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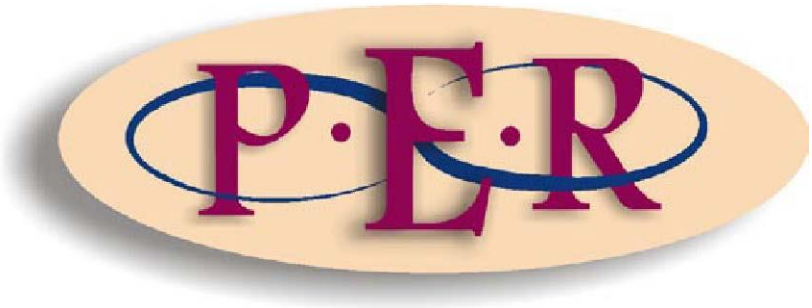

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ICT LAWS IN NIGERIA: PLANNING AND REGULATING A SOCIETAL JOURNEY INTO THE FUTURE

PC Obutte*

> The coverage of ICT goes beyond such activities as programming, networking and analyzing. It enables the usage of computers and related tools to enhance … the quality of life.[1]

1 Introduction

In Nigeria, the question of the importance, relevance and purpose of regulation in the Information and Communications industry has not been properly considered. The issuing of licences to operators in the telecommunications industry about 10 years ago and contemporary experiences due to services and regulatory convergence has not changed the situation. However, it does not seem that a decision to purposively regulate the sector has been made by the national regulator, considering the view that:

> Convergence brings better services in the telecoms sector. We don't have a say on the issue of convergence trends. That is purely technological and beyond any regulatory institution.[2]

This paper appraises the legal and regulatory framework for regulating ICT in Nigeria with a view to answering the following questions: is it possible to regulate the provision and usage of ICT services in Nigeria?; is it necessary to regulate ICT services in Nigeria?; and is it beneficial to regulate ICT services in Nigeria? To evaluate these questions, the paper presents an overview of the laws that pertain to the ICT sector in Nigeria and the institutional regulatory framework for enforcing those laws. Further, the clarification of some important concepts associated with ICT

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1 Obayelu and Ogunlade 2006 *IJEDICT* 65.

2 Juwah "Driving Convergence" 4.

is undertaken. In addition, the paper discusses some contemporary ICT issues in a way that illustrates their linkage with the challenges of ICT in Nigeria. The paper thereafter suggests some regulatory benchmarks to reposition the ICT sector to enhance the sustainable regulation of ICT in Nigeria.

2 Laws on information and communications technology in Nigeria

2.1 The Wireless Telegraphy Act[3]

The *Wireless Telegraphy Act* (WTA) was initially enacted in 1961. Having preceded all other extant laws in the sector, the WTA nevertheless continues to provide clarity in relation to the nature of the regulatory management of communications in Nigeria. Essentially, the Act seeks to regulate the licensing, location and operation of wireless telegraphy[4] services in Nigeria. Under the Act, it is an offence for a person to establish or use any station for wireless telegraphy, or install or use apparatus for wireless telegraphy except in accordance with a licence issued by the Commission.[5] In this regard, the "Commission" is defined to mean the Nigerian Communications

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3 *Wireless Telegraphy Act* of 1990.

4 Under the WTA, "wireless telegraphy" is defined to mean "… the emitting or receiving, over paths which are not provided by material substance constructed or arranged for that purpose, of electro-magnetic energy of a frequency not exceeding three million megacycles a second, being energy which either-
(a) serves for the conveying of messages, sound or visual images (whether the messages, sound or images are actually received by any person or not), or for the actuation or control of machinery or apparatus; or
(b) is used in connection with the determination of position, bearing or distance, for the gaining of information as to the presence, absence, position or motion of any object or any objects of any class, and reference to stations for wireless telegraphy and apparatus for wireless telegraphy shall be construed as references to stations and apparatus for the emitting or receiving as aforesaid of electro-magnetic energy as aforesaid: provided that where-
(i) a station or apparatus for wireless telegraphy cannot lawfully be used without license or could not lawfully be used without a licence but for regulations under this Act; and
(ii) any such electro-magnetic energy as aforesaid which is received by that station apparatus serves for the conveying of messages, sound or visual images; and
(iii)any apparatus is electrically coupled with that station or apparatus for the purpose of enabling any person to receive any of the message, sound or visual images, the apparatus so coupled shall itself be deemed for the purpose of this Act to be apparatus for wireless telegraphy." See s 2 of the WTA.

5 Ss 4-6 of *Nigerian Communications Act* of 2003 (NCA).

Commission (with regard to telecommunications matters) and the National Broadcasting Commission (with regard to broadcasting matters).[6]

2.2 The Nigerian Communications Act[7]

The Act was enacted in 2003 to create a regulatory framework for the Nigerian communications industry.[8] The Act established the Nigerian Communications Commission (NCC) as an independent National Regulatory Authority (NRA) for the telecommunications industry in Nigeria.[9] The Act further created provisions for the licensing and operations of telecommunications service providers and other related matters.[10] Ten years after the enactment of the Act, it remains doubtful that the regulator has discovered and effectively utilised the sector–specific regulatory powers conferred on it under the legislation.[11]

2.3 The National Broadcasting Commission Act[12]

The Act was first promulgated as a Decree on 24 August 1992. However, the Decree and its amendments have been adopted as an Act of the National Assembly. The *National Broadcasting Commission Act* therefore regulates radio broadcasting activities in Nigeria, as well as the licensing of Cable, DTH and all terrestrial radio and television services. It aims to implement the National Mass Communication Policy of the Federal Republic of Nigeria and also sets standards with regards to the contents and quality of materials being broadcast over the country's radio waves.[13] Though a critical component in convergence, neither the law nor the institution

6 S 3 of the NCA.
7 See the NCA.
8 S 1 of the NCA.
9 S 3 of the NCA.
10 S 2 of the NCA.
11 Further see, Advocacy for Social Rights *The Punch* 24.
12 See the *National Broadcasting Commission Act* 38 of 1992 (amended by Act 55 of 1999) (NBC Act).
13 See the NBC Act.

appear interested in regulatory convergence[14] in the manner that technology has made it possible for broadcasting, internet and phone calls to occur through the use of one piece of equipment, such as a computer or a mobile phone.

2.4 The National Film and Video Censors Board Act[15]

The *National Film Video Censors Board Act* was enacted in 1993. The Act established the National Film Video Censors Board as a regulatory body to regulate the films and video industry in Nigeria. The Board is empowered by law to censor, approve and classify all films and videos whether imported or produced locally.[16] It is also the duty of the Board to register all films and video outlets across the country and to keep a register of such registered outlets.[17] Over the years, the NFVCB has operated without interfacing with either the National Broadcasting Commission or the Nigeria Communications Commission. The separate institutional and operational focus of the ICT sector agencies leaves many practices potentially harmful to consumers unsanctioned.

3 The institutional framework

3.1 The Nigerian Communications Commission[18]

The Nigerian Communications Commission (NCC) was established by the *Nigerian Communications Act* as an independent national regulatory authority for the telecommunications industry in Nigeria.[19] The 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

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14 Merging the National Broadcasting Commission (NBC), Nigerian Communications Commission (NCC) and National Information Technology Development Agency (NITDA) as one regulatory entity for the Information and Communications Technology (ICT) sector.

15 *National Film Video Censors Board Act* 85 of 1993.

16 See *Evangelist Mrs Helen Ukpabio v National Films and Video Censors Board* unreported case number CA/A/ 103/06 of 9 January 2008.

17 See generally the *National Film Video Censors Board Act* 85 of 1993.

18 See the NCA.

19 See s 3 of the NCA.

throughout the country.[20] The main functions of the NCC, apart from implementing the WTA, include, *inter alia:*

> (a)The facilitation of investments in and entry into the Nigerian market for the provision and supply of communications services equipment and facilities;
> (b)The protection and promotion of the interest 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 the protection of communications services and facilities providers from the misuse of market power or anti-competitive and unfair practices by other services or facilities providers or equipment suppliers.[21]

3.2 The National Broadcasting Commission[22]

The National Broadcasting Commission (NBC) is established by the *National Broadcasting Commission Act*.[23] The NBC is responsible for advising the federal government on the implementation of the National Mass Communication Policy, with particular reference to broadcasting as well as licensing Cable, DTH, and all terrestrial radio and television services. The NBC is also responsible for undertaking research and development in the broadcast industry, upholding the principles of equity and fairness in broadcasting, and establishing and disseminating a national broadcasting code, while also setting standards with regards to the contents and quality of the materials broadcast.[24]

3.3 The National Information Technology Development Agency (NITDA)[25]

Following the approval of the National Information Technology Policy (National IT Policy) by the Federal Government of Nigeria in March 2001, the National

20 See the NCA.
21 S 3 of the NCA.
22 See the NBC Act.
23 See the NBC Act.
24 See the NBC Act.
25 See the *National Information Technology Development Agency Act* of 2007 (NITDA Act).

Information Technology Development Agency (the NITDA) was established in 2001 under the Federal Ministry of Science and Technology. It was initially given with the task of implementing the policy through coordinating and promoting the development and use of information technology in Nigeria.[26] Later, in 2007, the NITDA was formally established under an Act of the Nigerian National Assembly.[27] The primary functions of the NITDA under the law comprise these: (a) creating a framework for the planning, research, development, standardisation, application, coordination, monitoring, evaluation and regulation of information technology practices, activities and systems in Nigeria and all matters related thereto and for that purpose;[28] (b) providing guidelines to facilitate the establishment and maintenance of appropriate infrastructure for information technology and systems application and development in Nigeria for the public and private sectors, urban/rural development, the economy and the government;[29] (c) developing guidelines for electronic governance;[30] (d) developing guidelines for the networking of public and private sector establishments;[31] (e) developing guidelines for the standardisation and certification of information technology Escrow Source Code and Object Code Domiciliation, Application and Delivery systems in Nigeria;[32] (f) rendering advisory services in all information technology matters to the public and private sectors;[33] (g) introducing appropriate regulatory policies and incentives to encourage private sector investment in the information technology industry;[34] (h) determining critical areas in Information technology requiring research intervention and facilitating research and development in those areas; and, (i) accelerating internet penetration in Nigeria and promoting sound internet governance.[35]

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26 See Udotai "Growth and Challenges of Information Technology" 231; Ajayi "NITDA and ICT in Nigeria".
27 The NITDA Act.
28 S 6(a) of the NITDA Act.
29 S 6(b) of the NITDA Act.
30 S 6(c) of the NITDA Act.
31 S 6(d) of the NITDA Act.
32 S 6(e) of the NITDA Act.
33 S 6(f) of the NITDA Act.
34 S 6(g) of the NITDA Act.
35 S 6 of the NITDA Act.

An additional function of NITDA is to advise the Federal Government generally on issues related to the management and administration of Nigeria's country code top level domain (.ng) and also to supervise any organisation incorporated under the laws of Nigeria to manage and administer Nigeria's country code top level domain (.ng)[36]

3.4 The National Environmental Standards and Regulation Enforcement Agency[37]

The National Environmental Standards and Regulation Enforcement Agency (NESREA) was established in 2007 by the *National Environmental Standards and Regulation Enforcement Agency (Establishment) Act*. The Agency is responsible for ensuring the effective enforcement of environmental laws and regulations in the country, except in the oil and gas industry. The Act establishing the Agency creates provisions for the setting of air quality standards and atmospheric protection.[38] The Act also prohibits the discharge of hazardous substances into the air or upon the land and waters of Nigeria or at the adjoining shorelines except where such discharge is permitted or authorised under any law in force in Nigeria.[39] Importantly, these provisions constitute a framework for controlling hazardous emissions from telecommunications and ICT equipment to prevent environmental and health hazards. An oversight in the law is illustrated by incessant confusion between the NESREA and the NCC's competing claims over the regulation of masts.[40]

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36 Second schedule, s 6(m) of the NITDA Act - Supplementary Provisions Relating to the Supervision of the Management of the Country Code Top-level Domain (.ng) on the Internet.

37 The *National Environmental Standards and Regulation Enforcement Agency (Establishment) Act* of 2007 (NESREA Act).

38 S 20(1) of the NESREA Act.

39 S 27(1) of the NESREA Act.

40 See for example Osuagwu *The Vanguard.*

3.5 The Standards Organisation of Nigeria[41]

The Standards Organisation of Nigeria (SON) was established under the Standards Organisation of Nigeria Act[42] as a regulatory framework for enforcing standardising methods of production in Nigeria. The SON is required under the law to be actively involved in the inspection of imported goods and quality assessment at the ports and manufacturing establishments. The importance of this exercise is enormous, considering the economic, health and safety implications of the influx of substandard goods into the country. This regulatory function of the SON extends to the ICT industry in the regulation and enforcement of standards of ICT products and equipment manufactured in the country or imported from elsewhere.

4 Conceptual clarification

4.1 The utility and centrality of communications (services)

The centrality of communication services refers to the fundamental principle that the communications sector is of strategic importance to any economy. Thus ICTs, while being tradable services in their own right, are also the infrastructure over which other goods and services are traded and delivered in the present age.[43]

4.2 Economic, legal, self/owner regulations

The concept of regulation, though relative in meaning depending on discipline, has often been applied without recourse to fitness within context. The justifications, after enormous loss must have been suffered by the state from misapplication of the term, extend to its fluidity. Nonetheless, caution is required in its usage while effort should be made in ensuring it is construed with full understanding of requirements of context.

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41 See SON 2011 http://www.son.gov.ng/.
42 See the *Standards Organisation of Nigeria Act* of 2004.
43 Walden "Telecommunications Law and Regulation" 4.

4.2.1 Economic regulation

This refers to eco-legal dimensions of the relevant market, including the ICT market. It generally extends to processes designed to fulfill government's existing duty to protect the public from the harmful conduct of others in the marketplace. A typical mechanism employed in this context is competition/anti–trust law. In the absence of an appropriate legal framework, the licensing of service providers has been one of the most important tools in the economic regulation of ICTs in Nigeria. This area of ICT regulation is presently guided by some basic principles, which include:

a. preventing the possible abuse of monopoly power or a dominant position by operators;
b. increasing competition; and
c. limiting the cost of regulation to what is essential.[44]

4.2.2 Legal regulation

This aspect encompasses all aspects of the legal management of the ICT sector or market. It includes the establishment of adequate legal measures such as sector-specific laws, regulations and policies that enable the creation of an enabling environment for the sustainable development of the ICT sector. This aspect also includes other legal requirements such as guidelines, directives and standards established by the relevant regulatory authorities in the form of infrastructural and operational requirements for network infrastructure operators, service providers, manufacturers and marketers of software and other IT equipment.

4.2.3 Self/owner regulation

This represents a regulatory approach that shifts most of the regulatory burdens of ensuring standards in ICTs from the government's regulatory institutions to the

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[44] Correa "Economics of Telecommunications Regulation" 56-58.

service providers.[45] Here the prevailing notion is that market players know best how they should be regulated, especially where there is no large power disparity between the dominant and other operators.[46]

4.3 Deregulation and re-regulation

The concept of "deregulation" has to do with the liberalisation of an economic sector. This involves the removal of certain restrictions to enable the easy entrance of new service providers in order to enhance competition and discourage the formation of monopolies. Re-regulation refers to the reintroduction of a regulatory regime for the purpose of restoring order in any economic market.[47]

4.4 Economic policies and the evolving ICT market

4.4.1 The commercialisation and privatisation of Nigeria Telecommunications PLC (NITEL)

Prior to the liberalisation of the Nigeria telecommunications sector, the Nigeria Telecommunication PLC (NITEL), a federal government entity, had a monopoly in the provision of all telecommunications services in the country. However, the organisation was not permitted to make a profit while rendering such services. Later the federal government commercialised NITEL, thus allowing the organisation to make a profit. Nevertheless, this economic policy did not produce the expected impact with regards to improving the quality of telecommunications services and the viability of the Nigerian telecommunications market. Following the recent liberalisation of the Nigerian telecommunications sectors, the federal government privatised NITEL in very controversial circumstances. As a result of this, there has

45 Walden "Telecommunications Law and Regulation" 10.
46 Buckingham *et al* "Telecommunications Reform" 800.
47 Reregulation is often implemented in response to an unsatisfactory outcome of the policy of deregulation.

not been any positive economic benefit accruing to the public from the commercialisation and privatisation of NITEL.

4.4.2 Universal services/access

Universal service/access is primarily concerned with making available the provision of certain sets of telecommunications services as widely as possible, both geographically and socially.[48] The idea behind universal services is to provide a safety net, to ensure that telecommunications services are used by the majority, efficiently making available quality services for users in an appropriate fashion and at an affordable price.[49]

5 Contemporary issues

5.1 Internet governance

Internet governance refers to regulatory mechanisms put in place to ensure the equitable allocation of internet resources such as domain names and internet protocol (IP) addresses. Some notable regulatory mechanisms in this regard have evolved. These include the Internet Corporation for Assigned Names and Numbers (ICANN) and the Nigeria Internet Registration Association (NIRA). Although there is presently no potent legal or regulatory framework to guide conduct on the internet, efforts are made to do so at inter-governmental level through ICANN.

5.1.1 The Internet Corporation for Assigned Names and Numbers (ICANN)[50]

The ICANN was founded over ten years ago as a non-profit, multi–stakeholder organisation dedicated to coordinating the Internet's address system. The

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48 Walden "Telecommunications Law and Regulation" 11. See ITU "ICTs and the Millennium Development Goals".

49 OFTEL Universal Telecommunications Services; Kemmitt and Angel "Telecommunications Regime"v156.

50 See ICANN 2011 http://www.icann.org/.

organisation, based in California, seeks to promote competition in the domain name marketplace while ensuring Internet security and stability. The organisation has established a set of principles known as the Uniform Dispute Resolution Policy (UDRP) for Domain Names[51] to guide the resolution of domain name disputes. The policy establishes a procedure for the online resolution of disputes relating to internet domain names. It also proposes a non–national authority for the resolution of internet domain name disputes, which avoids the competition and conflict that arise from the existence of a variety of national courts and rules.[52]

5.1.2 The Nigerian Internet Registration Association (NIRA)[53]

The Nigerian Internet Registration Association (NIRA) was founded on March 23, 2005 as a stakeholder-led organisation responsible for the management of Nigeria's Country Top Level Domain Name (ccTLD) .ng. The NIRA's creation was the end of a long period of inactivity and dispute about the appropriate management of this important national resource. The organisation is coordinated by NITDA, with stakeholders drawn from within Nigeria's Internet Community. The NIRA seeks to maintain and promote the operational stability and utility of the .ng ccTLD and, by ensuring cost effective administration, to promote the development and establishment of a policy framework for the development and administration of the "ng", "cc" and "TLD".

5.2. Jurisdictional questions

A disturbing legal issue has been that of finding the appropriate jurisdiction where valid judicial enforcement could take place in situations where two parties in different jurisdictions enter into a contract or an enforceable agreement over the

51 ICANN 2011 http://www.icann.org/.
52 ICANN 2011 http://www.icann.org/.
53 See NIRA 2011 http://www.nira.org.ng/index.php/about-nira.

internet. Private international law, although not conclusive, has attempted to provide a traditional solution through the "forum state" and "target state" system.[54]

5.2.1 The forum state system

Under this system, legal obligations in cyberspace are restricted to a particular territorial jurisdiction defined in an online contract. Such jurisdiction will be the forum state, and legal action cannot be brought to enforce any obligations between the parties except in that jurisdiction. The forum state system is generally supported by the business community, which places much emphasis on the risk of having to protect itself against proceedings in a wide range of jurisdictions. This position is strengthened by the realization that it may be difficult on the one hand to restrict the field of such claims to a given jurisdiction because an internet site is published worldwide, and on the other hand, there is a real and "virtual" challenge in identifying the user's location with certainty.[55]

5.2.2 The target state system

Under the target state system, legal obligations in cyberspace are not restricted to a particular territorial jurisdiction, but extend to the jurisdiction where a consumer is located. This system is preferred by consumer advocates because it tends to provide consumers with more extensive protection by allowing them to institute legal proceedings in their own countries and consequently take to advantage of their own national laws on consumer protection.[56]

5.3 Net neutrality

Net neutrality refers to the concept that a broadband network should operate without any restrictions on the kinds of equipment attached to it, or on the mode of

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54 Benyehlef and Fabien 2005 *Lex Electronica* 55-58.
55 Benyehlef and Fabien 2005 *Lex Electronica* 55.
56 Benyehlef and Fabien 2005 *Lex Electronica* 55.

communication allowed.[57] "Net neutrality" is a principle that advocates no restrictions by internet service providers and governments on content, sites, platform, kinds of attachment, and the modes of communication. The principle states that if a given user pays for a certain level of internet access, and another user pays for the same level of access, then the two users should be able to connect to each other at the subscribed level of access. Neutrality proponents claim that telecommunications services providers seek to impose a "tired" service model upon users in order to control the paths and pipeline of internet services provided by them. They further argue that such would remove competition, create artificial scarcity, and oblige subscribers to buy uncompetitive services. Many believe that net neutrality is primarily important as a preservation of current freedoms. Vinton Cerf, co-inventor of the internet protocol, and Tim Berners-Lee, creator of the Web, have strongly supported network neutrality.[58]

5.4 Convergence

Convergence refers to the integration or merging of previously separate services in telecommunications/telephony, media/broadcasting and internet technologies into a single technological unit. The practical consequence is interoperability and the ability to access and operate services through a single device e.g. accessing the internet or a broadcast through a mobile phone. According to the ICT Regulation Toolkit "Convergence" is facilitated by the transition from analogue to digital, voice to data, narrowband to broadband, circuit switched to packet switched, one way to interactive, scarcity to abundance, and the accompanying digitalization of all content. Generally, convergence allows both previously separate sectors and entirely new sectors to compete in the same newly expanded market space.'[59] For example, there are already numerous examples of markets offering IPTV and mobile

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57 Uhls 2007 http://www.imprintmagazine.org/life_and_style/digital_divide_issue_net_neutrality.

58 See Cerf 2005 http://googleblog.blogspot.com/2005/11/vint-cerf-speaks-out-on-net-neutrality.html. Further see Wyatt 2013 http://bits.blogs.nytimes.com/2013/05/20/aid-for-f-c-c-in-defending-its-net-neutrality-rules/?ref=netneutrality.

59 InfoDev and ITU 2009 http://www.letregualtionstoolkit.org/en/sections.html.

59 InfoDev and ITU 2009 http://www.letregualtionstoolkit.org/en/sections.html.

television. In this new, converged market space, customers can expect the seamless provision from multiple sources on a single device of all electronic communications for one supplier competing with many other suppliers.[60] However, convergence is not complete in most developing countries, such as Nigeria. The implication is that the benefits of a converged ICT environment have been limited by the absence of a converged regulatory environment as well as a binding legal framework. Having the preceding pillars in place would support interoperable technologies that drive convergence and enable consumers to enjoy the benefits of convergence.

The contemporary challenge with convergence in Nigeria in contrast to other experienced market systems such as Europe is the reluctance to embrace regulatory convergence.

5.5 Electro-magnetic radiation (EMR) and health concerns

There are health dimensions to ICT usage. However, between governments and ICT operators in many jurisdictions, it seems that the attempt is chiefly to discredit claims that there are health hazards rather than to structure an effective legal regime that guarantees best practice. The topic readily provides a platform for controversy due to the possible liability that may attach to some practices. Notwithstanding, there are grounds to conclude that telecommunications equipment such as base stations as well as mobile phones do in fact emit electro-magnetic radiation that is ultimately harmful to the health of human beings.[61] Electro-magnetic radiation consists of waves of electric and magnetic energy moving together through space at the speed of light.[62] Issues regarding the harmful health impact of electro–magnetic radiation from base stations have been the subject of legal disputes in several countries. For example, in 2002 Vodafone, a GSM operator in Britain, sought to install mobile telephone antennae in the towers of the churches of St Margaret, Hawes and Holy Trinity, Knaresborough, in Leeds, England. This

60 InfoDev and ITU 2009 http://www.letregualtionstoolkit.org/en/sections.html.
61 See N'ukhet Yilmaz Turgut 2008 *JBL* 269-289.
62 Onwuegbuchi 2008 http://nigeriacommunicationsweek.com.ng/node/263.

action resulted in objections from residents who lived within the vicinity of the churches, primarily on the grounds of the risks to their health from living close to the antennae. Vodafone petitioned the court in the combined cases of St. Margaret Hawes (No 215 of 2002) and Holy Trinity Knaresborough (No 233 of 2002). The issue for determination before the court was whether or not radiation from a telecommunications base station might affect the health of people in the vicinity of such base stations. The matters were resolved by determining the appropriate base station radiation emission threshold.[63]

In Nigeria, all deployed telecoms equipment, installations, terminal equipment, mobile handsets and equipment in customers' premises sold by all Nigeria telecom operations in their various bundled promotions are required to be type–approved by the telecommunications industry regulator, the Nigeria Communications Commission (NCC). This is in compliance with the electro-magnetic field (EMF) thresholds set by the International Commission on Non-ionising Radiation Protection (ICNIRP) guidelines, the ITU, Institute of Electrical and Electronic Engineers (IEEE), amongst other industry standards-setting bodies.[64] While the debate on whether or not emissions pose health threats for Nigerian users of identified products continues, NESRA has fiercely sustained the task of regulating the related practices and the location of base stations to prevent environmental health hazards.[65]

5.6 The telecommunications three 'As': accessibility, availability and affordability

5.6.1 Accessibility

Telecommunications services should be accessible to subscribers/consumers that have subscribed to such services. In developed societies such as Finland and some

63 Onwuegbuchi 2008 http://nigeriacommunicationsweek.com.ng/node/263.
64 Onwuegbuchi 2008 http://nigeriacommunicationsweek.com.ng/node/263.
65 See Ezekiel 2010 http://www.nigerianbestforum.com/generaltopics/nesrea-vs-ncc-raging-battle-over-regulation-of-telecoms-masts/.

other European countries, the denial of access to anyone who deserves access is taken very seriously. The principle essentially implies that telecommunications services should be accessible to all individuals, especially for emergency purpose.

5.6.2 Availability

Telecommunications services should always be available to subscribers/consumers when such services are requested by them, notwithstanding the time of the request and the location. Some successes have been recorded since the sector was liberalised.[66] However, more could have been achieved in tariff reduction and the efficiency of the service provided,[67] judging from what obtains in other societies.

5.6.3 Affordability

Telecommunications services should be available to all subscribers at affordable prices. This policy aims to prevent the occurrence of a "digital divide" in the use of telecommunication services amongst earners of different levels of income. Considering the importance of telecommunications, it is required that services should be affordable without discrimination to people of varied social status. With the principle of affordability determining tariff plans across a number of mobile operators, there will still be an opportunity to supply advanced services to persons who prefer them and would be ready to pay for applications or services available in a network regardless of cost.

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66 As indicated elsewhere, for example, instead of undertaking unnecessary journeys people make phone calls to obtain the needed market and financial information. The lower cost of mobile communications compared with fixed telephony is often held up as one of the main financial gains of the system, especially in areas outside Lagos. See generally Pyramid Research 2010 http://www.pyramidresearch.com/documents/IMPACTofMobileServicesInNIGERIA.pdf 62.

67 See Akosile 2013 http://saharareporters.com/letter/fraud-perpetrated-mobile-service-providers-nigeria, in comparison with Ndibe 2013 http://saharareporters.com/column/who%E2%80%99s-exploiting-nigerian-mobile-phone-users-okey-ndibe.

6 Local challenges

For the purpose of illuminating significant themes and questions for the present and future regulatory management of the ICT sector in Nigeria, the sub-theme of this paper is an examination of selected challenges affecting ICT delivery in the country.

6.1 Consumer protection

The protection of ICT consumers has posed a major challenge to ICT regulation in Nigeria. This problem has been compounded by the continuous impact of convergence in the ICT environment. Presently, various regulatory frameworks for ICT in Nigeria have not created adequate measures to ensure synergy and create an enabling environment for the adequate protection of consumers. In this regard, it should be noted that the Consumer Affairs Bureau (CAB)[68] of the Nigerian Communications Commission (NCC) has not painstakingly remedied the complaints of telecommunications consumers in the face of convergence. Given this state of affairs, it is necessary to ensure the existence of appropriate consumer protection mechanisms in a converged ICT environment.[69]

6.2 Computer-generated documentary evidence

In 2011 a new *Evidence Act* was enacted to authorize the admissibility of "statements contained in a document produced by a computer … as evidence".[70]

The fact that computer-generated documents were previously inadmissible had made life difficult for the courts, and had created situations that undermined the

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68 The Consumer Affairs Bureau (CAB) of the Nigerian Communications Commission (NCC) was established in September 2001 to inform, educate and protect the consumers of telecommunications services in Nigeria. The CAB is responsible for responding to consumer complaints.

69 Buckingham and Williams "Designing Regulatory Frameworks" 881.

70 S 84(1) of the *Nigeria Evidence Act* of 2011.

activities of government as well as private individuals in Nigeria.[71] For instance, the Nigerian contract laws required that a contract should be oral or in writing, and never contemplated the formation of electronic contracts.[72] Under the new regime, however, documents in electronic formats containing electronic signatures as verification, for instance, will freely be processed, thus closing the earlier legal vacuum.[73] The earlier judicial interpretations[74] on the admissibility of electronic documents created juridical confusion as there were conflicting decisions across various courts in the land, including the Supreme Court. Some confusion may still occur in the interpretation of "computer" and "equipment" to include mobile phones for the purposes of admissibility.[75] Construed purposefully, it is should not be difficult to recognise that mobile phones are considered within the contemplation of the *Evidence Act* of 2011.

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71 The concern re crime in cyberspace was recently highlighted in a report that "The United States leads with 65 per cent of cyber-criminal activities, the United Kingdom with 9.9 per cent while Nigeria is the next hub of cyber criminals in the world with eight per cent". The report particularly noted that "over $557m was lost globally to cyber criminals in 2009 while a 22 per cent increase in cybercrime was recorded globally between 2008 and 2009". See generally Ogunseye *NBF Topics* 12.

72 Udotai "Growth and Challenges of Information Technology" 234.

73 For some years now the *Nigerian Electronic Transactions Bill*, 2011 has been pending before the National Assembly. The Bill proposes to facilitate the use of information represented in electronic media, regardless of the technologies employed, by giving electronic documents functional recognition. See Udotai "Growth and Challenges of Information Technology" 234-233.

74 See the cases of *Nuba Commercial Farms Limited v NAL Merchant Bank Ltd* 2002 24 WRN 157, 2003 FWLR (Pt 145) 661 CA; and *EFCC v Fani-Kayode* unreported case of 2009, where the Court of Appeal and the High Court respectively held that hard copies of electronic documents could not be admitted as evidence under the *Nigerian Evidence Act*. Contrast this with the position of the Supreme Court in the cases of *Esso West Africa Inc v Oyegbola* 1969 1 NNLR 194 and *Anyeabosi v RT Briscoe (Nig) Ltd* 1987 3 NWLR (Pt 59) 84; 2 NSCC (Vol 18 Pt 2) 805, where the Supreme Court held that hard copies of electronic documents were admissible as evidence. See also the case of *Ogolo v IMB (Nig) Ltd* NWLR (Pt 419) 314 CA, where the Court of Appeal held that copies of electronic evidence were admissible for further discussions on the admissibility of electronically generated evidence in Nigeria. See Chukwuemerie 2006 *SCRIPT-ed*; Osibanjo "Electronically Generated Evidence" 243; Ohiocheoya and Azuka 2008 *UBLJ* 83; Bamodu 2004 *JILT*.

75 While mobile phones were not expressly mentioned under the *Evidence Act*, s 84(5)(c) of the Act may have suggested their inclusion. The section provides that "a document shall be taken to have been produced by a computer whether it was produced by it directly or (with or without human intervention) by means of any appropriate equipment".

6.3 The centrality of telecommunications/ICT services

A major challenges to the ICT system in Nigeria include a dearth of expertise, the regulatory authorities' unwillingness to engage indigenous experts when they are available, and the poor construction and unsatisfactory implementation of sector-specific (eg telecommunications) laws. These challenges result from interpreting the regulations through a narrow lens, a practice that is far removed from the fundamental principles that underlie the provision of telecommunications services.[76] For the purposes of leapfrogging development in transition economies such as Nigeria, the implementation of the principles of affordability, availability and accessibility has been considered crucial. Though service providers are primarily accountable for access to, the availability of and the affordability of telecommunications services, nonetheless the government is still under a statutory obligation to the guarantee integrity of the ICT legal environment and processes.

6.4 Privacy concerns

The huge possibilities and benefits that accompany ICT deployment and indeed, convergence, have been obscured by an indifference to appropriate regulation on privacy. ICT in Nigeria is developing without a legal framework to protect the privacy of individuals in this rapidly evolving ICT environment. This was recently evident in the confusion that attended the telecommunications providers' (and later, the government's) attempts to capture subscribers' data during the SIM registration exercise. The confusion that attended the exercise would be largely traced to the lack of a framework - authorisations, a database, locations, guidelines and procedures relating to the capturing, storage and retrieval of data. Given the many negative uses to which data can be applied, it is necessary to develop a credible regime for the management and regulation of access to the personal data obtained from telecommunications subscribers. In this regard it should be noted that Nigeria

76 Accessibility, availability and affordability.

presently lacks a data protection law. Data[77] protection refers to the protection of the privacy of personal data or information relating to any identifiable individual from all forms of threats and abuses;[78] such as unauthorised destruction, accidental loss and unauthorized access, alteration or dissemination of data.[79]

6.5 The quality of services (QoS)

The poor quality of telecommunications services has been one of the major challenges to the ICT system in Nigeria. One of the causes of this problem has been the poor quality, insufficiency and inefficiency of the basic infrastructure that supports the operation of ICT networks and equipment in Nigeria. For example, it is common knowledge that the electrical power supply in Nigeria is highly erratic, and this renders ICT networks unreliable due to the occurrence of regular power outages and interruptions, and expensive due to having to cover the resulting costs of maintaining ICT infrastructure and equipment in Nigeria. It is doubtful if indifference and harmless threats would provide a remedy to users of the services.[80]

6.6 Broadband deployment

The deployment of broadband infrastructure has been slow in most developing countries, including Nigeria. This has been caused largely by the absence of adequate funding for such initiatives, as well by government insincerity. It had created the USPF to pursue the initiative and to deal with the cost implications of ensuring high speed applicable services.

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77 The term "data" has been defined to mean any "representation of facts, information or concepts in a form suitable for processing in a computer system, including a programme suitable to cause a computer system to perform a function". See A 1(b) of the *Council of Europe Convention on Cybercrime* (2001).

78 See A 2(a) of the *Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data* (1981). See also the *EU Directive 95/46/EC on the Protection of Individuals with regard to the Processing of Personal Data and on the Free Movement of Such Data* (1995).

79 See A 7 of the *Council of Europe Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data* (1981).

80 See for example Channels Television 2013 http://www.channelstv.com/home/2013/12/17/five-years-jail-term-for-poor-telecom-service-in-nigeria/.

6.7 E-commerce and internet banking

E-commerce has to do with commercial transactions that take place electronically or by means of an electronic data interchange.[81] On the other hand, internet banking refers to the use of internet technologies in bank transactions. In this form of banking, customers access their accounts and general information on bank products and services through computers, mobile phones or other intelligent devices[82] after establishing a connection with the bank's computer system over the internet. Internet banking is a form of E-commerce. Presently in Nigeria e-commerce and internet banking have not been fully developed. Consequently, a limited range of e-commerce and banking services are offered through the internet in Nigeria.[83]

7 Benchmarks for repositioning the ICT sector in Nigeria

Some regulatory benchmarks are imperative to repositioning the ICT sector and enhancing the sustainable regulation of ICT in Nigeria. They include the following:

7.1 Consumer confidence

Regulatory institutions in the ICT sector should strive for an improvement in the confidence of the regulated entities on the one hand and on the other, seek to establish similar trust in the business conduct of service providers towards consumers. This can be achieved by ensuring the establishment and enforcement of relevant consumer protection laws and the strict enforcement of the regulations that promote the initiative in the sector. The process will ensure efficient output and an effective outcome in restoring consumer confidence capable of stimulating beneficial economic results from the sector.

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81 OECD *Economic and Social Impact of Electronic Commerce* 28.
82 Carlson *et al* "Internet Banking".
83 Salawu *et al* 2007 *JILT* 490-496.

7.2 Competition law

Competition obligations require institutions to secure appropriate behaviours amongst service providers in the market place. The regulatory authorities require efficient tools to create the requisite enabling environment for competition in the ICT sector in Nigeria. In this connection, there is a need for the enactment of responsive competition legislation and the construction of a formidable institution to regulate economic interactions amongst service providers in Nigeria. The competition rules presently embedded in sector-specific legislation should be vigorously implemented pending the drafting of umbrella legislation.[84]

7.3 The enforcement of regulations in the communications sector

To reposition the ICT sector and enhance the sustainable regulation of ICT in Nigeria there is need for the regulatory institutions and authorities to ensure adequate enforcement of the existing regulations in the sector. Growing frustration with the quality of service and the seeming helplessness of consumers only impede economic development, which is crucial in the transitional economic phase of a country such as Nigeria.

7.4 Data protection legislation

The enactment of data protection laws at the federal level and across the states in Nigeria is an imperative, considering current local and global realities. A data protection law will guide operators and government in establishing clear, minimum safeguards and security measures to protect privacy concerns in e-commerce, communication services[85] and networks as well as web-based applications, transactions and social network sites.

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84 Pitt and Morton-Fincham "Competition Law" 441-498.

85 Concerns expressed by subscribers during SIM card registration underline the need for a statutory framework with clear responsibilities for government, communications providers, e-commerce outlets and several other entities that have so far carried on business as data

8 Conclusion

The nature of the laws in Nigeria reveals the anticipation of a liberalised and regulated ICT sector, although the concept of regulation has not been sufficiently manifested in managing post-reform processes. Furthermore, the rapid technological innovations in the ICT have not changed the regulatory attitude and strategy in resolving associated issues of privacy, jurisdiction and quality of service. These challenges continue to undermine the inherent potential in the sector and the traditionally guaranteed rights of privacy. Securing the optimum protection for consumers in a competitive market requires regulatory and institutional frameworks which are presently lacking in Nigeria. Realities reveal a need to strengthen regulatory practice and reposition the Information and Communications Technology in Nigeria in order to enable further development. The current regulatory practice, for example, of inaction and a refusal to punish criminal breaches of service undertakings, must not be allowed to persist. Effective regulatory response and redress are required for civil violations in the ICT market place, in order to boost consumer confidence and to achieve efficiency in the quality of the service provided.

collections agents in Nigeria. The point must be made that personal data should be dealt with in accordance with strict guidelines.

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LIST OF ABBREVIATIONS

CAB	Consumer Affairs Bureau
ccTLD	Country Top Level Domain Name
DTH	Direct to Home
EFCC	Economic and Financial Crimes Commission
EMF	Electro-magnetic field
EMR	Electro-magnetic radiation
GSM	Global System for Mobile Communication
JBL	Journal of Business Law
JILT	Journal of Information Law and Technology
ICANN	Internet Corporation for Assigned Names and Numbers
ICNIRP	International Commission on Non-ionising Radiation Protection
ICT	Information and communications technology
IEEE	Institute of Electrical and Electronic Engineers
IJEDICT	International Journal of Education and Development using ICT
IP	Internet protocol
IT	Information technology
ITU	International Telecommunication Union
NBC	National Broadcasting Commission

NCA	Nigerian Communications Act
NCC	Nigerian Communications Commission
NESREA	National Environmental Standards and Regulations Enforcement Agency
NESREA Act	National Environmental Standards and Regulations Enforcement Agency (Establishments) Act
NFVCB	National Film Video Censors Board
NIRA	Nigerian Internet Registration Association
NITDA	National Information Technology Development Agency
NITDA Act	National Information Technology Development Agency Act
NITEL	Nigeria Telecommunications PLC
NRA	National Regulatory Authority
OECD	Organisation for Economic Co-operation and Development
OFTEL	Office of Telecommunications
QoS	Quality of service
SON	Standards Organisation of Nigeria
UBLJ	University of Benin Law Journal
UDRP	Uniform Dispute Resolution Policy for Domain Names
USPF	Universal Service Provision Fund
WTA	Wireless Telegraphy Act