of radio navigation satellite services, amateur satellite services, earth exploration, and space research satellite services.

**4. 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.**

- 4.1. The Authority makes reference in section 1 of the Satellite Services Inquiry to both Sections 31(1) and 31(2) of the Electronic Communications Act, No. 36 of 2005 (ECA) which respectively provide that "*...no person may transmit any signal by radio or use radio apparatus to receive any signal by radio except under and in accordance with a radio frequency spectrum licence granted by the Authority to such person in terms of [the ECA]*" and "*a radio frequency spectrum licence is required in addition to any service licence contemplated in Chapter 3, where the provision of such service entails the use of radio frequency spectrum*".
- 4.2. The Authority continues by proposing a radio frequency spectrum licensing regime in section 6 of the Satellite Services Inquiry that differentiates between "satellite gateway earth station licences", "user-terminal network licences" and the "registration of space segment".

- 4.3. Whilst a granular approach to radio frequency spectrum licensing within the satellite service segment would in LIT's view better reflect current practice within industry, the current framing of the proposed licensing regime is ambiguous and risks conflating radio frequency spectrum licensing and the service licensing contemplated by Chapter 3 of the ECA.
- 4.4. LIT notes that the Satellite Services Inquiry does not substantively acknowledge the provision of electronic communications network services (ECNS), defined by the ECA as a service "*whereby a person makes available an electronic communications network, whether by sale, lease or otherwise — (a) for that person's own use for the provision of an electronic communications service or broadcasting service; (b) to another person for that other person's use in the provision of an electronic communications service or broadcasting service; or (c) for resale to an electronic communications service licensee, broadcasting service licensee or any other service contemplated by [the ECA]*" and the underlying need for the holders of a radio frequency spectrum licence to also hold appropriate ECNS licensing or licence exemption.
- 4.5. To the extent that the Authority's proposal is limited to differentiation within the radio frequency spectrum licensing regime, LIT would like to emphasize the importance of a framework which better enables the deployment of satellite services, reduces radio frequency spectrum licensing costs and which eases administration for both licensees and the Authority.
- 4.6. LIT notes that whilst the Authority is empowered by section 4 of the ECA to make, and by extension amend regulations with respect to any matter addressed by the ECA, which necessarily includes the licensing of radio frequency spectrum, it is not empowered to amend the ECA and consequently lacks the means to alter the licensing framework established by Chapter 3 of the ECA.
- 4.7. Unlike the administrative and cost barriers which result from the current Radio Frequency Spectrum Regulations, 2015 (as amended) and the Radio Frequency Spectrum Licence Fee Regulations, 2010 (as amended), LIT does not consider the service licensing framework established by Chapter 3 of the ECA to be an impediment to the deployment, innovation or expansion of the satellite service segment and does support the introduction of additional forms of ECNS service licensing. It is however, critical that these do not render obsolete and/or diminish existing ancillary licencing frameworks.
- 4.8. As outlined by the Authority in its notice on the illegal provision of or access to satellite internet services and possession, distribution or use of satellite broadband terminals and equipment in South Africa<sup>1</sup> the service licensing framework established by Chapter 3 of the ECA caters for the provision of satellite services of varying geographic scope. Mindful of the timeframes associated with any amendments to the ECA, which are better measured in years than in months, LIT submits that revisions to the radio frequency spectrum licensing regime represent the best opportunity for the Authority to improve the satellite service segment.

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<sup>1</sup> General notice 2203 published in Government Gazette 49777 on 28 November 2023

**5. QUESTION 4**

**Please provide your comments on the proposals in the preceding paragraph and the duration of the Gateway Earth Station licences**

- 5.1. LIT reiterates its response to question 3 regarding the conflation of service and radio frequency spectrum licensing.
- 5.2. There is no impediment in either Chapter 3 of the ECA or within the underlying regulations to the holder of a Private Electronic Communication Network (PECN) licence exemption operating a gateway earth station however such operation must be consistent with both the definition of PECN as *“an electronic communications network used primarily for providing electronic communications for the owner’s own use”* and the provisions of section 6(2)(c) of the ECA which contemplate *“private electronic communications networks used principally for or integrally related to the internal operations of the network owner”*.
- 5.3. A reasonable interpretation of the phrases *“own use”* and *“internal operations of the network owner”* is informed by the references to the provision of ECNS for *“commercial purposes”* found in Sections 5(3)(a) and 5(5)(a) of the ECA. LIT submits that the Inquiry inadvertently blurs the distinction between PECNS and ECNS as defined in the ECA.
- 5.4. LIT encourages the Authority to adopt policies that foster a commercially favourable environment that incentivise foreign investment and the future development of teleports and gateway earth stations in South Africa. LIT wishes to highlight the administrative burden that is imposed on both licensees and the Authority by the need to renew radio frequency spectrum licence on an annual basis.

**6. QUESTION 5:**

**Please comment of 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.**

- 6.1. LIT notes the Authority’s proposals in this regard. Given the complex outcomes which any new model might introduce LIT would encourage the Authority to undertake a regulatory impact assessment and cost modelling exercise to explore both the proposed and other radio frequency spectrum licence fee methodologies.

## 7. QUESTION 6:

Kindly comment on the section above and on the proposal for blanket licensing with a fee for a set number of terminals under a new proposed licence regime to be referred to as “Satellite User Station Network Licence”. If possible, please provide a breakdown of the number of terminals with the corresponding spectrum fee values in South African Rands.

7.1. The manner in which the Authority frames its interest in “introducing a licence type to cover all user-terminal stations under FSS, and MSS. This licence type will be termed “Satellite User Terminals Network Licence”” and where it notes that “This approach is very similar to the mobile/cellular environment, where devices are exempt from individual licensing i.e., blanket licence” blurs the distinction between radio frequency spectrum and service licensing under chapter 3 of the ECA.

7.2. The mechanism by which a subscriber to a retail service may possess “radio apparatus”<sup>2</sup> such as a mobile phone without first needing to hold the appropriate radio frequency spectrum licence (and an underlying ECNS licence) flows from section 31(1) of the ECA read together with the definition of “radio apparatus” and that for “subscriber equipment”:

*““subscriber equipment” means any device which is used by a subscriber to access, use or receive the services of a licensee referred to in Chapter 3 or the services of a person providing a service pursuant to a licence exemption, including without limitation, a telephone, regardless of technology such as IP (Internet Protocol) phones, mobile phones, publicly available phones: a handset, a computing device such as a personal digital assistant or a personal computer, a device for receiving a sound radio broadcasting service and a television, or other device or equipment, and any associated software”.*

7.3. It flows from these provisions that the general obligation imposed by section 31(1) of the ECA does not apply to subscriber equipment. LIT refers the Authority to its response to Questions 3 & 4 of the Satellite Services Inquiry for further discussion of the ECA’s primacy in these matters.

7.4. LIT furthermore considers the tiered model proposed at the conclusion of section 9 of the Satellite Services Inquiry to be a balanced and transparent approach but would encourage the Authority to undertake a regulatory impact assessment and cost modelling exercise to explore both the proposed and other radio frequency spectrum licence fee methodologies.

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<sup>2</sup> Section 1 of the ECA defines “radio apparatus” as meaning an electronic communications facility which is capable of transmitting or receiving any signal by radio, excluding subscriber equipment, if such subscriber equipment is used solely for that purpose.

**8. QUESTION 7:**

**Kindly comment on the appropriateness of using regulation 37 of the ICASA radio regulations (“Recognition of licences issued by other countries”) to recognize ESIM licences issued by other countries.**

- 8.1. LIT reiterates its support of the Authority’s efforts to modernise the South African satellite service licensing and free framework and would welcome any regulatory interventions that would help to reduce the costs and administrative burden of delivering satellite services in South African. It is however crucial that any intervention proposed by the Authority is compatible with the legal framework established by the ECA.
- 8.2. It is LIT’s view that the challenges faced by the Authority in respect of the Regulation 37 mechanism (and more specifically the radio frequency spectrum licensing of earth stations in motion (ESIM)) are unlikely to be remedied through amendments of the current regulatory regime alone.
- 8.3. Any practicable intervention would in LIT’s view likely need to occur within the context of further amendments to the ECA. Given the ongoing efforts of the Department of Communications and Digital Technologies (DCDT) to finalise the draft Electronic Communications Amendment Bill, 2022 the Authority is encouraged to consult with the DCDT regarding possible carve-outs for ESIM service licensing and/or licence exemption in Chapter 3 of the ECA.

**9. QUESTION 8:**

**Please provide your comments and details for the best practices in other jurisdictions to fulfil the intentions of the Authority as indicated in the above section. Furthermore, considering the provision set out in the Astronomy Geographic Advantage (AGA) Act of 2007, and the requirements of the Radio Quiet Zone, what measures and techniques do you propose to be employed in mitigating the possible interference that may be caused by the satellites within the Astronomy radio frequency bands in South Africa?**

- 9.1. LIT has no specific recommendations in respect of question 8 but welcomes the Authority’s willingness to seek stakeholder input and to be guided by international best-practice.

**10. QUESTION 9:**

**Please provide proposals on the role the Satellite operators can play in ensuring that broadband connectivity reaches the areas of the country in terms of community networks with Satellite connectivity as a backhaul.**

**Kindly provide a regulatory solution that can be applied by Satellite operators to address the shortcomings of terrestrial network is in providing to unserved and underserved areas of the country. This may include collaboration with government programs to reach out to those unserved and underserved areas of the country.**

10.1. LIT recognises that both fixed and mobile satellite services will play an increasingly important role in both the provision of subscriber services and in the expansion of broadband connectivity in areas where fixed and mobile terrestrial networks have fallen short in providing reliable and cost-effective connectivity.

10.2. While LIT supports measures which increase the uptake of satellite services it would encourage the Authority to undertake a regulatory impact assessment prior to imposing roll-out or equivalent obligations so as to ensure transparent and fair competition within both the satellite service segment and the fixed and mobile service markets which they are most likely to impact.

**11. CONCLUSION**

11.1. LIT welcomes the Authority's initiative to conduct an inquiry on the proposed new licensing framework for satellite services and looks forward to future engagements on the matter.

11.2. Satellite segment operators can significantly contribute to broadband connectivity in unserved and underserved areas by partnering with government programs, leveraging community networks, and implementing innovative infrastructure solutions. Regulatory frameworks should support these efforts through incentives, universal service obligations, and public-private partnerships. Additionally, focusing on community engagement, capacity building, and advanced technologies can further enhance the effectiveness and sustainability of satellite-based broadband services.

11.3. We trust that our submissions herein contribute positively to the Authority's initiative.

Yours faithfully



Valencia Risaba  
**CHIEF CORPORATE AFFAIRS OFFICER**

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