



# **SATELLITE COMMUNICATIONS GUIDELINES**

**(LTA-GL-002-2026)**

## **PREAMBLE**

The Liberia Telecommunications Authority (LTA), pursuant to the powers and functions granted unto it by Part III (11) of the Telecommunications Act 2007 (the Act), has developed these Guidelines to regulate the provision of satellite communications services in the Republic of Liberia.

## **OBJECTIVES**

The objectives of these Guidelines are to:

1. provide for a transparent and non-discriminatory framework for the regulation of satellite communications services;
2. establish procedures for the licensing of satellite communications services;
3. ensure efficient management and use of scarce national frequency resources;
4. facilitate the attainment of universal access policy objectives;
5. encourage innovation in the provision of affordable communications services to the public;
6. monitor and enforce compliance with national security, cybersecurity, data sovereignty, and consumer protection policies, laws and regulations;

## **SCOPE OF APPLICATION**

These Guidelines shall apply to Geo-Stationary (GSO) and Non-Geostationary (NGSO) satellite service providers operating in the space segment and to entities providing or intending to provide satellite communications services in the terrestrial, maritime and aeronautical territory of Liberia.

These Guidelines do not apply to meteorological, amateur radio, astronomy, and space research satellites.

## **PART I: REQUIREMENTS FOR SATELLITE NETWORKS IN THE SPACE SEGMENT**

This section outlines regulatory requirements for satellite communications networks in the space segment, specifically covering Satellite Landing Rights and Satellite Filings.

### **LANDING RIGHTS**

- 1.1** All satellite service providers are required to apply for and obtain Landing Rights Authorization from the LTA to transmit and receive signals to and from satellite earth terminals located within the territory of Liberia.
- 1.2** A Landing Rights Authorization grants the Authorization Holder permission to provide service to the following:
  - a) Satellite terminals (ESIMs) onboard aircraft, ships, or land vehicles within Liberia' s territory on a non-permanent basis not exceeding 90 successive days
  - b) Very Small Aperture Terminals (VSATs)
  - c) Licensed telecommunications providers in Liberia, including Mobile Network Operators (MNOs), Internet Service Providers (ISPs), Satellite Broadband Service Providers, Satellite Gateway Service Providers, Satellite Backhaul Service Providers, Satellite Managed Data Service Providers and Satellite Broadcasting Service Providers.
- 1.3** A Landing Rights Authorization does not permit the transmission of signals directly to International Mobile Terminal (IMT) devices for voice or data communications.
- 1.4** Satellite Service Providers seeking a Landing Rights Authorization must satisfy the following minimum application requirements:
  - a) ITU filing confirmation
  - b) Certified license from the satellite service provider' s home country
  - c) Provision of technical specifications of the satellite or satellite system
  - d) Provision of service coverage map and target users/customers
  - e) Data routing and cybersecurity compliance plan

- f) Completed Application Form
- g) Application fee payment receipt

**1.5 Holders of a Landing Rights Authorization shall have the following obligations:**

- a) Provide and maintain accurate and up-to-date technical and operational information regarding the satellite network, space station, or system, including but not limited to its intended applications, orbital parameters, frequency bands, and any other pertinent data. Such information shall be submitted to the LTA upon request.
- b) Maintain a comprehensive record of all entities within the territory of Liberia to whom satellite capacity/service is being provided. This record shall be made available to the LTA upon request.
- c) Disclose service terms, pricing, and performance indicators/standards.
- d) Comply with LTA quality of service, consumer protection, data protection, and other relevant LTA Regulations and Orders, as well as with national security provisions and applicable national laws.
- e) Ensure that entities and service providers to whom services are being provided within the territory of Liberia possess the required/appropriate LTA License/Authorization.

**1.6 Landing Rights Tenure and Fees:**

- a) A Landing Rights Authorization may be granted for a period of five (5) years per NGSO Satellite system or for a period of ten (10) years per GSO satellite system.
- b) the following fees shall apply:

Category	Tenure	Application Fee	Landing Rights Authorization Fee
GSO	10 years	US\$1,000	US\$10,000
NGSO	5 years	US\$1,000	US\$5,000

## **SATELLITE FILINGS**

**1.7** Entities intending to launch and operate satellites using Liberia as the registered home country shall be required to obtain a Satellite Network Operator License from the Liberia Telecommunications Authority (LTA). Upon issuance of the license, the LTA shall oversee all coordination and registration processes with the International Telecommunication Union (ITU), consistent with the ITU Radio Regulations and applicable filing requirements.

Entities applying for Satellite Network Operator License must satisfy the following minimum application requirements:

- a) Completed Application Form (To be developed)
- b) Liberia business registration certificate
- c) Articles of Incorporation
- d) Tax Clearance Certificate
- e) Business & Technical Plan covering the following:
  - List of radio frequencies and quantity of frequencies per band;
  - Orbital location and type;
  - Technical characteristics of Satellite systems, including the overall capacity, signal/beam patterns, and support links;
  - Terrestrial network facilities and terminals;
  - Name of proposed satellite or constellation
  - Deployment and operational plans, including timelines for development and launch of Satellite Systems;
  - Target Satellite footprint/ coverage areas/maps;
  - Type/nature of Satellite Services & Applications;
  - Target end-users/customers,
  - Estimated costs of deployment and operations;
  - Expected lifespan of satellite(s) or constellation;
- f) Payment of non-refundable Application
- g) License and Regulatory Fees.

## 1.8 License Type, Tenure & Fees

License Type	Tenure	Application Fee (US\$)	Annual License Fee	Regulatory Fees
Satellite Network Operator (GSO)	10 Years	1,000	5,000	5,000
Satellite Network Operator (NGSO)	5 years	1,000	2,500	2,500

## 1.9 Obligations of Licensed Satellite Network Operators:

- a) Provide and maintain accurate and up-to-date technical and operational information regarding the satellite network, space station, or system, including but not limited to its intended applications, orbital parameters, frequency bands, and any other pertinent data. Such information shall be submitted to the LTA upon request.
- b) Maintain a comprehensive record of all entities within the territory of Liberia to whom satellite capacity/service is being provided. This record shall be made available to the LTA upon request.
- c) Disclose service terms, pricing, and performance indicators/standards.
- d) Comply with LTA quality of service, consumer protection, data protection, and other relevant LTA Regulations and Orders, as well as with national security provisions and applicable national laws.
- e) Ensure that entities and service providers to whom services are being provided in the earth segment possess the required/appropriate LTA license.

## PART II: LICENSING REQUIREMENTS FOR EARTH SEGMENT SATELLITE SERVICES

**2.1** Satellite Service Providers and other entities seeking to provide the following services in the earth segment are required to apply for and obtain a Satellite Communications License from the LTA:

- a) Satellite Gateway Services

- b) VSAT Services
- c) Satellite Direct-to-Device (D2D) Services (including Mobile Satellite Services)
- d) Satellite Broadband Services (including Portable Satellite Terminals & ESIMS)
- e) Satellite Backhaul Services
- f) Satellite Broadcasting Services
- e) Satellite Managed Data Services

## **2.2 Application Requirements**

- a) Completed Application Form
- b) Landing Rights Authorization for Satellite Service Provider
- c) Liberia business registration certificate
- d) Articles of Incorporation
- e) Payment of Application and License/Regulatory Fees.
- f) Equipment Type-Approval
- g) Registered address/agent in Liberia

## **2.3 Obligations of Licensees in the Earth Segment**

- a) Compliance with Quality-of-Service requirements as specified in the LTA Quality of Service Regulations (LTA-001-REG-2024) or in applicable ITU Recommendations, other LTA Regulations, Orders, Notices, and the terms and conditions of License.
- b) Compliance with applicable Universal Access requirements
- c) Quarterly reporting to include:
  - i. end user subscribers/customers and their distribution across Liberia
  - ii. current distributors, resellers, retailers
  - iii. technical operating/performance indicators as specified in the conditions of License
  - iv. record of customer service complaints/issues and the manner of their resolution

## 2.4 License Tenure & Fees

Service Type	Tenure	Application Fee	Annual License Fee	Annual Regulatory Fee	Universal Access Contribution
Satellite Gateway Service	5 years	US\$1,000	US\$5,000	N/A	N/A
Satellite Broadband Service	5 years	US\$1,000	US\$5,000 + 3% of Gross Annual Revenue	N/A	0.5% of Gross Annual Revenue
Satellite Backhaul Service	5 years	US\$1,000	US\$5,000 + 3% of Gross Annual Revenue	N/A	N/A
VSAT Service (commercial)	5 Years	US\$100.00	US\$1,000 + 3% of Gross Annual Revenue	N/A	N/A
VSAT Service (non-commercial)	5 Years	US\$100.00	US\$500 per VSAT	N/A	N/A
Satellite D2D Services	5 years	US\$5,000	US\$250,000 + 3% of Gross Annual Revenue	9% of total sale of D2D voice & data services	0.5% of Gross Annual Revenue
Satellite Broadcasting Services	5 Years	US\$1,000	US\$5,000 + 3% of Gross Annual Revenue	N/A	N/A
Satellite Managed Data Service	5 Years	US\$500	US\$1,000 + 3% of Gross Annual Revenue	N/A	N/A

### **3.0 AMENDMENT & EFFECTIVENESS**

These Guidelines shall become effective upon signature and publication in the National Gazette, and shall be subject to periodic review and amendment to take into account developments in satellite communications services, international best practices, ITU recommendations and changes in policy and regulations.

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DONE IN THE CITY OF PAYNESVILLE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, AD  
2026

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**EMMANUEL J. PAYEGAR**  
**COMMISSIONER**

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**PATRICK R. HONNAH**  
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**ANGELA CASSELL-BUSH**  
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**BEN A. FOFANA**  
**COMMISSIONER**

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**CLARENCE K. MASSAQUOI**  
**CHAIRPERSON**

## **ABBREVIATIONS & DEFINITIONS**

In the context of these Guidelines, the following definitions shall apply. Where there is a conflict between these definitions and those in the Act, definitions in the Act shall prevail.

**The Act** – means the Telecommunications Act 2007

**Authorization Holder** – means the person/entity granted permission by the LTA to provide a telecommunications service; or to take an action in connection to a telecommunications service; or the right to utilize telecommunications resources.

**Earth Segment:** refers to all the terrestrial equipment and facilities that interact with satellites in the Space Segment, including earth stations, gateways, user terminals (VSATs), satellite phones, satellite broadcast reception dishes, antennas and decoders, ESIMS, portable earth stations, etc.

**Earth Station:** is a high-capacity ground-based facility installed to communicate with satellites. It may be fixed or mobile, may provide two-way or one-way communication with a satellite, or may connect a satellite to the Internet.

**Earth Station Service Provider:** means a licensee that owns/operates an earth station as a standalone commercial service or for individual/corporate use.

**Equipment Type Approval:** Is a process where the LTA certifies that a specific model of equipment meets minimum safety, technical, and regulatory standards before it can be imported, sold, or used in Liberia.

**ESIM:** stands for 'Earth Station in Motion' and means any small mobile earth station on board ships, trains, aircraft, or other moving vehicles.

**Frequency Authorization:** means a permission granted by the LTA for the use of assigned frequency

**GEO:** stands for 'Geo-Synchronous Earth Orbit' and means any satellite that moves at the same speed relative to the earth

**GSO:** stands for 'Geo-Stationary Orbit' and is a special case of GEO where a satellite orbits the Earth at a fixed position relative to the earth's rotation

**International Mobile Terminal (IMT) Devices:** means all mobile terminal equipment, including handheld, portable, fixed wireless, IoT/M2M, and specialized devices, that connect to licensed networks in accordance with ITU-R IMT standards.

**ITU:** stands for the International Telecommunications Union

**Landing Rights:** authorization granted by the LTA to satellite service providers for their satellite(s) to transmit/receive signals to/from terminals within the territory of Liberia.

**Landing Rights Holder:** A satellite service provider whose satellite or satellite system is authorized to transmit/receive signals to/from terminals within Liberia.

**LTA:** stands for the Liberia Telecommunications Authority

**Mobile Satellite Service (MSS):** in these Guidelines, this refers to a communication model where satellites transmit data directly to specialized satellite devices and terminals or ground infrastructure.

**MIFR:** is the ITU database containing all registered frequency assignments. It is also known as the Master Register.

**NGSO:** stands for Non-Geostationary Orbit and refers to satellites that are not fixed in position relative to the earth's rotation.

**Orbit:** The path that a satellite follows while revolving around the Earth.

**Satellite:** An object in outer space that revolves around the Earth. These Guidelines are concerned with satellites which provide communication services.

**Satellite Backhaul Service:** means Satellite connectivity used to link network nodes, such as mobile base stations with core networks.

**Satellite Broadcasting Service:** means the transmission of radio, television, or multimedia content directly from satellite systems to earth terminals.

**Satellite Broadband Service:** means a high-speed internet access service delivered by satellite to end user devices via portable satellite terminals.

**Satellite Capacity:** The range of data traffic provided by a Satellite communicating with an Earth Station in the territory of Liberia.

**Satellite Gateway Service:** means providing data/internet connectivity to satellites using earth terminals in Liberia.

**Satellite Gateway Terminal:** means an earth terminal/station used to provide data/internet connectivity to satellites.

**Satellite Direct-to-Device (D2D) Services:** refers to a communication model where satellites transmit data directly to IMT and other devices —such as smartphones or tablets —without requiring intermediary specialized satellite terminals or ground infrastructure.

**Satellite Filings:** the process of submitting technical data about a proposed satellite network's frequencies and characteristics to the International Telecommunications Union (ITU).

**Satellite Footprint:** The area of the Earth covered by the signal from a satellite.

**Satellite Managed Data Service:** means a satellite-based connectivity solution/service, including Internet of Things (IoT), Machine-to-Machine (M2M), data connectivity applications, except internet access as a service.

**Satellite Service Provider:** An entity owning and/or operating satellites and authorized by the LTA to provide satellite-based services to licensed telecommunications service providers within the territory of Liberia.

**Space Segment:** refers to satellites in orbit and all equipment on board the satellites that enables communication.

**Satellite System:** means the number of satellite(s) working together in unisome in the same constellation within the same frequency band and with footprint over the territory of Liberia.

**VSAT (Very Small Aperture Terminal):** is a small earth station with an antenna typically 0.75–3.8 meters in diameter, used for two-way communications with satellite systems.

**VSAT End-User (non-commercial):** An individual or entity authorized by the LTA to install, maintain and operate VSAT in Liberia exclusively for their own use. An authorized VSAT End-user is prohibited from providing VSAT services to the public, whether for a fee or otherwise.

**VSAT Services:** are satellite-based communication services that use small earth stations to provide two-way data, voice, and video connectivity.

**VSAT Service Provider (Commercial):** means an entity licensed by the LTA to provide VSAT-based communication services in Liberia, including installation, maintenance, and support services for end-user customers.

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