INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

NOTICE 3927 OF 2026

DRAFT AMENDMENT OF THE RADIO FREQUENCY SPECTRUM REGULATIONS, 2015 IN TERMS OF THE ELECTRONIC COMMUNICATIONS ACT, 2005 (ACT NO. 36 OF 2005)

The Independent Communications Authority of South Africa ("**ICASA**" or "**the Authority**") hereby declares its intention to amend the Radio Frequency Spectrum Regulations, 2015 ("**the Regulations**").

A copy of the Draft Amendment to the Radio Regulations ("**the Draft Regulations**") will be made available on the Authority's website at https://www.icasa.org.za or can be sent via email upon request by any individual or can be collected from ICASA Library at the following address: 350 Witch-Hazel Avenue, Eco Point Office Park, Eco Park, Centurion between 09h00 and 16h00, Monday to Friday.

The Authority hereby invites interested parties to make written representations on the Draft Regulations by no later than 16H00 on 29 June 2026 electronically (in Microsoft Word) and marked specifically for the attention of: **Mr. Mandla Mchunu – Project Manager.** The written representations should be sent by e-mail to RRamendments@icasa.org.za and copied to mmchunu@icasa.org.za.

Written representations received by the Authority pursuant to this notice will be made available for inspection by interested persons at the Authority's library.

When a person submits information to the Authority, such person may request that specific information be treated as confidential information in terms of section 4D of the Independent Communications Act of South Africa Act, 2000 (Act No.13 of 2000)

("ICASA Act"). The request for confidentiality must be accompanied by a written statement explaining why the specific information should be treated as confidential, in accordance with ICASA Guidelines for Confidentiality Request published in Government Gazette No. 41839 of 17 August 2018.

The Authority may determine whether such specific information or any portion thereof is to be treated as confidential in terms of section 4D of the ICASA Act. Where the request for confidentiality is refused, the person who made the request will be granted an opportunity to withdraw such representations or portion(s) thereof.

Persons submitting written representations are further invited to indicate, as part of their submissions, whether they require an opportunity to make oral representations on the draft Regulations, should the Authority elect to hold public hearings.

MOTHIBI G. RAMUSI
CHAIRPERSON
DATE: 29 April 2026

AMENDMENT OF THE RADIO FREQUENCY SPECTRUM REGULATIONS, 2015

The Independent Communications Authority of South Africa has, under sections 4(1) read with sections 31(4), 34(7) (c) (iii), 34(8) and 34(16) of the Electronic of the Electronic Communications Act, 2005 (Act No. 36 of 2005), made the regulations in the schedule.

SCHEDULE

1. Definitions

In these regulations "the Regulations" means the regulations a s published in the Government Notice No. 279 of 2015, as amended by Government Notices No. 386 of 2015; 781 of 2016; 585 of 2019; and 737 of 2021.

2. Amendment of regulation 1 of the Regulations

Regulation 1 of the Regulations is hereby amended –

2.1 by the insertion, after the definition "Assignment", of the following definitions:

''Astronomy Device'' means any device, apparatus, equipment or instrument, declared as such by the Minister in terms of section 28 of the Astronomy Geographic Advantage Act, 2007 (Act No. 21 of 2007), and includes all components, connections and electronic communications links thereof, whether such components, connections or electronic communications links are contiguous or not;

2.2 by the insertion, after the definition "EB", of the following definitions:

"Earth Station" means a station located either on the Earth's surface or within the major portion of the Earth's atmosphere and intended for communication with one or more space stations;

"Earth Station in Motion (ESIM)" Earth stations placed on moving platforms that communicate with geostationary-satellite orbit (GSO) or non-GSO systems operating in fixed satellite service (FSS) including Earth Station on board vessels (ESV) and Aircraft Earth Station (AES);

2.3 by the insertion, after the definition "Low Power Radio", of the following definition:

"Management Authority" means the organ of state or other institution or juristic person in which the authority to manage a particular astronomy advantage area is vested in terms of section 15 of the Astronomy Geographic Advantage Act, 2007 (Act No. 21 of 2007);

2.4 by the insertion, after the definition "National radio frequency plan", of the following definition:

"Network control and monitoring centre (NCMC)" means a facility that provides permanent monitoring and control over the satellite terminals. It is a critical regulatory mechanism ensuring that ESIMs do not cause harmful interference to other satellite services, particularly in shared frequency bands;

"Non-Geostationary Orbit Systems" means an orbit that is not geostationary (GSO), and thus any spacecraft on such orbit will not be fixed to the Earth's rotation. There are many types of NGSO, such as Low Earth orbit (LEO), Medium Earth orbit (MEO), and High Elliptical orbit (HEO). Some NGSOs can also be circular (radius is constant, or eccentricity is zero), or elliptical (eccentricity is greater than 0 and no more than 1);

2.5 by the insertion, after the definition " Non-specific short range devices", of the following definition:

"Orbit" means a path of a satellite around the Earth;

2.6 by the insertion, after the definition "RFID System", of the following definition:

"RICA" means the Regulation of Interception of Communications and Provision of Communication-related information Act 70 of 2002, published in

Government Gazette No. 24286 on 22 January 2003, as amended;

2.7 by the insertion, after the definition " Simplex radio rental system", of the following definition:

"Space Segment" means a satellite or satellite constellation network operating in space to communicate with its associated Ground Station;

3. Insertion of regulations 28A and 28B in the Regulations

The following regulations are hereby inserted in the Regulations, after regulation 28:

"**28A. Earth Stations in Motion.**

(1) A satellite operator must ensure that the operation of satellite services and transmission to ESIMs within the territory of South Africa, are carried out only if authorised by the Authority.

(2) When the Authority identifies the presence of an unauthorised operation in the territory of South Africa, the Authority will among others, seal or seize the radio apparatus in accordance with section 32 (3) of the Act.

(3) The equipment used for transmission must comply with the relevant technical specifications and meet applicable type approval requirements for installation and operation in the Republic of South Africa.

(4) Subject to sub-regulation (1), the Authority will not authorise ESIM's that are not linked to a satellite network filed with the ITU Radiocommunication Bureau according to Article 9 and 11 of the ITU Radio Regulations.

(5) The types of ESIM and applicable conditions of use are contained in Annexure K. Operators of ESIM may consult Annexure K for guidance on available frequency ranges that are routinely available for ESIM's.

(6) Foreign ESIMs that comply with ITU Resolution 156 (WRC-15), ITU Resolution 121 (WRC-23), ITU Resolution 169, Reports ITUR S.2223, ITU-R S.2357 and, ETSI EN 303 978, are exempt from licensing in South Africa, provided they are in the Republic of South Africa for a period not exceeding 90 calendar days.

(7) Foreign ESIM on board an aircraft, ship, or land mobile vehicle duly authorised/registered in its country of origin must require no licensing where the ESIM is within the territory of South Africa for a period not exceeding 90 calendar days and licence details included in the ship or aircraft's licence issued by the competent authority in compliance with Articles 18.5 to 18.6 of the ITU Radio Regulations.

(8) 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.

(9) The operator of the ESIM shall not claim protection or impose constraints on the development of terrestrial services operating according to the national table of frequency allocation and/or the National Radio Frequency Plan.

(10) 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.

28B. Satellite Space segment.

(1) A foreign satellite space segment operator must register with the Authority, the details of their systems or network in accordance with Form F.

(2) The registration contemplated in sub-regulation (1) is at no fee

and does not grant any right to provide services in the Republic of South Africa.

(3) To mitigate potential interference to Astronomy devices, the satellite space segment operator must, before commencing operations, coordinate with the Management Authority.

(4) A Satellite space segment operator providing services in the Republic must provide and maintain lawful interception capabilities to facilitate the implementation of the RICA.

(5) A Satellite space segment operator providing services in the Republic must manage interference by limiting unwanted emissions. For non-geostationary orbit systems, this will include the suppression of satellite transmissions in the channel adjacent to 10.7 GHz.

(6) A satellite space segment operator providing services in the Republic must take all the necessary protection measures contained in ITU Recommendation ITU-R RA.769-2 and the Radio Astronomy Protection Levels Regulations (No.R.90 of 2012)."

4. Amendment of regulation 42 of the Regulations

Regulation 42 of the Regulations is hereby amended –

(1) By insertion of sub-regulation (9) after sub-regulation (8):

"(9) Any person that contravenes regulation 28B (3) to (6) of the regulations is liable to a fine not exceeding R5 000 000.00 (Five million Rand)."

5. Short Title and Commencement

These regulations are called the Radio Frequency Spectrum Amendment Regulations, 2026, and must come into operation upon publication in the Government Gazette.

6. Insertion of Form F under Annexure A of the Regulations

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"FORM F

Foreign Satellite Space Segment Registration Form

To be submitted to: ICASA Satellite Licensing Division

Submission Method: Email to satellite@icasa.org.za or via online portal

Section A: Operator Information

- **Legal Name:** _____
- **Country of Registration:** ___
- **Contact Person (in case of interference):**

  _____
- **Email Address:** _____
- **Phone Number:** _____

Section B: Satellite Details

- **Satellite Network/System Commercial Name:**

  _____
- **Satellite Network ITU filling Name (s):**

  _____
- **ITU Filing Reference:** _____
- **Frequency Bands Used:** ___
- **Frequency bands filed with the ITU under Article 4.4:**

  _____
- **Emission Designations:** ___
- **Service Type:** ☐ FSS ☐ MSS ☐ BSS ☐ Other: ___
- **Coverage Area:** (e.g. Regional/Global)

  _____

Section C: Declaration

I, the undersigned,

- hereby declare that the information provided is truthful at the date of completions of this form.
- Commit to update this information whenever there are changes.

_____

Signature: _____ Date: _____

Name:

Designation
"... end of insertion.)

7. Addition of Annexure K, after Annexure J, of the Regulations.

"Annexure K

Radio frequency bands for ESIM and applicable provisions.

Categories	Equipment Type	Frequency Range	Applicable Provisions
A	GSO ESV	5 925-6 425 MHz	ITU Resolution 902 ITU-R S.1587
B	GSO ESV	14-14.5 GHz	ITU Resolution 902. ITU-R S.1587 ECC/DEC/(05)10
C	GSO AES	14-14.5 GHz/10.7-11.7 GHz and 12.5-12.75 GHz	ITU-R M.1643 ECC Decision (05)11
D	GSO Land ESIM	14-14.5 GHz. 10.7 – 12.75 GHz	ITU-R S.1857 ECC/DEC/(18)04
	GSO/NGSO Aeronautical ESIM	12.75 - 13.25 GHz/10.7 - 12.75 GHz	ECC Decision (19)04
	NGSO ESIM	14 – 14.5 GHz/10.7 – 12.75	ECC Report 279 ECC Report 271
E	GSO ESIM	19.7-20.2GHz/ 29.5-30GHz	RR No. 5.527A Resolution 156 (WRC-15) ECC/DEC(13)01ITU-R S.2223 Report ITU-R S.2357
F	GSO ESIM	17.7-19.7GHz/ 27.5-30 GHz	RR No. 5.517A Resolution 169 (WRC-19) ECC/DEC(13)01 ITU-R S.2223
G	NGSO ESIM	17.7-20.2GHz/ 27.5-30GHz	ECC/DEC(15)04 Report ITU-R S.2261

"... end of insertion.)

EXPLANATORY MEMO

1. INTRODUCTION

1.1 On 14 August 2024, the Authority conducted an Inquiry in terms of section 4B of the Independent Communications Authority of South Africa Act, 2000 (Act No. 13 of 2000) on the licensing framework for satellite services by publishing a notice in Government Gazette No. 51044 ("the Inquiry"). The purpose of the Inquiry was to:

- Determine a regulatory and/or licensing framework for Satellite Services in South Africa;
- Determine the procedures that the Authority may implement for the provision of satellite services in South Africa;
- Determine procedures for authorising user terminals, IoT terminals, earth station user terminals communicating with space station while in motion (ESIM/ESV), and ground earth stations in the South African territory.
- Consider the need to review spectrum fees, taking also into account the increasing amount of bandwidth used by satellite systems operating in higher frequency bands.
- Determine procedures for registration of international satellite operators (including details of International Telecommunications Union ("ITU") coordination status of the space segment) who intend to provide a service either directly or indirectly (through existing licensed operators) to South African consumers.

1.2 In terms of the notice, interested parties were invited to make written submissions to the Authority by no later than 12 November 2024, 16h00.

1.3 The Authority received forty-seven (47) written representations which were published in Authority's website on 31 November 2024.

1.4 The public hearings were held from 05 to 07 February 2025, which saw stakeholders providing valuable oral presentations regarding the framework's content.

1.5 After consideration of all the written submissions, oral hearings and supplementary information requested at the public hearings, ICASA published its findings in a government gazette No 52530, Notice 3144 dated 17 April 2025 ("Findings document").

1.6 The implementation of the findings requires the Authority to make amendments to the Radio regulations (*regulations published by Government Notice No. 279 of 2015, as amended by Notices No. 386 of 2015, 781 of 2016, 585 of 2019 and 737 of 2021*) and radio spectrum fees regulations (*Notice No. 33495 of 2010, as amended by Notices No. 385 of 30 March 2015 and No. 280 of 30 April 2015*).

2. REGULATORY AMENDMENTS

Regulation 28A:

2.1 The following explanation is provided for the proposed insertion of "Earth Station in Motion" ("ESIM") in the regulations:

2.1.1 The Authority noted in its Findings document, an overwhelming support from stakeholders with respect to the recognition of ESIM licences issued by other countries as this aligns with international best practices, reducing administrative and regulatory complexities, remove deployment barriers, encourage competition and investment, promoting international and regional cooperation. However, some stakeholders pointed out that the ESIMs should still comply with certain conditions and others suggested that the licensing of such ESIMS should be temporary to ensure the necessary safeguards are in place.

2.1.2 In implementing its Findings, the Authority proposes to amend the Radio Regulations and add section 28A that contains specific regulations that apply to ESIMs. The proposed amendment takes into account the principle of authorising ESIMs that are authorised in foreign countries

(similar to regulation 37 of the Radio Regulations) but adds further conditions that ensure there are necessary safeguards in place to protect national interests and ensure compliance with South African Regulations.

2.1.3 ESIM operate with Fixed Satellite Service (FSS) networks using various FSS frequency bands, with small directional antennas, for the provision of broadband communication services. The terminals may be at temporary locations or mounted on aircrafts, ships, vehicles or transportable devices used in motion. The global demand, utilization and application of broadband communications include requirements of connectivity for users on aircraft, vessels and vehicles in motion. This creates a demand for user terminals that operate at both fixed locations and while in motion in urban, suburban, rural areas as well as very remote parts of the globe.

2.1.4 ESIMs are used to deliver broadband to aircraft, ships, trains, and vehicles in motion using the same frequency bands, hardware, satellites, transponder beams, and control stations used to provide broadband services that serve earth stations at fixed locations. This connectivity provides an opportunity for operators, service providers, crew, first responders and passengers alike to leverage the innovative services offered with benefits arising from broadband internet connectivity.

2.1.5 Today, all earth stations used in motion are using Ku – and Ka-band frequencies; however, the rules and spectrum use regimes for Kaband and Ku-band are different. ESIM, as with any technology, require technical operating guidelines to ensure that operations can meet the requirements of the environment in which they are providing broadband service Depending on the frequency band and type of satellite network, the nature of providing satellite connectivity to

moving platforms necessitates careful regulation to ensure that incumbent services (terrestrial - satellite) in neighbouring or fly-over countries are protected in addition to other space services which share the same frequency band. Therefore, ESIM operations need to comply with the technical and operational requirements as enshrined in the International Telecommunication Union (ITU).

2.1.6 According to resolves 1 of ITU Resolution 22 (WRC-19), countries are required "to take all appropriate actions to make publicly and readily available the procedures for licensing/authorizing the operation of earth stations in their territories." Currently there are no national regulations regarding the use of ESIM's.

Regulation 28B:

2.2 The following explanation is provided for the proposed insertion of "Satellite Space segment" in the regulations:

<u>Registration of foreign Space segment providers</u>

2.2.1 The Findings document noted support for the space segment authorisation as the best streamlined and efficient approach. Stakeholders emphasised that the registration process should be simple and not administratively onerous with no requirement for an administrative fee.

2.2.2 It is on this basis that the Authority is implementing the registration procedure to promote transparency on the satellite operators providing or intending to provide services to South Africa. The registration is aimed at establishing direct contact between the regulator and the satellite operator to allow rapid resolution of interference and security issues, without creating an additional burden to enter the market.

2.2.3 Registration creates a centralised, authoritative list of all foreign satellite networks who are providing or intend providing services in the Republic. This improves the Authority's situational awareness of active satellite systems or networks without imposing full licencing burdens.

2.2.4 Space segment providers who are operating or intend operating in South Africa will be required to register with the Authority, details in accordance with the proposed FORM F. This information will be made publicly available on the Authority's website.

Radio Astronomy Protection

2.2.5 The Authority's Findings noted that a number of stakeholders stressed the need for a balanced approach in implementing protective measures for RQZs, such that the safeguarding of the interests of radio astronomy resources should be weighed up against the need to facilitate satellite connectivity to underserved areas and compliance obligations insofar as international standards are concerned.

2.2.6 It is for this reason that the Authority is requiring space segment operators to coordinate with the relevant Management Authority before commencing with operations to mitigate possible radio frequency interference.