

The Relevance of Electronic Signatures in Electronic Transactions: An Analysis of Legal Framework

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Abstract

The paper focuses on the legal framework on electronic signatures in electronic transactions with a view to analyze the extent to which electronic signature techniques can be relied upon in electronic transactions. The impact of Information and Communication Technology (ICT) signifies the relevance of electronic signatures. Electronic signatures are a key instrument in a document enabling electronic transactions-providing that assurance of data validity. The electronic signatures act as a legal attestation of the authenticity of that document with equivalent to handwritten signatures. The obstacle presented in the electronic transaction is the security factor which has been the major setback as the rate of crime increases in the Nigerian cyberspace. The paper further examined the relevancy of electronic signatures in electronic transactions in line with relevant laws at both international and domestic sphere. The paper adopted doctrinal research method approach wherein the relevant data collected was analyzed and the findings brought out. The findings of the paper made a layout in establishing an appropriate flexibility in the set of basic legal rule of conduct for the parties that may become involved in the use of electronic signatures and recommends that the full implementation and enforcement of electronic transaction so as to assist and shape more in harmonizing the laws and financial transaction practices in the cyberspace.

Keywords: Electronic Transaction, Electronic Signatures, Cyber Space, Legal Framework

1. Introduction

The paper focuses on the legal framework on electronic signatures in electronic transactions with a view to analyze the extent to which electronic signature techniques can be relied upon in electronic transactions legally. The integration of internet into our lives has transformed the ways and manner we transact, communicate and even live. The internet has revolutionized the setting of our lives to the extent that a person might even choose to stay home/indoors for days while transacting with the outside world. The essence of electronic transaction is achieved through electronic messages and other documents requiring signature which can be effectively applied in the electronic message where parties agreed to such transactions by electronic means. The application of electronic signatures is usually through the use of ICT.

2. Definition of Internet

Internet is regarded an international computer network connecting other networks and computers from companies, universities¹ etc. Internet was defined in a sound and academic definition as '... network of computers that are globally interconnected. It has three characteristics-random transmission of data; ability to break down data during transit; and the capacity to reconstitute data at the point of receipt.'² The analytical point is that, the definition has broken down the channel of operation of information technology. ICT is the process of utilizing technology to communicate information in text, graphics, audio, video or any format of combining these processes.³

ICT encompasses all forms of technology used to create stored exchange and use information in its various forms (business data, device, conversation, still images, motion pictures, multimedia presentations and other form including not yet conceived).⁴

Nigeria engagement into ICT is quite late, but has been able to recap or match with some of the technological development. The level of transactions and used of cyberspace indicates that ICT in Nigeria is rapidly growing. ICT constitute a viable tool for socio-economic development where businesses and individuals communicate from different parts of the world. The impact and changes in the business practices and communication is a remarkable achievement, in addition to the promotion of local products in international markets, facilitating access to market information for competitive prices for locally produced crafts, clothing and

¹ A. S. Hornby, Oxford Advanced Learner's Dictionary of Current English 6th Edition, Oxford University press 2001, p. 627.

² M. L. Ahmadu, 'Information Technology and Legislative Processes in Nigeria', in M. L. Ahmadu (ed) Legal Prisms: Directions in Nigerian Law and Practice, Usmanu Danfodiyo University Press, Sokoto, 2012, P. 2.

³ Ibid.

⁴ Section 34 of National Information Technology Development Agency Act (NITDA) 2007.

farm produce.¹ Though the development of ICT has offers a number of opportunities to the public which positively impacted the lives of people, it also presented a number of negative aspects which gave birth to the emergence of new conventional crimes that has now developed in a dimensional stages. Those crimes that perpetrated include cybercrime, child pornography, fraud in the electronic transactions and the use of unauthorized access to computer system which has become an endemic practice.²

3. ELECTRONIC TRANSACTIONS

Electronic transactions are processes of transmission of digitalized information related to persons, products and services (e-commerce) and the use of advanced ICT making it easy for information to be collected, stored, transferred, manipulated and retrieved through electronic means.³

3.1 Definition of Electronic Transaction

Electronic transaction is an act of buying or selling something or sending money electronically, especially over the internet. However, many businesses and consumers are unclear about how consumer protection laws can be enforced when electronic transactions take place across borders.⁴

Also an electronic transaction has been defined as business services that utilize ICTs including integral circuit (IC) card, cryptography and telecommunication networks. The application of e-transaction technologies is to respond to essentials changes in socio-economic trends. The transaction system is the structure of institutions, instruments, rules and procedures, standards and technical established to affect the transfer of money between all the parties. A proficient transaction system reduces the cost of exchange in goods and services and in essentials to the functioning of the inter-bank, money and capital markets.⁵

The emergence of new technologies supporting electronic storage, transfer and use of money has significant implications for consumers, corporations, governments and financial institutions. Now with the advancement in the technologies in the electronic transactions, there is Secure Electronic Transaction (SET) which stand as a communications protocol standard for securing credit card transactions over insecure networks, specifically, the Internet. SET was not itself a payment system, but rather a set of security protocols and formats that enabled users to employ the existing credit card payment infrastructure on an open network in a secure fashion. However, it failed to gain attraction in the market. VISA now promotes the 3-D secure scheme.⁶

4. Electronic Signatures

An electronic transactions or e-signature in any electronic document means that a person accepted the contents of an electronic message, or more broadly that the person who claims to have written a message is the one who wrote it (this indicates that the message received is the one that was sent by this person). By comparison, a signature is a stylized script associated with a person. In commerce and in law, a signature on a document is an indication that the person adopts the intentions recorded in the document. Both are comparable to a seal. In many instances, common with engineering companies for example, digital seals are also required for another layer of validation and security. Digital seals and signatures are equivalent to handwritten signatures and stamped seals.⁷

Unlike digital signatures which provides businesses with a method of authenticating a used based on verification through other entities. Digital signatures become viable option with encryption capabilities produced by asymmetric cryptography.⁸ This encryption provides each user with a key pair, including both public and private encryption keys. A key pair is made up of mathematically related numbers, the private keys is composed in part by two large prime numbers. This numbers are multiplied to produce a number that comprise part of the

¹ See for example, <http://www.alibaba.com/countrysearch/NG/craft-supplier.html>, where diverse local business promote and market their artwork, craft, African textiles, beads and other wares. For examples of project facilitating the deployment of ICTs for agricultural development and entrepreneurship in Africa, see Gakuru M, Winters K & Stepman F, 'Inventory on Innovative Farmer Advisory Services Using ICTs', (Forum for Agricultural Research in Africa, 2009), available at http://www.fara-africa.org/media/uploads/File/NSF2/RAILS/Innovative_Farmer_Advisory_Systems.pdf.

² Adejoke O Oyewunmi, 'The ICT Revolution and Commercial Sectors in Nigeria: Impacts and Legal Intervention', British Journal of Arts and Social Sciences, Vol. 5, No. 2, (2012), p. 235.

³ HIPCAR, 'Electronic Transaction: Assessment Report', harmonization of ICT Policies, Legislation and Regulatory Procedures in the Caribbean 2011, P. 1.

⁴ Definition of Electronic Transactions, Cambridge Dictionaries Online, Cambridge University Press.

⁵ Edesiri G. Okoro and Promise E. Kigho, 'The Problem and Prospects of E-transaction (The Nigerian Perspective)', Journal of Research in International Business and Management, Vol. 3 (1), 2013, P. 11.

⁶ Secure Electronic Transactions, Wikipedia, available at http://en.wikipedia.org/wiki/Secure_Electronic_Transaction. Accessed on 23/12/2014.

⁷ Regulatory Compliance: Digital signatures and seals are legally enforceable ESIGN (Electronic Signatures in Global and National Commerce) Act.

⁸ A 'digital signatures' is an authentication method involve hashing. See also Stephen S. Wu, Digital Signature, Authentication and Secure E-commerce, Ill Inst, for Continuing Legal Education, 2002.

public key. It is extremely difficult to work backward from this large to determine the original prime numbers.¹ Digital signatures are used in e-commerce and in regulatory filings are more secure than simple generic electronic signature.² Also the difference between the electronic signature and digital signature is that a digital signature is an electronic signature, but an electronic signature is not necessarily a digital signature. According to the Electronic Signatures Act (full name the electronic signatures in Global and National Commerce Act), an electronic or e-signature is any 'electronic sound, symbol or process' used to sign an electronic transaction. A digital signature is a 'secure' electronic signature which uses encryption and passwords to protect the integrity of the signature and guarantee the authenticity of the party who assigned it.³

The Nigerian electronic transactions recorded a great success both at the banking system and in other financial services. The practices and adoption of electronic payment system in the country increases rapidly, the electronic transfers recorded daily from one bank to other bank in Nigeria are about N 80 Billion.⁴ Further to this, the introduction of cashless policy by the Central Bank of Nigeria, electronic payment has created a new order in financial transactions and this is in compliance with the global financial trends.⁵

The Nigerian financial industries has move through various stages of virtual data storage and majority of the banks, government agencies, corporations and institutions had risen to the challenges of the new order of electronic banking and transactions.⁶ The use of Point of Sale (POS) machines have reduces the number of users at the point of Automate Teller Machines (ATM) queue, the online transactions is the fastest, easier, time, cost and energy saving applications today. Also the use of PAYPAL which has now generated much attention in the transaction services globally.

The benefits of electronic transaction services are striking, for instance for banks and business it includes:⁷

- accumulate 'fee based' income, as a result of 'sharing fee' received by banks from successful transactions.
- simplified bank operation in providing payment transactions services.
- no additional charges for every additional biller.
- low investment cost by banks and businesses.
- payment fee based on transactions

Also the benefits for customers are:⁸

- increases customer service by providing secure easy, instant and flexibility to commit e-payment transactions.

The development of infrastructure and increases in the electronic transactions platform users from all angles of businesses and customers play a role to an increase number of transactions across the globe. Now the discussion turns to legal framework.

5 An Analysis of Legal Framework

The analysis of legal framework of electronic signature in the electronic transactions with a view to examined the international and domestic laws in relation to electronic signatures.

5.1 Council of Europe Convention on Cybercrime

The Convention is the first international Treaty on crime committed through the internet and other computer related-network crimes. The Convention deals with infringement of copyright, computed related fraud, child pornography and violations of network security. It also covers series of powers and procedures such as the search of computer networks and interception.⁹

¹ Ibid.

² 'What is an electronic signatures', Cloudily.com, available at <http://cloudely.com/category/digital-signature-appexchange-2/>. Accessed on 3/1/2015.

³ Search security, techtarget, 'The difference between electronic and digital signatures', available at <http://searchsecurity.techtarget.com/answer/The-difference-between-electronic-and-digital-signatures>. Accessed on 24/12/2014.

⁴ Nigeria Records N 80 Billion Electronic Transactions Daily, Punch Newspaper, October 31, 2014. This was disclosed by Mr. Uzuma Dozie, the new Group Managing Director and Chief Executive Officer of the Diamond Bank plc in discussing the current statistics on business transactions in 'Media Trends in Business and Big Data Management' at the Society and Technology Conference and Exhibition 2014 in Lagos.

⁵ Ibid.

⁶ Ibid.

⁷ 'Electronic Transaction', Telkomsigma, available at <http://www.telkomsigma.co.id/e-transactions/>, Accessed on 21/12/2014.

⁸ Ibid.

⁹ The Convention was open for signature by the member States that have participated in the elaboration in Budapest on November 23rd 2001 and States not present have ratified the Convention. This law was dated on July 18th 2014 ('The Law')

The main objective of the Convention is to pursue a common policy aimed at the protection of the society against cybercrime, especially by adopting appropriate legislation and fostering international co-operation.¹ Nevertheless, The Law addresses the threat against computer systems by:²

- amending the existing provisions of the Criminal Code (recognition of phishing, inclusion of electronic keys in the list of items that can be used by perpetrators of racket, theft or breach of trust, and increase of the fine relating to the forgery of electronic keys);
- adding new offences (interception of computer data, misuses of devices, and misuses of electronic signature).

Recently, the Convention adopted the offences covering electronic signatures into law, which have not been existed at the time the Convention was signed. The European Union have seen it through that the need for the Convention to incorporate the electronic signatures due to its relevant used in the electronic transactions. The law has broadened its scope, primarily to amend and include offences which can be used in perpetration of the crimes that are unpredictable and related to electronic transactions. For instance, breach of trust and forgery of electronic keys are unforeseeable offences that have to be addresses by the Convention and also the domestic cybercrime laws. Today, cyber risk increasingly presents a major risk to the economic environment regardless of industry.

5.2 United Nations Commission for International Trade Law Model Law on Electronic Signatures 2001 (UNCITRAL)

The aim of UNCITRAL is rooted on the increased use of electronic authentication techniques as replacement for handwritten signatures and other traditional authentication procedures. It has suggested the need for a specific legal framework to reduce uncertainty as to the legal effect that may result from the use of such modern techniques (which may be referred to generally as "electronic signatures"). The risk that diverging legislative approaches be taken in various countries with respect to electronic signatures calls for uniform legislative provisions to establish the basic rules of what is inherently an international phenomenon, where legal harmony as well as technical interoperability is a desirable objective.³

The objectives of the Model Law, which include enabling or facilitating the use of electronic signatures and providing equal treatment to users of paper-based documentation and users of computer-based information, are essential for fostering economy and efficiency in international trade.⁴ The paper discusses some section of this law in relation electronic signatures.

The sphere application of this law applies where electronic signatures are used in the context of commercial activities. It does not override any rule of law intended for the protection of consumers.⁵ For the purposes of this Law:⁶

- a) "Electronic signature" means data in electronic form in, affixed to or logically associated with, a data message, which may be used to identify the signatory in relation to the data message and to indicate the signatory's approval of the information contained in the data message;
- b) "Certificate" means a data message or other record confirming the link between a signatory and signature creation data;

was published in the Official Gazette on July 25th 2014 (Mémorial A n°133 p. 2134) and republished with appended Convention on Cybercrime signed in Budapest on November 23rd 2001 ("the Convention") in the Official Gazette on August 12th 2014 (Mémorial A n°157 p. 2406), on European Union: Law Dated July 18th 2014 Approving Convention On Cybercrime, available at <http://www.mondaq.com/x/346382/data+protection/Prospectus+Directive+ECJ+Judgement>. Accessed on 22/12/2014.

'Data Protection', Law dated 18th July 2014 Approving Convention on Cybercrime, Published by Bonn Steichen and Partner, Newsletter September 2014, p. 7.

¹ Ibid.

² Ibid.

³ UNCITRAL Model Law on Electronic Signatures with Guide to Enactment 2001, United Nations, New York, 2002, p. 8.

⁴ Ibid. p. 9.

⁵ Article 1, Ibid; The Commission suggests the following text for States that might wish to extend the applicability of this Law: "This Law applies where electronic signatures are used, except in the following situations: [...]."

The term "commercial" should be given a wide interpretation so as to cover matters arising from all relationships of a commercial nature, whether contractual or not. Relationships of a commercial nature include, but are not limited to, the following transactions: any trade transaction for the supply or exchange of goods or services; distribution agreement; commercial representation or agency; factoring; leasing; construction of works; consulting; engineering; licensing; investment; financing; banking; insurance; exploitation agreement or concession; joint venture and other forms of industrial or business cooperation; carriage of goods or passengers by air, sea, rail or road.

⁶ Article 2, Ibid.

- (c) "Data message" means information generated, sent, received or stored by electronic, optical or similar means including, but not limited to, Electronic Data Interchange (EDI), electronic mail, telegram, telex or telecopy;
- (d) "Signatory" means a person that holds signature creation data and acts either on its own behalf or on behalf of the person it represents;
- (e) "Certification service provider" means a person that issues certificates and may provide other services related to electronic signatures;
- (f) "Relying party" means a person that may act on the basis of a certificate or an electronic signature.

The law provides for equal treatment of signature technologies and proceed to provides that nothing in this Law, except Article 5, shall be applied so as to exclude, restrict or deprive of legal effect any method of creating an electronic signature that satisfies the requirements referred to in Article 6, paragraph 1, or otherwise meets the requirements of applicable law.¹

The law provides for the Interpretation²

1. In the interpretation of this Law, regard is to be had to its international origin and to the need to promote uniformity in its application and the observance of good faith.
2. Questions concerning matters governed by this Law which are not expressly settled in it are to be settled in conformity with the general principles on which this Law is based.

The Law provides for variation by agreement and further that the provisions of this Law may be derogated from or their effect may be varied by agreement, unless that agreement would not be valid or effective under applicable law.³

The law provides for Compliance with a requirement for a signature:⁴

1. Where the law requires a signature of a person, that requirement is met in relation to a data message if an electronic signature is used that is as reliable as was appropriate for the purpose for which the data message was generated or communicated, in the light of all the circumstances, including any relevant agreement.
2. Paragraph 1 applies whether the requirement referred to therein is in the form of an obligation or whether the law simply provides consequences for the absence of a signature.
3. An electronic signature is considered to be reliable for the purpose of satisfying the requirement referred to in paragraph 1 if:
 - a) The signature creation data are, within the context in which they are used, linked to the signatory and to no other person;
 - b) The signature creation data were, at the time of signing, under the control of the signatory and of no other person;
 - c) Any alteration to the electronic signature, made after the time of signing, is detectable; and
 - d) Where a purpose of the legal requirement for a signature is to provide assurance as to the integrity of the information to which it relates, any alteration made to that information after the time of signing is detectable.
4. Paragraph 3 does not limit the ability of any person:
 - (a) To establish in any other way, for the purpose of satisfying the requirement referred to in paragraph 1, the reliability of an electronic signature; or
 - (b) To adduce evidence of the non-reliability of an electronic signature.
5. The provisions of this Article do not apply to the following: [...].

The law provides for the Satisfaction of Article 6⁵

1. [Any person, organ or authority, whether public or private, specified by the enacting State as competent] may determine which electronic signatures satisfy the provisions of article 6 of this Law.
2. Any determination made under paragraph 1 shall be consistent with recognized international standards.
3. Nothing in this article affects the operation of the rules of private international law.

¹ Article 3, Ibid.

² Article 4, Ibid.

³ Article 5, Ibid.

⁴ Article 6, Ibid.

⁵ Article 7, Ibid.

5.3 Evidence Act 2011 (As Amended) ¹

The major difference between electronic transactions and other form of commercial transactions is the electronic element, which development came through ICT as alternative to paper based businesses. In Nigeria, the greatest challenge to admissibility of electronic evidence relates to the recognition of electronic document within the fore view of the law. The evidential burden under the law in Nigeria (as to the admissibility of documents) was taken care of by sections 34 and 84 of Evidence Act, 2011 (as amended) which recognized documents stored in electronics forms. These provisions were improvement on Evidence Act, 1945 which failed to recognized electronic documents.

The relevance of Evidence Act in this paper is to the extent of identifying the significance use of computer-document in related evidence. The provisions point out the weights to be attached to admissible statements. It provides that in estimating the weight, if any to be attached to a statement rendered admissible as evidence by this Act regard shall be had to all the circumstances from which any inference call reasonably be drawn as to the accuracy or otherwise of the statement, and in particular-- ²

- (a) to the question whether or not the statement was made contemporaneously with the occurrence or existence of the facts stated, and to the question whether or not the maker of the statement had any incentive to conceal or misrepresent facts; and
- (b) in the case oral statement contained in a document produced by a computer-
 - (i) the question whether or not the information which the statement contained, reproduces or is derived from, was supplied to it, contemporaneously with the occurrence or existence of the facts dealt with in that information, and
 - (ii) the question whether or not any person concerned with the supply of information to that computer or with the operation of that computer or any equipment by means of which the document containing the statement was produced by it, had any incentive to conceal or misrepresent facts.

It also provides that for the purpose of any rule of law or practice requiring evidence to be corroborated or regulating the manner in which uncorroborated evidence is to be treated, a statement rendered admissible as evidence by this Act shall not be treated as corroboration of evidence given by the maker of the statement.³

The Act further provides that in any proceeding a statement contained in a document produced by a computer shall be admissible as evidence of any fact stated in it of which direct oral evidence would be admissible. if it is shown that the conditions in subsection (2) of this section are satisfied in relation to the statement and computer in question.⁴

The conditions referred to in subsection (1) of this section are:⁵

- (a) that the document containing the statement was produced by the computer during a period over which the computer was used regularly lo store or process information for the purposes of any activities regularly carried on over that period, whether for profit or not by anybody, whether corporate or not, or by any individual;
- (b) that over that period there was regularly supplied to the computer in the ordinary course of those activities information of the kind contained in the statement or of the kind from which the information so contained is derived;
- (c) that throughout the material part of that period the computer was operating properly or, if not, that in any respect in which it was not operating properly was out of operation during that part of that period was not such as to affect the production of the document or the accuracy of its contents; and
- (d) that the information contained in the statement reproduces is derived from information supplied to the computer in the ordinary course of those activities.

Where over a period the function of storing or processing information for the purposes of any activities regularly carried on over that period as mentioned in subsection (2) (a) of this section was regularly performed by computers, whether:⁶

- (a) by a combination of computers operating over that period;
- (b) by different computers operating in succession over that period;
- (c) by different combinations OJ computers operating in succession over that period; or
- (d) in any other manner involving the successive operation over that period whatever order. of

¹ This Act repeals the Evidence Act, Cap. E14, Laws of the Federation of Nigeria 2004, and enacts a new Evidence Act, 2011 which applies to all judicial proceedings in or before Courts in Nigeria.

² Section 34 (1) of the Evidence Act, 2011, As amended.

³ Section 34 (2), Ibid.

⁴ Section 84 (1), Ibid.

⁵ Section 84 (2), Ibid.

⁶ Section 84 (3) Ibid.

one or more computers and one or more combinations of computers.
all the computers used for that purpose during that period shall be treated for the purposes of this section as constituting a single computer; and references in this section to a computer shall be construed accordingly.

In any proceeding where it is desired to give a statement in evidence by virtue of this section, a certificate -¹

- (a) identifying the document containing the statement and describing the manner in which it was produced;
- (b) giving such particulars of any device involved in the production of that document as may be appropriate for the purpose of showing that the document was produced by a computer;
- (b) dealing with any of the matters to which the conditions mentioned in subsection (2) above relate, and purporting to be signed by a person occupying a responsible position in relation to the operation of the relevant device or the management of the relevant activities, as the case may be.

shall be evidence of the matter stated in the certificate: and for the purpose of this subsection it shall be sufficient for a matter to be stated to the best of the knowledge and belief of the person stating it.

For the purposes of this section-²

- (a) information shall be taken to be supplied to a computer if it is supplied to it in any appropriate form and whether it is supplied directly or (with or without human intervention) by means of any appropriate equipment;
- (b) where, in the course or activities carried on by any individual or body, information is supplied with a view to its being stored or processed for the purposes of those activities by a computer operated otherwise than in the course of those activities, that information, if duly supplied to that computer, shall be taken to be supplied to it in the course of those activities;
- (c) 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.

5.4 Electronic Commerce (Provision of Legal Recognition) Bill 2011³

Careful perusal of the Bill would reveal that if enacted as a law, it would provide for the application (subject to section 2) to any commercial transaction conducted through electronic means including commercial transactions by the Federal and State governments.⁴

It shall not apply to the transactions or documents specified in the schedule.⁵ And further provides that the minister may by order amend, vary delete from or add to the schedule.⁶

It further provides that where any law requires information to be in writing, the requirement of the law is fulfilled if the information is contained in an electronic message that is accessible and intelligible so as to be usable for subsequent reference.⁷

Also provides that where any law requires a signature of a person on a document, the requirement of the law is fulfilled, if the document is in the form of an electronic message, by an electronic signature which-⁸

- (a) is attached to or is logically associated with the electronic message;
- (b) adequately identifies the person and adequately indicates the person's approval of the information to which the signature relates; and
- (c) is as reliable as is appropriate given the purpose for which, and the circumstances in which, the signature is required.

Further provides for the purposes of paragraph (1) (c), an electronic signature is as reliable as is appropriate if-⁹

- (a) the means of creating the electronic signature is linked to and under the control of that person only;
- (b) any alteration made to the electronic signature after the time of signing is detectable; and
- (c) any alteration made to that document after the time of signing is detectable.

¹ Section 84 (4), Ibid.

² Section 84 (5), Ibid.

³ This Bill is before the National Assembly of the Federal Republic of Nigeria.

⁴ Section 1 (1) of the Electronic Commerce (Provision of Legal Recognition) Bill 2011.

⁵ Section 1 (2), Ibid.

⁶ Section 1 (3), Ibid.

⁷ Section 6, Ibid.

⁸ Section 7 (1), Ibid.

⁹ Section 7 (2), Ibid.

In addition, it provides where any law requires a seal to be affixed to a document, the requirement of the law is fulfilled, if the document is in the form of an electronic message.¹

It further provides notwithstanding subsection (1), the Minister may, by order in the Gazette, prescribe any other electronic signature that fulfils the requirement of affixing a seal in the electronic message.²

Finally, where any law requires the signature of a witness on a document, the requirement of the law is fulfilled, if the document is in the form of an electronic message, by an electronic signature of the witness that complies with the requirement of section 7.³

5.5 Electronic Transaction Bill 2011⁴

The objects of the Bill are:⁵

- a) To eliminate legal barriers to the effective use of electronic communications in transactions;
- b) To promote the harmonization of legal rules on electronic transactions across national boundaries.
- c) To facilitate the appropriate use of electronic transactions;
- d) To promote business and the community confidence in electronic transactions;
- e) To enable business and the community to use electronic communications in their transactions with government.

The provisions of the Bill when enacted shall apply to transactions both in private and public sectors.⁶

It further provides that if a rule requires the signature of a person, that requirement is met by an electronic message.⁷ Finally it provides that parties may agree to use a particular method of electronic signature, unless otherwise provided by the law.⁸

6. Conclusion

Flowing from the above, the relevance of electronic transactions cannot be over emphasized considering the use of electronic signatures in the electronic transactions. The road map provisions of services to consumer in the e-banking and financial transactions services by the use of ATM, POS, PAYPAL and other online transactions is tremendous to the development of information and communication technology. The significance of these laws is to address the offences of illegal accesses, interception or interference into computer system and certain related provisions of the law on creating and enhancing the laws for electronic trade, electronic signature and the law on data protection. The reason for the legal analysis on the electronic signatures is to bring out the relevant laws and provisions so as to maximize the risks of electronic transactions.

The finding of the paper reveals that the emergence of electronic transactions which involves the use of ICT raises much concern in the application of electronic documents particularly on issue of signatures that also raises the minds of the international community on the legality of such applications. This led to an agreed uniform rules to be prepared in a form of guide by the United Nations for the purpose of e-transaction/e-commerce and also to give other countries a roadmap on how to enact a legislations as the legal basis for supporting certification processes, emergence of digital authentication and certification technology. Further to this, the paper indicates that electronic signatures may use to refer as cryptographic signatures (cryptographic data affixed to a document) and a wide gap in this; it establishes the authenticity and origin of message which often include cryptographic data. The paper finds that the Cybercrime Convention directly address electronic transactions in relation to electronic signatures with relevance to a highlight of some various offences which rightly captured the foundational status of the Convention, although at the time when the Convention was signed this offences were not included. Also the findings of this paper points out that the Electronic Commerce Bill 2011 pending before the National Assembly if enacted would provides for the legal protection and recognition on the use of electronic signatures which is an indication that it has a recognition in the Nigerian electronic transactions and further emphasize that the law accept electronic signatures only where an information or document puts in writing in an electronic means that provides for signature placements. Therefore, electronic transactions through the electronic signatures formed an integral part towards concluding transactions legally.

It is therefore recommended that there should be public awareness on the application and laws of electronic transactions and also the need for immediate enactment of Electronic Commerce Bill 2011 into law. The paper further recommends that a security tips in the uses of electronic signatures should be created in an

¹ Section 8 (1), Ibid.

² Section 8 (2), Ibid.

³ Section 9, Ibid.

⁴ This Bill is before the National Assembly of the Federal Republic of Nigeria.

⁵ Section 1, Ibid.

⁶ Section 2, Ibid.

⁷ Section 6 (1), Ibid.

⁸ Section 6 (2), Ibid.

enlighten forum to the public for the purpose of users privacy protection. It further recommends that banks and other financial institution enhanced their protective measures in securing electronic transactions using signatures.

References

- A. S. Hornby, (2001) Oxford Advanced Learner's Dictionary of Current English 6th Edition, Oxford University Press.
- Adejoke O Oyewunmi, (2012), 'The ICT Revolution and Commercial Sectors in Nigeria: Impacts and Legal Intervention', British Journal of Arts and Social Sciences, Vol. 5, No. 2.
- Council of Europe Convention on Cybercrime 2001.
- Edesiri G. Okoro and Promise E. Kigho, (2013)'The Problem and Prospects of E-transaction (The Nigerian Perspective), Journal of Research in International Business and Management, Vol. 3 (1)
- Evidence Act, 2011, Laws of the Federation of Nigeria.
- Electronic Transaction Bill 2011.
- Electronic Commerce (Provision of Legal Recognition) Bill 2011.
- M. L. Ahmadu, (2012) 'Information Technology and Legislative Processes in Nigeria', in M. L. Ahmadu (ed) Legal Prisms: Directions in Nigerian Law and Practice, Usmanu Danfodiyo University Press, Sokoto.
- National Information Technology Development Agency Act (NITDA) 2007.
- HIPCAR, (2011) 'Electronic Transaction: Assessment Report', harmonization of ICT Policies, Legislation and Regulatory Procedures in the Caribbean.
- UNCITRAL Model Law on Electronic Signatures with Guide to Enactment 2001, United Nations, New York.

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