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Dear Chairperson

## **Consultation on the proposed new Licensing Framework for Satellite Services**

### **1. Introduction**

1.1. The submission is made by the Association of Comms and Technology (“ACT”) after the authority’s notice of its intention to conduct an inquiry into the Licensing Framework for Satellite Services gazetted on 14 August 2024.

1.2. ACT is a leading industry association in South Africa, representing major telecommunications network operators. It was founded in June 2021 by the Chief Executive Officers (CEOs) of South Africa's six largest telecommunications operators—, Cell C, Liquid Intelligent Technologies, MTN, RAIN, Telkom, and Vodacom. The formation of ACT was driven by the need to create a stronger, more coordinated voice on critical matters impacting the efficiency and effectiveness of the telecommunications industry and the broader Information and Communications Technology (ICT) ecosystem in South Africa.



1.3. ACT advocates for regulatory compliance, transformation and innovation within the ICT sector. ACT focuses on enhancing connectivity, driving socio-economic development, and fostering stakeholder collaboration. By addressing critical issues and promoting inclusive digital growth, ACT aims to empower communities and contribute to the country's economic transformation.

1.4. We thank the authority for the opportunity to make a submission on its section 4B Inquiry document, ("Inquiry document"), and confirms its intention to participate in any public hearing process that may form part of the inquiry.

## 2. Background

2.1. The ACT would like to commence its commentary on the process by asking two questions (1) what prompted this particular focus on satellite and (2) why this process is deemed necessary considering there is an existing framework that has been applied for years.

2.2. Whist the ACT and its members welcome the consultative approach followed by ICASA; it is our view that the premise of the inquiry may be flawed. All licensees in the sector should benefit from a more considered licensing regime, and not just the satellite industry.

2.3. We would like to refer ICASA to the licensing provisions set out in Chapter 3, which clearly constrains ICASA's licensing authority to the categories set out in sections 5 (licensing) and 6 (licence exemptions). These have been used to licence satellite networks and services to date and there is no explanation in the Inquiry document, what shortcomings in these provisions triggered this process.

2.4. The Inquiry document proposes 3 types of licensees:

Licence type	Description in Inquiry Document	Existing ECA Provisions to be used
<p>Satellite Gateway Earth Station Licence</p>	<p>Gateway Earth stations are hubs that connect the satellite network to terrestrial networks that is proposed to be authorised through the issue of a Satellite Gateway Earth station licence. The licence will specify the location from which the gateway earth station can be operated, the allocated spectrum authorised for use along with a range of licence conditions, such as national and international obligations and apparatus requirements.</p> <p>It is proposed that Gateway Earth Station Licences are legible to be treated under the Private Electronic communication Network (PECN) regime.</p>	<p>A PECN is clearly defined in the ECA as an electronic communications network used primarily for providing electronic communications for the owner’s own use. Considering that Earth Stations could be declared as essential facilities – it is prohibited from being used primarily for the owner’s own use (see section 43(8)(b) of the ECA). Especially considering the guidance in 43(10) that prohibits exclusive arrangements.</p> <p>It is clearly an electronic communications network service intended to be provided nationally, which requires an individual ECNS licence. Should the satellite provider want to provide services to end users, an individual ECS licence is required.</p>

Licence type	Description in Inquiry Document	Existing ECA Provisions to be used
User-Terminal network Licence	<p>ICASA is proposing a separate licence that authorises access to radio frequency spectrum for user terminals to communicate with satellites. The Inquiry document states that applicants for satellite User Terminal licence (which would be required for the sale and installation service of satellite user terminal equipment would have to register to obtain a Radio Dealer Certificate. Moreover, ICASA is proposing a blanket licensing of user terminals.</p>	<p>The ECA has a defined term for devices used by a subscriber to access, use or receive the services of a licensee – <b><u>subscriber equipment</u></b>. Section 35 of the ECA sets out the type approval regime and therefore ICASA needs to explain more clearly its intention behind the introduction of a User-Terminal Network Licence.</p>
Registration of Space Segment	<p>This is not a licence but rather some Space Segment registration regime for the Space segment operators who intend to include the territories of South Africa in its service area.</p>	<p>Considering the point made above, that Gateway Earth Stations requires a licence (and not a PECN as stated), there is no purpose for this registration approach.</p>

2.5. Considering the analysis above, ICASA is requested to provide more context to clarify how the existing framework was considered in its proposals for a new licensing framework for satellite.

### 3. Questions

3.1. 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 (*section 4*)?

3.1.1. The proposed ATU policy principles significantly align with the approaches followed in other jurisdictions such as the EU. It is however submitted that it is not comprehensive enough, nor does it align with South African legislation or consider local needs. Global regulatory standards frequently stress the importance of equitable market access. This philosophy advocates for regulatory frameworks that permit various technological solutions (such as terrestrial and satellite systems) to function under uniform guidelines (a level playing field), thereby fostering an equitable competitive landscape and stimulating market rivalry. These guiding principles are designed to facilitate impartial market entry and attract a diverse array of service providers, a strategy that has gained widespread acceptance among international regulatory entities like the ITU, as well as in the regulatory structures of regions such as Europe and North America.

3.1.2. It is submitted that ICASA needs to conduct its own independent analysis to determine the policy principles that should apply in South Africa.

3.2. 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.

3.2.1. The exclusions may be acceptable if ICASA explicitly requires that such services cannot be offered on a commercial basis. ICASA is furthermore requested to explain its rationale to decide on these particular services. If it is purely based on focusing attention on Fixed Satellite Services (FSS) Mobile Satellite Services (MSS) or Broadcasting Satellite Services (BSS), it may be necessary for ICASA to explain why the following services have been excluded: Meteorological Satellite services, Search and Rescue Satellite Services (Cospas-SARSAT), Space Operations Services and Scientific Satellite Services. These are specialised functions that do not strictly fall under FSS, MSS or BSS.

3.3. 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.

3.3.1. ICASA is requested to explain how it considered the existing licensing framework in the Inquiry document. Please refer to paragraph 2 above. A number of licensees have followed the current licensing framework and invested millions of rands to ensure compliance to local legislation and regulation. A sudden change to the regime may render their investments sunk, putting them at a disadvantage to new market players.

3.4. QUESTION 4: Please provide your comments on the proposals in the preceding paragraph (section 7) and the duration of the Gateway Earth Station licences.

3.4.1. First and foremost, ACT would like to refer ICASA to section 43 as a whole that promotes the leasing of facilities. In particular section 43(8)(b)

of the ECA, regards an Earth Station as an essential facility (although none has been declared as such yet). However, it is conceivable that upon consideration it would subject Earth stations located in South Africa, to the requirements imposed on essential facilities and require it to have an individual electronic communications network service (i-ECNS) licence. Moreover, section 43(10) specifically mentions satellite services as an example of a service that may not have exclusivity provisions which illustrates that it is unlikely to be offered primarily for own use in order to qualify as a PECN.

3.4.2. It is submitted that considering the benefits of having a Gateway Earth Station built in-country, which results in improved connectivity and services and the economic benefits of having such an asset in the country with its associated creation of high-skilled jobs, ICASA should rather consider how its regulatory framework could be improved to make South Africa a preferred investment destination.

3.5. 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.

3.5.1. Like the network and service licensing regime, spectrum licensing should be technology neutral. Accordingly, there should be no undue benefits and differentiation for satellite spectrum fees as opposed to other spectrum fees. It is proposed that aggregate pricing be introduced for all spectrum offering the same service on a linear scale.

3.6. 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.

3.6.1. Section 35 of the ECA covers the type approval regime and may be sufficient to address what ICASA intends with the Satellite User Station Network Licence. Without ICASA providing further context as the intention behind creating a separate system for satellite terminals, it is difficult to provide meaningful comments.

3.6.2. It is submitted that ICASA should conduct a SEIA to assess the impact on current satellite service providers and sharing the outcomes with the sector.

3.7. 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.

3.7.1. ACT acknowledges that the mutual recognition of ESIM licences reduces regulatory complexities, promotes international cooperation and encourages investment. There also seems to be regional efforts to reduce regulatory barriers for ESIMs in various parts of the world, including the African Telecommunications Union (ATU). However ACT propose that there be strict parameters in terms of which ESIMs are considered, including a requirement that this process not be used to bypass the licensing regime in South Africa. To be clear, the use of regulation 37 cannot be used to impact competitive services in South Africa.

3.8. QUESTION 8: Please provide your comments and details of the best practices in other jurisdictions to fulfill 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?

3.8.1. The proposed new Licensing Framework for Satellite Services discusses space segment authorisation under paragraph 10. It specifically mentions the ATU-R framework, and it is worth noting that it has some key differences compared to other jurisdictions such as the EU, US, and Australian frameworks as an example. It is distinct, particularly in its approach to satellite operator regulations and market entry. The ATU-R Framework prioritizes ease of market entry and operational flexibility for satellite operators more explicitly than other frameworks, reflecting a strategy to encourage rapid development of satellite communications infrastructure. However as stated, it is not suitable to be applied as is to the South African environment.

3.8.2. It is of critical importance to the sector that there should be parity in regulation. Regarding lawful interception, it is a requirement in most countries globally for satellite operators to have the capability to intercept communications when presented with a lawful order. RICA, however, falls under the jurisdiction of the Department of Justice, and it should be considered as such in the Inquiry document. ICAS must be cognisant of the ability of DOJ to enforce RICA in any proposed satellite framework.

3.8.3. Lastly, in as far as best practice is concerned, as well as upon considering best practices between the EU, US, China, India and Australia it appears that the following measures are generally employed to mitigate interference which go beyond just RQZ:

- Establishment of Radio Quiet Zones (RQZs): Many countries designate RQZs around major observatories, with strict controls on both satellite and terrestrial emissions within these zones.
- Power Limits and Emission Controls: Satellite operators must comply with strict power output limits and out-of-band emission standards, especially for bands adjacent to astronomy frequencies.
- Coordination and Licensing: Licensing procedures often include mandatory coordination with national regulatory authorities, observatories, and sometimes international bodies like the ITU to manage potential interference.
- Beam Control Techniques: Many countries require satellite operators to employ beam steering, spatial separation, nulling, or other directional controls to avoid directly illuminating sensitive areas within RQZs.
- Real-Time Monitoring and Compliance: Countries with RQZs deploy real-time interference monitoring and enforcement mechanisms, allowing for immediate responses to interference issues.
- Time Sharing: Time sharing to avoid satellite transmissions during critical radio astronomy observations
- International Cooperation: Most countries, especially those with strong astronomy programs, coordinate closely with the ITU and establish international agreements to ensure that satellite operators adhere to interference mitigation standards.

3.9. 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 networks 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.

3.9.1. The current universal service and access framework in South Africa requires an urgent and holistic review. Considering a satellite specific approach without first taking stock of the existing situation would result in a perpetuation of a broken system.

3.9.2. ICASA is encouraged to take this opportunity to institute a formal process to review the universal service and access framework in the country.

3.9.3. Network operators have been subjected to onerous spectrum obligations by the ICASA (e.g. IMT licensing obligations). ICASA is required to conduct a comprehensive review of the spectrum obligations, which include connectivity obligations to underserved communities, to determine a coherent rationale across users of spectrum for connectivity, given that the spectrum is technology neutral.

In addition, ACT will appreciate the opportunity to present oral presentations to the Authority when it is applicable. We anticipate a transparent process in the development of this regulatory framework, which will yield a framework that will provide regulatory certainty for Satellite Services and all network operators in South Africa.

Yours Sincerely,

Ms Nomvuyiso Batyi

Chief Executive Officer

Association of Comms and Technology