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12/11/2024

**Mr. Mandla Mchunu**

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ICASA

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South Africa

Dear Sir,

Imbila Africa (Pty) Ltd, is a level 2 BBBEE firm registered in South Africa. The primary business objective of Imbila Africa is to supply satellite equipment and services to all businesses and organisations in the country, with a view to increasing connectivity and materially reducing telecommunication costs in South Africa.

Please find our response to ICASA's consultation process on the proposed new licensing framework for satellite services.

### **Introduction:**

What role can the fourth industrial revolution (4IR) technologies be leveraged to enhance in South Africa's social and developmental challenges, and national programs? How prepared is South Africa to embrace the 4IR?

The South African economy experienced a deepening of its capital markets starting in 1970 and a transition from the elementary to the secondary and tertiary sectors. The need for highly skilled people rose within industries, but the need for unskilled workers decreased. Due to comparatively reduced labour costs and technological advancements within businesses, South Africa's structural unemployment and skills shortage problems are made worse by the 4IR skill needs. Because most South Africans receive poor quality education, the skills gap in the labor market has gotten greater over time. Two facts that highlight issues are: -

- "South Africa remains the most unequal country in the world, ranking first out of 164 countries" (World Bank).
- South Africa's Gini coefficient 0,63 in 2022 (where 1 is maximum inequality). The Gini coefficient is a statistical measure of income, wealth, or consumption inequality within a country or social group.

Imbila Africa's recommendations for South Africa to harness the 4IR to increase connectivity and digitization:

1. Increase internet access to a broader base of the population.

- In 2024, 74,7% internet penetration rate (% of SA population that accessed the internet via mobile device).
  - Mobile and broadband speeds well below global median.
2. Digital payments capabilities to be made more inclusive and widespread.
    - In 2017: 60% of South Africans used digital payments 30% of the poorest 40% used digital payments
    - In 2022: 95% of people in South Africa have used at least one digital payment method in the last year.
  3. Promote job-creating digital businesses.
    - unemployment crisis: 33,5% unemployment (2024Q2)
    - 60,6% youth (15 to 24-year-olds) unemployment rate (2024Q2)

Stats above based on “Research: How Technology could promote growth in six African countries”

In closing the digital divide, a regulatory environment that enables collaboration, reduces friction in the deployment of services, and focuses on keeping costs as low as possible is essential. This document aims to highlight ways in which the regulatory framework of South Africa should be supported and where it could be amended to achieve maximum benefit for all parties in the value chain.

Satellite internet has long been regarded as a potential solution for connecting the under- served communities who have not yet been reached by terrestrial technologies. Legacy satellite operators have struggled to fully close the digital divide due to the high costs of satellite construction and deployment, coupled with limited bandwidth. This has led to pricing that is often beyond the reach of the rural communities that need the connectivity the most. In recent years, this paradigm has begun to shift with the introduction of constellations of non-geostationary orbit (NGSO) satellites. While constellation deployment costs remain high, significant increases in available bandwidth are leading to better quality services as well as an incremental reduction in end-user prices.

Imbila Africa supports establishing a legislative framework that encourages closer cooperation between regulators and service providers. And strives to make affordable access to communications, the primary motivating factor. This is essential to luring the latest technology to South Africa and optimising advantages for end users, ISPs, MNOs, and others. We believe our input will be vital in helping ICASA take advantage of this unique opportunity to offer new and affordable connectivity to all South Africans.

We genuinely believe this initiative can bridge the digital divide between urban and rural South Africa, strengthening communities, healthcare, education, agriculture, and economic growth in every aspect. To this end we have included several graphs depicting the state of connectivity, access and other economic measures for South Africa’s telecommunication sector key drivers relative to other countries. We compare various aspects of the communications sector, level of universal service coverage, and general broadband access in South Africa.

## **IMBILA AFRICA’S RESPONSE TO ICASA’S CONSULTATION PAPER NOTICE 2678 OF 2024**

### **1. Applicable Legislation and Regulations**

**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?*

**Answer 1:** When aligning its laws and regulations with the ATU policy principles, it is highly suggested that ICASA incorporate a confirmation of the importance of prioritizing South Africa's national interests of ensuring sustainable and higher economic growth.

## **2. Scope of the Inquiry with respect to Radio Frequency Bands and Services**

**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.*

**Answer 2:** Supported.

## **3. Types of Licences/Authorizations (where applicable) for Satellite Communications**

**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.*

**Answer 3:** Imbila Africa's opinion regarding and optimal Licensing Approach:

In line with global best practices, in our view, the following licensing approach would meet the needs of modern satellite systems:

- A. Satellite Service Licence: to allow for direct internet provision/sales to end consumers. Note: The ownership restrictions currently applicable to the I-Electronic Communications Services Licence should be aligned with the ICT Sector Code.
- B. Satellite Network Licence: to allow operation of gateway earth stations (akin to a mobile operators backhaul which is not licensed separately) and user terminal networks. Note: The I-Electronic Communications Network Services Licence should be aligned with the ICT Sector Code; and
- C. Satellite Spectrum Licence:
  - I. Includes authorization to use spectrum required to operate the end-to-end network.
  - II. Authorises this for an unlimited number of devices.

## **4. Satellite Gateway Earth Stations**

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

**Answer 4:** The ATU encourages collaboration, investment, and the necessity of efficient regulation while promoting policies that improve telecommunications throughout Africa. A blanket licensing framework for Gateways is beneficial for many of the same reasons that blanket licensing for user terminals is consistent with this goal.

- A. Greater flexibility: Instead of planning their network deployment around regulatory approval delays, operators may now better align their network deployment with their operational demands and growth thanks to blanket gateway licensing. As a result, satellite operators would be more inclined to invest in infrastructure in South Africa, supporting not only activities within the country but also countries across the region.
- B. Ensures high-quality service: blanket licensing makes it possible for infrastructure to be developed rapidly, allowing satellite operators, their approved resellers, or MNO partners to continue providing end customers with high-quality products during times of high demand.
- C. Affordability: We support the view that spectrum prices or any other pricing regime employed for *the Gateway Earth Station licences* should be cost-effective and in line with global benchmarks to attract the establishment and operation of the gateway earth stations in South Africa.
- D. End-user ECNS, ECS and Broadcasting Service Restrictions: Multi-national service providers of highly complex digital technologies have efficiently and effectively rendered end-user communications and broadcasting services through the existing regulatory regime.
- E. PECN Licence Regime Eligibility: Supported for internal services and operations of the ground station and between the ground station and the space segment. Exemptions are a form of authorization, and should be employed where services or equipment or both have limited socio-economic impact on their own, or are purely ancillary to the main network or services.
- F. Licence Period: We would support a period of a minimum of 15 years.

## 5. National and International Coordination

**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.*

**Answer 5:** Spectrum pricing can be a major obstacle to developing a robust addressable market for satellite systems. Since expenditures are typically passed on in one way or another, end users benefit from every chance that operators can use to cut expenses. The present spectrum pricing scheme (ZAR/MHz) results in very high rates for gateway and user terminal spectrum band access because newer NGSO broadband systems require access to significant amounts of spectrum (which is shared with other satellite systems). Consequently, this makes it:

- A. less profitable to invest in South African infrastructure, which would result in lower service quality and less opportunities for local businesses to supply the fibre, power, and land required by satellite operators; and

- B. it is more difficult for end consumers to afford satellite internet, which affects adoption rates and reduces sales prospects for local resellers, satellite owners, and business partners.

Reducing spectrum pricing will directly lower service costs, increase the effect of services, and attract greater investment in the ICT sector in South Africa. According to an evaluation of international best practices, fixed gateway spectrum fees determined from an application cost recovery basis—regardless of the frequency band and the number of MHz utilized—have been shown to draw in the most foreign investment and provide the most clarity on regulatory costs. Lower annual spectrum fees of say, less than ZAR150,000 per annum, would be advantageous to South Africa.

At present, the current spectrum allocation tables in South Africa do not fully align with global norms nor with the needs of current generation satellite systems. Specifically, NGSO system often need access to the full Ku and Ka bands to provide the highest quality broadband services. These systems do not require exclusive access to portions of these bands but rather work alongside each other in a cooperative way to share the spectrum and avoid interference with each other and with ground systems for radio astronomy systems and terrestrial communications. However, it is critical that all these systems can access the full bands as they have been designed around these bands and according to international standards. Placing restrictions on portions of the Ku and Ka bands, specifically between 10.7 – 12.75 GHz in Ku and 17.8-19.3 GHz in Ka, means that satellite operators will need to limit the number of customers they serve or reduce the quality of service provided. This impacts everyone in the ICT sector (end-users, resellers, MNOs, infrastructure hosts, and operators) negatively without protecting anyone.

South Africa should expand their frequency allocation tables to cover the E band (71-86 GHz) and W band (95+ GHz) for satellite use to keep up with the advancements in satellite systems. By doing this, South Africa would be able to draw in the most cutting-edge systems currently under development and guarantee that the industry is ready for expansion and service quality enhancement, preventing the need for future legislative revisions at the same time as making the country an investor-friendly destination.

## 6. Satellite User Terminals

**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.*

**Answer 6:** For both applicants and regulators, the licensing model that licenses each user terminal separately is a burdensome and costly procedure. This issue is resolved by streamlining the procedure with "blanket" licences for multiple terminals at once, which can lead to a thriving satellite market that more rapidly addresses populations with limited access. The following are the main advantages of a "blanket" licence model:

- A. Speeds up the process of connecting the unconnected by allowing terminals to be delivered in a ready-to-operate state rather than requiring government approval before service can be initiated: Customers, who frequently have no other connectivity options and cannot wait; resellers, who can do business more rapidly; and the government, which wants to meet its broadband penetration targets as soon as possible, all naturally benefit from this.
- B. Lowers licensing fees: Individual licensing has a fee since it is an administrative challenge. The cost per terminal is reduced by switching to a blanket licensing model and implementing a cost recovery mechanism for fees (usually less than ZAR 30,000 per licence), which allows these savings to be passed on to customers. Increased affordability makes digital inclusion more accessible to people with the fewest resources and broadens the potential market.
- C. Minimizes the administrative complexity for resellers: Satellite service resellers can circumvent obtaining regulatory permits for every customer by licensing terminals in bulk. Instead, they can depend on the satellite operator's blanket licence. Because regulatory participation entails both operational and financial burdens, this lowers the cost of business.

## 7. Satellite User Terminals

**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.*

**Answer 7:** Supported

## 8. Space Segment Authorisation

**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?*

**Answer 8:** Supported

## 9. The Satellite Rollout Obligations

**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.*

**Answer 9:** Satellite operators, particularly operators of low-earth orbit satellite networks who can deliver high-speed broadband services with low latency, can indeed play an important and incrementally useful role in the ongoing national pursuit for universal access to affordable high-quality broadband services.

It is noteworthy that, over the last three decades, there have been several policy, legislative and regulatory attempts to address the persistent universal access challenge which inter alia requires significant capital expenditure in low return and low-income areas:

1. Amendment of the Telecommunications Act of 1996 to extend Telkom SA's monopoly in the telecommunications infrastructure services market in exchange for, amongst others, universal access obligations in unserved and underserved areas of the country and as partial contribution to the of reconstruction and development program (RDP) of the time [2001]<sup>1</sup>
2. Establishment of the Universal Service Agency (USA) and the Universal Services Fund (USF) in the 2001 amendment to the Telecommunications Act of 1996 [2001]
3. Introduction, licensing and funding of universal service access licensees (USALs) [2004, 2006, 2007]<sup>2</sup>
4. The promulgation of the Electronic Communications Act (ECA) of 2005 and introduction of a new licensing and universal access regime, including the re-establishment of the USA as the Universal Service Access Agency of South Africa (USAASA) and the USF as the Universal Services Access Fund (USAF) [2006]
5. Introduction of a framework to impose universal services obligations on licensees<sup>3</sup> [2006]

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<sup>1</sup>**Telecommunications Act(1996 amended 2001):-**

“Section 36(1)(a) Telkom shall be deemed to be the holder of a licence to provide public switched telecommunication services as contemplated in section 78(1) of the Post Office Act, 1958 (Act No. 44 of 1958), as that section existed immediately before its repeal by this Act;

(2) Telkom and any other holder of a licence to provide a public switched telecommunication service shall, until a date to be fixed by the Minister by notice in the *Gazette*, after consultation with the Authority and the Agency, comply with conditions specified in the licence in question relating to the extension of its public switched telecommunication service to areas and communities which are not served or not adequately served by telecommunication services, with a view to the achievement of universal service.

(3) In the licence to be issued to Telkom in terms of subsection (1) there shall be specified, in respect of any service rendered by Telkom immediately prior to the commencement of this section and specified in the licence after consultation with Telkom, a fixed period during which no person other than Telkom shall be licensed—

(a) to provide a similar service; ...”

<sup>2</sup> **Electronic Communications Act (2005):-**

“Section 58(1) There is hereby established a juristic person to be known as the Universal Service Agency.

“Section 59(1) The Agency shall—

(a) strive to promote the goal of universal service;

(b) encourage, facilitate and offer guidance in respect of any scheme to provide—

(i) universal access or universal service; or

(c) foster the adoption and use of new methods of attaining universal access and universal service;

(d) stimulate public awareness of the benefits of telecommunication services.

<sup>3</sup> **Electronic Communications Act (2005):-**

6. Opening of the Electronic Communications Network Services (ECNS) market to additional providers through conversion of Value-Added Network Services (VANS) licenses and confirmation of their ability to “self-provide” electronic communications facilities and networks [2008]
7. Gazetting of the SA Connect policy and introduction of new clarity on broadband service definitions, technical and service metrics and national targets for access and affordability [2013]
8. Launch of Phase 1 of the state-side implementation of SA Connect [2017]
9. Introduction of regulations related to ownership and control of licensees [2021]<sup>4</sup>
10. Establishment of the broadband access fund for Phase 2 of the State-side implementation of SA Connect and the appointment of state-owned Broadband Infracore as the manager of the fund [2023]

The success or lack thereof of these initiatives can be tested against data drawn from the annual the State of the ICT Sector Report of South Africa and official data from Statistics SA such as the Quarterly Labour Force Surveys, General Household Surveys, surveys on the Living Conditions of Households in South Africa and their respective sources. For overlapping reporting periods generally ending in September 2023, the following is noted from these sources:

- Whilst overall coverage for the purpose of accessing basic internet services is high, it is largely driven by mobile networks and is therefore its usefulness is limited to general-purpose internet access.
- In particular, the high levels of coverage (“universal access”) are not particularly meaningful for people, particularly those in rural and poor urban areas, who require an affordable and fit-for-purpose digital infrastructure grid that enables them to access basic services such as public services and services for education, healthcare, skills development, entrepreneurship and media and entertainment amongst others.
- In many cases, this is an existential problem whose solution could incrementally reduce the social and economic distance between these communities and the rest of the South African economy and society as a result their persistently high levels of unemployment, poverty and inequality, as shown below:

This graph depicts the percentage of households with access to the internet at home or in which at least one household member used the internet at home in 2022:

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“Section 8(1) The Authority must prescribe standard terms and conditions to be applied to individual licences and class licences.

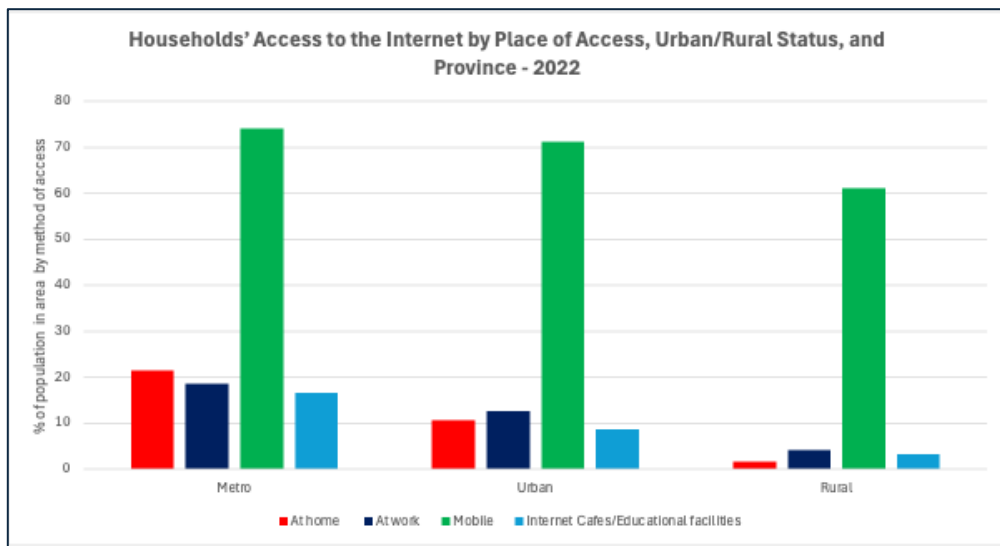
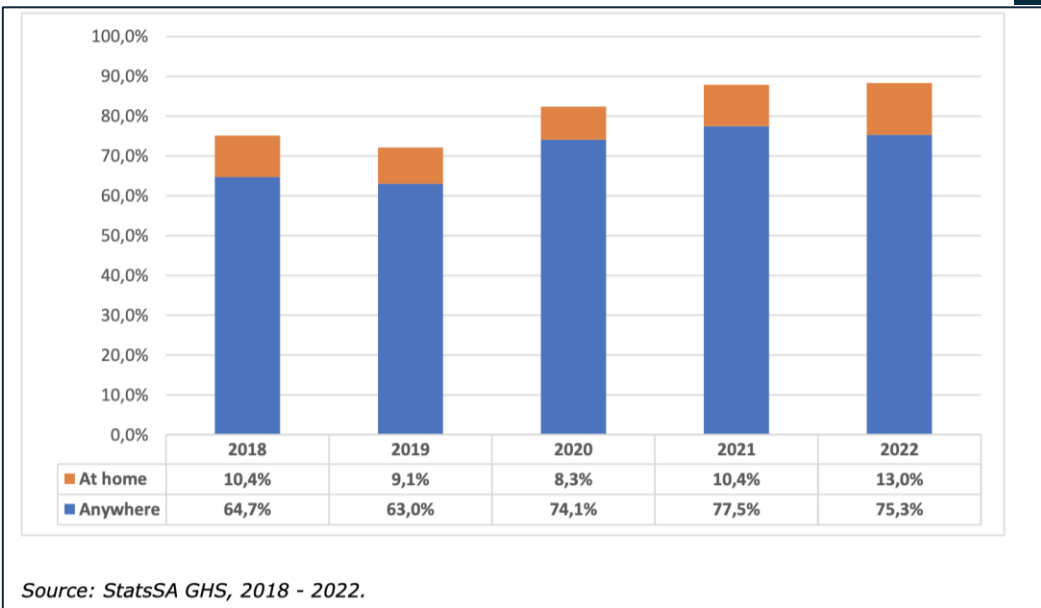
(2) Such standard terms and conditions may take into account—  
 (g) any universal access and universal service obligations; ...”

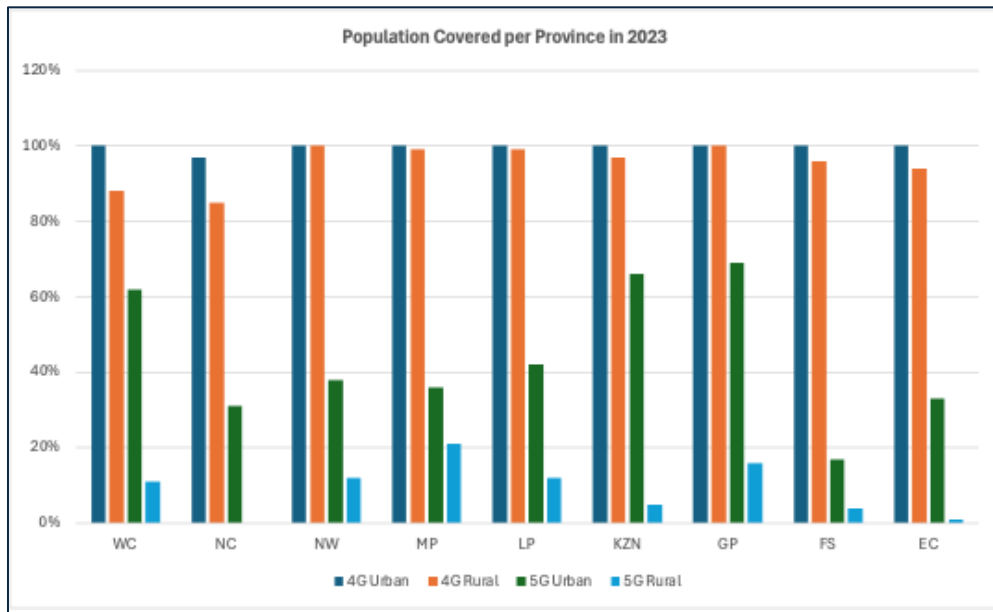
**<sup>4</sup> Regulations In Respect Of The Limitations Of Control And Equity Ownership By Historically Disadvantaged Groups (HDG) And The Application Of The ICT Sector Code:-**

“Section 3(4) An Individual Licensee must have a minimum of 30% of its ownership equity held by historically disadvantaged groups as required in terms of the EC Act, determined using the Flow Through Principle.

“Section 4(1) An Individual Licensee must have a minimum of 30% of its ownership equity held by Black People, determined using the Flow Through Principle.”

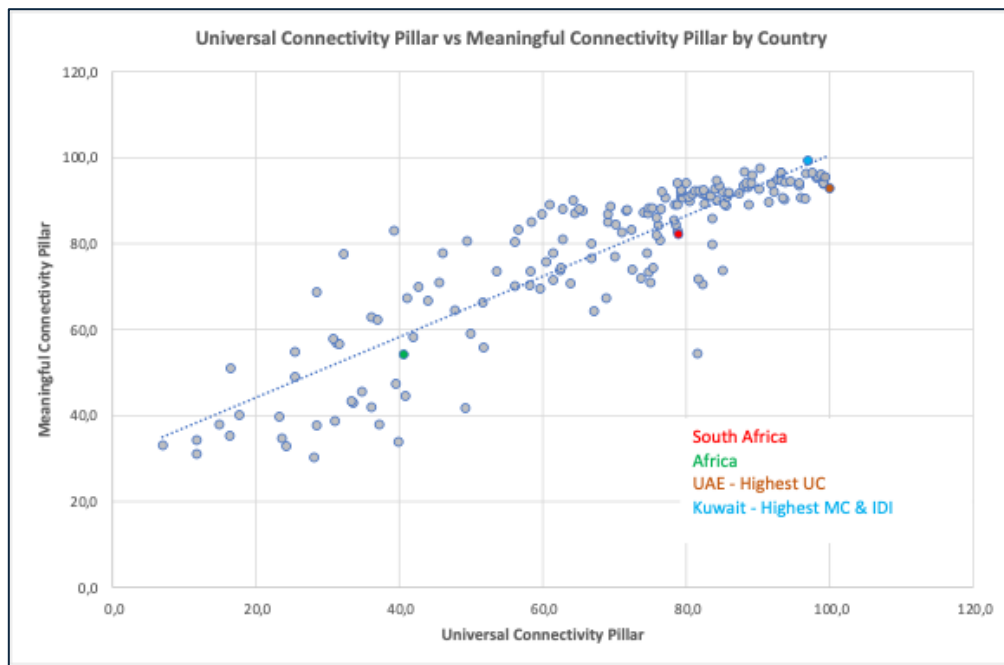
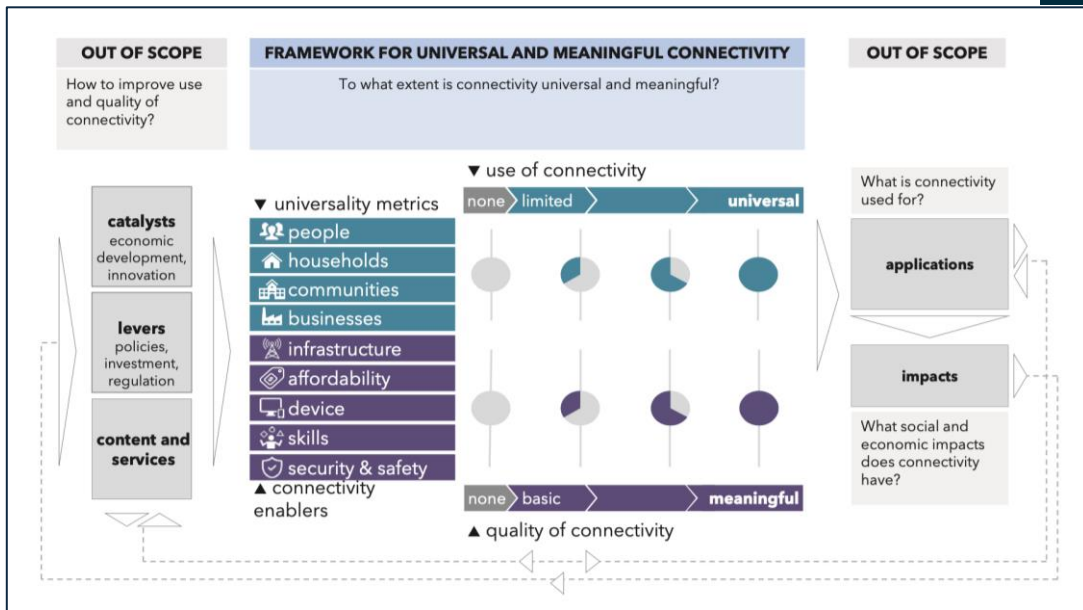






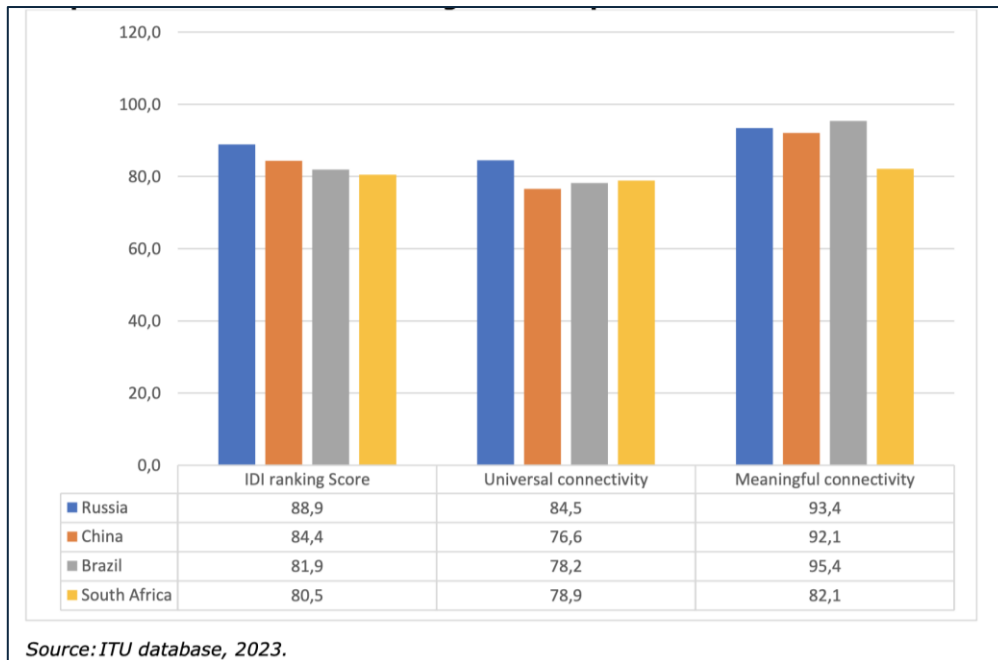
Our observation around the relative ineffectiveness of universal access that is simply based on mobile coverage is corroborated by the ITU 2023<sup>5</sup> analysis of the comparative ICT Development Index (IDI) that shows a mixed universal and meaningful connectivity picture, one which is high on physical universal access but relatively low on meaningfulness, pointing to low socio-economic value derived from the capital invested in network infrastructure and services for the rural and poor urban communities. The ITU now uses the term “meaningful connectivity” when considering the extent to which communities have access to the internet and actually are able to use it. This is demonstrated in the next two graphs:

<sup>5</sup> Measuring digital development – ICT Development Index 2023:- [https://www.itu.int/hub/publication/D-IND-ICT\\_MDD-2023-2/](https://www.itu.int/hub/publication/D-IND-ICT_MDD-2023-2/)

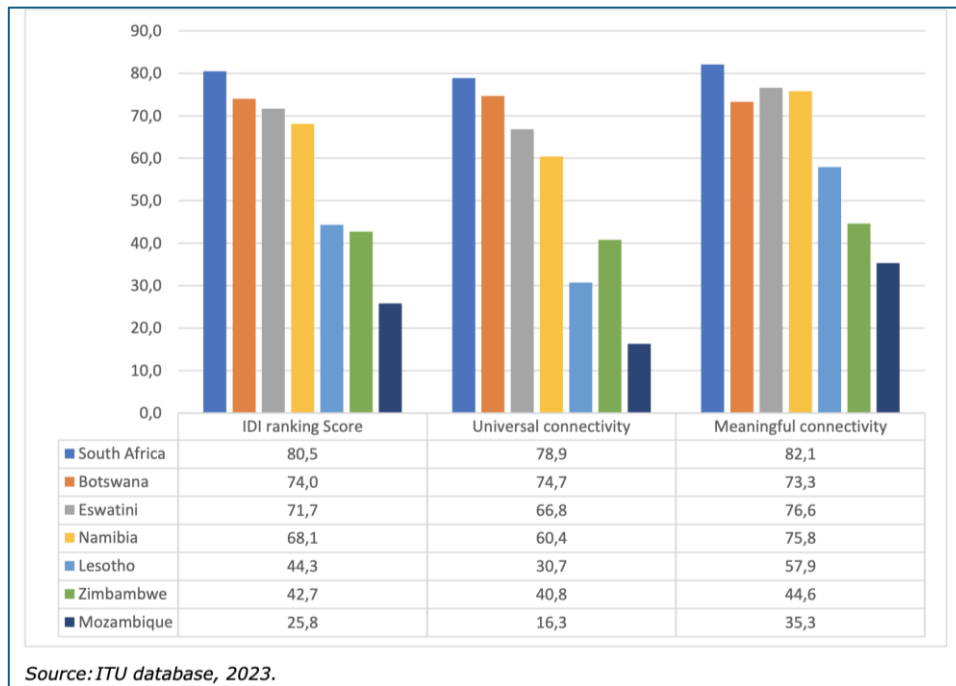


By contrast, the South African ranking in other respects is shown in the next two graphs:

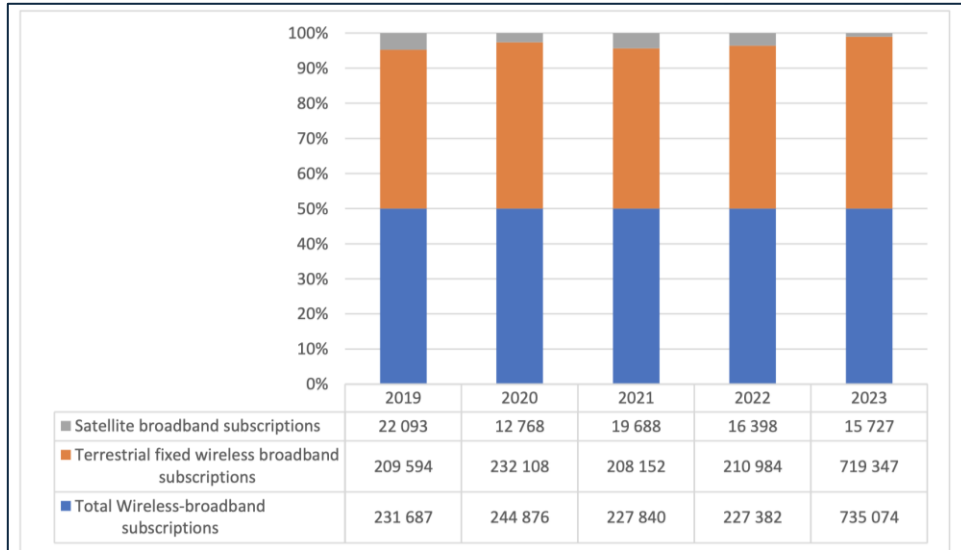
### South Africa's IDI ranking score compared to BRICS countries, 2023



### South Africa's IDI ranking score compared to other countries, 2023

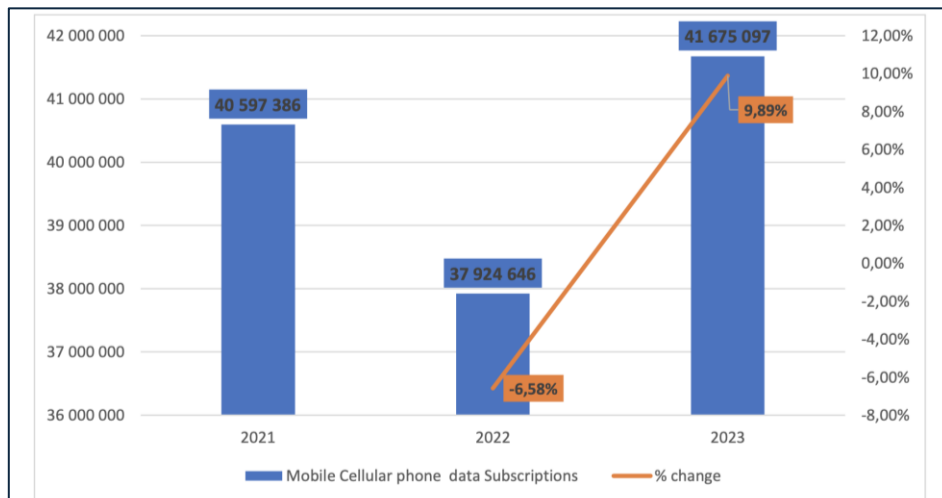


There is relatively low penetration of fixed broadband infrastructure, with fixed (terrestrial and satellite) wireless registering the lowest numbers of subscriptions (735k) against fixed (dsl and fibre) wireline (1,7m) and mobile data (41,6m). This is shown in the graph below:



Source: ICASA Electronic Communications Questionnaire 2019 - 2023.

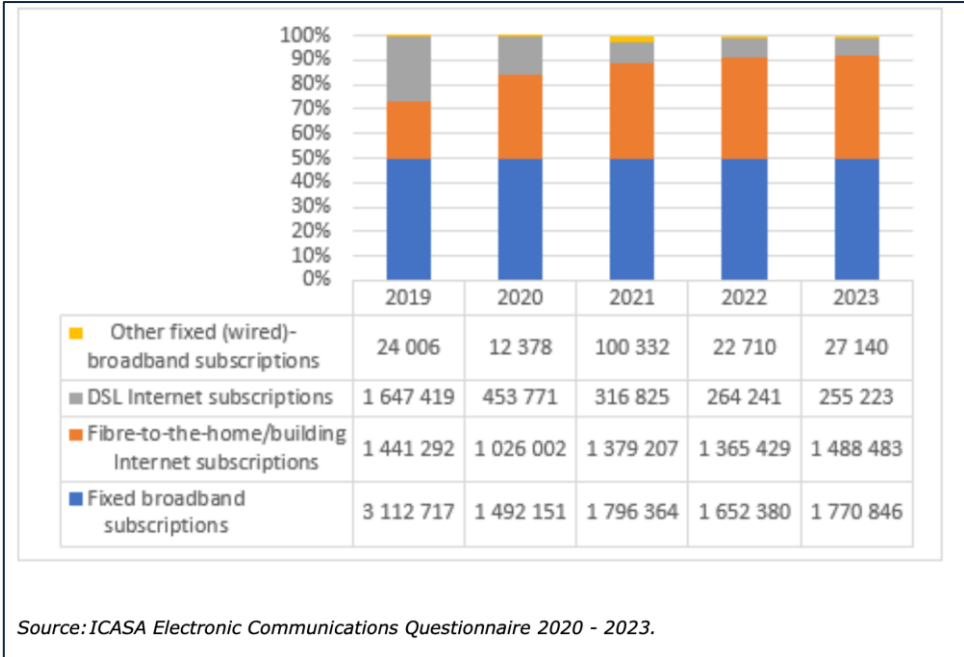
The following graph depicts mobile cellular phone data subscriptions as of 30 September each year:



Source: ICASA Electronic Communications Questionnaire 2021 - 2023.

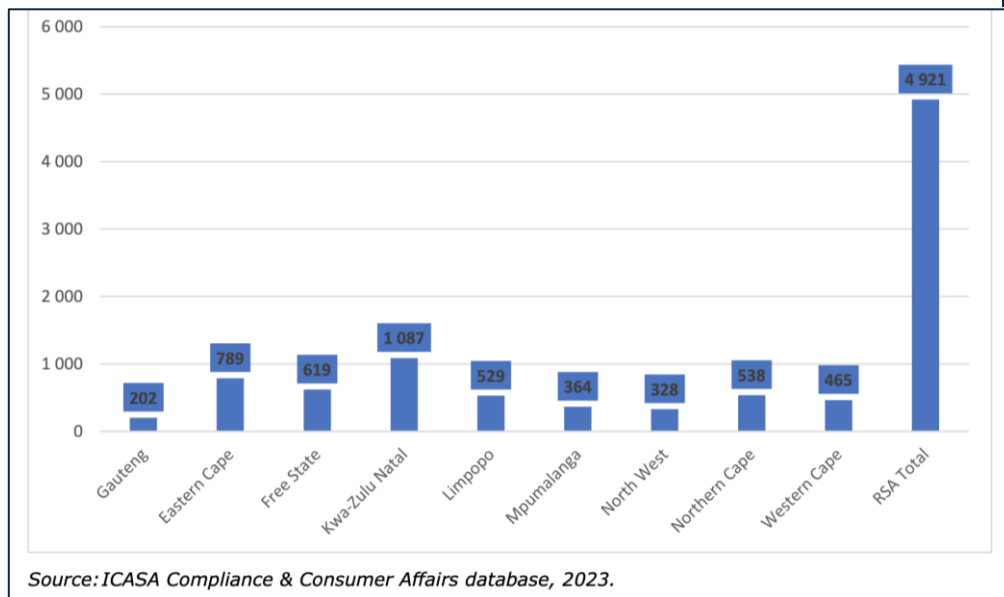
*Note: All LTE connections are included in 'mobile'. There is room for the definition of 'mobile broadband subscriptions' to be improved in subsequent reports, noting that it was not possible to accurately distinguish between handset data usage and mobile data usage on other devices, or alternatively to distinguish SIMs used for both voice and data from SIMs dedicated to data usage. It was also necessary to count total internet subscriptions rather than 'broadband' subscriptions, as it was not possible to accurately break out 'narrowband' internet, albeit this is now a small minority of total internet subscriptions. 'Wireless broadband' number may be incomplete in respect of some players, especially those operating in unlicensed spectrum bands.*

Next, the graph depicts fixed broadband subscriptions as at 30 September each year:



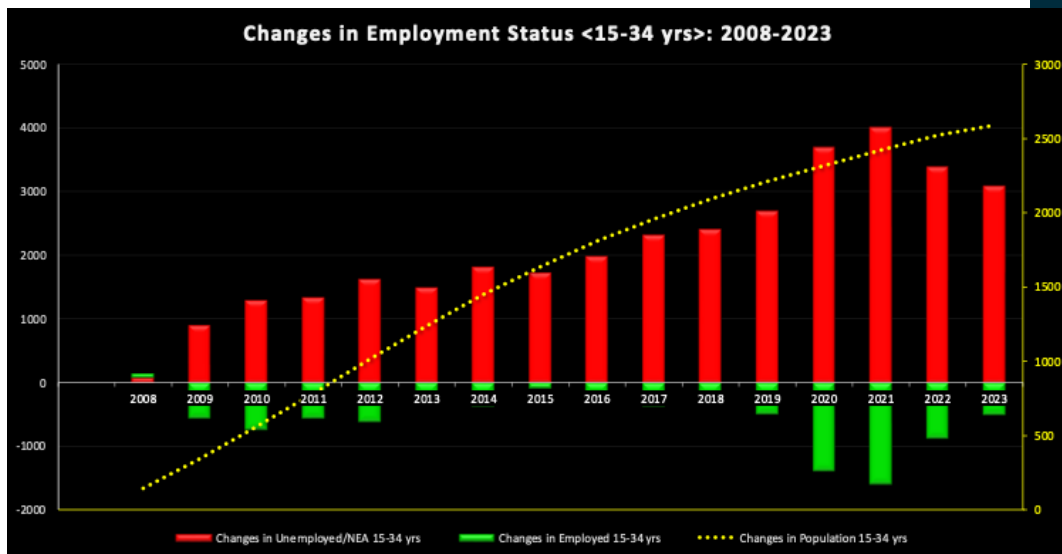
Of particular concern is the low levels of schools’ connectivity emanating from universal access obligations that have been part of the telecommunications legal and regulatory system since the 2001 amendment to the Telecommunications Act in 2001. Specifically, only 4,9k schools have been connected by licensees under these obligations and this is against the 22k public schools in the country, hosting 12,7m learners and 409k educators,<sup>6</sup> with a significant number of these schools located in rural and poor urban areas where there is already scarce wireline infrastructure that would be appropriate for digitalized teaching and learning. This graph demonstrates the connectivity of schools in 2023:

<sup>6</sup> 2023 Schools Realities, Department of Basic Education:- <https://www.education.gov.za/Portals/0/Documents/Publications/School%20Realities%20December%202023.pdf?ver=2024-02-21-110237-047>

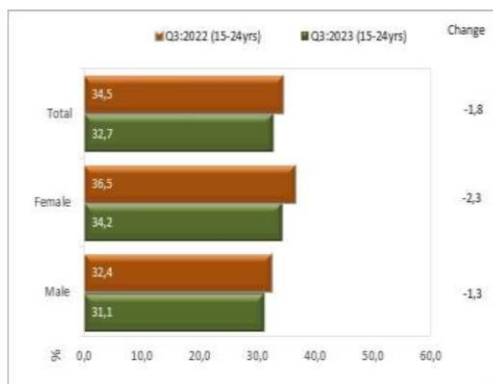


This graphically depicted information clearly shows the low level of connectivity across the country, despite the passage of time and some universal service and access initiatives and licence conditions requiring operators to promote affordability, accessibility and availability – in summary, these have been a failure. The urgency to deal with the matter, and in particular, to significantly grow broadband access for rural and urban poor areas that is affordable, fit-for-needs and allows members of these communities to attain agency as they try and overcome poverty, unemployment and inequality is demonstrated by the changes in the profile of labour between 2008 and 2013, where in effect, the 2,5m people who have been added into the working age group between 15-34 are economically unproductive, with the actual NEET numbers for the same age group sitting at 45% (i.e. 9m NEET out of the 20m in the age group)<sup>7</sup>

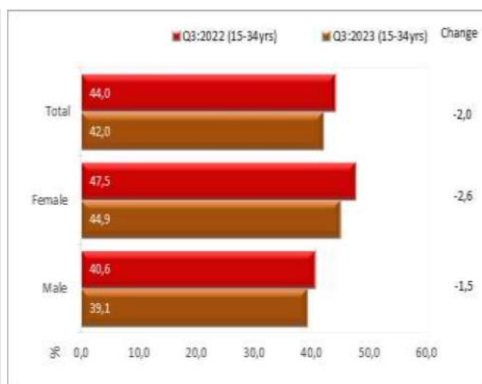
<sup>7</sup> StatsSA Quarterly Labour Force Survey, Quarter 3: 2023



**Figure 9a: NEET rate for youth aged 15–24 years by sex**



**Figure 9b: NEET rate for youth aged 15–34 years by sex**



It is therefore Imbila Africa’s view that:

- A. The introduction of a low-cost high-quality LEO satellite broadband service will close the IDI UMC rating of the offered digital infrastructure in rural and poor urban communities. This is largely attributable to the advantages of the satellite service coverage area, relatively low infrastructure costs (particularly where investment is made by existing and international operators of satellite constellations), and growing ability to provide increasing speed and quality of service over satellite.
- B. There are viable operating models where the satellite services can be curated variably through (1). direct access (broadband direct-to-home satellite) and (2). pooled access via satellite community gateways where on one hand the last mile can be provided by third party operated wireline and fixed wireless ECNS and ECS providers, including SA Connect implementing agents, and on the other, the service can be offered through



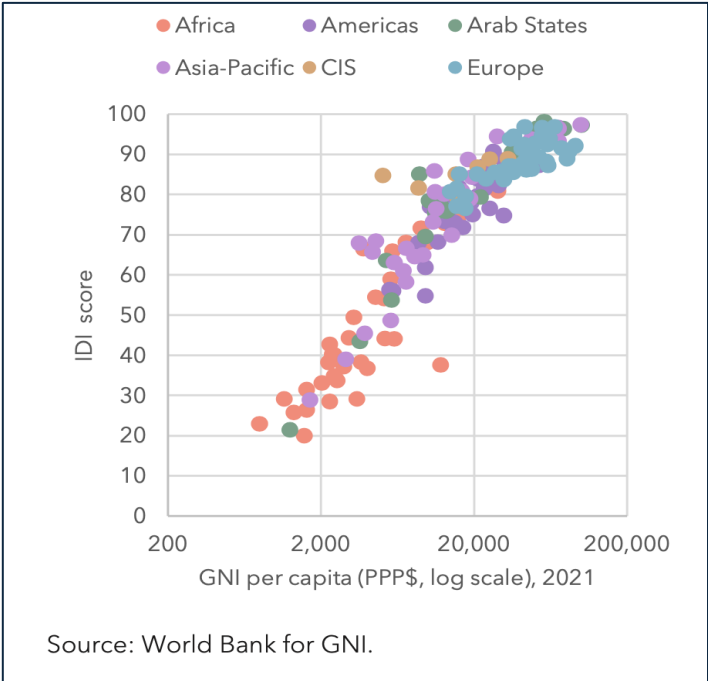


innovative community-owned-and-operated fixed wireless distribution services. This ignores the other benefits of wholesale backhaul capacity which are also offered by satellite.

GTM Model	Value Chain
Direct to home consumption	Satellite operator <-> client
	Satellite operator [<-> retailer; installer] <-> client
	Satellite operator <-> reseller [<-> systems integrators] <-> clients
Indirect consumption via local distribution with satellite gateway backhaul	Satellite Operator <-> satellite community gateway operator(s)
	Wholesale satellite gateway operator(s) <-> "last mile distributor" <-> client
	[Broadband Infracore SOC] <-> SA Connect implementing agents <-> client
	RIOT platform <-> RIOT community cluster operators <-> client

C. The result of formal mass deployment of such satellite services will accelerate the South African national pursuit for inclusive economic growth through universal access to affordable high-quality and fit-for-purpose digital broadband infrastructure and services and reverse the trends evident in the last century where South Africa has simultaneously delivered the best equity returns in the world AND the worst GINI index, as shown in the following graph:

**IDI performance and income correlation**



Given the history of failure of interventions whose performance metrics measured the acts of providing and receiving connectivity (ITU IDI Universality) and not on the social and economic outcomes derived from such acts (ITU IDI Meaningfulness), and given the complexity of working within the state systems of governance for a problem that requires innovation, agility and urgency, it is our recommendation that the regulator ought to augment the typical universal service obligations (e.g. on the numbers of household or schools or other public service facilities connected) and specifically include requirements for designing multi-stakeholder interventions targeting impact outcomes and measuring and reporting on such outcomes.

In the case of satellite operators, this will require some innovative ways of engaging the local market of impact practitioners, necessarily avoiding practitioners that measure their performance on the acts of giving (e.g. numbers of <devices> provided at discounted prices) and instead, focusing on those whose interests are tied to the economic interests of both the satellite operators and customers and beneficiaries of the satellite services (e.g. progress towards achievement of skills and capability certifications that demonstrably enable the beneficiary to get a job in the global digital vocational workplace – digital nomad).

The collaboration with government should be limited to policy and regulatory levels instead of through implementing agencies such as Broadband Infracore SOC. This allows the satellite operators to have the freedom to choose local value-adding impact partners, whilst being part of a collective in pursuit of a common national goal. An outcomes-based guiding policy framework may for example be the ICT and Digital Economy

Masterplan for South Africa<sup>8</sup>, published in 2021 jointly by the Department of Communications and Digital Technologies (DCDT) and the Department of Trade, Industry and Competition (DTIC).

**Conclusion: -**

While it is an established practice that NGSO operators have many channels to market including resellers, retailers, and commercial partnerships with mobile network operators to provide backhaul services and eventually direct to device in coverage dead zones, many foreign satellite operators also have a direct-to-consumer model that operates alongside their local commercial partnerships.

Spectrum pricing has historically been prohibitive, which has led to the costs of provision of broadband mobile services in South Africa being high relative to other developing countries and even developed countries. The low earth orbit (LEO) satellite technology that is available from companies such as SpaceX through its Starlink offering has the potential to significantly reduce the cost of broadband provision in South Africa and further significantly transform for the better, general access to connectivity, achieving a much higher broadband penetration across the country. This is one of the key major drivers of economic growth.

LEO technology does not require spectrum to be dedicated to enable the provision of data services, which can be achieved without any spectrum and wireless interference. The allocations of spectrum to satellite operators in line with international satellite bands is a critical first step for South Africa to expedite the introduction of commercial

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<sup>8</sup> [https://www.ellipsis.co.za/wp-content/uploads/2021/08/Digital-Economy-Masterplan-22-Feb-2021v1\\_updated.pdf](https://www.ellipsis.co.za/wp-content/uploads/2021/08/Digital-Economy-Masterplan-22-Feb-2021v1_updated.pdf)

satellite services into the country. Furthermore, Satellite Gateways and user terminals in South Africa should be permitted to have blanket licensing, consistent with recent ITU and ATU practice.

In addition to the above, according to South Africa's existing legislative framework, businesses that offer direct services to end users must possess I-ECNS and I-ECS licenses, which are presently only available to businesses having a 30% historically disadvantaged group (HDG) stake. Under the existing licensing structure, many international satellite operators with direct-to-consumer business models will be prohibited from participating in the South African market due to global laws that prohibit local shareholding.

This is true even if they are prepared to make a commitment to fulfilling B-BBEE criteria and looking for opportunities to support initiatives that directly assist the people that the equity requirements are intended to assist. Bringing South African licensing and ownership laws into compliance with the ICT Sector Code, which acknowledges alternative equity-equivalent schemes. This will allow the rollout of much needed, pervasive broadband services, at attractive price points, especially in rural and under-served areas in addition to urban centers. This would have the potential of accelerating economic growth, creating much needed employment and would encourage the deploying of additional capital into the economy.

As an alternate strategy for tackling empowerment, ICASA could consider modifying its rules to conform to the ICT Sector Code and permit equity equivalents to be provided in lieu of local shareholding. Foreign investment will be encouraged, and consumers, businesses, the government, and the market's established players—whose services are enhanced by satellite technologies will all benefit from this.

Examples of other multinational organisations that have utilised equity equivalent programmes to enter South Africa are:

- Amazon has successfully provided grants and technical training to black owned companies in the ICT industry.
- J.P. Morgan's Abadali Equity Equivalent Investment Programme focuses on empowering black entrepreneurs and black owned and controlled enterprises in financial services sector.
- Some innovation was required when Google's entry into South Africa was supervised by the Competition Commission. To help close the digital divide in this industry, Google had to set up an AdWords training program for small firms. This allowed Google to fulfill a commission need and a major goal without having to pay a hefty price.

These above examples demonstrate that alternative pathways to empowerment can be both impactful and sustainable.

We look forward to feedback from ICASA regarding the new Licensing Framework for Satellite Services soon.

Yours sincerely,



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