29 June 2026

Vodacom's Submission to the Authority's
"THE DRAFT AMENDMENTS TO THE RADIO FREQUENCY SPECTRUM REGULATIONS, 2015"

1. INTRODUCTION

Vodacom (Pty) Ltd ("Vodacom") welcomes the opportunity to submit written comments to the Independent Communications Authority of South Africa's ("ICASA") Draft Amendments of the Radio Frequency Spectrum Regulations, 2015 ("Draft Spectrum Regulations") and the Draft Amendments to the Radio Frequency Spectrum Licence Fee Regulations ("Draft Fees Regulations"), published on 15 May 2026.

Vodacom supports the Authority's decision not to introduce a separate satellite regulatory framework, but rather to incorporate satellite-related provisions into the existing spectrum and fees regulations. This approach ensures alignment with the Electronic Communications Act, 2005 ("ECA") and avoids unnecessary duplication.

However, while the Draft Amendments introduce important improvements, there remain areas which would benefit from some optimization and, where additional clarification would be beneficial, including in relation to regulatory interpretation and competitive neutrality.

2. GENERAL COMMENTS

Vodacom notes that the Draft Amendments propose the insertion of Regulation 28A, dealing with ESIMs, and Regulation 28B, dealing with satellite space segment registration. Vodacom appreciates that the Authority has adopted some of its previously proposed recommendations, in particular that:

- ICASA has decided not to introduce a standalone satellite regulatory framework, and instead to integrate applicable provisions for satellite service within the existing spectrum regulatory regime.
- ICASA has clarified that registration of foreign satellite space-segment operators does not grant any right to provide services in South Africa.
- ICASA has clarified technical, security, and interference safeguards, including ESIM monitoring requirements, and enforceable penalties.

While Vodacom welcomes and supports the Authority's efforts to develop a clearer framework for satellite-related spectrum use and terminal authorisation, Vodacom is concerned that the Draft Amendments do not sufficiently address some critical issues, including:

- The absence of a requirement for localised Gateway Earth Stations;
- Ambiguity regarding the distinction between infrastructure/capacity provision and electronic communications service provision;
- The need to clarify, within the existing ECA licensing framework, the relationship between satellite space-Earth segment registration and any applicable ECS/ECNS, radio frequency spectrum, type approval, RICA and other regulatory obligations

- The practicality of ensuring enforceability of RICA obligations where gateways are located outside South Africa;
- The process for harmful interference reporting and the tangible resolution thereof; and
- The need to preserve a level playing field between satellite operators and licensed terrestrial operators.

Vodacom therefore submits that while the draft amendments represent an improvement in regulatory clarity and safeguards, some further refinement is required to ensure compliance with the ECA's objectives of fair competition and regulatory certainty, as outlined in sections 2(d), 2(f), , and 2(z)[1].

3. SPECIFIC COMMENTS

3.1 Earth Stations in Motion (ESIM) – Regulation 28 A

Vodacom welcomes the introduction of Regulation 28A, which formalises ESIM usage, including temporary exemptions (the extent of which), mandatory network control and monitoring, and interference protection rules. However, some issues require clarification.

3.1.1 Monitoring and Control

Regulation 28A (8) states that "*The ESIM must be subject to permanent monitoring and control by a network control and monitoring centre or equivalent facility and be capable of receiving and acting upon at least enable transmission and disable transmission commands from the network control and monitoring centre. Only ESIM's operating under the control of the control and monitoring function will be authorised for use in South Africa*.". Vodacom supports the requirement that ESIMs must be capable of being monitored and controlled to mitigate harmful interference. However, it is recommended that the Authority clarify whether the network control and monitoring centre (NCMC) must be located inside South Africa's borders, and if not, specify how the Authority will ensure monitoring compliance. In addition, it is recommended that the Authority indicate the required minimum response times and escalation procedures that will apply.

Vodacom further recommends that the Authority specify the expected response time for disabling ESIM transmissions following an instruction from the Authority, or following a harmful interference report.

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[1] https://www.gov.za/documents/electronic-communications-act

3.1.2 Interference Management

Regulation 28A (10) states that "*Upon receipt of a report of Harmful Interference from licensees that operate terrestrial systems, the Authority may require that the ESIM transmissions must immediately be ceased*.". Vodacom supports measures to protect terrestrial networks from harmful interference. However, we recommend that the Authority additionally set out a clear process for managing harmful interference reports, including:

- the information required from the affected licensee,
- the Authority's verification methodology and process,
- the timeframe for cessation of transmissions, and
- the procedure for restoring ESIM operations once the interference has been resolved.

3.2 Satellite Space Segment - Regulation 28B

Vodacom notes that Regulation 28B introduces a mandatory registration regime for foreign satellite operators, with the explicit provision that such registration "*does not grant any right to provide services".* While Vodacom supports the intent to reduce barriers to entry, certain aspects of the framework would benefit from further clarification.

3.2.1 Infrastructure vs Service Ambiguity

Th proposed Regulation 28B (2) states that "*registration… does not grant any right to provide services in the Republic of South Africa".* Vodacom supports the Authority's view that the existing ECS/ECNS and radio frequency spectrum licensing framework remains the appropriate regulatory framework for the provision of electronic communications services and electronic communications network services in South Africa, and that there is no need to create a separate licensing framework for satellite services. Vodacom therefore recommends that the currently proposed Regulation 28B (2) be clarified to avoid any misinterpretation that registration creates a new form of satellite authorisation, gateway licence, waiver for the need to acquire authorization or license, or alternative route to market outside the existing ECA licensing framework.

In its current form, the currently proposed Regulation 28B (2) does not appear to sufficiently distinguish between:

a. The right to provide satellite <u>infrastructure</u> or space-Earth segment capacity to South African licensees; and
b. The right to operate electronic communications <u>networks</u> in South Africa.

This distinction matters because the current draft regulation deals with foreign satellite space-Earth segment registration, but the proposed Regulation 28B (4) then refers to a satellite space-Earth segment operator "providing services in the Republic".

Vodacom recommends that the Authority clarify that the intention of Regulation 28B (2) is to mean that registration does not authorise:

- The right to the provision of electronic communications services to customers/end-users in South Africa;
- The operation or use of satellite space-Earth segment infrastructure/capacity serving South Africa;
- Or the rendering of a wholesale satellite service to other licensed operators.

Instead, it is important to clarify that Regulation 28B (1) on its own only serves as a mechanism of good governance, ensuring that the Authority is aware of the presence of such foreign satellite operator's constellation over its jurisdiction, and in so doing, may also confer an opportunity to provide satellite infrastructure to licensed operators in South Africa.

Vodacom therefore recommends that the Authority rephrase Regulation 28 B (2) as follows:
"*The registration contemplated in sub-regulation (1) is at no fee and does not, of itself, grant any right to provide electronic communications services, electronic communications network services, radio frequency spectrum services, or any other licensable service in the Republic of South Africa. Such registration does not replace any licence, authorisation, approval, type approval, lawful interception obligation, local gateway requirement(s), or other requirement(s) under the ECA, RICA, or any other applicable law.*"

3.2.2 RICA Compliance and Licensing Misalignment

Regulation 28B (2) states that "*registration...does not grant any right to provide services in the Republic of South Africa".* and Regulation 28B (4) states "*A Satellite space segment operator providing services in the Republic must provide and maintain lawful interception capabilities to facilitate the implementation of the RICA*.". Vodacom supports the principle that services provided in South Africa must also be capable of lawful interception where required by law, and that such providers also comply with the RICA Act.

Section 30(1) of the RICA Act states that "Notwithstanding any other law, a telecommunication service provider must: -
(a) provide a telecommunication service which has the capability to be intercepted; and
(b) store communication-related information."[2]

[2] https://www.gov.za/sites/default/files/gcis_document/201409/a70-02.pdf

This places the RICA Act obligations on a "telecommunication service provider", which is defined as "any person who provides a telecommunication service under and in accordance with a telecommunication service licence issued to such person under Chapter V of the Telecommunications Act" [3]. Licenses issued under the Telecommunications Act have since been converted to ECS (Electronic Communications Services) and/or ECNS (Electronic Communications Network Services) Licenses.

In light of the above, Vodacom recommends that where a satellite space-Earth segment operator provides wholesale space-Earth segment capacity to a South African ECS/ECNS licensee, the RICA compliance obligation should be implemented through the licensed South African provider, supported by the provision of a localised gateway (refer to our comments under section 3.2.3 below) and, appropriate contractual and technical arrangements with the satellite operator.

3.2.3 Local Gateway Earth Stations

Vodacom notes that the Draft Amendments do not introduce a requirement for satellite operators providing services in South Africa to have localised Gateway Earth Station(s) in the Republic. This remains unchanged from the consultation phase, notwithstanding the concerns previously raised by Vodacom and other stakeholders.

Vodacom therefore reiterates its position that satellite operators offering services in South Africa, whether directly to end-users or indirectly through wholesale arrangements, should be required to have Gateway Earth Station(s) located within South Africa and operated by a South African ECNS licensee similar to the conditions set out in other countries such as Tanzania[4]. Vodacom previously submitted that "Satellite operators offering services in South Africa should be required to have gateway earth stations in South Africa," and that, given ICASA's obvious limited control over Gateway Earth Stations located outside South Africa, local Gateway Earth Stations should be mandatory for all services delivered to South African consumers[5] in line with implementing appropriate measures that ensure necessary compliance to lawful intercept, protection of personal data in accordance with POPIA, and/or avoiding loopholes that may compromise national security.

Notwithstanding, Vodacom recognises that there may be selected cases where the Authority may be able to consider providing an exception to the requirement for a local Gateway Earth Station, subject to appropriate justification for such deviation. In such cases, the Authority should make provision for a waiver

[3] https://www.gov.za/sites/default/files/gcis_document/201409/a70-02.pdf
[4] Tanzania EPOCA Licensing Amendment Regulations, 2025 – refer to Regulation 4A(1)
[5] https://www.ellipsis.co.za/wp-content/uploads/2024/08/Vodacom.pdf

to be granted on application, with the approval thereof being subject to the verification by the Authority that its deployment would satisfy various conditions including, inter-alia, full compliance to the POPIA Act, compliance to lawful intercept etc. Moreover, the Authority should also have determined that such services being offered through a foreign Gateway Earth Station will not create market distortions that adversely affect the competitive landscape of the market in South Africa, as well as be satisfied that national data security and sovereignty is preserved.

3.3 Direct-to-Device (D2D) Services

Vodacom notes that the Draft Amendments do not include/introduce a regulatory framework for Direct-to-Device (D2D) services using IMT spectrum. Vodacom reiterates that IMT spectrum is a scarce national resource, which licensed terrestrial mobile operators have an expectation of unencumbered use for least the full duration of their license. Moreover, the socio-economic benefits of terrestrial IMT are well proven, making it imperative for the Authority to avoid any harm to continued investment in such networks.. Any satellite deployment of IMT spectrum ought to be within the following guardrails:

- Authorization should only be subject to prior established commercial agreements with licensed terrestrial mobile operators
- Ensure full control remains with the terrestrial spectrum licensee which will in effect grant the Authority the ability to enforce the necessary regulatory oversight.
- Any alternative approach would risk constraining the continued expansion of IMT networks, substantially degrade QoS due to harmful interference adversely affecting end-users, inefficient use of spectrum due to fragmentation, stranded investments, undermine long-term regulatory certainty and disincentivise further terrestrial network investments. All of these potential adverse implications would translate to a significant adverse impact on GDP

Vodacom recommends that the Authority explicitly recognise and define D2D services, with particular reference to the guardrails indicated above as a minimum. Noting that D2D remains under study at WRC 2027 and that D2D technology is also rapidly advancing, Vodacom encourages the Authority to ensure that it aligns its regulations to the outcomes of WRC 2027 under agenda item 1.13. Notwithstanding, taking into account the aforementioned rapid development in this space, Vodacom would be supportive of the Authority entering into a consultative process to develop a preliminary national framework to enable D2D ahead of WRC 2027, cognisant of the guardrails recommended above, and importantly, recognising that such framework would be subject to revision post WRC 2027.

3.4 Other Comments on Regulations 28A and 28B

Vodacom notes that the Draft Amendments introduce some new definitions and operational requirements relating to satellite space segment registration, Earth Stations in Motion (“ESIMs”), foreign ESIM exemptions, ITU filings, astronomy protection and enforcement. Vodacom supports the Authority's efforts to create a clearer framework for satellite-related spectrum use. However, Vodacom recommends that the Authority refine certain provisions to improve legal certainty, technical accuracy and enforceability.

3.4.1 Clarification of "Space Segment" and "Ground Station"

The Draft Amendment defines "Space Segment" as *"a satellite or satellite constellation network operating in space to communicate with its associated Ground Station".* Vodacom submits that this definition may create uncertainty because the term "Space Segment" can be generally understood to refer to the segment in space such as inter-satellite links, whereas the proposed wording also refers to communication with a "Ground Station". The Draft Amendment defines "Earth Station", but does not clearly define "Ground Station", which may lead to uncertainty as to whether the Authority intends to refer to gateway earth stations, user terminals, ESIMs, or all earth stations.

Vodacom recommends that the Authority distinguish between the technical concept of "Space Segment" and the regulatory category of a foreign satelliteEarth-space segment serving South Africa. It may be more appropriate to revise this terminology to: "Space to national territory segment".

3.4.2 Support for Regulation 28A (4): ITU Article 9 and 11 filings

Regulation 28A (4) provides that the Authority will not authorise ESIMs that are not linked to a satellite network filed with the ITU Radiocommunication Bureau according to Articles 9 and 11 of the ITU Radio Regulations. Vodacom supports this requirement because it ensures that ESIM operations are linked to appropriately filed satellite networks. This is an important safeguard for interference management and regulatory certainty.

3.4.3 Regulation 28A (1) is subject to Regulation 28A (4)

Vodacom recommends that Regulation 28A (4) be redrafted to make clear that authorisation under Regulation 28A (1) is conditional upon the relevant ESIM being linked to a satellite network filed with the ITU Radiocommunication Bureau under Articles 9 and 11 of the ITU Radio Regulations. The current wording, "Subject to sub-regulation (1)," may create uncertainty as to whether Regulation 28A (4) is subordinate to Regulation 28A (1), where both sub-regulations appear to be legitimate in their own right Vodacom therefore recommends that the conditional provision in Regulation 28A(4) be removed, and that Regulation 28A (4) is elevated to follow Regulation 28A (1).

3.4.4 Annexure K

Vodacom notes that the proposed Regulation 28A (5) provides that the types of ESIM and applicable conditions of use are contained in Annexure K, and that operators of ESIM may consult Annexure K for guidance on available frequency ranges that are routinely available for ESIMs. Vodacom further notes that

Annexure K references international and regional instruments, including ITU-R instruments and EU/CEPT/ECC materials.

While Vodacom supports the use of international best practice and harmonised technical standards where appropriate, Vodacom submits that the final regulations should instead be set out taking into account the South African regulatory requirements applicable to ESIM operations.

In particular, Annexure K should not rely on EU, CEPT or ECC instruments without clarifying whether such instruments are appropriate for implementation in South Africa or referenced merely as technical guidance. Any binding technical, operational or licensing conditions applicable in South Africa should be expressly incorporated into the South African regulations or clearly prescribed by ICASA in accordance with the ECA and the NRFP.

Vodacom therefore recommends that the Authority revise Annexure K to provide a complete, South Africa-specific framework for ESIM frequency bands and conditions of use. This should include all applicable frequency bands, relevant technical limits, applicable standards, type approval requirements, licensing or exemption conditions, coordination requirements, interference protection conditions, and any applicable restrictions under the National Radio Frequency Plan, In addition, it is recommended that the Authority reference Annexure K only as being indicative, such as to not unduly limit the regulations when future bands are being use for ESIM deployment.

3.4.5 Define "Competent Authority" in Regulation 28A (7)

Vodacom requests that the Authority (ICASA) define "competent authority" for purposes of Regulation 28A (7). The current wording is ambiguous and consequently does not appropriately specify which Authority(ies) would be deemed as relevant and competent. This clarification is necessary to ensure that foreign ESIM exemptions are applied consistently and cannot be misused.

In addition to the above, Vodacom recommends that the Authority retain its independence by replacing the word "must" with "may" in Regulation 28A(7). Vodacom also recommends that the Authority make clear that it may impose additional operational conditions and/or require formal South African licensing if it finds that the licensing process of a foreign authority is deficient relative to South Africa's Legal and Regulatory regime.

3.4.6 Clarify and strengthen the temporary foreign ESIM exemption controls

Vodacom requests the Authority to clarify the temporary exemption period in Regulations 28A (6) and 28A (7). The current reference to foreign ESIMs being "in the Republic" for a period not exceeding 90 calendar days may create uncertainty as to whether the relevant trigger is merely physical presence or actual operation/transmission. Vodacom recommends that the regulation refer to the total period during which the ESIM is present in the Republic of South Africa, noting that the Authority may have limited visibility of ESIM transmission durations.

Vodacom further recommends that the Authority consider amending the exemption period from 90 calendar days to 30 calendar days per calendar year, or alternatively provide adequate reasons why a 90-calendar-day exemption is appropriate. A shorter exemption period would reduce the risk of prolonged unlicensed operation and regulatory arbitrage. In addition, a shorter duration may be more in line with National Security interests.

3.4.7 Clarify "national table of frequency allocation and/or the National Radio Frequency Plan"

Vodacom supports the principle in Regulation 28A (9) that ESIM operators should not claim protection or impose constraints on the development of terrestrial services. However, Vodacom recommends that Regulation 28A (9) be amended to refer only to terrestrial services operating in accordance with the National Radio Frequency Plan (NRFP). The reference to the "*national table of frequency allocation and/or the National Radio Frequency Plan*" may create unnecessary uncertainty, as the NRFP is the relevant statutory instrument under the ECA for the designation, management and assignment of radio frequency spectrum in South Africa.

Vodacom therefore recommends that the reference to the "*national table of frequency allocation*" be deleted, and that Regulation 28A (9) be aligned with the NRFP.

3.4.8 Clarify the coordination process with the Management Authority under Regulation 28B (3)

Vodacom supports measures to protect astronomy devices and radio astronomy interests. However, Vodacom requests the Authority to clarify the coordination process contemplated in Regulation 28B (3). In particular, the Authority should specify whether coordination with the relevant Astronomy Management Authority must be conducted directly by the satellite operator or facilitated through ICASA.

Vodacom recommends that ICASA require written confirmation from the relevant Astronomy Management Authority that coordination has been completed <u>before</u> a satellite space-earth segment operator commences operations covering South Africa. ICASA should also clarify the consequences where the Astronomy Management Authority does not confirm coordination, or where unresolved interference risks are identified.

Further, Regulation 28B (3), as currently drafted, may create uncertainty regarding the role of the Management Authority. The requirement that a satellite space-Earth segment operator must coordinate with the Astronomy Management Authority before commencing operations could be interpreted as giving the Management Authority the gatekeeping role over satellite services.

Vodacom submits that ICASA should remain the primary and final regulatory authority responsible for spectrum authorisation, registration and enforcement. The role of the Astronomy Management Authority should be clearly defined as providing technical input, coordination feedback or confirmation regarding radio astronomy protection, rather than exercising an approval function over satellite service commencement.

4. RECOMMENDATIONS

Vodacom respectfully recommends that the Authority:

1. Introduce a requirement for satellite operators providing services to South African consumers to use Gateway Earth Stations located in South Africa and operated by a locally licensed entity;
2. Clarify that Regulation 28B (1) only confers the opportunity to provide satellite infrastructure and/or capacity to licensed operators in South Africa, and does not provide authorisation to provide any retail or wholesale service i.e. that Regulation 28B (2) registration is not a substitute for ECS/ECNS licensing;
3. Align Regulation 28B (4) with RICA by confirming that RICA obligations attach to the relevant licensed electronic communications service provider, and confirm additional security controls for providers of satellite infrastructure;
4. Clarify how penalties will be enforced against foreign satellite space segment operators with no local presence;
5. Develop a clear regulatory framework for D2D services and IMT spectrum use

Vodacom remains committed to supporting the Authority in developing a regulatory framework that promotes innovation, investment, and fair competition, while safeguarding South Africa's long-term connectivity and economic objectives.

5. CONCLUSION

Vodacom supports the Authority's objective of developing a clearer framework for satellite services and ESIM operations in South Africa. Satellite technologies have the potential to contribute meaningfully to universal connectivity.

However, the Draft Amendments require further refinement to ensure that South Africa's regulatory framework remains enforceable, competitively neutral and aligned with national security and lawful interception requirements. In particular, Vodacom strongly recommends that the Authority introduce a local Gateway Earth Station requirement for satellite services delivered to South African consumers and clarify the relationship between satellite registration, ECS/ECNS licensing and RICA compliance.

Vodacom remains available to engage further with the Authority and to provide any additional information that may assist the Authority in finalising a legally sound, practical and competitively fair framework for satellite services in South Africa.