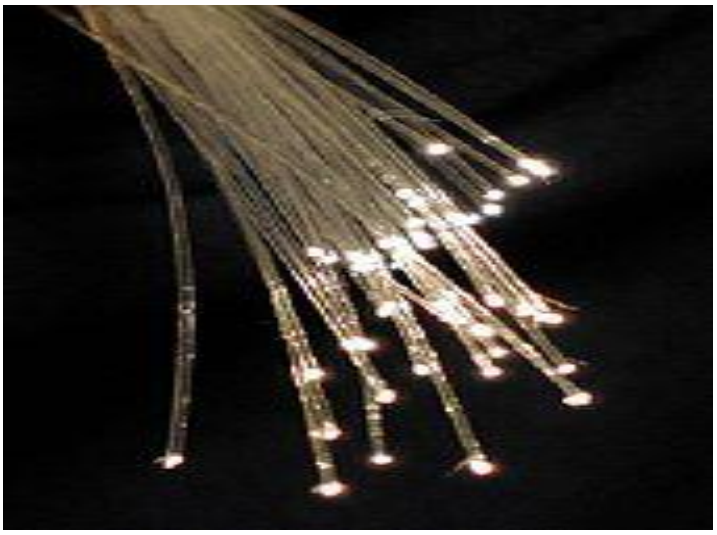

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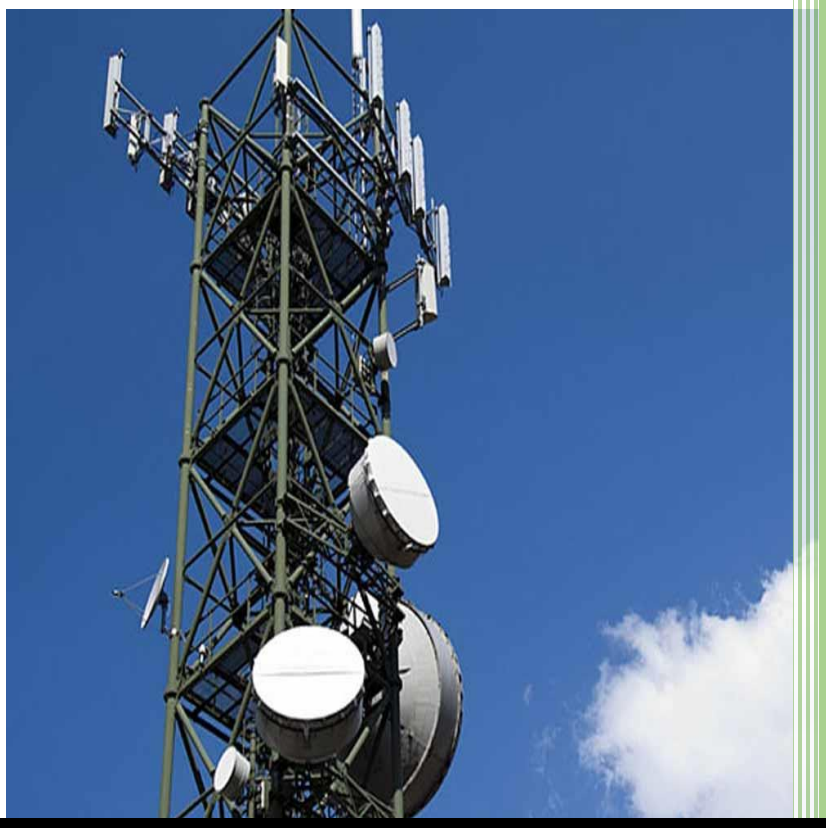

Telecoms Infrastructure Deployment in Nigeria and the issues of Multiple Regulation/Taxation

Research and Development Department

3/29/2017

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Executive Summary

The Nigerian Telecommunications Industry has experienced significant growth in telephony penetration. From a modest start of about 400,000 fixed and 25,000 mobile telephone lines in 2001, by year end 2007 the industry recorded nearly 42 million active subscriber line connections and by December 2016, the industry recorded nearly 156 million active subscriber line connections. Teledensity has risen from 0.04% in 2000 to over 110% in December 2016.

This growth was mainly due to continuous uptake of the digital mobile services and the Commission's adoption of the Unified Licensing Regime at the expiry in February 2006, of the five years exclusivity period granted the Digital Mobile Licencees.

Telecoms infrastructure development in Nigeria has brought Nigeria telecoms industry to an enviable position, as it is first amongst the nations of Africa. The National Telecommunications Policy 2000 was officially launched with the objective of establishing a long term telecommunications market structure in Nigeria in which multiple operators provide services on a competitive basis.

The overarching objective of this study is to determine the extent of telecommunications infrastructure deployment in Nigeria and the issues of multiple taxation and regulation. The study will examine the evolution of the telecommunications sector, developments in infrastructure deployment in Nigeria, what constitutes multiple taxation/regulation and efforts of the Nigerian Communications Commission to stem the practice in order to continue to grow the telecommunications sector as well as increase the sector's contribution to the gross domestic product (GDP).

Nigeria's telecommunications industry is currently the most vibrant telecommunications market in Africa, following its liberalization in the year 2001. The Industry has prompted both local and foreign investment in Nigeria

which has reached a cumulative total of about US$68.2 billion as at December 2014.

Infrastructure deployment in Nigeria has progressed consistently since mobile communications and GSM was introduced with the total number of Base Transceiver Stations (BTS)/Masts & Towers in the entire country standing at 36,532 comprising of GSM operators of 34,239 and 2,293 for other wireless local loop operators as at December, 2016.

The Nigerian Communications Commission has developed several guidelines and regulations aimed at aiding infrastructure deployment in Nigeria including Guidelines for the Installation of Telecommunications Towers and Masts and Guidelines on Collocation and Infrastructure Sharing.

In terms of Fibre Optics deployment, As at December, 2016, On-land Fiber Optics in km was deployed as follows:- MTN – 21,996km; GLO – 14,153km; AIRTEL - 6,853km; EMTS – 3,674.3km; NTEL - 161km; MainOne – 363.6km; 21st CENT - 7,140km; IPNX - 830.7 Km and INTERCELLULAR - 8,400km. In this segment, a total of 63,208km of On-land Fiber Optics cables was deployed cumulatively by the operators in 2016.

The successes recorded by the telecommunications industry in the last 10 years have reinforced the internationally acknowledged perception that communications is a powerful, progressive tool of socio-economic development. Sadly however, while this sector has been a major catalyst for socio-economic development it has become apparent that majority of our national stakeholders have failed to recognize the pivotal role played by mobile communications to the long-term socio-economic development of the nation. These sections of stakeholders instead continue to perceive the successes of the industry as opportunity to generate short term and other immediate pecuniary benefits. This skewed perception results in undue interference in the operations of

communications networks by various strata of society, and particularly agencies of government.

Despite the progress in the sector, one major challenge facing the industry is the issue of multiple taxation/regulation. Multiplicity of taxes makes investment climate tempestuous as investors are not sure the extent to which their incomes would be taxed. There are cases of large corporate entities that have moved their operations out of some States or from Nigeria to neighbouring countries on account of multiplicity of taxes and rising cost of doing business in Nigeria.
There are obvious contradictions in respect to taxes collected by all tiers of government in Nigeria. For example; by imposing educational tax after paying corporate tax by companies, accepting revenue from value Added Tax (VAT) later imposing sales tax, payment of ground rent and tenement rate all amount to multiple taxation syndrome. In some states in Nigeria the methodology used in tax collection is not only illegal but dehumanizing and violent.

The proper understanding of Nigeria constitution indicates that the Local Government Councils have no powers to legislate on taxes, they can only collect taxes under the authority of a State law which might empower them to make bye-laws. But the situation is that all the 774 Local government councils in Nigeria make laws arbitrarily to generate funds. Excessive taxation of the telecommunications services sector is hindering high technology investments, confining innovation and will eventually impede economic growth.

In finding solution to these challenges, The NCC has continued to engage with the Governors of the different States especially on the issues of multiple taxation/regulation and the state Governors have promised to work on the taxes and regulations.

The National Economic Council (NEC) at its 10th meeting held on Tuesday 11th December, 2012 highlighted the below-par performance of the country in the area of ICT development, particularly in Broadband service penetration, as well as unsatisfactory quality of telecommunications services. It also provided useful

insight on the challenges and solutions to improving ICT deliverables in Nigeria and sought the intervention of NEC members in creating an enabling environment for the rollout of critical and urgent ICT infrastructure in the country.

The Nigerian Governors' Forum, NGF, has discussed the issue of multiple regulations and taxes on telecommunication operations in the country extensively. The NCC had also engaged other agencies of government on the same issues with a view to improving relationship with telecommunications companies, who are often the victims of these taxes and multiple regulations.

The NCC as a responsible regulatory agency was worried about multiple regulations and taxes because they do not augur well for smooth development of the telecommunications sector. So we have decided to engage all stakeholders especially other government agencies in order to cushion the pains operators go through, as a result of multiple regulations and taxes.

Suggested Solutions to the Challenges

Clarity on various policies is the top expectation of the telecom sector's wish list. Some of the other major expectations were:

- Rationalization and simplification of the current tax structure. The taxes and levies charged by the different 3 tiers of government should be ascertainable, predictable on a clear defined criteria and known in advance what taxes they are liable to pay.
- Taxes and levies should be collected as prescribed by law on who the exercising authority should be especially where a federal legislation has covered field; states and local governments can no longer legislate on the same issues.
- The Taxes and Levies (approved rates for collection) Act, 1998 makes it illegal to use consultants to assess and collect taxes.
- Improve transparency as to the contribution of the communications sector to the Federation Account and the use of such funds for the development of the industry as well as extension of ICT services to

unserved and underserved areas. The states and local governments are beneficiaries in the sharing of proceeds from the Federation account.

Recommendations

1. Telecommunications infrastructure deployment should be prioritized by government to continue to drive the attraction of foreign direct investment capital in the build out of telecommunications infrastructure in the country. Investment opportunities exist in intercity and intra city network rollout of broadband infrastructure.
2. Government should pursue the implementation of the National Tax Policy and the meeting of the Nigeria Governors Forum should ensure the implementation of the resolution of the National Executive Council on Multiple Taxation and Regulation. Taxes and levies should be rationalized to ensure the overall growth and financial viability of the telecoms sector.
3. Government should encourage the National Assembly to consider telecoms infrastructure as a critical infrastructure sector and pass appropriate laws to protect the infrastructure and the industry as well as its financing needs.
4. There is need to set up a Telecom Finance Corporation on the principle to provide additional investment for the industry.
5. The 3 tiers of government should adopt uniform RoW across all states at a uniform and reasonable cost. The Federal Ministry of Works especially should adopt single window mechanism on priority basis for granting RoW permission throughout the country and States should also streamline their levies and taxes to ensure they are not predatory and will allow for the deployment of infrastructure to extend ICT services to underserved and unserved areas of the States.

6. Government should ensure adherence to the Guidelines on Infrastructure sharing and Guidelines for the installation of Masts and towers across the country. The States should align levies only on admissible charges for guidelines for installation of masts and towers.
7. Provide fiscal incentives to telecoms operators for deployment of fiber optic cables through inter cities across the country and for the development of smart cities.
8. The level of taxation and fees applied to the mobile sector are reflected in the retail prices operators charge for using their services. Therefore, a change in taxation or fees will lead to a change in the retail price of mobile services.
9. Basically, the Commission should encourage relationships and collaboration with other Ministries, Departments and Agencies of Government at the Federal level in the first instance. The Commission should discuss Common Issues on Regulations with others and seek ways of establishing a Nigerian Regulators Forum involving all Regulatory Agencies in Nigeria. This Forum shall be tasked with discussing all common issues of regulation as it affect each industry. Members of this Forum should be drawn from: NERC, CPC, NESREA, Nigeria Customs & Excise, FIRS, the Joint Tax Board, National Lotteries Commission, etc. The Commission should also engage State Governments and Local Governments to discuss issues that pertain to the telecommunications industry.

These changes to the mobile sector can lead to direct impacts on value-added and employment and, through spillover effects, on the wider economy, in particular on real GDP, tax revenues, employment and investment in Nigeria.

The Report provides the necessary information on status of infrastructure deployment and the various issues of multiple taxation/regulation to enable informed engagement with relevant stakeholders in the industry and the different tiers of Governments (Federal, State and Local).

CHAPTER ONE

1.0 INTRODUCTION

The need to attract investment and develop the national Information and Communications Infrastructure (ICT) led to policy and institutional reforms leading to deregulation and liberalization of the telecommunications sector in Nigeria. A regulatory body, the Nigerian Communications Commission (NCC) was established by law in 1992 and commenced operations in May 1993 with the inauguration of the first Board of the Commission marking the partial deregulation of the industry.

The Nigerian Communications Act (NCA) 2003 empowers it to facilitate investment and encourage entry into the Nigerian communications market for the provision of telecommunications service as well as the supply of equipment and facilities.

The Act also requires the NCC to license companies to provide communications service and create the much needed conducive environment for investors in the telecoms industry, while ensuring fair competition amongst players in the industry and ensuring subscribers are protected from unfair practices by telecoms service providers.

The overarching objective of this study is to determine the extent of telecommunications infrastructure deployment in Nigeria and the issues of multiple taxation and regulation. The study will examine the evolution of the telecommunications sector, developments in infrastructure deployment in Nigeria, what constitutes multiple taxation/regulation and efforts of the Nigerian Communications Commission to stem the practice in order to continue to grow the telecommunications sector as well as increase the sector's contribution to the gross national product (GDP).

The Nigerian Telecommunications Industry has experienced significant growth in telephony penetration. From a modest start of about 400,000 fixed and 25,000 mobile telephone lines in 2001, by year end 2007 the industry recorded nearly 42 million active subscriber line connections and by December 2007, the industry recorded nearly 156 million active subscriber line connections. Teledensity has risen from 0.04% in 2000 to over 110% in December 2016.[1]

This growth was mainly due to continuous uptake of the digital mobile services and the Commission's adoption of the Unified Licensing Regime at the expiry in February 2006, of the five years exclusivity period granted the Digital Mobile Licencees.

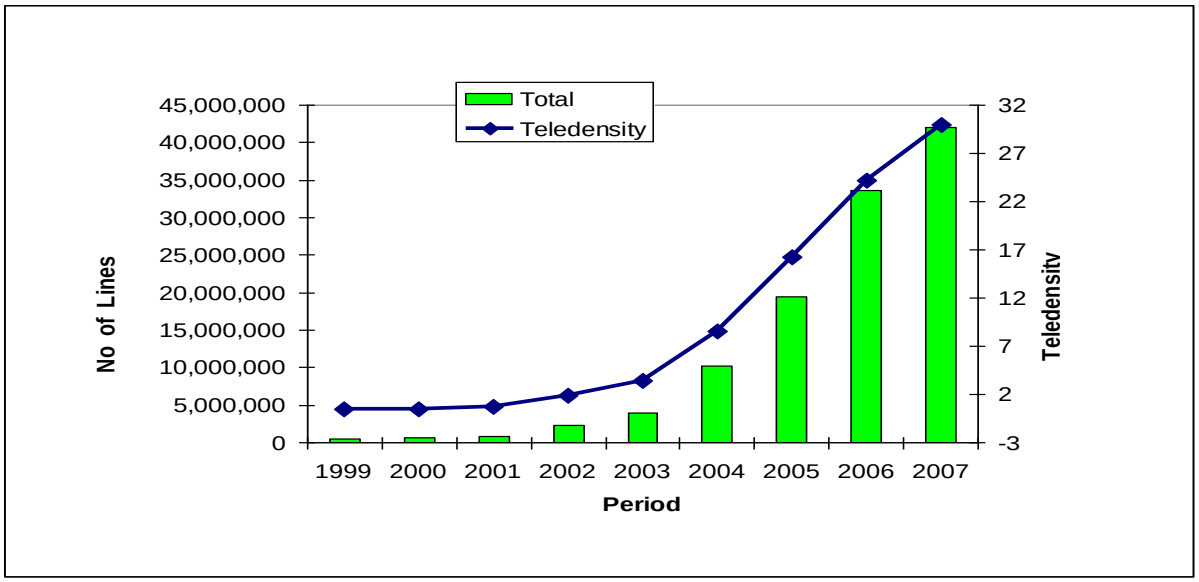


Figure 1: Telecoms Subscribers Numbers and teledensity from 1999 – 2007

[1] Nigerian Communications Commission 2017

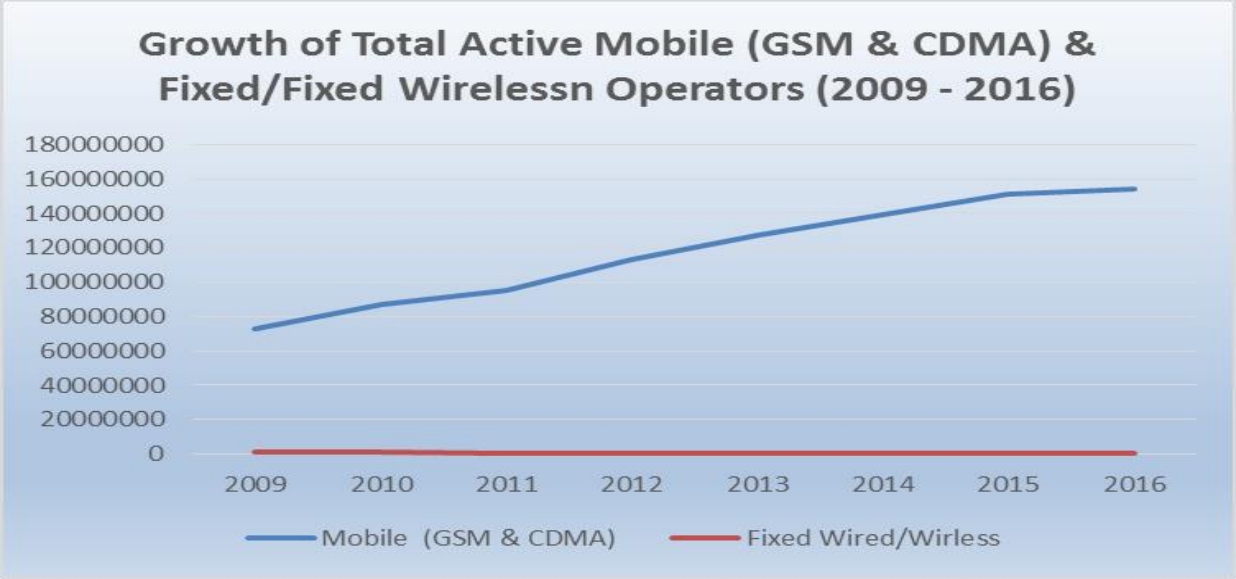


Figure 2: Growth of Active Telecoms Subscribers Numbers and teledensity from 1999 – 2007

Telecom infrastructure development in Nigeria has brought Nigeria telecoms industry to an enviable position, as it is first amongst the nations of Africa.[2] The National Telecommunications Policy 2000 was officially launched with the objective of establishing a long term telecommunications market structure in Nigeria in which multiple operators provide services on a competitive basis.

To liberalize the market, the government in its implementation of the Policy encouraged foreign investment and the inflow of capital by:

- eliminating the restriction level of foreign equity participation,
- reduction of import duties on telecommunications equipment from 25% to 5% for two years,
- grant of pioneer status to qualified investors and fiscal incentives to Local manufacture of telecommunications facilities.

[2] O. M. Sadiq, A. O. Oyelade and C.A.S. Ukachukwu "10 Years of Telecommunications Infrastructure Development in Nigeria" University of Lagos at the International Conference on Innovations in Engineering and Technology (IET 2011)

The liberalization of the telecoms sector and the resulting competition by private operators has brought very substantial benefits to subscribers in terms of much lower prices, increased accessibility to telecoms services and availability of infrastructure in various areas in the country. The Nigerian telecommunications sector has therefore become one of the fastest growing sectors of the Nigerian economy and contributing substantially to the gross domestic product (GDP) of about 9.8% by the end of 2016.

1.1 Overview of the Nigerian Telecommunications Industry

The Commission licensed three (3) Digital Mobile Operators through an Auction process that was widely adjudged to have been highly successful and transparent. This was followed by the licensing of a Second National Carrier and the fourth Digital Mobile Operator in 2002.

By the end of 2004, there were two National Carriers, four Digital Mobile Operators and 24 Fixed Telephony Providers (of which six were FWA Operators). In 2006, the Commission introduced the Unified Access Service Licenses (UASL) regime, to enable Operators take advantage of convergence in services and technology in order to offer better services.

In 2007, the Commission awarded a further UASL and spectrum license to Emerging Markets Telecommunications Services (EMTS). This brought the number of telecoms operators with national mobile licenses to five.

Nigeria's telecommunications industry is currently the most vibrant telecommunications market in Africa, following its liberalization in the year 2001. The Industry has prompted both local and foreign investment in Nigeria which has reached a cumulative total of about US$68.2 billion as at December 2014. Nigeria's subscribers' growth has also witnessed exponential growth and has seen the number of telecoms lines in Nigeria rise from under 500,000 in

2001 to over 156 million active lines as at December 2016. Teledensity has also grown significantly from 0.04% in 2000 to 110% in December 2016.

The mobile market is competitive with five (5) operators – MTN, Globacom, Airtel, Etisalat and Ntel – each offering both 2G and 3G services. However, some have started offering 4G LTE services. The 4G services are also being rolled out by smaller service providers such as Smile, Spectranet, iPNX and Swift. Only 0.2% of Nigerians have access to fixed telephone lines, so for the majority of Nigerians, mobile has represented their first opportunity to have access to communications services[3].

In their bid to provide optimum services, the operating companies in Nigeria have jointly contributed to the development of the nation's infrastructural facilities by investing billions of dollars in infrastructure deployments; network rollouts, upgrades and expansions due to the previous state of Nigeria's infrastructure which was highly underdeveloped. These consist mainly of fibre optic cables, base stations and satellite connections, transmitting traffic between cities and to other countries. To support the mobile infrastructure, operators have also embarked on building backbone networks to improve their operations. Such investments include the construction of three networks:

- a core telecommunication network,
- a transmission network,
- a power supply network and also bringing in skilled ICT employees[4]

1.2 Key Segments of the Nigerian Telecommunications Industry

- *Voice Segment*

The mobile sub-segment is undoubtedly the most active portion of the Voice segment which accounts for over 99% of the total number of phone lines in the

[3] 2014 Pyramid Research
[4] Nigerian Communications Commission, 2010

country. However, in the last three years, growth rates have slowed down and the mobile voice sub-segment market is being considered as approaching maturity. In contrast, the fixed line sub-segment is largely under-served, with minimal growth compared to the mobile segment. Fixed line subscriptions represented only about 0.14% of the total telephony subscriptions as at February 2017.

- *Data Segment*

Nigeria's data and internet market is currently at the growth stage. As at February 2016, estimates show that internet subscriber number stood at 89,998,873. The steady and impressive growth in the number of Nigerian internet users reflects a growing awareness of ICT services in the country. This has been largely fuelled by the exponential growth of mobile services over the last few years.

- *International Submarine Capacity*

There are currently four undersea cable providers in the Nigerian Telecoms Industry i.e. Main One, GLO-1, WACS (operated by MTN) and SAT-3 (operated by NITEL). A fifth cable (ACE) is expected to begin offering commercial services soon.

- *Wholesale Transmission/Leased Capacity*

This service is offered by the Universal Access Service licensees (all GSM operators hold this license), National Long Distance and Metropolitan Access Licensees.

1.3 NCC regulations affecting Infrastructure Deployment

The Nigerian Communications Commission (NCC) is responsible for creating an enabling environment for competition among operators in the industry as well

as ensuring the provision of qualitative and efficient telecommunications services throughout the country.[5]

The Commission has developed several Guidelines and Regulations to maintain a level playing field for all operators and encourage the entry of new entrants in to the telecommunications industry. Specifically, the Commission has developed the following guidelines and regulations targeted at infrastructure deployment in Nigeria including Guidelines for the Installation of Towers and Masts and Guidelines on Collocation and Infrastructure Sharing.

These Guidelines and Regulations provide the standards for telecommunications operations in Nigeria and for resolutions of disputes between operators and the general public.

Nigeria: infrastructure Layout

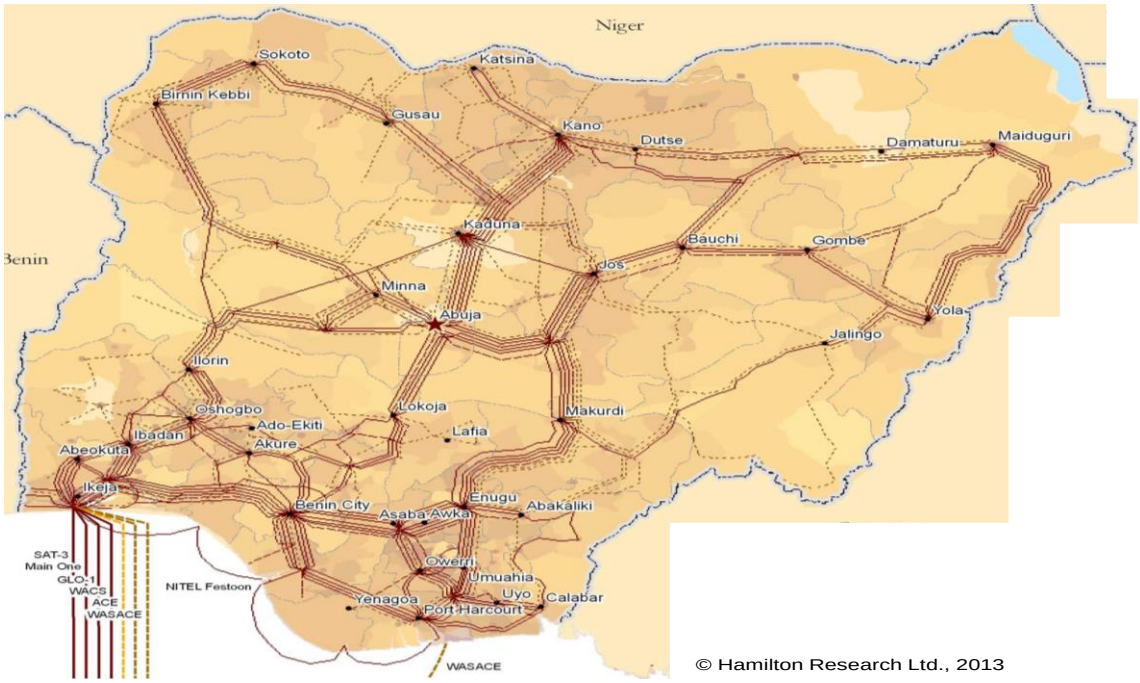


Fig. 3. Nigeria Infrastructure Layout 2013

[5] O. M. Sadiq, A. O. Oyelade and C.A.S. Ukachukwu "10 Years of Telecommunications Infrastructure Development in Nigeria" University of Lagos at the International Conference on Innovations in Engineering and Technology (IET 2011)

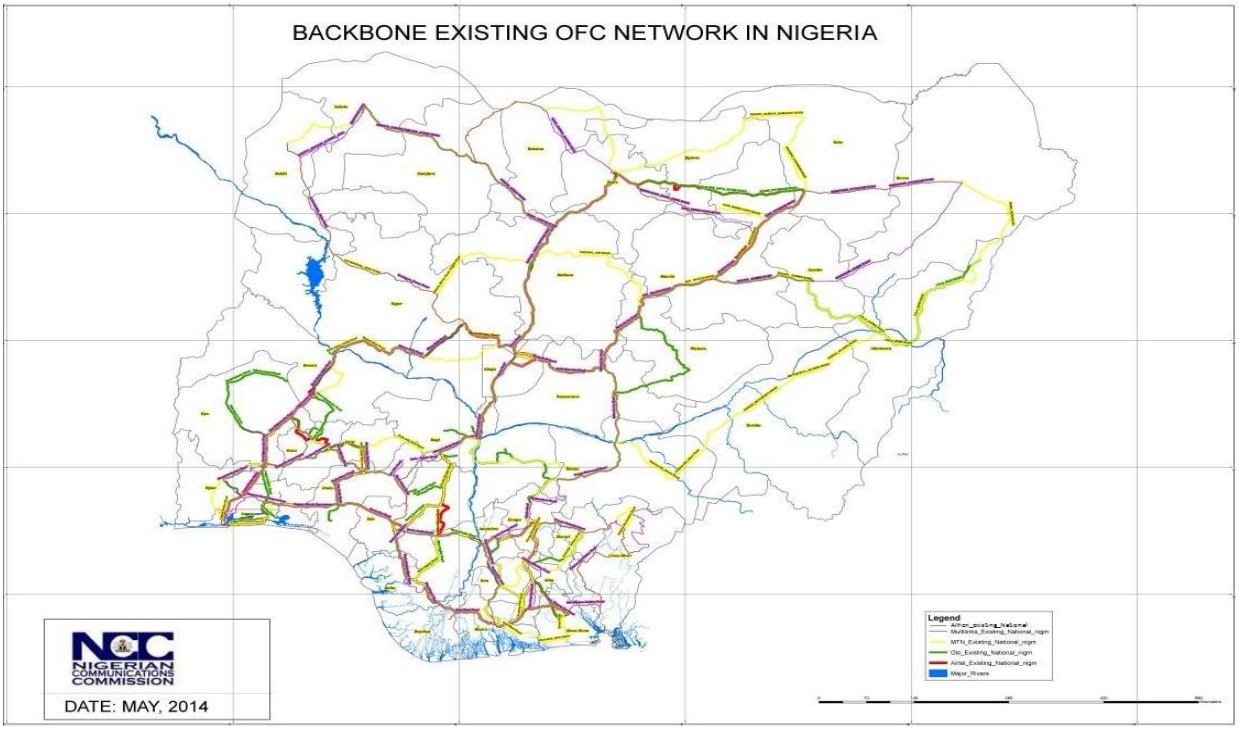


Fig. 4. Backbone of existing Fibre Optic Cable Network in Nigeria. Source: NCC 2014

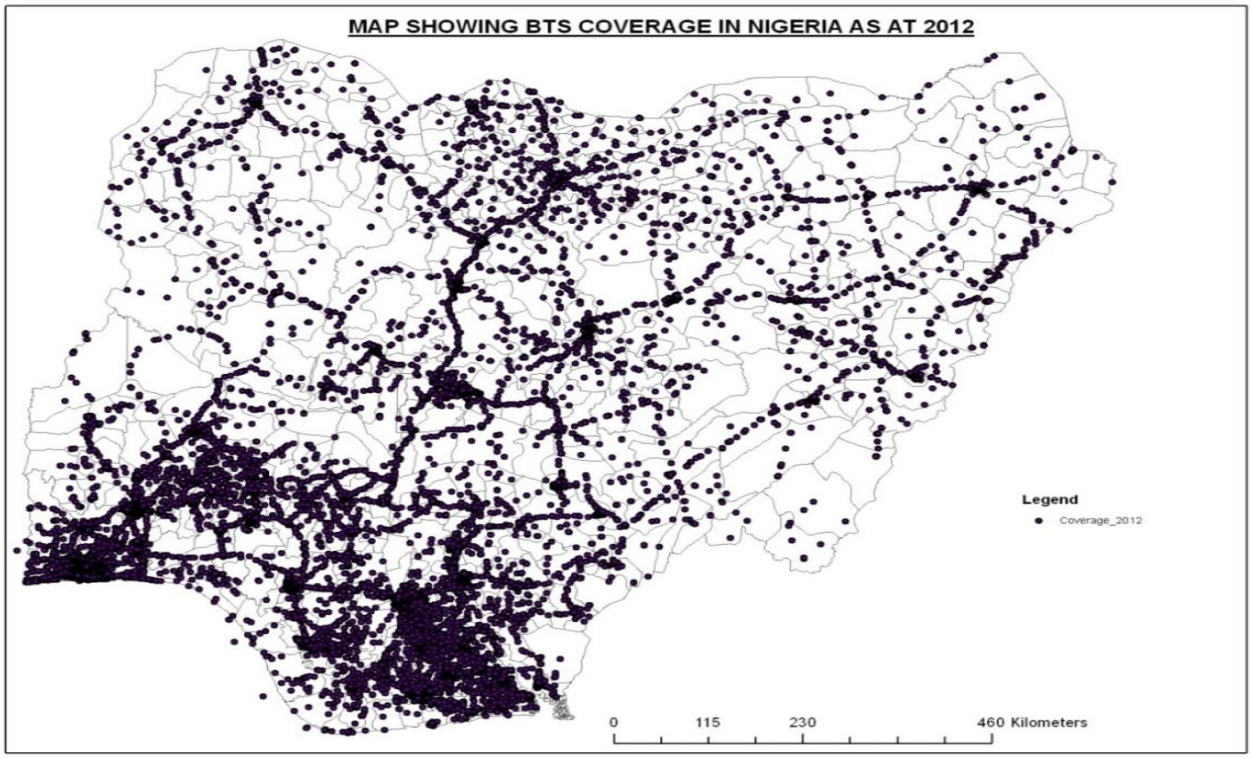


Fig. 5 Source: Universal Service Provision Fund (2012)

1.4 Developments in Infrastructure Deployment in the Telecommunications Sector

1.4.1 National Backbone Infrastructure

For the national backbone infrastructure, most of the operators especially the Long Distance Carriers have fibre presence in all the thirty six (36) states of the Federation and the Federal Capital Territory.

However, due to the emergence and rapid growth of the telecommunications industry, a lot of duplication and/or proliferation of fibre infrastructure along certain routes have occurred while some routes do not have fibre coverage at all.

Also, the cables along these routes that have multiple fibre installations are not even interconnected to provide redundancy which will promote network resilience. Government is therefore encouraging seamless interconnectivity regime and open access model among operators. This will provide a robust middle mile telecoms infrastructure for the nation.

Fiber deployment in Nigeria has also been plagued by inconsistency in administrative procedures regarding right of way permits, and poor urban and regional planning. In areas where fiber-optic networks exist, regulatory deficiencies and an absence of coordination in fiber deployment have resulted in the degradation of roads and public infrastructure.[6] Because of the infrastructural and operational problems currently faced in Nigeria, such as congestion and the unwillingness of operators to share backbone infrastructure, NCC decided to explore an open access model for the deployment of a fiber-optic network. The aim was to ensure effective deployment and a level playing field to achieve the national goals of an e-economy and universal access.[7]

[6] Assessment of Economic Impact of Wireless broadband in Nigeria, Analysis Mason Feb., 2011
[7] Nigeria's Broadband Strategy: The Open Access Model, NCC 2011

1.4.2. Collocation and Infrastructure Sharing

The Commission encourages and promotes the sharing of infrastructures like Rights of Way, Masts, Poles, Antenna, Mast and Tower structures, Ducts, Trenches, Space in buildings, Electric power (public or private source), as a means to encourage access to telecommunications services. Sharing infrastructure is one strategy that NCC as the telecommunications regulator in Nigeria is proposing for achieving a national broadband infrastructure more quickly than through simply letting the market take its course.

The Commission has also developed the "Guidelines on Collocation and Infrastructure Sharing" as a framework for infrastructure sharing among telecommunications operators in Nigeria. These Guidelines will encourage and promote the sharing of the following infrastructures:

- Rights of Way
- Masts
- Poles
- Antenna masts and tower structures
- Ducts
- Trenches
- Space in buildings
- Electric power (public and private source)

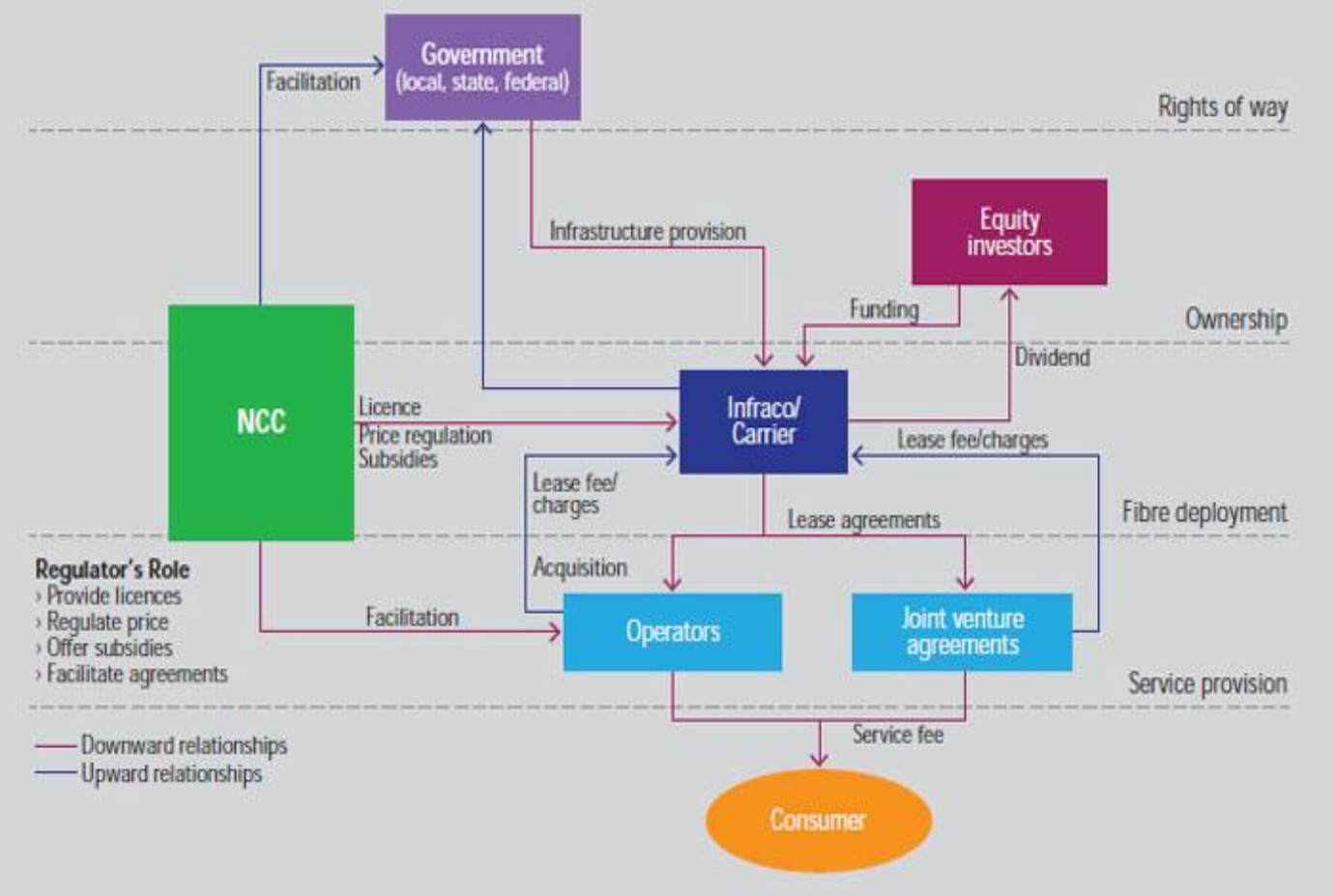


Fig. 6. The Open Access Model of the Nigerian Communications Commission. Source: NCC

1.4.3. Environmental Issues

Environmental issues stem from the requirement for operators to conduct an environment impact assessment before the deployment of any telecommunications infrastructure in line with the regulations of the Commission as well as set out procedures and guidelines for multiple other agencies of government. In this case, the telecommunications industry is saddled with multiple and in some cases conflicting regulations.

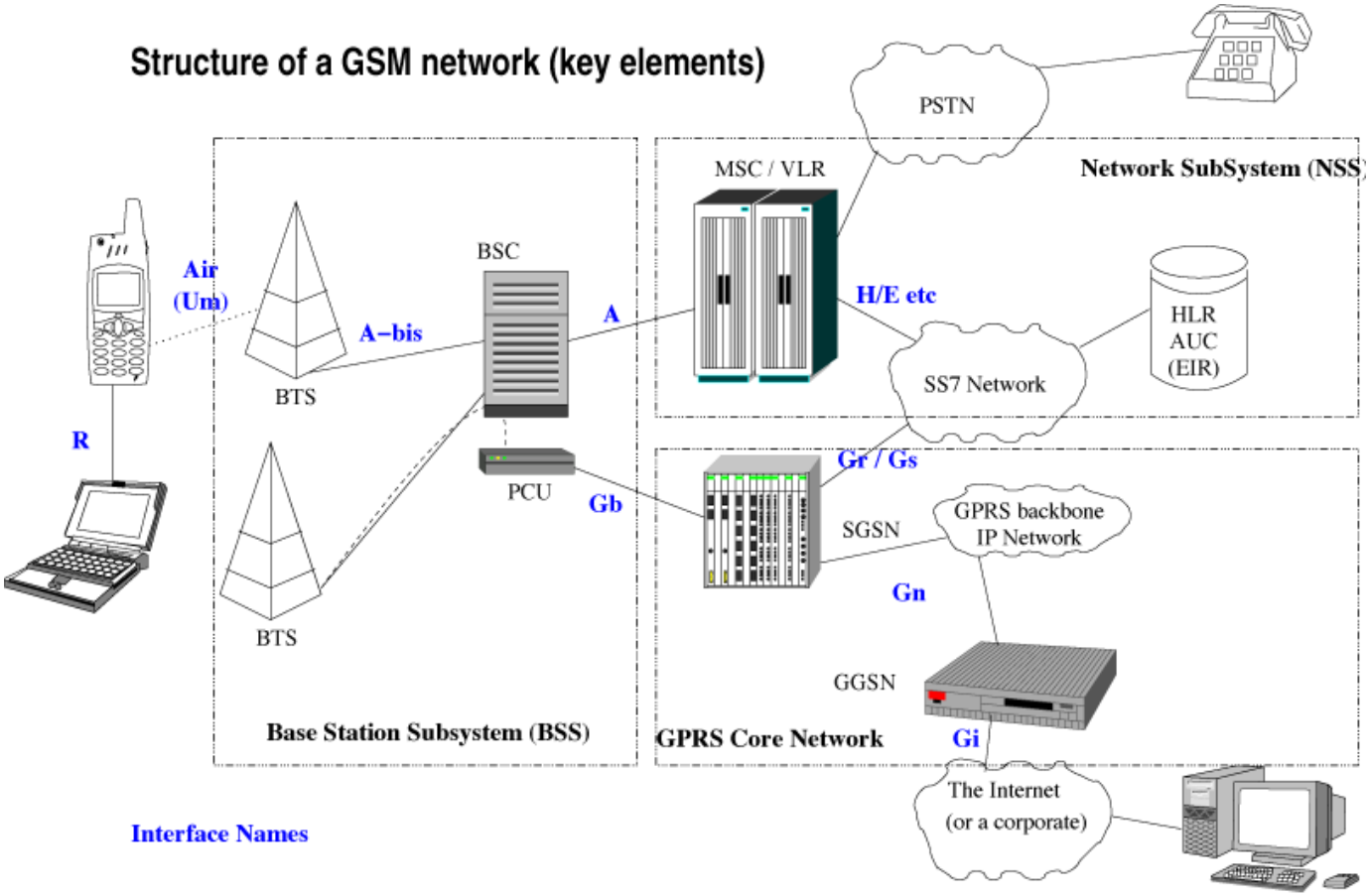


Figure 7. GSM Network Showing Access and Core Networks

1.4.4. Right of Way

Following the telecommunications revolution and the ubiquitous deployment of fibre optic infrastructure, right of way allotment has become a major revenue generating source for the various tiers of government and this has become a continuing discourse among the stakeholders in the telecommunications industry.

1.5 WHAT IS MULTIPLE TAXATION

Multiple taxation has been defined to mean 'when a single amount of money is taxed more than once, often by two or more different authorities in a way that may be unfair or illegal'.[8]

First, it refers to the various unlawful compulsory payments being collected by the local and state governments without appropriate legal backing through intimidation and harassment of the payers. Collection of it is characterised by the use of stickers, mounting of road blocks, use of revenue Agents/Consultants including Motor Park touts.

Second, it refers to situations where a taxpayer is faced with demands from two or more different levels of government either for the same or similar taxes. A good example here is the administration of the Value Added Tax (VAT) and Sales Tax simultaneously.

Third, the term refers to where the same level of government imposes two or more taxes on the same tax base. A good example is payment of Companies Income Tax, Education Tax and Technology Levy by the same company.

Fourth, it refers to cases whereby various government agencies "impose taxes" in the form of fees or charges.

Multiplicity of taxes makes investment climate tempestuous as investors are not sure the extent to which their incomes would be taxed. There are cases of large corporate entities that have moved their operations out of some States or from Nigeria to neighbouring countries on account of multiplicity of taxes and rising cost of doing business in Nigeria.

Notwithstanding the above, it suffices to say however that multiple taxation is not synonymous simply with being taxed at different levels of government. In a

[8] Longman Business English Dictionary

federal system of government, it is typical to have federal, state and local government taxes[9]. This truism was lucidly expressed in the National Tax Policy Document thus:

> "Multiple taxation in Nigeria first needs to be defined before it is tackled. The word multiple connotes "numerous", "several", "various" etc. A certain level of multiplicity is unavoidable in a Federal structure as each tier of government may want to charge certain taxes, fees, charges as may be applicable. The only aspect of multiplicity that is avoidable and for which the Constitution itself abhors is that where the tax, fee or rate is levied on the same person in respect of the same liability by more than one State or Local Government Council[10]."

1.6 Issues of Multiple Regulation/Taxation

Multiple taxation stems from several Government organizations both at the Federal State and Local Government levels issuing different payment requests to the Operating Companies at the same time. In Nigeria today, every conceivable Government authority wants to become involved in the activities of the telecommunications companies in one way or the other and thereby causing disturbances at the sites or premises of the Operating companies. This multiple regulation/taxation has been referred to as "a phenomenon where players in the ICT sector are subjected to various taxes, charges, fees, levies, rules and regulations from different tiers of Government- Federal, State, or Local, and Government Ministries, Agencies, Committees, Authorities, Commissions, and Parastatals".[11]

Basically, the Commission should encourage relationships and collaboration with other Ministries, Departments and Agencies of Government at the Federal

[9] National Tax Policy for Nigeria

[10] National Tax Policy for Nigeria

[11] National Association of Telecommunications Subscribers (NATCOMS) 2012, Submission to the Nigerian Communications Commission

level in the first instance. The Commission should discuss Common Issues on Regulations with others and seek ways of establishing a Nigerian Regulators Forum involving all Regulatory Agencies in Nigeria. This Forum shall be tasked with discussing all common issues of regulation as it affect each industry. Members of this Forum should be drawn from: NERC, CPC, NESREA, Nigeria Customs & Excise, FIRS, the Joint Tax Board, National Lotteries Commission, etc. The Commission should also engage State Governments and Local Governments to discuss issues that pertain to the telecommunications industry.

CHAPTER TWO

2.1 Conceptual Framework

2.1.1 Tax

A tax in principle is a compulsory contribution to state revenue, it's usually levied by the government on profit of businesses and workers income, or added cost of some goods, services and transactions.[12] Taxes may be levied by different arms of Government and the inclusion of "Compulsory" to serve as deterrent and punishable by law. Tax is not voluntary or a donation but an enforced contribution which is exerted pursuant to legislative authority. It is any contribution that is imposed by Government under different name like; duty, tribute, custom, excise, subsidy, aid or other name. The income of individuals and businesses including corporations are subject to tax.

In Nigeria, it is the responsibility of the Federal Board of Inland Revenue Services to collect the company income tax while the state governments through the State Internal Revenue Boards are responsible for collecting the personal income tax. As posit by Adam Smith (1776) in his 'Wealth of the Nations' that every subjects of state ought to contribute to support the government as possible in proportion to their respective abilities; this implies, in proportion to revenue they enjoy under the protection of the state. This is regarded as the principal of equity in taxation[13].

2.2 Literature Review

Telecommunications has become one of the fastest growing sectors in the world and the main driving force behind economic growth, innovations, cutting edge technological developments and entrepreneurships. These inherent potentials have made governments, businesses and consumers increasingly contribute to

[12] Anaesoronye, M. (2013, June 12): "Tin makes Tax System Convenient for Taxpayers", Business Day Newspaper (Vol. 11, No. 115, p. 27)

[13] Adam Smith 1776, "The Wealth of Nations" in Classical Economic Theories: History of Economic Theory and Thought.

the growth and rapid uptake of telecommunications products and services across the globe.

In the face of increased responsibility of governments (both Federal and Local) to provide the enabling environment for the acceleration of infrastructural growth and social development, coupled with dwindling revenue generation, the various tiers of government are looking for ways of widening their revenue base, in order to meet their responsibilities and obligations. In particular, Nigeria has been running an oil-based economy and with the dwindling revenue from oil, the Federal, State and Local governments are seeking other non-oil sources of revenue and the imposition of various spurious types or nomenclatures of taxes is being carried out.

The various tiers of Governments have seen telecommunications industry as a veritable avenue to increase revenue through the imposition of multiple taxes and multiple regulations. The telecommunications sector is also seen as one of the thriving sectors with wide coverage, serving large population base from which taxes can be fairly and readily collected through its service providers. The infrastructure of telecommunications is pervasive and ubiquitous and runs across the country through the States and Local Government areas.

Any organization or individual that is involved in any business venture that earns money (income) is subject to taxation. According to Ojeka[14] tax is an important source of fund for the development of the economy and the provision of social services. Small and Medium Enterprises in Nigeria are faced with the problems of high and multiple taxation.[15] Adebisi and Gbegi also indicated that the challenges of double and multiple taxation affect the survival of about 80% of Nigeria's businesses. Their study concludes that; the major factor responsible

[14] Ojeka, S. A. (2011) Tax Policy and the Growth of SMEs: Implications for the Nigerian Economy Research Journal of Finance and Accounting Vol. 2, No 2, 2011 ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)

[15] Adebisi, J. F and Gbegi, D. O. (2013) Effect of Multiple Taxation on the Performance of Small and Medium Scale Business Enterprises. (A Study of West African Ceremics, Ajeokuta, Kogi State) Mediterranean Journal of Social Sciences Published by MCSERCEMAS-Sapienza University of Rome Vol. 4 No 6 July 2013 E-ISSN 2039-2117ISSN 2039-9340

for the deaths of businesses is multiple taxation. The challenge is beyond the multiplicity of the taxes but also the complex tax regulation and lack of proper enlightenment about tax policies and requirement.

In Nigeria, company income tax is regulated at 30% tax on the company profits. The National Information Technology Development Agency (NITDA) Act 2007 stipulates a levy of 1% on the profit before tax of GSM service providers and all the telecommunications companies and Internet providers, Banks and other financial institutions. This law as indicated by Abiola and Asiweh amounts to duplication of tax since the companies pay tax related as required by Companies Income Tax Act (CITA).

For Onyeukwu[16] multiple taxation is not healthy for the development of corporate organizations, he posits that such multiplicity can at times affect the corporate social responsibility of the companies if they perceive the host countries are not friendly.

Salami asserts that in Nigeria; there are more than 500 taxes and levies imposed by different ties of government , this is different from those approved Taxes and Levies as approved by the (Approved list of Collection) Act. These multiplicity has invariably driven up the cost of doing business in Nigeria and destroyed the confidence of investors. The issue of multiple taxation tends to be more common in the Local Governments than other levels of governments.[17]

The challenges of multiple taxation as indicated by Agbor tends to be more pronounced in the telecommunications industry. Taxes collected by the Federal Government are many times recollected by the State and the Local Governments. When telecommunications companies seek permit to construct and install their mast towers, the taxes paid across all tiers of Government amount to multiple taxation. Empirical studies show that multiple and high tax

[16] Onyeukwu, H (2010) Business Tax in Nigeria: The Controversy of Multiple Taxation Retrieved from http://works.bepress.com/humphrey_onyeukwu on Wednesday, 27 2017

[17] Salami, A (2011) Taxation, Revenue Allocation and Fiscal Federalism in Nigeria: Issues, Challenges and Policy Options ECONOMIC ANNALS, Volume LVI, No. 189 / April – June 2011 www.doiserbia.nb.rs/ft.aspx?id=0013-32641189027S

system have negatively impacted on businesses which invariably translate to high cost of services offered by the telecommunication companies.[18]

There are obvious contradictions in respect to taxes collected by all tiers of government in Nigeria. For example; by imposing educational tax after paying corporate tax by companies, accepting revenue from value Added Tax (VAT) later imposing sales tax, payment of ground rent and tenement rate all amount to multiple taxation syndrome. In some states in Nigeria the methodology used in tax collection is not only illegal but dehumanizing and violent.

The proper understanding of the Nigeria constitution indicates that the Local Government Councils have no powers to legislate on taxes, they can only collect taxes under the authority of a State law which might empower them to make bye-laws. But the situation is that all the 774 Local government councils in Nigeria make laws arbitrarily to generate funds. Excessive taxation of the telecommunications services sector is hindering high technology investments, confining innovation and will eventually impede economic growth.

Multiple taxation can be counterproductive if it is excessively applied. The issue of power to impose tax should not be allowed to be abused or used as a means for desperate extortion, usurpation and illegitimate exploitation of the public by the government.[19]

Multiple taxation has been identified as one of the major problems facing Nigeria and corporate entities. The States usually complain about their fiscal responsibilities and fiscal powers and jurisdiction. In order to fill the gap, most states resort to levying certain taxes, which has led to arbitrariness, harassment

[18] Agbor, U. I. (2013) Getting the Money and Plummeting Business Development: A study of the Impact of Tax regime on Hospitality Industry in Calabar, Nigeria Global Journal of Political Science and Administration Vol. 1, No. 1, pp. 16-26, September 2013 www.ea-journals.org

[19] NESG Policy Brief, Multiple Taxation in Nigeria No. 2 September, 2006

and closure of businesses. It is in response to such challenges that the Taxes and levies Decree No. 21 of 1998 was enacted.[20]

2.3 THE CHALLENGES OF MULTIPLE/SPURIOUS TAXATION OF TELECOMMUNICATIONS INDUSTRY

The achievements of the telecommunications industry in the last ten years have invigorated the international belief that communications is a powerful and progressive tool of socio-economic development. The Continued boost to socio-economic development (e.g. in terms of job creation, security, and Socio cohesion), the impact upon culture and quality of life and the contribution to Gross Domestic product (GDP) are gains which have been recorded by the industry as a direct result of the advent of mobile telephony in Nigeria. Sadly, however, while this sector has been a major catalyst for socio-economic development it has become apparent that majority of our national stakeholders have failed to recognize the pivotal role played by mobile communications to the long-term socio-economic development of the nation. These sections of stakeholders instead continue to perceive the successes of the industry as opportunity to generate short term and other immediate pecuniary benefits[21] .

This skewed perception results in undue interference in the operations of communications networks by various strata of society, and particularly agencies of government predominantly, the industry has witnessed untoward intervention and actions from various Ministries, Departments and Agencies (MDAS) of Governments who see an opportunity to generate revenue from the operations of telecoms operators through the imposition of High, Multiple and illegitimate levies and taxes. The failure of the industry to submit to these

[20] Position paper on hazard and further implications of multiple taxation and regulation of the telecommunication industry in Nigeria by: Industry. Working group http:/www.ncc.goving/index.php?..>accessed on 20th January, 2017

[21] An examination of the legal regulations and taxation of telecommunication and electronic commerce in Nigeria by D. A. Ariyoosu htt:/www.unilorin.edu.ng/…Law-CL…> accessed on 24th Feb 2017

illegitimate regime and demands often results in disruptive enforcement actions by these MDAs.

Network operators continue to witness harassment, forcibly sealing of telecoms sites or removing components of site installations in their bid to compel compliance. These continued interventions in telecoms operations by MDAS result in disruptive of services, degradation of service quality, a major increase in operating expenses and the general cost of carrying on telecommunications business in Nigeria.

Whereas, the Taxes and Levies (Approved Rates for Collection) Act, 1998 provides the taxes and levies collectible by the various tiers of Government, this incidence of multiple taxation and regulation evidences the disregard of the provisions of the above Act by Various Ministries, Departments and Agencies (MDAS) of the Federal, State and Local tiers of Government[22]. These actions culminate in the imposition of illegal and inappropriate taxes and levies in the following ways as discussed briefly below:

(a) Illegal taxes and levies - The 1998 Act provides a list of taxes and levies to be collected by all tiers of government: federal, state and local. Any tax or levy outside of what the Act provides is illegal. As a rule, state and local governments, in a bid to shore up their revenue, consistently impose taxes and levies unknown to law on telecommunications companies.

(b) High or excessive tax demand when the tax is legal - Where the taxes or levies are legal, the quantum is arbitrary. Increases are imposed annually without a known parameter for its determination.

(c) Assessment and determination of taxes and levies - Government at all tiers tend to use consultants for the purposes of improving internally generated revenue. These consultants are paid a percentage of what they are able to generate. Unfortunately, the end result is that

[22] Companies Income Tax (Amended) Act 2007

consultants dream up taxes or levies that are unknown to law and utilize thugs and unscrupulous security personal to enforce them.

(d) Illegal enforcement and extra-judicial Activity - Collection of taxes legal or illegal is mostly done using crude methods. This includes arbitrary site/office closures, physical attacks and seizure of equipment.

2.4 PROBLEMS ASSOCIATED WITH MULTIPLE REGULATION

Regulation of Telecommunications sector by two or more entities occasions the hazard of indiscriminate regulatory intervention by these MDAS working at cross purposes to the detriment of the affected operators. It is not uncommon for instance to have a telecommunications operator receive a stop work order from either a state or Local MDA over a Right of Way (ROW) approval granted by a state or Federal MDA. It is also common to have state and Local Environmental MDAS reject an Environmental Impact Assessment (EIA) certificate Issued by the Federal Ministry of Environment (FME) to insist instead on the telecommunications operator processing same with them. It is no doubt the fact that the problem associated with this imbroglio usually leads to delay in project implementation which in turn causes excessive increase in the project cost, network outage and quality of service issues among others. Besides the multiple taxation which ultimately results, the situation presents significant regulatory disagreement that can ground telecommunications operations for months in severe cases with unpleasant implications for the national socio-economy.

CHAPTER THREE

3.0 INFORMATION ANALYSIS

3.1 NATIONAL BACKBONE INFRASTRUCTURE

3.1.1 SECURITY OF INFRASTRUCTURE

Vandalism, bombing and outright economic sabotage of telecom infrastructure has become a frequent occurrence in the Nigerian ICT sector. Some operators have reported more than 70 cuts on their respective nationwide fiber networks on a monthly basis. This is generally caused by theft, willful damage, or accidental disruption due to road construction or expansion. Often, the phenomenon is accompanied by widespread service downtime and economic losses due to unearned revenues not only by the telecom operators, but also by the vast community of Nigerian business people who use these networks to conduct their businesses. One operator has reported it spends about U$D90 million annually to repair fiber network cuts.

Security of outdoor telecommunications infrastructure and safety of technical field staff have become part of the avoidable burdens that have befallen telecom operators in the country.[23] Such phenomenon is among the factors hampering the deployment and operations of broadband networks around the country. Certain ICT and Telecoms Infrastructure are critical to the National Interest and should be protected.

3.1.2 Critical National Infrastructure & Cyber Security

Engagement with industry stakeholders including presentations by ATCON, ALTON and other major stakeholders made a clear call for action to stem the tide of frequent destruction of ICT infrastructure and equipment. ICT networks are indeed critical infrastructures that have serious socio-economic

[23] Williams, Edem E.; Essien Eyo (2011). "Building a Cost Effective Network for E-Learning in Developing Countries.". *Computer and Information Science*. **4** (1): 53.

implications when they are out of service. They are classified in this modern age as essential service utilities along with Power, Transportation, and Water.

The government realizes that every modern nation state depends on the reliable functioning of its critical infrastructure to guarantee national and economic security. The term critical Infrastructure refers to ICT networks and systems, that are crucial to the Federal Republic of Nigeria to the extent that the damage, destruction or ineffectiveness of such networks and systems, whether physical or virtual, would have adverse impact on our national security, economic wellbeing, public safety, food security or any combination thereof. Threats of Cyber-attacks and Physical (vandalism, sabotage and theft) attacks are two broad categories of threats that could adversely affect the nation's critical ICT infrastructure.[24]

In many countries, legislations have not kept pace with developments in the cyber world, and legal interpretations of certain online phenomenon in a borderless global context such as the cyberspace are not entirely clear. For instance, in a situation where websites are accessible virtually to anyone anywhere in the world, it is often difficult to predict where cyber threats can come from. Businesses and national security infrastructure have been targets of cyber-attacks from overseas countries where perpetrators are beyond the reach of conventional national laws. International cooperation is therefore necessary in fighting cyber threats and attacks.

Without a cutting-edge cyber security and cybercrime law, the traditional legal concept of jurisdiction and arrest warrant may be difficult to enforce due to the cross-border and transnational character of the internet. Conventional national laws are increasingly proving inadequate to address the legal challenges

[24] https://www.researchictafrica.net/countries/nigeria/Nigeria_National_Broadband_Plan_2013-2018.pdf

emanating from the cyberspace.

3.2 SPECIFIC INFRASTRUCTURE DEPLOYMENT

Information collated from specific operators illustrates the magnitude of telecoms players' role in the overall infrastructure deployment and operational investment in Nigeria[25].

There are several technologies deployed and operating in the country.

Fiber Optics Deployment (km):

i. As at December, 2016, On-land Fiber Optics in km was deployed as follows:- MTN - 21,996km; GLO – 14,153km; AIRTEL - 6,853km; EMTS – 3,674.3km; NTEL - 161km; MainOne – 363.6km; 21st CENT - 7,140km; IPNX - 830.7 Km and INTERCELLULAR - 8,400km. In this segment, a total of 63,208km of On-land Fiber Optics was deployed cumulatively by the operators in 2016.

ii. As at December, 2016, Submarine Fiber Optics in km was deployed by three Mobile operators as follows: - MTN – 14,599; GLO - 9,800; MainOne – 7,000km; AIRTEL – 8km; 21st CENT- 33km and NTEL - 70km with a total of 31,510km.

A further analysis of the fibre optics deployed illustrated that of the 94,718km deployed as at December, 2016; 63,208km was deployed on-land while 31,510km was submarine. MTN had the largest on-land with 21,996km deployed as at December, 2016.

During this period, MTN focused its investment on building up the transmission network to substitute for the lack of established telecom infrastructure[26]

In April 2009, Nigerian operators declared that $10bn in further investment is needed for network upgrades and expansion over the next 10 years. Etisalat

[25] www.ncc.gov.ng

[26] Pyramid Research, 2010

Nigeria has a budget to invest about $2bn to build network infrastructure in Nigeria over the next three years. MTN has also secured a loan of $600million for expansion of its operations in Nigeria.[27] MTN has received N318 ($2.15 billion) bank loan from 17 local and international banks to further expands it network capacity across the country[28].

Fibre Optics Deployment as at December 2016

Terrain Type	S/N	Operator	Mileage (km)
On-Land	1	NTEL	161.00
	2	IPNX	830.70
	3	EMTS	3,674.30
	4	AIRTEL	6,853.00
	5	21ST CENTURY	7,140.00
	6	INTERCELLULAR	8,400.00
	7	GLO	14,153.00
	8	MTN	21,996.00
		TOTAL	**63,208.00**
Submarine	1	21ST CENTURY	33.00
	2	AIRTEL	8.00
	3	NTEL	70.00
	4	GLO	9,800.00
	5	MAINONE	7,000.00
	6	MTN	14,599.00
		TOTAL	**31,510.00**

3.3 Collocation and Infrastructure Sharing

Collocation is an element of the interconnection of networks hence it is essential that operators agree on terms of its implementation towards ensuring seamless interconnectivity. Collocation shall constitute part of the negotiations for interconnection and be governed by provisions of the Telecommunications Network Interconnection Regulations.

[27] Nigerian Communications Commission, 2010
[28] Nkanga, 2010

3.4 Environmental Issues

When it comes to environmental issues, the position of the telecommunications industry could perhaps best be described as one of balance, and of a rather severe pragmatism. The industry can, of course, make a number of strong arguments to promote its green credentials.

Nevertheless, environmental issues are playing a massive role in wholesale telecoms. For Barry Kingsland, director for energy and sustainability at Cable & Wireless Worldwide, green issues are driving significant developments in global energy markets, and in turn within the telecoms sector: "The whole smart utilities agenda is ramping up massively, driven by carbon reduction commitments. There's an expectation that the industry will spend something like £200 billion over 10 years, in fundamentally changing the way the energy sector works."[29]

Environmental objectives and legislative requirements are certainly placed upon telcos, although these can vary significantly between regions. Kingsland says, "On every contract from the government, there are specific requirements around improving performance and sustainability and specific targets on carbon and water consumption. Kingsland also refers to the waste electronic and electrical equipment (WEEE) directive, which governs the way all European businesses dispose of electrical equipment at the end of life, as well as other regulations controlling oil storage, protection and recovery.

Perhaps the most commonly referenced standard is ISO 14001 environmental accreditation, which is designed to help businesses in any sector be more environmentally friendly, with standards designed to reduce their environmental impact and enhance their environmental credentials. It is

[29] TRAI: Financial and Economic Analysis. See: http://www.trai.gov.in/WriteReadData/PIRReport/Documents/Qtr%20 III%20analysis%202014-15%20(i.e.%20DEC.%2014)%20PDF.pdf

available both on a national and a global basis, but there are some regional variations which certainly impact the way businesses operate.[30]

In Nigeria, the telecoms operators are required to apply and obtain approvals of the Environmental Impact Assessment studies (EIA) carried out at all sites before commencement of installation of any form of telecoms base transceiver station (BTS) and for any other infrastructure.

3.5 Choice of Sites

The selection of sites for broadcast transmitting station require not only being able to identify large areas that will accommodate the necessary high antenna structures but also the ability to handle the public opposition and other various technical aspects of site acquisition. In the case of radio and television transmitting antennas, three basic problems exist: correct location, obtaining planning permission and negotiating terms of acquisition – which are more difficult as compared to problems associated with site acquisition for base transceiver station (BTS) used for mobile Communications. Thus, much effort and even more time are usually required for investigating and acquiring a site for either radio or TV transmitters. In practice, the activities of site acquisition for both radio and television stations overlap considerably and all that is required is a constant interflow of information until the site is finally acquired and construction commenced.

3.6 Right of Way

Challenges common to operators in the telecoms sector have been identified as; the high costs of right of way resulting in the high cost of leasing transmission infrastructure; long delays in the processing of permits; multiple taxation at Federal, State, and Local Government levels and having to deal with multiple regulatory bodies; damage to existing fibre infrastructure as a result of cable

[30] http://www.ncc.gov.ng/docman-main/legal-regulatory/guidelines/54-guidelines-on-collocation-and-infrastructure-sharing/file

theft, road works and other operations; and the lack of reliable, clean grid electricity supply.

Right of way is a legal instrument allowing operators to deploy infrastructure on federal or state roads, power transmission lines, railways etc. at a fee. Unfortunately the fees are not fixed and it varies from state to state, region to region, agency to agency. Despite the fact that Government issues license to Infracos (Infrastructure Companies), it goes beyond issuance of license for broadband penetration to be guaranteed and sustained.

The typical telecommunications access network infrastructure for the fixed wired network includes the main distribution frame (MDF), cross connect cabinet and the distribution point (DP). The access network is the part of the network that is dedicated to providing services to the user, while the core network is where the technical configuration of the network as well as billing operations take place.[31] The high-speed data network is composed of fiber optic cables which forms the backbone of the network. It connects major cities and allows the network to function as a unit. Fiber optic cables are also used within the city in linking MDFs. The use of OFC in the network is to facilitate high network availability and reliability. The MDF could be described as the core/access network interface. The cross connect cabinet (CCC) is considered as the segment between primary and secondary cables. Primary cables are those originating from the MDF while secondary cables originate from the CCC. The Distribution Point (DP) is the last point before the subscriber home.

3.6.1 GIS in network Infrastructure Management

Geographic Information System (GIS) is used as network inventory and infrastructure management tool in the access network. It does not only

[31] GIS AS TOOL FOR TELECOMMUNICATION NETWORK INFRASTRUCTURE MANAGEMENT Naruvbe, G.O. & Adagbasa, G.E. Regional Centre for Training in Aerospace SurveysObafemi Awolowo University Campus,Ile-Ife, NigeriaEmail: enaruvbe@rectas.org

correctly represents the network elements in the form of maps, but also captures all attribute data of the elements and is therefore able to generate reports. This is important and useful in managing network resources and planning for network expansion in places where resources are running low. Using GIS site engineers are also assisted in localizing faults that may be a result of equipment failure or cable damage and hence significantly reduce downtime since the database query eliminates the need for field engineers to trace cables on site. GIS provides all the information required in fixing faults as it gives a detailed report of all equipment pots that are used for the provisioning of service to subscribers. The system also shows location of equipment and other network infrastructure (Fig. 9).[32]

[32] GIS AS TOOL FOR TELECOMMUNICATION NETWORK INFRASTRUCTURE MANAGEMENT Naruvbe, G.O. & Adagbasa, G.E. Regional Centre for Training in Aerospace SurveysObafemi Awolowo University Campus,Ile-Ife, NigeriaEmail: enaruvbe@rectas.org

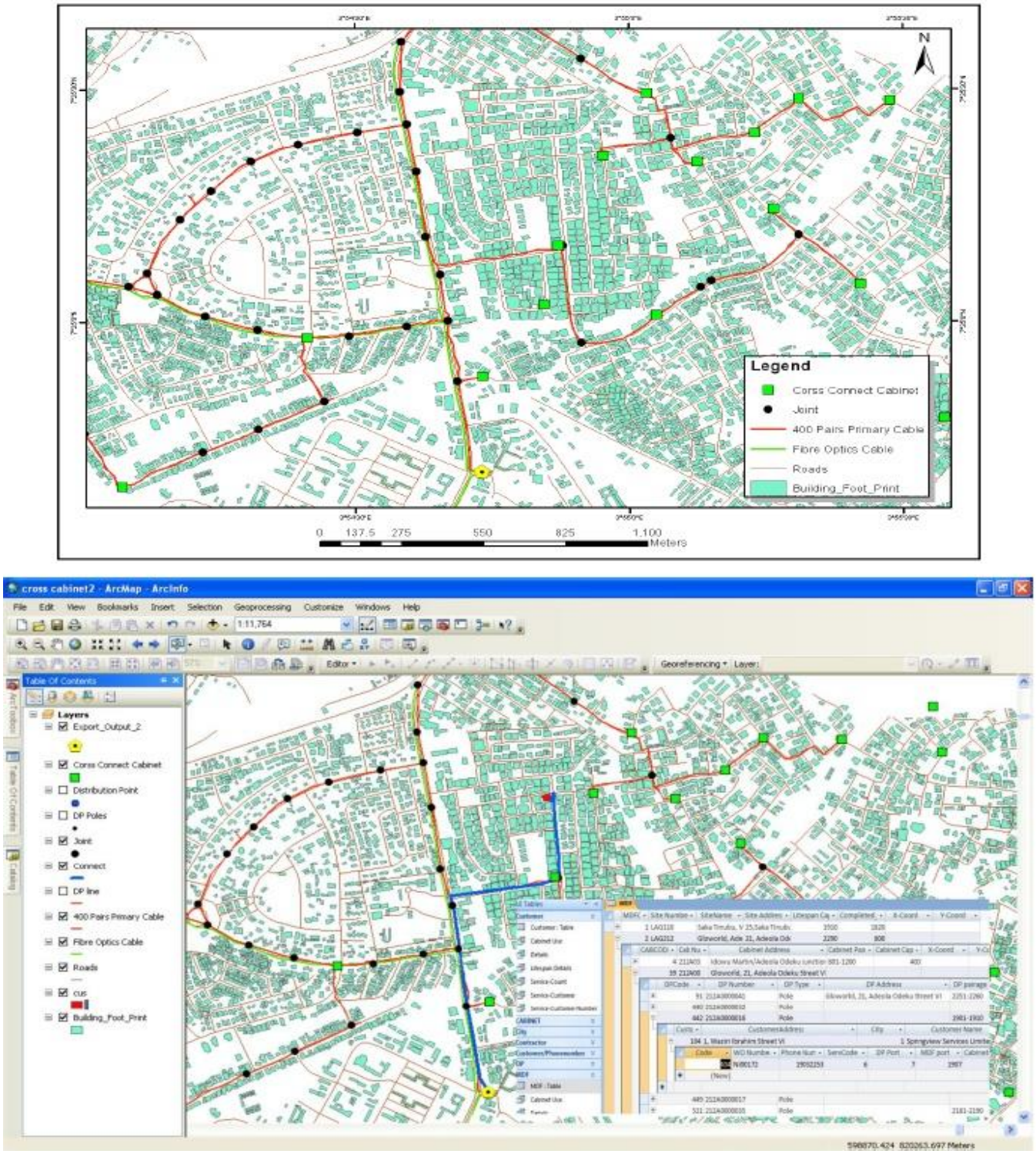


Figure 8: Typical GIS Map showing network infrastructure

3.7 Economic Considerations

The implication of multiple taxation constitutes illegal and inappropriate taxation and legislation. From the foregoing, it is evident that multiple taxation presents a number of hazards thus: inhibits growth and penetration; stifles the telecommunication industry growth; and limits the creation of value chain that is beneficial to socioeconomic development. These invariably combine to limit or constrain tax revenues to government from direct and indirect value addition as well as wider economic impact of the sector on the economy.

Following the Multiple taxation and regulation by the different tiers of government in addition to the statutory taxes levied on operators, telecommunications operators pay Annual Operating Levy (AOL) of certain percentage of earnings to the Nigerian Communications Commission (NCC) and are required in addition to pay various rates and charges to other Federal Government agencies (e.g. Consumer Protection Council, Nigeria Lottery Commission, federal and state ministries of environment etc.), authorities in every state and local Government in which they operate.[33] The current heavy taxes imposed on telecoms companies at the federal, state and local government levels, have been a major obstacle, which retards economic growth, limits profits, compromises quality of service and slows network expansion. It is known that State governments and Local Governments now issue permits to the telecoms operating companies before they can embark on network rollout and expansion.

The Federal Executive Council on January 20, 2009 adopted a draft National Tax Policy for Nigeria, which was expected to grow tax revenue at all tiers of government, enhance government revenue from non-oil tax and also increase transparency and accountability in tax management. The policy was also to

[33] Ken Nwogbo, Nigeria Communications Week on Multiple Taxation Choking Telecoms Companies 15 September, 2010.

provide a new set of guidelines, rules and modus operandi that would regulate Nigeria's tax system and provide a basis for tax legislation and administration in the country. Most importantly, the policy was aimed at curbing multiple taxation.[34]

3.8 Issues of Multiple Regulation/Taxation

The successes recorded by the telecommunications industry in the last 10 years have reinforced the internationally acknowledged perception that communications is a powerful, progressive tool of socio-economic development. Sadly however, while this sector has been a major catalyst for socio- economic development it has become apparent that majority of our national stakeholders have failed to recognize the pivotal role played by mobile communications to the long-term socio-economic development of the nation. These sections of stakeholders instead continue to perceive the successes of the industry as opportunity to generate short term and other immediate pecuniary benefits. This skewed perception results in undue interference in the operations of communications networks by various strata of society, and particularly agencies of government.[35]

Predominantly, the industry has witnessed untoward intervention and actions from various Ministries, Departments and Agencies (MDAs) of Governments (at the 3 tiers) who see an opportunity to generate revenue from the operations of telecoms operators through the imposition of Multiple, illegitimate levies and taxes. The failure of the industry to submit to these illegitimate regime and demands often results in disruptive enforcement actions by these MDAs. Network operators continue to witness harassment, forcibly sealing of telecoms sites or removing components of site installations in their bid to compel

[34] Ken Nwogbo, Nigeria Communications Week on Multiple Taxation Choking Telecoms Companies 15 September, 2010.

[35] NCC- Industry Working Group on Multiple Taxation (March 2012)

compliance. These continued intervention in telecoms operations by MDAs results in a disruptive of services, degradation of service quality, a major increase in operating expenses and the general cost of carrying on communications business in Nigeria. While we note that the untoward consequences of Multiple and illegitimate levies/taxes is not born solely by the telecommunications industry, it is our cogent believe that the critical nature or services provided by the telecommunications sector requires urgent action to address these challenges before a total collapse of the telecommunications sectors is witnessed.[36]

Taxes and levies collectible by various tiers of Government were clearly stated in Taxes and Levies (Approved Rates for Collection) Act, 1998. Any tax outside this should be regarded as illegal and inappropriate (Appendix A). Many Ministries, Departments and Agencies (MDAs) impose taxes and levies in order shore up their internally generated revenues. In The Taxes and Levies (Approved Rates for Collection) CAP.T2 LFN 2004, there were 39 different taxes and levies: eight for the Federal Government, eleven for States and twenty for Local governments.[37] But in addition to that, many states and local governments, under the pretext that the numerous levies they impose on corporate bodies and individuals do not yield the anticipated quantum of resources they need, have introduced the concept of Internally Generated Revenue (IGR) as another key tax component.

In its Policy Brief on multiple taxation in 2006, The Nigerian Economic Summit Group stated that 80 types of taxes as against 40 approved for the three tiers of government by the Taxes and Levies (Approved List for collection) Decree No. 21

[36] NCC- Industry Working Group on Multiple Taxation (March 2012)
[37] Companies Income Tax (Amended) Act 2007
Mathew Epkpeke 2016. http://itpulse.com.ng/stakeholders-lament-multiple-taxation-in-nigerias-telecom-industry/

of 1998 were imposed on businesses in Nigeria. The attendant effect was the negative impact these multiple taxations were having on them.[38]

The multiple tax imbroglios are not only limited to organized private sectors but to all facets of business concern in Nigeria. Unauthorized revenue collectors abound all the routes of intercity transport vehicles perpetually demanding tolls from the drivers. Nearly all the bus stops are these revenue collectors planted demanding tolls from the drivers. A journey of ten kilometers may be strewn with about twenty cost centers/revenue collection points where various tolls are collected throughout the day.

3.9 NCC Regulatory Interventions

The NCC set up an Industry Working Group (IWG) on Multiple Taxation and Regulation to coordinate actions and follow up responses to demands bothering on multiple taxation/regulation imposed on the telecoms operating companies by the various tiers of Government. For instance, the Urban Furniture Regulatory Unit (UFRU), an agency of the Lagos State Ministry of Environment and Physical Planning, had consistently imposed several levies on telecoms operators operating in the State, ranging from base station installation to maintenance of already built telecoms masts. They were also either denied the rights of way (ROW) to dig up the ground to lay fiber optic cables or they are deliberately delayed by the State government policy on telecoms infrastructure rollout.

[38] The Nigerian Economic Summit Group 2016

3.9.1 NCC Engagements with the National Economic Council and the Nigeria Governors Forum

The NCC has continued to engage with the Governors of the different States especially on these issues of multiple taxation/regulation and the state Governors have promised to work on the taxes and regulations.[39]

The Nigerian Governors' Forum, NGF, has discussed the issue of multiple regulations and taxes on telecommunication operations in the country extensively. The NCC had also engaged other agencies of government on the same issues with a view to improving relationship with telecommunications companies, who are often the victims of these taxes and multiple regulations.

The NCC as a responsible regulatory agency was worried about multiple regulations and taxes because they do not augur well for smooth development of the telecommunications sector. So we have decided to engage all stakeholders especially other government agencies in order to cushion the pains operators go through, as a result of multiple regulations and taxes. The NCC is particularly worried about the indiscriminate way base transceiver stations (base stations) are sealed by agencies and some state governments and have appealed to these agencies and the state governors to show some understanding. The NCC are in talks with them to understand the implications of these actions as they affect quality of service and other sundry matters, including power supply.

The Honourable Minister of Communications Technology in 2012, made a presentation to the National Economic Council on Multiple Taxation, Levies and Charges on ICT Infrastructure in Nigeria and following the adoption of the recommendations of the Adhoc Committee set up to advice the NEC, the NEC in the 47th Meeting in 2013,[40] resolved as follows:

1. That all States Governments shall adopt and implement Federal Ministry of Works (FMW) Guidelines for Grant on Federal Highways Right of Way

[39] Anayo Ezugwu, Realnews: Nigeria to End Multiple Taxation on Telecoms Operators by Prof. U.G. Dambatta, Executive Vice Chairman, NCC 2015

[40] Resolution of the Nigeria Governors Forum 2013

to ICTSP ("FMW RoW Guidelines") prescribed by the Federal Ministry of Works and agreed with the ICT Ministry, as the applicable rules and regulations for the issuance and administration of Rights of Way on States and Local Government roads in Nigeria with respect to the build, operation and maintenance of fibre optic duct and ancillary infrastructure by ICT Operators in the respective States and Local Government.

2. That as part of the terms for the adoption of the FMW RoW Guidelines by the State Governments, the State Government may impose and the ICT operators shall agree the following:

   a. All future fibre duct infrastructure build shall be extended to designated State Government Secretariats, Medial Hospitals, House of Assembly, Universities and Governors' office by operators;

   b. Such State Institutions in paragraph "a" above shall be covered where they are within 1000 meters of the operator's proposed build route for which that operator seek the grant of the RoW;

   c. Build to Government institution shall be shared on an open access basis amongst all ICT Operators to accelerate broadband service penetration/growth and to eliminate multiple deployments and incidence of states' infrastructure damage. The Open Access model shall compensate State Governments through fixed incremental alienation/sublease charge for subsequent users which shall be based on the FMW RoW Guidelines;

   d. All ICT Operators shall be willing to explore public private partnership models with interested states for telecom infrastructure build based on agreed revenue and service compensation structure for the State; and

   e. ICT Operators shall be willing and will participate upon invitation by the State Government in the integration of fibre infrastructure

build within future States-funded projects i.e. build of fibre ducts into new road projects or repairs of existing roads.

3. That with respect to the administration of levies and charges currently being imposed by the different States and Local Governments on telecommunications and other ICT operations (including Tenement, Building Permits, Stacking Permit etc.), all States Government shall be guided and implement the following agreed guiding principles and understanding;

   a. All States of the Federation and Local Government shall abide strictly by the provisions of the 1999 Constitution (part II, Chapter I) on legislative limitations with respect to telecommunication services, which places the regulation of Communications services within the exclusive jurisdiction of the Federal Government;

   b. The states and operators shall work with the Joint Tax Board to prepare and agree a list of applicable taxes and levies in accordance with extant law, within the purview of the on-going review of the Taxes and levies (Approved List for Collection) Act 1998 to standardize legitimate fees/levies;

   c. All agreed levies/charges list should be standardized as exclusive list of levies applicable to ICT operators across all states of the Federation and Local Governments;

   d. Whilst the on-going review of the Taxes and Levies Act remain pending, the Honourable Minister of ICT has been mandated by the Federal Government to liaise with and agree quantum of administrative fees and levies to be charged by all States of the Federation. These fees and Levies shall be uniform across all the States;

e. Once fees and levies are agreed, all State Governments shall implement one-of yearly lump sum payment administrative process per existing telecom tower installation. Such lump sum shall cover all application States and Local Governments fees and levies agreed pursuant to this resolution;

f. Based on the agreed fees and levies, all State Government shall implement a reduced uniform one-off lump sum payment for building permit for each new telecom tower installation in any State of the Federation. The agreed fees and levies shall be escalated on a 3% basis every 5 years to recognize economic trend on on-going management and administrative cost;

g. With respect to non-tower installation used for ICT operations, i.e. offices, the State Governments shall apply the same fees and levies, as well as the relevant criteria applied to non-telecommunications services installation i.e residential and office building, based on the applicable location charges, to all non-telecoms site installation in their States;

h. All State Government shall set up a single collection and administration point in all the States for all agreed fees and levies, which shall have the responsibility to coordinate collection of the agreed fees and levies for States and Local Governments and authorities as applicable in each State of the Federation;

i. all agreed payments shall be made by operators within the first 3 months of each year or 3 months after commencement of operation by new operators or companies with monetary or administrative

penalties for default to be agreed or enforced similar to those contained in the FMW RoW Guidelines;

j. State Governors shall issue appropriate Executive Orders compelling strict adherence to the implementation of the resolution of the NEC contained in this access to telecom infrastructure by State and Local Government operatives shall require the consent and written approval of the Executive Governor of the applicable state as part of the measures for protecting ICT infrastructure as critical national security infrastructure; and

k. The State Government shall, without delay and where appropriate, initiate the necessary legal reform and implement the requisite legal framework to ensure the effective implementation of the resolution of the National Economic Council as contained in this document.

4. That ICT Operators shall meet their commitment to improving quality of service across the country and ensure that the benefits of improved administration of the fees and levies shall translate into corresponding improvement in infrastructural build out, which shall accelerate ICT growth, and improve quality of efficient and affordable services.

5. That ICT operators shall provide increase and improve commitments towards Corporate Social Responsibility (CSR) projects in the States and Local Government as a means of giving back to host communities and supporting socio-economic well-being of the consumers.

Summary of Operators BTS Cell Sites Showing the frequencies Deployed in the States of the Federation (Raw Data is Derived from Latest Submissions By Operators as at year Ending December 2016)

		AIRTEL	ETISALAT	GLO	MTN	NATCOM	Other Operators												
S/No	State	Airtel_POP	EMTS POP	Glo(POP)	MTN_Actual POP	Natcom_POP	Visafone	Vodacom	Swift Network	Suntel	Spectranet	Smile	IS-Internet Solution	Cyberspace	Cobranet	Multilinks	Sum-GSM Operators	Sum-Other WLL	Sum-Operator POPs
1	FCT, Abuja	358	259	312	657	328	62	6	0	0	129	94	4	0	0	0	1914	295	2209
2	Abia	173	163	145	477		10	1	0	0	0	0	0	0	0	0	958	11	969
3	Adamawa	99	64	87	203		0	1	0	0	0	0	0	0	0	0	453	1	454
4	Akwa Ibom	238	128	157	409		19	1	0	0	0	0	0	0	0	0	932	20	952
5	Anambra	186	171	147	685		28	2	0	0	0	19	0	0	0	0	1189	49	1238
6	Bauchi	119	80	98	222		0	1	0	0	0	0	0	0	0	0	519	1	520
7	Bayelsa	59	42	78	155		3	1	0	11	0	0	0	0	0	0	334	15	349

Summary of Operators BTS Cell Sites Showing the frequencies Deployed in the States of the Federation (Raw Data is Derived from Latest Submissions By Operators as at year Ending December 2016)

		AIRTEL	ETISALAT	GLO	MTN	NATCOM	Other Operators												
S/No	State	Airtel_POP	EMTS POP	Glo(POP)	MTN_Actual POP	Natcom_POP	Visafone	Vodacom	Swift Network	Sunte l	Spectranet	Smile	IS-Internet Solution	Cyberspace	Cobranet	Multilinks	Sum-GSM Operators	Sum-Other WLL	Sum-Operator POPs
8	Benue	109	157	147	358		0	1	0	0	0	0	0	0	0	0	771	1	772
9	Borno	101	79	102	181		0	1	0	0	0	0	0	0	0	0	463	1	464
10	Cross River	121	97	128	284		5	1	0	0	0	0	0	0	0	0	630	6	636
11	Delta	228	152	272	634		31	3	0	0	0	11	0	0	0	0	1286	45	1331
12	Ebonyi	76	56	57	163		0	1	0	0	0	0	0	0	0	0	352	1	353
13	Edo	205	190	366	530		26	3	0	0	0	37	0	0	0	0	1291	66	1357
14	Ekiti	76	51	82	235		5	0	0	0	0	0	0	0	0	0	444	5	449
15	Enugu	159	128	174	534		15	3	0	0	0	0	0	0	0	0	995	18	1013
16	Gombe	72	39	63	128		0	1	0	0	0	0	0	0	0	0	302	1	303

Summary of Operators BTS Cell Sites Showing the frequencies Deployed in the States of the Federation (Raw Data is Derived from Latest Submissions By Operators as at year Ending December 2016)

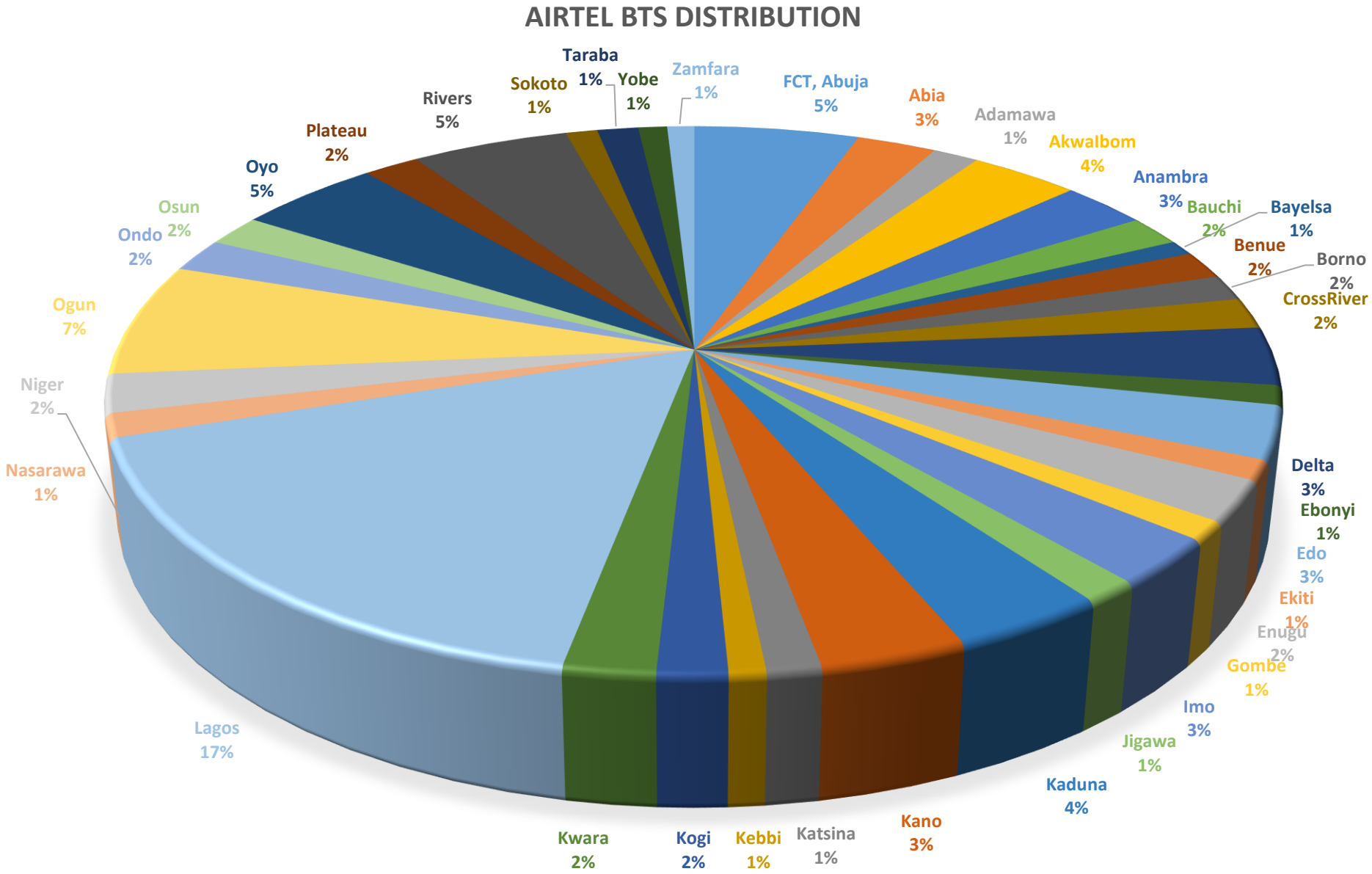
		AIRTEL	ETISALAT	GLO	MTN	NATCOM	Other Operators												
S/No	State	Airtel_POP	EMTS POP	Glo(POP)	MTN_Actual POP	Natcom_POP	Visafone	Vodacom	Swift Network	Sunte l	Spectranet	Smile	IS-Internet Solution	Cyberspace	Cobranet	Multilinks	Sum-GSM Operators	Sum-Other WLL	Sum-Operator POPs
17	Imo	181	133	164	548		10	1	0	0	0	0	0	0	0	0	1026	11	1037
18	Jigawa	86	42	50	145		0	0	0	0	0	0	0	0	0	0	323	0	323
19	Kaduna	241	216	272	482		41	4	0	0	0	40	0	0	0	0	1211	85	1296
20	Kano	227	157	183	494		26	3	0	0	0	0	0	0	0	0	1061	29	1090
21	Katsina	84	66	152	255		7	1	0	0	0	0	0	0	0	0	557	8	565
22	Kebbi	57	47	83	182		0	0	0	0	0	0	0	0	0	0	369	0	369
23	Kogi	108	141	221	256		0	1	0	0	0	0	0	0	0	0	726	1	727
24	Kwara	142	108	158	301		13	2	0	0	0	0	0	0	0	0	709	15	724
25	Lagos	1117	775	1078	1926	222	219	32	239	0	270	255	10	98	60	35	5118	1218	6336

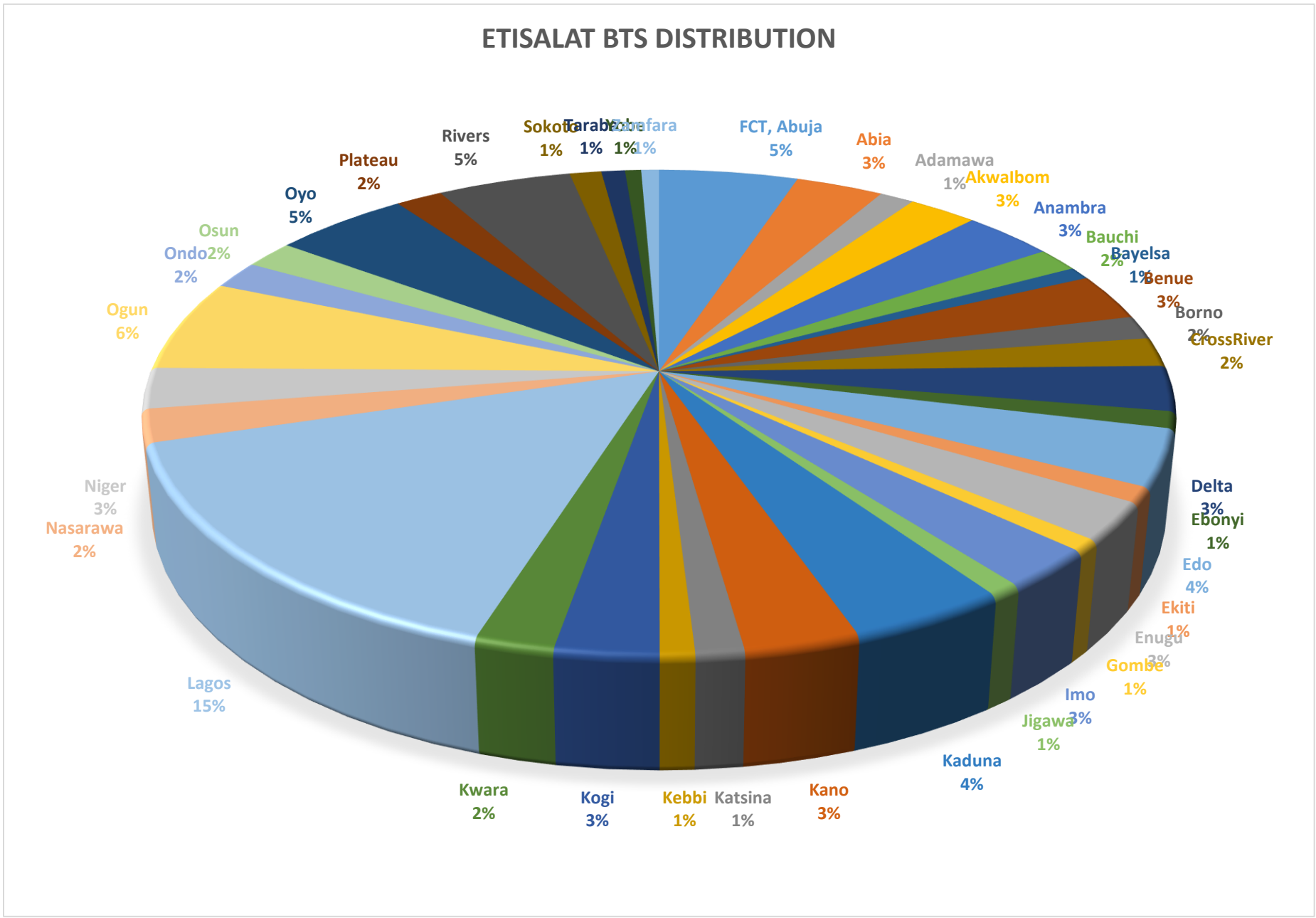
Summary of Operators BTS Cell Sites Showing the frequencies Deployed in the States of the Federation (Raw Data is Derived from Latest Submissions By Operators as at year Ending December 2016)

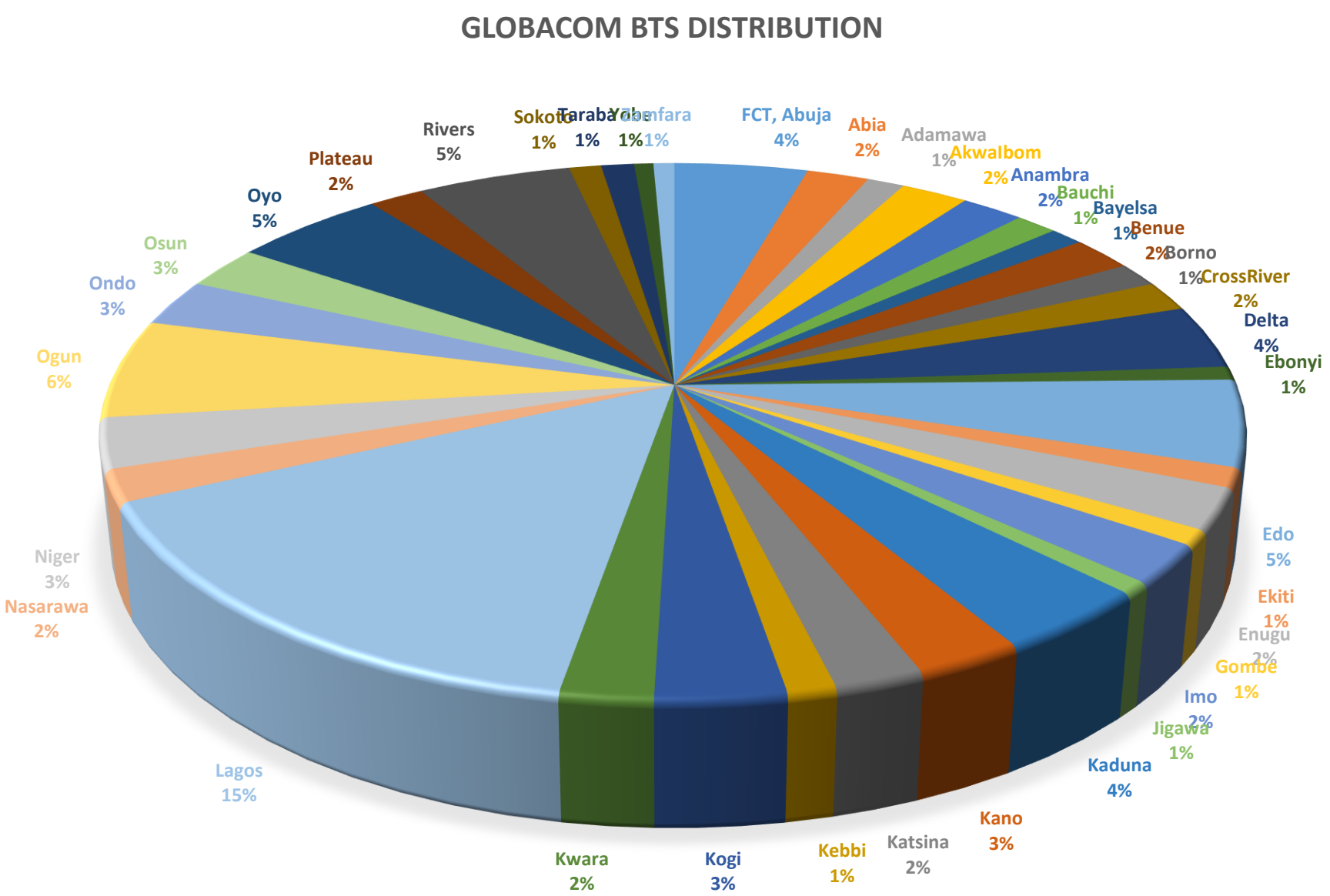
		AIRTEL	ETISALAT	GLO	MTN	NATCOM	Other Operators												
S/No	State	Airtel_POP	EMTS POP	Glo(POP)	MTN_Actual POP	Natcom_POP	Visafone	Vodacom	Swift Network	Suntel	Spectranet	Smile	IS-Internet Solution	Cyberspace	Cobranet	Multilinks	Sum-GSM Operators	Sum-Other WLL	Sum-Operator POPs
26	Nasarawa	92	111	135	243		0	0	0	0	4	0	0	0	0	0	581	4	585
27	Niger	151	137	212	338		0	1	0	0	0	0	0	0	0	0	838	1	839
28	Ogun	442	307	419	917	8	12	2	1	0	18	0	1	0	0	2	2093	36	2129
29	Ondo	131	93	199	378		14	1	0	0	0	0	0	0	0	0	801	15	816
30	Osun	122	93	183	375		12	1	0	0	0	0	0	0	0	0	773	13	786
31	Oyo	310	252	356	546		54	3	0	0	21	46	1	0	0	0	1464	125	1589
32	Plateau	121	87	127	307		18	2	0	0	0	0	0	0	0	0	642	20	662
33	Rivers	341	249	360	884		48	4	0	0	48	74	0	0	0	1	1834	175	2009
34	Sokoto	69	59	75	164		0	1	0	0	0	0	0	0	0	0	367	1	368

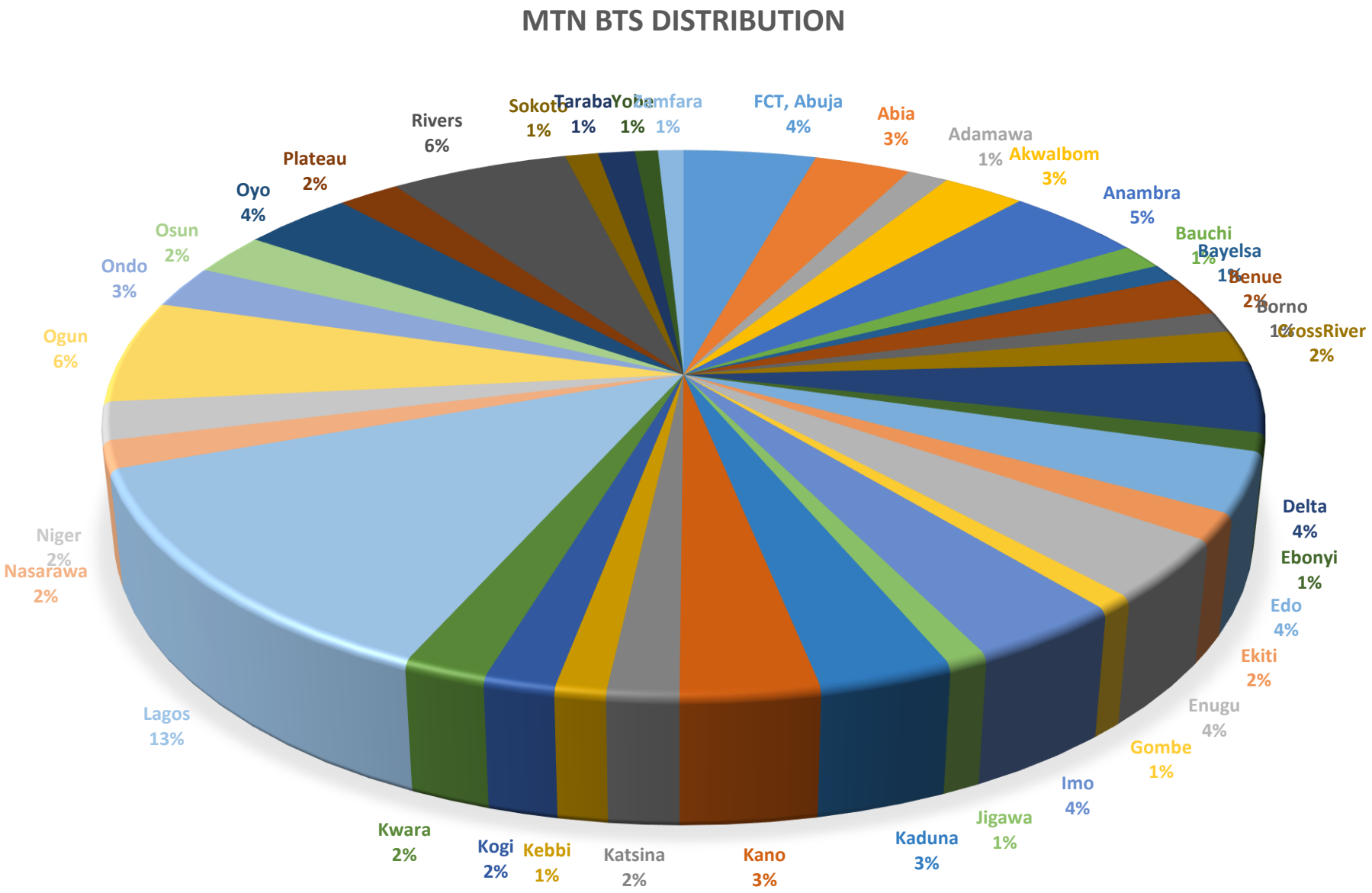
Summary of Operators BTS Cell Sites Showing the frequencies Deployed in the States of the Federation (Raw Data is Derived from Latest Submissions By Operators as at year Ending December 2016)

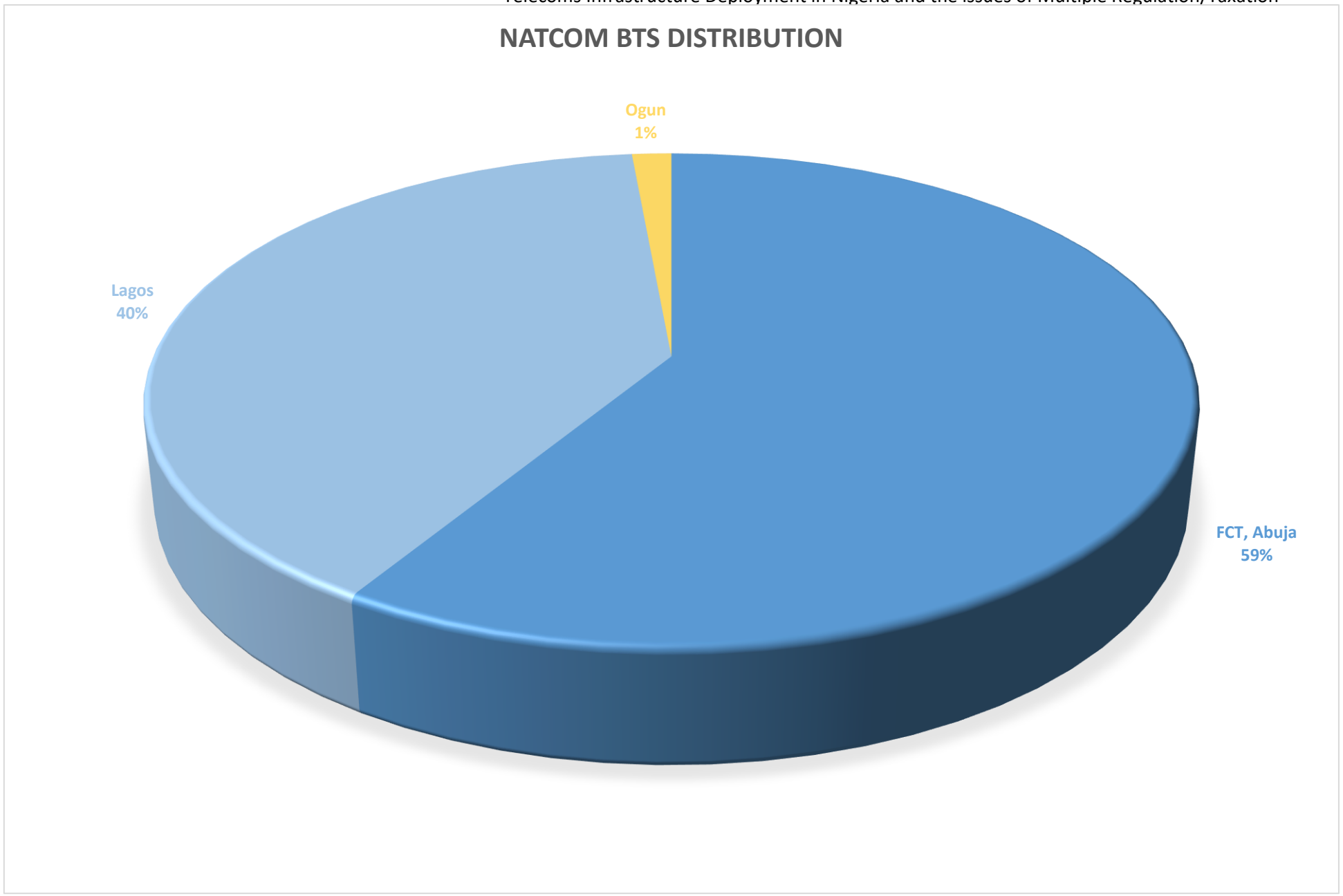
		AIRTEL	ETISALAT	GLO	MTN	NATCOM	Other Operators												
S/No	State	Airtel_POP	EMTS POP	Glo(POP)	MTN_Actual POP	Natcom_POP	Visafone	Vodacom	Swift Network	Suntel	Spectranet	Smile	IS-Internet Solution	Cyberspace	Cobranet	Multilinks	Sum-GSM Operators	Sum-Other WLL	Sum-Operator POPs
35	Taraba	89	44	77	182		0	0	0	0	0	0	0	0	0	0	392	0	392
36	Yobe	63	30	45	115		0	0	0	0	0	0	0	0	0	0	253	0	253
37	Zamfara	59	33	49	127		0	0	0	0	0	0	0	0	0	0	268	0	268
Total		**6,612.00**	**5,036.00**	**7,013.00**	**15,020.00**	**558.00**	**678.00**	**86.00**	**240.00**	**11.00**	**490.00**	**576.00**	**16.00**	**98.00**	**60.00**	**38.00**	**34,239.00**	**2,293.00**	**36,532.00**

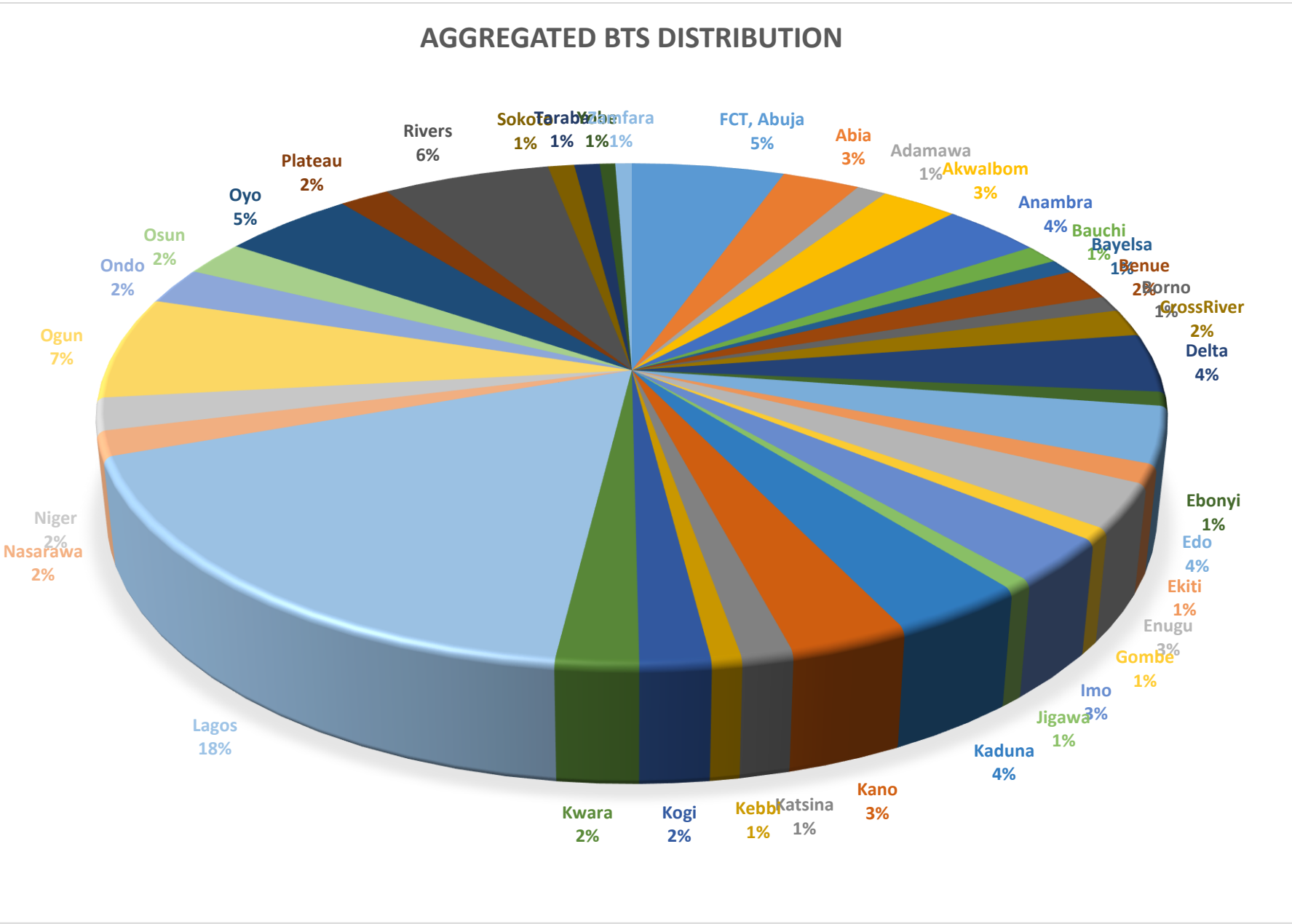

AIRTEL BTS DISTRIBUTION
Taraba 1%
Sokoto 1%
Yobe 1%
Zamfara 1%
FCT, Abuja 5%
Abia 3%
Adamawa 1%
Akwalbom 4%
Anambra 3%
Bauchi 2%
Bayelsa 1%
Benue 2%
Borno 2%
CrossRiver 2%
Delta 3%
Ebonyi 1%
Edo 3%
Ekiti 1%
Enugu 2%
Gombe 1%
Imo 3%
Jigawa 1%
Kaduna 4%
Kano 3%
Katsina 1%
Kebbi 1%
Kogi 2%
Kwara 2%
Lagos 17%
Nasarawa 1%
Niger 2%
Ogun 7%
Ondo 2%
Osun 2%
Oyo 5%
Plateau 2%
Rivers 5%


ETISALAT BTS DISTRIBUTION
FCT, Abuja 5%
Abia 3%
Adamawa 1%
Akwalbom 3%
Anambra 3%
Bauchi 2%
Bayelsa 1%
Benue 3%
Borno 2%
CrossRiver 2%
Delta 3%
Ebonyi 1%
Edo 4%
Ekiti 1%
Enugu 3%
Gombe 1%
Imo 3%
Jigawa 1%
Kaduna 4%
Kano 3%
Katsina 1%
Kebbi 1%
Kogi 3%
Kwara 2%
Lagos 15%
Nasarawa 2%
Niger 3%
Ogun 6%
Ondo 2%
Osun 2%
Oyo 5%
Plateau 2%
Rivers 5%
Sokoto 1%
Taraba 1%
Yobe 1%
Zamfara 1%


GLOBACOM BTS DISTRIBUTION
Sokoto 1%
Taraba 1%
Yobe 1%
Zamfara 1%
FCT, Abuja 4%
Abia 2%
Adamawa 1%
Akwalbom 2%
Anambra 2%
Bauchi 1%
Bayelsa 1%
Benue 2%
Borno 1%
CrossRiver 2%
Delta 4%
Ebonyi 1%
Edo 5%
Ekiti 1%
Enugu 2%
Gombe 1%
Imo 2%
Jigawa 1%
Kaduna 4%
Kano 3%
Katsina 2%
Kebbi 1%
Kogi 3%
Kwara 2%
Lagos 15%
Nasarawa 2%
Niger 3%
Ogun 6%
Ondo 3%
Osun 3%
Oyo 5%
Plateau 2%
Rivers 5%


MTN BTS DISTRIBUTION
FCT, Abuja 4%
Abia 3%
Adamawa 1%
Akwalbom 3%
Anambra 5%
Bauchi 1%
Bayelsa 1%
Benue 2%
Borno 1%
CrossRiver 2%
Delta 4%
Ebonyi 1%
Edo 4%
Ekiti 2%
Enugu 4%
Gombe 1%
Imo 4%
Jigawa 1%
Kaduna 3%
Kano 3%
Katsina 2%
Kebbi 1%
Kogi 2%
Kwara 2%
Lagos 13%
Nasarawa 2%
Niger 2%
Ogun 6%
Ondo 3%
Osun 2%
Oyo 4%
Plateau 2%
Rivers 6%
Sokoto 1%
Taraba 1%
Yobe 1%
Zamfara 1%


NATCOM BTS DISTRIBUTION
Ogun
1%
Lagos
40%
FCT, Abuja
59%


AGGREGATED BTS DISTRIBUTION
FCT, Abuja 5%
Abia 3%
Adamawa 1%
Akwalbom 3%
Anambra 4%
Bauchi 1%
Bayelsa 1%
Benue 2%
Borno 2%
CrossRiver 1%
Delta 2%
Ebonyi 4%
Edo 1%
Ekiti 4%
Enugu 1%
Gombe 3%
Imo 1%
Jigawa 3%
Kaduna 1%
Kano 4%
Katsina 3%
Kebbi 1%
Kogi 1%
Kwara 2%
Lagos 2%
Nasarawa 18%
Niger 2%
Ogun 2%
Ondo 7%
Osun 2%
Oyo 5%
Plateau 2%
Rivers 6%
Sokoto 1%
Taraba 1%
Yobe 1%
Zamfara 1%

OPERATORS		AIRTEL			ETISALAT			GLO			MTN	
S/N	State	Metro Fibre (Km)	National Fibre (Km)	Submarine (Km) - Lekki to Saka Tinubu	Metro Fibre (Km)	National Fibre (Km)	Submarine (Km)	Metro Fibre (Km)	National Fibre (Km)	Submarine (Km)	Fibre Length (Km)	Submarine (Km)
1	Abuja	36	204		91	168		260	233		347	
2	Anambra	14	65		0	48.4			251.32		486	
3	Enugu	9	145		0	241			205		920	
4	Ebonyi	-	103		0	96.2			89		565	
5	Abia	-	198		0	138			172		470	
6	Imo	-	32	8	0	23.6	0		209	9,800	148	14,599
7	Lagos	301	173		381.6	202		585	146		575	
8	Oyo	75	298		0	123		89.8	514		355	
9	Ekiti	-	68		0	0			84.46		642	
10	Ondo	2	201		0	297.9			423.76		1189	
11	Osun	1	118		0	142.3		3.6	248		287	

12	Ogun	1	319		0	291.8		131.3	288.6		1244	
13	Sokoto	7	101		0	0			112		440	
14	Zamfara	-	-		0	0			406		538	
15	Kebbi	-	-		0	0			351.04		867	
16	Kano	52	200		51	2			406		362	
17	Kaduna	23	418		20.2	23			763		981	
18	Jigawa	-	76		0	0			56		114	
19	Katsina	-	-		0	0			235.4		1322	
20	Kogi	3	198		0	385.3			862.88		693	
21	Benue	1	264		0	266			839		343	
22	Nasarawa	-	259		0	225			358		186	
23	Kwara	-	140		0	0			211.75		600	
24	Niger	2	402		0	0			816.4		593	
25	Plateau	7	101		0	0			338		1398	
26	Borno	-	102		0	0			334		304	
27	Taraba	-	-		0	0			452		377	

28	Bauchi	-	494		0	0			662		685	
29	Gombe	-	-		0	0			190		875	
30	Adamawa	-	-		0	0			556		859	
31	Yobe	-	195		0	0			105		760	
32	Edo	21	380		43	207		179.2	543.11		346	
33	Delta	29	366		0	13		12.1	405.01		1009	
34	Rivers	40	185		53	25		245	263		223	
35	Akwa Ibom	1	246		0	0			240		307	
36	Cross River	20	124		0	116			211		200	
37	Bayelsa	-	36		0	0			67		386	
		644	**6,209**	**8**	**639.8**	**3034.5**		**1506**	**12647.73**	**9800**	**21996**	**14599**

	MAIN ONE				**21ST CENTURY NETWORKS**		
S/N	**State**	**Metro Fibre (Km)**	**National Fibre (Km)**	**Submarine (Km)**	**Metro Fibre (Km)**	**National Fibre (Km)**	**Submarine (Km)**
1	Abuja	4.8	0	7000	200		33
2	Anambra						
3	Enugu						
4	Ebonyi						
5	Abia						
6	Imo						
7	Lagos	337			6920		
8	Oyo	8.5					
9	Ekiti						
10	Ondo						
11	Osun						
12	Ogun						
13	Sokoto						
14	Zamfara						
15	Kebbi						
16	Kano						
17	Kaduna						
18	Jigawa						
19	Katsina						
20	Kogi						
21	Benue						
22	Nasarawa						

23	Kwara						
24	Niger						
25	Plateau						
26	Borno						
27	Taraba						
28	Bauchi						
29	Gombe						
30	Adamawa						
31	Yobe						
32	Edo	7					
33	Delta						
34	Rivers	6.3			20		
35	Akwa Ibom						
36	Cross River						
37	Bayelsa						
		363.6		**7000**	**7140**		**33**

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
1	Abia	Abia State Infrastructural Development Fund Board	Demanding N1.9 million from Airtel as infrastructural development levy.	Harassment of Staff at the Umuahia shops and threat to lock up Base Stations.
		State Environmental Protection Agency	Demanding N300,000 per new site for environmental support fee in the state.	Forceful stoppage of work at site, threat to use Police to arrest Contractor.
		Abia State Town Planning Authority	Demanding N65,000 per site as permit and processing fees for Environmental Impact Assessment (EIA) registration.	Use of Civil Defense to arrest staff and impoundment of site equipment.
2	Adamawa	Madagali Local Government	Demanding Development Permit fee of N100,000 per site.	Using the Nigerian Urban and Regional Planning Land Decree No. 88 1992 as their backing, arrested Contractor on site by using a Police Officer.

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
		MINISTRY OF ENVIRONMENT	Demanding Sanitation/Pollution/Site Inspection Levy of N52,000 per site.	Arrest and prosecution of site engineers in Magistrate Court.
3	Akwa Ibom	All LGAs	Demanding Permit fees of N200,000 per site.	Use of Civil Defense to arrest SBC staff and impoundment of site equipment.
		Akwa Ibom State Ministry of Environment	Demanding Pollution Discharge fees with no specific amount.	Threat to shut down base stations, offices and Institution of Court Action.
4	Anambra	Ministry of Environment	Demanding N500,000 per base station as Environmental Impact Assessment fees.	
		Anambra State Signage and Advert Agency	Demanding N4.5 million from Etisalat as outdoor advertising for base stations. New base stations would be levied N700,000 each while a fine of N1 million	

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
			would be levied on every defaulting base station.	
5	Bauchi	Bauchi LGA	Demanding Business Premises Permit fee.	Threat to shut down office.
		Bauchi State Signage & Advertisement Management Agency	Demanding Signage, Branding and Advert Levy of N755,560,000.	Threat to shut down base stations, offices and Institution of Court action.
		Ministry Of Land And Survey	Demanding GSM Registration fee of N150,000 per site.	Threat to shut down base stations.
6	Bayelsa		Bayelsa State Ministry of Environment is demanding N3 million for Effluent Discharge and Turbidity levy, while in Yenegoa, the state capital, its local government council is demanding N1.05 million for operational permit, sewage, signpost/advert fee and local government support levy.	
7	Benue	Benue State Ministry of Science and Technology	Demanding Annual Subscription on GSM	Threat to Prosecution

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
		Makurdi LGC	Communication Masts fee of N100,000 per site. Demanding Advertisement and Sanitation Levy of N9,500 per site.	
8	Borno	Borno State Education Endowment Fund	Demanding Education Levy of N5,000 using the Borno State Education Endowment Fund Amendment Law 2006	Threat to lock up operational offices of operators.
9	Cross River	Cross River State Internal Revenue Service Ministry of Lands and Housing Town Planning Authority Cross River State Ministry of Environment/GoJohnson Royal Services	Demanding N510million for cell site revenue due for 2005-2010. Demanding N1.2 million per base station site. Demanding Annual Environmental fees (Environmental Sanitation and Pollution) of 38,400,000.00.	Threat to shut down base stations, offices and Institution of Court Action.
10	Delta	Ministry of Environment LGAs	Demanding N276 million from a single operator as ecological tariff levy. Demanding Erection permit, development levy, operation permit, building permit. No	These demands are not captured under the

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
		Ministry Of Environment And LG Reps Of Environmental Dept.	uniform amount but N500,000 and above. Demanding Gaseous emission, effluent discharge, sanitation fees/levies of N1.2m and above per LG covering the cell sites.	Constitution as list of accepted levies and taxes for LGCs. Threat to lock up and seal cell sites with their own padlock without notice
11	Ebonyi	Ebonyi State Environmental Protection Agency/ GoJohnson Royal Services	Demanding Erection/Installation Permit and Environmental Impact Assessment Registration/ Compliance fee of N150,000 per site. Also demanded additional Environmental Sanitation fee /Environmental Development/Support Levy and Effluent discharge fees of N57,000,000	Forceful stoppage of work at site, threat to use Police to arrest Contractor. Airtel had to pay 150,000 to secure release of site build materials. Threat to shut down base stations, offices.
12	Edo	Edo State Town Planning Authority/LGAs	Demanding Permit fees of N750,000 per site.	

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
		Edo State Government	Demanding Environmental levy of N250,000 per site.	Relying upon Environmental Levy on Industrial & Commercial Establishments Law 2004.
13	Ekiti	Gbonyin Local Government	Demanding Mast Installation Permit fee of N250, 000. 00 per BTS site.	Threat to shut down base stations.
14	Enugu	Enugu State Ministry of Environment and Mineral Resources through MCE Communications, a public relations and advertising company Enugu State Ministry of Environment and Mineral Resources	Demanding Annual Revenue with no specific amount. Demanding EIA/ Audit Clearance fee of 10,000,000 with additional penalty fee on default of order.	Threat to lock up operational offices. Threat to shut down base stations, offices and Institution of Court Action.
15	FCT	Abuja Municipal Area Council	Demanding Sign Posts fee of 800,000.00 per BTS site. Demanding N257 million from MTN as annual charge for the telecoms operator's base stations	Threat to seal up sites

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
		Abuja Municipal Management Council (AMMC)	mounted in the federal capital territory.	
16	Gombe	Kwami LGA	Demanding Erection/Installation Permit fee of N100,000 per site	Forceful stoppage of work at site
17	Imo	Imo State Environmental Transformation Commission (ENTRACO)	Demanding from Airtel, N262.4 million for pest/vector control fee and fumigation charges for the year 2008 – 2011.	Threat to shut down base stations. Actual institution of court action and embarrassment at Owerri shop on two occasions.
		Ministry of Lands, Survey & Urban Planning	Demanding Replicated Planning permit approval fee of N500,000.00 per site despite previous payments to Town Planning Authorities for the same sites and for the same purpose.	Threat to lock up sites and refusal to approve building plans.
		State's Town Planning Authority	Demanding N720,000 per base station as permit fees.	

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
18	Jigawa	Jigawa State DCDA State LGAs	Demanding EIA fees of N80,000 – N100,000 per site. Demanding Tenement Rate of N40,000 – N50,000 per site.	
19	Kaduna	Kaduna State Urban Planning & Development Authority	Demanding EIA fee of N250,000/site and Refused to accept EIA prepared by FME/NESREA Consultant. Insisted on using its own consultant.	
20	Kano	All the 44 Local Government Authorities (LGAs)	Demanding Erection Permit fees that are not fixed.	Relying on By Laws which could have been passed by LGA Legislative Council or drawn up by the LGA Revenue Committee.
21	Katsina	Katsina State Urban planning & Development Authority	Demanding N755,000 per site as building permit and Environmental Impact Assessment fees.	

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
			Also demanding Tenement rates of 11,500,000.00 for R of O.	
22	Kebbi	Zuru LGA	Demanding Erection/Building Permit fee of N 80,000/site.	Arrest of Contractor on site by Police.
23	Kogi	Kogi State Environmental Protection Board	Demanding Environmental Compliance fees (EIA, Annual levy) of N15,000,000.	Threat to shut down base stations, offices and Institution of Court Action
24	Kwara	Ifelodun Local Government	Demanding fee for Erection of Telecommunication Mast at N450,000.00 per site.	Forceful stoppage of work at site.
25	Lagos	Urban Furniture Regulatory Unit Ikeja LG	Asking telecoms operators to pay N2 million for each newly installed telecoms masts, N1 million for each existing ones, and N500, 000 as renewal fees for each telecoms masts installed in the state. Demanding Venture Permit fee of N20,000.00.	
26	Nasarawa			
27	Niger	Niger State Urban Development Board	Demanding Development/Planning	

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
			Permit fee of N800,000.00 per site.	
28	Ogun	Ogun State Environmental Protection Agency	Demanding Emission Control Scheme payment which is not fixed, and also Petroleum Product Storage Facility Assessment which is not fixed as Operators were asked to negotiate with selected consultants.	
29	Ondo	Signage and Advertisement Agency Ondo State Development and Property Corporation (OSDPC)	Demanding N34 million as signage/outdoor fee for base stations and N12.35 million for state support levy. Demanding Economic Development Levy on Mast Installation at N700,000 per site.	Closure of some Base Stations for days Threat to shut down base stations, offices and Institution of Court Action.
30	Osun	Osun State Ministry Of Environment Osun State Government	Demanding Mast Installation Permit fee of N100,000.00 per site. Demanding Administrative Charge of N37,000.00 Per site	

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
31	Oyo	Akinyele Local Government Ibadan North Local Govt	Demanding Environmental Levy of N1,440,000. Demanding Corporate Parking fee of N250,000.00	Threat to lock up operational office
32	Plateau	Local Government Councils (LGCs) Fire Service	Demanding Advertisement Levy of N150,000. Fire Safety Inspection Demand Notice demanding N10,000 for showroom.	
33	Rivers	All Local Government Councils (LGCs)	Demanding Operational Permit fee of N500,000.00 per annum.	
34	Sokoto	Department of Works, Illela LGA. Sokoto South LGA	Demanding Erection Permit fee of N100,000/site. Demanding Business / Annual Dues which are not fixed.	Arrest of Contractor on site by Police. Threat to shut down base stations, offices and Institution of Court Action.
35	Taraba	All LGAs	Demanding Permit fees of N400,000 per site.	

	Statistics of various levies by states			
No.	State	Requesting Agency	Action	Remarks
36	Yobe	Ministry of Environment	Demanding Environmental Tax with no specific amount.	Threat to shut down base station, Setting up of Mobile Environmental Courts to try erring organization.
37	Zamfara	Talata Mafara LGA	Demanding Erection/Building Permit of N 100,000/ site.	Arrest of Contractor on site by Police

3.9.2. Benchmark with other jurisdictions

In the case of license fees, and other forms of taxes and levies, India outstrips its global counterparts. For instance, China does not levy any license fees; in Singapore, it varies between 0.8% –1.0% of the annual turnover. Similarly, license fees are negligible in South Africa (0.15%–0.35% as a percentage of revenue from licensed services) and Thailand (a maximum 1.5% of annual revenue)[41]. There is a need for the Government to revisit and revise these levies, since they adversely affect the sector's growth. Research indicates that a one percentage point reduction in taxes on mobile broadband is likely to result in up to 1.8 percentage point increase in penetration, and up to 0.7 percentage point increase in GDP over five years in emerging markets. Specifically for

[41] KPMG in India analysis, 2016

wireless broadband, every dollar reduced in taxes for emerging markets, will generate GDP ranging between US$1.4 and US$12 billion[42]

The telecoms infrastructure industry has acted as a backbone for the development of telecom services and played a prominent role in the growth story of the Indian telecom sector. Telecom infrastructure primarily includes the underlying network, such as fiber/cell sites over which wireline and wireless telecom services are provided.

3.9.3. Telecoms towers

Introduction Worldwide, ownership and management of telecom towers has largely been in the hands of telecom operators. However, in countries such as India and the US, towers have gained significance as a separate industry with operators outsourcing tower infrastructure to independent players. Separate tower companies with a considerable number of towers offer advantages such as rapid rollout over a large area, sharing of towers and tenancy-driven discounts, as compared to towers managed by operators. India's telecom infrastructure industry is one of the pioneers in passive infrastructure sharing. The tower infrastructure companies provide an integrated neutral host platform that is used by diverse and often competing operators. The growth of these independent tower companies, along with infrastructure sharing, has resulted in rapid rollout of services, fast go-to market time for new entrants and savings in capex and opex. This has led to affordable services for end users and improved accessibility to the hinterland. Industry size and growth. The country's tower industry has grown significantly over the past few years. The number of telecoms towers grew from around 250,000 in FY08 to 421,000 in FY14. Furthermore, the tenancy ratio has increased significantly from 0.9 to 1.9 during this period.[43]

[42] "Broadband policy," TRAI, http://www.trai.gov.in/Content/broadband_policy.aspx, accessed 25 Feb 2017

[43] KPMG in India analysis, 2016

4.0 Challenges of Telecoms Infrastructure Deployment in Nigeria and the Issues of Multiple Taxation/Regulation

1. Spectrum-related issues

   Spectrum is a scarce and critical resource and its efficient allocation and usage is critical for successful delivery of telecom services in the country. However, several spectrum-related issues such as high pricing, unavailability of optimum quantum of spectrum and lack of a spectrum roadmap are factors that continue to affect the sector adversely.

2. The tower industry continues to face multiple challenges, despite the significant role played by the infrastructure segment in the overall growth and delivery of telecom services. Foremost, challenges around obtaining RoW and site acquisition continue and have slowed down deployment of towers.

3. Furthermore, the non-uniform policies adopted by different states raise impediments in obtaining RoW. Another significant area of concern that is inhibiting the growth of the sector is that benefits to be provided under infrastructure status have not yet been extended to the industry.

   Consequently, economic benefits envisaged by the Government for the development of the industry have not trickled down to the implementation level.

4. An added challenge faced by the tower industry is on the green energy solutions front. Given that the ecosystem for renewable energy is at a nascent stage in the country, it is difficult to achieve the stringent green energy targets that have been set.

5. Multiple fees and levies

   The industry is levied high fees under the guise of permission fees, renewal fees, sharing fees, compounding fees, development charges and lump sum deposits for demolition.

4.1.0. Suggested Solutions to the Challenges

Clarity on various policies is the top expectation of the telecoms sector's wish list. Some of the other major expectations were:

- Rationalization and simplification of the current tax structure. The taxes and levies charged by the different 3 tiers of government should be ascertainable, predictable on a clear defined criteria and known in advance what taxes they are liable to pay.
- Taxes and levies should be collected as prescribed by law on who the exercising authority should be especially where a federal legislation has covered field; states and local governments can no longer legislate on the same issues.
- The Taxes and Levies (approved rates for collection) Act, 1998 makes it illegal to use consultants to assess and collect taxes.
- Improve transparency as to the contribution of the communications sector to the Federation Account and the use such funds for the development of the industry as well as extension of ICT services to unserved and underserved areas. The states and local governments are beneficiaries in the sharing of proceeds from the Federation account.
- Continue to canvass for the Declaration of Telecommunications Infrastructure as Critical National Infrastructure (CNI). Multiple taxation is a vexatious issue because of the mode of enforcement usually adopted to collect levies, especially where the tax or levy is illegal.
- Noting that all telecoms operators are national licensees as telecoms is under the exclusive list of the Federal Government as provided in the Constitution and the Nigerian Communications Act 2003, actions of other government Agencies and multiple authorities distracts the telecoms

operators. These actions invariably become cost with these authorities finally ending up being rent seeking rather than administrative fees.

- However due to some overlap of functions which allows the regulation of certain aspects of the business of operators, for example, the Nigerian Civil Aviation Authority (NCAA) is authorized by law to regulate the height of structures that might negatively impact aviation safety. Again, planning authorities regulate the deployment or building of structures within their areas of authority. On the environment, because it is a residual issue, most authorities freely regulate it, not minding that in such circumstances, where a federal law exists, they are precluded from so doing. These overlaps may be corrected by the legislative actions of the National Assembly.
- Continue to pursue the aggressive campaign to Protect, Inform and Educate consumers and all other stakeholders on such issues like the Electro-Magnetic Frequency (EMF) Emission. Other Regulators at all levels hide under the need to protect citizens against EMF to encroach on NCC regulatory space. Interestingly, their idea of preventing the emission is to charge fees, payment of which regularizes or mitigates the supposed risk.
- Publish research studies on Socio-Economic benefits of Telecommunications and its contributions to the economy.
- Directly appeal to State Governors: Most State Governors are unaware of the actions of the Ministries, Departments and Agencies (MDAs) under them. Where they are, they are not fully seized of the legal and constitutional implications of the actions of these agencies take. Approaching the governors and apprising them of the actions of their MDAs, especially with regards to

their powers under the constitution, will help to reduce incidences of multiple regulations.

- Improve actions and take steps to boost manufacturing of telecom products domestically in Nigeria.

CHAPTER FOUR

4.0 CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

The service industry, according to National Bureau of Statistics presently makes up approximately 50% of the rebased GDP of Nigeria, which is put at approximately N80.3trillion (US$510.1bn). The telecommunications and information services sector make up N6.9trillion (US$44.3bn) of this rebased number. Compared with the 2012 non-rebased figure of N364.4 billion (US$2.3bn), this is a significant increase in GDP contribution.[44]

The high point of deregulation of the telecommunications industry which started in 1992 was the licensing of the GSM operators at the turn of the 21st century. Significant investment has been made by operators in the industry.

Today, many businesses in Nigeria leverage the output of the telecommunications sector. For instance, numerous innovative products in the financial services industry (internet banking, mobile banking etc.) rely heavily on Internet access. Many on-line retail platforms have emerged and as far as telephony is concerned, the gap between the rich and the poor has virtually disappeared and only rear its ugly head in the choice of handsets or other gadgets that individual users deploy in communicating. A Nigerian farmer in the sub-urban areas in 2014 is superior to top level government functionaries or top business executive pre-2001 by virtue of quality and quantity of information available to him through his handheld device!

The revolution in the telecoms sector has constantly challenged our imagination on the possibilities and associated benefits that a turn-around in the power

[44] An examination of the legal regulations and taxation of telecommunication and electronic commerce in Nigeria by D. A. Ariyoosu htt:/www.unilorin.edu.ng/…Law-CL…> accessed on 25th January, 2017

sector can deliver to the Nigerian economy. There is palpable envy of those who invested in the telecommunications sector to make this happen as if they did not deserve the returns on their investment. This is accompanied by the pervasive feeling amongst Nigerians that the sector can still do more. Investments are still required to eliminate drop calls, enhance faster internet access or connectivity etc.

Given the contribution and impact of the operators in this sector, the telecoms sector is a sector that must continuously be supported in all ramifications including fiscal. Apart from the peculiar challenges of the different businesses within this sector, three (3) major areas the sector is challenged fiscally and has been seeking Federal Inland Revenue Service (FIRS)' understanding are:

1. Deductibility of expenses: It is trite that the basis of deductibility of expenses for a company operating in the telecommunications sector is the WREN test i.e. only expenses that are wholly, reasonably, exclusively and necessarily incurred in generating profits of the business are deductible under the Companies Income Tax Act (as amended).

   There are instances where valid business expenses such as non-receipted discretionary payments (e.g. payments to various groups for approvals or security of their equipment or employees) are incurred by these operators. These expenses are sometimes huge and arise as a result of the peculiar nature of the industry. FIRS had often times taken an inflexible position especially during tax audits/investigation exercises in relation to tax deductibility of these expenses. A more positive disposition by tax authorities to the sector's apparent business realities will be appreciated.
2. Input VAT: Presently, under the VAT Act (as amended), the scope for the input/output offset mechanism is limited to input VAT incurred on goods purchased or imported directly for resale and goods which form the stock-in-trade used for the direct production of any new product. The reality is that these conditions for allowable input VAT may be too restrictive.[45]

[45] VAT Act (2009) ALL FWLR (Pt. 490) 788 @505. See also RAIMI V. IMEC (2005) 6 NWLR (Pg 920)56 @ 84.

There are arrangements within the telecommunication sector exerting pressure on this provision of the VAT Act for amendment. For instance, telecommunication service providers (TSP) deploy network infrastructure through subcontractors who provide and maintain infrastructure on their behalf. TSPs are not permitted to recover VAT charged by the subcontractors from their output VAT despite significant VAT costs incurred on materials.

3. Multiple taxation: One of the clear objectives of the National Tax Policy (NTP) is the elimination of multiple taxation in all the forms in which it manifests within the Nigerian economy. Whilst the challenge of multiple taxation is not limited to the telecommunications sector, the degree of exposure is high.

   Thus, regrettably, telecommunications operators are still confronted with multiple levies (e.g. annual operating levy, information technology levy, spectrum fees, national number plan fees and various other fees imposed by state and local governments) on the same stream of income.

   Different tiers of government have enacted regulations imposing additional taxes/levies on these operators. While some of them are illegal, others are oftentimes based on perception that telecom operators are cash cows and should willingly submit to any form of levies or charges imposed on them. This trend needs to be evaluated, considering the intent of NTP to eliminate multiple taxation at all levels.

To the extent that the telecoms sector remains one of the clear successful policy implementation stories of the last decade, friendlier tax practices can only stimulate continuous productivity and investment by the operators. FIRS and other relevant agencies of government, which are responsible in this regard should therefore take up the challenge and enable the necessary positive changes.

The NCC and Industry must continue to engage relevant stakeholders and show its willingness to challenge the continuing high handedness of the different tiers of government towards the sector to ensure continuous growth and improved contributions of the telecoms industry to the socio-economic wellbeing of Nigeria. The NCC should, when necessary support and even drive the provision of telecommunications services to particularly difficult states, unserved areas and underserved areas.

4.2 Recommendations

1. Telecommunications infrastructure deployment should be prioritized by government to continue to drive the attraction of foreign direct investment capital in the build out of telecommunications infrastructure in the country. Investment opportunities exist in intercity and intra city network rollout of broadband infrastructure.
2. Government should pursue the implementation of the National Tax Policy and the meeting of the Nigeria Governors Forum should ensure the implementation of the resolution of the National Executive Council on Multiple Taxation and Regulation. Taxes and levies should be rationalized to ensure the overall growth and financial viability of the telecoms sector.
3. Government should encourage the National Assembly to consider telecoms infrastructure as a critical infrastructure sector and pass appropriate laws to protect the infrastructure and the industry as well as its financing needs.
4. There is need to set up a Telecom Finance Corporation on the principle to provide additional investment for the industry.
5. The 3 tiers of government should adopt uniform RoW across all states at a uniform and reasonable cost. The Federal Ministry of Works especially should adopt single window mechanism on priority basis for granting RoW permission throughout the country and States should also streamline their levies and taxes to ensure they are not predatory

and will allow for the deployment of infrastructure to extend ICT services to underserved and unserved areas of the States.

6. Government should ensure adherence to the Guidelines on Infrastructure sharing and Guidelines for the installation of Masts and towers across the country. The States should align levies only on admissible charges for guidelines for installation of masts and towers.
7. Provide fiscal incentives to telecoms operators for deployment of fiber optic cables through inter cities across the country and for the development of smart cities.
8. The level of taxation and fees applied to the mobile sector are reflected in the retail prices operators charge for using their services. Therefore, a change in taxation or fees will lead to a change in the retail price of mobile services.
9. Basically, the Commission should encourage relationships and collaboration with other Ministries, Departments and Agencies of Government at the Federal level in the first instance. The Commission should discuss Common Issues on Regulations with others and seek ways of establishing a Nigerian Regulators Forum involving all Regulatory Agencies in Nigeria. This Forum shall be tasked with discussing all common issues of regulation as it affect each industry. Members of this Forum should be drawn from: NERC, CPC, NESREA, Nigeria Customs & Excise, FIRS, the Joint Tax Board, National Lotteries Commission, etc. The Commission should also engage State Governments and Local Governments to discuss issues that pertain to the telecommunications industry.

These changes to the mobile sector can lead to direct impacts on value-added and employment and, through spillover effects, on the wider economy, in particular on real GDP, tax revenues, employment and investment in Nigeria.

APPENDIX A - Schedule of Taxes to be collected by the Federal Government

1. Companies income tax.
2. Withholding tax on companies, residents of the Federal Capital Territory, Abuja and non-resident individuals.
3. Petroleum profits tax.
4. Value added tax.
5. Education tax.
6. Capital gains tax on residents of the Federal Capital Territory, Abuja, bodies corporate and non-resident individuals.
7. Stamp duties on bodies corporate and residents of the Federal Capital Territory, Abuja.
8. Personal income tax in respect of –

   (a) members of the Armed Forces of the Federation;

   (b) members of the Nigeria Police Force;

   (c) residents of the Federal Capital Territory, Abuja; and

   (d) staff of the Ministry of Foreign Affairs and non- resident individuals.

Part II
Taxes and Levies to be collected by the State Government

1. Personal Income Tax in respect of –

(a) Pay-As-You-Earn (PAYE); and

(b) Direct taxation (Self Assessment).

1. Withholding tax (individuals only).
2. Capital gains tax (individuals only).
3. Stamp duties on instruments executed by individuals.
4. Pools betting and lotteries, gaming and casino taxes.
5. Road taxes.
6. Business premises registration fee in respect of –

(a) Urban areas as defined by each State, maximum of –

(i) ₦ 10,000 for registration, and

(ii) ₦5,000 per annum for renewal of registration; and

(b) Rural areas –

(i) ₦2,000 for registration, and

(ii) ₦1,000 per annum for renewal of registration.

1. Development levy (individuals Only) not more than N 100 per annum on all taxable individuals.	2. Naming of street registration fees in the State Capital.	3. Right of Occupancy fees on lands owned by the State Government in urban areas of the State.
4. Market taxes and levies where State finance is involved.		

Part III
Taxes and Levies to be collected by the Local Government

1. Shops and kiosks rates.	2. Tenement rates.	3. On and Off Liquor Licence fees.
4. Slaughter slab fees.	5. Marriage, birth and death registration fees.	6. Naming of street registration fee, excluding any street in the State Capital.
7. Right of Occupancy fees on lands in rural areas, excluding those collectable by the Federal and State Governments.	8. Market taxes and levies excluding any market where State finance is involved.	9. Motor park levies.
10. Domestic animal licence fees.	11. Bicycle, truck. canoe, wheelbarrow and cart fees, other than a mechanically propelled truck.	12. Cattle tax payable by cattle farmers only.
13. Merriment and road closure levy.	14. Radio and television licence fees (other than radio and television transmitter).	15. Vehicle radio licence fees (to be imposed by the Local Government of the State in which the car is registered).
16. Wrong parking charges.	17. Public convenience, sewage and refuse disposal fees.	18. Customary burial ground permit fees.

19. Religious places establishment permit fees.
20. Signboard and Advertisement permit fees.

Made at Abuja this 30th day of September 1998

General Abdulsalami Alhaji Abubakar
Head of State, Commander-in-Chief of the Armed Forces
Federal Republic of Nigeria

References

1. Nigerian Communications Commission 2017.
2. O. M. Sadiq, A. O. Oyelade and C.A.S. Ukachukwu "10 Years of Telecommunications Infrastructure Development in Nigeria" University of Lagos at the International Conference on Innovations in Engineering and Technology (IET 2011).
3. 2014 Pyramid Research.
4. Nigerian Communications Commission, 2010.
5. O. M. Sadiq, A. O. Oyelade and C.A.S. Ukachukwu "10 Years of Telecommunications Infrastructure Development in Nigeria" University of Lagos at the International Conference on Innovations in Engineering and Technology (IET 2011).
6. Assessment of Economic Impact of Wireless broadband in Nigeria, Analysis Mason Feb., 2011.
7. Nigeria's Broadband Strategy: The Open Access Model, NCC 2011.
8. Longman Business English Dictionary.
9. National Tax Policy for Nigeria.
10. National Tax Policy for Nigeria.
11. National Association of Telecommunications Subscribers (NATCOMS) 2012, Submission to the Nigerian Communications Commission.
12. Anaesoronye, M. (2013, June 12): "Tin makes Tax System Convenient for Taxpayers", Business Day Newspaper (Vol. 11, No. 115, p. 27).
13. Adam Smith 1776, "The Wealth of Nations" in Classical Economic Theories: History of Economic Theory and Thought.
14. Ojeka, S. A. (2011) Tax Policy and the Growth of SMEs: Implications for the Nigerian Economy Research Journal of Finance and Accounting Vol. 2, No 2, 2011 ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online).
15. Adebisi, J. F and Gbegi, D. O. (2013) Effect of Multiple Taxation on the Performance of Small and Medium Scale Business Enterprises. (A Study of West African Ceremics, Ajeokuta, Kogi State) Mediterranean Journal of Social Sciences Published by MCSERCEMAS-Sapienza University of Rome Vol. 4 No 6 July 2013 E-ISSN 2039-2117ISSN 2039-9340.
16. Onyeukwu, H (2010) Business Tax in Nigeria: The Controversy of Multiple Taxation.
    Retrieved from http://works.bepress.com/humphrey_onyeukwu on Wednesday, 27 2017.
17. Salami, A (2011) Taxation, Revenue Allocation and Fiscal Federalism in Nigeria: Issues, Challenges and Policy Options ECONOMIC ANNALS, Volume LVI, No. 189 / April – June 2011
    www.doiserbia.nb.rs/ft.aspx?id=0013-32641189027S.
18. Agbor, U. I. (2013) Getting the Money and Plummeting Business Development: A study of the Impact of Tax regime on Hospitality Industry

in Calabar, Nigeria Global Journal of Political Science and Administration Vol. 1, No. 1, pp. 16-26, September 2013 www.ea-journals.org
19. NESG Policy Brief, Multiple Taxation in Nigeria No. 2 September, 2006
20. Position paper on hazard and further implications of multiple taxation and regulation of the telecommunication industry in Nigeria by: Industry. Working group http:/www.ncc.goving/index.php?..>accessed on 20th January, 2017
21. An examination of the legal regulations and taxation of telecommunication and electronic commerce in Nigeria by D. A. Ariyoosu htt:/www.unilorin.edu.ng/…Law-CL…> accessed on 24th Feb 2017
22. Companies Income Tax (Amended) Act 2007
23. Williams, Edem E.; Essien Eyo (2011). "Building a Cost Effective Network for E-Learning in Developing Countries." *Computer and Information Science*. **4** (1): 53.
24. https://www.researchictafrica.net/countries/nigeria/ Nigeria_National_Broadband_Plan_2013-2018.pdf
25. www.ncc.gov.ng
26. Pyramid Research, 2010
27. Nigerian Communications Commission, 2010
28. Nkanga, 2010
29. TRAI: Financial and Economic Analysis. See: http://www.trai.gov.in/WriteReadData/PIRReport/Documents/Qtr%20III%20analysis%202014-15%20(i.e. %20DEC. %2014) %20PDF.pdf
30. http://www.ncc.gov.ng/docman-main/legal-regulatory/guidelines/54-guidelines-on-collocation-and-infrastructure-sharing/file
31. GIS AS TOOL FOR TELECOMMUNICATION NETWORK INFRASTRUCTURE MANAGEMENT Naruvbe, G.O. & Adagbasa, G.E. Regional Centre for Training in Aerospace SurveysObafemi Awolowo University Campus,Ile-Ife, NigeriaEmail: enaruvbe@rectas.org
32. GIS AS TOOL FOR TELECOMMUNICATION NETWORK INFRASTRUCTURE MANAGEMENT Naruvbe, G.O. & Adagbasa, G.E. Regional Centre for Training in Aerospace SurveysObafemi Awolowo University Campus,Ile-Ife, NigeriaEmail: enaruvbe@rectas.org
33. Ken Nwogbo, Nigeria Communications Week on Multiple Taxation Choking Telecoms Companies 15 September, 2010.
34. Ken Nwogbo, Nigeria Communications Week on Multiple Taxation Choking Telecoms Companies 15 September, 2010.
35. NCC- Industry Working Group on Multiple Taxation (March 2012)
36 NCC- Industry Working Group on Multiple Taxation (March 2012)
37. Companies Income Tax (Amended) Act 2007
Mathew Epkpeke 2016. http://itpulse.com.ng/stakeholders-lament-multiple-taxation-in-nigerias-telecom-industry/
38. The Nigerian Economic Summit Group 2016
39. KPMG in India analysis, 2016

40 "Broadband policy," TRAI, http://www.trai.gov.in/Content/broadband_policy.aspx, accessed 25 Feb 2017
41. KPMG in India analysis, 2016
42. Anayo Ezugwu, Realnews: Nigeria to End Multiple Taxation on Telecoms Operators by Prof. U.G. Dambatta, Executive Vice Chairman, NCC 2015
43. Resolution of the Nigeria Governors Forum 2013
44. An examination of the legal regulations and taxation of telecommunication and electronic commerce in Nigeria by D. A. Ariyoosu htt:/www.unilorin.edu.ng/…Law-CL…> accessed on 25th January, 2017.
45. VAT Act (2009) ALL FWLR (Pt. 490) 788 @505. See also RAIMI V. IMEC (2005) 6 NWLR (Pg 920)56 @ 84.