

12 November 2024

Independent Communications Authority of South Africa
350 Witch-Hazel Avenue,
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Centurion

Attn: Mr Mandla Mchunu

By email: satlicensing@icasa.org.za

Dear Mr Mchunu

Re: Consultation on the proposed new Licensing Framework for Satellite Services

Introduction

- 1 We refer to the Consultation on the proposed new Licensing Framework for Satellite Services¹("the proposed framework") published by the Independent Communications Authority of South Africa ("the Authority") on 14 August 2024.
- 2 We appreciate the opportunity to comment on the proposed framework, particularly given the key role that satellite technology is expected to play in the universal provision of broadband services in our country and across the world.
- 3 We broadly support measures to ensure the appropriate licensing of services provided using satellite technologies, including those used to provide broadband services.
- 4 However, it is not clear from the proposed framework what mischief the Authority seeks to address, in circumstances where South Africa has an existing technology neutral legislative, regulatory and licensing framework under which satellite services have been ably handled for many years.
- 5 In the context of convergence and technological neutrality, a proposed satellite-specific licensing framework is regressive.
- 6 The proposed framework also pays scant regard to the confines of the underlying empowering statutes, the existing South African licensing and regulatory frameworks and the existing ITU coordination processes.

¹ Consultation on the proposed new Licensing Framework for Satellite Services, published under notice number 2678, Government Gazette number 51044, 14 August 2024.

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- 7 We are therefore concerned that the proposed framework is unduly broad and misaligned from the empowering underlying legislative framework.
- 8 We set out below some overarching comments, before responding to the specific questions posed by the Authority. Given the absence of a clear rationale for the proposed framework, we have responded to the specific questions as meaningfully as possible.
- 9 We trust that our submission will assist the Authority in developing a lawful and practical way forward.

The broader context in which satellite licensing must be considered

- 10 Any satellite licensing framework to be developed by the Authority must be considered within the context of the broader satellite licensing context and the legislative, licensing and regulatory framework.
- 11 Satellite services are licensed and coordinated at both the (i) global and (ii) national levels.

ITU satellite coordination and notification processes

- 12 First, a satellite-specific framework must be located within the context of the international framework governing satellites, under the auspices of the International Telecommunications Union ("ITU").
 - 12.1 Satellites are based in space, and are global infrastructure whose footprint covers many countries. As a result, they are regulated through international agreements and practices.
 - 12.2 As the Authority is aware, the ITU is the specialised agency of the United Nations which is responsible for international regulation of information and communication technologies.
 - 12.3 There is an existing co-ordination and notification process with which all satellites must comply before they are launched. These and other ITU processes are aimed at preventing satellites from causing interference whether with other satellites or other radiocommunications systems.
 - 12.4 One of the primary functions of the ITU is the recording of satellite and earth station frequency assignments in the Master International Frequency Register ("MIFR"). International satellite coordination is the process by which a satellite network is registered in the MIFR at the ITU.
 - 12.5 The satellite coordination process is extensive and allows for a comment period to allow countries (administrations) to comment and object before a satellite is launched. Before any satellite is launched with a satellite footprint covering South Africa, ICASA would have

become aware of such satellite through the relevant ITU publications and had an opportunity to comment and object.

- 12.6 Only after the ITU co-ordination process is complete, may a satellite be launched and only then may its signals be received in the countries within the relevant satellite footprint.²
- 12.7 Satellites are also authorised by the satellite operator's home licensing administration, as this is where the transmission of the signal originates. Article 18.1 of the ITU Radio Regulations is very clear on how transmitting stations (including in respect of satellite services) are managed by administrations, i.e., transmitting stations used for uplink satellite services must be licensed in the country in which the transmitting station is located.

13 Any satellite licensing framework developed by the Authority must have due regard to the existing ITU coordination and notification process under the ITU Radio Regulations.

- 14 We are also mindful of the particular characteristics of satellites.
- 15 A satellite's coverage area (or "footprint") is determined before it is launched, and its viability depends on its ability to service all the countries within its footprint. It is not a viable economic proposition for a satellite to serve only one or two countries. The costs associated with the deployment and use of satellites can only be recouped by optimizing coverage of the area of the earth that the satellite can reach.
- 16 For satellite network operators or service providers, having to seek authorisation from a multitude of regulators and satisfying the licence requirements and conditions of many countries, would be costly and time consuming, even in cases where fees may be relatively low. Satellite operators depend on harmonized regulatory approaches, because of their wide multi-national coverage.

National legislative, regulatory and licensing context

- 17 Second, any electronic communications licensing framework developed by the Authority must meet the confines of the empowering statute, the Electronic Communications Act, 2005 ("the ECA") and related laws, which set out a clear licensing framework for all electronic communications services and frequency spectrum use in South Africa. In turn, South Africa's licensing framework and use of frequency spectrum must accord with the country's international obligations and international standards.³

² Further information is available at [FAQ - Regulatory procedures for the submission and recording of satellite networks and earth stations](#)

³ s5(2)(j) of the ECA

- 18 South Africa, like many other countries, has adopted a technology neutral licensing framework,⁴ which has been adopted internationally as the preferred solution to regulators' struggles to keep up with the fast paced changes in ICT. The ECA was enacted in 2005 specifically to establish a legal and regulatory framework, in line with technology and economic developments, to promote convergence of electronic communications,⁵ to create a technologically neutral licensing framework⁶ and to promote and facilitate convergence.⁷⁸
- 19 A technology neutral licensing regime -
- 19.1 ensures flexibility, accommodates future technological and market changes, thus promoting the provision of innovative services, increased competition and growth in the industry;
 - 19.2 simplifies/reduces the number of licence categories, and reduces administrative burdens and licence fees, which ultimately results in lower prices and increased efficiency;
 - 19.3 ensures that similar services, irrespective of the technology they use, are regulated in the same or similar manner, thus reducing discrimination against or undue preference of some technologies; and
 - 19.4 lowers barriers to market entry and promotes competition, by allowing service providers to offer a wide range of services regardless of the technology they use. This increased competition means consumers can receive improved services at reduced prices.
- 20 In order to give effect to the overall statutory objectives, the ECA provides broadly for the licensing of electronic communications network services, electronic communications services and broadcasting services.⁹
- 21 The ECA further envisages that these services will be granted individual or class licences, alternatively certain of them may be exempt from requiring a licence.

⁴ s2(b) of the ECA

⁵ Preamble to the ECA

⁶ s2(b) of the ECA

⁷ s2(a) of the ECA

⁸ Other objects of the ECA which ought to be borne in mind in this process include to -

- promote the universal provision of electronic communications networks and electronic communications services and connectivity for all; (s2(c) of the ECA)
- encourage investment, including strategic infrastructure investment, and innovation in the communications sector; (s2(d) of the ECA)
- refrain from undue interference in the commercial activities of licensees while taking into account the electronic communication needs of the public (s2(y) of the ECA); and
- promote stability in the ICT sector (s2(z) of the ECA).

⁹ s5 of the ECA

- 22 The Authority has prescribed detailed licensing processes and procedures regulations for individual and class licences, as well as standard licence terms and conditions.¹⁰
- 23 Any service to be licensed must necessarily fall within the existing licensing framework in Chapter 3 of the ECA. Any licensing framework considered by the Authority must be based on and be consistent with the licensing provisions in the ECA. The Authority cannot act *ultra vires* by creating a licensing framework that is not catered for by the ECA.
- 24 In addition, the use of radio frequency spectrum is subject to Chapter 5 of the ECA. Subject to certain provisions, no person may transmit any signal by radio or use radio apparatus¹¹ 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.¹² A radio frequency spectrum licence is required in addition to any service licence contemplated in Chapter 3 of the ECA.¹³
 - 24.1 The requirement for a frequency spectrum licence does not apply in specific circumstances, including where a person utilises radio frequency spectrum in the course of making due and proper use, as a subscriber, of a licensed or exempt electronic communications services or electronic communications network services.¹⁴
 - 24.2 The Authority may prescribe -
 - 24.2.1 types of radio apparatus the use or possession of which; or
 - 24.2.2 the circumstances in which the use or possession of radio apparatus does not require a radio frequency spectrum licence, including scientific uses of radio frequency spectrum that have been coordinated and agreed to by the Authority.¹⁵
- 25 The Authority has prescribed the Radio Frequency Spectrum Regulations, 2015 (as amended) ("the Radio Frequency Spectrum Regulations"), the purpose of which is to, among other things, -
 - 25.1 establish the framework through which the Authority may allocate and assign radio frequency spectrum under the South African National Radio Frequency Plan;

¹⁰ Namely the Individual Licensing Processes and Procedures Regulations, the Class Licensing Processes and Procedures Regulations and the Standard Terms and Conditions Regulations

¹¹ Radio apparatus excludes subscriber equipment

¹² s31(1) of the ECA

¹³ s31(2)(a) of the ECA

¹⁴ s31(5) of the ECA

¹⁵ s31(6) of the ECA

- 25.2 establish standard terms and conditions which will be applicable to all frequency bands and applications as well as radio frequency spectrum licences;
- 25.3 establish transparent, fair and efficient procedures and processes for radio frequency spectrum licence applications; and
- 25.4 provide for circumstances in which the use or possession of radio apparatus does not require a radio frequency spectrum licence.¹⁶
- 26 Satellite technology is already contemplated in the ECA. For example, an electronic communications facility includes a satellite transponder,¹⁷ and an electronic communications network includes satellite systems.¹⁸
- 27 Similarly, the Radio Frequency Spectrum Regulations specifically envisage and cater for satellite services. For example, in the Radio Frequency Spectrum Regulations, application and permit fees specifically provide, under the heading "Satellite Service", for fixed satellite earth station uplink, transport satellite news gathering stations (SNG) and VSAT.¹⁹
- 28 Accordingly, satellite services are not novel to South Africa, or to the country's legislative and regulatory framework. On the contrary, the Authority has ably licensed and regulated various satellite use cases under the existing legislative, regulatory and licensing framework for many years.
- 29 To the extent that there is a gap in the existing licensing and regulatory framework, that gap must be clearly identified, and addressed within the parameters of the existing empowering statutory provisions. To the extent that amendments may be required to the existing service and spectrum regulations to address specific gaps, those ought to be clearly articulated together with clear proposals to address those specific gaps.
- 30 Our comments on the proposed framework are provided with the above objectives and legal provisions of the ECA and the nature of satellite technology in mind.
- 31 Against this background, before addressing the specific questions posed by the Authority, we consider the underlying rationale for the proposed framework.

It is unclear what mischief the proposed framework is trying to address

- 32 Although we have considered the proposed framework in detail, we have not been able to clearly identify the specific mischief that the proposed framework is seeking to address.

¹⁶ Reg. 2 of the Radio Frequency Spectrum Regulations

¹⁷ Definition of electronic communications facility in s2 of the ECA

¹⁸ Definition of electronic communications network in s2 of the ECA

¹⁹ Item 7 of Annexure F of the Radio Frequency Spectrum Regulations

- 33 While the proposed framework specifies its regulatory objectives,²⁰ these are not stated in relation to a clearly identified problem. The stated intention of the proposed framework is, among others, to develop a transparent and streamlined framework for potential satellite operators. However, the proposed framework does not indicate what the perceived shortcomings, inefficiencies or lack of clarity in the current licensing and regulatory framework are.
- 34 We understand that there have been recent technological developments in the provision of broadband services using non-geostationary satellites.
- 35 But, as explained above, satellite services are not new. The current licensing framework in the ECA already provides for the licensing and regulation of satellite networks and services.
- 36 For example, Direct To Home (DTH) services have used spectrum in the FSS and BSS bands to provide broadcasting transmission and related services for decades, and have been adequately dealt with under the existing ECA service and spectrum licensing framework. Other longstanding satellite use cases in South Africa include VSAT, critical data communication, content distribution and high availability feeds for live events, air traffic navigation facilities, satellite telemetry and tracking and radio astronomy observations.
- 37 In the absence of a clearly articulated problem statement, we are not in a position to properly assess the necessity and rationale for the proposed framework, or the extent to which the proposed framework will address any shortcomings that the Authority may have identified.
- 38 It is not apparent why the Authority considers it necessary or appropriate to put in place a technology-specific licensing framework for satellite services.
- 39 In order to move forward in any meaningful way, we respectfully submit that it is essential for the Authority to clearly identify the specific satellite technology / use case that it seeks to address (e.g., non-geostationary satellites for broadband purposes) and identify the gaps in the existing licensing and regulatory framework which necessitate the development of a framework and/or the amendment of existing regulations to address specific needs in relation to that technology and those gaps.

Will and/or to what extent will the proposed framework apply to satellites already in orbit?

- 40 It is not clear whether and how the proposed framework is intended to apply to satellites that are already in orbit and are already in use in South Africa.
- 41 It is also unclear how the proposed framework will correlate with the agreements with satellite operators at ITU level, particularly bearing in mind that the satellites were launched after complying with the ITU co-ordination process, during which issues of harmful interference were considered and addressed. To our

²⁰ Section 3 of the proposed framework

knowledge, there was no objection recorded by South Africa at the launch of such satellites nor has there ever been any such objection by South Africa.

- 42 We propose that this be clarified in order to enable stakeholders to meaningfully comment on the proposed framework.
- 43 To the extent that the Authority ultimately puts in place a satellite licensing framework, such framework should not apply to satellites that have already been launched, but should apply only to satellites that are launched after the framework is implemented.

Comments on specific questions posed by the Authority

- 44 Our comments and proposals on the questions posed by the Authority are set out below.
- 45 As explained above, the absence of a clear purpose and problem statement for the proposed framework make it difficult to specifically address / comment on the questions posed. This notwithstanding, we have endeavoured to provide constructive responses to the various questions posed by the Authority.

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?

- 46 We understand and support in principle the ATU's objective of developing a suitable licensing framework aimed at safeguarding harmonisation to the greatest extent possible.
- 47 However, the Authority does not appear to have considered the extent to which the recommendations of the ATU are consistent with the ECA and the Independent Communications Authority of South Africa Act, 2000 ("the ICASA Act").
- 48 While the ATU has indicated a strong need to harmonise the satellite regulatory framework of its member states, it is the duty of the Authority, after assessing the needs of our country, to apply the principles in a manner that is in line with the existing laws in our country.
- 49 The ITU itself recognises the need to ensure consistency with the legal framework within the country. The ATU advised:

"Member States may use the satellite licensing framework at their discretion by simply making the necessary adjustments to reflect their unique social, economic, legal and political circumstances."²¹
- 50 The strategies for attaining the ATU's policy principles in South Africa must therefore be aligned with the provisions of the ECA and the ICASA Act, the

²¹ ATU-R Framework relating to harmonized licensing framework for licensing of satellite services in Africa, numbered ATU-R Framework 001-0, August 2022, pg. 12

Authority's empowering laws. As a creature of statute, the Authority must act within the prescripts of its empowering statutes.²²

- 51 In addition to ensuring consistency with the ECA and ICASA Act, any framework adopted must -
- 51.1 be based on a rationale that has been rigorously interrogated and articulated;
 - 51.2 include only those proposals that are strictly necessary to address the specific challenges faced by the Authority - It should not seek to reinvent the wheel or to fix that which is not broken;
 - 51.3 be evidence based, and supported by a thorough analysis, research and regulatory impact assessment, and international best practice;
 - 51.4 be appropriate, effective and proportional, and must serve the policy objectives without creating unnecessary red tape or unduly stifling the regulated service or burdening service providers;
 - 51.5 facilitate and not impede the use of all available satellite resources which cover South Africa within their footprint;
 - 51.6 be consistent with our technology neutral licensing framework. The Authority's statutory mandate is clear - the Authority must create a technologically neutral licensing framework, and all licences granted and issued by it must be technologically neutral;
 - 51.7 not unreasonably increase the cost of providing services as increased costs would have to be passed on to consumers; and
 - 51.8 be geared for globalisation, and enable service providers to compete effectively, both at home and in global markets. It should allow companies to keep abreast of technology and market developments, and to grow and develop unhindered by unnecessary regulation.

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

- 52 We note that the scope of the proposed framework is intended to include Broadcasting Satellite Services.
- 53 To the extent that the proposed framework is intended to address technological developments in the provision of broadband services, specifically via

²² *Hot 1027 Fm (Pty) Ltd v Independent Communications Authority of South Africa and Others* (23582/2022) [2023] ZAGPPHC 6 (13 January 2023), at para 32

non-geostationary satellite systems, it is not clear why the Authority seeks to include FSS and BSS within the scope of the proposed framework.

- 54 Any challenges that the Authority is or expects to experience in respect of the provision of broadband services via non-geostationary satellites are unlikely to arise in respect of FSS or BSS.
- 55 We propose that FSS and BSS be expressly excluded from the scope of the proposed framework. Any framework that the Authority considers putting in place must be specifically aimed at addressing whatever mischief that the Authority is seeking to address, and should not include instances where that mischief does not arise.

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.

- 56 No. The proposed approach to licensing / authorisation in the proposed framework is vague and is not consistent with the ECA.
- 57 As explained above, in terms of s5 of the ECA, the Authority may issue individual and class licences for electronic communications services, electronic communications network services and broadcasting services. To the extent that licensees require a frequency spectrum licence, the Authority may issue a frequency spectrum licence in terms of s31(1) of the ECA. These are the relevant statutory licence categories within which the "satellite communication value chain" must be located.
- 58 It is unclear how the approach proposed by the Authority in this section is intended to fit into the licensing framework prescribed in the ECA.
- 59 It is also unclear why a new licensing framework is required, when the ECA already sets out a clear licensing framework for all electronic communications services, including those provided via satellite. As mentioned above, the Authority has, for many years, licensed satellite services, including FSS and BSS, in accordance with this licensing framework.
- 60 There are no indications in the proposed framework whether the proposed satellite gateway earth station licence and user terminal network licence are individual or class licences. It is also unclear under what authority the Authority would be registering the space segment, in circumstances where such registration is not provided for in the ECA.
- 61 No additional licence, authorisation or registration may be issued by the Authority over and above that which is provided for in the ECA, and the existing licensing and regulatory framework.
- 62 We propose that the Authority align its proposed licence categories with the ECA and, where appropriate, issue the necessary individual or class licences and frequency spectrum licences, alternatively provide for appropriate exemptions.

QUESTION 4: Please provide your comments on the proposals in the preceding paragraph and the duration of the gateway earth station licences.

63 The proposals in this section are vague and unclear.

64 The proposed framework says:

"The creation of a Satellite Gateway earth station licence would allow the licensee to install and operate a Satellite Earth Station using a specified radio frequency band. This licence does not confer any right of ownership of the frequency spectrum., it simply allows the frequency channel to be used during the term of the licence in accordance with the conditions of the licence.²³

65 First, it is not clear why the satellite gateway earth station cannot be licensed under the current licensing framework, and why a new licence category is required.

66 Second, on the one hand, there are indications in the proposed framework that a gateway earth station licence may be a frequency spectrum licence since it allows frequency channel to be used during the term of the licence. On the other hand, *"applicants or holders of the gateway earth station licence are eligible to be treated under the private electronic communications network (PECN) licence regime"*²⁴. It is not clear if the Authority's view is that satellite gateway earth stations are PECNs or would only be "treated" as PECNs. If it is the latter, it is not clear on what basis the Authority would treat a person as falling within a licence category in circumstances where that person does not in fact fall under that licence category.

67 It is also unclear on what basis the said licence should prevent the licensee from providing services to end users.

68 The licence term of five years appears to be arbitrary. If the satellite gateway earth station licence will be treated as a PECN, then it would operate under a licence exemption, without the need for renewal after a validity period.

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.

69 It is difficult for us to comment on possible fees since the rationale for creating a new licence category is unclear and the proposed licensing framework is vague.

²³ Pg 17 of the proposed framework

²⁴ Pg 18 of the proposed framework

- 70 We would only be in a position to comment on any proposed fees once these issues are clarified, and we have a better understanding on the rationale and justification for any fees.

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.

- 71 DTH subscriber equipment does not require licensing in terms of the regulatory framework under the ECA. We support this.
- 72 It is, however, not clear what this section is intended to license. It is also unclear who will have the obligation to obtain this licence. The ECA and the regulations made under the ECA do not require people to obtain licences to sell or provide user terminals. The ECA requires that such persons ensure that the user terminals comply with the type approval requirement.²⁵

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.

- 73 We support the free circulation of foreign visiting earth stations in motion onboard vessels and aircrafts based on mutual recognition of authorisations issued by countries of origin. We support the continued implementation of such mutual licence recognition. Additional registration in South Africa, which would not accord with the ECA, would undermine such mutual recognition.

QUESTION 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?

- 74 The proposed registration of satellites is inconsistent with the ECA and international best practice.

The space segment authorisation serves no identified regulatory objective

- 75 It is not clear what the nature of the intended space segment authorisation is, i.e. whether it is a licence under the ECA or would constitute a licence exempt service. The ECA and the ICASA Act do not empower the Authority to "register" persons who would otherwise not require a licence under the ECA.

²⁵ s35 of the ECA

- 76 It is also unclear what the purpose of the registration is. Registration would not prevent harmful interference, or enable the Authority to take direct enforcement action as envisaged in the proposed framework.
- 77 Registration with the Authority will not prevent the beaming of signals into South Africa - a person who is not registered in South Africa would still be able to "service" South Africa since the satellite has already been launched and is already beaming into South Africa. Unregistered satellite services are therefore likely to become rampant and ethical foreign businesses may opt to no longer provide services to South Africans as they would not be able to compete with services who are not subject to the administrative burden and cost of registration.
- 78 Furthermore, the nature of FSS and BSS satellite systems is that these provide large area or multi-country coverage by orbital slot. Such space segment would thus serve a regional area and re-use the FSS spectrum per orbital position. It is unclear what purpose a registration of capacity on a national basis would serve. Satellite capacity could be used to deploy a service in a neighbouring country, with that downlink being receivable across the region regardless of any national database, register or listing. At the same time the identical FSS and BSS frequencies would be re-used per orbital position across the geostationary arc.
- Internationally, most countries do not require in-country registration of satellites that have gone through the ITU co-ordination process
- 79 Hardly any country requires additional licensing or authorisation of space / satellite services after a satellite has undergone the ITU co-ordination process and has had their transmission sites licensed where they are located. This "Open Skies" approach has been and continues to be adopted by most administrations in the world, since it ensures the continued growth of their communications industries.
- 80 The requirement to register in-country, after having gone through the ITU co-ordination process is, therefore, not in line with international best practice.
- 81 We note that the Authority has referenced Brazil as a case study for its proposals. However, the regime in Brazil is an exception, not the norm. The Authority does not appear to have assessed the impact of the regulatory framework in Brazil on the provision and/or availability of satellite services in Brazil. It is worth noting that the number of satellites "approved" for use in Brazil was 46 as at November 2023, down from 60 satellites recorded in 2019.²⁶
- 82 In most countries, once the ITU process is completed, the satellite is launched and has the right to beam into each country within its footprint without any further

²⁶ <https://www.statista.com/statistics/746574/number-satellites-authorized-brazil/>

country-specific licensing and/or authorisation requirements for beaming into the country.²⁷ We recommend that the Authority follow this approach.

- 83 We are aware of recent developments in a few other countries on the African continent to initiate similar inquiries on satellite frameworks, but similar to the Authority, they have failed to put forward a problem they are seeking to address. Notwithstanding these inquiries, currently there is no country in the SADC region that requires in-country registration of satellites after they have gone through the ITU co-ordination process.

The proposed space segment authorisation would reduce the number of satellites "available" for use in South Africa

- 84 The effect of the Authority's proposed space segment authorisation / registration is that service providers in South Africa would only be permitted to use a satellite if the satellite operator has registered with the Authority and appears in the list of approved satellites.
- 85 This could reduce the number of satellites available for access and use in South Africa, leading to a reduction in choice and stifling of availability of innovative technology. If a satellite provider whose satellite covers South Africa, and having followed the ITU processes, has not registered with the Authority, that satellite would no longer be available for use by service providers in South Africa, irrespective of the fact that the satellite would still be beaming into South Africa. This would negatively impact on our country's ability to meet its communications goals. If South Africa is to fully benefit from satellite technology, its regulatory frameworks should permit open and direct access to all satellite resources that have been properly co-ordinated through the ITU.
- 86 Furthermore, all satellites with a footprint over South Africa have, as far as we are aware, gone through the ITU co-ordination process and, to our knowledge, there was no objection recorded by South Africa at the launch of such satellites. As a result, many satellites have been in operation and have included South Africa within their footprint for many years, hence services emanating from these satellites are accessible in South Africa.
- 87 It would be inappropriate for South Africa, after so many years, to seek to put in place a framework that requires additional registration in-country considering that the satellite operators have already cleared beaming their satellite signals into South Africa as per the coverage beam provided in the ITU co-ordination process.
- 88 It is unclear if the intent would be to merely list capability and capacity in space and duplicate data in the ITU-R BR International Frequency Information Circular

²⁷ Apart from the ITU notification procedures, satellites that are launched are further authorised by the satellite operator's home licensing administration as this is where the transmission of the signal originates.

(Space Services) ("BRIFIC") for space services,²⁸²⁹ or if indeed the list envisaged by the Authority would be actively updated to report active frequency usage and frequent operational changes. A static generic list would merely be a duplication of the ITU-R BRIFIC with limited value, whilst an active status list may result in an unmanageable operational burden.

- 89 Furthermore, as FSS and BSS satellites operate multi-country or regional footprints, any space segment listed in the Authority's list of authorised space stations could be deployed to deliver services for any neighbouring country and thus no longer be "available" for South Africa. Such a list would thus have to be updated frequently per orbital slot to reflect frequent regional platform changes. It remains unclear what purpose it would serve to list in a national register or list space segment details that could be deployed regionally.

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.

- 90 Satellites, by their nature, can do things that other technologies cannot. They have an unrivalled ability to provide universal services across vast areas where other systems are either unaffordable or unavailable, including to remote and rural areas. Satellite based systems are also used internationally to reduce costs, increase efficiency and improve productivity. This provides an opportunity to contribute to addressing the digital divide and to improving people's lives. Bridging the digital divide and ensuring universal access to communications services is therefore not only an engineering or supply problem, but is also a regulatory and policy challenge.
- 91 If South Africa puts in place an inappropriate regulatory framework that introduces unwarranted regulatory hurdles that inhibit or prevent cost effective provision of satellite services, South Africa will not be able to realise the full potential of satellite services, largely because of inappropriate regulations that inhibit or prevent the cost-effective provision of satellite based services.

Conclusion

- 92 Judged against the objectives and legal requirements of the ECA, as well as international best practice, the proposed framework is lacking in the following respects, and would, if implemented, impede the country's ability to realise the benefits of satellite technology:

²⁸ <https://www.itu.int/en/ITU-R/space/brific/Pages/default.aspx>

²⁹ <https://www.itu.int/itu-r/space/apps/public/spaceexplorer/networks-explorer>

- 92.1 It is not clear what mischief the proposed framework seeks to address, and why such mischief cannot be addressed using the existing technology neutral licensing framework in the ECA.
- 92.2 The proposed framework is unduly wide and covers services which are already subject to clear licensing frameworks, and would thus be throwing the proverbial baby out with the bath water.
- 92.3 South Africa has an existing legislative and regulatory framework, in which satellite services have been appropriately licensed and regulated for many years. The proposed framework appears to be inconsistent with the existing legislative and regulatory framework.
- 92.4 The proposed framework is also inconsistent with international best practice, and disregards the existing ITU coordination process, which was specially created due to the multi-national nature of satellite technology.
- 93 We propose that the Authority reconsider the proposed framework and the licensing of satellite services with a view to using the existing licensing and regulatory framework. To the extent that the Authority is unable to achieve its objectives using the existing licensing and regulatory framework, we propose that the Authority clearly articulate the deficiencies in the existing framework - e.g., if the Authority identifies a specific gap in respect of the licensing of broadband services via non-geostationary satellite systems - and publish for comment its proposals to address only those specific deficiencies .
- 94 To the extent that the Authority persists with the proposed framework, which we do not support, we recommend that such framework should not include FSS and BSS within its scope, since the existing regulatory framework is working well and any challenges in respect of the provision of broadband services via non-geostationary satellites, are unlikely to arise in respect of BSS and FSS³⁰.
- 95 We trust that our submissions will be of value and assistance to the Authority.
- 96 We request an opportunity to make oral representations in the event that the Authority decides to hold public hearings.

Yours faithfully


Wellington Ngwepe
Executive Head: Policy and Regulatory Affairs

³⁰ Provision of broadband Internet services via non-geostationary satellites using these bands is currently less desirable and unlikely to experience widespread adoption by customers