

**THE UNITED REPUBLIC OF TANZANIA
THE LAW REFORM COMMISSION OF TANZANIA**



**Report on the
Introduction of a legal Framework
on Electronic Commerce and
Cyber Crimes**



**REPORT PRESENTED TO THE MINISTER FOR JUSTICE AND
CONSTITUTIONAL AFFAIRS 12th MAY 2006**

PREAMBLE

*“.....In as much as I subscribe to the view that the court should not be ignorant of modern business methods and shut its eyes to the mysteries of the computer, it would however have been better if **the position were clarified beyond all doubt by legislation rather than by judicial intervention.**”*

Nsekela J (as he then was) in Trust Bank Ltd. v. Le-Marsh Enterprises Ltd, Joseph Mbui Magari, Lawrence Macharia-The High Court of Tanzania (Commercial Division) at Dar es salaam, Commercial case No.4 of 2000 (unreported)

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P.O. Box 3580,
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August 2005

Minister for Justice and Constitutional Affairs,
P.O. Box 9050,
DAR ES SALAAM.

Re: Transmittal Letter in Respect of the Introduction of a Legal Framework on Electronic Commerce and Cyber Crimes

The Law Reform Commission has completed research on the Introduction of a Legal Framework on E-Commerce and Cyber Crimes in Tanzania. The Commission in accordance with section 9 of the *Law Reform Commission of Tanzania Act, No. 11 of 1980 (CAP 171 R.E 2002)*, in its own motion initiated this project in April 2004.

In line with section 14(1) of the *Law Reform Commission of Tanzania Act, 1980 (CAP 171 R.E 2002)* we have the honour to submit to you, the final report on the Introduction of a Legal Framework on E-Commerce and Cyber Crimes in Tanzania.

A large, stylized handwritten signature in black ink, positioned above a horizontal dotted line.

**Judge (Rtd.) Anthony Bahati
CHAIRMAN**

THE LAW REFORM COMMISSIONERS



Justice Anthony N. Bahati
Chairman



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Mr. William Mdundo
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ACKNOWLEDGEMENT

In the course of research and writing of this Report, the Commission received contributions from various people within and outside the commission through consultative meetings and workshop. The Commission is indebted to all these people.

The Commission is grateful to the DANIDA for its financial support at all stages of the study.

In the final analysis, the Commission bears full and collective responsibility for both the form and content of this Report.

EXECUTIVE SUMMARY

The Commission on its own initiative undertook a project on the Introduction of a Legal Framework on Electronic Commerce and Cyber Crimes in April 2004 as provided by section 9(1) of the Law Reform Commission Act 1980.

Due to technological changes Tanzania is forced to keep on track to cope with these changes. The current changes have brought fundamental changes on how commerce and communication takes place. However, there is no law that regulates this fast growing area, in line with this, the Commission decided to undertake the review of the laws related to business transactions, which are greatly affected by technological changes. Basically, the aim of this project is to create a legal framework to cover aspects related to E-Commerce and Cyber Crimes in Tanzania.

In the aspect of E-commerce, it is fundamental to introduce a legal framework that will secure electronic transactions for example, distance/online transactions. Current laws were mostly designed to facilitate paper-based transactions and as mentioned above Tanzania has to keep on pace by adopting UNCITRAL Model Laws and Commonwealth Model Laws.

The report contains five chapters. The First chapter introduces the project explaining the mandate of the Law Reform Commission, background of the project, its rationale, objective, scope and methodology.

Chapter two deals with literature review, an overview of e-commerce, contracts, and consumer protection. This chapter highlights the impact of e-commerce on the current laws. Common law principles such as the requirement of original documents, written documents, authentication and manuscript signatures under the current laws are some of the barriers that are likely to hinder the development of e-commerce in Tanzania. Furthermore, the laws in Tanzania protect consumers on offline business only.

This report has also discussed cyber crimes and other related crimes, these are crimes committed by the use of computers and other related devices. While other countries have legislated these crimes the current criminal laws in Tanzania do not reflect cyber crimes. Moreover, the concern on the admissibility of electronic evidence was also raised. The Evidence Act 1967 relies on best evidence rule which denies electronic evidence.

Another issue is that of Data protection and privacy. There is no legal framework on the said area hence, there is free flow of personal data and confidential information. Another area affected by this new technology is taxation. Under digital technology digitized goods or services such as software can be delivered electronically which pose a challenge on the taxation system.

There is no law in Tanzania that governs Domain names, other countries like South Africa and US have enacted legislation to regulate this area. The study has further observed that Domain names are not governed by any law in Tanzania.

The issue of electronic payments has also been discussed in chapter two. With the development of digital technology banks and other financial institutions are now using online services, customers can now use bankcards to order and make payments online.

Chapter three deals with the analysis of the state of the law at the national and international level. The relevant policies has also been discussed.

The analysis of research findings is discussed in chapter four. These findings were gathered through consultative meetings and focused group discussions in Dar es Salaam, Arusha and Mwanza. Most stakeholders from the field and workshop supported the idea of introducing the legal framework for E-Commerce and Cyber Crimes. Conclusions and recommendations are found in chapter five of the report.

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LIST OF ABBREVIATIONS

ARPANET	-	Advanced Research Project Agency Network
ATM	-	Automated Teller Machine
ccTLDs	-	country code Top Level Domains
DMCA	-	The Digital Millennium Copyright Act.
DNS	-	Domain Name System
EDI	-	Electronic Data Interchange
EFTPOS	-	Electronic Funds Transfer at Point of Sale
gTLDs -	-	generic Top-Level Domains
ICANN	-	Internet Corporation for Assigned Names and Number
ICT	-	Information and Communication Technology
IP	-	Internet Protocol
ISIN	-	International Securities Identification Number
ISP	-	Internet Service Provider.
LCO	-	Law of Contract Ordinance
NNA	-	National Numbering Agency
OSP	-	Online Service Provider.
OECD	-	Organisation for Economic Cooperation and Development
PIN	-	Personal Identification Number
SET	-	Secure Electronic Transaction Protocol
SWIFT	-	The Society for Worldwide Inter bank Financial Telecommunication
UK	-	The United Kingdom
UNCITRAL	-	United Nations Commission on International Trade Law
UNCTAD	-	United Nation Conference on Trade and Development
US	-	United States
WIPO	-	World Intellectual Property Organisation.

LIST OF CASES

1. A & M Records, Inc v. Napster, In; US Court of Appeal for 9th Circuit 239 F. 3d 1004, 2001. US App. LEXIS 5446: 57 us PQ. 2D (BNA) 1729, 10th Circuit.
2. Adams v. Lindsell (1818) 1 B& Ald.681 533.
3. Beunsan Rest. Corp v. King, 126 F. 3D 25,27 (2Kdcir, 1997).
4. Carlil v. Carbohc Smoke Ball co. Ltd. [1892] 2 Q.B.484
5. Fisher v. Bell [1961] 1 Q.B 349
6. Harrods v. UK Network Services Ltd [1997] EIPR D-106.
7. House Fire Insurance v. Grand (1879) L.R. 4EX.DN.26.
8. Marks & Spencer plc v. One in a Million Ltd [1998] FSR 265.
9. Nissan Motor Co.v. Nissan Computer Corp. 89 F. Supp 2d 1154.(E.D.Cal.2000)
10. Pharmaceutical Society of Great Britain v. Boots Cash Chemists Ltd (1951) 2 Q.B 795.
11. Pitman Training Ltd. v. Nominet UK (1997) FSR 797.
12. Prince plc v. Prince Sportswear Group Inc. [1998] FSR 21.
13. R.v. Gold (1988) 2 WLR 984.
14. R.v. Whitely (1991) 93 Cr. App. R 381
15. State Farm Mutual Auto. Ins. Co. v. Brockhurst 453 F. 2d 533,10th Cir. (1972)
16. Tanzania Cotton Board v. Corgecot Cotton Company SA [1997] TLR 165.
17. Thornton v. Shoe Lane Parking (1971) 1ALL E.R 686.
18. Trust Bank Tanzania Ltd. v. Le-Marsh Enterprises Ltd, Joseph Mbui Magari, Lawrence Macharia ,In the High Court of Tanzania (Commercial Division) at Dar es Salaam, Commercial case No.4 of 2000 (unreported).

LIST OF TANZANIAN STATUTES

1. The Bank of Tanzania Act, CAP 197 R.E 2002
2. The Banking and Financial Institutions Act, CAP 342 R.E 2002
3. The Bills of Exchange Act, CAP 215.CAP 215 R.E 2002
4. The Evidence Act, CAP 6 R.E 2002
5. The Law of Contract Ordinance CAP 345 R.E 2002.
6. The Law Reform Commission of Tanzania, CAP 171R.E 2002
7. The Sale of Goods Ordinance, CAP 214 R.E 2002.
8. The Trade and Service Marks Act, CAP 326 R.E 2002.

LEGISLATION FROM OTHER JURISDICTIONS

1. The Supply of goods and Services Act 1982 (UK).
2. The Consumer Protection Act 1987 (UK).
3. The Sale of Goods Act 1979 (UK).
4. The Computer Misuse Act 1990 (UK).
5. The UK Data Protection Act 1998.
6. The Civil Evidence Act 1995 (UK).
7. The US Anti-Cybersquatting Consumer Protection Act 1999.
8. The UK Bill of Exchange Act 1882.
9. The Electronic Communication and Transaction Act No. 25 of 2002. (South Africa)

INTERNATIONAL INSTRUMENTS

1. UNCITRAL Model Laws 1996/2001.
2. Commonwealth Model Laws on Technology.

CHAPTER ONE

1.0 INTRODUCTION

1.1 Mandate of the Law Reform Commission

The Law Reform Commission of Tanzania Act¹ established the Law Reform Commission of Tanzania (hereinafter referred to as the Commission) as an independent Government institution. Its function among others is to take and keep under review all the law of the United Republic of Tanzania with a view to its systematic development and reform.²

The Commission performs its duties in two ways; the first one is where there is a reference from the Attorney General whereby the Commission will examine the matter and make recommendations with a view to reform the law in relation to those matters.³ Secondly the Commission may on its own initiative subject to informing the Attorney General undertake the examination of any matter without waiting for a reference from the Attorney General.⁴

Furthermore, in performing its functions the Commission is mandated to review any law or branch of the law and propose measures necessary for bringing that law or branch of the law into accord with current circumstances of Tanzania, and measures necessary for eliminating anomalies or other defect in the law, repealing obsolete or unnecessary laws, reducing the number of separate enactments and codifying and simplifying the laws.⁵ At the request of the Attorney General, the Commission has the power to prepare comprehensive programme for the consolidation and revision of laws and undertake

¹ Act No. 11 CAP 171.

² S.4 (1) *ibid.*

³ S.8 (1) *ibid.*

⁴ S.9 (1) *ibid.*

⁵ s.4 (2)(a) *ibid.*

preparation of any draft bills pursuant to any such programme approved by the Attorney General.⁶

1.2 Background of the Project

The rapid development of ICT and its importance in our development moved the Commission to implement its *motto* that is “ *We review the past, reform the present and anticipate the future*”. The idea on this Project was sourced by the Commission *suo motus* as permitted by the enabling Act.

1.3 Rationale of the Project

The current rapid growth of technology advancement in the world has brought dramatic changes in business transactions and communication among people. The development of ICT on the use of computers has impacted the criminal law by facilitating the existing crimes and creating cyber crimes. Since Tanzania is not an Island, it cannot avoid such technological changes. Many people in different parts of the world do trade with one another across boundaries of their nations. Therefore it is important to have a law in place, which will govern this area, whereby communication is done through electronic means. Though Electronic Commerce has been spreading widely in the World there is no law in Tanzania to regulate this area. Therefore the importance of having an effective legal framework to cater across this area and other related areas cannot be over-emphasized.

ICT has necessitated electronic commerce to be conducted in different ways which include telephones, e-mails, fax mails. In normal circumstances, in on-line transactions which involve more than one person, dispute is likely to occur due to the fact that all Tanzanian laws are offline, lacking provisions concerning online transactions. Due to this lacuna and other legal problems facing e-commerce the Commission undertook a review and research on the laws related to business transaction, which are affected by rapid development of technology. The rationale behind this project therefore is to protect

⁶s.4(2)(d) *ibid.*

consumers and other computer users and facilitate business transactions in a safe way. For that reason the Law Reform Commission of Tanzania undertook this project so as to regulate areas related to e-commerce, cyber or computer crimes, e-government and data protection.

1.4 Objectives of the Project

The main objectives of this project are: first, to create a legal framework for on-line transactions in Tanzania. Currently all laws governing business are offline which were designated to facilitate paper based transactions,⁷ that is a contract should be written, signed and must also be witnessed.⁸ These requirements are likely to affect Electronic Commerce.

The law governing contracts in Tanzania applies the old postal rule for the communication of offer, acceptance and revocation. It provides that the communication of an offer is concluded when a proposer puts a letter of the proposal in transmission to an acceptor and when the letter of the acceptor comes to the knowledge of proposer.⁹ With new technology, people in different areas can enter into a contract through Internet, whereby parties do not physically meet. There is no law that protects consumers doing business on line or data stored in computers.

The second objective is to create a legal framework for combating cyber crimes, protecting data and maintaining privacy of computer users. The laws governing criminal law were enacted before the development of ICT.

This report discusses the operation of on-line business and other related matters, whereby in due course it touches on the issue of on-line transactions in different forms and comes up with recommendations for the reforms.

⁷ Bwana J. Challenges facing Regulation of E-Commerce in Tanzania at page 67.

⁸ s.10 and proviso there to of the Law of Contract Ordinance CAP 345 R.E 2002.

⁹ s.4 (2) *ibid.*

1.5 Scope of the Project

This report ventures to create an environment for regulating Electronic Commerce in Tanzania resulting from technological development. E Commerce is a wide subject with different categories including data protection, on-line auctions, electronic/digital signatures, cyber contracts, Domain names, on-line transactions, and Privacy in computer. In line with e-commerce there is cyber crime issues such as theft, fraud, hacking, creation of computer viruses and bombs. This report is limited to the discussion of each of the above mentioned categories as operated in other countries and proposes for adoption of relevant rules which can suit Tanzania.

The Commission will further come up with recommendations and if necessary prepare draft Bills on ICT.

1.6 Methodology of the Project

The methods applied in this project were mainly two: - library research and field research.

Through library research various books, case laws, statutes, International Legal instruments, articles and Internet materials were consulted.

Field research involved visiting some regions of Tanzania Mainland for gathering more inputs from relevant stakeholders. These regions were Dar es Salaam, Mwanza and Arusha. Focused group discussions and consultative meetings were applied by researchers to gather information and data from various stakeholders.

The targeted groups were the Presidents office planning and privatisation, Ministries of Trade and Industries, Ministry of Science, Technology and Higher Education, Ministry of Transport and Communication and the Commission for Science and Technology. Researchers also met with officials of Banks including The Bank of Tanzania (BoT),

National Bank of Commerce (NBC) LTD, CRDB Bank, National Micro Finance Bank (NMB), Standard Chartered Bank, and STANBIC Bank.

The researchers further consulted officials from Higher learning Institutions including the Faculty of Law, The Computer Science Department and the Faculty of Commerce, all of the University of Dar es Salaam; Dar es Salaam Institute of Technology (DIT), Tanzania Institute of Accountancy (TIA), the Institute of Finance Management (IFM) and Arusha Technical College (ATC). Other stakeholders consulted were Tanzania Chambers of Commerce and Industry and Agriculture (TCCIA), Tanzania Communication and Regulatory Authority (TCRA), Tanzania Investment Centre (TIC), Economic and Social Research Foundation (ESRF), Tanzania National Parks Authority (TANAPA), Lawyers, Travel Agents, Eastern and Southern African Management Institute (ESAMI) and the Media.

CHAPTER TWO

2.0 THE ADVENT OF ICT AND DIGITAL ECONOMY

2.1 Introduction:

The 20th Century has witnessed rapid and new innovative technologies with fundamental changes in the way commerce takes place.¹⁰ Those fundamental changes and the inception of Internet¹¹ have been seen as subjects of great interest attracting many people and requiring regulatory reforms. The use of modern means of communication such as electronic mail and Electronic Data Interchange (EDI) for the conduct of International trade has been increasing rapidly throughout the world.¹² With time, this is expected to develop further as a technical support such as information highways and the Internet becomes more widely accessible to many people. Paralleling the growth of the Internet itself, the scale of commercial transactions carried out using some form of electronic communication is increasing dramatically.¹³ The digital revolution has brought fundamental change to communication and fuelled dramatic developments for the new digital economy.¹⁴ The efficacy offered by the digital technology has opened up enormous potential for participation in international trade for countries through e-commerce.

The global development of e-commerce might be stymied by old laws enacted at the time when it was still at best a figment of a few technologists' imagination hence requiring uniformity rules. Electronic commerce conducted over the computer network is growing explosively. It can be argued that the current commercial laws are likely to be affected by these rapid e-commerce changes, inviting alternative regulatory approaches that would not impede e-commerce while advancing and ensuring consumer protection interests.

¹⁰ Tauzin.B. State impediment to E-Commerce: September 26,2002. <http://energycommerce.house.gov/107/hearing> 18/3/03.

¹¹ The Internet Is a Global Matrix Of Interconnected Computer Networks. (Currie 2000:50) They allow Computers to communicate in a Network. (Fitzgerald, 2000:5).

¹² UNCITRAL Model Law on Electronic Commerce with Guide to Enactment (1996).

¹³ Lloyd I. Information Technology 3Ed 2001 at page xlv.

¹⁴ WIPO 2000 Paragraph 1.

Moreover the communication of legally significant information in the form of paperless messages is likely to be hindered by legal obstacles to the use and recognition of such messages or by uncertainty as to their effect or validity. E-commerce through digital revolution offers great opportunities for economic growth hence the need for an effective legal framework.¹⁵

In line with technology development on e-commerce, computer technology has impacted criminal law on two ways; first it has facilitated the commission of existing crimes such as fraud, theft etc. Secondly, computer technology has also created a new range of illegal activities such as hacking and development and distribution of computer viruses.¹⁶

2.2 AN OVERVIEW ON E-COMMERCE

2.2.1 E-commerce defined

E-commerce is a wide subject with various definitions.¹⁷ E-commerce can be defined as a commercial exchange system, which makes use of computers and communication network advances. It is the use of production information in electronic forms instead of paper, for business or government operations. This suggests that e-commerce means using technological advances to promote everything involving the exchange of business information among computers and humans or traders and customers.¹⁸

Moreover, E-commerce as a concept includes commercial activities undertaken online, including international trade transactions, advertising and domestic business –to-consumer (B2C) and business- to -business (B2B) transaction to mention a few.¹⁹

As a network e-commerce has been further defined as sale or purchase of goods or services conducted over computer-mediated networks. The goods and services are

¹⁵ Koffi Anan, UN quoted in UNCTAD 2001 at iii.

¹⁶ Bainbridge, D. Introduction to computer Law, 4th ed. 2000, at p. 283.

¹⁷ WIPO report carries a 4 page Annexure compiling 10 different definitions.

¹⁸ Kaetzel L., J E-commerce and IP on the Internet 1996 p. 186 http://fire.nist.gov/bfrlpubs/build96/art_033.html 26/2/03.

¹⁹ Mackenzie P.D, E-commerce Law –China <http://www.perkinscoie.com/resource/ecommerce.htm> 26/02/2003.

ordered over those networks, but payment and ultimate delivery of the goods/services may be conducted on or offline.²⁰

Some scholars regard e-commerce as other business activities such as marketing and advertisements.²¹

In this discussion e-commerce can be termed as commercial transactions²² over digital networks (whether open²³ or closed networks²⁴) to increase delivery speed and reduce operational costs through computer-to-computer transactions and web-enabled mobile phone communications.²⁵

2.2.2 Types of Electronic Commerce

The classification of e-commerce normally depends on the nature of the transaction. When a transaction is done between businesses, it is called business-to-business e-commerce.²⁶ Under B2B e-commerce, the customer is another enterprise or another department within the same enterprise.

The second type of e-commerce is called business-to-customer e-commerce (B2C). It refers to the placing of finished goods/services to end-users i.e. customers who can be corporate entities or individuals. In consumer-to-consumer (C2C) individuals purchase and sell from one another, for instance in auctions; and consumer-to-business (C2B) where consumers post prices at which they are willing to buy goods and services from businesses.²⁷

²⁰ OECD defined e-commerce i.e. the 'Networks' over which relevant activities are carried out; the 'Processes' that ought to be included within the general domain of e-commerce. See UNCTAD 2001: 6.

²¹ Currie (2000:9) and Timmers (1999:XV).

²² Commercial transactions may comprise but not limited to selling and purchase.

²³ The term 'open network' means a network, such as the Internet, using non-proprietary protocols.

²⁴ An illustration of 'closed network' is electronic data interchange (EDI).

²⁵ In what is now referred to as m-commerce where commercial transactions are done through mobile electronic facilities such as mobile telephones.

²⁶ It is also referred to as B2B e-commerce.

²⁷ UNCTAD 2001:84.

2.2.3 Advantages of E-commerce

E-commerce offers advantage over the traditional commerce, which is based on paper use. Under e-commerce information flows more quickly and in more directions than in the orthodox commerce giving businesses opportunities for accessing more markets at low cost and with minimal capital investment. The information flow improves competitiveness and customer services, reducing transaction costs and overheads while avoiding traditional limitations of restricted access to information.²⁸

For commerce involving physical products, the Internet functions as a global system facilitating sales, in which the placing of an order and the making of payment can take place online, while the goods themselves are delivered separately through a postal or other delivery service.²⁹ E-commerce saves time and money³⁰ and the risk of lost or damaged documents is reduced when documents are transmitted electronically. It is believed that since computerisation expanded into the business community, systems of Electronic Data Interchange (EDI) have facilitated the placing and despatch of orders between commercial undertakings.³¹

2.2.4 Attribution of Computer Acts to a Person.

It is believed that one of the advantages of e-commerce is the automation of tasks, which previously required human involvement.³² Computers can receive orders on-line and, in some Electronic Data Interchange systems (EDI), even keep track of inventory and automatically place orders when supplies run low. This raises an important issue; can a computer accept an offer and create a contract? For example, if a person wishes to buy a book and makes an offer to an on-line bookseller, can the merchant's web server accept the offer and create the contract?

²⁸ WIPO, Para 207.

²⁹ Intangible products can be distributed instantaneously through the Internet that as a system to promote sales, but also as a system to effectuate the delivery.

³⁰ Kaetzel Ij, E-commerce and IP on the Internet page 186, NIST Gaithersburg.

³¹ Lloyd I. Information Technology Law 3ed 2001 at page xliv.

³² Turban E., Electronic Commerce 2002 at page 84.

English law and most other legal systems, have a tradition of attributing the actions of a machine to the person who instructs it to execute a particular routine.³³

In the United States, the court ruled in the case of *State Farm Mutual Auto.Ins.Co.v.Brockhurst*,³⁴ that since the computer only operated as programmed by the insurance company, it was bound by the contract formed (in this case, an insurance renewal). Based on these two precedents, the Common law courts would probably decide that a web server, as an agent of the on-line business, can both make offers and accept offers in order to create contracts. Web-automated contracts therefore need to be carefully constructed to prevent the creation of unwanted contracts. Otherwise, as long as the customer reasonably believes that the computer accepted the offer, the contract will be fully binding regardless of what bugs the server might have or what the on-line terms might state e.g. price, quantity, product, etc.

2.2.5 How does E-commerce affect Commercial Laws in Tanzania

The rapid growth of e-commerce over the world has put the country in the position of facing challenges and effects to her various commercial laws and other related laws. Generally the legal system in Tanzania is mainly based on Common law. Regulatory steps to secure electronic transactions such as digital signatures, electronic evidence, reforms to contract law, dispute settlement and others have not yet been promulgated. The basic commercial laws in Tanzania are derived from the 20th century .The laws were designed to facilitate paper-based transactions.³⁵ Most established legal rules require the use of documents, written notices, signatures etc. Such a requirement can pose an obstacle to the development of e-commerce. Despite the changes and regulatory reforms made by the country since independence, most of the laws enacted since British colonial rule before the 1960s are still in force.

³³ In *Thornton v. Shoe Lane Parking* (1971) 2 QB 163, (1971) 2 WL, (1971) 1 ALL E R 686 the court ruled that a customer contracted with a car park machine (representing the owner) when he fed in his money and received a claim ticket. As Denning L.J. Suggested.

³⁴ 453f.2d 533, 10th Cir. (1972).

³⁵ Bwana J. Challenges facing Regulation of e-commerce in Tanzania p 67.

The UNCITRAL Model Law could perhaps be the solution to the above stated problems. The Model law addresses this problem by taking it as its central principle of the functional equivalence approach according to which traditional requirement for writing, documents, signatures etc can be satisfied by electronic techniques which serves the same function.³⁶ The core provision of Model Law stipulates that information shall not be denied legal effect, validity or enforceability solely on the grounds that it is in the form of a data message.³⁷ The subsequent Article provides that legal requirements for writing³⁸ signature³⁹ and the use of originals⁴⁰ can be satisfied by the use of data messages in appropriate and that rules of evidence should not deny the admissibility of data messages solely because of their form.⁴¹ This means that the paper based documents that apply the best rule evidence e.g. original documents should be in equal footing with electronic evidence such as computer print out.

The Commonwealth countries under compendium of technologies have agreed to formulate Model Bills on electronic evidence, electronic transaction model law, freedom of information model law, privacy model law, and Competition Model Law.⁴²

While Tanzania has not yet adopted UNCITRAL Model Laws requirements other countries like the UK have some legislation such as Electronic Communications Act of 2000, which reflect UNCITRAL Model Law. The Act recognises that requirements for writing or signature may hamper the use of e-commerce. The very Act has gone further than simply stating that electronic documents are to have the same status as their paper equivalents. It empowers the appropriate Secretary to modify it in such manner as he might think fit for the purposes of electronic communications storage the provision of any existing primary or secondary legislation or scheme, licence or approval issued under any legislation which require anything to be done or evidenced in writing or by use of documents or by post or other specified means of delivery, or to be signed or sealed or

³⁶ Bradgate R. Commercial Law 3ed 2000 at page 22.

³⁷ Article 5 of UNCITRAL Model law, guide to enactment 1996.

³⁸ Article 6 *ibid*.

³⁹ Article 7 *ibid*.

⁴⁰ Article 8 *ibid*.

⁴¹ Article 9 *ibid*.

⁴² The Bills were drafted by Commonwealth Secretariat and presented in the Africa Region Workshop held in Cape Town, South Africa in March 2005.

records to be kept etc".⁴³ Likewise the EU E-commerce Directive provides that Members shall ensure that their legislation allows contracts to be concluded electronically.⁴⁴

2.3. CONTRACTS AND TYPES OF CONTRACTS

Contract laws are among of the areas, which can be affected by the development, and use of e-commerce. The Law governing contracts in some countries including Tanzania applies traditional postal rule for the communication and revocation of offer and acceptance as laid down in the case of *Adams v. Lindsell*⁴⁵ and *House Fire Insurance v. Grand*.⁴⁶ The general position of Common Law is that where the communication is made by post the contract arises on the date the letter of acceptance is posted in due course. On the latter case Signer L.J argued that:

*" the acceptor in posting the letter has put it out of his control and has done an extraneous act..., and shows beyond all doubt each side is bound."*⁴⁷

In *Adams v. Lindsell* the plaintiffs* were woollen manufacturers in Bromsgrove, Worcestershire. The defendants were wool-dealers at St. Ives in Huntingdon. On the 2nd September 1817, the defendants wrote to the plaintiffs, offering a quantity of wool on certain terms and requiring an answer 'in course of post'. The defendants misdirected their letter, which did not reach the plaintiffs until the evening of 5th September. That same night the plaintiffs posted a letter of acceptance, which was delivered to the defendants on 9th September. If the original offer had been properly addressed, a reply could have been expected by the 7th September, and meanwhile, on 8th September, not having received such a reply, the defendants had sold the wool to other parties.

As an academic problem, three possible answers were available in this case. An offer made through the post might be regarded as accepted in the eyes of the law:

⁴³ Section 8 of Electronic Commerce Act 2000.

⁴⁴ OJ 2000 L 178/1.

⁴⁵ (1818) 1 B & Ald.681.

⁴⁶ (1879) L.R.4EX.DN.26.

⁴⁷ Ibid

- (a) As soon as the letter of acceptance is put into the post; or
- (b) When the letter of acceptance is delivered to the offeror's address; or
- (c) When the letter of acceptance is brought to the actual notice of the offeror.

The Court of King's Bench in *Adams v Lindsell* preferred the first solution and decided that the contract was concluded when the letter of acceptance was posted on 5th September.

Apart from postal rule in the above mentioned case, there are considerable numbers of traditional statutory rules about particular types of contract requiring them to be made or evidenced in a particular way. These requirements which are contrary to electronic contracts can be briefly categorized as follows:

- (1) The contract must be under seal.
- (2) The contract must be in writing.
- (3) The contract must be witnessed, authenticated and evidenced.

Indeed UNCITRAL Model Laws and Commonwealth Model bills could perhaps be the best solution for the implementation of on-line transactions and communications with regard to the above traditional requirements. Specifically Article 6 and 7 of UNCITRAL redefines the aspects of writing and signature to fit into digital world and provide certainty to cyber contracts and promote e-commerce in general.

Common law countries like Tanzania have historically relied heavily on the transfer of written signed and authenticated documents. Undoubtedly the invention of computers and development of electronic communication represents a major challenge and opportunity in this respect. A likelihood of much bigger practical problem arises in the field of electronic commerce.⁴⁸ In case of two party e-mails, the question is whether to apply the postal or telex model. Although e-mail seems to be as quick as telex or fax an e-mail message does not signal its arrival in the way that telex or fax does.

⁴⁸ For a full discussion see Rowland and Macdonald, *Information Technology Law* (2nd ed, 2000)

It is thought that similar arguments apply to full blown electronic commerce. In this field the problems are much greater in connection with the legal requirements for writing and signature than in relation to offer and acceptance.⁴⁹

The UK has made great effort to face electronic commerce challenge by passing the Electronic Communications Act 2000 and gives the “appropriate Minister” wide powers to make orders carrying this process forward.⁵⁰

2.3.1 Distance Contracts

The recent enormous increase in interest and investment in the Internet worldwide has arisen largely as a result of its increasing commercialisation.⁵¹ In line with this, it is now common to argue that the essence of a market place is that it is the forum of exchanging goods and services for money or value. Underpinning such buying and selling are commercial contracts conducted electronically between the parties which can pose a considerable effect on the existing offline laws.

Under E-commerce there is the so called the distance selling contracts using distance communication through Internet. A distance selling contract has been defined as any contract concerning goods and services concluded between a supplier and a consumer under an organized distance sales or service provision scheme run by the supplier, who for the purposes of the contract, makes exclusive use of one or more means of distance communication up to the moment at which the contract is concluded.⁵² This is a contract where the supplier and the consumer do not come face to face prior to the conclusion of the contract (telephone sales, mail order, m-commerce, telescoping, e-mail, facsimile or e-commerce). All these kinds of contracts are not in line with the common legal myth held by the general public under Common law that contracts must be in writing and have a manuscript signature. The main types of contracts to be observed through Internet can be summarized as hereunder:

⁴⁹ *ibid.*

⁵⁰ Section 8 of the Electronic Communications Act of UK.

⁵¹ Edward L. Law and the Internet, regulating cyberspace 1997 at page 93.

⁵² Turban E; Electronic Commerce Sweet and Maxwell Publishers, London 2002 at page 30-31.

2.3.2. Contracts for the Sale of Physical Goods

These types of contracts arise where a Web page is being used in conjunction with more traditional advertising as an alternative shop window, e.g. for the sale of alcohol, books or compact disks. Although the contract is formed over the Internet, the performance by the supplier is constituted by the dispatch of goods to the ultimate purchaser. In line with this the question of advertisements and promotion of goods on-line arises. Generally traditional or offline contracts by nature are bilateral where both parties are bound and there is the exchange of promise.

On the other hand, on-line advertisements can create unilateral contracts that is to say an announcement offers money or reward for the performance of an action, which does not oblige the accepting party to notify the advertiser apart from doing the act. In this case on-line advertisements therefore need to be carefully drafted to ensure that customers and lawyers interpret them as advertisement and not unilateral contracts to avoid what happened in the case of *Carlill v. Carbolic Smoke Ball Co. Ltd* which concerned unilateral contracts.⁵³ The effect is that where, say, a company with a Web offers 50 Million pounds to any one who finds a bug in its program may find itself liable for more money than originally anticipated.⁵⁴

On-line Merchants are also advised to observe the fine distinction between an offer and invitation to treat in order to protect themselves from making unintentional offers. The Common English principle⁵⁵ that shop displays and price lists are invitation to treat is also likely to apply to e-mail price lists and websites, which are electronic analogy of shop windows.

⁵³ [1892] 2 Q.B 484.

⁵⁴ Customers are advised to use disclaimers to emphasize that the webvertisement is only an advertisement or invitation to treat not an offer or unilateral contract. For further discussion, see Turban E., on E-Commerce 2002 at page 71-73.

⁵⁵ *Pharmaceutical Society of Great Britain v. Boots Cash Chemists Ltd* [1951] 2 Q.B. See also *Fisher v. Bell* [1961] 1 QB 394 at 399. For more details see Turban C., On E-commerce 2002 at p 82-83.

2.3.3 Contracts for the supply of digitised products

These types of contract normally involve the online supply of data, such as software, text or multimedia products and often involve the granting of licence of any copyright material comprised within the products.

2.3.4 Contracts for the supply of services and facilities:

These types of contract include on-line banking and other financial services, the giving of professional advice over the Internet etc.

In distance or on-line contracts some of the questions or crucial legal issues to be posed are for instance when using Internet,

- when is communication deemed to be an offer and to bind the offeror?
- When is the acceptance deemed to be effective?
- Which legal system should be applied to transactions where the contracting parties come from different jurisdictions?
- How should transactions be authenticated?
- How can electronic privacy and data protection be ensured?
- When and where are the contracts formed?.
- Do we have any law that protect consumers making business on-line?

Resolving questions when and where a contract is concluded and which legal system is to govern the relationship of the parties is likely to raise substantial conflict of laws.

The other problem, which might be observed in on-line contracts, is how to determine the rule as regards instantaneous communication, which rule should apply, or is the postal rule the more appropriate analogy?

Due to the nature of our laws and limited computer legal knowledge of our courts the courts are likely to face a dilemma in answering the following legal issues. For instance in cyberspace contracts, where is the contract actually formed, how is it formed in what

ways can acceptance be communicated? Can a computer accept an offer and form a contract? If a person wishes to buy a book through a web, for instance, Amazon.Com and makes an offer on-line, Can the merchant's Web server accept the offer and create the contract? One can also imagine that where "A" sends e-mail to "B", when is the contract really formed and whom does it binds the sender or the receiver? Some scholars have argued that the moment the merchant sends back the e-mail to the buyer, the contract is formed on the merchants' side⁵⁶. In *Thornton v. ShoeLane Parking*,⁵⁷ Denning L.J suggested that

" [The customer] was committed at the moment when he put his money into the machine. The contract was concluded at that time.... the offer is made when the proprietor of the machine holds it ...the acceptance takes place when the customer puts his money into the slot

*The contract was concluded at that time. The offer is made when the proprietor of the machine holds it out as being ready to recover the money. The acceptance takes place when the customer puts his money into the slot".*⁵⁸

On the other hand the Computer might respond to the e-mail sent but suppose the other party server has a problem how can the parties have knowledge as to whether their communication is effective? The US Court in *State Farm Mutual Auto Ins. Co v. Brockhurst*⁵⁹ could also be relevant on this point.

In this case the Court ruled that since the computer only operates as programmed by the insurance company, it was bound by the contract formed. Based on these two precedents, like English courts our courts would also probably decide that a web server, as an agent of the online business, can make both offers and accept offers in order to create contracts. The proposed distance selling regulations will focus on protecting consumers who purchase goods and services over the Internet. Unlike Tanzania, English Law protects

⁵⁶ Turban C. E-commerce 2002 at p 80.

⁵⁷ [1971]2 QB 163, [1971]2 WL, [1971] 1 ALL E .R 686.

⁵⁸ *ibid* at p.689.

⁵⁹ Cir (1972) 453 F.2d 533, 10th Circuit.

consumers in numerous ways by off-line laws which are applicable to the on-line world.⁶⁰

2.3.5 On-line auctions

The world has witnessed a dramatic growth in on-line auctions aimed both at consumers and businesses. Unlike the traditional auction the world of technology has now embarked on the so-called on-line auction. Not surprisingly, there is no specific legislation dealing with on-line auctions but this trend does raise interesting legal questions.⁶¹ Notably, an auction is merely a particular manner of contracting and rules relating to when an offer is accepted and when it is revoked.⁶²

Indeed what makes on-line auctions more interesting is the question of the method of acceptance by the auctioneer. The general principle of current law stipulates, "a sale by auction is completed on the fall of the auctioneer's hammer or in any other customary manner."⁶³ With on-line auctions there is the practical problem that there is no auctioneer's hammer. In practice, this problem seems to be resolved by setting a closing time on the web site by which all bids must be placed. The highest bidder at the time the auction closes is bound to contract unless the reserved price has not been reached.⁶⁴

Generally, the legal structure in on-line auction seems to be different from the traditional one based on offline. On-line auctions are normally structured as contracts between the auction house and the seller and between the auction house and each bidder.⁶⁵ The auction house does not become a party to any contract of sale. It is merely the conduit, which introduces the seller to the purchaser. Normally the auction house is involved in collecting payment. The auction house accordingly has no liability in the event that there is a failure with respect of title or quality. It has been pointed out that in many on-line

⁶⁰ These Laws includes The Sales of Goods Act 1979(UK), The Supply of Goods and Services Act 1982(UK),The Consumer Protection Act 1987(UK) etc.

⁶¹ Turban E; Electronic Commerce Sweet and Maxwell Publishers, London 2002 at page 45-46.

⁶² Ibid.

⁶³ See Section 59 (b) of Sales of Goods Ordinance Cap 214 R.E. 2002

⁶⁴ Op.cit.

⁶⁵ Ibid.

auctions there is a purported contract of sale between a seller and a purchaser when the seller and purchaser do not even know each other's identity.⁶⁶ All dealings are made with the auction house that sets out the terms of sale in lengthy terms and conditions. This may mean that there could be difficulties with this chain of events in establishing a contract of sale between the purchaser and seller.

On-line auctions such as the type that take place at www.ebay.com, www.qxl.com, www.icollector.com and increasingly on portals such as Yahoo are different from traditional auctions. The process can take several days rather than minutes and the bidding may be at various different times during that period rather than sequential.⁶⁷ Most terms and conditions for these types of on-line auctions create a contract between the on-line auction company and the seller and between the on-line auction company and each bidder. The on-line auction company acts as intermediaries introducing the vendor to the purchaser and taking a commission for the introduction. However, the contract of sale between the vendor and the purchaser does not include the on-line auction company even though they determine the terms and conditions for this contract.

People dealing in online auctions contract might receive the wider protection of Consumer legislation, as there is no auction house.⁶⁸ It has further been pointed out that in many on-line auctions there is a purported contract.

2.3.6 Electronic Ticketing

E-commerce has also moved airlines to use Internet sales and e-tickets as a means of reducing distribution costs and saving money in terms of ticketing paperwork and staffing. Customers can now make their bookings and payment online. The said travelling area needs to be regulated to protect the customers or consumers and other beneficiaries.

⁶⁶ *ibid* at Page 46.

⁶⁷ *Ibid*.

⁶⁸ *Opcit* at p. 45.

2.3.7 Taxation under E-commerce

The tradition and general tax principles of source, residence and jurisdiction for the purpose of income tax under the current offline laws might be affected by the global nature of the e-commerce. The question, therefore, arises where a business is to be regarded as established for fiscal purposes? In the situation where income is earned in one country by an individual resident or undertaking established in another country the question inevitably arises of where taxes fall due to be paid.

Resolution of this issue is the prime rationale behind the raft of bilateral tax conventions negotiated under the auspices of the OECD Model Tax Convention,⁶⁹ which is not reflected by tax regime in Tanzania. With regard to downloaded goods/service or data such as software, audio or visual works the taxation mechanism can be based on Article 5,⁷⁰ which provide for the notion of permanent establishment for the purpose of taxation. The article can also solve the question as to whether the database can be considered as a 'stock or merchandise'.⁷¹

2.4. CONSUMER PROTECTION

2.4.1 The Consumer Protection, Sales and Supply of Goods

The Laws related to the above subject matter in Tanzania protect consumers on off-line business only which hardly apply to the online business when it comes to the matter of distance contracts. The laws do not protect the consumers against any risks involved in distance selling and buying business because when these laws were passed the online or distance contracts were not in practice in Tanzania. In the UK consumers can be protected against numerous risks in distance contracts by way of off-line laws, which are equally applicable to the online law.⁷² The Sale of Goods Act 1979(UK), The Supply of

⁶⁹ Article 7 of the OECD Model Tax Convention provides that the profit of an enterprise of a Contracting State shall be taxable only in that state enterprise carries on business in the other Contracting State through a permanent establishment situated therein.

⁷⁰ OECD Model Tax Convention.

⁷¹ Llyod,I,J, Information Techonology Law 3rd ed. 2000,p.596.

⁷² Ibid p 30.

Goods and Services Act 1982 and Consumer Protection Act 1987 offer a remedy to the defective products etc.

It should be remembered that in e-commerce contracts e.g., parties (supplier and consumer) do not come face to face prior to the conclusion of the contract.⁷³

The laws in Tanzania neither cover on-line contracts nor recognize cyber space or digital signatures. The laws provide that, the contract must be in writing and duly signed or authenticated before a witness, the requirement which is no longer applicable in cyber space world hence affecting the former laws which have to face changes and reforms to accommodate e-commerce principles. There is a need for our country to introduce distance-selling (on-line) laws. These laws should focus on protecting consumers who purchase goods and services over the Internet.

The virtual or 'digital' nature of the agreement theoretically presents no impediment to its recognition under English law as this has already been regulated.

Some jurisdictions and model laws, with regard to legal recognition of electronic contracts, have offered specific legislation affirming their validity. For example, the Model Law on e-commerce of the United Nations Commission on International Trade Law (UNCITRAL) states;

“In the context of contract formation, unless otherwise agreed by the parties, an offer and the acceptance of an offer may be expressed by means of data messages. Where a data message is used in the formation of a contract, that contract shall not be denied validity or enforceability on the sole ground that a data message was used for that purpose or stored by electronic, optical or similar means, including electronic mail”⁷⁴

⁷³ Instead they use telephone sale, mail order, email, facsimile etc

⁷⁴ UNCITRAL Model Law 1996/2001

2.5 CYBER CRIMES

2.5.1 Introductory remarks

The rapid development of Digital technology and the invention of Computers have impacted on the way crimes are committed. It is now possible for culprits to easily commit crimes using computers. These crimes are known as cyber or computer crimes. It might be difficult to deal with cyber crimes under the current statutes that were legislated before the development on technology. Some countries like the UK, South Africa, Seychelles, Comoro; India etc have enacted legislation to regulate this area. The Commonwealth Secretariat has also come up with compendium of technology model laws with proposed status to regulate ICT.⁷⁵

2.5.2 Privacy in Computers.

There is no sufficient privacy when using a computer as hackers might intercept computer message. Computer hacking is the accessing of a computer system without the express or implied permission of the owner of that computer system.⁷⁶ A computer hacker is a person who gains access to a computer system without permission. A hacker may gain access remotely, using a computer in his own home or office connected to a telecommunication network and can be able to interfere with the security system in the computer.

The aspect which is often identified as a factor deterring consumers from participating in e-commerce is the fear that information transmitted over the internet might be intercepted by computer hackers. For instance where the data takes the form of, for example, credit card, the potential for loss is obvious.⁷⁷

Some scholars have argued that most of the hackers are motivated by a sense of achievement and the act of breaking into a computer system using their own mental effort

⁷⁵ Commonwealth Secretariat has drafted Electronic Model Laws (Bills) on Electronic Evidence, Electronic Transaction, Computer and computer related crimes, privacy and freedom of information.

⁷⁶ Brainbridge D. Introduction to Computer Law 4th Edition at page 307.

⁷⁷ Llyod I.J Information Technology Law 3ed 2000 at page 571.

is reward enough for them.⁷⁸ Their illegal act can cause damage to computer systems inadvertently and they may pave the way for others to do the same maliciously. They are said to pose a serious threat to the security of computer systems. Once the hacker has penetrated in a computer system he can be able to read or copy information, which may be highly confidential. The hacker can also erase or modify information or programs stored in the computer system, or download programs or data. He can further be tempted to steal money or direct the computer to have goods sent to him. By their very nature and relative susceptibility to unauthorized access, computer systems pose different problems to those encountered with information stored on paper. In the UK, hackers who gain access to confidential files stored in a computer can be caught and are liable under the law of confidence.

The great likelihood threat of hacking can be posed by employees but, burglars and industrial spies apart, persons outside the organisation would find it extremely difficult to gain access to the information. Arguably, information stored on a computer that is linked to a telecommunications system is much more vulnerable. It is analogous to information stored in paper files kept in locked cabinets but left in a public place. Hackers who are some times nicknamed as 'mad hackers' are very clever and they can just find the right key to fit the cabinet, and not only can a total stranger try the lock but, often, they can spend as long as they like, trying different keys with impunity until they find one that turns the lock.⁷⁹

Furthermore the UK Court of Appeal had an opportunity to examine the applicability of criminal damage when it heard the appeal against conviction of the self-styled 'mad hacker'. In *R. v. Whitely*,⁸⁰ the accused gained an unauthorized access to the Joint Academic Network (JANET) and gave himself the status of Systems Manager. He deleted and added files, changed passwords and deleted audit files recording his activities. He was very skilled and even deleted a special program inserted to trap him.

⁷⁸ *Opcit.*

⁷⁹ *Ibid* at page 320. The House of Lords decision in the case of *R v Gold* [1988] 2 WLR 984 highlighted the problem of computer hacking and the ease with which it could be done.

⁸⁰ (1991) 93 Cr App R 381.

His activities caused serious disruption and he was convicted of damaging computer disks. The Court of Appeal rejected his appeal confirming that the value of the disks had been impaired. The Lord Chief Justice, Lord Lane, said that the Act required that tangible property had been damaged, not that the damage itself should be tangible.

The UK has enacted a legislation to deal with computer hackers. The law, which contains provisions on the basic hacking offences, is known as The Computer Misuse Act 1990. For instance section 1 of the said Act is aimed directly at hackers who gain access to computer programs or data without any further intention to carry out any other act. It provides that a person is guilty of an offence if:

- (a) he causes a computer to perform any function with intent to secure access to any program or data held in any computer.
- (b) the access he intends to secure is unauthorized; and
- (c) he knows at the time when he causes the computer to perform the function that this is the case.

The hackers can also be caught under the UK Data Protection Act 1998 This Act regulates the use and storage of personal data that is, information relating to individuals who can be identified from that information. Where a computer hacker gains access to a computer system on which personal data is stored and then makes a copy of that data which he stores in his own computer, the hacker is guilty of the offence of processing personal data without having notified the Commissioner.⁸¹

2.5.3 Computer Frauds

Computer fraud can be described as stealing money or property by means of computers that is to say using a computer to obtain dishonestly, including money and cheques or credit or services or to evade dishonestly some debt or liability.⁸² Computer fraud can also involve dishonestly giving an instruction to computer to transfer funds into a bank account or using a forged bankcard to obtain money from a cash dispenser (Automated Teller Machine-ATM). Computer fraud can be mainly divided into two types namely

⁸¹ The UK Data Protection Act 1998.

⁸² Brainbridge D., Introduction to Computer Law 4th Edition at page 291.

data frauds and programming frauds.⁸³ The first type of fraud involves entering an unauthorized data into a computer and tempering, altering or suppressing with that data. The second type of computer fraud as opposed to the first one involves alteration of a computer programme to affect the fraud which is harder to detect than data fraud.⁸⁴

2.5.4 Computer Pornography

With digital technology it is now possible for images or texts to be recorded, published and transmitted on a digital media rather than paper or video tape.⁸⁵ The contents of these images sometimes contain obscene or pornographic materials. The use of computer network such as Internet to disseminate obscene or pornographic materials is alarming. Children and women are the most vulnerable group of obscene materials published electronically.⁸⁶

While Tanzania has not yet enacted any law that will regulate publication and transmission of obscene materials other countries such as the US and the UK have enacted legislation to regulate the above subject.⁸⁷ The Commonwealth Model Laws on Computer and Computer related Laws also provides for the offences on publications, production and possession of Child pornography.⁸⁸ There is a need of regulating these offences under Criminal Statutes in Tanzania.

2.5.6 Data Protection

There is a threat which the use of data processing techniques can pose to the rights and freedoms of those individuals whose personal data is subjected to some form of automated processing.⁸⁹ Personal data and other digital information need to be protected. There is no Law that protects data or database in Tanzania. The main concern here could

⁸³ Ibid.

⁸⁴ *ibid* p.294.

⁸⁵ Lloyd J.I., Information Technology Law 2000 at page 279.

⁸⁶ See *R v. Fellow* [1997] 2 ALL ER. See also *Meechie v. Multi-Media Marketing*, 94 LGR 474 cited in Lloyd J.I., Information Technology Law 2000 at page 279.

⁸⁷ See the UK Obscene Publication Act 1959 as amended in 1994 and the US Communication Decency Act of 1996.

⁸⁸ Section 10 of The Commonwealth Model Laws on Computer and Computer related Laws.

⁸⁹ Lloyd J. Information Technology Law 2000 at page xli.

be the right to privacy, data protection and danger of information misuse. Moreover Databases are not fully protected under the Copyright law in Tanzania.

The UK has enacted the Data Protection Act. Privacy on Data or information is also covered under the South African Electronic Communication Act 2000. The Commonwealth Secretariat has also drafted a Model Bill on Privacy for the promotion and protection of the privacy of individuals, and for connected matters.⁹⁰ The Bills has gone further by providing for the establishment of the office of Privacy Commissioner.

2.6 RELIABILITY AND ADMISSIBILITY OF COMPUTER EVIDENCE.

Generally any modern system of commerce depends partly on trust but mainly on the fact that agreements between the parties are documented.⁹¹ This is a common principle in most transactions, which do not involve online communication. However in Electronic Commerce the situation might be different due to the fact that the parties to the agreement may never have physically met or spoken to each other. In this situation the only reliable Evidence of their agreement will be documents evidencing their transaction. It is possible for parties to face some problems on the admissibility and weight of this kind of evidence because the documents will be computer generated which in most cases might fall as secondary and primary evidence.

The crucial issue here is whether the current statutes on evidence derived from the Common law recognise and give the same weight electronic evidence with that produced from the normal documents drawn by human beings.

The Evidence Act, 1967 does not provide room for the admissibility of Computer/Electronic Evidence apart from the best rule evidence. This has been evidenced recently in the High Court of Tanzania Commercial Division in the case of *Trust Bank Ltd. v. Le-marsh Enterprises Ltd., Joseph Mbui Magari, Lawrence*

⁹⁰ Privacy Model Bill presented at the Workshop on the Law and Technology held in Cape Town, South Africa March 2005.

⁹¹ Alistair Kelman in Turban E., on E-commerce at page 188.

*Macharia*⁹² whereby the question before Judge Nsekela was whether Computer Evidence is admissible in our Courts. The court was looking for the definition of bankers' books in relation to the evidence produced by the computers.

The judge urged the courts to take due cognizance of the technological revolution that has engulfed the world. "The law cannot ill afford to shut its eyes to what is happening around the world in the banking fraternity."⁹³ "It is in this spirit that I am prepared to extend the definition of Banker's books to include evidence emanating from computers subject to same safeguards applicable to other banker's books under section 78 and 79 of the Evidence Act."⁹⁴

In reaching its decision the court was also moved by the decision in the case of *Tanzania Cotton Marketing Board v. Corgecot Cotton Company SA*⁹⁵ whereby the court stated as follows;

*"While it is an undisputed fact that under Rule 4 of the Arbitration Rules, 1957, the award is to be forwarded to the Registrar of the High court by registered post, the words 'registered post' should be interpreted widely enough to take into account the current development in communication technology that has taken place..."*⁹⁶

The conclusion to be drawn from the court decision is that though our laws do not recognize computer evidence as original but the prevailing circumstances allow the admissibility of such evidence but this has to be clarified beyond all doubt by legislation rather than by judicial intervention.

The Civil Evidence Act 1995(UK) removed previous requirement that a document has to be original (in a written form) in order to be admissible. In 1981 Professor Smith in a

⁹² The High Court of Tanzania (Commercial Division) at Dar es Salaam Commercial case no.4 of 2000 (Unreported).

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ TLR 165[1997].

⁹⁶ Ibid.

learned article on computer evidence developed the ideas put forward in the Statute of Liberty and came up with a rule, which was later accepted by the English Courts.

The rule reads as follows:

*“Where information is recorded by mechanical means without the intervention of a human mind, the record made by the machine is admissible evidence, provided of course, it is accepted that the machine is reliable”*⁹⁷

2.7 INTERNET SERVICES PROVIDERS (ISPS) AND ONLINE SERVICES PROVIDERS (OSP) LIABILITY ON DIGITISED SERVICES.

The ISPs and OSPs play a big role on most transactions conducted online. They can facilitate computer users to access data and other digitised services through their services. Computer users can be able to download and infringe copyrighted materials.

The infringement of digitised materials raises three theories namely: primary, secondary and contributory liability.⁹⁸ Primary infringers are those who exercise any of the exclusive rights of a copyright owner without proper authorization.⁹⁹ Secondary liability for copyright infringement can be termed as the liability that is applied to someone other than a primary infringer of the copyright.¹⁰⁰ Internet service providers and online service

⁹⁷ J.C.Smith The admissibility of Statement by Computer, (1981) Crim.L.R.390.This statement was quoted with approval by Court of Appeal in R v.Spiby (1990) 91 Cr.App.186.

⁹⁸ Dr.Thomas Hays, The University of Aberdeen UK,Research Member, CIER, the Molengraaff Institute for Private Law, Utrecht , the Netherlands, *The Evolution and Decentralization of Secondary Liability for Digital Infringements of Copyright protected Works in the United States*, The paper presented in the University of Utrecht, Holland. See also the case of *M.Witmark & Sons v.Pastime Amusement Co.*298 F.470 (E.D.S.C 1924) 4th Circuit 1924.

⁹⁹ Other terms used to denote the same category of infringing activity are indirect infringement and third-party infringement. They generally mean the same thing in the context of copyright infringement, though the uses of these terms vary between jurisdictions in relation to other forms of intellectual property. See e.g., the differences in the use of the term “indirect” in respect of design-right infringement in the UK copyright, Designs and Patents Act & 226(4) (incorporating contributory infringement concepts for unregistered designs similar to those found in copyright law) and the use in the Registered Designs Act &7(3) (reflecting a more limited scope for indirect infringement where registration constructively imputes knowledge, and thereby primary liability, to those involved in infringement).

¹⁰⁰ The exclusive rights of copyrights owners are enumerated at 17 U.S.C. & 106-to reproduce, to prepare derivative works, to distribute copies, to display and to perform in public-are infringed under 17U.S.X.&501 if any of these rights are exercised without a license.

providers can be secondarily held liable as facilitators for the infringement of copyrighted, materials online.¹⁰¹

The problem is how to hold ISPs and OSPs liable for copyright infringement. The other issue is to see whether they are able to watch, control the digitised material and identify the infringers and how can they can watch and control the materials digitised and the infringers and the owners' of copyrights. Some courts argue that ISPs and OSPs are benefiting from the primary infringers hence liable. To solve this problem the US has enacted the Digital Millennium Copyright Act (DMCA 2000) whereby ISP becomes liable if they have the knowledge through the Web they are hosting.

2.8 DIGITISED SERVICES/GOODS

Some products such as software, video, newspapers, music, books etc can also be delivered in digital format therefore suppliers can send the products over internet while serving time and money.

The Internet is now based on around transfer of information in digital format and as transmission speed increases, so more and more complex and substantial forms of data may be transmitted on-line.¹⁰²

It is now becoming common for individuals to order, purchase and download copies of software and make payment by means of a credit card.

For instance the MP3 files facilitate music to be transmitted over the Internet in real time and computer users can download music freely causing a considerable concern over the owners of copyright in musical work.¹⁰³ The technology development has expanded to the extent that virtually any item of information found, pictures text or graphics may be transformed into a digital format.¹⁰⁴ This has been seen to be a threat to copyright owners as illustrated in the case of *A & M Records, Inc. v. Napster, Inc.*¹⁰⁵ Napster engaged in wholesale reproduction and distribution of copyrighted works all constituting direct copyright infringement. They facilitated the transmission of MP3 files between and

¹⁰¹ *A & M Records, Inc. v. Napster, Inc.* US Court of Appeal for Ninth Circuit 239 F.3d 1004,2001 U.S App. LEXIS 5446:57US PQ.2D (BNA) 1729.

¹⁰² Lloyd I.J Information Technology 3rd ed at page 3.

¹⁰³ *ibid.*

¹⁰⁴ *ibid.*

¹⁰⁵ US Court of Appeal for Ninth Circuit 239 F.3d 1004,2001 U.S App. LEXIS 5446:57US PQ.2D(BNA)1729.

among its users through peer-to-peer file sharing. The decision of the Court in this case, which held Napster liable, has posed a great challenge on copyright with regard to musicians, recording companies and other computer users.¹⁰⁶ The situation could be worse in the absence of legal framework to regulated digitised materials.

2.9 DOMAIN NAMES

Domain names are Web or Internet addresses used by web servers to identify each other on the Internet. It is an alternative to numerical Internet Protocol (IP) address. There are two main types of domain names namely generic top-level domains (gTLDs) and country code Top level Domains (ccTLDs).¹⁰⁷ Common Examples of domain names are www.ffwlaw.com, www.ican.org, www.udsm.org.tz, www.lrct@lrct-tz.org ICANN which is an American Company established under Californian law is responsible for co-ordinating some of the technical function relating to the Internet.

Some Scholars have argued that the situation with regard to the national domain is rather more complex, with a mix of public and private sector organisations playing the big role of the domain name registry.¹⁰⁸ While in Tanzania by 2004 two persons were registering the domain names, in the UK, a non-profit making company Nominet plays this role.¹⁰⁹ During the last twenty-five years, the Internet has evolved from a United States government research project into a prominent international medium of communication.¹¹⁰ Throughout this evolution, the Domain Name System (DNS) has been witnessed playing a major role in the rise of the Internets popularity by providing a “human friendly” method of Internet navigation thus facilitating international commerce and a global exchange of knowledge.¹¹¹

¹⁰⁶ Mambi.A. The Dissertation on Copyright infringement, the impact of Technology and the music Industry in Tanzania, University of Aberdeen, UK 2003 at page 4.

¹⁰⁷ Ibid at page 21.

¹⁰⁸ Lloyd J.I. Information Technology Law 3ed 2000 at Page 25.

¹⁰⁹ Nominet UK derives its authority from the Internet industry in the UK and is recognised as the UK registry by the Internet Assigned Numbers Authority (IANA) in the US.

¹¹⁰ The Internet has its roots in the Advanced Research Project Agency Network (ARPANET), A research network established in the early 1970s by the US Department of Defense. See the Notes on the Future Of Domain names Dispute Resolution: Crafting practical International Legal Solutions from within the UDRP frame work by Lisa M.Sharock cited in 51 Duke Law Journal .See also <http://www.law.duke.edu/journals/dlj/articles/dlj51p81.htm>. 2001 at page 1.

¹¹¹ See Lisa M.Sharock on the Future Of Domain names Dispute Resolution 2001at page 1.

It has been observed that the rapid growth of the Internet and the development of the DNS, however, have come with a price namely, an immense strain on an international trademark law system ill equipped to deal with cyber-controversies. As the United States Court of Appeal from the Second Circuit has opined, applying established trademark law in the Internet context is “somewhat like trying to board a moving bus.”¹¹² Sharrock in his article¹¹³ argued that this problem is necessarily exacerbated in the international context where, to continue the bus analogy, it is difficult to determine where the bus is located or even whether the bus has a physical presence at all.

While trademarks are governed by the Trade and Service Mark Act 1987, there is no law that governs Domain names in Tanzania hence a great likelihood of pirates cybersquatting domain names. In other jurisdictions like South Africa these area is covered under the Electronic Communications and Transactions Act 2000.

While, many countries have established dispute resolution policies for domain names, Tanzania has not yet adopted any of such policies.

In the US, The *US. Anti-cybersquatting Consumer Protection Act (ACPA)*¹¹⁴ has been enacted for the purpose of regulating Domain names. The Act protects famous trademarks holder against cybersquatters who register, or traffic in, identical or confusingly similar domain names in bad faith and with intent to profit. In other words there is a possibility of passing off where traders are using similar domain names. A good example of domain names disputes can be traced from the case of *Prince Pl v. Prince Sportswear Group Inc.*¹¹⁵ The dispute involved the two companies competing with legitimate rights on prince.com domain name in different jurisdictions.¹¹⁶ The source of the dispute is a fundamental mismatch between trademark rights and the domain name system.

¹¹² *Beunsan Rest. Corp v. King*, 126 F.3D 25, 27 (2D Cir.1997).

¹¹³ *Opcit.*

¹¹⁴ 1999.

¹¹⁵ (1998)FSR 21.

¹¹⁶ CH-1997-P No.2355, July 18, 1997.

The UK had also experienced the conflict on domain names in *Pitman Training Ltd v. Nominet UK*¹¹⁷ and *Marks & Spencer plc v. One in a Million Ltd*¹¹⁸ whereby the issue of cybersquatting was clarified and the practice of domain piracy was effectively buried. In this the above latter case the business of One in a Million Ltd had registered the plaintiffs' names and trade marks as internet domain names without their consent and then sought to sell them. The Court of Appeal dismissed the appeal and granted a permanent injunction. The Court held that the registration of a distinctive name such as Marks and Spencer made a false representation constituting to passing off. The Court further argued that registration was an erosion of the exclusive goodwill, which damaged Marks and Spencer plc.

Furthermore, in *Harrods v. UK Network Services Ltd*,¹¹⁹ concerning the use of harrods.com, Harrods launched an action in England for passing off and trademark infringement. Summary judgment was granted and the defendant was ordered to release the domain name to the plaintiff.

In some cases a dispute involving multiple trademark holders might arise where more than one party has trademarks rights in the same word or phrase. In this situation the dispute arises as to who controls domain names incorporating the trademark. This can be echoed from *Nissan Motor Co. v. Nissan Computer Corp.*,¹²⁰ which is illustrative of the bitter clashes that can occur between multiple holders of identical marks in the Internet setting. In this case Nissan Motor Company filed a suit alleging both cybersquatting and traditional infringement and therefore an injunction was granted to the right holders.

2.10 BANKS AND FINANCIAL INSTITUTION LAWS

Banks are now using new technology through online service whereby people can open Bank account online. Customers can use banks to order and purchase services and goods online. Customers can also easily transfer money online. All these changes brought by e-

¹¹⁷ [1997] FSR 797.

¹¹⁸ [1998] FSR 265.

¹¹⁹ [1997] EIPR 106.

¹²⁰ 89 F.Supp 2d 1154 (C.D Cal.2000).

commerce will affect the laws related to the banking and financial transactions, most of these laws do not address the electronic transaction but rather offline transactions.

2.10.1 Payment Mechanisms for Internet Commerce

The creation of suitable mechanisms for enabling different types of payment system to be made through the Internet seems to be a key factor in full realization of its potential as a commercial medium though it can also pose a problem if not well regulated.¹²¹ The issue is whether the use for example of credit card system is safe, risk less and whether complete anonymity is a desirable feature of a payment mechanism.

2.10.2 Payment by card in Cyberspace

It is estimated that 47 per cent of all disputes dealt with by Visa in the European Union are directly related to Internet fraud.¹²² Due to the high rate of Internet related fraud on credit card transactions, Visa supports the swift adoption of the Secure Electronic Transaction protocol (SET). Developed by a consortium led by MasterCard and Visa and implemented since 1997, SET is a standard protocol that supports secure digital credit card transactions on-line.¹²³ Visa is also based on advocating parallel measures to enhance the security of transactions on the Net such as the adoption and standardization of digital signatures. In response to rising fears of credit card fraud in electronic commerce transactions, the Law Commission of England and Wales issued draft proposals addressing the issue on April 27, 1999. If approved they would fundamentally change fraud legislation in the area.

The new methods of payments for goods and services under e-commerce, which can be seen as a logical development of conventional cheques related to Bills of exchange, can affect the Bills of Exchange Law. The combined definition of a bill of exchange and a Cheque has to be affected. The combined definition of Bills of Exchange and Cheques

¹²¹ Edward L. Law and the Internet, regulating cyberspace 1977 at page 110.

¹²² Turban E., on E-commerce at page 36.

¹²³ Ibid at page 36.

under the UK Bills of Exchange Act 1882, which is in parimateria with Tanzania, can be summarized as follows.

“An unconditional order in writing, addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand or at a fixed or determinable future time a sum certain in money to or to the order of a specified person or the bearer”.¹²⁴ (*emphasis added*)

Furthermore in the UK a Cheque is defined under the Bills of Exchange Act 1882 as a bill of exchange, drawn on a banker payable on demand.¹²⁵ All these elements are now contained in electronic analogy of the cheque through the use of sophisticated Cryptography and cyberspace allowing the creation of digital signatures.¹²⁶ However to enable digital money to replace cheques in Tanzania, a new legislation has to be introduced like the UK did.¹²⁷ The UK has solved the above problem through the enactment of the Electronic Communication Act of 2000. Under digital technology (cyberspace) the requirement of writing and signature with regard to negotiation of bills provided under the current law will be different.

Another notable banking payment change brought by technological development is the birth of a number of networks and services, which are used for transfer of funds. This Network has been usually referred to as wholesale EFT systems-SWIFT. A good example is SWIFT, which is the new mode of electronic funds transfer between financial institutions from one country to another. All these changes which are not reflected by some legal systems including Tanzania can affect the Commercial laws related to financial Institutions such as Banking and Financial Institutions Act 1991 and Bank of Tanzania Act 1995.

These laws have to be amended to accommodate the new electronic communication, services, payment and transfer of money. Furthermore the new e-commerce money transfer such as the use of VISA, Master Card, Credit, and Cards, which is now

¹²⁴ Section 3.

¹²⁵ Section 73 of The Bills of Exchange Act 1882.

¹²⁶ Turban E. E-commerce 2002 at p 168.

¹²⁷ *ibid* 2000 Act.

universally accepted as payment mechanism, is becoming alternatives to conventional bank transfer apart from overtaking personal cheques¹²⁸ hence affecting commercial laws. People can use on-line payment through Internet using these cards. Different from use of a Cheque, the payment by Electronic Funds Transfer at Point of Sale (EFTPOS) is effected by the giving of instructions by the buyer to his or her bank to make the payment to the retailer.¹²⁹ Compared with payment by cash and cheques, EFTPOS payment systems are seen to be new and still infant in other countries. However as the technology develops rapidly the system will be highly applied in the developing countries thus necessitating the enactment of legislation to regulate this area¹³⁰.

On the other hand, the Trade and Consumer Credit lacks e-commerce regulatory framework calling for changes. The laws will be affected by the development of e-commerce, as they have to be changed to overcome the probable risk such as security, transaction costs, limitation of users and privacy over the Internet or online contracts.

2.11. JURISDICTION PROBLEM

Under E-Commerce the determination of the applicable jurisdiction where parties are in dispute can also be a problem to the courts as to which law will apply in case of such dispute or it could be difficult to answer the issue as to where do things happen on the net or web?, whose laws apply?, how do you enforce civil rules or foreign judgment under current laws against a party in e-commerce?. This is due to the fact that e-commerce business seems to be that contracting parties and customers are likely to be from overseas¹³¹ and the current municipal laws are hardly applicable, hard to enforce and difficult to apply remedies unless they are amended.

2.12 ELECTRONIC AND DIGITAL SIGNATURES

The evolution of E-Commerce has brought a revolution on the paper based or manual signatures (a handwritten form) paving way for electronic or digital signatures. An electronic signature is normally produced by performing a mathematical function on the

¹²⁸ Turban E. E-commerce 2002 at page 36.

¹²⁹ *ibid* at p 111.

¹³⁰ *ibid* at page 36.

¹³¹ *ibid* page 115.

document, or part of it, which identifies the signatory and authenticates the contents of the document.¹³² To be an effective signature, the modified document must be producible only by the maker, and any attempt to change the content of the document must invalidate the signature.

On the other hand it has been argued by different scholars that even where there is no positive legal requirement that a document be signed in order to have legal validity, signatures have an important evidential function.¹³³ There are some methods in which electronic documents can be signed including by the use of biometric systems, such as finger print or voice recognition, or by rental scanning. The best form of electronic signature available depends on the use of encryption technology. A message can be encrypted by use of computer algorithm code or key. The users are issued with a unique pair of matching keys whereby one would be kept private and the other made public. A message encrypted with a particular private key can only be decrypted with the corresponding public key. By encrypting part of message or document using his own unique private key a person can therefore effectively sign it, identifying himself as the sender and/or indicating his assent to its contents.¹³⁴ Should any one dispute the authentication of the message or any document, it can be tested by decrypting the signature using his public key. Successful decryption will then indicate that the original must have been encrypted with his private key and thus that he signed it.¹³⁵

2.12.1 UNCITRAL on Digital signatures and other Electronic Signatures

In discussing the desirability and feasibility of preparing the new Model Law and in defining the scope of uniform rules on electronic signatures, UNCITRAL has examined various electronic signature techniques currently being used or still under development. The common purpose of those techniques is to provide functional equivalents to handwritten signatures; and other kinds of authentication mechanism used in a paper-based environment (e.g. seals or stamps). The same techniques may perform additional

¹³² Reeid C., *Internet Law: Text and Materials* 2000, at page 158.

¹³³ Bradgate R. *Commercial Law* 3ed 2000 at page 23.

¹³⁴ *Ibid.*

¹³⁵ *Ibid.*

functions in the sphere of electronic commerce, which are derived from the functions of a signature but correspond to no strict equivalent in a paper-based environment.¹³⁶ Article 7 of the UNCITRAL Model Law on E-commerce is much based on the recognition of the function of a signature in a paper-based environment.

Moreover, alongside ‘digital signature’ based on public-key cryptograph, there exist various other devices, also covered in the broader notion of ‘electronic signature’ mechanism, which may currently be used, or considered for future use, with a view to fulfilling one or more of the above-mentioned functions of handwritten signatures. For example, certain techniques would rely on authentication through a biometric device based on handwritten signatures.¹³⁷ In such a device, the signatory would sign manually, using a special pen, either on a computer screen or on a digital pad. The handwritten signature would then be analysed by the computer and stored as a set of numerical values, which could be appended to a data message and displayed by the relying party for authentication purposes. Such an authentication system would presuppose that samples of the hand-written signature have been previously analysed and stored by the biometric device. Other techniques would involve the use of personal identification numbers (PINs), digitised versions of handwritten signatures, and other methods such as clicking an ‘OK-box’.¹³⁸

It has been argued that UNCITRAL is committed and intended to develop uniform legislation that can facilitate the use of both digital signatures and other forms of electronic signatures.¹³⁹ To that effect, UNCITRAL has further attempted to deal with the legal issues of electronic signatures at a level that is intermediate between the high generality of the UNCITRAL Model Law on Electronic Commerce and the specificity that might be required when dealing with a given signature technique.¹⁴⁰ In any event, consistent with media neutrality in the UNCITRAL Model Law on Electronic Commerce,

¹³⁶ UNCITRAL Model Law on Electronic Signatures with Guide to Enactment 2001 at page 7-19.

¹³⁷ *ibid* at 21.

¹³⁸ *Ibid.*

¹³⁹ *ibid.*

¹⁴⁰ *ibid.*

the new Model Law is not to be interpreted as discouraging the use of any method of electronic signature, whether already existing or to be implemented in the future.

2.13 WRITING, SIGNATURE AND ORIGINAL

All the methods for transferring both property rights in tangible goods and intangible property or for creating security interests in either type of property presuppose at least the agreement of the parties on the transfer of such property or creation of the security interest.¹⁴¹ That agreement may be subject to specific form requirements either as a condition for the validity of transfer under the substantive applicable law, or pursuant to the applicable rules on evidence. The spectrum of form requirements may range from a written document signed by the parties, which in some jurisdictions may be made by a stamp or mechanical means as well as a hand, to a public deed drawn by a notary public. Intermediate requirements include other formalities, such as certain number of witnesses or authentication of signatures by a notary public. In some legal systems such as common law, a statutory contract form is required.

The current replacement of paper-based methods for transferring rights in tangible goods, transferring intangible property or creating security interests in tangible goods or intangible property with electronic equivalents presupposes therefore the resolution of the following legal issues; the satisfaction of writing and signing requirements; the evidential value of electronic communications and the determination of the place of contract formation.¹⁴²

Among such legal obstacles found in many countries including Tanzania, those arising from the existence of writing and signature requirements and the probative effect of electronic communications have already been settled.¹⁴³ To solve this problem, statutory provisions should be made for the acceptance of computer generated information.

¹⁴¹ *ibid.*

¹⁴² See UNCITRAL Report on Model Laws on E-Commerce with the Guide to enactment 1996, published in New York 1997.

¹⁴³ see Articles 5 to 10 of the UNCITRAL Model law on Electronic Commerce.

2.14 REGISTRY FUNCTION: AUTHORITY, LIABILITY AND PRIVACY ISSUES.

In addition to general issues such as those referred to above, the UN General Assembly has also noted that, the establishment of electronic equivalents to paper based registration systems raises a number of particular problems.¹⁴⁴ These problems include among others the satisfaction of legal requirements on record-keeping, the adequacy of certification and authentication methods, possible need of specific legislative authority to operate electronic registration systems, the allocation of liability for erroneous messages, communication failures, and system breakdowns, the incorporation of general terms and conditions and the safeguarding of privacy.¹⁴⁵

Indeed the prospects for developing electronic equivalents of acts of transfer or perfection might be more positive where the law has at least in part dispensed with the strict requirement of physical delivery, for instance, by attributing to certain symbolic acts the same effect as the physical delivery of certain goods. One such example may be where the law attributes to the transferee or secured creditor the constructive possession of the goods transferred or pledged by virtue of an act of the parties that confers on the transferee the means for claiming control over the goods. Conceivably, the law could attribute the same effect to the entry of the transfer agreement into a registry system administered by a trusted third party or to an acknowledgement sent by the party in physical possession of the goods.¹⁴⁶

2.15 TITLES AND NEGOTIABLE INSTRUMENTS

As noted in an earlier study by the UN Secretariat, the issue of writing and signature in an electronic context does not seem to solve the issue of negotiability which has been said to be “perhaps the most challenging aspect” of implementing EDI in international trade practices. Rights in goods represented by documents of title are typically conditioned by

¹⁴⁴ UN General Assembly Report 2002, UNCITRAL Working Group on Electronic Commerce at page 10-11.

¹⁴⁵ *Ibid.*

¹⁴⁶ *Ibid.*

the physical possession of an original paper document (the bill of lading, warehouse receipt, or other similar document).¹⁴⁷

Analyses of the legal basis for the negotiability of documents of title have indicated that *“there is generally no statutory means in place by which commercial parties, through the exchange of electronic messages, can validly transfer legal rights in the same manner possible with paper documents”*.¹⁴⁸ Moreover, *“the legal regime of negotiable instruments is in essence based on the technique of a tangible original paper document, susceptible to immediate visual verification on the spot. The UNCITRAL suggests that in the present state of legislation, negotiability cannot be divorced from the physical possession of the original paper document”*.

Thus, it has been said that one challenge in developing law to accommodate electronically transmitted documents of title *“is to generate them in such a way that holders who claim due negotiation will feel assured that there is a document of title in existence, that it has no defects upon its face, that the signature or some substitute therefore is genuine, that it is negotiable, and that there is a means to take control of the electronic document equivalent in law to physical possession”*.¹⁴⁹

Arguably, the development of electronic equivalents to documents of title and negotiable instruments would therefore require the development of systems by which transactions could actually take place using electronic means of communication.¹⁵⁰ This result could be achieved through a registry system, where transactions would be recorded and managed through a central authority, or through a technical device based on cryptography that ensures the singularity of the relevant data message. In the case of transactions that would have used transferable or quasi-negotiable documents to transfer rights which were intended to be exclusive, either the registry system or the technical device would need to

¹⁴⁷ *ibid.*

¹⁴⁸ See. Jeffrey B.Ritter and Judith Y.G.”International Electronic Commerce and Administrative Law: The Need for Harmonized National Reforms, *Harvard Journal Of Law and Technology*, Vol.6 (1993) p.279. Cited by UNCITRAL Report 2001.

¹⁴⁹ Donald B.P, Electronic Data Interchange as documents of title for tangible agriculture commodities, *Idaho Law Review*, Vol.31(1995), p.726.

¹⁵⁰ UN General Assembly Report 2002, UNCITRAL Working Group on Electronic Commerce page 11.

provide a reasonable guarantee as to the singularity and the authenticity of the transmitted data.¹⁵¹

2.16 INTERNATIONAL INITIATIVES ON TRANSFER OF RIGHTS THROUGH ELECTRONIC MEANS

The transmission of instructions and information during the clearing and settlement process is conducted through various secure communication networks such as SWIFT or Cedcom. These instructions may be checked against validation rules such as the International Securities Identification Number (ISIN) to ensure its accuracy. ISIN is a code that uniquely identifies a specific securities issue.¹⁵² The organization that allocates ISINs in any particular country is the National Numbering Agency (NNA), which is typically a recognized stock exchange.

As noted earlier, developing electronic equivalents of traditional, mainly paper-based, methods for transferring or creating rights in or tangible goods or intangible property may face serious obstacles where the law requires physical delivery of goods or of paper documents for the purpose of transferring property or perfecting security interest in such goods or in the rights represented by the document. The particular problem presented by electronic commerce is how to provide a guarantee of uniqueness (or singularity) equivalent to possession of a document of title or negotiable instruments

¹⁵¹ Ibid.

¹⁵² *ibid* at page 26-27.

CHAPTER THREE

3.0 STATE OF THE LAW

3.1 INTERNATIONAL LEVEL

3.1.1 The UNCITRAL Model Law on Electronic Commerce with The Guide To Enactment 1996 & 2001

As noted earlier in this discussion that E-Commerce has a great effect on the existing offline legislation that embody the requirement of writing and signatures, the UN has introduced a Model Law that can be used and adopted by the countries to facilitate the enactment of laws that relate to E-Commerce. A model law is a legislative text that is recommended to states for enactment as part of their national law.¹⁵³ The use of the UNCITRAL Model Law can also be useful in solving the problems related to the evidential value of electronic communications, the determination of the place of contract formation and the jurisdiction applicable. The Model Law can be used as a tool for harmonizing laws in the world. As the UNCITRAL Model law on Electronic Commerce, the new Model Law is the form of legislative text that is recommended to States for incorporation into their National law.¹⁵⁴

It is generally advisable that when enacting the new Model Law (UNCITRAL Model Law on E-Commerce), to adhere as much as possible to the uniform text in order to make the national law as transparent and familiar as possible for foreign users of the national law.¹⁵⁵ Unlike an International convention, model legislation does not require a state enacting it to notify the UN. The purpose of Model Law is to offer national legislators a set of internationally acceptable rules as to how such legal obstacles may be removed and how more secure legal environment may be created for what has become known as electronic commerce.¹⁵⁶ The Model Law on International Commercial Arbitration (1985) and the Model Law on Electronic Commerce (1996) illustrate how the model law can be

¹⁵³ Jose Angelo Estrella Faria, UNCITRAL , Legal harmonization through Model Laws, The Experience of UNCITRAL Paper presented at ALRAESA in South Africa 2005 at page 13.

¹⁵⁴ UNCITRAL Model Law on Electronic Signatures with the Guide to Enactment 2001 at page 18.

¹⁵⁵ Ibid.

¹⁵⁶ Guide to Enactment of the UNCITRAL Model Law on Electronic Commerce (1996).

adopted to the subject matter under consideration and to the degree of flexibility sought by the drafters.

In line with its training assistance activities, the UNCITRAL secretariat may provide technical consultations for Governments preparing legislation based on the UNCITRAL Model Laws.

Noting that an increasing number of transactions in international trade are carried out by means of electronic data interchange and other means of communication, commonly referred to as “electronic commerce”, which involve the use of alternative to paper-based methods of communication and storage of information the UN Commission at its twenty-ninth session after consideration of the observations of Governments and interested organisation adopted the Model Law on Electronic Commerce.¹⁵⁷ The UN Commission believed that the adoption of the Model Law on Electronic Commerce by the UN Commission will assist all States significantly in enhancing their legislation governing the use of alternatives to paper-based methods of communication and storage of information and in formulating such legislation where none currently exists.

The UN Commission further recommends that all States give favourable consideration to the Model Law when they enact or revise their laws, in view of the need for uniformity of the law applicable to alternatives to paper-based methods of communication and storage of information.¹⁵⁸

The following are the relevant UNCITRAL Model Law articles that can be useful guidelines in drafting any legal framework related to E-Commerce.

¹⁵⁷ See the Resolution adopted by the General Assembly 51/162 Model Law on Electronic Commerce, The United Nations Commission on International Trade Law.

¹⁵⁸ Ibid.

Article 6

Writing

- (1) *Where the law requires information to be in writing, that requirement is met by a data message if the information contained therein is accessible so as to be usable for subsequent reference.*
- (2) *Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the information not being in writing.¹⁵⁹*

3.1.2 The purpose of Article 6 in as far as Writing is concerned;

Article 6 is intended to define the basic standard to be met by a data message in order to be considered as meeting a requirement (which may result from statute, regulation or judge-made law) that information be retained or presented “in writing” (or that the information be contained in a “document” or other paper-based instrument). It may be noted that article 6 is part of a set of three articles (article 6,7, and 8), which share the same structure and should be read together.

3.1.3 Consideration of the traditional writing requirement on the paper based Documents

In the preparation of the Model Law, particular attention was paid to the functions traditionally performed by various kinds of “writings” in a paper-based environment.¹⁶⁰ For example, the following non-exhaustive list indicates reasons why national laws require the use of “writings”:

- (1) to ensure that there would be tangible evidence of the existence and nature of the intent of the parties to bind themselves;
- (2) to help the parties be aware of the consequences of their entering into a contract;
- (3) to provide that a document would be legible by all;

¹⁵⁹ Article 6 of UNCITRAL Model Law.

¹⁶⁰ UNCITRAL Model Law on E-Commerce with Guide to Enactment 1996 at Para UN General Assembly Report 2002, UNCITRAL Working Group on Electronic Commerce. 48.

- (4) to provide that a document would remain unaltered over time and provide a permanent record of a transaction;
- (5) to allow for the reproduction of a document so that each party would hold a copy of the same data;
- (6) to allow for the authentication of data by means of a signature;
- (7) to provide that a document would be in a form acceptable to public authorities and court;
- (8) to finalise the intent of the author of the ‘writing’ and provide and sub-sequent audit for accounting, tax or regulatory purposes;
- (9) ...
- (10) ...and
- (11) to bring legal rights and obligations into existence in those cases where a “writing” was required for validity purposes.

However, in the preparation of the Model Law, The UNCITRAL found that it would be inappropriate to adopt an overly comprehensive notion of the functions performed by writing.¹⁶¹ Existing requirements that data be presented in written form often combine the requirement of “writing” with concepts distinct from writing, such as signature and original. Thus, when adopting a functional approach, attention should be given to the fact that the requirement of a ‘writing’ should be considered as the lowest layer in hierarchy of form requirements, which provide distinct levels of reliability, trace ability and inalterability with respect to paper documents.

The requirement that data be presented in written form (which can be described as a “threshold requirement”) should thus not be confused with more stringent requirements such as “signed writing” “signed original” or “authenticated legal act”.¹⁶² For example, under certain national laws, a written document that is neither dated nor signed, and the author of which either is not identified in the written document or is identified by a mere letterhead, would be regarded as a “writing” although it might be of little evidential

¹⁶¹ Ibid Para 49.

¹⁶² Ibid.

weight in the absence of other evidence (e.g. testimony) regarding the authorship of the document.

In addition, the UNCITRAL pointed that the notion of inalterability should not be considered as built into the concept of writing as an absolute requirement since ‘writing’ in pencil might still be considered a “writing” under certain existing legal definitions.¹⁶³ Taking into account the way in which such issues as integrity of the data and protection against fraud are dealt with in a paper-based environment, a fraudulent document would nonetheless be regarded as ‘writing’. In general notions such as “evidence” and “intent of the parties to bind themselves” are to be tied to the more general issues of reliability and authentication of the data and should not be included in the definition of a “writing”.

3.1.4 The importance of Article 6

Article 6 is one of the core provisions of the Model Law. Article 6 is intended to build upon article 7 of the UNCITRAL Model Law on Electronic Commerce and to provide guidance as to how the test of reliability in paragraph 1 (b) of article 7 can be satisfied. In interpreting article 6, where any legal consequence would have flowed from the use of a handwritten signature, the same consequence should flow from the use of a reliable electronic signature.¹⁶⁴ It should be remembered that the purpose of Article 6 is not to establish a requirement that, in all instances, data messages should fulfil all conceivable functions of writing. Indeed Article 6 focuses upon the basic notion of the information being reproduced and read rather than focusing only upon specific functions of a writing for example, its evidentiary function in the context of tax law or its warning function in the context of civil law.

3.1.5 Compliance with a requirement for a signature

Article 7

(1) *Where the law requires a signature of a person, that requirement is met in relation to a data message if:*

¹⁶³ Ibid UN General Assembly Report 2002, UNCITRAL Working Group on Electronic Commerce.

¹⁶⁴ See UNCITRAL Model Law on Electronic Signatures with Guide to enactment 2001 at page 52.

- (a) *a method is used to identify that person and to indicate that person's approval of the information contained in the data message; and*
- (b) *that method 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.*

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.*

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.*

3.1.6 Originality of a document

Article 8

- (1) *Where the law requires information to be presented or retained in its original form, that requirement is met by a data message if:*

(a) *there exists a reliable assurance as to the integrity of the information from the time when it was first generated in its final form, as a data message or otherwise; and*

(b) *where it is required that information be presented, that information is capable of being displayed to the person to whom it is to be presented.*

(2) Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the information not being presented or retained in its original form.

(3) For the purposes of subparagraph (a) of paragraph (1) of article 8:

(a) the criteria for assessing integrity shall be whether the information has remained complete and unaltered, apart from the addition of any endorsement and any change which arises in the normal course of communication, storage and display; and

(b) the standard of reliability required shall be assessed in the light of the purpose for which the information was generated and in the light of all the relevant circumstances.

UNCITRAL has argued that if “original” were defined as a medium on which information was fixed for the first time, it would be impossible to speak of “original” data messages, since the addressee of a data message would always receive a copy thereof.¹⁶⁵ However, it should be noted that article 8 should be put in a different context. The notion of “original” in article 8 is useful since in practice many disputes relate to the question of originality of documents, and in electronic commerce the requirement for presentation of originals constitutes one of the main obstacles that the Model Law attempts to remove.

¹⁶⁵ UNCITRAL Report on Original under Article 8, Para 62.

Although in some jurisdictions the concepts of “writing”, “Original” and “signature” may overlap, the Model Law approaches them as three separate and distinct concepts. Article 8 is also useful in clarifying the notions of “writing” and “original” in particular in view of their importance for purpose of evidence.

Article 8 is pertinent to documents of title and negotiable instruments, in which the notion of uniqueness of an original is particularly relevant. However, attention is drawn to the fact that the Model Law is not intended only to apply to documents of title and negotiable instruments, or to such areas of law where special requirements exist with respect to registration or notarisation of “writing”, e.g., family matters or the sale of real estate.¹⁶⁶ Examples of documents that might require an “original” are trade documents such as weight certificates, agricultural certificates, quality or quantity certificates, inspection reports, insurance certificates, etc. While such documents are not negotiable or used to transfer rights or title, it is essential that they be transmitted unchanged, that is in their “original” form, so that other parties in international commerce may have confidence in their contents.

In a paper-based environment, these types of document are usually only accepted if they are “original” to lessen the chance that they be altered, which would be difficult to detect in copies. Various technical means are available to certify the contents of a data message to confirm its “originality”.¹⁶⁷ Without this functional equivalent of originality, the sale of goods using electronic commerce would be hampered since the issuers of such documents would be required to retransmit their data message each and every time the goods are sold, or the parties would be forced to use paper documents to supplement the electronic commerce transaction.

¹⁶⁶ Ibid.

¹⁶⁷ Ibid.

3.1.7 Admissibility and evidential weight of data message

Article 9

- (1) *In any legal proceedings, nothing in the application of the rules of evidence shall apply so as to deny the admissibility of a data message in evidence:*
 - (a) *on the sole ground that it is a data message; or,*
 - (b) *if it is the best evidence that the person adducing it could reasonably be expected to obtain, on the grounds that it is not in original form.*
- (2) *Information in the form of a data message shall be given due evidential weight. In assessing the evidential weight of a data message, regard shall be had to the reliability of the manner in which the data message was generated, stored or communicated, to the reliability of the manner in which the integrity of the information was maintained, to the manner in which its originator was identified, and to any other relevant factor.*

The purpose of article 9 is to establish both the admissibility of data messages as evidence in legal proceedings and their evidential value. With respect to admissibility, paragraph (1), establishing that data messages should not be denied admissibility as evidence in legal proceedings on the sole ground that they are in electronic form, puts emphasis on the general principle stated in article 4 and is needed to make it expressly applicable to admissibility of evidence, an area in which particularly complex issues might arise in certain jurisdictions. The term “best evidence” is a term understood in, and necessary for certain common law jurisdictions.¹⁶⁸ However, the notion of “best evidence” could raise a great deal of uncertainty in legal systems in which such a rule is unknown. States in which the term would be regarded as meaningless and potentially misleading may wish to enact the Model Law without the reference to the “best evidence” rule contained in paragraph (1).

¹⁶⁸ *ibid.*

3.1. 8 Retention of data messages

Article 10

(1) Where the law requires that certain documents, records or information be retained, that requirement is met by retaining data messages, provided that the following conditions are satisfied:

- (a) the information contained therein is accessible so as to be usable for subsequent references; and*
- (b) the data message is retained in the format in which it was generated, sent or received, or in a format which can be demonstrated to present accurately the information generated, sent or received; and*
- (c) such information, if any, is retained as enables the identification of original and a destination of a data message and the date and time when it was sent or received.*

(2) An obligation to retain documents, records or information in accordance with paragraph (1) does not extend to any information the sole purpose of which is to enable that message to be sent or received.

(3) A person may satisfy the requirement referred to in paragraph (1) by using the services of any other person, provided that the conditions set forth in subparagraphs (a), (b) and (c) of paragraph (1) are met.

3.1. 9 Formation and validity of contracts

Article 11.

In the context of contract formation, unless otherwise agreed by the parties, an offer and the acceptance of an offer may be expressed by means of data messages. Where a data message is used in the formation of a contract, that contract shall not be denied validity or enforceability on the sole ground that a data message was used for that purpose.

Article 11 is not intended to interfere with the law on formation of contracts but rather to promote international trade by providing increased legal certainty as to the conclusion of

contracts by electronic means. It deals not only with the issue of contract formation but also with the form in which an offer and an acceptance may be expressed. In certain countries, a provision along the lines of paragraph (1) might be regarded as merely stating the obvious, namely that an offer and an acceptance, as any other expression of will, can be communicated by any means, including data messages.¹⁶⁹ However, the provision is needed in view of the remaining uncertainties in a considerable number of countries as to whether contracts can validly be concluded by electronic means. Such uncertainties may stem from the fact that, in certain cases, the data message expressing offer and acceptance are generated by computers without immediate human intervention, thus raising doubts as to the expression of intent by the parties. Another reason for such uncertainties is inherent in the mode of communication and results from the absence of a paper document.

3.1.10 Recognition by parties of data messages

Article 12.

As between the originator and the addressee of a data message, a declaration of will or other statement shall not be denied legal effect, validity or enforceability solely on the grounds that it is in the form of a data message.

Article 12 was added at a late stage in the preparation of the Model Law, in recognition of the fact that article 11 was limited to dealing with data messages that were geared to the conclusion of a contract, but the draft Model Law did not contain specific provisions on data messages that related not to the conclusion of contract but to the performance of contractual obligations (e.g., notice of defective goods, an offer to pay, notice of place where a contract would be performed, recognition of debt).¹⁷⁰ Since modern means of communication are used in a context of legal uncertainty, in the absence of specific legislation in most countries, it was felt appropriate for the Model law not only to establish the general principle that the use of electronic communication should not be discriminated against, as expressed in article 5, but also to include specific illustrations of

¹⁶⁹ *ibid.*

¹⁷⁰ *ibid.*

that principle. Contract formation is but one of the areas where such an illustration is useful and the legal validity of unilateral expressions of will, as well as other notices or statements that may be issued in the form of data messages, also needs to be mentioned.

3.1.11 Attribution of data message

Article 13.

- (1) *A data message is that of the originator if it was sent by the originator himself.*
- (2) *As between the originator and the addressee, a data message is deemed to be that of the originator if it was sent:*
 - (a) *by a person who had the authority to act on behalf of the originator in respect of that data message;*
 - (b) *by an information system programmed by, or on behalf of, the originator to operate automatically.*
- (3) *As between the originator and the addressee, an addressee is entitled to regard a data message as being that of the originator, and to act on that assumption, if:*
 - (a) *in order to ascertain whether the data message was that of the originator, the addressee properly applied a procedure previously agreed to by the originator for that purpose; or*
 - (b) *the data message as received by the addressee resulted from the actions of a person whose relationship with the originator or with any agent of the originator enabled that person to gain access to a method used by the originator to identify data messages as its own.*

Article 13 has its origin in article 5 of the UNCITRAL Model Law on International Credit Transfers, which defines the obligations of the sender of a payment order.¹⁷¹ Article 13 is particularly intended to apply where there is a question as to whether a data message was really sent by the person who is indicated as being the originator. In the case of a paper-based communication the problem would arise as the result of an alleged

¹⁷¹ *ibid.*

forged signature of the purported originator. In an electronic environment, an unauthorized person may have sent the message but the authentication by code, encryption or the like would be accurate. The purpose of article 13 is not to assign responsibility. It deals rather with attribution of data messages by establishing a presumption that under certain circumstances a data message would be considered as a message of the originator, and goes on to qualify that presumption in case the addressee knew or ought to have known that the data message was not that of the originator.¹⁷²

3.1.12 Time and place of dispatch and receipt of data message

Article 15.

- (1) *Unless otherwise agreed between the originator and the addressee, the dispatch of a data message occurs when it enters an information system outside the control of the originator or of the person who sent the data message on behalf of the originator.*

- (2) *Unless otherwise agreed between the originator and the addressee, the time of receipt of a data message is determined as follows:*
 - (a) *if the addressee has designated an information system for the purpose of receiving data message, receipt occurs:*
 - (i) *at the time when the data message enters the designated information system; or*
 - (ii) *if the data message is sent to an information system of the addressee that is not the designated information system, at the time when the data message is retrieved by the addressee;*
 - (c) *if the addressee has not designated an information system, receipt occurs when the data message enters an information system of the addressee.*

¹⁷² *ibid.*

- (3) *Paragraph (2) applies notwithstanding that the place where the information's system is located may be different from the place where the data message is deemed to be received under paragraph (4).*
- (4) *Unless otherwise agreed between the originator and the addressee, a data message is deemed to be dispatched at the place where the originator has its place of business, and is deemed to be received at the place where the addressee has its place of business. For the purposes of this paragraph.*
- (a) *if the originator or the addressee has more than one place of business, the place of business is that which has the closest relationship to the underlying transaction or, where there is no underlying transaction, the principle place of business;*
- (b) *if the originator or the addressee does not have a place of business, reference is to be made to its habitual residence.*

Article 15 results from the recognition that, for the operation of many existing rules of law, it is important to ascertain the time and place of receipt of information. The use of electronic communication techniques makes those rules difficult to ascertain. It is not uncommon for users of electronic commerce to communicate from one State to another without knowing the location of information systems through which communication is operated. In addition, the location of certain communication systems may change without either of the parties being aware of the change. The Model Law is thus intended to reflect the fact that the location of information systems is irrelevant and sets forth a more objective criterion, namely, the place of business of the parties. In that connection, it should be noted that article 15 is not intended to establish a conflict-of-laws rule.

3.1.13 Carriage of Goods

Article 16. Action related to contracts of carriage of goods

This article applies to any action in connection with or in pursuance of, a contract of carriage of goods, including but not limited to:

- (a)
 - (i) *furnishing the marks, number, quantity or weight of goods;*
 - (ii) *stating or declaring the nature or value of goods;*
 - (iii) *issuing receipt for goods;*
 - (iv) *confirming that goods have been loaded;*

- (c)
 - (i) *notifying a person of terms and conditions of the contract;*
 - (ii) *giving instruction to a carrier;*
- (c)
 - (i) *claiming delivery of goods;*
 - (ii) *authorizing release of goods;*
 - (iii) *giving notice of loss of, or damage to, goods;*
- (d) *giving any other notice or statement in connection with the performance of the contract;*
- (e) *undertaking to deliver goods to a named person or a person authorized to claim delivery;*
- (f) *granting, acquiring, renouncing, surrendering, transferring or negotiating rights in goods;*
- (g) *acquiring or transferring rights and obligations under the contract.*

Article 17. Transport documents

- (1) *Subject to paragraph (3), where the law requires that any action referred to in article 16 be carried out in writing or by using a paper document, that requirement is met if the action is carried out by using one or more data messages.*
- (2) *Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for failing either to carry out the action in writing or to use a paper document.*

- (3) *If a right is to be granted to, or an obligation is to be acquired by, one person and no other person, and if the law requires that, in order to effect this, the right or obligation must be conveyed to that person by the transfer, or use of, a paper document, that requirement is met if the right or obligation is conveyed by using one or more data messages, provided that a reliable is used to render such data message or messages unique.*
- (4) *For the purpose of paragraph (3), the standard of reliability required shall be assessed in the light of the purpose for which the right or obligation was conveyed and in the light of all the circumstances, including any relevant agreement.*
- (5) *Where one or more data messages are used to effect any action sub paragraphs (f) and (g) of article 16, no paper document used to effect any such action is valid unless the use of data messages has been terminated and replaced by the use of paper documents. A paper documents issued in these circumstances shall contain a statement of such termination. The replacement of data messages by paper documents shall not affect the rights or obligations of the parties involved.*
- (6) *If a rule of law is compulsorily applicable to a contract of carriage of goods which is in, or is evidenced by, a paper document, that rule shall not be inapplicable to such a contract of carriage of goods which is evidenced by one or more data messages by reason of the fact that the contract is evidenced by such data message or messages instead of by a paper document.*
- (7) *The provision of this article do not apply to the following(...)*

In preparing the Model Law, the UN Commission noted that the carriage of goods was the context in which electronic communications were most likely to be used and in which a legal framework facilitating the use of such communications was most urgently needed. Articles 16 and 17 contain provisions that apply equally to non-negotiable transport documents and to transfer of rights in goods by way of transferable bills of lading. The principles embodied in articles 16 and 17 are applicable not only to maritime transport but also to transport of goods by other means, such as road, railroad and air transport.

3.1.14 Recommendations of the UN Commission to Governments

- (a) to review the legal rules affecting the use of computer records as evidence in litigation in order to eliminate unnecessary obstacles to their admission, to be assured that the rules are consistent with developments in technology, and to provide appropriate means for a court to evaluate the credibility of the data contained in those records;
- (b) to review legal requirements that certain trade transactions or trade related documents be in writing, whether the written form is a condition to the enforceability or to the validity of the transaction or document, with a view to permitting, where appropriate, the transaction or document to be recorded and transmitted in computer-readable form;
- (c) to review legal requirements of a handwriting signature or other paper-based method of authentication on trade related documents with a view to permitting, where appropriate, the use of electronic means of authentication;
- (d) to review legal requirements that documents for submission to governments be in writing and manually signed with a view to permitting, where appropriate, such documents to be submitted in computer-readable form to those administrative services which have acquired the necessary equipment.

3.2. AUTOMATED TELLER MACHINES (ATMs)

Banks have been at the forefront in introducing a new technology into commercial activity, principally through the introduction of Electronic Fund Transfer (EFT) systems. Previously customers' instructions to the bank were given in writing. The new technology allows the customers to conduct electronic banking by the use of Automated Teller Machines (ATMs).

In Tanzania the use of ATMs is subject to no statutory regulation. Currently the use of such cards is governed by express contract terms provided by banks.

ATMs system gives rise to a number of legal problems concerning the effectiveness of the mandate given by the Person Identification Number (PIN), privacy and the security of the system, liability in case of card loss and liability for losses caused by the system failure such as the failure to make a payment.¹⁷³ There is no law that regulate this area apart from bank internal regulations.

There was also a concern from stakeholders that there are counterfeited bank notes from ATMs. They propose that there should be a mechanism to register every bank note coming from the ATM.

3.3. Experience from other African countries

3.3.1. SOUTH AFRICA

South Africa is one of the countries that have legislated on ICT.

In South Africa issues related to ICT such as e-commerce and cyber crimes are governed and regulated by a single legislation namely the Electronic Transaction and Communications Act No. 25 of 2002.

The Act provides for e-governments services, cryptography providers, and authentication services providers, consumers' protection, protection of personal information and protection of critical databases.

The Act further provides for the regulation of Domain names and the authority to regulate such web addresses. Limitation of liability of Internet service providers is also provided

¹⁷³ Bradgate, Robert, Commercial Law, 3rd Ed. 2000 at page 712.

under the Act. More importantly the Act provides for cyber inspectors, their powers and cyber crimes.

3.3.2.UGANDA

Uganda is one of the countries that have made great efforts in regulating ICT in East Africa. In the course of this research, researchers observed that Uganda had already drafted three bills on ICT. The said Bills that were expected to come up with effective legislation are related to Computer misuse, Electronic transactions and Digital signatures.

Tanzania might acquire experience on e-commerce regulations from South Africa and Uganda and opt relevant aspects that can be adopted in the proposed legislation on e-transactions.

3.4 NATIONAL LEVEL

3.4.1 Policy

Tanzania has some policies addressing business transactions and information technology in general. Some of these policies are:- the National Trade Policy¹⁷⁴ and the National Informational and Communication Technologies Policy.¹⁷⁵

3.4.1.1 The National Trade Policy

The National Trade Policy provides for the trade liberalisation of imports and exchange controls through partial retention of the proceeds of own exports.¹⁷⁶

The policy also seeks to address domestic market with the aim of promoting trade development as the means of raising the capacity of domestic demand through a strategy based on increasing participation in the global market. The policy has further highlighted

¹⁷⁴ National Trade Policy 2003.

¹⁷⁵ National Information and Communication Technologies policy 2003.

¹⁷⁶ *opcit.*

the international policy instruments basing on Bilateral Co-operation, Regional Trading Arrangements and the WTO Co-operations among other things.

However, the policy has not fully addressed the aspect of electronic commerce. All issues related to trade, market, tax, export etc discussed in the Trade policy are likely to be affected by the development of information and computer technology whereby business transaction can be done electronically. The policy has addressed very briefly on the development and impact of e-commerce on economy and intellectual property rights.

3.4.1.2 The National Information and Communications Technologies Policy:

The policy is mainly structured to address the development of Information and Communications Technologies (ICT).

The vision and mission of the ICT policy can be summarized as follows

Vision

The National ICT Policy is aligned to the following vision statement:

“Tanzania to become a hub of ICT Infrastructure and ICT solutions that enhance sustainable socio-economic development and accelerated poverty reduction both nationally and globally.”¹⁷⁷

Mission

The overall mission of this Policy is:

“To enhance nation-wide economic growth and social progress by encouraging beneficial ICT activities in all sectors through providing a conducive framework for investments in capacity building and in promoting multi-layered co-operation and knowledge sharing locally as well as globally.”¹⁷⁸

¹⁷⁷ The National ICT Policy at p.2.

¹⁷⁸ *ibid.*

The policy encourages the importation of hardware and software to support the development of ICT industry.

Furthermore, e-commerce and e-government have not been fully addressed. With regard to e-commerce the policy provides that few local website in Tanzania are offering limited e-business services. The services are said to be constrained by the lack a national payment system, local credit cards, and a legislative framework appropriate for e-business. The policy admits that the legal framework in Tanzania does not provide adequate safeguard to create an environment of trust for e-business transaction to take place ¹⁷⁹

3.4.1.3 E-government:

The policy highlights that various arms of government have made significant progress in deploying ICT in e-government solutions categorised into both e-government and e-governance solutions. The government has now embarked on e-government. The government is using ICT to promote good governance, e-business, access to information etc. Although the government has already started the implementation of E-government in various departments the legal framework to regulate this area is not yet in place. Currently several laws in Tanzania impose barriers to electronic forms of contracting especially with regard to the manner in which government departments and Ministries could accept electronic fillings, which is an impediment to the development of e-governance. ¹⁸⁰

Moreover, the overall policy has not fully addressed e-commerce and what kind of legal framework that would regulate this fast growing area. One could expect to see the policy addressing all components related to e-commerce such as computer misuse, electronic evidence, contracts, communications etc. The policy has also not addressed on how

¹⁷⁹ *ibid* at 8.

¹⁸⁰ See the Paper on the impact of ICT to Tanzania at page 30, the paper presented by A.Mambi, in the Stakeholders workshop at The Law Reform Commission on 9 of June 2005.

Tanzania can adopt the UNCITRAL model law as a guideline to the enactment of e-commerce legislation

3.5 LEGISLATION

Business transactions in Tanzania are governed by various legislation. Some of these Legislation are The Law of Contract Ordinance,¹⁸¹ The Bills of Exchange Ordinance¹⁸², Sale of Goods Ordinance,¹⁸³ The Cheques Act,¹⁸⁴ the Banking and Financial Institutions Act¹⁸⁵ the Bank of Tanzania Act, 1995, The capital market Act 1985 and the Law of Evidence Act.¹⁸⁶ Some of these laws were enacted before the business transactions entered into digital technology.

3.5.1 The Law of Contract Ordinance, 1961(CAP 345 R.E 2002)

The Law of Contract provides for the main elements of the contract namely consideration and intention to create legal relation among other things. The Offer and acceptance are the necessary elements of any agreement. The law further stipulates for the mode of communication of offer, acceptance and revocation. Communication of offer and acceptance is provided under section 4 of the Law of Contract Ordinance.

section 4(1) of Tanzania law of Contract Ordinance provides that;

the communication of proposal/offer is complete when it comes to the knowledge of the person to whom it is made.

4(2) the communication of acceptance is complete:

(i) "as against proposer, when it is put in the course of transmission to him as to be out of the power of the acceptor.

(ii) "as against the acceptor when it comes to the knowledge of the Proposer".

¹⁸¹ CAP 345 R.E. 2002

¹⁸² CAP 215. R.E 2002

¹⁸³ CAP 214. R.E 2002

¹⁸⁴ Act No.3 of 1969

¹⁸⁵ CAP 342 R.E 2002

¹⁸⁶ CAP 6 R.E 2002

4 (3) *The communication of a revocation is complete:*

- (i) *as against the person who makes it, when it is put into a course of transmission to the person to whom it is made, so as to be out of the power of the person who makes it;*
- (ii) *as against the person to whom it is made, when it comes to his knowledge.*

On the other hand section 5 of the Ordinance stipulates that;

- (1) *A proposal may be revoked at any time before the communication of its acceptance is complete as against the proposer, but not afterwards.*
- (2) *An acceptance may be revoked at any time before the communication of its acceptance is complete as against the acceptor but not afterwards.*

Section 6 provides that a proposal is revoked;

- (a) *by the communication of notice of revocation by the proposer to the other party.*
- (b) *by the lapse of the time prescribed in such proposal for its acceptance, or, if no time is so prescribed, by the lapse of a reasonable time, without communication of the acceptance;*
- (c) *by the failure of the acceptor to fulfil a condition precedent to acceptance, or by the death or insanity of the proposer, if the fact of his death or insanity comes to the knowledge of the acceptor before acceptance.*

The proviso of section 10 of the Law of the Contract Ordinance provides that nothing herein contained shall affect any law in force, and not hereby expressly repealed or displayed, by which any contract is required to be made in writing or in the presence of witnesses or any law relating to the registration of documents.

The position in Tanzania, which seems to depart from the Common Law postal rule means that where an acceptor posts his letter of acceptance so that it is out of his power, then the proposer is bound. That is to say the contract has been concluded as far as proposer is concerned but the acceptor is not bound until his acceptance comes to the knowledge of proposer.

On the other hand revocation of an acceptance is complete as against the person to whom it is made when it comes to his knowledge.¹⁸⁷ These rules are likely to be affected by e-commerce. Under e-commerce the electronic or distance contacts are common and the point to be taken into account is how the offer and acceptance are communicated and revoked online. Some scholars have argued that the general principle is that where offer and acceptance are communicated by means of electronic mail, a contract will be made when and where the acceptance is received by the party making the offer.¹⁸⁸ On the other hand, the International Chamber of Commerce Rules for Electronic Trade and Settlement provides that an electronic offer and acceptance becomes effective when it enters the information system of the recipient in a form capable of being processed by that system¹⁸⁹.

3.6.2 The Sale of Goods Ordinance (CAP 214 R.E 2002)

This is an Act that provides for the law relating to the contract and sale of goods. Section 5(1) provides that;

*Subject to the provisions of this Act and of any other written law in that behalf, a contract of sale may be made in **writing (either with or without seal)** or by word of mouth, or partly in writing and partly by word of mouth, or may be implied from the conduct of the parties.*

Moreover, Section 6(1) of the said Law stipulates that;

¹⁸⁷ Section 4(3) Law of Contract Ordinance, Tanzania.

¹⁸⁸ David Brainbridge, Introduction to Computer Law 4th Edition at page 278.

¹⁸⁹ Article 2.1.1.

*A contract for the sale of any goods of the value of two hundred shillings or more shall not be enforceable by action unless the buyer accepts part of the goods so sold, and actually receives, the goods, or gives something in earnest to bind the counteract or in part payment, or unless some **note or memorandum in writing** of the contract is made and signed by the party to be charged or by his agent in that behalf.*

S.59 (1)(b) a sale by auction is complete when the auctioneer announces its completion by the fall of the hammer or in other customary manner, and until such announcement is made any bidder may retract his bid.

The Act does not provide room for online transactions rather than traditional paper-based methods. Writing and manuscript signing are among the requirements of contract while fall of the hammer is common under normal auction. With online auction it is not possible to apply the fall of the hammer rather the time matters. This problem might be resolved by setting a closing time on the web site by which all bids must be placed and the highest bidder at the time the auction closes will be bound to contract unless the reserved price has not been reached.

The requirements for writing and manuscript signature are also not necessary under e-commerce. The current laws in Tanzania do not provide for electronic signatures. In this era of e-commerce the requirement for writing can be met by acceptance of electronic information as satisfying requirements for writing. Under the 2000 EU Directive the desire to reduce requirements for paper-based documents is a main feature of electronic commerce¹⁹⁰. Model Law has provided the guidelines on how to deal with writing requirement where the law requires so.¹⁹¹

¹⁹⁰ Lloyd I.J, The information Technology Law, 3rd ed at page 576.

¹⁹¹ See Article 6 and 7 of the UNCITRAL Model Law 1996 and 2001.

3.5.3 Banking and Financial Institutions Act 1991. (CAP 342 R.E 2002)

This is an Act to consolidate the law relating to business of banking, to harmonize the operation of all financial institutions in Tanzania for the purpose of fostering sound Banking activities. The relevant sections for the purpose of this discussion can be summarized as follows.

Section 7 (5) provides that every application for a licence under this Act

shall be in writing and shall include: *The Bank may, in any case where it grants a licence impose such terms and conditions, as it may deem appropriate.*

Further section 9 (3) provides that:

When any licence has been revoked, the Bank shall after the expiry of the time period set out in section 10 publish a notice of revocation in the Gazette and in a newspaper of general circulation in the areas in Tanzania in which the main office of the relevant bank or financial institution is located and take any other steps necessary to inform the public of such revocation.

S.26 (3) *The Board may, before paying any claim lodged under subsection (2), require the claimant to furnish it with such documentary proof as may be proper to show that he is entitled to payment out of the fund; and the Board may decline to make any payment under this section to a person who, in the opinion of the Board, had any responsibility for, or may have profited directly or indirectly from the circumstances leading up to the bank or financial institution becoming insolvent. Under this section the board means Deposit insurance Board.*

S. 31 (1) *Every bank or financial institution shall at all times exhibit a copy of its last audited balance sheet in conspicuous position in the public part of its principal place of business in Tanzania and shall similarly exhibit copies of such balance sheet in each of its branch offices in Tanzania.*

S. 33 Every bank and every financial institution shall furnish to the Bank (BOT) within 14 days after the end of every quarter a statement in a prescribed form giving an analysis of advances and bills discounted at the last day of that quarter.

S.37 (2)(a) Subject to paragraph (b), no bank or financial institution shall, without the prior written approval of the Bank, directly or indirectly, grant to any person, any accommodation so that the total value of such accommodation to or on behalf of such person.

S.47(1)The Bank may, in writing and subject to such conditions as it may consider necessary, authorize a bank or a financial institution incorporated outside Tanzania which does not propose to transact banking.

The above mentioned sections contain outdated provisions, which do not accommodate e-commerce. The provisions of this Act, which require the use of documents, written notices, signatures (manuscript) need to be amended to accommodate electronic transactions and reflect the UNCITRAL Model Law.

3.6.4 The Bills of Exchange Ordinance (CAP 215 R.E 2002)

This is an Act relating to Bills of Exchange, Cheques and Promissory notes.

Section 3 of the Ordinance provides that:

- (1) A bill of exchange is an unconditional order in writing, addressed by one person to another, signed by the person giving it, at a fixed or determinable future time, a sum certain in money to or to the order of a specified person, or to bearer.*
- (2) An instrument which does not comply with these conditions or which orders any act to be done in addition to the payment of money, is not a bill of exchange.*

Furthermore, Section 17(2) stipulates that

Any acceptance is invalid unless it complies with the following conditions, namely: -

- (a) *it must be written on the bill and be signed by the drawee and the mere signature of the drawee without additional words is sufficient.*

section 20(1) provides that,

Where a simple signature on a blank stamped paper is delivered by the signer in order that it may be converted into a bill, it operates as a prima facie authority to fill it up as a complete bill for any amount the stamp will cover, using the signature for that of the drawer, or the acceptor, or an indorser; and, in like manner, when a bill is wanting in any material particular, the person in possession of it has a prima facie authority to fill up the omission in any way he thinks fit.

The requirement for a signature in a bill can also be noted under Section 23 which provides that;

No person is liable as drawer, indorser, or acceptor of a bill who has not signed it as such:

- (a) *where a person sign a bill in a trade or assumed name, he is liable thereon as if he had signed it in his own name;*
- (b) *the signature of the name of a firm is equivalent to the signature by the person so signing of the names of all persons liable as partners in that firm:*

The effect of Section 23 on the requirement of signature as a conditional precedent for the negotiation and endorsement of the bill can also be observed under section 32 (1) which provides that;

“An endorsement in order to be a negotiation must comply with the following conditions, namely:-

(a) it must be written on the bill itself and be signed by the indorser and the simple signature of the indorser on the bill, without additional words, is sufficient.

These Laws, which regulate negotiable instruments, are not structured to accommodate online transactions rather than off-line transaction. The traditional requirements of writing and manuscript signature which are not feasible under e-commerce can be observed in sections 3, 20, 23 and 89(1) Under Electronic transaction there is now e-cheques which necessitate the amendment of these laws.

Furthermore, the current mode of Cheque transfer, which requires the physical delivery of the payment instrument to the retailer by the buyer or banker and customer, appears not suitable to payment online. With online transactions physical delivery is not necessary as people can use e-cheques. On top of that the laws in Tanzania do not address the use of e-Cheques.

CHAPTER FOUR

4.0 Analysis of Research Findings

The research was conducted in three sampled regions, which are Dar es Salaam, Arusha and Mwanza. Through meetings and group discussions researchers managed to gather relevant information to this project. The idea of introducing the legal framework for Electronic Commerce in Tanzania was supported by most of the stakeholders. They advised that the research on e-commerce should not be limited to specific problems, rather, it should be general in nature and that the law should take into account the National Information and Communication Technologies Policy. Others suggested that the proposed law should reflect Model Laws and international laws governing the electronic business.

While some participants proposed that electronic commerce be regulated by few legislation others proposed a single legislation. However there were some stakeholders with the view that the existing laws should be amended so as to accommodate changes, as this will be the easiest way of getting new law in place. They went on saying that enacting a new law will take time and this will be a problem as Tanzania is already lagging behind. There was also a proposal that the Act should be flexible so as to allow the responsible Minister to make regulations.

The Commission agrees with the view of amending the relevant existing legislation to accommodate Electronic transactions and other related matters. Further the Commission recommends the enactment of new legislation to cover issues such as Data Protection, Domain names, Privacy in Computer and Cyber crimes.

Stakeholders raised a challenge that the Government should act as an engine for change by preparing qualified personnel in order to handle the changes. The Government should harmonize its sectors to enable them to create good infrastructure in Electronic Commerce Law. They further argued that Electronic Commerce policy should be

formulated first and then the law should follow. Stakeholders were divided on the laws that Tanzania should learn from others while enacting its laws. Some proposed that while making her own legislation, Tanzania should not look at legislation of other Jurisdictions. Others argued that it was important to use Commonwealth and UNCITRAL Model Laws in that process.

In addition, stakeholders argued that although the Law Reform Commission initiated this Project, Electronic transactions had already started in Tanzania without regulation. This could affect many people and financial institutions that are involved in on-line transactions.

The Commission recommends for the improvement of the existing ICT policy so as to cover all aspects related to e-commerce. The Commission is of the view that the Government should use UNCITRAL and Commonwealth Model Laws as well as learn best practise from other jurisdiction in the process.

There is also a need of training judicial officers on legal matters related to Information and Communication Technology for smooth implementation of the proposed laws.

4.1 Security

One of the main concerns in the course of discussion was that the law that will regulate Electronic Commerce should provide for the security on electronic transactions. A number of stakeholders were of the opinion that electronic communications which is the base for electronic transactions is a bit easier to temper with, although test keys have been introduced to protect those transactions carried out through these ways from being interfered.

The participants argued that security of information is likely to be eroded or tempered by some technicians who provide test keys. These technicians can easily access to any information concerning particular transaction, which creates doubts to the owner of the particular information. However some stakeholders opined that Electronic commerce is

about trust. Apart from creating an environment whereby, in any electronic transaction customers or parties will have to trust themselves, there is a need of introducing identity cards to people dealing with on-line transactions, which will help in identifying or imposing liability to persons. With the increase in the use of electronic commerce there will be a need to provide for mandatory identification of the people using electronic technology, or identification of the computers and other machines used in electronic transactions.

On the issue of security on any information stored or electronically transferred, the Commission is of the view that the security is the fundamental issue in electronic transactions, which in most cases is based on trust. In order to make the issue of security legally effective the proposed law should set standards of software, requirement of performance disclosure and other related matters.

Furthermore the Commission proposes that the proposed legislation should clearly stipulate obligations and liabilities of each party in electronic transactions.

4.2 Jurisdiction and Conflict of Laws

It was also learnt that so long as E-commerce is practiced in different countries there is a great likelihood of conflict of laws between national and international laws. Stakeholders suggested that, the proposed law should not be too indigenous to hinder development of Electronic Commerce. Moreover, as E-commerce involves trans-boundary business it is very possible for a dispute to arise between parties living in different countries with different legal systems, which might cause jurisdiction problem as to which system should apply. In this case Stakeholders proposed that the law applicable should depend on the residence of a customer.

The Commission agrees with the above argument and adopts proposals made by the stakeholders. Further it propose that the Government should sign and ratify International Conventions administered by UNCITRAL such as The UN Convention on the

Recognition and enforcement of Arbitral Award 1958, The UN Convention on Contracts for the International Sale of Goods (Vienna) 1980.

4.3. Payment Cards

It was further observed that there is no law that regulates the use of credit cards and debit cards. It was therefore suggested that the Bank of Tanzania should allow the use of those cards to the holders who have no foreign account while they are abroad.

The Commission recommends enactment of a legislation that will regulate transactions by cards.

The importance of standardisation of bank forms to all banks for those who need to use on-line banking was also noted.

4.4 Admissibility of Electronic Evidence

The admissibility of electronic documents, as original evidence was one of the concerns raised by the stakeholders. This issue arises from the provision of Tanzania Evidence Act that for the document to be admitted, as primary evidence should be original. However the definition of original document does not include computer print-out document. With this new Technology of Electronic Communication the use of computers in preparation of electronic document is replacing manuscript documents. Arguably the Evidence Act does not recognise the electronic document as original for purpose of primary evidence. The participants suggested that the Government should accept emails as well as online certificate as official documents, given the daily increase of electronic communication.

The Commission supports the stakeholders' views on the admissibility of electronic evidence. The law should put electronic evidence on equal footing with original documents. To that effect, there is a need of amending The Evidence Act 1967, CAP 6

R.E 2002 to provide room for the equivalence of electronic evidence vis-à-vis the best evidence rule.

Furthermore the Commission is aware of the ruling of The High Court, Commercial Division, on whether a computer print out should be admissible as original document.¹⁹² In this case *Nsekela J.* (as he then was) argued that due to the current technological changes computer print-out should be admitted as original document for the purpose of evidence.

On the other hand, stakeholders expressed their concern on the issue of certification of original documents when communicating electronically. The concern was on the ground that up to now the technology does not allow certification of documents electronically. They proposed to have a board, which will control certification of electronic documents and digital signatures.

The Commission supports the stakeholders' views on the establishment of the board that will deal with certification of electronic documents and digital signatures. The Commission further recommends for the enactment of legislation that will regulate certification of electronic documents and digital signatures.

4.5 Acknowledgement of Receipts

Since it is a fact that e-commerce is business, and business is communication, and communication is sending, receiving and acknowledging receipt, the Electronic Communication transaction should enable the party sending information electronically to know that the other party has received the message.

The Commission notes the relevance of this issue especially the notification of received message. Moreover the Commission is of the view that an acknowledgment of receipt may be given by any communication by the addressee, whether automated or otherwise

¹⁹² Trust Bank Tanzania Ltd v. Le-Marsh Enterprises and others, High Court of Tanzania Commercial Case no. 4 of 2000 (unreported).

or by conduct of the addressee sufficient to indicate to the originator that the data message has been received.

4.6 Time and Place

There was also an issue on the importance of time and place of sending documents online. It was proposed that the law should define the question of time and place when entering online contracts.

The Commission recommends for adoption of UNCITRAL Model Laws and Commonwealth Model Laws in determining time and place where the on-line or distance contract was concluded.

4.7 Data Protection

Stakeholders also mentioned data protection as one of the areas to be taken into consideration when enacting the proposed law. They said that so long as the current technology allows the use of cryptographic methods as the means data protection and ensure privacy. They further proposed that the law should clearly provide for standard of encryption and decryption under digital signatures into be applied.

The Commission concurs with the stakeholders' arguments on the enactment of the law that will take into account cryptographic methods among other things.

4.8 Domain Names

Electronic transactions usually involve big companies with domain names, trademarks or web registered names, for the purpose of advertisements. Stakeholders said that since there is no law, which regulate domain names in Tanzania, there is a need of having such law. The proposed law should provide for requirement that before registration of domain name the organisation concerned should present physical documents to support its

application that is to show whether there is any connection between the name and its activity. They also suggested that all domain names registered in Tanzania should bear country code that is .tz.

The Commission notes the importance of enacting a legislation that will regulate domain names in order to avoid unnecessary cybersquatting.

4.9 Cyber crimes

Electronic Commerce involves transaction of money and other important information. The involvement of big sums of money give rise to emerging of people who will be tempted to commit some offences in order to get money or access to the confidential information without prior permission. These people are known as computer hackers. The participants proposed that the proposed legislation should create offences such as computer frauds.

The Commission notes the need for creating computer fraud offences and other related offences in the proposed legislation so as to control computer crime.

4.10 Internet Service Providers

As noted in the foregoing discussion, Electronic transactions have been undertaken before the initiation of this project. Some electronic services and organisations, which provide Electronic services including Internet Service Providers, had not been registered. With this proposed new legislation there is a need to register all Internet Service Providers under one board before starting operation.

In criminalizing some activities stakeholders proposed that the new proposed legislation should criminalize not only the act but also the intention behind the action. They also

said in case the offence is committed outside Tanzania there must be agreement between two countries on extradition of offenders.

They further said that the proposed law should be clear that in certain instances the public Authority, by court order, be permitted to interfere the privacy of clients and the ISPs should make this fact clear to their clients. They further opined that the proposed law should not impose stringent conditions to the ISP so as to encourage them to do business and the profit making aspect should be recognised by the law.

However, where a client proves before a court of law that her/himself and ISP knew information and prove the negligence of the ISP then the latter should be liable. Currently, some ISPs impose terms of agreement on the use of Internet services to their clients. Therefore the participants were of the opinion that the proposed law should regulate the terms of agreement entered between ISP and clients.

The Commission concurs with the stakeholders' proposal and that there is a need to regulate ISPs. There must be a board to regulate this institution in Tanzania.

4.11 Tax Collection

Stakeholders also raised the issue of tax collection when business transactions are carried out electronically. They proposed that the government should set a mechanism for collection and exemption of taxes electronically. The stakeholders noted that the proposed law on electronic commerce should address the issue of tax evasion

The Commission notes the Stakeholders views and recommends that Tanzania should sign and ratify the OECD Model Tax Convention as this provides for the basis of bilateral treaties between States on Tax arrangements.

4.12 Proof

Stakeholders suggested that the law should give exception to the standard of proof in criminal offences established by the proposed law due to technology involved. The said offences can be proved on the balance of probabilities. The law should provide for on-line fines in online transaction and it should provide for sanctions for payment failure.

The Commission disagrees with the stakeholders' idea on the introduction of an exception to the standard of proof in criminal offences.

4.13 Ignorance of Technology

Stakeholders proposed that as far as computer technology is concerned in some circumstances ignorance of technology should be accepted as defence in court of law.

The Commission does not support stakeholders' idea on the issue of ignorance of technology to be accepted as a defence.

4.14 On-line Auctions

On the question of online auctions, stakeholders were of the opinion that the proposed law should have provisions on determination of the highest bidder. The current provision that the winner will be obtained after the fall of the hammer should not apply in online auctions instead the winner should be obtained when the time and the date set are due. Further there should be two other winners so that if the first defaults, the next will be declared the winner.

The Commission recommends for the amendment of the Sale of Goods Ordinance to be that where Parties are dealing on on-line auction the time should determine the last bidder rather than the fall of the hammer.

4.15 Contributions from Workshop

On the 9th June 2005, the Commission convened a stakeholders workshop to gather more inputs. The discussion paper was presented to the stakeholders and afterwards the participants came up with the following views:

It was suggested that, there is a need for change so as to keep on pace. Participants agreed that it is high time for Tanzania to have a law on ICT on the reasons that there are some institutions which have already started to use ICT in their daily activities without legal framework. For instance, it was commented that customer transactions take a long time as the banks are supposed to have a written document sent to the BoT, it was argued that this is an obstacle, and therefore the Act has to be amended to accept electronic attachments.

On the other hand it was suggested that, there is no need for amendment. What should be done is that a law should be enacted to cover matters relating to ICT, however other participants recommended for several pieces of legislation instead of a single piece of legislation.

The risks of electronic transactions among banks are real when the electronic banking system fails it results in the loss of anticipated earnings by banks. The new legislation should be designed to address the issue of irrevocable transactions and finality among banks which is against consumer protection. Therefore, it was suggested that there should be a law to support the principles.

Furthermore, participants suggested that the Companies Ordinance, Bankruptcy Ordinance and other related regulations should be reviewed. It was recommended that different issues should be separated for example; it was recommended that electronic transactions, cyber crimes and consumer protection should be regulated separately.

The Commission was advised to observe what other countries and regional organizations have done, for instance, SADC and EAC. There were examples of the Indian Information

Technology Law and the Electronic Communication Act of South Africa which cover all aspects of information technology. The proposed law should reflect international Conventions and Treaties to cover jurisdictional problems. It was further suggested that the issue of electronic privacy and freedom of information should be considered and that the law should take into account these two issues.

The participants recommended for the amendments of the existing relevant laws and the UNCITRAL Model Laws, Commonwealth Model Laws and OECD Model Tax Conventions. The proposed law should provide for an institutional framework that could establish and empower the regulatory authority with supervisory powers on all ICT matters.

Training Institutions promote access to online information, concern was raised to matters such as pornography, when accessed at a lower level. It was recommended that new dimensions should be established to deal with such information.

The Commission is of the view that there should be several Acts to cover all matters under ICT. The existing laws, which are affected by ICT should be amended.

Participants suggested that the proposed law should cover the following areas: Digital signatures, Electronic transactions, Electronic payments, Privacy, Data Protection, Piracy of Intellectual Property Rights, Domain names, Cyber crimes such as, money laundering, terrorism, hacking, publication and trade in obscene materials (pornography).

The Commission agrees with the suggestions of the participants.

Participants urged the Commission to produce a Draft Bill out of this report.

Commission agreed with the opinion of the participants.

Finally, the proposed law should not come up with a legal framework that is too rigid, it should also not include a lot of criminal elements, and emphasis should be put in issues that deal with e-commerce to make life a lot easier.

The Commission views the matter differently that the law should cover all issues relating to ICT including cyber crimes.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion.

The research findings have revealed that there is no law in Tanzania that regulate information technology given the rapid growth of electronic transactions and illegal activities conducted using computers. The current laws, which govern business transactions, are designed to govern offline transactions rather than online transactions. Moreover there is no law that governs cyber crimes and other related crimes.

The law governing contracts in Tanzania applies the old postal rule for the communication of offer and acceptance. The current law does not accommodate e-commerce contracts, which are normally electronically concluded, and the parties do not necessarily meet physically. In this case it might be difficult to solve the dispute arising from that contract. The common features in e-commerce such as electronic or digital signatures, data protection and computer crimes are not yet regulated. Consumers and others people transacting online are not protected by any law.

Furthermore, technological development has forced most banks in Tanzania to adopt electronic transactions whereby customers can open accounts and transfer money online. However there is no law governing this area apart from rules formulated by banks. It was also observed that customers are not assured of the security of their information or data transmitted electronically.

The current laws are structured to suit paper-based environment with requirement of originality, writings, manuscript signatures, physical delivery of goods, and presence of witnesses when contracting. The proposed law should ensure that most forms of e-

commerce could be conducted without requirements of complying with any additional requirement relating to form.

On the other hand, the requirement provided under the Evidence Act that when it comes to documents the best evidence is the one in original form, poses as an obstacle in electronic transactions. There is no law that recognise electronic records and digital signatures.

The aspect relating to Domain names and cyberspace is also important to be regulated to curb cybersquatting offences. It has been noted that there is inherent conflict between trademark Law and Domain name system.¹⁹³ While the law covers trademarks, Domain names are not covered by any law. Experience from other Jurisdictions shows that some other countries have introduced judicial remedies in Domain Names disputes. A good example is USA whereby trademark holders were given specific statutory protection against cybersquatting in 1999 through the enactment of *The US. Anti-cybersquatting Consumer Protection Act (ACP)*.¹⁹⁴ The said law is aimed at protecting consumers and business by prohibiting the bad faith and abusive registration of distinctive marks as Internet domain names with the intent to profit from the goodwill associated with such marks.¹⁹⁵

It was also observed that in Tanzania there is no law which regulates domain names and there is no regulatory board entrusted with supervision and control of such web addresses.

¹⁹³ See the case of *Pitman Training Limited et al v. Nominet U.K* [1997] F.S.R 797 [1998] Tr.L.R 173. The case concerned conflict on the domain names www.pitman.co.uk and pitman.co.uk. See also *Nissan Motor Co. v. Nissan Computer Corp* 89 F.Supp 2d 1154 (C.D Cal.2000).

¹⁹⁴ Sharrock L.M, The future of Domain Name disputes resolution: Crafting practical International legal solutions from within the UDRP Framework.

¹⁹⁵ Ibid.

5.2 Recommendations

From the above conclusion the Commission recommends as follows:

Legal recommendations

- 1) There is a need of amending the current laws governing business transactions in order to accommodate electronic features such as electronic/digital signatures. The law should provide that where offer and acceptance are communicated by means of electronic mail, a contract would be made when and where the acceptance is received by the party making the offer.
- 2) The Law of Contract Ordinance should be amended to accommodate electronic contract.
- 3) The Contract law should also incorporate, the International Chamber of Commerce Rules for Electronic Trade and Settlement, which provide that an electronic offer and acceptance becomes effective when it enters the information system of the recipient in a form capable of being processed by that system.
- 4) In addition to that, the Sale of Goods Ordinance should be amended to reflect electronic transactions. For instance the requirement of the fall of the hammer on the completion of auction can be solved by setting a closing time on the web site by which all bids must be placed and the highest bidder at the time the auction closes will be bound to contract unless the reserved price has not been reached.
- 5) Criminal Law Statutes should also be reviewed and amended to accommodate all matters related to Cyber Crimes.
- 6) Furthermore, the requirement of writing and manuscript signatures can be solved by incorporating UNCITRAL model law into our national laws. For instance the writing requirement can be solved by Article 6. With regard to signature the

model law also provides for the solution as provided under article 7 which is based on the recognition of the functions of signature in a paper based method.

- 7) The Commission further recommends for the adoption of UNCITRAL Model Laws on Electronic Commerce and Digital Signatures. In Drafting Bills related to the Information Communication Technology, the drafters should use UNCITRAL Model Laws and Commonwealth Model Bills as guidelines.
- 8) There is also a need of amending the Laws related to Intellectual Property Rights to cope with the current technological changes.
- 9) The Commission also recommends for the amendment of the Evidence Act (1967) to accommodate Electronic Evidence.
- 10) The Commission recommends that the laws relating to Taxation should be amended to accommodate all matters related to e-commerce Taxation.

Non legal recommendations

- 1) The Commission further recommends the Government to apply for a membership of UNCITRAL.
- 2) The Commission recommends for the training of judicial officers on legal matters related to Information and Communication Technology.
- 3) The Commission recommends on the review of the ICT policy to address in full the aspects of e-commerce.

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