

SATELLITE-BASED INTERNET CONNECTIVITY STATISTICS - GHANA'S EXPERIENCE

**13th Meeting of the Expert Group on ICT Household Indicators (EGH) and
16th Meeting on Expert Group on Telecommunications/ICT Indicators (EGTI)
(24th – 26th September 2025)**



**NATIONAL COMMUNICATIONS AUTHORITY
(NCA - GHANA)**

Outline

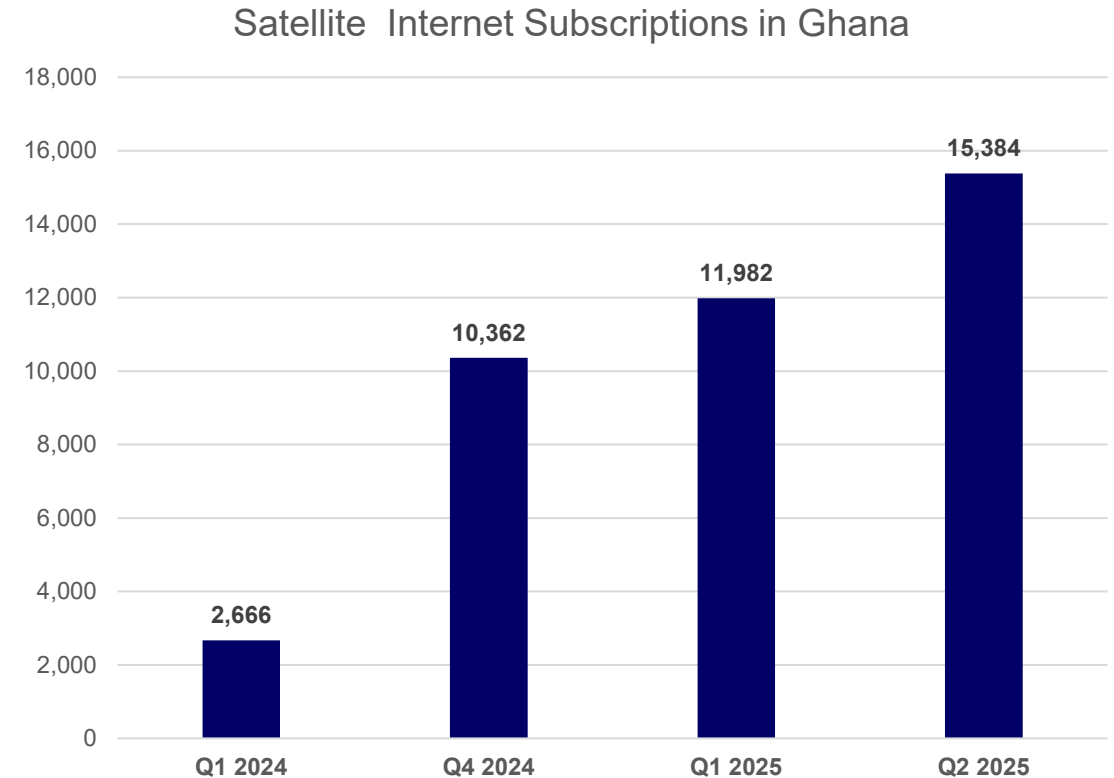
- Introduction
- Internet over Satellite statistics in Ghana
- What kind of data is collected
- How the data is collected
- How results are used for policy & decision making
- Conclusion
- Recommendations for additional indicators

Introduction

- The regulator issues licence for two main segments with sub-categories:
 - Earth Segment Satellite Services.
 - Space Segment Satellite Services (Landing Rights).
- There are currently 29 Satellite Licenses issued for various categories.
- Satellite services that require licencing include: Gateways, Landing Rights, Satellite Network (last mile connectivity, VSATs etc.)

Internet over Satellite Statistics in Ghana

- Ghana has issued 29 satellite licenses. 11 provide last mile connectivity.
- Prior to licensing of Starlink in April 2024, subscriptions stood at 2,666
- As of June 2025, there are over 15,000 subscriptions.
- The entry of low earth orbit non-geostationary satellite operators necessitated the formulation of a framework (Satellite Licensing Framework 2024) to guide licensing and operation of satellite communications in Ghana



What kind of data is collected

In Ghana, the regulator collects both supply side and demand side data

■ Supply Side:

- Number of licensed Satellite Operators
- Type of services they provide
- Spectrum/bandwidth allocated
- Registration of terminals (Earth stations, VSATs)
- Number of active subscriptions,
- Subscriptions by region, and by plan

■ Demand Side:

- Future collaboration with Statistical Agency (GSS) to collect data on Household Access to Satellite Internet Connectivity.

How the data is collected

- **Licensing and Authorisations:** Operators and terminals must acquire licence from the regulator creating administrative data.
- **Operator Reporting:** as part of license conditions, operators are required to submit monthly, quarterly and annual data on subscriptions, terminals etc., which feed into statistics productions.
- **Market Monitoring:** regulator actively monitors the market to track and detect unregistered services to bring them under regulation.
- **Future National Surveys:** Collaboration with national statistical agency (GSS) ensures inclusion of such ICT indicators in Household Surveys which helps capture adoption and use at the consumer level.

How the data is used

- **To inform licensing policies:** in 2024, Ghana through the regulator introduced the “Satellite Licensing Framework” to guide activities in the satellite communications market in the country.
- **To ensure compliance:** global providers operating in the country adhere to the national laws and meet consumer protection requirements.
- **To monitor internet market:** impact in the market in terms of affordability, adoption, opportunities available etc.
- **For spectrum management:** Supports spectrum management and planning for future demands.
- **To guide universal access planning:** to complement mobile network to connect rural and underserved communities
- **Supports crisis resilience and disaster response planning.**

Conclusion

- Satellite connectivity is a growing part of Ghana's digital ecosystem.
- Ghana's experience demonstrates that collecting data on Satellite-based internet connectivity requires a mix of administrative records, operator reporting, household surveys and active market monitoring.
- Ghana is open to collaborating on refining and expanding indicators.

Recommendations for additional indicators

- Introduce a standalone indicator on Satellite Broadband Connectivity
 - Number of Satellite Broadband Subscriptions
 - Number of Earth Stations, Terminals, Kits, etc.
 - Satellite Broadband by Speed (10mbps, 20mbps 50mbps etc.)
 - Household Access to Satellite Broadband
 - Satellite usage for Resilience and Redundancy.
 - Use of Satellite Broadband for Disaster response.