



Conflict of Interest Between Regulatory Agencies on Telecommunication Sector And Consequences of Improper Telecommunication Mast Installation in Nigeria

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ABSTRACT

This paper examines various laws governing telecommunication installations in Nigeria with a view to addressing the perceived shortcomings in the laws. While the National Environmental Standards Regulatory and Enforcement Agency Act (NESREA Act) and the National Communications Commission (NCC Act) have been enacted to solve the problems associated with the effects of telecommunication mast installation in public places, the outcome of these laws seem inadequate for failure to provide effective means of enforcing same. The study considered the provisions of NESREA Act which is the principal Law enacted for ensuring that environmental standards are maintained and protected in Nigeria and the provisions of NCC Act which is the law that establishes the principal body which regulates telecommunication installations in Nigeria as well as other legislations. While NESREA in its Regulation provided for a setback of 10 metres, the NCC Act provided for a setback of 5 metres, which often conflicts and put victims at disadvantage and also conflict between the two regulatory bodies. It was observed that serious environmental hazards are linked to installation of telecommunication masts within/close to residential premises. Among these are leukemia, cancer, cracks on the buildings, pollution, such as water, land and air. The problems also include telecommunication masts falling on buildings and sometimes death due to sub-standard materials used in the installation as against the stated standard by the controlling regulatory bodies.

INTRODUCTION

This article is aimed at examining conflicts of interest between the two major bodies responsible for telecommunication installation in Nigeria and the effects of telecommunication installations on the Nigerian environment and its habitats particularly human beings. It also focuses on adequacy or otherwise of the laws put in place to regulate telecommunication in Nigeria. It is obligatory on the part of telecommunication operators to ensure that Nigeria people enjoy the best of their services and this cannot be done without installation of telecommunication infrastructures such as telecommunication masts. There is no doubt that the advent of telecommunications in Nigeria has brought about a lot of developments which are innumerable however, it is not without its shortcomings. A lot of people have met their untimely death as a result of telecommunication installations while so many farm lands are being destroyed on daily basis and lots of people no longer enjoy consumption/intake of fresh water¹ and many more. The article focuses on these environmental issues/challenges as they affect the Nigerian environment and the people at large.

The world at large has been revolutionized by the internet, information communication technology and wireless digital telecommunication. The effect of Information Technology (IT) has been noticed on social and economic activities around the globe and it has actually turned the whole world into a global village or better still a global room. Telecommunication has contributed immensely to the growth and development of many nations in every respect; that is, socially, culturally and economically. In Nigeria, since the inception/introduction of telecommunication, this has also being the story; telecommunication industries in Nigeria have recruited/employed millions of Nigerians as workers in the various industries.

For the growth of telecommunication services, service providers must as a matter of compulsion ensure that they install telecommunication masts all over the country in disseminating information and data services to end users of their services. Accord-

ing to Bashir Gwandu² in 2011 who was the acting Vice Chairman of Nigerian Communications Commission, it was pointed out that telecommunication services cannot be enjoyed without installing masts and towers across Nigeria because there are no sophisticated infrastructures in place like what they have in other developed countries of the world. This statement by Bashir Gwandu shows us that these masts are very essential if we are to talk about telecommunication in Nigeria. The provision and citing of these towers across Nigeria is a condition precedent in ensuring that telecommunication and internet services are made available to end users across Nigeria without any form of interruption. It must however be pointed out that the existence of telecommunication mast has brought about serious issues ranging from health, environmental to business concerns across Nigeria and all these shall be discussed in this paper.

According to Earnest Ndukwe³ who is the former executive Vice Chairman of Nigerian Communication Commission, he pointed out that without installing telecommunication masts across the country, there can be no communication. With respect to the license issued to them to operate in Nigeria, the telecommunication operators are under obligation to ensure that they provide effective communication coverage for their clients; in order for them to achieve this; the operators must ensure that they make provision for every necessary infrastructure that will make the mandate given to them achievable and one of the infrastructures include telecommunication mast.

The central problem to be addressed here is the issue of environmental protection because environmental protection is essential in order to live a quality, healthy and enjoyable life as well as administrative problem over the control of telecommunications generally; discrepancies in the laws governing same and leadership tussle between the various organs/bodies saddled with telecommunication responsibility in Nigeria. In Nigeria, there is a leadership tussle between National Environmental Standards Regulatory and Enforcement Agency (NESREA)⁴

1 Dangers of telecommunication masts published 11th April, 2012 available at <http://www.allafrica.com>. Accessed 10th Aug, 2014.

2 Bashir Gwandu, Next Newspaper (Nigerian Newspaper) <http://234next.com>. Accessed on 23rd October, 2014.

3 Nigeria Communications Week Newspaper of Wednesday December 28, 2011.

4 NESREA is the body that was established to replace Federal Environmental Protection Agency (FEPA) which was

as the umbrella body which is responsible for the maintenance environmental standards/protection in Nigeria and Nigeria Communications Commissions (NCC) which is the body set up to regulate Communications in Nigeria. NESREA states in its Regulations that a mast installed must be at least 10 metres away from a residential property while NCC in its Act states that it is alright if such is 5 metres away from a residential property. There are so many instances where NESREA had pulled down masts permitted to be installed/ erected by NCC for contravening environmental standards and this has caused a lot of rancor between the two bodies. All these will be discussed with examples in this article.

1. BODIES AND LAWS RESPONSIBLE FOR TELECOMMUNICATION INSTALLATION IN NIGERIA

Presently in Nigeria, the main body responsible for regulating telecommunications is Nigeria Communication Commission (NCC). Nigerian Communications Commission was first established in 1992 by the Nigerian Communications Commission Act No 75 of 1992. Thereafter, the Nigerian Communications Act 2003 came into force and repealed the 1992 Act, the Act in its Section 3 of the 2003 Act⁵ spelt out the responsibility of the Commission and states as follows:

The commission is a body corporate with perpetual succession and a common seal, capable of suing and being sued in its corporate name and shall have the power:

- (i) to enter into contract and incur obligations
- (ii) to acquire, hold, mortgage, purchase and deal howsoever with property whether movable or immovable; real or personal; and
- (iii) to do all such things as are necessary for or incidental to the carrying out of its functions and duties under the Act.⁶

The commission has the following functions under the Act:

- a. the facilitation of investments in and entry into the Nigerian market for provision and supply of communications services, equipment and facilities
- b. the protection and promotion of the interests of consumers against unfair practices including but not limited to matters relating to tariffs and charges for and the availability and quality of communications services, equipment and facilities
- c. ensuring that licensees implement and operate at all times the most efficient and accurate billing system
- d. the promotion of fair competition in the communications industry and protection of communications services and facilities providers from misuse of market power or anti-competitive and unfair practices by other service or facilities providers or equipment suppliers
- e. granting and renewing communications licences whether or not the licences themselves provide for renewal in accordance with the provisions of this Act and monitoring and enforcing compliance with licence terms and conditions by licensees
- f. proposing and effecting amendments to licence conditions in accordance with the objectives and provisions of this Act
- g. fixing and collecting fees for grant of communications licences and other regulatory services provided by the Commission.
- h. the development and monitoring of performance standards and indices relating to the quality of telephone and other communications services and facilities supplied to consumers in Nigeria having regard to the best international performance indicators
- i. making and enforcement of such regulations as may be necessary under this Act to give full force and effect to the provisions of this Act
- j. management and administration of frequency spectrum for the communications sector and assisting the National Frequency Management (NFM Council in developing a national frequency plan
- k. development, management and administration of a national numbering plan and electronic addresses plan and the assignment

the body that regulates the environment prior to the establishment of NESREA.

⁵ Nigeria Communications Act, Cap N 97 LFN 2004.

⁶ Section 3 (2) of the Act.

- of numbers and electronic addresses therefrom to licensees
- l. proposing, adopting, publishing and enforcing technical specifications and standards for the importation and use of communications equipment in Nigeria and for connecting or interconnecting communications equipment and systems
 - m. the formulation and management of Nigeria's inputs into the setting of international technical standards for communications services and equipment
 - n. carrying out type approval tests on communications equipment and issuing certificates therefore on the basis of technical specifications and standards prescribed from time to time by the Commission
 - o. encouraging and promoting infrastructure sharing amongst licensees and providing regulatory guidelines thereon
 - p. examining and resolving complaints and objections filed by and disputes between licensed operators, subscribers or any other person involved in the communications industry, using such dispute-resolution methods as the Commission may determine from time to time including mediation and arbitration
 - q. preparation and implementation of programmes and plans that promote and ensure the development of the communications industry and the provision of communications services in Nigeria
 - r. designing, managing and implementing Universal Access strategy and programme in accordance with Federal Government's general policy and objectives thereon
 - s. advising the Minister on the formulation of the general policies for the communications industry and generally on matters relating to the communications industry in the exercise of the Minister's functions and responsibilities under this Act
 - t. implementation of the Government's general policies on communications industry and the execution of all such other functions and responsibilities as are given to the Commission under this Act or are incidental or related thereto
 - u. generally advising and assisting communications industry stakeholders and practitioners with a view to the development of the industry and attaining the objectives of this Act and its subsidiary legislation
 - v. representation of Nigeria at proceedings of international organisations and for matters relating to regulation of communications and matters ancillary and connected thereto; *and*
 - w. general responsibility for economic and technical regulation of the communications industry.⁷
- Pursuant to the Act, the commission also has the power to make and publish regulations for all or any of the following issues:
- a. written authorisations, permits, assignments and licences granted or issued under this Act
 - b. assignment of rights to the spectrum or numbers under Chapter VIII, including mechanisms for rate-based assignment
 - c. any fees, charges, rates or fines to be imposed pursuant to or under this Act or its subsidiary legislation
 - d. a system of universal service provision under Chapter VII, including but not limited to the quality of service standards
 - e. communications and related offences and penalties
 - f. any matter for which this Act makes express provision; and
 - g. such other matters as are necessary for giving full effect to the provisions of this Act and for their due administration.⁸
- NESREA and its Act and Regulations should also be considered when anything is being discussed in respect of telecommunication because it is the umbrella body responsible for environmental protection in Nigeria.
- As a result of the Koko incident of 1988, the Federal Government of Nigeria enacted the Harmful Waste Decree 42 of 1988, which led to the establishment of the Federal Environmental Protection Agency (FEPA) through Decree 58 of 1988 and 59 (amended) of 1992. FEPA is made to be responsible for managing and ensuring adequate protection for the environ-

7 Nigeria Communications Act, Section 4(1).

8 Nigerian Communications Act, Section 70 (1), Cap N97 LFN 2004.

ment. It must be noted that upon the establishment of FEPA, Nigeria became the first African country to establish a nationally recognised institutional mechanism to ensure environmental protection.⁹ FEPA and some Departments in other Ministries were joined together to become the Federal Ministry of Environment in 1999 and this was done without putting in place a legal framework for enforcement issues which led to ineffective enforcement of environmental laws across Nigeria. In order to address this perceived lacuna in our law, the Federal Government of Nigeria established the body known as National Environmental Standards and Regulations Enforcement Agency (NESREA) which replaced Federal Environmental Protection Agency.

NESREA is given the task of ensuring environmental protection of the Nigerian environment.¹⁰ The Agency's vision according to its establishment law is to ensure that Nigeria citizens have access to an environment that is cleaner and healthier while the mission is to inspire personal and collective responsibility in building an environmentally conscious society for the achievement of sustainable development in Nigeria¹¹.

The powers given to the Agency are so enormous. In the area of protecting the environment, the Agency can prohibit processes and the use of equipment or technology that affect environmental quality¹². It is also saddled with the responsibility of conducting field follow up in order to ensure adequate compliance with set standards and ensure that violators of the standards put in place are caught up by the law and bear the consequences of their actions¹³. The Agency according to its establishment law also has the power to establish mobile courts in order to dispense off cases of environmental violations speedily¹⁴. The Agency can conduct public investigations and make proposals to the minister for the review of existing guidelines, regulations and standards on environment¹⁵. Also, the Agency can put in place programmes for setting

standards and regulations for the prevention, reduction and elimination of pollution and other forms of environmental degradation in the nation's air, land, oceans, seas and other water bodies and for restoration and enhancement of nation's environment and natural resources¹⁶.

NESREA as an Agency is expected to perform the following functions as stipulated in its Act¹⁷:

- (i) Enforce compliance with laws, guidelines, policies and standards on environmental matters
- (ii) Coordinate and liaise with stakeholder, within and outside Nigeria, on matters of environmental standards, regulations and enforcements
- (iii) Enforce compliance with the provisions international agreements, protocols, conventions and treaties on the environment, including climate changes, biodiversity, conservation, desertification, forestry, oil and gas, chemicals, hazardous wastes, ozone depletions, marine and wild life, pollution, sanitation and such other environmental agreements as may from time to time come into force
- (iv) Enforce compliance with policies standards, legislations, and guidelines on water quality, environmental health and sanitation, including pollution abatement
- (v) Enforce compliance with guidelines and legislations on sustainable management of the ecosystem, biodiversity conservation, and the development of Nigeria's natural resources
- (vi) Enforce compliance with any legislation on sound chemical management, safe use of pesticides and disposal of spent packages thereof
- (vii) Enforce compliance with regulations on the importations, exportation, production, distribution, storage, sale, use, handling and disposal of hazardous chemicals and wastes other than in the oil and gas sector
- (viii) Enforce through compliance monitoring, the environmental regulations and stan-

9 <http://www.nesrea.gov.ng>. Accessed 30th August, 2016

10 See Section 2, NESREA Act.

11 Ariyoosu D.A. "An Examination of Legal Regulation and Environmental Impacts of Telecommunication Installations in Nigeria": *Journal of Law, Policy and Globalisation*, Vol 30, 2014. p. 6.

12 Section 8 (d) NESREA Act.

13 Section 8 (e) NESREA Act.

14 Section 8 (f) NESREA Act.

15 Section 8 (k) NESREA Act.

16 Section 8 (o) NESREA Act.

17 Section 7 of the National Environmental Standards and Regulations Enforcement Agency (Establishment) Act No 25 of 2007.

dards on noise, air, land, seas, oceans and other water bodies other than in the oil and gas sector

- (ix) Ensure that environmental projects found by donor organizations and external support agencies adhere to regulations in environmental safety and protection
- (x) Enforce environmental control measures through registrations, licensing and permitting systems other than in the oil and gas sector
- (xi) Conduct environmental audit and establish data bank on regulatory and enforcement mechanisms of environmental standards other than in the oil and gas sector
- (xii) Create public awareness and provide environmental education on sustainable environmental management, promote private sector compliance with environmental regulations other than in the oil and gas sector and publish general scientific or other data resulting from the performance of its functions
- (xiii) Carry out such activities as are necessary or expedient for the performance of its functions.

It is pertinent to say that NESREA Act has provided for, regulations comprehensive measures for environmental standards, laws and regulations and further provides compliance of the Rules and Regulations relating to environmental matters. It must be pointed out that NESREA made Regulations in respect of telecommunication mast installation in 2011 to ensure that telecommunication operators comply with environmental standards in the course of installing their telecommunication masts.

To this end, even though NCC does not appreciate NESREA as a body as it relates to telecommunication mast installation, it is obvious that NESREA cannot be sidetracked in this area.

2. ENVIRONMENTAL STANDARDS AND TELECOMMUNICATION MASTS

The issue of environmental standards and how telecommunication mast is controlled and managed in Nigeria is a very serious issue. There are instanc-

es whereby the two Federal agencies that is, NCC and NESREA engage in various disagreements over who between them is responsible for setting standards and ensure compliance in this area. The NCC feels it the sole regulator of the industry and on the other hand, NESREA, the umbrella environmental manager and regulator in the country. It must be pointed out that there are disparities in the law regulating the two bodies; for instance, NESREA in its regulations of 2011 provides that telecommunication masts should be cited/erected not lesser than 10 metres away from a residential building while NCC says it should be cited 5 metres away from a building. This lacuna is a dangerous one which poses a great environmental risk and necessary steps need to be taken by the Federal Government. NESREA in ensuring environmental protection has had cause severally to shut down base stations of some telecommunication operators in Nigeria for failure to comply with the existing environmental laws and it has also affirmed that it will not relent in its efforts to ensure that any telecommunication operator that violates the country's environmental standard is made to face the wrath of the law accordingly.¹⁸

It has been noted that for some times now in Nigeria, the Nigerian Communications Commission (NCC) and the National Environmental Standards and Regulations Enforcement Agency (NESREA), have been involved in a war of superiority over who controls the environment when it comes to telecommunication mast installation across the country, while NESREA seemed to follow a moral and ethical pathway, NCC considers the profit it will make as body as it sees it as a business which must generate adequate income.¹⁹

Reports have it that the leadership tussle between the two bodies was majorly noted after NESREA sealed up an MTN mast and base station located at EFAB Estate Abuja sometimes in 2012. In justification of its actions, NESREA made it known that the installed mast failed to comply with the minimum distance expected from the perimeter fencing of any residential building which should be 10

18 Dr. Mrs Ngere Benebo, DG, NESREA We must protect environmental standards-NESREA. Interview granted on 13th April, 2011. Available at <http://www.ipledge2nigeria.com>. Accessed 15th August 2016.

19 People's daily: Revisiting NCC, NESREA clash over masts available at news.peoplesdailyng.com. Accessed 15th August 2016.

meters away according to its regulations; according to NESREA, the sealed up mast is just 1.2 meters away which is not safe for the residents around the area.²⁰ The said 1.2 meters setback does not even comply with NCC's 5 meter setback as set out in their law; one however wonders why and how such a mast should be allowed by NCC; this shows the lapses on NCC's part and serves as a proof as insinuated by Nigerians that NCC is only concerned with the profit it will make in the telecommunication business rather than safety and wellbeing of Nigerians. The location where the mast was installed did not comply with the 10 meter setback standard put in place by NESREA, a requirement permitted by the National Environmental (Telecom and Broadcast Facilities) Regulations S1 No 11 of 2011. NCC on its part stated that it has the right to determine where telecommunication masts are cited and not NESREA²¹. Since that particular incidence, the two bodies have engaged in leadership tussle, and Nigerian have been wondering which one of them is outstepping its boundaries.

According to NESREA²², it was empowered by its establishment law to ensure regulate and ensure enforcement of all standards in order to guarantee environmental safety for the citizens. It means that NESREA is expected to monitor anything related to human activities in the environmental space and ensure sustainability of the nation's environment.

It must be pointed out that despite the fact that NCC by its mandate is expected to ensure that telecommunication operators provide uninterrupted and effective services for their end users, the issue of environmental protection must not be neglected which must fall in line with the provisions of the NESREA Act which is the major law regulating the environment as monitored by NESREA.²³ The National Environmental Regulations S1 No 11 of 2011 which includes Telecommunications and Broadcast Facilities, is a document that as a matter of compulsion be obeyed by all relevant stakeholders in the telecommunication industry in Nigeria, NCC as a body is not left out.

It must however be pointed out that some states in Nigeria have also taken the issue of environmen-

tal protection especially as it relates to telecommunication mast installation serious. For instance, Lagos State has a separate regulatory agency which has been put in place to curb uncontrolled installation of telecommunication masts across the state, this action is to support the efforts of the federal government of Nigeria in ensuring environmental protection.²⁴

3. SOME HAZARDS ASSOCIATED WITH TELECOMMUNICATION INSTALLATIONS

It must be pointed out here that a lot of people in Nigeria have gone through hell in one way or the other based on the fact that telecommunication mast was erected very close to their premises. Some people ignorantly allowed these masts to be erected while some people were persuaded to believing that same would never have any adverse effect on them; furthermore, some people are aware of the hazards but they were enticed into allowing same due to huge amount of money being offered them by telecommunication operators. All these effects on human beings and environment at large will be considered one after the other.

3.1. Health hazards

There are series of Research works from the year 2000 from Europe and some other Countries of the world where studies have revealed that there are adverse effects in populations living within 1500' Cell towers. The effects include Headache, skin rashes, sleep disturbance, cardiac arrhythmias, depression and so on in people living near cell towers.²⁵ New Research has also established abandonment of birds' nesting and birth defects in chicks near cell towers as well as permanent fertility loss in some species.²⁶

Also, on cell phone front, some studies have found various adverse effect including brain cancers and salivary gland tumors on the same part or area of the head where the phone was positioned. In 2010, the World Health Organisation (WHO) re-

20 Ibid.

21 *ibid.*

22 *ibid.*

23 *ibid.*

24 *ibid.*

25 Levitte B.B, Cell Towers – Wireless Convenience? Or Environmental Hazard? (iUniverse, 2011), viii.

26 *Ibid.*, ix.

leased a 13-country study called Interphone. Interphone found an excess of malignant glioma brain tumors in those who used cell phones for approximately 30 minutes a day over a period of 10 years.

There was also a prediction by World Health Organisation (WHO) that by the year 2030, more than 13 million people would have died across the globe as a result of various forms of cancers with 21 million cases being diagnosed annually.²⁷

Also, in Sweden, a lot of studies were carried out which revealed that there is a link between EMFs and cancer risk. It is worthy of note that Sweden is the first country in the world to recognize the link between EMFs and cancer risk.²⁸

The overall incidence of cancer has been rising steadily since the turn of the century despite earlier diagnosis, surgical techniques, and improvement in treatments. Viral infections are thought to account for up to 20 percent of some cancers while environmental factors contribute perhaps the remaining 80 percent. Some forms of cancers that have been associated with EMF exposure include cancers of the brain, the blood, the skin, and glandular tissue.²⁹

Cancer can be defined as the wild proliferation of cells that were at one time in a normal state. EMFs in various frequencies have been found to cause the kind of genetic damage that could lead to such abnormalities; to influence cell division at a crucial stage of mitosis, and to promote an increased rate of growth in cells that are already tumorigenic. There is a body of evidence that shows that brain tumors may actually be markers for EMF exposure. About 20 different studies have found association between EMFs and brain tumors with ten studies showing strong statistically significant increases in brain tumors in high EMF occupational exposures or in the children of such workers.³⁰ This actually shows even the long term effect of exposure to EMFs. It shows that even the unborn children are partakers of the menace of exposure to EMFs. The most common form of brain cancer is glioma, a tumor which occurs in the supportive tissues of the brain. Astrocytomas are the most common subtype of gliomas and it is astrocytomas that have been

found to be significantly elevated in people exposed to higher levels of EMFs for more than five years in some studies.³¹

In addition, Leukemia has been linked to exposure to EMFs. Leukemia is the cancer of the blood. It is characterized by the production of abnormal and immature white blood cells called leukocytes, which as the disease progresses, interferes with the healthy white blood cells (granulocytes) that the body requires to fight bacteria, viral and other infections. Red blood cells which are responsible for oxygen transport throughout the body and blood platelets needed for clotting are also affected. As healthy white blood cells decrease, infections set in: as healthy red blood cells decreases, anaemia and bleeding disorders take over; before one discovers, the whole organs of the body are affected adversely.³²

The lower House at the National Assembly in Nigeria³³ is so concerned with the indiscriminate installation of telecommunication masts in the country and sounded a note of warning in respect of same in the floor of the House during one of their sessions sometimes ago³⁴. Also Telecommunications EMF Emission Protection Bill is now being sponsored by the House of Representatives Committee on Science and Technology. It is aimed at creating limits on human exposure to EMF and minimum requirements for the protection of the public and workers from risks to their health. This will protect citizens from possible effects of radiations from telecommunication installations when it is finally passed.

A lot of Nigerians have developed one form of ailment or the other and they have associated it with the Telecommunication mast being installed close to their premises and claimed that they had no such ailment until the Mast was brought to their environment.

According to a medical report issued at the University of Ado Ekiti Teaching Hospital established that telecommunication masts in residential areas could pose health challenges. One of the victims of this risk, Pa Afolabi Oyekanmi who allowed a telecommunication company to install a mast in his

27 Ibid.

28 Levitte B.B, *Electromagnetic Fields: A Consumer's Guide to the Issues and How to Protect Ourselves* (Blackprint.com,2007), p. 208.

29 Ibid. p. 203.

30 Ibid. p. 204.

31 Ibid. p. 205.

32 Ibid. pp. 206-207.

33 The House of Representatives is the lower legislative arm of government at the federal level in Nigeria.

34 <http://www.thepointernewsline.com> Accessed 3rd December, 2015.

compound is now full of regrets. In his words, it is the cause of his myriad of health challenges. He said “I curse the day the mast was erected here. If I die, the telecom company is responsible”. The medical report issued to him confirmed that some of his ailments were caused by radiation from telecommunication mast.³⁵

3.2. Destruction of lives and property

The way and manner Telecommunication masts are being installed in Nigeria nowadays is so alarming. Despite the fact that there are laws put in place to regulate their installations, so many telecommunication industries have failed to comply with these established laws.

It must however be pointed out that there are disparities as regards these laws and the Agencies responsible for this have been into various forms of battles over the citing of these masts. NESREA in its 2011 Regulations stipulates that a mast should be erected at least 10 meters away from the fence of a dwelling/residential building, schools etc. while NCC has only made its own set back to be just 5 meters away. This has posed a lot of problems between the two bodies which actually has adverse effect on the environment at large.

It has been observed in Nigeria that Telecommunication industries have failed woefully in complying with these laws as Telecommunication masts are being installed/erected indiscriminately as rightly observed by the House of Representatives of Nigeria on the floor of the House during one of its sessions recently³⁶.

There are cases where Telecommunication operators make use of substandard materials during the installation of their masts and whenever there is rainfall or heavy wind, such fall on the nearby premises, destroying buildings, other properties while killing those who are unlucky to be close by at that moment and leaving numerous people injured. There have been series of such occurrences in cities like Lagos where Telecommunication masts fall on people thereby causing their untimely death. Not only that, so many hard earned properties have

been lost to this menace. It has also been observed that those buildings that are close to where these telecommunication masts are erected do crack as a result of vibration from the generators put in place to power them.

3.3. Economic Effects

It has been noted that buildings close to telecommunication masts do loose market value³⁷. There are cases where people intend to buy properties and once they are taken to the site and notice telecommunication mast close to the property, such property would not appeal to them again no matter how ridiculous the price may be. This is actually a major problem associated with telecommunication mast installation.

3.4. Pollution

Pollution arises in a situation whereby contaminants are released into the natural environment which eventually leads to negative change, discomfort and instability³⁸. Those things that cause to pollution are referred to as pollutants and they are the major components of pollution which are usually waste materials of various types. Telecommunication installations can be addressed as a major pollutant of this time as it forms part of any form of pollution one may think of as will be rightly brought out and/or explained in this work. Pollution has an adverse effect on the ecosystem and the balance in the environment. By virtue of developments and urbanization, pollution has greatly increased worldwide leading to global warming and various health challenges.³⁹ There are different types/kinds of pollution which are:

- a. Air Pollution
- b. Water Pollution
- c. Soil Pollution
- d. Noise Pollution.

All these forms of pollution will be discussed as they relate to telecommunication installation in Nigeria because they are all present in the course of installation and the use of telecommunication masts throughout the country.

35 Kehinde, A.O., “A Study of The Legal Issues In Environmental Protection As it Affects Telecommunication Installation In Nigeria” (PhD thesis, Igbinedion University, Nigeria 2017) p. 127.

36 Ibid.

37 Community Petitions NCC Over Telecom Mast. Vanguard Newspaper 29th October, 2010.

38 Ibid.

39 <https://www.nationalgeographic.org/encyclopedia/pollution/> Accessed 7th November, 2021.

3.3.1. Air Pollution

This results from the release of harmful substances into the earth's atmosphere. The major air pollutants are: carbon monoxide, chlorofluorocarbons (CFC's), nitrogen oxides and sulfur oxides.⁴⁰

Air pollution is being experienced in Nigeria on daily basis; this is basically as a result of epileptic power supply. Nigerians are forced to result to an alternative way of generating power supply through the use of generating sets. There are several cases of people who died as a result of suffocation from the smoke from their generating sets; these cases can be found on various Nigerian dailies and this is so pathetic. The smoke being generated from these generating sets are air pollutants which is dangerous to the health of Nigerians.

Furthermore, the machineries being used in most industries in Nigeria do emit smoke and release gaseous emissions which are harmful to the society at large. In addition, the level of improper waste management in Nigeria is so high and this is so terrible and disheartening. Refuse are dumped into drainages, some drop it close to premises being inhabited by human beings and where people carry on businesses, some waste boxes being provided by governments and organizations are placed so close to where people reside; as if that was not enough, when the waste boxes are filled up and due for disposal, no action is taken. This affects the quality of life of people because it leads to air pollution and when bad odors are inhaled, such leads to various health hazards.

In respect of telecommunication masts, most of these masts are being powered through the use of generating sets and this is as a result of the poor electricity supply in the country. The smoke from these generating sets too contributes to the higher level of pollution being experienced in the country. If one observes Nigeria closely, the erections of these telecommunication masts are so massive. Each telecommunication operator has their masts even so close to each other in some places; this condition is a very terrible one as it affects those who live close by greatly and even affects the whole area, community, town, state and the entire country at large. This analysis shows how the installation of telecommunication mast has contributed to the level of air pollution being experienced.

40 <http://www.conserve-energy-future.com/PollutionTypes.php> Accessed on 22nd May, 2015.

3.3.2. Water Pollution

This arises when wastes are released into the water and contaminates it.⁴¹

There are several instances where water close to factories and industries are polluted or contaminated through the activities of such industry or factory; that is why it is very essential that Environmental Impact Assessment be carried out before any industry takes off its business so as to evaluate the likely effect its activities may have on the society at large. Any industry that fails to comply with this regulation should be sanctioned accordingly. It must be pointed out here that those who suffer a lot in this regard are those who live in the Niger Delta region of Nigeria.

It is pertinent to state also that installation of telecommunication mast has also contributed to this form of pollution this is because most of the generating sets being used to power the masts do emit oils or diesel which eventually strays to the nearby water and thus pollute same. There are several instances where such has happened and those affected had to lock up their wells and find alternative source of water. I believe actions in Nuisance can be taken against such telecommunication operators so as to caution them in the way their generating sets are being managed.

3.3.3. Noise Pollution

This occurs when the noise level crosses the normal decibel level. Noise has been identified as a form of sound which is unwanted, or sound which is unpleasant and causes discomfort to the ears of the listeners.⁴²

Sound is said to be unwanted when it adversely affects some normal activities which includes but not limited to sleeping and conversation, or reduces quality of life. It must be noted that not all noise amounts to pollution. If it is not something that happens regularly, you cannot call it pollution; you can only refer to it as nuisance. But when it happens or occurs on regular basis, then it amounts to pollution.⁴³

41 Ibid.

42 Khanna, B. (2011, January 3). What are the harmful effects of Noise Pollution. PreserveArticles.Com: Preserving Your Articles for Eternity. Retrieved January 20, 2014, from <https://www.preservearticles.com/environment/harmful-effects-of-noise-pollution/785>

43 <http://www.conserve-energy-future.com/causes-and->

It has been argued by scientists that it is not only human beings that are being affected by pollution.⁴⁴ For instance, aquatic animals are affected by noise pollution coming from big ships on the ocean and other machineries used on waters. Also it has been noted that activities by timber operators and their equipment affect the animals in forest.

Noise usually generates from household machines, heavy vehicles plying our roads, loudspeakers from various religious houses (especially churches and mosques) and so on. All these are experienced on daily basis in Nigeria and it is really affecting all living organisms including human beings.

[effect-of-soil-pollution.php](#) Accessed on 8th June, 2015.

44 Ibid.

RECOMMENDATIONS AND CONCLUSION

As good and effective as telecommunication mast installation is, the hazards its advent has brought on Nigerians and Nigeria's natural environment cannot be overemphasized especially with respect to the leadership tussle between the two major regulatory bodies in the telecommunication industry and the negative effects highlighted above. From the above discussion, there is a need for Nigeria government and other relevant stakeholders in the telecommunication industry to intervene and ensure that the leadership tussle is resolved as urgently as possible and the relevant laws are enforced to ensure compliance on the part of telecommunication operators so as to ensure environmental protection.

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