



**SABC SUBMISSION TO THE INDEPENDENT COMMUNICATIONS AUTHORITY OF
SOUTH AFRICA**

PROPOSED NEW LICENSING FRAMEWORK FOR SATELLITE SERVICES

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South African Broadcasting Corporation SOC Limited: Registration Number: 2003/023915/30

Non-Executive Directors: Mr K M Ramukumba (Chairperson); Ms N A Batyi (Deputy Chairperson); Dr R K C Horne; Ms P Kadi; Ms P P Magopeni; Mr D M Maimela; Ms A C Makhwanya; Mr D K Mohuba; Ms M Moonsamy; Ms R M S Motaung; Adv T S Thipanyane; Mr M Tsedu
Executive Directors: Ms N L Chabeli (Group Chief Executive Officer); Mr L Binza (Acting Chief Operations Officer); Ms Y van Biljon (Chief Financial Officer); **Company Secretary:** Adv T Moshakga

1. Introduction

- 1.1. On the 14th August 2024, the Independent Communications Authority of South Africa (ICASA), published a notice of its intention to conduct an inquiry into the licensing framework for Satellite Services pursuant to section 4B of the ICASA Act, 2000 (Act No. 13 of 2000) “The Inquiry”.
- 1.2. The SABC would like to thank ICASA for the opportunity to make submissions on the Proposed Licensing Framework for Satellite Services 2024. The SABC supports ICASA’s intentions to determine a regulatory and/or licensing framework for Satellite Services in South Africa for the benefit of all South Africans. The SABC welcomes and appreciates ICASA’s invitation to submit inquiries and contribute to this initiative.
- 1.3. As the only public broadcaster within the Republic of South Africa charged with a specific mandate set out in Chapter IV of the Broadcasting Act No. 4 of 1999 to provide not only radio and television programming that informs, educates and entertains; but further states that these are to be made available throughout the Republic.
- 1.4. This presents an opportunity to the SABC to provide these services to all corners of South Africa, through various means that include Satellite Services in broadcasting television and radio services to the masses, in fulfilling this mandate.
- 1.5. The SABC has commercial agreements with other ICASA ECNS license holders for contribution and distribution satellite uplink services, including a cross-carriage agreement with a (Direct To Home) DTH platform operator.
- 1.6. The SABC will nevertheless largely confine its submission of this proposed licensing framework to areas which are of concern to its business as the public broadcaster and will further substantiate this initial submission through oral hearings should the Authority be holding any.

2. General Comments

2.1 It is to be noted that signal distribution costs, of which the use of satellite services forms part of is a costly expense for the SABC. This operational cost is crucial in up linking and broadcasting television and radio services to audiences across the country on the Direct To Home (DTH) platforms and the digital/analogue terrestrial transmitters spread throughout the country. If the uplink to the primary C-Band and/or secondary Ku-Band is not possible, then millions of South Africans will be left “in the dark” as far as receiving television and radio programs. It is therefore crucial that a sound licensing framework is in place to ensure that the provision of such services is protected from interference, overcharging and to ensure fair and adequate bandwidth allocation and proper registration of new market entrants in the wake of the increase in the Satellite Market requirements.

3. Responses relating to specific questions asked in the proposed licensing framework inquiry posted in the publication by ICASA.

3.1 Policy principles from the ATU that ICASA seeks to align with. Kindly provide comment(s) on the proposed policy principles and any further recommendations.

The SABC welcomes the alignment with international best practices. The framework must provide for an even playing field for all players: those currently actively involved with satellites; and those intending to enter the market. The framework must also consider potential future barriers to entry into the satellite market and try to mitigate against them. Considering that SA does not own its own satellite and is therefore dependent on leasing space from international suppliers, questions arise on: how will this new framework ensure or encourage future developments towards owning a satellite; how are the incumbent international suppliers licenced; and will similar regime be affected on new suppliers.

3.2 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.

Although the scope of this enquiry is only focused on Fixed Satellite Services (FSS), Mobile Satellite Services (MSS) and Broadcasting Satellite Services (BSS), there should be a similar regulatory framework applicable to those satellite services excluded in this enquiry to ensure an even playing field for all role players and eliminate any interference and potential barriers to entry into those services.

3.3 Policy principles from the ATU that ICASA seeks to align with. Kindly provide comment(s) on the proposed policy principles and any further recommendations.

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.

Yes, the SABC's view is that this allows for the Authority to licence according to the potential or abilities of each licensee. Applicants may also only intend to utilise one or all of the satellite communications, it would be imperative for the Authority to individually consider each applicant for purposes of promoting the growth of the industry and not promote for dominant players to enjoy monopoly in the sector.

Furthermore, having separate licenses might be beneficial when analysing difficulties such as:

Specialised Regulation – Separate licenses allow for more tailored regulatory oversight for each segment, ensuring that specific technical and operational requirements are met.

Clear Accountability – Different segments can be held accountable for their specific roles, making it easier to manage compliance and address issues.

Focused Expertise – Regulatory bodies can develop specialised expertise for each segment, potentially leading to more effective regulation.

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

We view this stance as being progressive, the 5yrs period can perhaps be made longer to 10yrs. This will give incumbent users enough time to procure new equipment if indeed the changes impact on their ability to use the existing equipment or technology

3.5 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.

The SABC's position and previous submission on spectrum fees was that it has ECNS licences which are solely used for broadcasting services of special events and programmes of national interest. We thus accordingly submitted that the SABC should be exempted from paying spectrum fees of its ECNS licences, particularly because such licences are solely used for broadcasting services. In the event that the SABC intends to use its ECNS licences for purposes other than broadcasting services, the Corporation could notify the Authority well in advance for such intentions. The exemption from paying spectrum fees will assist the SABC to redirect the funds to public service mandate.

The SABC submits that new licensees be required to contribute towards community development projects (i.e. establishment and maintenance of computer labs in underserved areas) or contribution to the development of local content hubs in underserved areas or contribute a levy towards the local content fund and universal service and access fund.

International Benchmark on Methodologies

Below are methodologies used in other jurisdictions to develop an effective spectrum fee calculation and we believe these can be explored by the Authority to develop an effective methodology for Gateway Earth Stations in South Africa.

High Throughput Satellite Factor (HTSF):

Rationale: Introducing an HTSF to reduce fees for HTS services is sensible given the unique demands of these systems. This discount recognizes the global competitiveness in satellite services and aims to encourage investment.

Implementation: A defined HTSF value between 0.1 and 0.3 appears practical; however, clarity on how this value will be determined and adjusted over time is vital. Stakeholders may benefit from transparency regarding how the HTSF correlates with market performance, investment levels, and the overall health of the satellite services sector in South Africa.

Variable Fees per MHz by Frequency Band:

Rationale: This method acknowledges the different characteristics of frequency bands and the varying practical limitations of their use. Considering the limited spectrum in lower frequency bands, the differential pricing based on MHz makes logical sense.

Application: The implementation must be appropriately aligned with actual market demand and technical characteristics of the frequencies. An analysis of spectrum usage trends and requirements will help the Authority to set fair and sustainable rates.

Adjustment to Existing Fee Structures:

Consideration of Minimum Fees: Integrating a minimum fee (RUL) to ensure a baseline returned from the operators is reasonable, especially when combined with a mixed-model approach that allows for flexibility based on actual usage.

Licensing Framework:

Per Licence Model: Powering the licensing framework based per license, rather than per Earth Station, suits scenarios where multiple stations may operate within a single integrated satellite network. This reduces the overall compliance burden on operators and can promote the establishment of more non-geostationary satellite systems without imposing prohibitive costs.

Methodologies from Other Regions

Auction-Based Spectrum Fees (United States)

In the U.S., the Federal Communications Commission (FCC) uses an auction system to allocate spectrum licenses. Operators bid for the right to use specific frequencies, and the auction prices reflect the market demand for those bands.

Suitability for South Africa:

An auction model can incentivize operators to value spectrum according to their business needs and market conditions, potentially maximizing government revenue. This model could be particularly useful for high-demand or congested frequency bands.

Tiered Pricing Model (Australia)

Australia uses a tiered pricing system where fees are based on the specific frequency band and the geographic area covered. The fees may vary depending on the band's demand, usage conditions, and the extent of the geographic area.

Suitability for South Africa

This model allows flexibility in fee structures according to band characteristics and usage. For South Africa, this could address discrepancies in demand across the country and encourage more efficient use of available spectrum.

Per MHz Pricing (Canada)

Canada employs a per MHz pricing model wherein operators are charged fees based on the amount of spectrum they hold in MHz. This can be differentiated by frequency band, taking into account the economic value of the band.

Suitability for South Africa:

This method can provide a straightforward fee calculation tied directly to the spectrum utilized by operators. Implementing such a model in South Africa would offer clarity and predictability in fees, aligning costs with actual resource usage.

Demand-Based Pricing (European Union)

In the EU, certain member states adopt demand-based pricing methodologies that adjust spectrum fees according to market demand, usage intensity, and economic conditions. This can also include considerations of the social and economic benefits of using the spectrum.

Suitability for South Africa:

Adopting a demand-based pricing model allows for responsiveness to market conditions. For South Africa, this could ensure that operators are only paying for

spectrum they utilize, potentially leading to more efficient allocation and use of resources.

Cost-Based Pricing with Economic Analysis (United Kingdom)

The UK's Office of Communications (Ofcom) employs a cost-based pricing approach that considers the economic value of spectrum, regulatory costs, and other societal benefits when determining fees.

Suitability for South Africa:

A cost-based approach could provide an equitable framework for determining spectrum fees reflective of the actual costs associated with regulating and managing the spectrum. This could be especially relevant for South Africa, given the necessity of promoting access and equity.

Hybrid Approach

Some countries adopt a hybrid approach that combines elements from various models, including fixed fees, demand-based pricing, and auction systems.

Suitability for South Africa:

A hybrid model tailored to South Africa's specific needs could harmonize the benefits of certainty (fixed fees for baseline access) with market dynamics (auction or demand-based adjustments for premium frequencies).

Preferred Option

The combination of High Throughput Satellite Factor (HTSF) and the variable fees per MHz model. This hybrid approach would allow for flexibility, catering specifically to the unique operational demands of HTSF. Moreover, it could promote investment in the satellite sector while still ensuring that the Authority captures fair revenues based on actual spectrum usage and demand dynamics.

Sources

Federal Communications Commission (FCC). "Spectrum Auctions." [FCC - Spectrum Auctions] (<https://www.fcc.gov/spectrum-auctions>)

Australian Communications & Media Authority (ACMA). "Spectrum Pricing." [ACMA - Spectrum Pricing] (<https://www.acma.gov.au/spectrum-pricing>)

Innovation, Science and Economic Development Canada. "Spectrum Pricing." [ISED - Spectrum Pricing] (https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/h_sf01722.html)

Ofcom UK. "Ofcom's approach to spectrum pricing." [Ofcom - Spectrum Pricing] (<https://www.ofcom.org.uk/manage-your-licence/radiocommunications-licences/spectrum-pricing>).

European Commission. "EU Guidelines for the promotion of the EU-wide deployment of broadband networks." [EU Guidelines] (<https://ec.europa.eu/digital-strategy/our-policies/next-generation-access-networks>).

3.6 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.

A blanket licensing framework based on set fees per number of terminals is welcomed. This will reduce the overall compliance burden and need for multiple license application on operators without prohibitive costs. This method can provide a straightforward fee calculation tied directly to the number of terminals utilised by operators, offering clarity and predictability in the required fees for actual resource usage.

We would however propose a different fee category per number of terminals.

Number of terminals (n)	Fee per category of user terminal in ZAR
$0 < n \leq 1\ 000$	A
$1\ 000 < n \leq 10\ 000$	B
$10\ 000 < n \leq 100\ 000$	C
$> 100\ 000$	D

3.7 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.

Regulation 37 of the ICASA Radio Frequency Spectrum Regulations of 2015 provides for the Recognition of Licences Issued by other Countries and states that:

“Notwithstanding provisions to the contrary in these regulations, the Authority may issue a radio frequency spectrum licence as required by the Act or these Regulations to a person who, in the opinion of the Authority, possesses a similar licence issued by an authority in another country despite the fact that such person does not satisfy specific requirements stipulated by these regulations for the acquisition of the licence or certificate.”

The SABC submits that it is appropriate to use regulation 37 of the Radio Regulations to recognise the ESIM Licenses issued by other countries. This response assumes the Authority will ensure that the license is adjusted to align with the requirements of the regulations.

3.8 Please provide your comments and details of 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?

The SABC has limited knowledge of radio astronomy and will limit its responses to areas that may impact public broadcasting. We were in the past requested and have complied to the authorities’ request to switch off all terrestrial signals (digital and analogue) in an effort to reduce interference in the SKA area.

As such, the only access that the communities in the SKA area have to public broadcasting, is via DTH satellite services, which are primarily based on KU-band reception.

We therefore submit that, in the interests of universal access, the authority needs to ensure that this access to DTH services, is maintained in the SKA area, and that relevant mitigation measures (at no cost to the communities) be implemented in cases where the DTH solution is found to be causing interference.

3.9 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.

As the Public Broadcaster, our mandate is to render TV and Radio services to all South Africans in all corners of the country. South African audiences should be able to access SABC content regardless of where they reside in the country. This requirement can only be possible through satellite transmission. Satellite transmission is much larger and more accessible than terrestrial transmission which rely on a network of transmitter towers located across the country. Satellite transmission on the other hand covers the entire country and requires the reception dish to have a clear line of sight to the satellite in orbit.

VSAT services using Ku-band and Ka-band spectrum have been available for over 10 years and well established in the South African market in underserved rural areas. These solutions are however expensive, and the access is limited to business and commercial entities that can absorb the installation and exorbitant monthly rentals.

There are new market players, such as Starlink and Kuiper (Amazon), that are possible game changers in the satellite market. News from the USA and other countries that have adopted this technology, holds that the costs of the technology reduce with scale. Also given the amount of bandwidth that this technology delivers, in comparison to VSAT, the price point scales can be more favourable.

The regulatory environment needs to encourage the adoption and development of these new technologies in order to improve universal access in the under serviced areas. Collaboration with government programs to reach unserved and underserved areas of the country are some of the regulatory solutions that can be used by Satellite Operators to address the shortcomings of terrestrial networks. Other regulatory solutions might include offering rebates on satellite license fees to encourage Satellite Operators to address the shortcomings.

4. Recommendations

We humbly recommend that The Authority take lessons from the monopoly and dominance enjoyed in the analogue and digital transmission services for the terrestrial market by one signal provider. The shift from analogue to digital necessitates a shift from terrestrial to satellite broadcasting. The regulations should guard against creating a further monopoly in the satellite market by creating barriers to entry for new entrants.

Furthermore, the SABC would like to request the Authority when determining a regulatory and/or licensing framework for Satellite Services in South Africa for the benefit of all South Africans to always consider the technology neutrality principle as enshrined in the Electronic Communication Act. To the extent that the SABC accepts that it should reach 100% of the population with its digital television services, it does

not agree that the technology to be used to achieve this should be confined by Policy and Regulations. The Corporation still believes that this decision should be a commercial decision that should be decided upon by the SABC and its signal distributor. Not only does the SABC want to be everywhere at all times but also on every device or terminal equipment. This goes beyond the issue of achieving 100% population coverage but also enriching the coverage with convenience and comfort.

Therefore, the SABC submits that The Authority should grant flexibility and promote technology neutrality without confining broadcasters into a specific mode of signal distribution, while encouraging the adoption and development of these new technology services in order to improve universal access.