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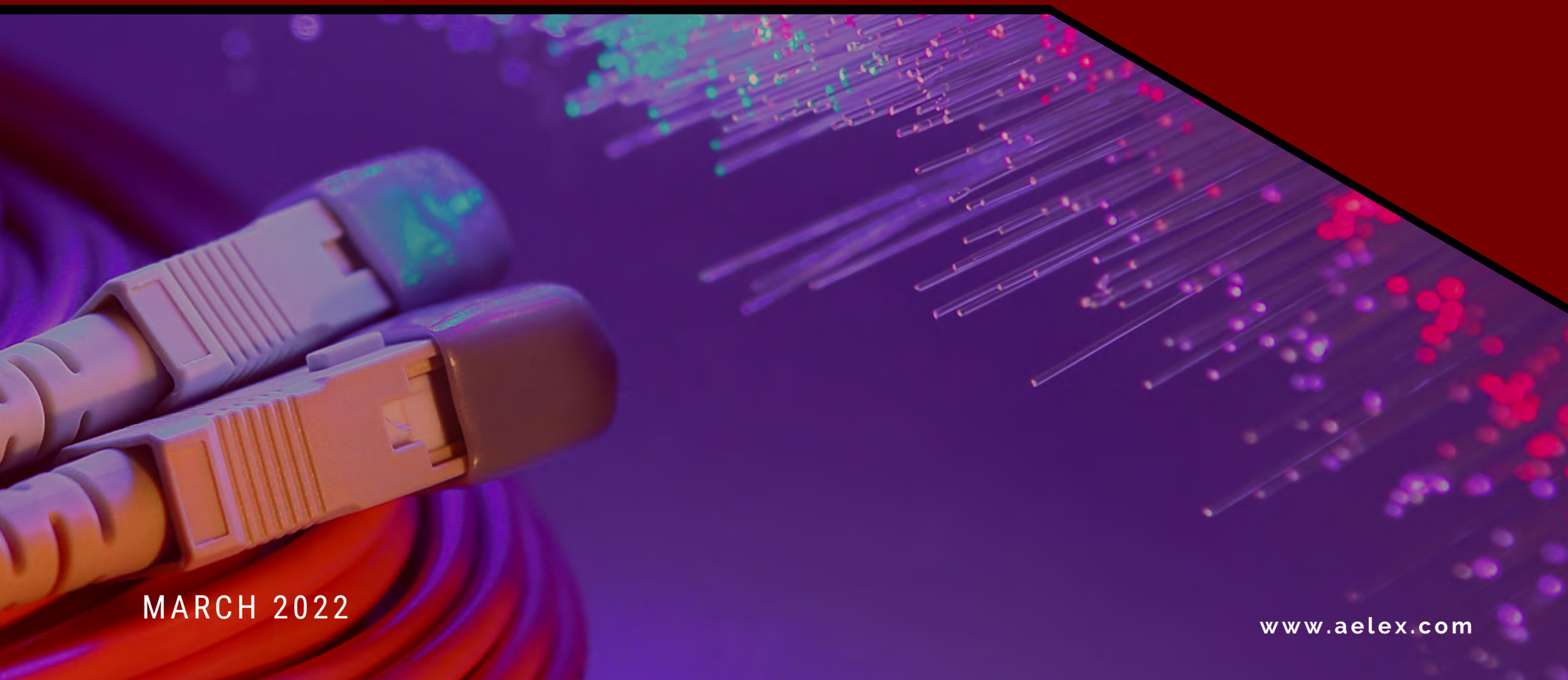
ARTICLE SERIES

EXPLORING THE LEGAL FRAMEWORK FOR LAYING FIBRE OPTIC CABLE NETWORKS IN NIGERIA



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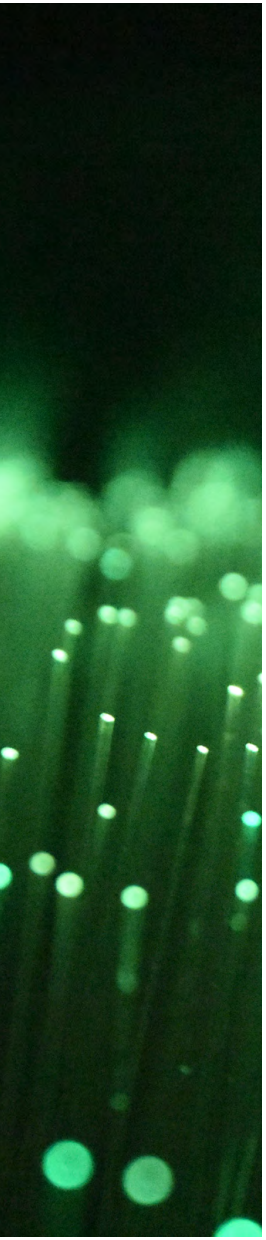


SYNOPSIS

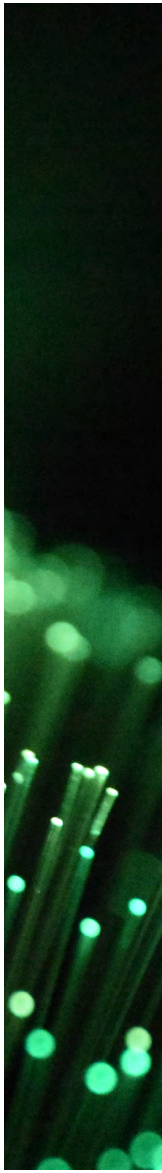
The introduction of fibre optic cables in the telecommunications sector can be said to be one of the revolutionary developments in the sector. By providing higher bandwidth, greater flexibility, improved latency, and stronger security, the overall capabilities of contemporary telecommunication infrastructure have been scaled up with the introduction of, and preference for, fibre optic cables over metallic cables. These developments have had far reaching implications for users, investors, and regulators alike within the telecommunications sector in terms of setting the tone for improved service offerings, increased investment opportunities and the need for adequate and needs-matching regulations.

1. INTRODUCTION

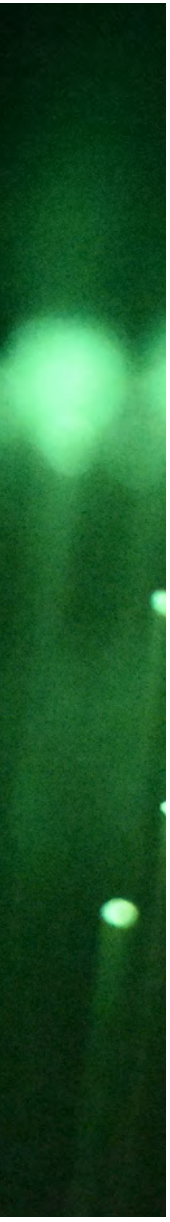
The Nigerian telecommunications landscape has experienced exponential growth both in tele-density and the quality of telecommunication services due to the increased preference for fiber optic cable powered networks by telecommunication industries. Indeed, telecommunication industries across the globe are also set on this path, as there seems to be a massive shift from conventional copper or metallic cable powered telecommunication transmissions to the use of fibre optic cables. [1]

In fact, the current disposition of telecommunication service consumers for faster, stronger, and far-reaching, digital internet connectivity has largely been facilitated by the introduction of fibre optic cable powered networks and this has seen fiber optics technology become a strategic pivot for contemporary telecommunication operations.

The Nigerian telecommunication industry is also set on this path as efforts have been made in recent times by stakeholders and the government to adopt fibre optic technology in the provision of telecommunication services. Worthy of special mention is the Lagos State Unified Duct Infrastructure Project (LASG-UDIP) which was kickstarted in 2020 as part of the state's 'Smart City Programme' aimed at providing a 24-hour driven economy. [2]



[1] For instance, Rwanda, has undertaken massive Fibre Optics deployment projects to key into the future of broadband - https://www.reuters.com/article/ozabs-rwanda-telecoms-20110316 idAFJOE72F07D20110316
[2] See more at https://pmnewsnigeria.com/2021/09/30/lagos-to-complete-udip-project-before-end-of-2021-lasimra-boss/



The Lagos State Commissioner for Science and Technology disclosed that over 3,000km of fiber cables were deployed in the year 2020 as part of the unified fibre project. The project is said to be a multi-year project that will involve the installation of a total of 6000km of fibre optic cables that will come in two phases of 3000km each. [3] Apparently, the project is also a means of implementing a “dig once” policy in order to prevent the fragmented and constant digging of state roads by different telecom operators and internet service providers.[4]

This increased deployment of fibre optic technology within the telecommunications sphere in Nigeria underscores the necessity of government’s involvement in the regulation of the operation, installation, and deployment of fibre optic cables across the country by telecommunication companies through adequate and robust regulatory frameworks.

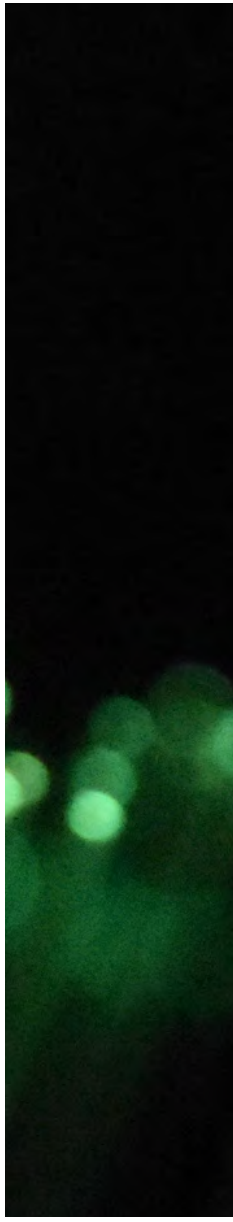
It is in light of the foregoing that this article seeks to review the extant regulatory framework that governs the laying of fibre optic cables in Nigeria.

2. WHAT ARE FIBRE OPTIC CABLES?

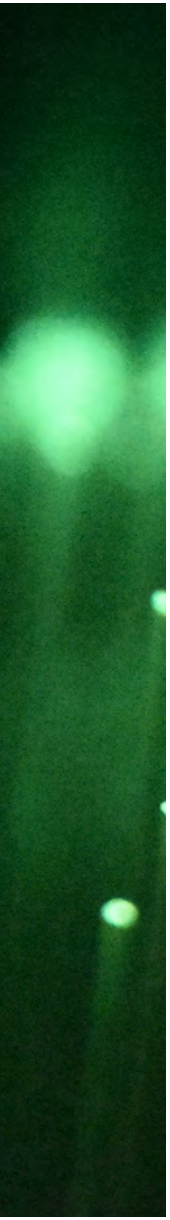
A fibre optic cable is a network cable that contains strands of glass fibers inside an insulated casing, designed for long-distance, high-performance data networking, and telecommunications which provide higher bandwidth and transmit data over longer distances as compared to other wired cables.[5]

A fibre optic cable can contain varying number of glass fibers usually with another glass layer, called cladding, surrounding the glass fiber core and the buffer tube layer which protects the cladding, while a jacket layer acts as the final protective layer for the individual strand.[6]

Fibre optic cables are commonly used because of their advantages over copper cables, some of which include higher bandwidth and transmission speed for long-distance and high-performance data networking in telecommunication services, such as internet, television, and telephones.[7]



[3] https://www.vanguardngr.com/2021/05/smartcity-project-lagos-installs-over-3000km-fibre-optic-cable/
[4] https://techpoint.africa/2020/07/09/lagos-unified-internet-fibre/
[5]https://www.lifewire.com/fiber-optic-cable-817874
[6]Ibid [7]https://www.techtarget.com/searchnetworking/definition/fiber-optics-optical-fiber?amp=1-For example, Verizon and Google use fiber optics in their Verizon FIOS and Google Fiber services, respectively, providing Gigabit internet speeds to users.



3. LOCAL REGULATORY FRAMEWORK

3.1 The Nigerian Communications Act 2003

The Nigerian Communications Act, 2003 **("NCA")** is the primary legislation regulating telecommunications in Nigeria. The NCA provides a regulatory framework for the Nigerian communications industry and applies to the provision of all communication services and networks, in whole or in part within Nigeria or on a ship or aircraft registered in Nigeria. The NCA also established the Nigerian Communications Commission **("the NCC")** as a body corporate with the responsibility for the regulation of the communication sector in Nigeria. The NCC undertakes the licensing of all operators in the communications sector.

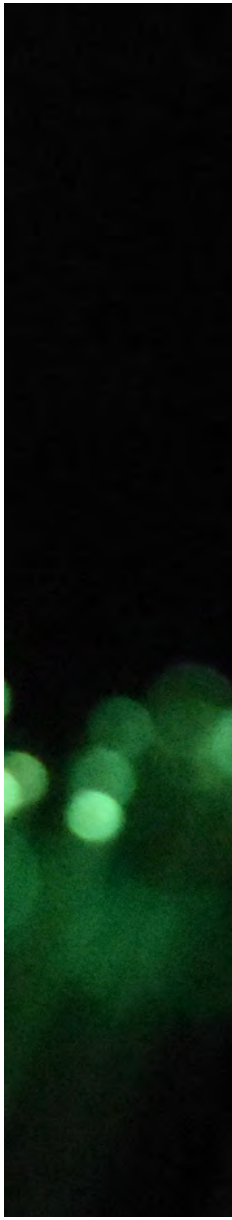
Section 31 of the NCA provides that "no person shall operate a communications system or facility nor provide a communications service in Nigeria unless authorised to do so under a communications licence or exempted under regulations made by the Commission under this Act".

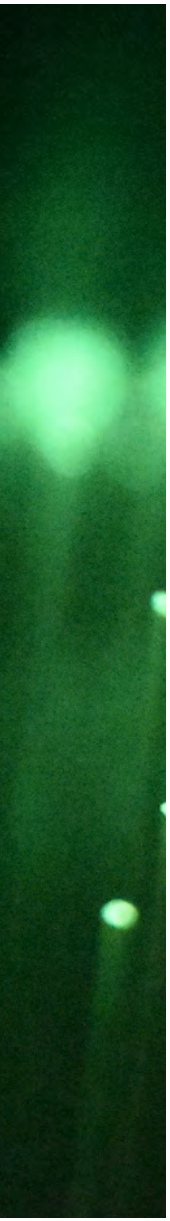
Thus, the operation of a communication system or facility in Nigeria without first obtaining the requisite licence is expressly prohibited under the foregoing provision of the NCA. In this regard, Section 31(2) of the NCA further provides that anyone who operates a communication system/facility or provide a communication service in Nigeria without a licence/exemption commits an offence and is liable on conviction to;

a. a fine not less than the initial fee for the relevant licence; or
b. a fine not less than 10(ten) times the initial fee for the relevant licence; or
c. imprisonment for a term not exceeding 1(one) year; or
d. both such fine and imprisonment.

In addition, upon conviction, such a person will be required to forfeit the property, facilities installations and equipment used for the provision and operation of the unlicensed service to the NCC.

The NCA also requires licensees in connection with the installation of their respective network facilities, to take all reasonable steps to act in





accordance with good engineering practice; protect the safety of the persons and the properties; ensure that the activities interfere as little as practicable with:

(i) the operation of a public utility,
(ii)public roads and paths
(iii)movement of traffic, and
(iv)the use of land and protect the Environment.[8]

3.2 Nigerian Communications Commission Regulations 2019 ("NCC Regulations")

The NCC Regulations were made by the NCC in furtherance of its duty to regulate the communications sector. The NCA empowers the NCC to make and enforce such regulations as may be necessary to give full force and effect to the provisions of the NCA. The NCC Regulations sets out guidelines on the eligibility and requirements for obtaining a communication licence.

All companies operating or intending to operate in the communications sector are bound by the NCC Regulations.

Classes of Licences

There are two major classifications of licences under the NCA, and they are:

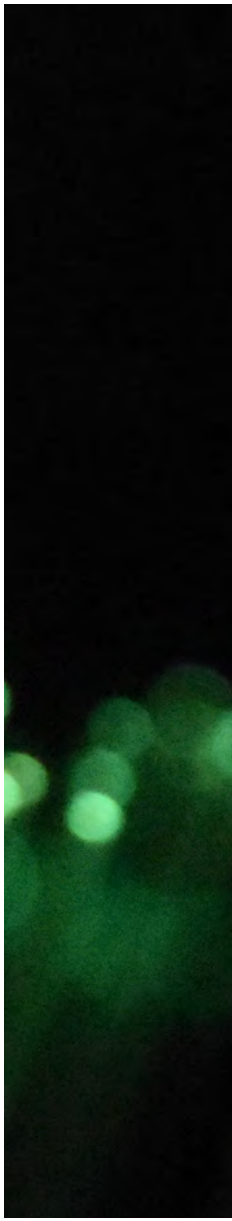
a. Individual Licence.
b. Class Licence.[9]

An Individual Licence is one which terms, conditions, obligations, scope and limitations are limited to the service being provided. Individual Licences are granted for various services including the provision or operation of Metropolitan Fibre Cable Network ("MFCN").[10]

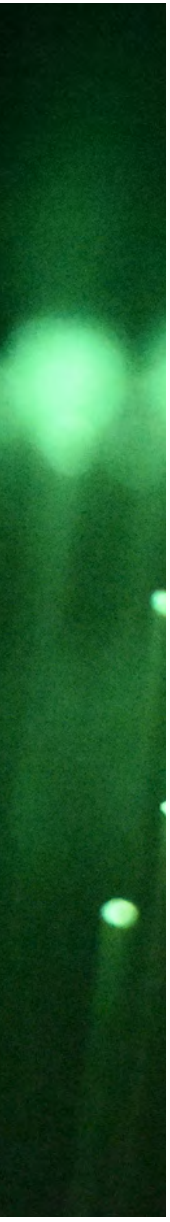
Conversely, a Class Licence is a type of general authorization in which the terms and conditions/obligations are common to all licence holders. It requires only registration with the Commission for applicants to commence operation.

Requirements to obtain an Individual Licence for provision of Fibre Optic Cable Network

On the requirements for obtaining an Individual Licence, Regulation 10 of the NCC Regulations provides that an application for any licence from



[8] Section 136(2) of the NCA 2004
[9] Our focus here will be on Individual Licences since issues of fibre optics are only provided for under the Individual Licence category.
[10] See NCC, "List of Licenses" available at: https://www.ncc.gov.ng/licensing-regulation/licensing/licensees-list



the NCC shall only be valid where the applicant;

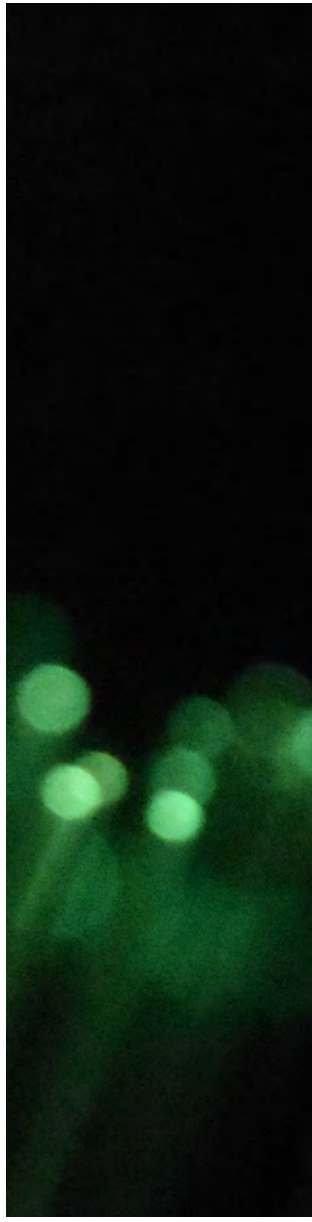
- is a body corporate under the laws in force in Nigeria;
- meets the technical requirements for operating such a licence;
- possesses sufficient financial capacity to provide long term services;
- satisfies any other condition that the NCC may require; and
- in the case of a resource dependent service, the applicant has secured the determination by the NCC that it has secured a reservation of such resource.

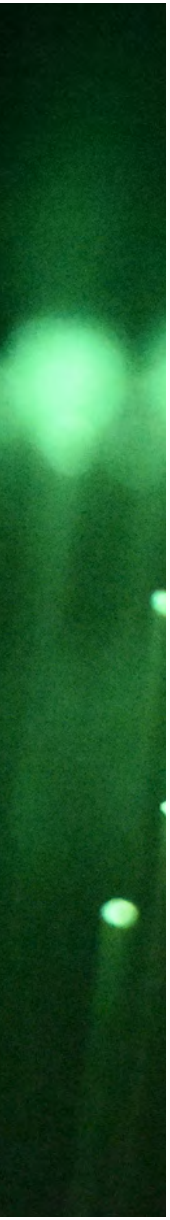
An applicant for this licence is required to submit a completed application form to the NCC accompanied by the following:

- Certificate of Incorporation.
- Tax Clearance Certificate.
- Certified True Copy (CTC) of Articles & Memorandum of Association.
- Certified True Copy (CTC) of Form CO7 (List of Company Directors)
- Certified True Copy (CTC) of Company's Registered Address
- Feasibility report of proposed service applied for (where applicable).
- 3 Passport photographs of authorized representative.
- Passport photographs of directors of the company

Upon submission of the form, the applicant is required to pay a non-refundable administrative charge of N500,000, which is 5% of the licence fee. The licence fee is, however, payable upon approval of the application.

Regulation 13 of the NCC Regulations also provides that any person who provides a telecommunications service without a valid licence shall be liable to an administrative fine of N5,000,000 for the contravention and N500,000 for each day that the contravention persists after an order to desist has been issued by the NCC.





4. LICENSING REGIME UNDER THE METROPOLITAN FIBER CABLE NETWORK SERVICES LICENCE (MFCN LICENCE)

The deployment of fibre optic cables and related transmission infrastructure is largely governed by the NCC's conditions set out in the MFCN licence. The licence establishes the specific terms and conditions under which telecommunication service providers are authorised to carry out the following activities:

a. To construct, maintain and operate "access tandem"[11] and fibre optic transmission facilities and backbone upon land or in water or under water in all territories of the states of Nigeria;

b. To employ other means of transmission such as microwave/satellite or any other cost effective means other than fibre optic cables in topographical terrains such as streams, hills or mountains where the deployment of fibre optics may prove difficult;

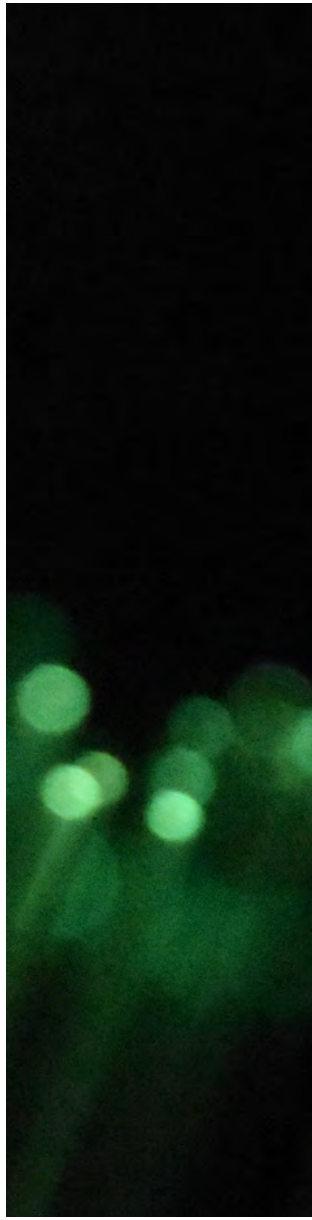
c. To carry intra-city telecommunications traffic within a designated area;

d. To interconnect two or more metropolitan areas for the purpose of transmitting inter-city traffic between metropolitan areas, and

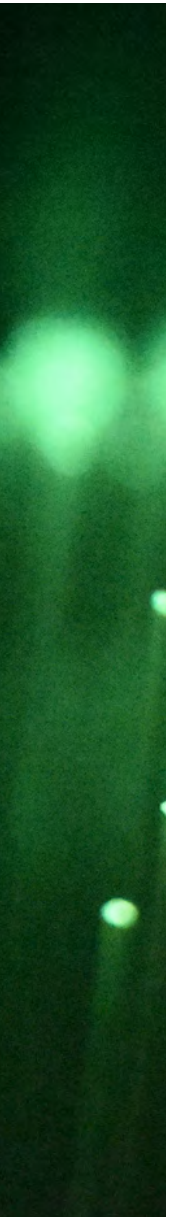
e. To establish points of presence[12] for the purpose of interconnecting with private networks and access providers networks.

Notwithstanding the robust activities authorised by the licence, telecommunication service providers are still restricted in certain respects under the licensing regime. Some of these restrictions include:

a. The licence shall be for the transmission and switching of telecommunications services within the approved metropolitan area(s) and to such extent does not permit the licensee to carry such messages outside the borders of Nigeria.[13]
b. The licence does not permit the licensee to operate as an Access Provider.[14]
c. The switching function of the licensee under the licence is limited to the provision of Access Tandems.[15]



[11] Access tandem refers to switching systems that provide concentration and distribution for traffic originating and terminating in the networks of access providers.
[12] 'Point of Presence' means a "location designated by the licensee (service provider) where switching and transmission facilities are provided for the purpose of interfacing with other operators". See NCC MFCN Licence, p.7
[13] See Condition 32.1 of the MFCN Licence [14] See Condition 32.2 of the MFCN Licence [15] See Condition 32.3 of the MFCN Licence



d. The licensee is prohibited from switching Internet traffic for the purpose of delivery of IP packets to end users.[16]
e. The licensee is prohibited from providing or operating any other telecommunication service:

- Which is not expressly included within the scope of the licence or,
- For which a separate licence has not been issued by the Commission.[17]

The licence is valid for a period of 20 years subject to renewal.[18] The nature of this licence, being an individual licence, is intended for use by a singular licensee, such that a licensee is not permitted to operate, assign, sub-licence or transfer their licence to any other party without obtaining a prior written approval from the NCC.[19]

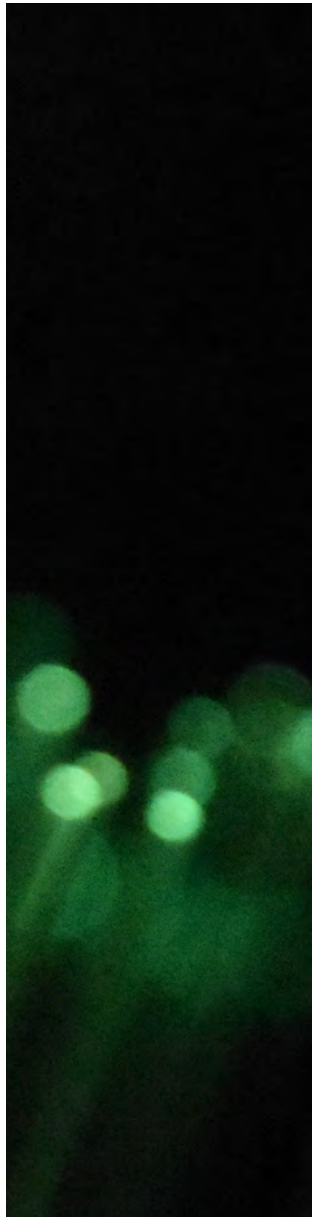
It is also worthy of note that obtaining an MFCN licence does not grant automatic authorization to implement the terms of the licence.

Relevant permits and licences including building permits and other non-telecommunication permits required to build, implement, modify, and remove installations and buildings, must be sought and obtained in accordance with relevant applicable laws and regulations.[20]

5. CONCLUSION

From the foregoing, the laying of fibre optic cables falls under the purview of operations primarily regulated by the NCA and the NCC Regulations and the licence required for laying fibre optic cables in Nigeria is the MFCN licence which falls under the Individual Licence category. In addition, other ancillary licences/permits are required to effectively carry out the terms of the MFCN licence.

One cannot overemphasize the role of, and need for, proper organization and regulation of the processes of laying fibre optic cables within any given socio-political space through necessary legal frameworks for approvals and licences.



[16] see Condition 32.4 of the MFCN Licence
[17]See Condition 32.5 of the MFCN Licence
[18]See Paragraph 2, MFCN Licence
[19]Section 38(1) NCA
[20] Condition. 24.1 of the MFCN Licence.

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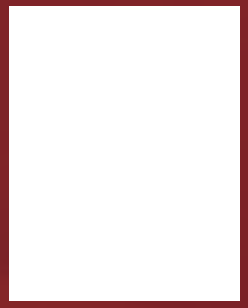

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