



REPORT OF THE PUBLIC INQUIRY ON THE DRAFT GUIDELINES ON COMMERCIAL SATELLITE

1.0 INTRODUCTION

The Nigerian Communications Commission (the Commission) pursuant to its powers under Section 70 of the Nigerian Communications Act 2003 (the Act), developed the draft Guidelines on Commercial Satellite (the Guidelines). Based on the participatory rule-making procedure established by the Commission, the draft Guidelines was published on its website for comments from the general public especially, telecommunications operators and other stakeholders.

A Public Inquiry was scheduled for March 16, 2018 and stakeholders were duly notified. A Notice of the Public Inquiry on the Guidelines was published in Daily Trust, This Day and Guardian Newspapers of Tuesday, February 20, 2018.

Further to the publication, the Commission received Seven (7) submissions from the following stakeholders:

1. Thuraya
2. Inmarsat
3. Yahsat
4. Avanti
5. ESOA + GVF
6. One Web
7. Zest

The Commission later received comments from NigComSat after the expiration of the deadline for submission of comments.

2.0 THE PUBLIC INQUIRY

The Public Inquiry held as scheduled at the Conference Hall of the Commission and commenced at 11:00 am. It was chaired by the Executive Vice Chairman, Prof. Umar Garba Danbatta who was represented by the Director, Spectrum

Administration Department (DSA), Engr. A.K. Nwaulune. Ninety (90) participants who attended the Forum included Staff of the Commission telecommunications operators, interested stakeholders and the media.

The EVC explained that the Public Inquiry was part of the rule-making process aimed at ensuring wide consultations prior to the issuance of guidelines by the Commission. He highlighted the primary objectives of the Guidelines which include:

- To create a legal framework that will assist in regulating the provision and use of Satellite Communications Services and Networks across Nigeria, on a ship or an aircraft registered in the Country.
- To ensure that scarce frequency resources are effectively managed, especially where frequency sharing between satellites and terrestrial systems are required.
- To encourage the use of satellite connectivity to unserved areas lacking terrestrial transmission infrastructure backbone.
- To provide for protection from impermissible levels of interference to reception of signals by earth stations in the Fixed/Mobile Satellite Service from terrestrial stations in a co-equally shared band.

The EVC enjoined participants to freely make contributions that would assist the Commission in developing the Guidelines.

The Principal Manager, Spectrum Administration Department, Engr. U. M Aliyu gave an overview of the draft Guidelines. This was followed by a presentation on issues raised in the various submissions made by stakeholders on the draft Guidelines. Comments received at the Public Inquiry are also covered by this Report.

A. General Overview of the Guidelines Commercial Satellite Communications

The draft Commercial Satellite Guidelines was presented to the audience by the Principal Manager, Spectrum Administration Department. The outline of the draft Guidelines consists of the General Terms and Conditions, Licensing of Earth Station, License Tenure, Licensee's Obligations, Licence Renewal, Processing Time, Application, End-User Terminal, Authorization of Space Segment Satellite Operators, Space Segment Authorization Evaluation Criteria, etc.

B. Review of Submissions Received

Consistent with its practice, the Commission considered all the comments that were made by stakeholders. A summary of the comments and the responses of the Commission are contained below.

1. Comments by Stakeholders:

A stakeholder requested for an opportunity to discuss with the Commission on how the same rigour that is applied to satellite services in terms of maintaining a database of providers and the submission of technical information to the Commission on space stations, can also be applied to other users of spectrum.

Response by the Commission:

The Commission is open to discussing the issue with the stakeholders. However, other service providers may be required to submit database of their deployments to the Commission.

2. Comments by Stakeholders:

The Commission should consider the difference between those that provide backhaul infrastructure and those that provide services through local licensed partners in the country based on satellite capacity lease and service level agreements. In this case, satellite terminals are only used as an interface between the satellite infrastructure and a local radio connection (e.g. a modem, or base station; 3G, LTE, 5G, IoT) where user devices are connected to.

The difference between these two topologies is important, since in the first case the satellite terminal (usually called user terminal) is directly used by the user, while in the latter case the satellite terminal is not accessible directly by the consumer.

Response by the Commission:

Comment noted – The Commission believes that the licensing of local service providers for both MSS and FSS ground segment users suffices.

3. Comments by Stakeholders:

There is a presumption that foreign satellites means Non-Nigerian satellites and from the Guidelines. This is implied due to the provisions of Paragraphs 5 (2)(a) and 13 (1) (a). The absence of an explicit reference to foreign (i.e., non-Nigerian) is ambiguous, for instance, whilst “broadcasting satellites” appear to be excluded, Paragraph 16 anticipates annual fees for C band spectrum.

Response by the Commission:

Foreign space segment Satellite Operators are not exempted from the provisions of the Guidelines if they provide service to customers in Nigeria without using a local company.

We are of the opinion that “foreign satellites” must not be stated. It is important to note that C-band spectrum is not only used for broadcasting.

4. Comments by Stakeholders:

- The draft Guidelines are not clear with respect to the licensing requirements for the local service providers/ distributors of commercial satellite services in Nigeria.
- Licensing process should be transparent and non-discriminatory.

Response by the Commission:

- The subsisting GMPCS and Sales & Installation (S & I) of Satellite Terminal Equipment Licenses suffices.

The draft Guidelines will be updated to clarify this accordingly.

- Licensing process will be in accordance with the Act which mandates a transparent and non-discriminatory licensing process.

5. Comments by Stakeholders:

Clarification is required to understand whether it is mandatory that Earth Station/Central Hub/Teleport/Gateway) should be locally established in Nigeria, and whether the requirements as described under this section only apply for operators who plan to establish such facility in Nigeria.

Response by the Commission:

The understanding of the provision is correct.

6. Comments by Stakeholders:

- The requirement for a Space Segment Satellite Operator Authorization (Landing Rights) raises concerns that the existing successful ‘open-skies’ regulatory regime in Nigeria will become less flexible, leading to a cumbersome licensing process.

No separate landing rights authorization should be required for non-Nigerian satellite operations

- Clarification required on intention of the Commission in respect of the rationale for introducing Landing Rights requirements in Nigeria on a per satellite basis. This is particularly relevant with the introduction of a number of large LEO satellite systems that will be made up of a large number of satellites.

Response by the Commission

- The Commission will review this provision in line with the concept of reciprocity.
- The landing Rights will apply to a large number of satellites, if justified. The Commission will further review the provision.

7. Comments by Stakeholders:

The Commission should confirm that a local presence is required for the operation of both VSATs and ESIMs and that a local presence is not required for visiting ESIMs (for a period less than 6 weeks).

Response by the Commission:

Confirmed.

8. Comments by Stakeholders:

Clarification is required regarding the text of the draft Guidelines, notably applying the conditions of Paragraph 5(2) in a proportionate manner and extending the same “light-touch” regulation approach to all satellite terminals.

Response by the Commission:

Paragraph 5(2) refers to gateway Earth Stations. “Light-touch” regulation is only applicable to GMPCS, visiting ESIMs/VSAT and other visiting terminals.

9. Comments by Stakeholders:

The end-user and consumer should not be subject to any licensing procedure or payment of fees.

Response by the Commission:

Paragraph 12(1) clarifies that the end-user will not be subject to any licensing process.

10. Comments by Stakeholders:

VSATs which are temporarily used in the country (e.g., for broadcasting events, oil exploration, etc.), should enjoy the same licensing exemption for a six week period as ESIMs do under the draft Guidelines.

Response by the Commission:

Comments Accepted. The draft Guidelines will be updated stating that there will be no authorization requirements for visiting VSATs.

11. Comments by Stakeholders:

The same conditions which apply to ESIMs should apply to VSATs.

Response by the Commission:

Comments Accepted.

12. Comments by Stakeholders:

Clarification is required on whether an end-user that is not a body corporate can establish and use a satellite earth station without a licence.

Response by the Commission:

The type of satellite earth station needs to be clarified.

13. Comments by Stakeholders:

The ability to register a visiting satellite terminal with the Commission should be extended to any terminal, and not only to “portable” terminals as could be interpreted from Paragraph 12(3) of the draft Guidelines.

Response by the Commission:

Comments noted. The Commission will revert with a feedback.

14. Comments by Stakeholders:

Corporate users should benefit from a “class” or “umbrella” licence regime for the use of satellite terminals without a Hub or a Gateway in the country, as a complement to Paragraph 12(2) of the draft Guidelines.

Response by the Commission:

This is accepted provided the corporate user is served by a licensee.

15. Comments by Stakeholders:

There is need to confirm that there are no authorization requirements for a foreign space segment satellite operator who provides services through local licensed service providers.

Response by the Commission:

Such a provider is not required to get an authorization, but must ensure that the local service provider is a licensee of the Commission.

16. Comments by Stakeholders:

It was recommended that basic information consisting of the company's name and address is sufficient for such a database of customers providing service using space segment.

Response by the Commission:

Basic information includes type of Licence, duration, location (s) etc. will be required.

17. Comments by Stakeholders:

Provisions concerning visiting terminals used by individuals are not addressed appropriately.

Response by the Commission:

The scope of the Guidelines will be amended to indicate that non-commercial individual users are exempt from licensing process

18. Comments by Stakeholders:

The Commission should remove any discrimination in the draft Guidelines to ensure fair competition between operators and terminals that offer similar services and applications to users. Fees should be reduced to the minimum, to cover the administrative cost or even waived across board.

Response by the Commission:

The Commission is not aware of any discrimination in the Guidelines. Regarding the issue of fees, the Commission will review the fees in the draft Guidelines accordingly.

19. Comments by Stakeholders:

Confirmation required whether the fees are payable on any number of terminals authorised in the country?

Response by the Commission:

Fees are to be paid for all terminals.

20. Comments by Stakeholders:

Space Segment landing rights authorization should pay a one-off fee of \$10,000USD (Ten Thousand United States Dollars), for the life span of the satellite.

Response by the Commission:

Under the draft Guidelines, this fee covers all the satellites owned by an operator. However, the Commission is reviewing its position on applicable fees.

21. Comments by Stakeholders:

If fees and charges are to be applied for spectrum usage, they should not be applied on an individual terminal basis, but to be paid by the service provider for a 'blanket license' which exempts individual terminal licensing.

Response by the Commission:

This is the case. Fees to be charged for spectrum usage refer to gateway earth stations.

22. Comments by Stakeholders:

Satellite terminal pricing should be exempted from fees and customs duties so that the end users in Nigeria (i.e. communities in the rural and remote areas) can be connected and can contribute to the economy of the country and its growth.

Response by the Commission:

Comments not accepted, especially in consideration of the fact that custom duties are not within the regulatory purview of the Commission.

23. Comments by Stakeholders:

While the importance of terminal type approval is recognized, the Commission is encouraged to accept international standards and to accept the results of independent test facilities.

Response by the Commission:

Comment not accepted. International Standards/Type Approval will only be accepted for visiting terminals.

24. Comments by Stakeholders:

Visiting VSATs should be allowed entry and use on the basis of mutual recognition of the type-approval certificate from the country of origin.

Response by the Commission:

Paragraph 17(3) waives Type-Approval requirement for visiting ESIMs where there is already a type-approval certificate from the country of origin. The draft Guidelines will be amended to apply the same conditions for VSATs.

25. Comments by Stakeholders:

It was recommended that type-approval compliance should be a matter for the manufacturer of the terminal in order to avoid unnecessary duplication, etc.

Response by the Commission:

Type-Approval may be done by either the Manufacturer or the Terminal owner. Note however, that once a device has been typed-approved in Nigeria, the Commission does not require any further certificate.

26. Comments by Stakeholders:

In the absence of a GMPCS MoU mark, it is presumed that exemptions under Paragraph 17 (2) and (3) would not be applicable to any other terminals (such as those which may be carried by individuals) and thus required to undergo additional testing in order to be type-approved in Nigeria.

Response by the Commission:

There is no need for testing if the laboratory is on the list of those recognized by the Commission. However, it must be type-approved by the manufacturer or entity importing the terminals. Any model that has been type-approved in Nigeria shall not need type-approval again.

27. Comments by Stakeholders:

Satellite terminals should be mutually recognized, for example CE marked (type approved) terminals should be accepted as these have been tested for efficient use of spectrum and not causing harmful interference.

Response by the Commission:

Comments not accepted. International Standards/Type Approval will be accepted for only visiting terminals.

28. Comments by Stakeholders:

The Commission should maintain a proper database of terrestrial providers, if any exists, in the Ku-band FSS allocations (10.7-12.75 and 14.0-14.5 GHz), and all technical details in order to ensure protection of satellite services operators and prompt action in the event of interference to its services by any earth station located within Nigeria. The data will enable LEO satellite operators predict any interference to its system, with little or no intervention by the Commission.

Response by the Commission:

A database is in place but not published for prediction. The information can be shared when necessary.

29. Comments by Stakeholders:

A clear definition of each terminology which has straight and only one possible interpretation will make the Guidelines easier to read and understand.

The term “earth exploration satellite” in Paragraph 3 (2), is used in place of the traditional term “earth observation satellite”. It is recommended a change be made to the term as defined in Paragraph 19.

Response by the Commission:

Comments Accepted.

30. Comments by Stakeholders:

The draft Guidelines would benefit from inclusion of additional definitions and concise descriptions for various words and terms, including landing rights, satellite service provider operators, satellite earth stations, fixed earth stations acting as “gateways” or “hubs”, terrestrial network terminals, and VSATs or ESIMs; Portable Terminal Equipment vis-a-vis VSAT terminals and ESIMs terminals; Visiting Terminals used by individuals falling outside the scope of ESIMs; etc

Response by the Commission:

Comments noted. The draft Guidelines is being reviewed further and this will be taken on board.

31. Comments by Stakeholders:

It would be valuable to know how services such as M2M services via satellite could be addressed in the Guidelines

Response by the Commission:

They are addressed as VSATs which could be permanent or visiting, and would be covered under a class licence, if permanent.

32. Comments by Stakeholders:

Clarity is needed regarding the applicability of the Guidelines to space segment operators that incorporate different frequency bands to provide a range of satellite services which cut across both commercial and non-commercial, military and broadcast purposes.

Response by the Commission:

The Guidelines are restricted to commercial satellite communication but recognises hybrid satellites. Refer to Para. 13 (1) (h) which stipulates a single authorisation but with different conditions for the different bands.

Additional Issues Raised at the Public Inquiry

Other comments at the inquiry;

- Avanti Satellite Company commended the Commission on its unique strategy of consulting the industry stakeholders for comments on any proposed draft Guidelines or Regulations.
- Inmarsat, commended the Commission for the exemplary work done on the Guidelines and also for the excellent presentation.

QUESTIONS/SUGGESTIONS	COMMISSION'S RESPONSE
Why does the Commission only intend to classify Machine to Machine (M2M) as V-Sat ?	The Commission will in the course of reviewing the Guidelines also consider other V-Sat terminals.
There should be classification of Earth station that are registered in Nigeria, since some local operators use it for satellite management.	V-Sat used for only Network management would be captured at no cost to the Licensee.
Classification of Satellite, Radio Navigation Satellite Service (RNSS) is exempted in the Guidelines while L – band is grouped as part of pay load in the Guidelines. This appears contradictory.	L band is not only synonymous with the radio navigation satellite services but also used by MSS operators. The classification of L band and exemption of Radio navigation satellite services in the Guidelines will be reviewed.
Power flux density & Effective Isotropic Radiated Power (EIRP) in the Guideline is a limiting factor to satellite operations, where it is interfering with terrestrial wireless radio.	Mitigation techniques has been provided to ensure interference free operation in any band shared by both satellite & terrestrial systems by: <ul style="list-style-type: none"> • Limitation on satellite Power flux Density (pfd) produced at the surface of the earth.

	<ul style="list-style-type: none"> • Limitation on the Effective isotropic Radiated power (e.i.r.p) by terrestrial stations.
<p>The Commission was advised to refrain from using Regulations and Guidelines in stifling investors but rather consider ways to encourage Companies that invested in Nigeria.</p> <p>Secondly, the use of incentives should be proposed for Companies that are up to date in their tax payments by charging them less than others that are not in this category when they are registering their terminal equipment.</p>	<p>Based on findings by the Commission, every country charges for Earth station registration sited in its country. The Commission will however review its position if it has proof of any country, where satellite was not paid for.</p>
<p>Ka band should be included with the Ku band used by Earth Station in Motion (ESIMs), when it comes to what was written for ESIMs in the Guidelines.</p>	<p>In the Guidelines, the issue of future services was mentioned in order to allow the possibility of updating the Guidelines from time to time and issues arising from Earth station in Motion (ESIMs) will be addressed during any amendments.</p>

Dated this 30th Day of April, 2018.

Prof. Umar Garba Danbatta
 Executive Vice-Chairman/CEO
 NIGERIAN COMMUNICATIONS COMMISSION

