

**PUBLIC ePROCUREMENT IN KENYA: A CRITICAL ANALYSIS OF
THE LEGAL, TECHNOLOGICAL AND GOVERNANCE CHALLENGES**

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DECLARATION

I **BEATRICE MESO** do hereby declare this thesis to be my original work and that it has not been submitted elsewhere or is not due for submission of a degree in any other university.

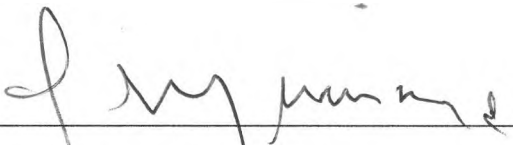
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This thesis has been submitted with my approval as the university supervisor.

Signature



PROF: ALBERT MUMMA

DEDICATION

This thesis is dedicated to my beloved Parents Rev. Philip Meso and Madam Fridah Meso for teaching me that even the largest task can be accomplished if it is done one step at a time.

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ABSTRACT

Information technology has revolutionized the manner in which business is done in the world. It has brought numerous opportunities in the areas of public procurement and many public entities have embraced in their procurements. eProcurement is a new phenomenon which has made procurement easy, efficient, competitive and transparent. Many public entities around the World are now advertising their bids through the websites and others even conduct the whole procurement process through the internet. In Kenya, eProcurement is slowly gathering momentum but the existing legal framework does not adequately support it.

eProcurement under the existing legal framework pose serious challenges ranging from insecurity, lack of confidentiality, accessibility to the eProcurement systems etc. These challenges must be addressed in order to ensure an efficient eProcurement in Kenya.

Enactment of laws like the Electronic Transactions Act shall be ideal in addressing some of these challenges.

TABLE OF CONTENTS

Declaration.....	ii
Dedication	iii
Acknowledgements.....	iv
Abstract	v
Table of Contents	vi
List of Statutes.....	viii
Abbreviations and Acronyms	ix

CHAPTER ONE

PUBLIC EPROCUREMENT IN KENYA: A CRITICAL ANALYSIS OF THE LEGAL, TECHNOLOGICAL AND GOVERNANCE CHALLENGES

1.1 Background.....	1
1.2 Statement of the Problem.....	3
1.3 Research objectives.....	3
1.4 Research Questions.....	3
1.5 Hypotheses.....	4
1.6 Limitations of the Study.....	4
1.7 Justification of the Study.....	4
1.8 Theoretical Framework.....	6
1.9 Literature Review.....	7
1.10 Research Methodology.....	20
1.11 Chapter Breakdown.....	20

CHAPTER TWO

CAN E-PROCUREMENT DELIVER ON THE OBJECTIVES OF PUBLIC PROCUREMENT?

2.1 Introduction	22
2.2 Maximization of economy, Efficiency and eProcurement	23
2.3 Competition, fair Treatment of Competitors and eProcurement	27
2.4 Integrity & Fairness and eProcurement.....	28
2.5 eProcurement in Enhancing Transparency and Accountability.....	29
2.6 Public Confidence and eProcurement.....	32
2.7 e-Procurement and the Promotion of Local Industry and Economic Development	35
2.8 Conclusion.....	39

CHAPTER THREE

LEGAL VALIDITY OF E-PROCUREMENT PROCEDURES AND DOCUMENTS

3.1 Introduction.....	41
3.2 eProcurement Process and Legal issues.....	42
3.2.1 E-Tendering.....	42
3.2.2 Validity and Enforceability of Electronic Contracts.....	44

3.2.4 Need for Online Dispute Resolution.....58
 Conclusion.....60

CHAPTER FOUR

ePROCUREMENT: IS IT A HAVEN OF CRIMINAL ACTIVITIES?

4.1 Introduction.....61
 4.2 Crimes Related to Confidentiality and Integrity.....61
 4.3 Fraud and forgery.....64
 4.4 Offences Related to Copyright or Intellectual Property Infringement.....65
 4.5 Cyber Terrorism.....67
 4.6 eProcurement and Corruption.....69
 Conclusion.....74

CHAPTER FIVE

CONCLUSIONS AND SUGGESTIONS

5.1 Recommendations.....75
 5.2 Conclusions.....81
 References.....84

LIST OF STATUTES

1. Public Procurement And Disposal Act 2005
2. Public Procurement And Disposal Regulations 2006
3. Evidence Act
4. Kenya Communication Act
5. Evidence Act,
6. Copyright Act
7. Law of Contract Act.
8. Electronic Transactions Bill, 2007

LIST OF ABBREVIATIONS

1. CUECIC-Electronic Communications in International Contracts
2. GDP- Gross Domestic Product
3. GJLOS-Governance, Justice, Law and Order Sector
4. GPA - Government Procurement Agreement
5. ICT- Information and Communications Technology
6. KONEPS - Korea ON-line EProcurement System
7. MLEC-Model Law on Electronic Commerce
8. OECD-Organization for Economic Cooperation and Development
9. PPOA-Public Procurement Oversight Authority
10. SME- Small and Medium Size Enterprises
11. STD-Standard Tender Documents
12. TTP- Trusted Third Parties
13. UNDP- United Nations Development Programme
14. UNESCO-United Nations Educational, Scientific and Cultural Organization
15. UNCITRAL -UN Commission on International Trade Law
16. WTO- World Trade Organisation

CHAPTER ONE

Introduction

1.1 Background

Innovation in government procurement is becoming recognized all over the world as important for enhancement of the competitiveness of government operations and performance. In effect, Governments around the world are embracing eProcurement to improve their performance.¹ An increasing number of public entities are also adopting eProcurement solutions to replicate the success that has been witnessed following the introduction of eProcurement in the private sector.² eProcurement is defined as the process of purchasing or obtaining goods, services or works electronically.³ An integrated (commonly web-based) communication system is used in all or some of the stages of procurement.⁴

There is evidence that implementation of eProcurement results in numerous benefits, such as time and cost savings, increased compliance with supplier contracts, and enhanced control of spending on the part of public entities. Additionally, eProcurement means easier access to information and simplified, standardized purchasing process. In essence, the use of electronic means in purchasing is generally perceived to increase the efficiency of the procurement process. As a result, in some regions like the European Union, public eProcurement is one of the main prioritized areas in the area of e-government.⁵

Despite all of the benefits that public eProcurement offers, the implementation of any e-government project is complicated because of the size and bureaucratic nature of government.⁶

¹ G. G. Lim, R. B. Kim and H. B. Lee, "Public EProcurement: The Korean On-Line EProcurement System (KONEPS)", 3rd *International Public Procurement Conference Proceedings* 28-30 August 2008, p. 773.

² N. A. Panayiotou, S.P. Gayialis, and I.P. Tatsiopoulos, "An eProcurement system for governmental purchasing," 90 *International Journal of Production Economics* pp. 79-102, (2004).

³ K. Mitchell, "Instituting eProcurement in the public sector," *Public Management* 21(2000).

⁴ S. Croom and A. Brandon-Jones, "Impact of eProcurement: experiences from implementation in the UK public sector, 13" *Journal of Purchasing & Supply Management* 294 (2007), at p. 295.

⁵ E. G. Carayannis, and D. Popescu, "Profiling a methodology for economic growth and convergence: learning from the EU eProcurement experiences for central and Eastern European countries," 25 *Technovation* 1 (2003).

⁶ P. R. Devadoss, L.P. Shan, and J.C. Huang, "Structurational analysis of e-government initiatives: a case study of SCO," 34 *Decision Support Systems* pp. 253-269, (2002).

As a matter of fact, public eProcurement has similarities with the private sector, such as, its focus on value, competitiveness, and accountability. However, public e-public procurement has special characteristics that make it different. For example, the procurement process, which includes selecting bidders, evaluating tenders, and selecting contracts, should be transparent, efficient and competitive in public estimation. In addition, procuring entities must follow certain rules and restrictions imposed by the procurement laws and regulations.⁷

Demand for open access of government procurement market has been on the increase especially at the global level hence governments have no option but to devise means of enhancing transparency, competition and efficiency in procurement. The advent of World Trade Organisation (WTO), has led to negotiation of bilateral and multi-lateral agreements in various areas including procurement. The Government Procurement Agreement (GPA) is one such agreement which has enhanced transparency in procurement administration and for fair competition. Furthermore, as society becomes more liberalized and the education level of citizens rises, more interests are placed on transparency, efficiency and competition in public procurement services.⁸

Recently, information and communications technology (ICT) has been used as the main engine for innovation in almost all sectors of the economy, and as discussed above procurement is no exception.⁹ Therefore, new avenues of commerce such as e-marketplaces and online shopping malls have emerged.

eProcurement is now a force that cannot be stopped but embraced. It is, however, important to note that even as eProcurement grows, it poses various legal, technological and governance issues that need to be addressed in order to create a conducive environment for it to flourish.¹⁰ In Kenya, the government has established an e-government procurement project task force composed of various stakeholders. The task force engaged a consultant who developed the

⁷ *Supra*, note 3.

⁸ *Supra*, note 1, p. 746.

⁹ IDC, "IT Services for e-government in Western Europe, 2001-2006," IDC Research Report #RE03J, 2003.

¹⁰ *Id.*

government eProcurement strategy.¹¹ The eProcurement strategy identifies several legal, technological and governance challenges that that may jeopardize the development of e-commerce in Kenya. This paper seeks to address these challenges and where possible proscribe solutions.

1.2 Statement of the Problem

The study proposes to identify and discuss legal, technological and governance issues and challenges that need to be addressed to facilitate the adoption of public eProcurement in Kenya and propose possible solutions thereto.

1.3 Research Objectives

The objectives of the study will be:

- a) To identify and discuss the objectives of public procurement processes and how eProcurement may enhance or impede the achievement of the objectives in Kenya.
- b) To identify and discuss the challenges that eProcurement pose to the existing legal framework and concepts in Kenya.
- c) To identify and discuss possible criminal activities that eProcurement may occasion or prevent in Kenya.

1.4 Research Questions

The research will seek to answer the following questions:

- (a) To what extent does eProcurement enhance the main objectives of public procurement in Kenya?
- (b) What are challenges that eProcurement pose to the existing Kenyan legal framework and concepts?
- (c) What are criminal activities that eProcurement pose to the Kenya people and how can they be addressed?

¹¹ Jerome Ochieng, E-Government Procurement Planning and Change Management: Action Plan for E-Government Procurement implementation in Kenya, Public Procurement Oversight Authority.

1.5 Hypotheses

The hypotheses of the study are:

1. eProcurement is based on information technology and it enhances most of the objectives of public procurement in Kenya.
2. The existing legal framework is inept in supporting eProcurement in Kenya and therefore needs for it to be reviewed.
3. eProcurement has given rise to new criminal activities that law alone may not address and therefore certain technological measures like passwords and other security features have to be used.

1.6 Limitations of the Study

This study was limited in the following ways;

- a. There was a limited number academic materials in eProcurement and most materials were drawn from internet information.
- b. The time for this research was limited to four months and it was self funded hence few funds were used.

1.7 Justification of the Study

Public procurement accounts for the bulk of government expenditure. Indeed, public procurement constitutes up to fifteen percent (15%) of the gross domestic product (GDP) of most developing countries.¹² In Kenya, sixty percent (60%) of the government revenue is expended towards public procurement. Public procurement, therefore, constitutes an important part of public finance and expenditure and if it is well managed and administered, it can foster economic development.¹³

The Public Procurement and Disposal Act outlines the objectives of the law on public procurement in Kenya to, *inter alia*, enforce and ensure compliance in relation to requirements of transparency, fair treatment and competition in procurement procedures in public entities in Kenya.¹⁴ Further, the Act seeks to establish procedures for procurement and the disposal of

¹² W. Odiambo and P. Kamau, "Public Procurement: Lessons from Kenya, Tanzania and Uganda" (OECD, Working Paper No. 208, 2003) available at <http://www.oecd.org/dataoecd/59/11/2503452.pdf>. (Accessed on 12/05/2010).

¹³ Id

¹⁴ Id

assets by public entities to maximize economy and efficiency; to promote competition and the integrity and fairness of those procedures. It seeks to enhance transparency and accountability of procurement procedures, public confidence in those procedures and facilitate the promotion of local industry and economic development.¹⁵

The Government of Kenya is currently engaged in devising means and ways to achieve the above objectives of the public procurement law in Kenya. For instance, it seeks to save 30 billion shillings by re-organizing its procurement processes. Further, there are on-going deliberations to develop measures to end-corruption which is responsible for huge losses. The Government sees eProcurement as one way of achieving these objectives. Additionally, with the advent of fibre optic technology, the Kenyan government is seeking to develop eProcurement system to take advantage of the technological benefits.¹⁶

Given that procurement is a critical component of national development. Public procurement has a significant role in realizing the Vision 2030¹⁷ objectives, it is important that the stakeholders of the public procurement system leverage their collective efforts to ensure efficiency in the management of public resources and that government gets value for money in delivering Vision 2030's flagship projects. A reformed procurement system is necessary to ensure fairness and competition among suppliers of goods, works and services to the Government of Kenya.¹⁸

It is, therefore, necessary to examine whether eProcurement if adopted as a public procurement process is able to meet the above objectives of procurement law and especially transparency, competitiveness and fairness to all. The study also seeks to identify legal and technological issues and challenges that may hinder the adoption of public eProcurement in Kenya. Further, it reviews the existing legal framework and give suggestions on how to address the gaps the exists.

¹⁵ Section 2, PPDA.

¹⁶ J. M. Migai Akech, 2005, *Development Partners and Governance of Public Procurement in Kenya: Enhancing Democracy in the Administration of Aid*, International Law and Politics (Vol. 37:829), pg. 829.

¹⁷ Vision 2030 is an economic development plan by the Kenyan government to develop several different economic zones un various parts of the country.

¹⁸ Uhuru Kenyatta, "Public Procurement Reforms in Kenya", Remarks by the Permanent Secretary, Treasury at the Opening of the 2nd Annual Public Procurement Stakeholders Consultative Forum at the Kenyatta International Conference Centre on 31st July, 2009.

The study will discuss how eProcurement may help eliminate factors that limit attainment of value for money in public procurement such as collusion, corruption, bureaucracy and delay. In this regard, the study will explore ways through which eProcurement can be utilized to make public procurement more effective, transparent, competitive and fair to all.

1.8 Theoretical Framework

Public procurement is a tool to ensure protection of public interest. Public procurement uses public funds and procures goods, services and works for the general public. Procurement is therefore a strategically instrument for ensuring public interest.¹⁹ Any process use in public procurement should therefore ensure value for money to the general public.²⁰

This research is therefore grounded on the **theory of public interest**. Public Interest theory is an economic theory first developed by Arthur Cecil Pigou that holds that regulation is supplied in response to the demand of the public for the correction of inefficient or inequitable market practices.²¹ Regulation is assumed initially to benefit society as a whole rather than particular vested interest. The regulatory body is considered to represent the interest of the society in which it operates rather than the private interests of the regulators.²²

In public procurement, the public interest is that the procedures are done efficiently, competitively; promote integrity, transparency and accountability. The assumption is that if public procurement is done in public interest then the above objectives are attained and the end product is that the public will attain value for its money.

Money for value is a public interest objective that should inform any procurement process including eProcurement. Value for money means attaining the best available outcome when all

¹⁹ Ramadhan S. Mlinga, 2007, Tanzanian Policy Framework Towards Achieving Value For Money In Procurement, Tanzania Public Procurement Regulatory Authority. Available at, www.businessdictionary.com. Accessed on 23 September 2010.

²⁰ National Audit office, U.K., Getting Value for Money from Procurement – How Auditors can help, downloaded from [www.ogc.gov.uk/documents/Value for Money \(VFM\) in Procurement - The Role of Auditors.pdf](http://www.ogc.gov.uk/documents/Value_for_Money_(VFM)_in_Procurement_-_The_Role_of_Auditors.pdf). Accessed on 28th September 2010.

²¹ Pigou, A. C. (1932) *The Economics of Welfare*. London: Macmillan and Co.

²² Richard A. Posner, *Theories of Economic Regulation*, *The Bell Journal of Economics and Management Science*, Vol. 5, No. 2 (Autumn, 1974), pp. 335-358.

relevant costs and benefits over the procurement cycle are considered. Value for money can be enhanced in public procurement by encouraging competition by ensuring non-discrimination in procurement and using competitive procurement processes; promoting the use of resources in an efficient, effective and ethical manner and making decisions in an accountable and transparent manner.²³

Value for money may be attained through various means but enhancing the procurement process is one of the ways of enhancing value for money. eProcurement is a new innovation that modifies procurement processes that if successfully implemented may increase value for money for the procuring entities hence foster public interest.

This paper interrogates eProcurement and identifies various legal, technological and governance challenges that need to be addressed. Introduction of eProcurement without addressing those challenges may not necessarily guarantee value for money in procurement.

1.9 Literature Review

The following literature is relevant to the subject of the present study:-

Engstrom, Wallstrom and Salehi-Sangari have undertaken a study on the implementation of public eProcurement in Sweden.²⁴ The study shows that the implementation of eProcurement within Swedish government authorities developed substantially between 2001 and 2008. This development is mainly attributed to the regulation by the Swedish National Financial Management Authority, a central administrative agency under the Ministry of Finance which demanded all central government agencies to apply e-invoicing from 1st of July 2008. The requirement was the first step towards increased use of public eProcurement solutions.²⁵

The study deals with the issue to be addressed in the current study concerning contribution of eProcurement over the conventional procurement system. The study establishes that eProcurement has tangible benefits such as cost savings, increased contract compliance, and

²³ Achieving Value for Money in the delivery of Public Services, downloaded from www.publications.parliament.uk/pa/cm200506/cmselect/cmpubacc/742/742.pdf. Accessed on 28th September 2010.

²⁴ *Supra*, note 3.

²⁵ *Ibid.*, 317.

enhanced public expenditure control. Further, the study identified challenges to eProcurement relating to circumstances such as the increased usage of eProcurement affecting a larger number of employees and the unavailability of more strategically advanced eProcurement solutions in 2008.²⁶

Engstrom, Wallstrom, Salehi-Sangari's study reveals contradicting findings on the impact of eProcurement in public procurement. The difference in perception on whether eProcurement simplifies the process or makes it more complex indicated that organizations were in different stages of implementation. It could also be interpreted as an indication of an underestimation of employees' resistance to change. The results also indicated that the introduction of public eProcurement added new selection criteria related to electronic interactions and electronic invoices.²⁷

In conclusion, the study highlighted the importance of focusing on people involved in the implementation of eProcurement and how they will be affected. The study pointed out the importance of allocating resources to capacity development instead of focusing only on the possible savings. In order to balance the empowerment of employees with the need for increased control, the study recommended that government authorities make strategic decisions regarding the degree of centralization. Another important factor identified in the study was the need to ensure compliance with regulations and policies although that was seen as less of a challenge since regulations already governed public procurement. The study also considered it important to understand how and if eProcurement will influence SMEs' (Small to Medium size Enterprises') possibilities to be selected as suppliers.²⁸

However, the study was limited to only 15 Swedish government authorities and it acknowledged that further studies were needed to evaluate eProcurement within other public organizations that might have other administrative structures. Moreover, the study focused on Sweden and its regulations of public eProcurement and there is, therefore, need for studies to investigate public

²⁶ *Ibid.*

²⁷ *Ibid.*, p. 317.

²⁸ *Ibid.*, p. 318.

eProcurement in other countries.²⁹ The current study is, thus, a useful compliment to the foregoing study in that it explores the legal challenges attending the implementation of public eProcurement in Kenya.

Amoussou-Guenou evaluated the impact of information and communication technology (ICT) on procurement procedures and law.³⁰ He noted that due to increased electronic commerce (e-commerce) and the inefficiency of public purchasing systems, opportunity had arisen for the implementation of eProcurement by governments and their respective entities.³¹

According to Amoussou-Guenou, electronic public procurement is a viable option for efficient and cost-effective procurement for purchase of goods and services in the public sector. He stated that in order for public eProcurement to be effective, an enabling legal framework is requisite.³²

Amoussou-Guenou went on to analyze the emergent legal issues on public eProcurement. Further, he outlined the best practices in public eProcurement in the European Union, France, Phillipines and North Korea and set them out as worthy examples for emulation by developing countries establishing their eProcurement policies.³³ The work is important to the current study which reviews the key legal issues emerging in implementation of public eProcurement in Kenya.

Lim, Kim and Lee's article is a case study of successful development of e-government system in Korea.³⁴ In the year 2002, Public Procurement Service in Korea successfully established and started the Korea ON-line EProcurement System (KONEPS). KONEPS is a representative eProcurement system which integrates characteristics of ecommerce into government for business procurement activities. KONEPS handles annual transaction volume of 56 billion

²⁹ *Ibid.*, p. 316.

³⁰ R. Amoussou-Guenou, "Legal Aspects of EProcurement", A Paper Presented at the Asian Development Bank International Conference on EProcurement, 20-25 June, 2005, Seoul, Korea, p. 1-18.

³¹ *Ibid.*, p. 3.

³² *Ibid.*

³³ *Ibid.*, p. 15.

³⁴ *Supra*, note 1.

dollars, daily exchanges of electronic documents, users consist of 121,000 suppliers and 37,000 public organizations, and the 4.5 billion dollars of cost saving.

According to Lim, Kim and Lee, digitization of the procurement system can eliminate various offline interchange activities between buyers and sellers, which may result in substantial reduction of transaction costs. They give the example of KONEPS which has enhanced the public procurement administration and the service in terms of productivity and transparency realizing annual transaction cost savings of \$4.5 billion. They also argue that eProcurement provides information in real-time thereby expanding the information provided on private contracts. In their view, this promotes fair competition and reduced direct contact between business people and public officials, thereby significantly reducing the possibility of corruption.³⁵

There are a few factors that have contributed to successful adoption and implementation of KONEPS. First, Korean governments' keen policy for promoting a modern legal and institutional infrastructure appropriate for a knowledge based economy facilitated the development and adoption of KONEPS. The Korean government played a leading role in promoting the ICT sector by setting e-government initiatives, infrastructure and procurement.³⁶

The government set various policy measures and legal framework that promoted active collaboration of private and public sectors for efficient commercialization and digitization of the PPS. Further, the active participation and collaboration among stakeholders such as multiple ministries of the public sectors and related private vendors was another important factor which contributed to KONEPS establishment. KONEPS is a system which is built based on the multiple network of participants and stakeholders, thus the effective collaboration among these players is necessary to synchronize the system which can efficiently connect related players.³⁷

³⁵ *Ibid.* p.755.

³⁶ R.B. Kim, "Transformation of Emerging Economy to a Knowledge-Based Economy: Korean Case." 9(1) *Global Business Review* 149-156 (2008).

³⁷ *Supra*, note 755.

However, several limitations and potential risks of KONEPS as with any public eProcurement method are also identified. The first is the threats of potential commercial procurement services like B2B e-marketplaces for procurement. The current KONEPS service scope is limited in a certain part of whole supply chain as it provides only automated operational level services. It is proposed that KONEPS respond quickly to the change of environment including technologies and legal landscape to sustain its competitive advantage in the future.³⁸

The paper suggests ways to implement the United Nations Convention Against Corruption in national procurement systems.³⁹ The UN Convention calls for anti-corruption measures in procurement, including measures to address conflicts of interest. The paper proposes the incorporation of measures to remedy potential conflicts of interest into the UN Commission on International Trade Law (UNCITRAL) Model Procurement Law. The paper reviews prior work on the topic, including recommendations from the Organization for Economic Cooperation and Development (OECD) and the UN Standards of Conduct for the International Civil Service, which specifically highlight the dangers of conflicts of interest in procurement.⁴⁰

The paper argues that because the depth of the divide, and the fact that the strategies used to bridge it, can vary enormously between nations and societies, it would be very difficult to derive a universal definition of an actionable “conflict of interest,” or to impose a uniform scheme of rules or institutions to combat conflicts of interest.⁴¹ Further, the strategies vary depending on the medium/system used to undertake the procurement. As argued in the present study, eProcurement system presents different conflict of interest challenges quite apart from the ordinary brick and mortar procurement. It is necessary to study the challenges presented by

³⁸ *Ibid.*, p. 756.

³⁹ United Nations Commission on International Trade Law (UNCITRAL), “United Nations Convention against Corruption: implementing procurement-related aspects”, A Discussion Paper submitted to the Conference of the States Parties to the United Nations Convention against Corruption, Second session Nusa Dua, Indonesia, 28 January-1 February 2008; http://www.uncitral.org/pdf/english/working_groups/wg_1/INF.2.pdf (accessed on 12/04/2010).

⁴⁰ *Ibid.*

⁴¹ *Ibid.*

eProcurement, especially the legal challenges relating to conflict of interest and review measures needed to tackle them as undertaken in the current study.

Cimander, Hansen and Kubicek's article discuss why electronic signatures are an obstacle for cross-border eProcurement in Europe.⁴² The article acknowledges the promise of eProcurement as a programme of e-government in Europe and around the world in terms of cost saving and time efficiency. The limited cross-border eProcurement activity in Europe is noted and attributed to the lack of technical interoperability and legal harmonization in particular concerning the use of e-signatures. The article then undertakes a comparative study of the different legal provisions in the Czech Republic, France, Germany, Spain and Sweden to provide an overview of the current legal state-of-play regarding e-signatures and make suggestions on how to overcome the remaining obstacles to pan-European eProcurement. The article concludes that e-signatures play an important role in the tendering phase and the contracting phase of the eProcurement.⁴³

This article explains that European eProcurement is regulated by directives 2004/17/EC and 2004/18/EC and signatures by Directive 1999/93/EC. All 27 Member States have officially transposed these directives into their national laws and provide for electronic public procurement but in most Member States particular e-signature laws exist for regulating e-signatures. The directive regulates three different types of electronic signatures with different degrees of authenticity: simple, advanced and qualified. The differences between the kinds of e-signature required come from security considerations and general considerations of which kind of electronic signatures can be equal to handwritten signatures.⁴⁴

Further, while the procurement directives allow for the use of e-signatures, they do not prescribe them.⁴⁵ Member States of EU may decide whether tender documents have to be furnished with an electronic signature or not. If they do, it has to be at least of an advanced type. The Member

⁴² Ralf Cimander, Meik Hansen and Herbert Kubicek, "Electronic Signatures as Obstacle for Cross-Border EProcurement in Europe", Available at: https://www.eid-stork.eu/dmdocuments/public/ElectronicSignaturesAsObstaclesForCross-BorderEProcurementInEurope_LessonsFromThePROCUREProject.pdf (accessed on 30/04/2010).

⁴³ *Ibid.* p. 9.

⁴⁴ *Ibid.* p. 5.

⁴⁵ Art. 48(5) of Directive 2004/17/EC and Art. 42(5) b of Directive 2004/18/EC.

States are yet to transpose the directives on e-signatures and therefore standardization is not easy to achieve. Similarly, world-wide standardization on this aspect of eProcurement is also far from attainment.⁴⁶

The study proposes a two-phase approach in dealing with the challenges to eProcurement associated with lack of world standard on e-signature. It proposes imposition of lower security level in the early tendering phase and the higher level in the final contracting phase. However, it is argued that such proposal to be effective should be driven by legal reforms proposed as part of legal harmonization for the entrenchment of eProcurement. The current study seeks to reveal the legal issues and challenges associated with technical aspects of eProcurement such as the need for e-signatures and how they may be resolved through legal reforms.⁴⁷

Assar and Boughzala's paper analyses the various aspects of public eProcurement processes through the detailed study and the modeling of an effective purchase procedure.⁴⁸ The obtained model is used to identify all the stages and process likely to be virtualized through the use of electronic collaborative tools. This analysis is the basis of a critical evaluation of five major eProcurement platforms currently used in France and how they may be leveraged to resolve the challenges of eProcurement.⁴⁹

According to the public procurement contracts code (CMP, Code des Marchés Publics), the relationship between the two contracting parties concerned by a public purchase implies the signing of a contract and the transfer of a financial amount in accordance with certain rules. These rules deal with free access to all information related to the public purchase order, ensures equal processing of all received tenders, and the global transparency of the whole procedure. The economically most advantageous offer will be selected. To be able to make the best choice, the criteria is defined according to the nature of the purchase, notably the technical value of the

⁴⁶ *Supra*, note 61, p. 8.

⁴⁷ *Ibid.* p. 27.

⁴⁸ Said Assar and Imed Boughzala, "Collaborative features in French public eProcurement", A Paper presented at the AIM Conference 2006; Available at: <http://subs.emis.de/LNI/Proceedings/Proceedings92/gi-proc-092-005.pdf> (accessed on 12/04/2010), p. 83-103.

⁴⁹ *Ibid.*

tender, its innovating character, its cost of use, the execution delay, aesthetic and functional qualities, after-sales service and technical support.⁵⁰

The paper shows that public eProcurement is a strategic goal in the development of e-government applications in France and in the European Community. The analysis in the paper reveals that there are still many challenges to eProcurement especially in relation to meeting the requirements for public procurement under the CMP rules. The evaluation of main electronic platforms actually deployed in France to support these eProcurement processes consolidates this opinion. This evaluation shows that although many platforms have been developed, there does not seem to be any technological standard and general pattern for the supported processes to heal the challenges facing eProcurement.⁵¹

In other words, the paper concludes that the challenges and issues facing eProcurement are not necessarily technological in nature or capable of resolution by the standardization or improvement of technology. This position matches with the approach taken in the present study that legal issues and challenges facing eProcurement can only be better tackled by adoption and application of better regulatory practices.

Mansor has highlighted issues relating to the introduction of eProcurement by various ministries and government agencies in Malaysia.⁵² The article highlights objectives of government procurement in Malaysia are set to be paralleled to the development objectives. The objectives include ensuring a sustainable supply of product and services. Second, government procurement in Malaysia is guided by the principle of value for money. Third, government procurement aims at achieving the national development agenda of the development of local small medium companies to promote growth. According to the paper, the procurement policy in Malaysia is also a tool to promote transfer of technology and expertise.⁵³

⁵⁰ *Ibid.* p. 85.

⁵¹ *Ibid.*, p. 93.

⁵² Norma Mansor, "Public Procurement Innovation in Malaysia: EProcurement", Available at: www.nap.sip.ag-research.org/pdf/EProcurement-Malaysia.pdf (accessed on 12/04/2010).

⁵³ *Ibid.*, p. 4.

The paper also notes that procurement system has around the world evolved from a highly centralized to a more deregulated and decentralized ones. The evolution is attributed to reforms and agitation for better government performance and societies' intolerance for high transaction costs.⁵⁴

The second part of the paper dwells on the implementation and application of eProcurement in Malaysia. It emerges that *eProcurement* was introduced in Malaysia in 1999 in line with the promotion of electronic government (*e-government*) and over the time, the exercise of *eProcurement* developed in stages to allow the suppliers particularly small-scale companies to adapt themselves with the new changes in the procurement system.⁵⁵

As regards benefits of eProcurement, the paper points that the adoption of eProcurement in Malaysia has mainly improved public procurement by expediting the process by eliminating time loss caused by human interaction and reduced paper work making it more efficient. EProcurement has also reduced the procurement process bringing down costs to a minimal level therefore improving the overall management of purchases and management. The spillover benefit to the society is that it promotes an information technology literate workforce and business. The suppliers on the other hand have benefited from the introduction of eProcurement by getting better access to the contracts, cost-saving, better speed and definitely more accurate on specifications of products and services. Timeliness in payment by government agencies is another very significant advantage to suppliers.⁵⁶

However, the introduction of eProcurement has also increased challenges for many suppliers, particularly those in rural areas, to fully participate in eProcurement. Some parts of Malaysia still experience poor ICT infrastructure, thus making it difficult for these small entrepreneurs to participate eProcurement. Also, low level of education and low ICT knowledge exclude many small rural entrepreneurs. System instability has also been mentioned as one of the obstacles faced by suppliers as it is a daunting task to access government website due to frequent

⁵⁴ S.A. MacManus, "Designing and Managing the Procurement Process", in J.L. Perry (ed.), *Handbook of Public Administration*, 2nd Ed (San Francisco, CA: Jossey-Bass, 1996), pp. 590-610.

⁵⁵ *Supra*, note... p.7.

⁵⁶ *Ibid.*, p. 9.

breakdown of ICT. Similarly, the breakdown is also experienced by the suppliers. In addition, the on-line registration is costly, especially the initial registration to become an enabled supplier. The conclusion is that eProcurement is more transparent and efficient; however, unless training on professionalism is scaled up, accountability and integrity are not ensured.⁵⁷

In conclusion, it is argued in the paper that the introduction of eProcurement in Malaysia was timely as there are many advantages both to the suppliers and government. More importantly, it is more transparent and would certainly improve governance. However, to promote greater participation and acceptance by suppliers, efforts should be made to deal with the challenges that limit suppliers in accessing the system.⁵⁸ The discussion in the paper is relevant to the current study in that it deals with the benefits, issues and challenges relating to the implementation and application of eProcurement in a third-world country. The findings in the study are illuminating pointers to the issues likely to be encountered upon the introduction of eProcurement in Kenya.

Migai Akech in a paper on the influence of development partners on public procurement in Kenya reviews the procurement regime of Kenya's focusing on the Governance, Justice, Law and Order Sector (GJLOS) Reform Program in the context of the then on-going public procurement reform efforts.⁵⁹ The paper, essentially, advances two principal arguments. First, it establishes that the GJLOS's procurement regime in Kenya is inefficient and unlikely to be effective since it creates administrative structures that are not only unwieldy but also run parallel to the national system. The paper, hence, recommends that GJLOS's procurement regime be harmonized with the national system.⁶⁰

Second, the paper argues that the procurement regime in Kenya is not sufficiently democratic as it is not accountable to the Kenyan people and does not facilitate the meaningful participation of key stakeholders. In the interests of accountability, it is recommended that those entrusted with the task of administering this procurement regime should in particular be subject to full rigour of

⁵⁷ *Ibid.*, p. 10.

⁵⁸ *Ibid.*, p. 11.

⁵⁹ *Supra*, note 18.

⁶⁰ *Ibid.*

the jurisdiction of the national public procurement regulatory authority and the national court system.⁶¹

The paper takes a bottom-up approach to the development of institutional mechanisms for reform of the public procurement in Kenya. Public procurement reforms are seen as part of the wide framework for alignment of global governance. As a first step towards ensuring adequate responses to the need for global governance, developing countries in particular should enhance the effectiveness of their administrative law frameworks.⁶²

In effect, the paper recommends the harmonization of the procurement regime in Kenya with the international systems and systems. In this respect, the paper contributes at large to the approach taken in the current study towards the reform of public procurement regime in Kenya to incorporate public eProcurement.⁶³ The key limitation of the paper is the fact that the paper was written before the Public Procurement and Disposal Act (PPDA) was enacted and the current public procurement regime was instituted. Some of the finding and recommendations in the study have been overtaken by events.

Wanja Thairu discusses public eProcurement in Kenya as part of the wider framework of implementation and application of e-governance in Kenya. According to her, e-governance is being accessible electronically to provide the public with relevant information besides facilitating communication between different government sectors. E-government refers to government use of electronic resources and technology to conduct its business. It involves the application of information and communication technology by the government with the aim of exchanging information and services among different arms of government and with its citizens and businesses. This could be done by any government, anywhere in the world.⁶⁴

⁶¹ *Ibid.*

⁶² *Ibid.*

⁶³ *Ibid.*

⁶⁴ Wanja Thairu, "Application of E-Government in Kenya: Current Status and Future Prospects", Available at: <http://www.mu.ac.ke/academic/schools/is/journal/articles/thairu1.pdf> (accessed on 12/04/2010).

She finds that the concept and application of e-government is relatively new in Kenya and different government agencies are at different stages of development towards becoming electronic in their operations. According to her, e- legislation is a very important component of e-government as it supports and enables the implementation of a variety of e-government applications such as e-taxation and eProcurement. It also serves to harmonize the implementation of a multiple of applications and activities in such sectors as commerce, social services, education, health and agriculture.⁶⁵

In her view, there are stages to the establishment and running of e-government. There are also several aspects that influence or determine the establishment and application of e-government that may be peculiar to each country. Her research explores the issues relating to the status of e-government in Kenya. The research findings and discussions show the current status of e-governance in Kenya and suggest ways of enhancing the efficiency and effectiveness of e-governance in Kenya.⁶⁶

The study is the relevant to the current study being among the few that discuss the key issues affecting e-government, and in particular eProcurement, in Kenya. However, the study is neither a legal study nor does it deal with legal issues and challenges relating to eProcurement in Kenya in the manner they are addressed in the current study.

An assessment of the public procurement system reveals that much progress has been made in the reform of the legal framework for public procurement in Kenya.⁶⁷ With the enactment of the Public Procurement and Disposal Act, 2005 (PPDA) and Regulations, 2006 the Kenya has attained a sound and comprehensive legal framework for public procurement with a clear hierarchical distinction. The PPDA and regulations establishes the procurement methods to be applied and cover goods, works and services for all procurement using national funds.⁶⁸

⁶⁵ *Ibid.*

⁶⁶ *Ibid.*

⁶⁷ Public Procurement Oversight Authority, "Assessment of the Procurement System in Kenya", October 2007: Available at: <http://www.oecd.org/dataoecd/6/12/41583965.pdf> (Accessed on 12/04/2010).

⁶⁸ *Ibid.* p. 9.

The assessment acknowledged the strategic importance of the Public Procurement Oversight Authority as the body in-charge of regulation of public procurement in Kenya. It emerges that PPOA as currently established under the PPDA has clearly defined responsibilities and is capable of steering public procurement reforms in Kenya. The Board of the Authority was appointed in September 2007 and although it is presently largely staffed with personnel seconded from other government departments it has outgrown the tutelage of the Treasury and is in the process of stamping its independence from the Ministry of Finance by establishing independent and separate operations.⁶⁹

The assessment also established that the legal framework for public procurement supports integration of procurement planning in the budget formulation process. Accordingly, all procurement activities are required to be within the approved budget and planned through an annual procurement plan of the procuring entity. In addition, the legal framework specifies that sufficient funds must be set aside before procurement is initiated.⁷⁰

The assessment also notes that the legal framework is complemented with a series of Standard Tender Documents (STDs) covering procurement of goods, works and services. The responsibility for updating the STDs is clearly assigned to the PPOA. Evidence from the surveys suggests that the STDs have reached high level of dissemination and 66% of all procurements carried out are using STDs.⁷¹

The assessment recommends studies on adoption and use of competitive procurement methods as default method. In this regard, it is recommended that steps should be taken to identify barriers and incentives for using competitive public procurement in Kenya.⁷² The current study takes up the challenge by exploring the potential of eProcurement in enhancing the public procurement regime in Kenya. Further, the study goes on to explore ways and means of dealing with the legal issues and challenges that may arise in the implementation and enactment of public eProcurement in Kenya.

⁶⁹ *Ibid.*

⁷⁰ *Ibid.* p. 13.

⁷¹ *Ibid.* p. 15.

⁷² *Ibid.* p. 24.

1.10 Research Methodology

The study will employ quantitative and qualitative research methods in the collection and analysis of the data necessary for the research. Desk research of primary and secondary data sources will be undertaken. Primary sources such as statutes and treaties will be consulted. Further, secondary sources such as treatises, journals, working papers, newspaper articles and the internet will also be relied upon. The study will also involve analysis of statements in reports, policy documents and newspapers

The study will also draw information on the legal challenges and issues facing eProcurement in Kenya from a focus group discussion with key informants drawn from among government and government agencies with exposure to public procurement and, in particular, eProcurement, in Kenya.

Further, interviews with the relevant staff of the Public Procurement Oversight Authority (PPOA) and the e-Government Secretariat will also be conducted.

1.11 Chapter Breakdown

Chapter One: Background of the Study

The introduction comprises the proposal of this study. It briefly highlights the scope of the study. It also discusses theoretical framework underpinning the study, objectives of the study, justification of the study, hypothesis and research methodology.

Chapter Two: Can e-Procurement Deliver on the Objectives of Public Procurement?

This chapter discusses the main benefits of eProcurement which include improving transparency, efficiency, accountability, fairness and restoring public confidence. It will also discuss the main technology based challenges that may impede the realization of the benefits of e-procurement.

Chapter Three: Legal Validity of e-Procurement Procedures and Documents

The Chapter will discuss the legal challenges facing adoption of eProcurement under the current public procurement legal procurement epitomized by the Public Procurement and Disposal Act,

the Evidence Act, the Contracts Act and the Kenya Communication Act. In particular, the chapter will explore issues that are occasioned by the fact that there is no sufficient e-legislation to support electronic transactions. Some of these issues include legal validity of documents, electronic signatures, electronic contracting, electronic meetings (video conferencing/teleconferencing).

Chapter Four: eProcurement: Is it a Haven of Criminal Activities?

eProcurement is pegged on information technology which gives eProcurement unique characteristics of anonymity, impersonal and instant. These characteristics can be used by criminals as to perpetuate their criminal activities. This chapter discusses new criminal activities that may be borne out of eProcurement.

Chapter Five: Conclusions and Recommendations

This Chapter will draw conclusions to the key findings made in the study based on the hypotheses. It will state whether the hypotheses set out for the study are confirmed or negated. It will also make suggestions for further studies and dealing with legal challenges to public eProcurement highlighted in the study.

CHAPTER TWO

Can e-Procurement Deliver on the Objectives of Public Procurement?

2.1 Introduction

Over the last twenty years information technology has radically changed the way most businesses operate. Those that have implemented it successfully have enjoyed the benefits of substantial increases in operating efficiency, transparency, accountability among other benefits. More recently, network technology has enabled fast and low cost communications and, increasingly, the ability to carry out commercial activity through relationships forged over computer networks including the internet.⁷³

The application of technology is usually focused on a business's core profit generating activities. However, the costs of many secondary activities, in support of an organization's primary business, can often also be greatly reduced by the introduction of appropriate technology. In particular, traditional procurement processes and cycles harbor substantial inefficiencies that can be removed by the introduction of network-based electronic procurement (e-Procurement) systems.⁷⁴

Due to its characteristics and reliance on technology, eProcurement is not only expected to reduce the cost of purchasing process but also to alter the activities of purchasing. It is bound to transform purchasing process from an operational activity to a strategic activity. This will provide opportunities for improving market coordination by making additional partners available due to improved competition.

This chapter discusses the extent to which eProcurement may achieve the various Kenyan public procurement objectives namely, to maximise economy and efficiency; to promote competition and ensure that competitors are treated fairly; to promote the integrity and fairness of those procedures; to increase transparency and accountability in public procurement procedures; to

⁷³ Marcella Corsi, Andrea Gumina and Daria Ciriaci, 2006, How E-Government May Enhance Public Procurement, International Public Procurement Conference Proceedings 21-23 September 2006.

⁷⁴ Id

increase public confidence in those procedures; and to facilitate the promotion of local industry and economic development.⁷⁵

2.2 Maximization of economy, Efficiency and eProcurement

Maximization of economy and efficiency is one of the objectives of public procurement in Kenya.⁷⁶ The procurement processes seeks to achieve this objective in various ways which include providing timeframes within which certain processes are to be done, providing on how to obtain quality services, goods and works and limiting costs for the processes. Time, quality and cost are the main criteria for measuring efficiency and maximize on economy.

2.2.1 Procedures in Time

The whole procurement process is a highly regimented regime which requires actions to be done within certain timeframes.⁷⁷ The Kenyan Public procurement and Disposal Act, 2005 provide for various timeframes within which various activities are to be carried out to ensure efficiency. Some of the timeframes set in the Act are as follows;

- a. Section 52(3) (a), (b) and (h) requires that the tender document should state the time limit for delivery or completion of specific requirements, time frame for submission of tenders and opening of tenders and tender validity periods respectively. Further, section 58(3) requires that tenders must be submitted before the deadline and any submission must be returned unopened.
- b. Section 66(6) provides that the evaluation of tenders must be done within the period specified in the tender document
- c. Section 67 provides that notification of award and regret should be made before expiry of the period during which tenders are valid.
- d. Section 68 (2) – A written contract shall be entered into within the time specified in the tender documents but not until at least 14 days have elapsed.

These time frames ensure that certain processes are done within a stipulated time to ensure that efficiency is enhance by procuring goods fast enough and safe costs of delays.

2.2.2 Requirements as to Quality

⁷⁵ Section 2 of the Public procurement and Disposal Act, 2005.

⁷⁶ PPARB App No. 55 of 2009 – 10th December 2009 Voith Hydro GmbH & Co Vs KenGen

⁷⁷ PPARB App No. 55 of 2009 – 10th December 2009 Voith Hydro GmbH & Co Vs KenGen

Requirements as to quality ensure that procurement is both efficient and ensure maximization of economy. First the Public Procurement and Disposal Act requires that the procuring entity should identify its needs and reduce them into a procurement plan.⁷⁸ This requirement ensures that the procuring entity only procures what is necessary.

The evaluation processes in the procurement procedures ensures that goods and services of qualities intended are procured. The technical evaluation compares each tender to the pre-set technical requirements of the description of goods, works or services in the tender document. The evaluation team must reject the tenders that do not satisfy the technical requirements.

2.2.3 Requirements as to Costs

The procurement procedures provide for measures to ensure that only the lowest evaluated bidder is awarded the tender. Regulation 50 of the Public procurement and Disposal regulations of 2006 clearly stipulates what the evaluation team needs to do to procure the lowest evaluated bid.

To ensure efficient and maximize on economy, any novel procurement process must meet these three main criteria. The adoption of eProcurement system allows firms to reduce transaction costs, improve internal procurement process efficiency, and increase collaboration with suppliers.⁷⁹

By implementing e-procurement, the firm could shorten the order fulfillment cycle time, lower inventory levels, lower price paid for goods, reduce administrative costs of procurement, enhanced budgetary control, elimination of administrative errors, increase buyers' productivity, lowering prices through product standardization and consolidation of buys, improve the payment process and improve information management.⁸⁰

Public procurement is an information intensive function of government. It has to satisfy requirements for goods, works, systems and services in a timely manner and at minimal cost. To

⁷⁸ Regulation 20 of Public Procurement and Disposal Regulations.

⁷⁹ Chaffey, D. (2004). E-business and e-commerce management: strategy, implementation and practice. 2nd edition. Financial Times Prentice Hall.

⁸⁰ Lin, F. R. and Shaw, M. (1998). Reengineering the order fulfillment process in supply chain networks. The Information Journal of Flexible Manufacturing Systems, 10, 197-229.

do this efficiently, standardized procedures and documents are used as much as possible during a typical procurement transaction. The more this process is supported by information technology, the easier it becomes to handle the paperwork and documentation burdens.⁸¹

In September 2003 the European Commission issued a Communication on “The Role of e-Government for Europe’s Future”: it stated that e-Government is an enabler to realize a better and more efficient public administration.⁸² It improves the development and implementation of public policies and helps the public sector to cope with the conflicting demands of delivering more and better services with fewer resources.⁸³

Further, in the Ministerial Declaration approved unanimously in Manchester in November 2005, EU Member States agree that by 2010;

- a. eProcurement will be contributing to high user satisfaction with public services
- b. eProcurement will have significantly reduced the administrative burden on businesses and citizens
- c. the public sector will have achieved considerable gains in efficiency through the use of ICT.
- d. European administrations will have significantly increased transparency and accountability wherever possible and relevant through innovative use of ICT.

To assure maximum efficiency, eProcurement must be implemented in various sectors of the economy and all relevant stakeholders must embrace ICT. Poor implementation of ICT may result in various problems which may be counterproductive to the objective of efficiency. One such problem is lack of interoperability. Interoperability is the ability of electronic systems to communicate to each other and enable transactions across different networks.

The Philippines has adopted a set of comprehensive laws and regulation to implement e-Government Procurement. It has promulgated the Government Procurement Reform Act (Act

⁸¹ Wayne A. Wittig, Public Procurement and the Development Agenda, International Trade, CH-1211 Geneva 10, Switzerland.

⁸² European Commission (2003). The Role of e-Government for Europe's Future, COM (2003) 567 final, 26.9.2003. Available at <http://europa.eu.int/>. accessed on 8th October 2010.

⁸³ Id

9184). The law binds the State to promote the ideals of good governance, in all its branches, departments, agencies, subdivisions, and instrumentalities, including government-owned and/or controlled corporation, and local government units. The law applies to “procurement of infrastructure projects, goods, and consulting services, regardless of source of funds, whether local or foreign.”⁸⁴

Section 8 of Article III of this Act entitled “Procurement by Electronic Means” provides, that “to promote transparency and efficiency, information and communication technology shall be utilized in the conduct of procurement procedures.”⁸⁵

In addition, there are Regulations that have been enacted in application of the Government Procurement Reform Act. In this regard, two comprehensive executive orders were passed. Executive Order N0. 40 aim at consolidating procurement rules and procedures for all national government agencies, government-owned or controlled corporations and government financial institutions and requiring the use of the government electronic procurement system. On its part, Executive Order N0. 322 require all national government agencies, instrumentalities and government owned or controlled corporations to participate in the electronic procurement system.⁸⁶

The Philippines also offers a very interesting example of participation of the citizens and the civil society in the e-Government with a special focus on e-procurement. Indeed, the civil society is actively involved in assisting the Government in its e-procurement strategy. It also looks over procurement by government units to assure that fairness and good governance are respected.⁸⁷

2.2.4 Major Set Back to Efficiency in eProcurement Process

To ensure efficiency and maximize on economy in public procurement by using eProcurement processes, the various systems used by various player must be interoperable. Interoperability is a property of a product or system, whose interfaces are completely understood, to work with other products or systems, present or future, without any restricted access or implementation. The

⁸⁴ See “Government Procurement Reform Act”, Republic of the Philippines (Act N0. 9184 of July 2002), http://www.procurementwatch.org.ph./rules_ra9184/ra9184.htm#1 (accessed on 10/09/2010).

⁸⁵ *Ibid.*

⁸⁶ See http://www.procurementservice.net/english/AboutEPS/AB_EO322.asp (accessed on 10/09/2010).

⁸⁷ See <http://www.procurementwatch.org.ph> (accessed on 10/09/2010).

Institute of Electrical and Electronics Engineers has defined interoperability as the ability of two or more systems or components to exchange information and to use the information that has been exchanged.⁸⁸ James A. O'Brien and George M. Marakas further define interoperability as being able to accomplish end-user applications using different types of computer systems, operating systems, and application software, interconnected by different types of local and wide area networks.⁸⁹

Interoperability is critical in eProcurement since public entities and private participants must be able to communicate using technology. eProcurement involves an electronic data interchange (EDI) on a large scale and therefore requires both the sender and the receiver to interpret each and every data element in precisely the same way. Interoperability is not always assured between different organizations involved in eProcurement. All the organizations involved in public procurement may not be using the same technology. Even if they are using the same technology, the practice of it differs from organization to organization.

Lack of interoperability in eProcurement will result in a limited number of participants since the system will exclude some participants. This will in turn reduce competition and discourage communication.⁹⁰

2.3 **Competition, fair Treatment of Competitors and eProcurement**

Public procurement procedures ensures that as many bidders as possible submit their bids. Once the bids are submitted, the procedures ensure that the evaluation and award processes are conducted fairly. Ways in which Public Procurement and Disposal Act ensure competition and fair treatment of competitors is by requiring wide spread advertisement and objective evaluation criteria and award.

⁸⁸ Institute of Electrical and Electronics Engineers. IEEE Standard Computer Dictionary: A Compilation of IEEE Standard Computer Glossaries. New York, NY: 1990.(iftikahr).

⁸⁹ Id

⁹⁰ Hilde Van Eylen, Public eProcurement Initiatives and experiences; Borders and Enablers, European Commission, August 2002.

2.3.1 Advertisements

Section 54 (2) of the Public Procurement and Disposal act requires that if the estimated value of the goods, works or services being procured is equal to, or more than the prescribed threshold for national advertising, the procuring entity shall advertise, at least twice in a newspaper of general nationwide circulation which has been regularly published for at least two years before the date of issue of the advertisement, and on its website in instances where the procuring entity has a website, and the advertisement shall also be posted at any conspicuous place reserved for this purpose in the premises of the procuring entity as certified by the head of the procurement unit.

This requirement on advertisement ensures that as many bidders as possible are able to know that a procuring entity wants to procure. With efficient eProcurement, information on potential bids will be relayed much faster through website, e-mail or any electronic method. The only challenge with electronic means is that since there many procuring entities advertising on their website, it will be cumbersome for bidders to hop from one website to the next to find out what is available. The Public Procurement Authority may, however, cure this by providing a common website for advertising tenders.

2.4 Integrity & Fairness and eProcurement

Public procurement is the government activity most vulnerable to corruption. Lack of transparency and accountability were recognized as a major threat to integrity in public procurement at the 2004 OECD Global Forum on Governance: Fighting Corruption and Promoting Integrity in Public Procurement.⁹¹ Integrity and fairness may be jeopardized at various stages of procurement as follows;

- a. **Pre Bid stage:** The lack of adequate needs assessment, planning and budgeting of public procurement; requirements that are not adequately or objectively defined; an inadequate or irregular choice of the procedure; and a timeframe for the preparation of the bid that is insufficient or not consistently applied across bidders.⁹²
- b. **Bidding stage:** Inconsistent access to information for bidders in the invitation to bid; lack of competition or in some cases collusive bidding resulting in inadequate prices; conflict-

⁹¹ Organization for Economic Co-Operation and Development, 2007, Integrity in Public Procurement GOOD PRACTICE FROM A TO Z, Organization for Economic Co-Operation and Development, pg 324.

⁹² Id pg 33

of-interest situations that lead to bias and corruption in the evaluation and in the approval process; and lack of access to records on the procedure in the award that discourages unsuccessful bidders to challenge a procurement decision.⁹³

- c. **Post Bid Stage:** The insufficient monitoring of the contractor; the non-transparent choice or lack of accountability of subcontractors and partners; lack of supervision of public officials; and the deficient separation of financial duties, especially for the payment.⁹⁴

Various procedures in Public Procurement are meant to ensure integrity and fairness in the processes. For example, section 66(2) provides that the evaluation and comparison of tenders shall be done using the procedures and criteria set out in the tender documents and no other criteria shall be used. This provision ensures that all the submitted tenders are evaluated using the same criteria and therefore ensure fairness. eProcurement may enhance fairness in procurement processes by having a set system of evaluating tenders.

2.5 eProcurement in Enhancing Transparency and Accountability

A procurement process that conforms to the expected standards of probity, transparency and accountability is one in which clear procedures that are consistent with government policies and legislation established, understood and followed from the outset. These procedures need to consider the legitimate interests of suppliers and ensure that all potential suppliers are treated equitably. Achieving an ethical, transparent approach requires that the procurement rules be clear, open, well understood and applied equally to all parties to the process.⁹⁵

2.5.1 Transparency

Transparency refers to the openness of a procurement activity to scrutiny by interested parties. It involves providing documented reasons for decisions and the provision of appropriate information to relevant stakeholders. Transparency also underpins the principle of open competition. The awarding of a contract should not be decided from a pre-registered list or from expressions of interest, unless this is part of a rigorous process of prequalification based on full

⁹³ Id pg 33

⁹⁴ Id pg 33

⁹⁵ Commonwealth Government, 'Guidance on Ethics and Probity in Government Procurement', January 2005.

information, predetermined specifications, market research and prior assessment no less demanding than competitive tendering.⁹⁶

Attracting a sufficient number of bidders in public procurement through processes that are open and fair is a key concern. To ensure a level playing field for bidders, all countries recognise the need to provide:⁹⁷

- a. Transparent and readily accessible information on general laws, regulations, judicial decisions, administrative rulings, procedures and policies on public procurement; and
- b. Equal opportunities for participation of bidders through a competitive procedure, and the provision of consistent information to all bidders on the procurement opportunity, in particular on the method for bidding, specifications, as well as selection and award criteria.

Transparency could be considered a public good that bears an immediate cost for both government and bidders. A balance must be found between transparency and its contribution to corruption control with other considerations such as efficiency. In practice countries have adapted the level of transparency and openness of the procurement procedure according to a number of factors, including the sensitivity of the information and the **specificity and value** of the public procurement.⁹⁸

To ensure transparency the Public Procurement has put in place several measures as discussed below;

- a. **Receive clear documentation on the procurement opportunity** to ensure an accurate understanding by bidders. To enhance this the Public Procurement Oversight Authority has devoted significant efforts in recent years to develop model documents (e.g. through template bid documentation, standard
- b. sets of clauses and conditions, standard procurement guidelines, etc.). eProcurement will play a big role in fostering format documents.

⁹⁶ Uyarra, Elvira and Flanagan, Kieron, Understanding the Innovation Impacts of Public Procurement (April 17, 2009). Manchester Business School Research Working Paper No. 574. Available at SSRN: <http://ssrn.com/abstract=1507819>. Accessed on 10th November 2010.

⁹⁷ Id

⁹⁸ Id

- c. **Receive information early about evaluation criteria**, i.e. how bids will be evaluated in the process. The Act compels the evaluation team to use the criteria already set out in the tender document.
- d. **Receive information at the same time** when bid requirements change. Section 67 requires that at the same time as the person submitting the successful tender is notified, the procuring entity shall notify all other persons submitting tenders that their tenders were not successful. eProcurement will ensure instant dissemination of information.
- e. Bidders may ask for further **clarification** or information, keeping in mind that information on questions and answers should be consistently disseminated to all bidders.

2.5.2 Accountability

Accountability is the obligation to account for the way particular duties have been performed. Accountability for outcomes in procurement is being able to explain how the procurement has achieved its anticipated outcomes. Accountability shows how the public interest has been protected in the expenditure of public funds. In the context of the State Purchasing Policy, accountability means being able to demonstrate how an agency has achieved its procurement objectives in a manner consistent with the objectives of the Policy.⁹⁹

Within the public sector, procurement is seen as increasingly important in delivering value to governments and ultimately to tax payers and society. Procurement officials are in the public eye because of the significant impact of procurement on the economy. The cornerstone of a public procurement system operating with integrity is the availability of mechanisms and capacity for ensuring effective internal control and audit.¹⁰⁰ Furthermore, mechanisms for lodging complaints and challenging administrative decisions contribute to ensuring the fairness of the process. In order to respond to citizens' demands for greater accountability in the management of public expenditures, some governments have also introduced direct social control mechanisms by closely involving stakeholders – not only the private sector but also end-users, civil society, the media or the public at large – in scrutinizing integrity in procurement.

⁹⁹ Callendar, G. & Mathews, D. (2000). "Government Purchasing: An Evolving Profession?" *Journal of Public Budgeting, Accounting & Financial Management*, 12(2), 272-290.

¹⁰⁰ Beth, Elodie, *Integrity in Public Procurement: Good Practice from A to Z*. Organisation for Economic Co-operation and Development (OECD), 2007. Available at SSRN: <http://ssrn.com/abstract=987026>. Accessed on 12 November 2010.

The Public Procurement and Disposal act seeks to ensure accountability through various mechanisms which are outlined below;

- a. All decisions of the Procuring entity regarding procurement may be reviewed by the Public procurement review Board.
- b. All decisions of the evaluation committee are subject to the oversight of the procuring entity's tender committee.
- c. Procurement plan which has to be made in view of the available budget and the functioning of internal controls in procurement, including financial control, internal audit and management control.

eProcurement will inject clear and simple procedures in procurement process and this may reduce the opportunities for corruption. However, as it will be discussed under chapter four, eProcurement may reduce levels of accountability through corrupt activities that are instant, impersonal and anonymous.

2.6 **Public Confidence and eProcurement**

As public procurement is a very complicated system within which there are many conflicting interests, sound procurement regulations are needed in order to increase public confidence in the procedures followed in public procurement, and to ensure fair and equitable treatment of all persons who deal with the procurement system.¹⁰¹ Public confidence in the procurement process can be gained based on the level of transparency, efficiency, fairness and accountability. eProcurement may achieve transparency, efficiency, fairness and accountability if well implemented. It however, poses serious challenges that may jeopardize public confidence.

Inappropriate introduction of e-procurement carries high risks of market fragmentation. The legal, technical and organizational barriers that may result from procurement online are one of the greatest challenges for policy makers.¹⁰² To build up confidence in e-procurement, the development of compliance verification schemes should be promoted. Potential difficulties relate

¹⁰¹ Khi V. Thai, Public Procurement Re-Examined, Journal of Public Procurement, Volume 1, Issue 1, 9-50.

¹⁰² Commission of the European Communities, 2004, Communication From the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee Of The Regions, Action Plan for the Implementation of The Legal Framework for Electronic Public Procurement, Brussels.

to the use of advanced electronic signatures, in particular signatures based on a qualified certificate and which are created by a secure-signature-creation device.

2.6.1 Building public confidence by use of Trusted Third Parties

eProcurement is impersonal, anonymous and instant hence posing a high level of mistrust amongst the players. In ordinary procurement parties get to meet and know each other, transaction take some time hence enable parties confirm of several transactions. EProcurement requires that participating parties have trust on the people they are dealing with and in its endeavour to restore public confidence.¹⁰³ To enhance, trust there in need for Trusted Third Parties.

Trusted third party (TTP) is an entity which facilitates interactions between two parties who both trust the third party; they review all critical transaction communications between the parties, based on the ease of creating fraudulent digital content. In TTP models, the relying parties use this trust to secure their own interactions. TTPs are common in any number of commercial transactions.¹⁰⁴

Trusted third parties are key agents in eProcurement as they play an intermediary role hence boosting trust. They provide banking, legal, insurance and other services necessary to facilitate e-commerce. Trusted third parties will only be trusted by players if there is a well established certification mechanism. Players would be more comfortable trading with trusted third parties duly certified by a government.¹⁰⁵

To facilitate the certification of trusted third parties, section 21 of the Electronic Transactions Bill 2007¹⁰⁶ mandates the regulator of e-commerce to grant licenses authorizing any particular

¹⁰³ Kenny, Charles, Construction, Corruption, and Developing Countries (June 1, 2007). World Bank Policy Research Working Paper No. 4271. Available at SSRN: <http://ssrn.com/abstract=996954>. Accessed on 12 November 2010.

¹⁰⁴ Nicklas Lundblad, Next Generation Trusted Third Parties –Some Experiences from the Swedish ChamberSign Project, St Anna Research Institute.

¹⁰⁵ Id page 38.

¹⁰⁶ This is a Bill pending in Kenyan Parliament for debate.

person to provide electronic certification services. Any licence granted under this section should require the licensee to do the following;

- a. Make use of hardware, software and procedures that are secure from intrusion and misuse.
- b. Provide a reasonable level of reliability in its services which are reasonably suited to the performance of intended functions.
- c. Provided procedures to ensure that secrecy and privacy of the electronic signatures are secure.
- d. Observe any other standards that the licence may prescribe.

The implementation of this section would go a long way in boosting trust in e-commerce. It will ensure that there is easy identification of parties in international e-commerce.

Part IV provides for limitation of liability of service providers who are trusted third parties. Section 22, 23 and 24 states that a service provider shall not be subject to any civil or criminal liability in respect of third party material, in form of electronic versions, to which he/she acted merely as a conduit, store or host. Section 26 obliges the service providers to notify the authorities of any unlawful activity in writing but under section 27, the service providers do not have general obligation to monitor data which is in transit.

The limitation of liability of service providers especially in criminal activities is not appropriate. It should be the duty of service providers, since they possess the ICT expertise and experience, to notify the state of such criminal activities that may be perpetuated on the internet. If they fail to reasonably identify the criminals and notify the authorities, they should be liable. If service providers cannot investigate cybercrime, then there should be an established government entity that works closely with service providers to investigate cyber crime.

2.6.2 Business Continuity Planning and Public Confidence

To ensure public confidence in eProcurement system, the public has to be assured that the system is well secured and can be available even after a major disaster befalls a procuring entity. The modern business world unlike its predecessor has become more risky with the advent of

information communication technology. The business environment is changing rapidly with enormous office automation, e-mail, e-commerce, centralization, decentralization, downsizing, and right sizing¹⁰⁷ and over dependence to technology. Global terrorism has increasingly become more organized and lethal with business interconnectivities and dependencies becoming more complex and prone to failures. The global customer is more sophisticated and adversely informed about his environment. Most governments have built mechanisms through regulators to protect their business environments¹⁰⁸ and pressure to develop resilience plans¹⁰⁹. These regulations are required to protect privacy and make organizations maintain business continuity. This has brought about the issue of business continuity in the event of interruption emanating from the risky business environment.

Business continuity planning is founded on the basis of a business's ability to be a going concern. Business continuity is an organization understanding at the highest level that aims and objectives are not compromised by unexpected interruptions. BCP recognizes that some business services or products must be continuously delivered without interruption. Business continuity planning can hence be defined as a process that seeks to ensure that an organization will continue doing business when its normal facilities are unavailable. The main focus of this process should be to return an organization into a business as usual state as quickly as possible.¹¹⁰

2.7 **e-Procurement and the Promotion of Local Industry and Economic Development**

Public Procurement processes are intended to facilitate the promotion of local industry and economic development. Public Procurement Oversight authority encourages procuring entities to implement this objective. The newly promulgated Constitution in Kenya emphasizes on this objective. Article 206 empowers Parliament to enact a legislation to prescribe a framework within which policies relating to procurement and asset disposal shall be implemented and which

¹⁰⁷ Tipton, H. F. (2007). *Information Security Management Handbook* (6th ed.). Boca Raton: Auerbach.

¹⁰⁸ Graham, J. e. (2006). *A risk management approach to Business continuity; Aligning Business continuity with corporate governance*. Brookfield: Rothstein Associates.

¹⁰⁹ CBK. (2008). *Business Continuity Management*. Retrieved from Central bank of Kenya: http://www.centralbank.go.ke/downloads/acts_regulations/Business_Continuity_Management.pdf

¹¹⁰ Peltier, T. R. (2005). *Information Security Fundamentals*. Boca Raton, Fla: Auerbach Publications.

may provide for all *inter alia* the protection or advancement of persons, categories of persons or groups previously disadvantaged by unfair competition or discrimination.¹¹¹

eProcurement may promote local industry and economic development if well implemented. Looking at it from the point of view that procurement processes will be carried out efficiently, it will enhance accountability and transparency, the eProcurement may promote local industry and economic development. eProcurement allows local businesses to raise national and global awareness about their products and reach customers beyond their traditional market.

However, the implementation of eProcurement by small and medium size enterprises may be a big challenge because of the implementation cost involved. eProcurement infrastructure may be enormous and the small and medium size enterprise may not afford.

2.7.1 Costs of Technology and eProcurement

If there is ever going to be an effort to solve the digital divide, then the access to computer hardware would have to be at the top of the list, and it would initially seem like the most difficult area to solve, but it may actually be one of the easiest problems to start tackling.¹¹² The high cost of hardware is one of the main problems affecting the development of information technology in the developing world, but trends in hardware prices demonstrate that the technology is becoming more accessible every year, with hardware prices continuing to fall.

The solution to this problem could lie in the use of charities to provide old hardware from the developed countries and donate it towards less developed ones. It is calculated that each year in the United Kingdom alone, 1.5 million computers are thrown as garbage, and an equivalent amount are kept in storage unused.¹¹³ In the United States, 2 million computers are thrown out each month.¹¹⁴ Something that could be done in this respect is to have projects that transfer some of this old equipment to poor countries.

¹¹¹ The Constitution of Kenya, 2010, Kenya Gazette Supplement No. 55 (the Constitution of Kenya) 27th August 2010.

¹¹² Andreson, A; Bikson, T; et al. *Universal Access to E-mail: Feasibility and Societal Implications*, Santa Monica CA: Rand, 1995, pp.54-56.

¹¹³ For similar statistics, see: Computer Aid International. @ < <http://www.computer-aid.org>>

¹¹⁴ Aguilar, R. "Where old computers go to live", CNET *News.com*, December 29, 1998. @ <http://news.com.com/2100-1040-219552.html?legacy=cnet> Accessed on 5th October 2010.

Large industries like Microsoft, Sun Microsystems and IBM have already committed funds to provide some computing services for developing countries, including hardware and open source office application software. Small computer donations could go a long way in establishing information hubs and provide wider access to the web.¹¹⁵

2.7.2 Telecommunications Infrastructure and eProcurement

It is imperative that improvement of telecommunications infrastructure must be a priority for those developing countries that wish to increase their internet access rates and hence increase eProcurement. This strategy must run in two separate streams; one is to ensure that the international connections are in place and are suitable for internet transactions, and the second is to improve national telecommunications infrastructure.¹¹⁶

The national telecommunications infrastructure is a more difficult problem to tackle. Internet connection rates are largely dependent on the existence of an adequate phone network system in the country in question. The problem is that the cost of wiring a country to provide improvements in connection rates is considerable. It is difficult to determine the cost of every new line in a developing country because calculations must take into consideration the fact that most of the technology must usually be imported.¹¹⁷ The government of Kenya has boosted e-infrastructure by the recent optic cable. Wireless internet connectivity has offered some of the solutions.

The existing infrastructure is also limited in the amount of bandwidth that it can transfer. Systems can clog as communication happens between networks.

¹¹⁵ Sun Microsystems. "Sun counters educational digital divide", Sun Microsystems press release, 2002. <http://za.sun.com/news/press/2002/020708.html>, Accessed on 5th October 2010.

¹¹⁶ Cukier, K. N. "Bandwidth Colonialism? The Implications of Internet Infrastructure on International E-Commerce", INET99 *Conference*, San Jose California, June 1999. http://www.isoc.org/inet99/proceedings/1e/1e_2.htm. Accessed on 5th October 2010.

¹¹⁷ Id

2.7.3 Bridging the Digital Divide

At the international level, the International Telecommunications Union (ITU) has taken a leading role in bridging the digital divide.¹¹⁸ One of the main purposes of ITU is to promote the extension of the benefits of the new ICTs to all the world's inhabitants. ITU is mandated to foster and offer technical assistance to developing countries and to promote the mobilization of the material, human and financial resources needed to implement these goals. ITU's mandate, further, includes promoting international co-operation and partnerships between government members and the growing number of private sector members who have joined ITU. ITU has initiated the Electronic Commerce for Developing Countries (EC-DC) programme which brings on board more than 140 ITU Member States that are either developing or least developed.¹¹⁹ Through the EC-DC, several activities are being undertaken by the ITU based on four objectives of this special development initiative. These four objectives include;

- i. Infrastructure Development-where they coordinate the establishment of e-transaction infrastructure.
- ii. Human Resources Development-they develop local capacity in e-transaction technologies.
- iii. Policies and strategies-they address policy and strategy issues related to e-transactions.
- iv. Partnership with industry-they forge neutral and non-exclusive partnerships with industry.

United Nations Development Programme (UNDP) and United Nations Educational, Scientific and Cultural Organization (UNESCO) have also put in place various programmes to bridge the digital divide.

In Kenya, the Government is taking certain initiatives to bridge the digital divide. In the 2009/2010 fiscal budget the government allocated 1.3 billion Kenya shillings to install mobile computer laboratories for each constituency for use by high schools.¹²⁰ The government also

¹¹⁸ See <http://www.itu.int/ITU-D/digitaldivide/>. Accessed on 30 September 2010.

¹¹⁹ About EC-DC. Available on: <http://www.itu.int/ITU-D/ecdc/about.html>. Accessed on 30 September 2010. Kenya is among the developing countries under the programme.

¹²⁰ Refer to Kenya's Finance Bill, 2009. Available at:

launched a one million laptop/computer campaign countrywide in conjunction with broadband providers by undertaking to underwrite part of the interest payments on funds borrowed to purchase these laptops and computers.

The government, to enhance optic cable connectivity, allowed the internet service providers to offset against their taxable income the cost incurred in acquiring the right to use the fibre optic cable over a period of twenty years; increased wear and tear on telecommunication equipment including the fibre optic cable from 12.5% to 20% and provide tax deduction of 5% on computer software.¹²¹

Bridging the digital divide is an administrative issue that any state that wishes to enhance its eProcurement should address. Kenya has no option but to put in place relevant policy measures to address digital divide. Certain laws are also essential in bridging the digital divide. Since information and communication technology is a key factor in the development and distribution of e-commerce, there is need for right to information laws that would compel government to avail information and communication facilities to all citizens. In Kenya, now the newly promulgated Constitution provide for the right to information and equitable distribution of information.¹²²

2.8 Conclusion

eProcurement brings about many benefits to organizations which include reduction of expenses, increases efficiency and sometimes enhances transparency. eProcurement can therefore be used to enhance the underlying objective of procurement namely attaining for value for money to all players in procurement. Value for money means attaining the best available outcome when all relevant costs and benefits over the procurement cycle are considered.

Despite the actual benefits that eProcurement may bring there are many challenges that face the implementation of eProcurement. These challenges are technological in form and include lack of

http://www.treasury.go.ke/index.php?option=com_docman&task=cat_view&gid=88&Itemid=86. Accessed on 27 September 2009.

¹²¹ Ibid

¹²² Refer to Article 34 and 35 on right to information and chapter 11 on devolution of power and resources.

interoperability, the digital divide, lack of proper business continuity planning and lack of trusted third Parties.

CHAPTER THREE

Legal Validity of e-Procurement Procedures and Documents

3.1 Introduction

eProcurement in Kenya is still in its infancy. Indeed, public eProcurement in Kenya is largely rudimentary and still at the evolutionary stage which is marked by unsophisticated electronic transactions such as online tender advertisements, email invitations to bid and electronic communication with suppliers among others. It is therefore important to explore the key legal issues relating to public eProcurement at least to find out whether they are responsible for the under-development of public eProcurement in Kenya. The potential legal challenges associated with using electronic procurement systems in public procurement are also discussed and the best practices highlighted in tackling them.

In essence, public eProcurement entails the migration by public entities from paper-based procurement process into using the electronic means. From a legal standpoint, the usage of an electronic means raises various legal issues ranging from validity and effectiveness of data messages and of all the process of transaction from contracting to payment related to eProcurement. As eProcurement involves moving procurement online, it poses fundamental legal issues raised by e-Commerce or e-Transactions in general when the law requires valid documents to be in writing. The legal issues related to eProcurement are mainly validity and enforceability of electronic contracts and the need for an online dispute resolution mechanism.¹²³

The current Kenyan public procurement laws supports manual conventional public procurement at the expense of public eProcurement. This is discernable from the fact that the law imposes numerous requirements for validity and enforceability which imply that transactions in material form are favoured in comparison with electronic transactions. In particular, the existing law makes several requirements mandatory in order for contracts to be enforceable in Kenya. Some

¹²³ Roland Amoussou-Guenou, "Legal Aspects of EProcurement", International Conference On EProcurement Organized by Asian Development Bank Institute (ADBI) Public Procurement Service (PPS) of Republic of Korea, The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) 20 – 25 June 2005, Seoul, Korea.

of the requirements include giving information in writing, providing a signature, producing a document, recording information and retaining a document..¹²⁴

The above issues are evident upon a close examination of the procurement related legislations that are currently in force in Kenya, namely, Public Procurement and Disposal Act, 2005, Evidence Act, Copyright Act and Law of Contract Act. The yet to be enacted Electronic Transactions Bill is an attempt to tackle some of the above challenges although as it shall be shown, it falls short of providing effective solution to all legal issues facing public eProcurement in Kenya.

3.2 eProcurement Process and Legal issues

EProcurement as discussed in this part involves two core processes namely e-tendering and e-contracting. Contract establishment process starts from the time a procuring entity realizes a procurement need, to advertisement, opening, evaluation and contract award. Order and payment process cover delivery of goods, services or works, invoicing and payments.

3.2.1 E-Tendering

a. Advertising

E-tendering involves the period between advertisement of tenders and submission of tender. The Public Procurement and Disposal Act require that advertisement should be done at least twice in a newspaper of general nationwide circulation which has been regularly published for at least two years before the date of issue of the advertisement, and on its website in instances where the procuring entity has a website, and the advertisement shall also be posted at any conspicuous place reserved for this purpose in the premises of the procuring entity as certified by the head of the procurement unit. This requirement incorporates e-advertisement but still retains the traditional advertisement through newspaper.¹²⁵ There are however, serious technological problems involving e-advertisement. It is important to note for some time newspapers have been the easiest conventional mode of advertisement. It is indeed difficult for potential tenders to access every procuring entity's website to find out what has been advertised. With a newspaper,

¹²⁴ Public Procurement Oversight Authority Brochure, August 2009; available at: <http://www.oecd.org/dataoecd/12/28/45397347.pdf> (accessed on 10/09/2010).

¹²⁵ Section 54 of the Public procurement and Disposal act of 2005.

several procuring entities would have their tenders in one newspaper unlike advertising individual websites. The solution to this is that there should be established a common website where all tenders by procuring entities are advertised.

b. Tender submissions and opening

Once advertisements have been done tenders under eProcurement are supposed to submit their tenders electronically. Building tenders by electronic means can be based on structured questionnaires, though the effectiveness of such solution depends a lot on the experience of people defining such questions and criteria of evaluation of tenders. The awarding authority receives tenders, but is not allowed to open them before the prior appointed opening date.

The main concerns of e-tender opening are captured as follows;

- i. It is a requirement that when bidders are submitting their bids, they should do so within a prescribed time. The system should be such that when that time comes the system is able to lock out late submissions.
- ii. The procurement law requires that during opening, all tenders should be opened at the same time. In eProcurement where tenders are sent electronically, when can it be deemed that an opening of tenders has taken place. How can bidders witness the opening and how would they signify their satisfaction with the opening process. What will constitute a tender box and what will be considered the two locks that a tender box should have, can pass words do?

c. Tender Evaluation

The Public Procurement and Disposal Act requires that the tender evaluation committee should be comprised of at least three people. It contemplates the three meeting in one place and evaluating the tender. With eProcurement, parties can evaluate electronically while in different places. The selection process can be automated provided that there are assigned weights to specific features of tenders (it is particularly feasible if the tenders are built on questions). The eProcurement system can give just the recommendations and the last word belongs to the awarding authority. The chosen tenderer and rejected suppliers are informed on the results of the evaluation electronically.

e-Tender evaluation raises several questions which include the following;

- i. During evaluation, can the evaluation team evaluate electronically? The Act contemplates an evaluation and negotiation team can the team evaluating and negotiating through teleconferencing be said to fulfill procurement requirements?
- ii. How will the negotiating team sign the minutes and the evaluation reports?

3.2.2 Validity and Enforceability of Electronic Contracts

With respect to validity and enforceability of electronic contracts, it is noteworthy that traditional public procurement regulations impose the documents to be in writing especially when a certain limit of expenditure is reached. The question that arises is how to deal with this issue within the context of eProcurement especially where disputes arise relating to electronic contracting.¹²⁶

Once the best tender has been selected, awarding authority establishes agreement with the supplier. Of all the eProcurement processes e-contracting is the one that raise most legal issues. E-contracting activities include identifying, checking and validating of contractual parties, negotiation and validation contract.

There are two types of electronic procurement contracts namely, contracts of physical goods, services and works; and contracts for electronic materials like software, music, images, voice, text etc. In the first contract the internet is being used as the medium to communicate and sometimes to conclude a contract but in the second contract the internet represents the place where the performance takes place.¹²⁷

Contractual negotiations are the result of a series of communication that create a legally binding agreement. For this reason, there is little difference between contracts made online and those formed face to face. The general contract laws that apply to elements of a contract in physical

¹²⁶ *Ibid.*

¹²⁷ Jacob Consulting Pty Ltd, n.d, Online Contracts: How To Make Ecommerce Work, Available at: http://www.djacobson.com/technology_business/jacobson_online_contracts_0603.pdf. Accessed on the 29 September 2010.

contracts also apply to electronic contracts.¹²⁸ The legal doctrines of offer, acceptance and consideration coupled with intention of parties to create a legally binding relation define the necessary elements for creation of a contract in eProcurement just as in traditional procurement. There are however, certain legal and contractual issues that arise because of electronic contracting technology and some of which are discussed below.

a. Legal capacities of parties

Identification and establishing the contractual capacity of parties is usually the first step towards entering into a valid contract. You cannot enforce a contract against someone who does not exist or who is incapable of being bound by a contract like a minor or people of unsound mind. When transacting on internet, in most cases, you do not get to know the other party and this exposes one to contracting with people who lack capacity or who cannot even be traced.

All commercial transactions rely on trust between the purchaser and the seller. One of the factors that enhance the trust is the physical knowledge of the party one is transacting with. In electronic transaction, especially in electronic procurement, the parties know each other through the internet. There is lack of real-time visual or oral interaction, and this creates a number of concerns like: How can I be sure that I am dealing with the right person? How can I determine whether the party I am dealing with is trustworthy? Does the other party have capacity to contract? How can I be sure that the messages I receive during the transaction are genuine and have not been tampered with in transit? How can I generate evidence for use in the event of a dispute (digital equivalents of signatures, receipts, warranties, etc)? Who would I seek redress against in case of breach of contractual terms?¹²⁹

Since electronic transactions are not face-to-face, a means of identifying individuals is needed. The use of 'trusted third parties' (TTPs) like banks, credit card companies, estate agents, financial advisors, certification authorities and lawyers may help allay some of the identity

¹²⁸ Craig S Wright, (2008) Electronic Contracting in an Insecure World, SANS Institute. Available at: http://www.sans.org/reading_room/whitepapers/legal/electronic_contracting_in_an_insecure_world_2088?show=2088.php&cat=legal. Accessed on the the 29 September 2010.

¹²⁹ P J Skevington and TP Hart (1997) Trusted third parties in electronic commerce, Springer Netherlands, BT Technology Journal, Vol 15, No 2, April.

concerns raised above and enhance trust. Trusted Third Parties are established, reputed, and responsible fiduciary entity accepted by all parties to an agreement, deal or transaction as a disinterested and impartial intermediary for settlement of payments and post-deal problems.¹³⁰ Construction of an institutional framework of TTPs is one important focal point for expanding the market of electronic procurement.

In particular, TTPs have important roles to play in enabling the transacting parties to:

- authenticate one another's identities,
- check one another's credentials,
- guarantee the integrity and confidentiality of the messages passing between them,
- settle disputes.

In eProcurement, certification authorities, time-stamping authorities and digital notaries are all examples of 'new' TTPs that have arisen to address eProcurement needs.¹³¹ Companies that have been certified by the certification agencies are given a certificate and a signature for use in international eProcurement. This makes identification of parties easy if e-transactions are amongst certified companies. The challenge, however, remains when transacting with individuals and companies that are not certified.

Many countries in the world have enacted laws providing for the licensing of certification authorities. The Digital Signature and Electronic Authentication Law (SEAL) of 1998 provides for the licensing procedure of certification authorities in US. Since its enactment several certification authorities have been licensed and they include VeriSign and Global Sign.¹³² In Kenya, section 83 E of the Kenya Communications (Amendment) Act no 1 of 2009 empowers the Communications Commission of Kenya to grant licences authorizing a person to provide

¹³⁰ Definition of Trusted Third parties is borrowed from an online Business directory. Available at: <http://www.businessdictionary.com/definition/trusted-third-party.html>. Accessed on the the 29 September 2010.

¹³¹ VeriSign Website: <http://www.verisign.com/>. Accessed on the 29 September 2010. VeriSign is one of the renowned certification authorities in the World.

¹³² Read about the VeriSign and GlobalSign in their following websites, <http://www.verisign.com/> and <http://www.globalsign.com/> respectively.

electronic certification services. The Commission is yet to license electronic certification services providers in Kenya.

b. Offer and acceptance

The law on offer and acceptance applies to e-contract in the same way that it applies to traditional contracts. For example, the offer must be definite and sufficient, the acceptance must be effectively communicated, and other rules like the postal acceptance rule apply. There are, however, unique issues that arise in e-contracts in so far as offer and acceptance is concerned.

One key issue relate to the time and place of dispatch and receipt of electronic communications of offer and acceptance. The times of dispatch and receipt of an electronic communication become important to the determination of contract-related time deadlines.¹³³ The place of dispatch and receipt of electronic communications determine where the contract was formed hence the law governing the contract in case the parties did not chose the law applicable.

Sometimes it is not clear what constitutes an offer especially when a communication is posted on a website. Does it constitute an offer or invitation to treat? This study holds the view that websites should be considered as electronic billboards or goods on display and therefore an invitation to treat. This view is based on the ruling in *Fisher v Bell*¹³⁴ where the requirements of offer and acceptance in the formation of a contract were discussed. The case established that, where goods are displayed in a shop together with a price label, such display is treated as an invitation to treat by the seller, and not an offer. The offer is instead made when the customer presents the item to the cashier together with payment. Acceptance occurs at the point when the cashier takes payment. Taking the website as the shelves, then goods advertised on it are merely an invitation to treat and an offer is made when a customer orders either electronically or otherwise. It is however important that the facts of the individual case be considered separately in solving contractual issues involving a website.

¹³³ Wolfgang Hahnkamper, (2005), Acceptance of an Offer in Light of Electronic Communications Journal of Law and Commerce , Vol. 25.

¹³⁴ (1961) 1 QB 394.

The General Rule is that a contract is formed at the time and place that the acceptance is received, unless accepted by post, in which case the postal acceptance rule applies. The postal acceptance rule states that where an acceptance is to be sent by post, the contract associated with the acceptance is considered as concluded at the moment of posting the letter and not when the letter is received except the offeror provides otherwise.¹³⁵

This general rule and postal rule on acceptance face a lot of challenge when it comes to electronic contracts. For example when contracting by way of e-mail there are several potential moments of acceptance which are;¹³⁶

- i. The first moment occurs when the e-mail departs the sender's outbox controlled by the sender. In Internet-based e-mail transactions, the e-mail cannot be recalled once it has left the sender's outbox. This is a situation analogous to the postal rule.
- ii. The next is the instant of receipt of the e-mail into the recipient's inbox. At this point, the e-mail is accessible to the recipient.
- iii. The next possible instant that could potentially be the moment of acceptance is when the recipient collects the email from the mail server into the client's mail inbox. At this point, the recipient has received the e-mail.
- iv. Finally, there is an argument for defining the moment of acceptance as the point when the recipient has opened or read the e-mail.

The international community and several countries have negotiated or enacted legal instruments to address the many issues that offer and acceptance on e-contracts pose. The most remarkable instrument in international contracts is the *Convention on the Use of Electronic Communications in international contracts* (CUECIC). This Convention, spear headed by the United Nations Commission on International Trade Law (UNCITRAL), was adopted by the General Assembly on 23 November 2005, the Convention aims to enhance legal certainty and commercial predictability where electronic communications are used in relation to international contracts. It addresses the determination of a party's location in an electronic environment; the time and place

¹³⁵ *Adams v Lindsell* [1818] EWHC KB J59

¹³⁶ Craig S Wright, *Supra* Note 51.

of dispatch and receipt of electronic communications and the use of automated message systems for contract formation.¹³⁷ Article 10(2) provides for a point of acceptance outlined in (b) above i.e. it defines a moment of acceptance as the instant of receipt of the e-mail into the recipient's inbox and is accessible to the recipient.

To fill the gap brought about by eProcurement in relation to rules of offer, acceptance and other contractual issues in international contracts, the United Nations Convention on Contracts for the International Sale of Goods (CISG) has been opined by the CISG Advisory Council to apply to international eProcurement. The convention was adopted by a diplomatic conference on 11 April 1980, establishing a comprehensive code of legal rules governing the formation of contracts for the international sale of goods, the obligations of the buyer and seller, remedies for breach of contract and other aspects of the contract.¹³⁸

CISG does not expressly address the issues that eProcurement poses and it was negotiated before eProcurement was a reality. However, the CISG Advisory Opinion on Electronic Communications under CISG¹³⁹ has interpreted several provisions of the CISG as being able to support an electronic transaction. Article 15 of CISG provides that an offer becomes effective when it reaches the offeree and that an offer, even if it is irrevocable, may be withdrawn if the withdrawal reaches the offeree before or at the same time as the offer. The Council interpreted the term "reaches" to correspond to the point in time when an electronic communication has entered the offeree's server. An offer, even if it is irrevocable, can be withdrawn if the withdrawal enters the offeree's server before or at the same time as the offer reaches the offeree. A prerequisite for withdrawal by electronic communication is that the offeree has consented,

¹³⁷ United Nations Convention on the Use of Electronic Communications in International Contracts Summary. Available at: http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2005Convention.html. Accessed on the 29 September 2010.

¹³⁸ United Nations Convention on Contracts for the International Sale of Goods Summary. Available at: http://www.uncitral.org/uncitral/en/uncitral_texts/sale_goods/1980CISG.html. Accessed on 29 September 2010.

¹³⁹ CISG Advisory Council (2003) Electronic Communications under CISG, Nordic Journal of Commercial Law. Available at: http://www.njcl.fi/1_2003/commentary3.pdf. Accessed on 28 September 2010.

expressly or impliedly, to receive electronic communications of that type, in that format and to that address.¹⁴⁰

Article 18(2) of CISG provides that an acceptance of an offer becomes effective at the moment the indication of assent reaches the offeror. An acceptance is not effective if the indication of assent does not reach the offeror within the time he has fixed, or, if no time is fixed, within a reasonable time, due to account being taken of the circumstances of the transaction, including the rapidity of the means of communication employed by the offeror. An oral offer must be accepted immediately unless the circumstances indicate otherwise. The Council opined that an acceptance becomes effective when an electronic indication of assent has entered the offeror's server, provided that the offeror has consented, expressly or impliedly, to receiving electronic communications of that type, in that format, and to that address. The term "oral" includes electronically transmitted sound in real time and electronic communications in real time. An offer that is transmitted electronically in real time communication must be accepted immediately unless the circumstances indicate otherwise provided that the addressee consented expressly or impliedly to receiving communications of that type, in that format, and to that address.

The CISG Council opinions are authoritative but not binding interpretations or opinions of the state of a particular area of law. Often referred to as "soft law" because they are non-binding, advisory opinions nevertheless encourage states or individuals to behave in a certain way.¹⁴¹

It is clear from the opinion of the Advisory Council that the CISG can be applied in governing international e-contracts. When the CUECIC finally enters into force it will no doubt supplement the provisions of the CISG.

There are other types of e-contracts that pose new challenges to the CISG. An example is the click-wrap kind of contracts. These contracts may start with a web-based advertisement or some other collateral offer for consideration. There are two main ways to enter into a click-wrap agreement, a party may type and click where the consumer must type "I accept" or something

¹⁴⁰ Ibid

¹⁴¹ Lorraine de Germiny & Joshua Karton, n.d. The CISG Advisory Council Comes of Age, Available at: http://works.bepress.com/cgi/viewcontent.cgi?article=1001&context=joshua_karton. Accessed on 29 September 2010.

similar in an on-screen box, and then a send button of some sort to signify acceptance of the contract. The second way to enter into click-wrap agreements is through icon clicking, where the consumer clicks an "I accept" button on an application screen or web site. In common with both of these methods is that the user may not proceed beyond that point unless they agree to accept the contract agreements presented.¹⁴² Establishing the time and place of dispatch and receipt of offer and acceptance becomes a problem. This form of contractual negotiations is different from e-mail and deserves separate consideration.

Kenya has not signed the CUECIC and the CISG and it is not therefore bound by the obligation in the conventions.¹⁴³ Parties contracting electronically may however, relying on the freedom of contract, incorporate provisions of CUECIC and CISG in their contractual terms.

c. E-contracting challenges on negotiation

Electronic environments have a great impact on contract negotiation. The benefits of e-negotiation could reduce the need for face-to-face meetings and traveling, improve the quality of agreements and mutual satisfaction, and reduce the damage caused by lasting and unresolved disputes. Contracts can be negotiated by exchange of messages over networks or by using a negotiation platform. Studies on e-mail negotiation have shown that trading partners behave differently in electronic negotiation than they would in a face-to-face meeting.¹⁴⁴ E-negotiation is a challenging task from the legal as well as from the business point of view. New laws and new legal frameworks for e-contracting such as building e-notaries are needed. User acceptance, security and confidentiality are also important challenges of e-negotiation.¹⁴⁵

¹⁴² The Benefits of Click-Wrap Contracts over Shrink-Wrap Contracts. Available on: http://www.designireland.net/index.php?http%3A//www.designireland.net/alpha/controller/view_article.php%3Foid%3D00000000015. Accessed on 29 September 2010.

¹⁴³ Refer to the UNCITRAL Texts and Status. Available at: http://www.uncitral.org/uncitral/en/uncitral_texts.html. accessed on 29 September 2010.

¹⁴⁴ Shell, R. (2001) *Electronic Bargaining: the Perils of E-Mail and the Promise of Computer-assisted negotiations*. Wharton on making decisions, ed. Stephen Hoch, Howard G. Kunreuther. New York, Wiley.

¹⁴⁵ Id

d. Execution of Electronic Contracts

Execution of contracts is not one of the elements of a valid contract. Execution is however, crucial in agreements to evidence the intention of parties to be contractually bound by the terms of the contract. In traditional contract formation, execution is done by parties signing the document containing the terms of the agreement. Since there are no physical documents in electronic agreements, the execution is not done by writing. To surmount the requirement of execution, especially in contracts that require writing, several ways have been employed to signify execution in electronic contracts. The common methods used include the use of electronic signatures or exchange of e-mails. Electronic signatures means data in electronic form in, affixed to or logically associated with, a data message, which may be used to identify the signatory in relation to the data message and to indicate the signatory's approval of the information contained in the data message.¹⁴⁶

These electronic signatures are associated with a unique numerical code or value which when associated with the correct cryptographic algorithm allows one to verify the authenticity of an electronically signed document with extremely low probability of error. To be held valid the signature must provide the identity of the party who signed the document and demonstrate the intention to sign.

UNCITRAL, on 5 July 2001, adopted the Model Law on Electronic Signatures with Guide to Enactment, 2001. This model law aims at bringing additional legal certainty to the use of electronic signatures in national legislations. It establishes a criterion of technical reliability for the equivalence between electronic and hand-written signatures. The Model Law follows a technology-neutral approach, which avoids favouring the use of any specific technical product. It further establishes basic rules of conduct that may serve as guidelines for assessing possible responsibilities and liabilities for the signatory, the relying party and trusted third parties intervening in the signature process.¹⁴⁷

¹⁴⁶ Refer to the definition provided by the UNCITRAL Model Law on Electronic Signatures with Guide to Enactment, 2001.

¹⁴⁷ Summary on UNCITRAL Model Law on Electronic Signatures with Guide to Enactment, 2001. Available at: http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2001Model_signatures.html. accessed on the 29 September 2010.

So far, nine countries have enacted laws in compliance with this model law. These countries include Cape Verde (in 2003), China (in 2004), Guatemala (in 2008), Mexico (in 2003), Thailand (in 2001), United Arab Emirates (in 2006) and Viet Nam (in 2005) and Costa Rica (in 2005).¹⁴⁸ Kenya has not even drafted a Bill on electronic signatures based on the Model law on electronic signatures. A few provisions on electronic signature exist in the Electronic Transactions Bill 2007 which is drafted in compliance with MLEC.¹⁴⁹

e. Paper Based Concepts and Documents

Various paper based concepts have hampered the development of eProcurement and there is need for legal certainty in the area. The paper based concepts include; originality of documents, writing requirement in contracts and signature.

The Public Procurement and Disposal Act 2005 sets out a procurement procedure that is paper based. In this regard, the Act mainly advocates for open tendering although it allows for use choice of procedure and use of alternative procurement methods within the limitations stipulated under the Act. The applicable alternative procurement procedures include direct procurement and specially permitted procedures. Clearly, these methods do not contemplate the use of eProcurement systems and are therefore a limitation to the adoption of public eProcurement in Kenya.¹⁵⁰ Section 58 of the Act requires that a tender must be in writing, it must be signed and it must be sealed in an envelope. Further section 67 of the Act requires that procuring Entities must keep records for procurement transactions for at least six years after the resulting contract was entered into or, if no contract resulted, after the procurement proceedings were terminated. There is no mention of electronic records in this instance suggesting that records may only be manual. There is also the issue of the practicality of keeping electronic documents for six years given the numerous incidences of staff turnover and likelihood of accidental loss or damage of electronic records.¹⁵¹

¹⁴⁸ Refer to the Status of the UNCITRAL Model Law on Electronic Signatures with Guide to Enactment, 2001.

¹⁴⁹ Section 10 and 11 provide for electronic signatures.

¹⁵⁰ Part IV of the Act.

¹⁵¹ Section 67 of the Act.

Certain admissible evidence carries more evidential weight or value than others. With regard to paper-based documentation, the "best evidence" rule requires that the content of a writing should be proven by introducing the original document to court. In the electronic environment, the distinction between original and copy becomes blurred. Documents created electronically have different attributes than paper-based documents. Even though admissible, the evidential weight of electronic documents may be adversely affected by their ease of alteration without leaving any trace.¹⁵²

Contract laws also require that certain types of contracts, especially contracts for sale of immovable property should be in writing.¹⁵³ It is contentious whether electronic contracts meet the writing requirement. Associated with the writing requirement, is the requirement of signature. Are electronic signatures sufficient in executing contracts?

To address the above concerns, various international instruments have incorporated what is called electronic equivalency rules to recognize electronic documents as originals, electronic writing and signatures.¹⁵⁴

Besides CUECIC which has a few provisions providing for the equivalency rules, UNCITRAL has enacted the UNCITRAL Model Law on Electronic Commerce with Guide to Enactment (MLEC) which was adopted by UNCITRAL on 12th day of June 1996. This model law was enacted with the intention of facilitating the use of modern means of communications and storage of information. It is based on the establishment of a functional equivalent in electronic media for paper-based concepts such as "writing", "signature" and "original". By providing standards by which the legal value of electronic messages can be assessed, the Model Law should play a significant role in enhancing the use of paperless communication. The Model Law also contains rules for electronic procurement in various areas.¹⁵⁵

¹⁵² Green Paper, Supra note 32.

¹⁵³ Section 3 of the Law of Contracts Act, Cap 23, Laws of Kenya, provides for contracts that ought to be in writing..

¹⁵⁴ Charles Martin Article. Supra note 26.

¹⁵⁵ Summary on Model Law on UNCITRAL Model Law on Electronic Commerce with Guide to Enactment. Available at: http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/1996Model.html. accessed on 29 September 2010.

Articles 6, 7 and 8 of MLEC provides that where the law requires; information to be in writing, signature of a person and information to be presented or retained in its original form, then such requirements are met by electronic forms of the same and there is reliability in the writing, signature or document.

Over hundred countries have taken steps to enact laws that are styled in the provisions of MLEC.¹⁵⁶

In Kenya the Kenya Communications (Amendment) Act 2008 (KCAA) is the first legislative intervention expressly recognizing and facilitating the development of e-commerce. Further, the Act attempts a definition of the term “electronic commerce” (e-commerce) which hitherto was not legally defined in Kenyan law. Largely, the Act applies the UNCITRAL Model Law on Electronic Commerce, 1996 which is an internationally endorsed template for the drafting and enactment of e-commerce legislation and deal with the uncertainties surrounding the use of electronic data interchange (EDI) and other computer-based alternatives to paper-based means of communicating and storing information which are the hallmarks of e-commerce. The KCAA incorporates some of the provisions of the Model Law, albeit with varying fidelity to its wording and underlying objectives.¹⁵⁷

The Act eliminates legal uncertainties surrounding the use of electronic documents in electronic transactions. In particular, the KCAA sought to eliminate the uncertainty by giving formal legal recognition to electronic documents (with the exception of wills, negotiable instruments and documents of title); electronic means of entering into and terminating contracts; and electronic signatures.

The Act is particularly relevant to the present study for its legal recognition of electronic signatures and electronic evidence. In so doing, the KCAA debunks the popular perception of electronic records as second-class evidence. It takes affirmative action in favour of such evidence

¹⁵⁶ Refer to the Status of the UNCITRAL Model Law on Electronic Commerce with Guide to Enactment.

¹⁵⁷ Michael M. Murungi, “Comments on Kenya's Electronic Transactions Bill, 2007 & The Information and Communications Bill, 2008”, Excerpts from a slide presentation at the Kenya ICT Board/Kenya ICT Federation Public Panel on E-Commerce Grand Regency Hotel Nairobi June 19, 2008.

by providing that electronic records and electronic signature certificates are to be presumed to be secure and correct unless the contrary is proved. This effectively places the burden of proof on the party challenging the production of such evidence. Likewise, a court may presume that an electronic message received by the addressee corresponds with the message fed into the computer by the sender.

The KCA Act introduces Section 106 B which grants admissibility to “any information contained in an electronic record which is printed on a paper, stored recorded or copied on optical or electromagnetic media produced by a computer”. The KCA Act and the Evidence Act make no attempt at defining “electronic record” leading to the most logical assumption that these are records in electronic form. In this regard, the KCA Act defines “electronic form”, with reference to information, as: any information generated, sent, received or stored in magnetic, optical, computer memory, microfilm or similar device. Thus the term electronic record would include those records generated and stored by media other than the conventional computer and this includes digital video recorders. Under the Act, the term “computer” is defined widely to include any electronic, magnetic, optical or other high-speed data processing device or system which performs logical, arithmetic and memory functions by manipulations of electronic, magnetic or optical impulses, and includes all input, output, processing, storage, software and communication facilities which are connected or related as a system or network.¹⁵⁸

However, the Act’s provisions impose conditions to be satisfied in the admission of electronic records into evidence which are repetitive of an amendment previously introduced to the Evidence Act by the Finance Act of 1999. The amendment is now part of section 65 of the Evidence Act which provides that for electronic evidence to be admissible in court, it has to be reduced to a computer print-out to be admissible, the following conditions must be satisfied, namely, the computer print-out containing the statement must have been produced by the computer during the period in which the computer was regularly used to store or process

¹⁵⁸ Innovation and Information Consultants, Inc, Trends in Electronic Procurement and Electronic Commerce and Their Impact on Small Business (2004). University of Illinois at Urbana-Champaign’s Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship. Available at SSRN: <http://ssrn.com/abstract=1509977>. Accessed 12 November 2010.

information for the purposes of any activities regularly carried on over that period by a person having lawful control over the use of the computer.

In addition, the computer on which the print-out is derived must have been operating properly or, if not, that any respect in which it was not operating properly was not such as to affect the production of the document or the accuracy of its content. In effect, the law of evidence does not allow the production of evidence in electronic form. Rather, it permits the production of digital evidence only after it has been printed out in hard copy. This means parties to disputes where evidence is in electronic form will have to incur extra costs in the production of the documents.

The recent decision of *Republic v Public Procurement Administrative Review Board Ex-parte Kenya Medical Supply Agency & 3 others*¹⁵⁹ shows that courts are still not clear on whether or not electronic evidence is admissible in evidence. In the case, the High Court of Kenya held that a scanned document may not be regarded as an -original for the purposes of the Public Procurement and Disposal Act, 2005 particularly where in its guidelines to potential bidders, a Procuring Entity requires the submission of 'original' documents. In an application to review the decision of the Procurement Review and Appeals Board in which the Board had applied a recently enacted law recognizing the legality of electronic documents and the originality of documents rendered in electronic form, the High Court reversed the Board's decision and excluded the application of the new electronic documents law from the Procurement Act.

This case was the first definitive judicial test for the newly enacted provisions of the Kenya Information and Communications Act, 1998 (formerly the Kenya Communications Act, 1998) regarding the recognition of electronic documents. The decision highlights what may be an awkward dilemma for legislative drafting and statutory interpretation. On the one hand, section 5 of the Public Procurement and Disposal Act, 2005 provides that where there is a conflict between the Act or the regulations made under it and any other Act in matters relating to procurement and disposal, the Procurement Act and its regulations are to prevail. On the other hand, the provisions of the Kenya Information and Communications Act, 1998 recognize the legality of electronic documents and 'electronic originals.' The Act expressly recognizes the legality of electronic

¹⁵⁹ [2010] eKLR High Court at Nairobi (Nairobi Law Courts), Jeanne Gacheche, J., March 4 2010.

documents and extends its application to other Acts of Parliament providing for any matter or document to be done in writing. However, the conflict between these provisions and the Public Procurement and Disposal Act, 2005 was thrown into relief when a dispute over the procedure followed in the procurement of HIV-AIDS drugs by the government came to the courts. The case served to bring out the uncertainty regarding the issue of whether or not to admit electronic evidence resulting from electronic procurement transactions.

3.2.4 Need for Online Dispute Resolution

As regards the issue of online dispute resolution, it is a fact that a significant proportion of public procurement even here in Kenya, particularly in construction contracts generates disputes. Those disputes are usually resolved by alternative dispute resolution and especially through arbitration when foreign contractors are involved. Given that the parties may be far apart and different locations at a time, there may be need to provide facilities and afford legal recognition to online dispute resolution. This is necessary in order to cut costs and also ensure convenience for parties to eProcurement and consolidate the benefits accruing from use of eProcurement. For instance, the government may establish “Electronic Court Rooms” to resolve eProcurement disputes. It seems to be accepted as a principle that disputes generated electronically should be also resolved electronically to improve the efficiency of justice. Though this possibility is still at a very early stage, in Asia, the Philippines is offering a good example of what can be done in this matter, regarding both the necessary legal framework and online dispute resolution service.

The Kenyan legal framework does not provide for online dispute resolution. The mode of dispute resolution with respect to public procurement in Kenya is provided for under section 25 of the Kenya Public Procurement and Disposal Act. The section merely continues the existence of the Public Procurement Complaints, Review and Appeal Board established under the Exchequer and Audit (Public Procurement) Regulations, 2001 as the Public Procurement Administrative Review Board. The composition and membership of the Review Board is as provided for in the regulations with administrative services provided for by the Authority.¹⁶⁰

¹⁶⁰ Section 25 of the Act.

Generally, the law provides that where any candidate claims to have suffered or to risk suffering, loss or damage due to the breach of a duty imposed on a procuring entity by this Act or the regulations, he may seek administrative review as in such manner as may be prescribed. However, the excludes from review matters touching on the choice of a procurement procedure; a decision by the procuring entity to reject all tenders, proposals or quotations; where a contract is signed in accordance to section 68; and where an appeal is frivolous. The grounds on which an appeal may be deemed frivolous are not clearly outlined. All that the Act provides is that the Review Board may dismiss a request for a review if it is of the opinion that the request is frivolous or vexatious or was made solely for the purpose of delaying the procurement proceedings or the procurement.¹⁶¹

The Act provides that the parties to a review shall be the person who requested the review; the procuring entity; if the procuring entity has notified a person that the person's tender, proposal or quotation was successful, that person; and such other persons as the Review Board may determine. The Act provides that upon receiving a request for a review under section 93, the secretary to the Review Board notify the procuring entity of the pending review and the suspension of the procurement proceedings.¹⁶²

The Review Board is enjoined to complete its review within thirty days after receiving the request for the review. The Act stipulates that in no case may any appeal under the Act stay or delay the procurement process beyond the time stipulated in the Act or the regulations. The Review Board has powers under the Act to, *inter alia*,

- (a) annul anything the procuring entity has done in the procurement proceedings, including annulling the procurement proceedings in their entirety;
- (b) give directions to the procuring entity with respect to anything to be done or redone in the procurement proceedings;
- (c) substitute the decision of the Review Board for any decision of the procuring entity in the procurement proceedings; and

¹⁶¹ Section 95, *Ibid.*

¹⁶² Section 94, *Ibid.*

(d) order the payment of costs as between parties to the review.¹⁶³

However, the right to request a review under the Act is merely in addition to any other legal remedy a person may have and does not therefore preclude the aggrieved party from seeking recourse to legal action in the mainstream judicial system. This creates the danger of parallel proceedings both before the Review Board and the ordinary courts at the discretion of the parties. The Act provides that a decision made by the Review Board is final and binding on the parties unless judicial review thereof commences within fourteen days from the date of the Review Board's decision. Nevertheless, any party to the review aggrieved by the decision of the Review Board may appeal to the High Court and the decision of the High Court shall be final.¹⁶⁴

Clearly, the above framework does not envisage a modification of the dispute resolution system to integrate online dispute resolution. If anything, the framework for dispute resolution is essentially an amplification of the old framework for dispute resolution involving the administrative tribunal, namely, the Review Board, with appeals and judicial review availed under the subsisting court structure. As a result, it is not clear how the system can be aligned to accommodate disputes arising in eProcurement where the parties are situated in diverse locations and the cost of availing them for the traditional dispute resolution mechanisms is prohibitive.

3.3 Conclusion

This chapter has set out some of the legal issues that eProcurement raises and demonstrated that certain efforts local and international are being undertaken to address them. Several conventions have been negotiated and internationally acceptable principles formulated to address the highlighted issues. Some countries have taken lead in enacting national laws to reflect those internationally accepted standards. To ensure certainty and uniformity in eProcurement, national legislation should reflect the set international standards encapsulated in the discussed conventions and principles.

¹⁶³ Section 98, *Ibid.*

¹⁶⁴ Section 100, *Ibid.*

CHAPTER FOUR

eProcurement: Is it a Haven of Criminal Activities?

4.1 Introduction

eProcurement has been used by criminals in perpetuating their criminal activities and now such criminal activities are referred to cybercrimes. Cybercrime is broadly understood to encompass a wide range of activities divided into two types of categories namely, crimes that target computer networks or devices directly; and crimes facilitated by computer networks or devices, the primary target of which is independent of the computer network or device. Some of these cybercrime include hacking, computer fraud, copyright infringement, cyber terrorism and breach of privacy.¹⁶⁵ These offences are captured more accurately in the Convention on Cyber-Crime. The Convention on Cybercrime is the first international treaty seeking to address Computer crime and Internet crimes by harmonizing national laws, improving investigative techniques and increasing cooperation among nations.¹⁶⁶

4.2 Crimes Related to Confidentiality and Integrity

Title 1 of chapter II addresses offences against the confidentiality, integrity and availability of computer data. It obligates signatories to enact laws dealing with illegal access of a computer system, interception of non-public transmissions of computer data to, from, or within a computer system, interference with computer data, interference with computer systems, such as computer sabotage and misuse of computer-related device.¹⁶⁷

Cybercrime may compromise the integrity and confidence of eProcurement. Procurement processes are a set of procedures that are intended to promote the integrity and fairness of those procedures, increase transparency and accountability and increase public confidence in those

¹⁶⁵ Spang-Hanssen, Henrik Stakemann, *The Future of International Law: Cybercrime* (2008). Available at SSRN: <http://ssrn.com/abstract=1090876>. Accessed on 29th September 2010.

¹⁶⁶ It was drawn up by the Council of Europe in Strasbourg with the active participation of the Council of Europe's observer states Canada, Japan and USA. The Convention and its Explanatory Report was adopted by the Committee of Ministers of the Council of Europe at its 109th Session on 8 November 2001. It was opened for signature in Budapest, on 23 November 2001 and it entered into force on 1 July 2004. As of 2 September 2006, 15 states had signed, ratified and acceded to the convention, while a further 28 states had signed the convention but not ratified it.

¹⁶⁷ Roderic G. Broadhurst, Peter N. Grabosky, *Cyber-crime: the Challenge in Asia*, Hong Kong University Press, 2005.

procedures.¹⁶⁸ eProcurement is prone to confidentiality and integrity related crimes which affects the confidence of players and reduce the integrity of the process.

One of the main differences between eProcurement and traditional/manual procurement is that eProcurement are largely impersonal, anonymous and sometimes instant. These eProcurement characteristics pose privacy, confidentiality and security concerns which include:¹⁶⁹

- a. Unsolicited marketing, advertisement-users or even bidders have concern that information they provide for use in eProcurement may be used to send them targeted advertisements or sold to other companies that may advertise to them.
- b. Users are concerned that computers might be used to make predictions about their habits and interests. They fear that people may know information about them that was not in public domain. The users fear that they may inadvertently reveal personal information to other users of their computer. This information may be available to the people not intended and such information may be used in criminal and civil cases. Other types of profile information may reveal interests, habits, or personal preferences which information may be used to challenge the character of a party in a case. Companies and businesses are concerned that their business secrets and confidential information may be accessed by hackers and be used by competitors.¹⁷⁰
- c. Users are concerned that companies will profile them in order to facilitate price discrimination. Individuals may be concerned not only about the possibility of being charged higher prices because of information in their profile, but also about the fact that they may be treated differently from other people.¹⁷¹

¹⁶⁸ See Section 2 of the Public Procurement and Disposal Act, 2005.

¹⁶⁹ Stephen E. Fieberg, (2006) Privacy and Confidentiality in an e-Commerce World: Data Mining, Data Warehousing, Matching and Disclosure Limitation, *Statistical Science*, Vol. 21, No. 2, 143–154. Available at: http://projecteuclid.org/DPubS/Repository/1.0/Disseminate?view=body&id=pdfview_1&handle=euclid.ss/1154979817. Accessed on 28th September 2010.

¹⁷⁰ Id

¹⁷¹ Id

The confidence of customers engaged in eProcurement depends on how eProcurement channels have addressed these concerns.¹⁷² Business and consumers require assurance that transactions that occur in an online environment are secure and private.

To address the privacy and confidentiality issues the Organization for Economic Co-operation and Development (OECD) has developed Guidelines on the Protection of Privacy and Transborder Data Flows of Personal data upon which many other sets of guidelines and some privacy laws are based. The OECD guidelines provide for eight principles that provide a useful framework for analyzing privacy and confidentiality issues related to eProcurement personalization. These principles include;¹⁷³

- a. Data Quality Principle-Personal data should be relevant to the purposes for which they are to be used, and, to the extent necessary for those purposes, should be accurate, complete and kept up-to-date.
- b. Purpose Specification Principle-The purposes for which personal data are collected should be specified not later than at the time of data collection and the subsequent use limited to the fulfillment of those purposes or such others as are not incompatible with those purposes and as are specified on each occasion of change of purpose.
- c. Use Limitation Principle-Personal data should not be disclosed, made available or otherwise used for purposes other than those specified except with the consent of the data subject by the authority of law.
- d. Security Safeguards Principle-Personal data should be protected by reasonable security safeguards against such risks as loss or unauthorized access, destruction, use, modification or disclosure of data.
- e. Openness Principle-There should be a general policy of openness about developments, practices and policies with respect to personal data. Means should be readily available of

¹⁷² Lorrier Faith Cranor, (2003), 'I Didn't Buy for Myself' Privacy and E-commerce Personalization, Washington DC, AT & T Labs Research. Available at: <http://lorrie.cranor.org/pubs/personalization-privacy.pdf>. accessed on 28th September 2010.

¹⁷³ OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data.

establishing the existence and nature of personal data, and the main purposes of their use, as well as the identity and usual residence of the data controller.

- f. Individual Participation Principle-An individual should have the right to obtain their data from a data controller and to have incorrect data erased or amended.
- g. Accountability Principle-A data controller should be accountable for complying with measures which give effect to the principles stated above.

Some countries have enacted privacy and confidentiality laws based on the OECD guidelines. The United States, for example, has enacted the Electronic Communications Privacy Act of 1986 and the Children Online Privacy Act of 1998 to address various privacy issues in the internet. The Electronic Communications Privacy Act of 1986 was designed to prevent unauthorized government access to private electronic communications and prohibit access to stored electronic communications. Many states have generally recognized the right to privacy in their national constitutions and enumerated several offences against privacy. Despite these efforts to address privacy and confidentiality issues, the victims of privacy transgressions have no clear legal recourse internationally and in most countries especially with relation to eProcurement.¹⁷⁴

Further to the foregoing discussion, security concerns also emanate from the fact that hackers may corrupt personal or company information to destroy a competitor or just for fun. Thieves, terrorists or any criminal may access information and use it for criminal activities. The problem of identification of parties to an e-contract is prevalent in eProcurement and therefore a person trading on internet may lose money or goods when orders and payments are made through the internet.

4.3 Fraud and Forgery

Computer fraud is any dishonest misrepresentation of fact intended to let another to do or refrain from doing something which causes loss. In this context, the fraud will result in obtaining a benefit by altering computer input in an unauthorized way. This requires little technical expertise

¹⁷⁴ Danice Kowalczyk, (2000), Avoiding Intellectual Trespass in the Global Marketplace: Encryption & Privacy in E-Commerce, Virginia Journal of Law and Technology.

and is not an uncommon form of theft by employees altering the data before entry or entering false data, or by entering unauthorized instructions or using unauthorized process.

Title 2 of chapter II covers the traditional offences of fraud and forgery when carried out through a computer system. With respect to forgery, the intent of this provision is to protect computer data in the same manner as tangible documents, where such data may be acted upon or used for legal purposes. With regard to fraud, the Committee of Experts (COE) drafters recognized that the technological revolution has brought with it extraordinary opportunities for committing economic crimes. Credit card companies, other banking-related institutions, and their customers are particularly at risk, as cybercriminals have increasingly targeted and manipulated moneys represented or administered in computer systems.

There are cases where database of credit cards information is hacked or unauthorized persons gained access to sensitive information from systems which are said to be secure. Some Development Bank of Singapore (DBS) internet banking customers had their account information compromised while DSB system was secured and not hacked into. The alleged hacker may have used trojan horse program¹⁷⁵ to transfer a few hundreds to thousands Singapore Dollars from some customers' accounts to his own account.¹⁷⁶

4.4 Offences Related to Copyright or Intellectual Property Infringement

Among the most common offences carried out via the internet are infringements of intellectual property rights. Technological innovations have given cyber-criminals extremely powerful tools to reproduce and disseminate, on a mass scale, protected works. The internet also provides offenders with an enormous and global market place in which to buy and sell pirated merchandise, including pirated music, films, and software. Signatory countries are required to criminalize copyright infringement.

In an international context, it is particularly important for businesses to protect their copyrights, domain names, trademarks and other intellectual property when conducting transactions or doing

¹⁷⁵ Trojan is a form of computer virus.

¹⁷⁶ Chen Huifen, 2002, DBS takes out ad to clear the air, Business Times, available at; <http://www.net-profit-marketing.com/dbs-outage-big-saga-with-small-voice-on-social-media.html>. accessed on 7th October 2010.

business abroad. One way of protecting intellectual property is by drawing an internet services agreement that carefully delineates the intellectual property of the parties involved as well as intellectual property created while the services are being provided.¹⁷⁷

There is currently no sufficient international agreement on various issues fundamental to the protection of intellectual property rights in the electronic environment. To date multilateral and bilateral treaties prove to be the most feasible way to deal with trans-boarder intellectual property related issues.

On December 1996, WIPO adopted two treaties namely, WIPO Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT). These treaties address issues of the definition and scope of rights in the electronic environment, and some of the challenges of online enforcement and licensing.¹⁷⁸

Under World Trade Organization structure (WTO), the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs), adopted in 1994, provide a framework for trade related aspects of Intellectual property rights and eProcurement. It provide rules concerning trade related intellectual property rights, basic principles of previous intellectual property conventions, standards regarding availability, scope, and use of intellectual property rights. Appropriate enforcement, multilateral dispute settlement procedures and transitional arrangements for countries are also included in the agreement.

Debates relating to intellectual property rights are ongoing in international forums such as the World Intellectual Property Organization, the World Trade Organization, the European Union and the Organization for Economic Cooperation and Development and the Internet Corporation for Assigned Names and Numbers, with the purpose of finding a suitable and more relevant framework for intellectual property rights in eProcurement.

¹⁷⁷ Franklin Pierce Law Center, n.d., Intellectual Property in E-Commerce, World Intellectual Property Organization. Available on: http://www.ipmall.info/hosted_resources/pubspapers/WIPO.pdf. Accessed on 28 September 2010.

¹⁷⁸ International Bureau of WIPO. Available at: http://www.wipo.int/treaties/en/ip/wct/trtdocs_wo033.html. Accessed on 28 September 2010.

Kenya has enacted several laws addressing intellectual property including the Copyright Act, No 12 of 2001, Trade Marks Act, (Cap 506, Laws of Kenya) and the Industrial Property Act, No 3 of 2001. These laws shall be considered in detail in the next chapter, which discusses the legal and regulatory framework for eProcurement in Kenya.

4.5 Cyber Terrorism

Cyber terrorism may be describes as the use of information technology by terrorist groups and individuals to further their agenda. This can include use of information technology to organize and execute attacks against networks, computer systems and telecommunications infrastructures, or for exchanging information or making threats electronically. Examples are hacking into computer systems, introducing viruses to vulnerable networks, web site defacing, Denial-of-service attacks, or terroristic threats made via electronic communication.¹⁷⁹

Cyber terrorism is the convergence of terrorism and cyberspace. It is generally understood to mean unlawful attacks and threats of attack against computers, networks, and the information stored therein when done to intimidate or coerce a government or its people in furtherance of political or social objectives. Further, to qualify as cyber terrorism, an attack should result in violence against persons or property, or at least cause enough harm to generate fear. Attacks that lead to death or bodily injury, explosions, plane crashes, water contamination, or severe economic loss would be examples. Serious attacks against critical infrastructures could be acts of cyber terrorism, depending on their impact.¹⁸⁰

Cyber terrorism is real and can happen and jeopardize eProcurement. It has happened to many are for political and ideological reasons. For example, in October 2007, the website of Ukrainian president Viktor Yushchenko was attacked by hackers. A radical Russian nationalist youth

¹⁷⁹ Alexander, Yonah Swetman, Michael S. (2001). *Cyber Terrorism and Information Warfare: Threats and Responses*. Transnational Publishers Inc.,U.S

¹⁸⁰ Denning, D., "Cyberterrorism", Testimony before the Special Oversight Panel of Terrorism Committee on Armed Services, US House of Representatives, 23 May 2000. (<http://www.cs.georgetown.edu/~denning/infosec/cyberterror.html>), Accessed on 4th October 2010.

group, the Eurasian Youth Movement, claimed responsibility.¹⁸¹ In 1999 hackers attacked NATO computers. The computers flooded them with email and hit them with a denial of service. The hackers were protesting against the NATO bombings in Kosovo. Businesses, public organizations and academic institutions were bombarded with highly politicized emails containing viruses from other European countries.¹⁸²

Cyber terrorism may be done through various methods. Some of these methods are discussed below.

Malicious code and viruses- such as viruses or Trojan Horses, is used to infect a computer to make it available for takeover and remote control. Malicious code can infect a computer if the user opens an email attachment, or clicks an innocent-looking link on a website.¹⁸³

Identity Theft- Individual users are often lured into clicking on tempting links that are found in email or when visiting websites. Clicking on titles such as “Buy Rolex watches cheap,” or “Check out my new Photos,” can take advantage of web browser vulnerabilities to place malicious software onto a users system which allows a cybercriminal to gather personal information from the user’s computer.¹⁸⁴

Malicious code can scan a victim’s computer for sensitive information, such as name, address, place and date of birth, social security number, mother’s maiden name, and telephone number. Full identities obtained this way are bought and sold in online markets. False identity documents can then be created from this information using home equipment such as a digital camera, color printer, and laminating device, to make official-looking driver’s licences, birth certificates, reference letters, and bank statements.¹⁸⁵

¹⁸¹ Thevenet, Cédric (Nov 2005) "Cyberterrorisme, mythe ou réalité?". From the World Wide Web: http://www.terrorisme.net/pdf/2006_Thevenet.pdf. Accessed on 4th October 2010.

¹⁸² Weimann, Gabriel (2006). *Terror on the Internet: The New Arena, the New Challenges*. United States Institute of Peace, U.S

¹⁸³ Whitelaw, K. 1998. *Terrorists on the Web: Electronic 'Safe Haven'*. US News & World Report, Vol.124, p. 46.

¹⁸⁴ Id

¹⁸⁵ Id

Cyber Espionage- Cyber espionage involves the unauthorized probing to test a target computer's configuration or evaluate its system defenses, or the unauthorized viewing and copying of data files. However, should a terrorist group, nation, or other organization use computer hacking techniques for political or economic motives, their deliberate intrusions may also qualify them, additionally, as cybercriminals. If there is disagreement about this, it is likely because technology has outpaced policy for labeling actions in cyberspace. In fact, industrial cyber espionage may now be considered a necessary part of global economic competition, and secretly monitoring the computerized functions and capabilities of potential adversary countries may also be considered essential for national defense.¹⁸⁶

EProcurement is highly dependent on information technology and therefore a potential target for cyber terrorism. If a terrorist attacked an eProcurement system, it may result into loss of vital information necessary for procurement. One of the measures that companies have to put in place is business continuity planning to ensure that should their systems be attacked, they can still remain in business.

4.6 eProcurement and Corruption

Although public procurement processes are fairly complex and can be implemented differently in various jurisdictions, the three main phases of the public procurement process are Procurement planning and budgeting; Procurement solicitation; and Contract award and performance. eProcurement also follows these three phases. Corruption can arise in various forms in each of these separate phases of the procurement process. In the procurement planning and budgeting phase, the government entity needs to determine what good or service it would like to buy (the requirement) and how much it would like to spend (the budget).

In both of these cases, there are opportunities for corruption. In determining the requirement, reports could be prepared that falsely report damaged equipment in order to create an excess supply that could be used for corrupt purposes. The procurement requirements could also be written to favor a particular supplier or contractor. Budgets could be set artificially high so that

¹⁸⁶ Larry Greenemeier, "Estonian Attacks Raise Concern Over Cyber 'Nuclear Winter,'" Information Week, May 24, 2007, at

[<http://www.informationweek.com/news/showArticle.jhtml?articleID=199701774>]. Accessed on 3rd October 2010.

[<http://www.informationweek.com/news/showArticle.jhtml?articleID=199701774>]. Accessed on 3rd October 2010.

excess allocations can be stolen or diverted. In addition, programmatic budgets could be devised in such a way that there are overlapping budgetary allocations among separate organizations or departments that could likewise be applied in a corrupt manner.¹⁸⁷

In the procurement solicitation phase, the main tasks are compiling the request for proposals or tender documents and conducting the evaluation. The evaluation criteria in the request for proposals or tender documents could be drafted to favor a particular supplier or service provider or likewise could be drafted to emphasize weaknesses of a particular competitor. The evaluation criteria could be drafted in a subjective way or even not clearly stated in tender documents, leaving room for manipulation and biased assessments and having no grounds to justify the decision. Later during the evaluation of the proposals or tenders, the evaluation criteria could be misapplied or otherwise further defined or amended after proposal or tender receipt. During this phase it is also possible that advance information could be provided to a particular favored supplier or contractor. Other techniques such as failing to solicit proposals or tenders from the competitors of a favored supplier, wrongfully restricting the tender pool, soliciting offerors known to be inferior to a favored supplier, simply mis-addressing tender documents, accepting late proposals or rejecting legitimate proposals are techniques that can be utilized to corrupt the procurement process.

Corruption opportunities also abound at the contract award and performance phase of the procurement process. For example, an offeror could propose an unrealistically low offer in the hopes that after the contract is awarded procurement officials will allow amendments to increase costs. Likewise, a firm could offer exceptionally high caliber products or less qualified personnel to meet a particular requirement and then upon contract award substitute inferior products or personnel. It is also possible to corruptly require sub-contractual relationships with favored suppliers. Furthermore, after the evaluation is complete, it is possible to award a contract that materially differs from the terms of the solicitation in terms of specifications, quantity, or delivery schedule. Oversight and reporting requirements may also be minimized and in some cases cost overruns can be corruptly explained away or falsely justified. Finally, supporting

¹⁸⁷ Curbing Corruption in Public Procurement in the Asia and the Pacific, Progress and Challenges in 25 countries, Thematic Review ABD –OECD.

documentation could be intentionally lost or destroyed making detection and prosecution of corruption offenses difficult.

A clear and comprehensive regulatory framework for the conduct of public procurement is a fundamental prerequisite for curbing corruption in public contracting. It is the basis for the development and application of equal practice, for transparency and fairness, and for meaningful review and control mechanisms. In the absence of a sound regulatory framework, any form of manipulation and corruption may occur and remedies for such practices may be difficult to implement.

Although no public procurement system will likely ever be fully free of all corruption, a system that promotes transparency, efficiency, economy, fairness and accountability will be a system where corrupt activities will be more difficult to conceal and will be easier to punish administratively and criminally. Adequate training of procurement officers, the establishment of multidisciplinary and multiparty evaluation committees, rotation principles for procurement officials and the establishment of accountability and report procedures, are keys in fighting corruption. The development of codes of conduct for staff is also extremely important. These are but a few ideas as to how to address and control corruption in the context of public procurement. And in so doing, the public sector shall likely acquire high quality goods and services at a cost or price deemed to be fair and reasonable.

EProcurement comes with new features that pose certain challenges or sometimes offer solutions to procurement activities. Some of these features discussed below.

4.6.1 Automation and Immediacy

While suppliers need to be able to open their systems so that customers can place orders and make payments on-line, criminals, and very often employees or employees with external associates, will seek opportunities to exploit any slackness in transaction monitoring, manual checking, and separated authorization. Traditional auditing and accounting methods also may well prove inadequate in this new environment.¹⁸⁸

¹⁸⁸ Hooper, P. & Page, J. Putting teeth into your data security., *National Public Accountant*, Volume 41, May 1996, pp. 13-18.

The use of computer-based accounting systems essentially eliminates some major internal control concerns associated with manual systems. The computer is immeasurably more accurate than any person performing the same calculations, it is consistent in its treatment of transactions once it is programmed, and does not have any dishonest or disloyal motivations. However there are important internal control problems associated with input, processing, storage, and output.¹⁸⁹

Electronic systems remove the physical inconvenience associated with manual systems that makes some forms of corrupt activity too risky, inconvenient, or impossible. For example, increased power to manipulate data can make corrupt misuse of confidential information a lot easier. This manual system might be slow and inefficient, but this inefficiency is a handy safeguard against corruption and abuse by employees. But risk increases as human intervention and supervision are reduced and the speed of transactions means there isn't time to retract them before they are completed. This is not however a reasonable excuse for management to resist the adoption of emerging technology. New risks must be identified, acknowledged and managed.¹⁹⁰

4.6.2 Loss of Collateral Information

A further generic corruption risk characteristic of several emerging technologies is the loss of collateral information, which is traditionally reliable ways of identifying and establishing trust between participants in transactions. As these technologies have become more pervasive, face to face communication has steadily diminished, replaced by human to machine and increasingly machine to machine interaction. With this shift, many of the societal and business cues such as general appearance, facial expressions, verbal or body language, voice, dress, demeanour or apparent authority have been lost. Whilst these cues may not be essential to the meaning and intent of a transaction, they nevertheless provide useful contextual information for one or more of the parties to the transaction. Many of the emerging technologies that are of concern allow the customer, employee, or supplier to participate, communicate and transact without physically meeting anybody. This reduces the ability of public sector agencies and their clients and customers to be alerted by societal cues to suspicion, incongruent or anomalous behaviour. They

¹⁸⁹ Id

¹⁹⁰ Id

may fall victim to electronic impersonation of suppliers, of supervisors, and of other employees.¹⁹¹

A related issue is that offenders who use new technology in this way are less easily identified by traditional law enforcement methods. Put simply, there is no description, address or telephone number to begin locating the offender. Electronic traces and clues will be left by perpetrators but these require quite different investigative skills from those possessed by traditional investigators and auditors.¹⁹²

Legal problems of prosecution and proof can also arise. One of the factors inherent in information and telecommunications technologies is that their misuse can leave no trace; but law is traditionally based on texts and material evidence of acts which, for computer related crime, are often unavailable. This makes it difficult to assess the scale of and to detect and prosecute computer-related crime. As identity fraud is a subject of increasing concern to various law enforcement bodies, the loss of collateral information will doubtless have an impact in that area of criminality.¹⁹³

4.6.3 Accessibility and Ubiquity

Where widely networked systems can be accessed from many places and at different times many risks arise. This is especially the case in new systems or in areas that are not used to dealing with sensitive information. The misuse of unattended workstations is an obvious hazard in this regard. It is not just raw data that are at risk from over-accessible systems. Content and processes based around value-adding are the currency of the information economy. Copying or stealing of this intellectual product may become an opportunity for dishonest government and private sector employees alike.¹⁹⁴

¹⁹¹ Commonwealth of Australia, 1999, Contributions to Electronic Commerce: What Law Enforcement and Revenue Agencies can do, Research Group into the Law Enforcement Implications of Electronic Commerce (RGEC), Canberra, p. 54, para. 2.4.18.

¹⁹² Id

¹⁹³ Id

¹⁹⁴ Hughes, G., *Data Protection in Australia*, The Law Book Company Limited, 1991, p. 15.

To curb corruption, Kenya has enacted several legislations which include the Anti-Corruption and Economic Crimes Act, 2003, Public Officer Ethics Act, 2003 and the Supplies Practitioners Management Act, 2007. Pursuant to the Anti-Corruption and Economic Crimes Act, 2003, Kenya has established the Kenya Anti-corruption Commission which is tasked with fighting corruption. The commission is however, ill-equipped to deal with corruption in the arena of eProcurement.

At the international level the United Nations in its resolution No 58/4 of 31 October 2003, the General Assembly adopted the United Nations Convention against Corruption, and the Convention entered into force on 14 December 2005.¹⁹⁵ The Convention offers a comprehensive set of measures that can be taken by the Member States, international organizations, private sector, as well as the United Nations.¹⁹⁶ The Convention has detailed provisions on: preventive measures; criminalization and law enforcement; international cooperation; asset recovery; technical assistance and information exchange; and also mechanisms for its implementation.

4.6 Conclusion

Due to the inadequacy of the existing laws in addressing procurement, the fast advancing technology has further compounded the problems hindering the development of eProcurement. The technology based procurement has pose cyber related crimes which would ordinarily be avoided under traditional procurement. There need to ensure that the firms which use eProcurement are safe from attacks by cyber terrorists-or criminals. It is important that firms put in place alternative measures in the name of business continuity planning to ensure that they still remain in business even when the technology breaks down.

¹⁹⁵ Transparency International Handbook, "Curbing Corruption in Public Procurement", 2007, and cited at page 15, "United Nations Convention against Corruption: implementing procurement-related aspects," Conference Room Paper submitted by the United Nations Commission on International Trade Law to the Second session of the Conference of the States Parties to the United Nations Convention against Corruption (CAC/COSP/2008/CRP.2).

¹⁹⁶ Ibid

CHAPTER FIVE

Recommendations and Conclusions

5.1 Recommendations

In light of the various shortcomings of the legal, regulatory and policy in eProcurement regulation in Kenya, there is need for various measures to be undertaken to boost eProcurement. This study recommends various measures that need to be undertaken to ensure adequate regulation of eProcurement.

5.2.1 Enactment of the Electronic Transactions Act and the Electronic Signatures Act

The Electronic Transactions Bill 2007 pending in Parliament needs to be enacted to have a force of law. The Bill's overall object is to create a safe, secure and efficient legal environment for individual consumers and investors, businesses, government, and other relevant entities to conduct and use electronic transactions. It encourages the use of ICTs and e-government and e-commerce services as well as to protect the privacy of the public and the interests of consumers and clients due to potential misuse and unauthorized use of ICTs. This Bill therefore seeks to facilitate and promote the use of electronic transactions in Kenya by creating legal certainty and public trust around transactions which are conducted with various forms of information and communications technologies (ICTs). If enacted into law, it shall comprehensively provide for various issues including privacy and security, contract formation issues like time and place of dispatch and receipt of offer and acceptance. Some of these issues were identified as challenges to ultimate implementation of eProcurement by this study. The Bill has to be reformed however to provide for electronic dispute resolution mechanisms, consumer protection, Intellectual Property and Taxation. These aspects are critical and need to be included in the Act. If the Bill is enacted with the amendments on the areas mentioned then it may promote the implementation of eProcurement in Kenya.

Further, the Bill does not adequately address the issue of electronic signatures which is a critical aspect in electronic transactions. To fully provide for electronic signatures, there is need for enactment of Electronic Signatures Act modeled alongside the UNCITRAL Model on Electronic Signatures to eliminate any uncertainty that surrounds electronic signatures. The Act should

clearly define what amounts to an electronic signature. Such a definition should be technologically neutral and broad enough to include electronic sound, symbol, or process attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign a record.¹⁹⁷

These two legislations if enacted into law and fully implemented then they may support the achievement of most objectives of public procurement. The main objectives that may be achieved include operating efficiency, transparency, and accountability among other benefits.

5.2.2 Restructuring of the Public Procurement Oversight Authority

The growth of electronic procurement has created the need for vibrant and effective regulatory mechanisms, which would further strengthen the legal infrastructure that is crucial to the success of electronic procurement. To be able to harmoniously address all the multi-sectoral issues, the authority should be staffed with technology savvy staff and enabled with relevant technology oriented tools for regulation. The authority should *inter alia* be charged with the following duties;

- a. Facilitate and promote electronic procurement
- b. Promote public confidence in the integrity and reliability of electronic records and electronic procurement.
- c. Foster the development of electronic procurement through the use of electronic signatures to lend authenticity and integrity to correspondence in any electronic medium.
- d. To facilitate coordination between and among the various Ministries, government agencies and key players in procurement like banks so as to ensure effective development of harmonized regulation of eProcurement.

Currently the ICT Board is working closely with Public Procurement Oversight Authority by providing technical assistance in the form of policy, legal and regulatory technical assistance and capacity building.¹⁹⁸ This initiative should be encouraged so that PPOA may achieve its objectives through implementation of eProcurement.

¹⁹⁷ Lauren Bright and Jerald Jacobs, 2001, Implications of Electronic Signatures Act, American Society of Association Executives. Available at: <http://www.nrwa.org/2001/publications/articles/ElectronicSignatures.htm>. Accessed on 5 October 2009.

¹⁹⁸ ICT Board Website. Available at:

5.2.3 Self regulation

The major players in eProcurement are private corporations and individuals. They possess the relevant technology necessary in eProcurement. Given the complexity of eProcurement regulation, there is an urgent need to involve the players themselves who may come up with technology based and technology neutral forms of regulation. However, such form of regulation should be used alongside government regulation.

Self regulation favours market-driven codes of conduct and enforcement mechanisms with minimal government regulation is one of the most effective means for fostering the growth of electronic procurement.¹⁹⁹ The private sector should form an umbrella association to oversee the transactions carried out through electronic means.

5.2.4 Amendment of Certain Laws

The Public Procurement and Disposal Act, 2005, Evidence Act, the Law of Contract Act, the Penal Code and the Companies Act are some of the key laws that need to be amended to appreciate eProcurement.

a. Public Procurement and Disposal Act, 2005

The Act should be overhauled to reflect eProcurement. Various provisions that are paper based should be done away with and restructured to embrace electronic means. Implementation of eProcurement should not simply be engrafting electronic technology onto a paper-based procurement process, but there should be a focus on reengineering the entire procurement process to take advantage of electronic innovations. To provide for effective eProcurement platform the Public procurement and Disposal Act should provide for the following functionalities;²⁰⁰

- a. Electronic data Interchange which refers to inter-organizational information system using structured data exchange protocols; usually through value added frameworks.
- b. e-sourcing which involve ways of identifying new sources of supply using electronic technologies.

¹⁹⁹ Steele, Supra foot note 19 <http://www.ict.go.ke>. Accessed on 16th November 2010.

²⁰⁰ Madara Ogot et al, 2009, The Long term Policy Framework for Public Procurement in Kenya, Public Procurement Oversight Authority.

- c. e-tendering which is the process of inviting offers from suppliers and receiving their responses electronically.
- d. e-disposal –using electronic means in conducting disposals through auctions and other means.
- e. e-informing-using electronic technologies in gathering and distributing procurement related information.

The Act should introduce the general validity of computer-based administrative activity to have the same value as the traditional paper-based.

b. Penal Code, Cap 63 Laws of Kenya

The Penal Code must be amended to recognize a record generated in digital form by an information system which can be transmitted within an information system or from one information system to another, or stored in an information system or other medium. Recognition of electronic documents and amendment of provision that outlaws uttering of documents would curb electronic uttering of documents. Further, the Penal Code should be amended to provide that information is capable of being stolen.

c. Law of Contract Act, Cap 23 Laws of Kenya

Section 3 which provide that certain contract must be in writing to ensure their enforceability should be amended to allow for enforceability of electronic writing.²⁰¹

d. Evidence Act, Cap 80 Laws of Kenya

The Evidence Act should be amended to recognize electronic documents in the same level as paper based documents. The best evidence rule should include use of electronic documents. The evidence Act should also be amended to provide for various presumptions regarding electronic documents. For example, the court has to presume, unless the contrary is proved, that the secure

²⁰¹These contracts are: Any special promise to answer for the debt, default or miscarriages of another person; Any representation or assurance made or given concerning or relating to the character, conduct, credit, ability, trade or dealings of any other person, to the intent or purpose that such other person may obtain credit, money or goods; and, Contract for the disposition of an interest in land.

electronic record has not been altered since the specific point of time the secure electronic signature was affixed.

e. Companies Act, Cap 486 Laws of Kenya

The Companies Act should be amended to allow for the following;

- i. Electronic filing of returns,
- ii. Recognition of electronic documents,
- iii. Electronic payment of dividends etc.

Since eProcurement can only function well if various government agencies are interlinked, the office of Registrar of Companies should be proactive in availing companies information online to establish their existence. If the register is availed online then the procuring entity should be able to authenticate any information submitted by a bidder online.

5.2.5 International Cooperation

Global cooperation is critical in the regulation of eProcurement because of its transboundary nature and the fact that eProcurement is generally a global phenomenon. Kenya must therefore join other countries in their efforts in boosting eProcurement, regionally and internationally. Certain issues that eProcurement raises like taxation, intellectual property and consumer protection can only be effectively regulated through international cooperation. Kenya should enter into several bilateral and multilateral instruments to ensure sustainable international cooperation.

Article 2 of the newly promulgated Constitution in Kenya recognizes the application of general rules of international law in Kenya. This recognition introduces the international best processes when it comes to public procurement. Further, the Constitution provides that any treaty or convention ratified by Kenya form part of the law of Kenya. This provision makes it easy for Kenya to adopt international conventions. Kenya should consider ratifying the agreement on Government Procurement. The Agreement on Government Procurement (GPA) is to date the only legally binding agreement in the WTO focusing on the subject of government procurement. The GPA is based on the principles of openness, transparency and non-discrimination, which

apply to Parties' procurement covered by the Agreement, to the benefit of Parties and their suppliers, goods and services.

5.2.6 Dispute Resolution

Dispute resolution is one of the key concerns of the players in e-procurement. Since each country has different laws and differing judicial capacity levels, there is need for uniformity in dispute resolution. To ensure uniformity and certainty, this report recommends that the proposed Electronic Transactions Act should provide for arbitration as a form of dispute resolution. Arbitration allows parties to choose the law applicable to their contract, choose qualified people to arbitrate, and limit the time frame for arbitration. Such discretion to parties makes arbitration an ideal dispute resolution mechanism in eProcurement than litigation.

In order to fully cater for limitations in resolving disputes arising from public eProcurement, it is recommended that Kenya adopts a mechanism for online dispute resolution and incorporate it within its legal framework. The best approach should to adopt the route taken by the Philippines in implementing such a mechanism.²⁰²

The Electronic Commerce Act of the Philippines (Act N. 8792) was enacted to pave the way for online dispute resolution (ODR) in the country by providing for government use of Electronic Data Messages, Electronic Documents and Electronic Signatures. Section 28 of the same law establishes that the necessary should be done to “promote the use of Electronic Documents and Electronic Data Messages in Government and to the general public”.²⁰³

Indeed, Kenya can borrow a leaf from the Philippines by further incorporating online dispute resolution (ODR) as an important instrument of its judicial reform. In Philippines, the ODR platform was launched in 2004 is fully operational. The web-based service offers a complaint desk related to “Blind Bidding”, “Neutral Evaluation”, “Mediation” and “Arbitration”. It is assumed that public eProcurement disputes can also be settled by using this information “Court Room”. The ODR in the Philippines is also supported by the “Alternative Dispute Resolution

²⁰² *Supra*, note 29.

²⁰³ Section 28, Electronic Commerce Act of the Philippines (Act N. 8792).

Act of 2004” which states in its section 2 (Declaration of Policy), that “the State shall encourage and actively promote the use of Alternative Dispute Resolution (ADR) as an important means to achieve speedy and impartial justice and de-block court dockets. As such, the State shall provide means for the use of ADR as an efficient tool and an alternative procedure for the resolution of appropriate cases.”²⁰⁴

5.2 Conclusions

Technological advancement in the information technology has revolutionized the manner in which various sub-sectors of the economy conduct their business. In recent past we have witnessed the use of information technology in banking, commerce, government and in this case procurement. Procurement processes have now embraced information technology and virtually all the procurement processes including procurement planning, invitation of tenders, submission of tenders, opening and evaluation of tender, negotiation and contracting can be done electronically. When these processes are done electronically, procurement in that sense is termed as eProcurement.

eProcurement brings about many benefits to organizations which include reduction of expenses, increases efficiency and sometimes enhances transparency. eProcurement can therefore be used to enhance the underlying objective of procurement namely attaining for value for money to all players in procurement. Value for money means attaining the best available outcome when all relevant costs and benefits over the procurement cycle are considered.

Despite the actual benefits that eProcurement may bring there are many challenges that face the implementation of eProcurement. These challenges are technological in form and include lack of interoperability, the digital divide and lack of proper business continuity planning. A great majority of Kenyans who may wish to participate in eProcurement do not have access to information communications technology. Access to this technology is hampered by the high capital investment in the technology. Computer and networking of the same is too expensive and many investors may not afford. This therefore limits the number of participants in eProcurement.

²⁰⁴ See “PhilippinesOnlineDisputeResolution”, <http://www.disputeresolution.ph>(accessed on 10/09/2010).

Further most people are not knowledgeable in the use of the technology. As much as they may afford the technology, they may not know how to operate the technology. Assuming that they know how to operate the technology; they may be limited access by copyright requirements.

Further, it is apparent that the existing procurement laws and policies in Kenya do not absolutely support the development of eProcurement in Kenya. Various legal issues hinder the development of e-procurement in Kenya. There are several laws in Kenya which deal directly or indirectly with public procurement. The main laws that deal with public procurement include the Public Procurement and Disposal Act, 2005, Law of Contract Act, Cap 23 Laws of Kenya. Despite the fact the Public Procurement and Disposal act was enacted only in 2005, it does not have any provision that appreciates eProcurement. It is based on paper-based, manual procurement practices which hinder the development of eProcurement. The Public Procurement Oversight Authority which is composed of people who are not experts in information technology and who cannot appreciate the efficiency that comes with eProcurement.

Due to the inadequacy of the existing laws in addressing procurement, the fast advancing technology has further compounded the problems hindering the development of eProcurement. The technology based procurement has pose cyber related crimes which would ordinarily be avoided under traditional procurement. There need to ensure that the firms which use eProcurement are safe from attacks by cyber terrorists or criminals. It is important that firms put in place alternative measures in the name of business continuity planning to ensure that they still remain in business even when the technology breaks down.

Various international instruments like, the Convention on the Use of Electronic Communications in international contracts, United Nations Commission on International Trade Law and United Nations Convention on Contracts for the International Sale of Goods have proposed noble ways of dealing with some of these technological problems. Some countries like Korea have a more advanced eProcurement process that Kenya can learn from.

To facilitate the trust in eProcurement, there should be in place trusted third parties who will facilitate the eProcurement processes. These third parties will act as middle men in solving most of the legal, technological and administrative issues discussed in earlier chapters.

It is important to note that if eProcurement is new phenomenon that must be embraced. The various challenges that befall it must be addressed so that it is able to thrive. What follows is some of the suggestions that may improve the development of eProcurement in Kenya.

References

1. Alexander, Yonah Swetman, Michael S. (2001). *Cyber Terrorism and Information Warfare: Threats and Responses*. Transnational Publishers Inc., U.S
2. Andreson, A; Bikson, T; et al. *Universal Access to E-mail: Feasibility and Societal Implications*,
3. Anthony, T. "English: 1 Tongue for the New Global Village", *Associated Press Wire*, April 2000.
4. Callendar, G. & Mathews, D. (2000). "Government Purchasing: An Evolving Profession?" *Journal of Public Budgeting, Accounting & Financial Management*, 12(2), 272-290.
5. CBK. (2008). *Business Continuity Management*. Retrieved from Central bank of Kenya:
http://www.centralbank.go.ke/downloads/acts_regulations/Business_Continuity_Management.pdf.
6. Chaffey, D. (2004). *E-business and e-commerce management: strategy, implementation and practice*.
7. CISG Advisory Council (2003) *Electronic Communications under CISG*, *Nordic Journal of Commercial Law*. Available at: http://www.njcl.fi/1_2003/commentary3.pdf.
8. Commonwealth Government, 'Guidance on Ethics and Probity in Government Procurement', January 2005.
9. Communications Commission of Kenya, (2009), *Communications Statistics Report Second Quarter 2008/09*. Nairobi, Communications Commission of Kenya. Available at:
http://www.cck.go.ke/UserFiles/File/SECTOR_STATISTICS_REPORT_Q2_0809.pdf.
10. *Contributions to Electronic Commerce: What Law Enforcement and Revenue Agencies can do*, Research Group into the Law Enforcement Implications of Electronic Commerce (RGEC), Canberra 1999, p. 54, para. 2.4.18.
11. Craig S Wright, (2008) *Electronic Contracting in an Insecure World*, SANS Institute. Available at:

12. [http://www.sans.org/reading_room/whitepapers/legal/electronic contracting in an insure world 2088?show=2088.php&cat=legal](http://www.sans.org/reading_room/whitepapers/legal/electronic_contracting_in_an_ins_eure_world_2088?show=2088.php&cat=legal).
13. Cukier, K. N. "Bandwidth Colonialism? The Implications of Internet Infrastructure on International
14. Curbing Corruption in Public Procurement in the Asia and the Pacific, Progress and Challenges in 25 countries, Thematic Review ABD –OECD.
15. Danice Kowalczyk, (2000), Avoiding Intellectual Trespass in the Global Marketplace: Encryption & Privacy in E-Commerce, Virginia Journal of Law and Technology.
16. Davila, A., Gupta, M. and Palmer, R. (2003). Moving procurement systems to the Internet: the
17. Definition of Trusted Third parties is borrowed from an online Business directory. Available at: <http://www.businessdictionary.com/definition/trusted-third-party.html>.
18. Denning, D., "Cyberterrorism", Testimony before the Special Oversight Panel of Terrorism Committee on Armed Services, US House of Representatives, 23 May 2000. (<http://www.cs.georgetown.edu/~denning/infosec/cyberterror.html>),
19. E. G. Carayannis, and D. Popescu, "Profiling a methodology for economic growth and convergence: learning from the EU eProcurement experiences for central and Eastern European countries," 25 *Technovation* 1 (2003).
20. *E-Commerce*", INET99 Conference, San Jose California, June 1999. @: <http://www.isoc.org/inet99/proceedings/1e/1e_2.htm>.
21. European Commission (2003). The Role of e-Government for Europe's Future, COM (2003) 567 final, 26.9.2003. Available at <http://europa.eu.int/>.
22. Franklin Pierce Law Center, n.d., Intellectual Property in E-Commerce, World Intellectual Property Organization. Available on: http://www.ipmall.info/hosted_resources/pubspapers/WIPO.pdf.
23. G. G. Lim, R. B. Kim and H. B. Lee, "Public EProcurement: The Korean On-Line EProcurement System (KONEPS)", 3rd *International Public Procurement Conference Proceedings* 28-30 August 2008, p. 773.
24. Graham, J. e. (2006). *A risk management approach to Business continuity; Aligning Business continuity with corporate governance*. Brookfield: Rothstein Associates.

25. Hilde Van Eylen, Public eProcurement Initiatives and experiences; Borders and Enablers, European Commission, August 2002.
26. Hooper, P. & Page, J. Putting teeth into your data security., *National Public Accountant*, Volume 41, May 1996, pp. 13-18.
27. Hughes, G., *Data Protection in Australia*, The Law Book Company Limited, 1991, p. 15.
28. IDC, "IT Services for e-government in Western Europe, 2001-2006," IDC Research Report #RE03J, 2003.
29. Institute of Electrical and Electronics Engineers. IEEE Standard Computer Dictionary: A Compilation of IEEE Standard Computer Glossaries. New York, NY: 1990.(iftikahr).
30. International Telecommunication Union, 2002, ITU Digital Access Index: World's First Global ICT Ranking Education and Affordability Key to Boosting New Technology Adoption. Available at: http://www.itu.int/newsroom/press_releases/2003/30.html.
31. J. M. Migai Akech, 2005, Development Partners and Governance of Public Procurement in Kenya: Enhancing Democracy in the Administration of Aid, University of Nairobi.
32. Jacob Consulting Pty Ltd, n.d, Online Contracts: How To Make Ecommerce Work, http://www.djacobson.com/technology_business/jacobson_online_contracts_0603.pdf.
33. Jerome Ochieng, E-GP Planning and Change Management: Action Plan for E-GP implementation in Kenya, Public Procurement Oversight Authority.
34. K. Mitchell, "Instituting eProcurement in the public sector," *Public Management* 21(2000).
35. Khi V. Thai, Public Procurement Re-Examined, *Journal of Public Procurement*, Volume 1, Issue 1, 9-50.
36. Larry Greenemeier, "Estonian Attacks Raise Concern Over Cyber 'Nuclear Winter,'" *Information Week*, May 24, 2007, at [<http://www.informationweek.com/news/showArticle.jhtml?articleID=199701774>].
37. Lauren Bright and Jerald Jacobs, 2001, Implications of Electronic Signatures Act, American Society of Association Executives. Available at: <http://www.nrwa.org/2001/publications/articles/ElectronicSignatures.htm>.

38. Lin, F. R. and Shaw, M. (1998). Reengineering the order fulfillment process in supply chain networks.
39. Lorraine de Germiny & Joshua Karton, n.d. The CISG Advisory Council Comes of Age, http://works.bepress.com/cgi/viewcontent.cgi?article=1001&context=joshua_karto
40. Lorrier Faith Cranor, (2003), 'I Didn't Buy for Myself' Privacy and E-commerce Personalization, Washington DC, AT & T Labs Research. Available at: <http://lorrie.cranor.org/pubs/personalization-privacy.pdf>.
41. Magrini, P. (2006). *Transparency in Public Procurement: the Italian Perspective*, Proceedings of the 1st High level Seminar on e-Procurement.
42. Marcella Corsi, Andrea Gumina and Daria Ciriaci, 2006, How E-Government May Enhance Public Procurement, International Public Procurement Conference Proceedings 21-23 September 2006.
43. Maryke Silalahi Nuth, Indonesia's Digital Divide and E-commerce: Opportunities and Challenges, Norway, Norwegian Research Center for Computers & Law Faculty of Law, University of Oslo. Available on: <http://www.tiimi2008.com/9.pdf>.
44. Michael M. Murungi, "Comments on Kenya's Electronic Transactions Bill, 2007 & The Information and Communications Bill, 2008", Excerpts from a slide presentation at the Kenya ICT Board/Kenya ICT Federation Public Panel on E-Commerce Grand Regency Hotel Nairobi June 19, 2008.
45. N. A. Panayiotou, S.P. Gayialis, and I.P. Tatsiopoulos, "An eProcurement system for governmental purchasing," 90 *International Journal of Production Economics* pp. 79-102, (2004).
46. National Audit office, U.K., Getting Value for Money from Procurement – How Auditors can help, downloaded from [www.ogc.gov.uk/documents/Value for Money \(VFM\) in Procurement - The Role of Auditors.pdf](http://www.ogc.gov.uk/documents/Value%20for%20Money%20(VFM)%20in%20Procurement%20-%20The%20Role%20of%20Auditors.pdf).
47. Nicklas Lundblad, Next Generation Trusted Third Parties –Some Experiences from the Swedish ChamberSign Project, St Anna Research Institute.
48. Norma Mansor, "Public Procurement Innovation in Malaysia: EProcurement", Available at: www.nap.sip.ag-research.org/pdf/EProcurement-Malaysia.pdf.

49. OECD Guidelines on the Protection of Privacy and Transborder Flows of Personal Data.
50. P J Skevington and TP Hart (1997) Trusted third parties in electronic commerce, Springer Netherlands, BT Technology Journal, Vol 15, No 2, April.
51. P. R. Devadoss, L.P. Shan, and J.C. Huang, "Structurational analysis of e-government initiatives: a case study of SCO," 34 *Decision Support Systems* pp. 253-269, (2002).
52. Peltier, T. R. (2005). *Information Security Fundamentals*. Boca Raton, Fla: Auerbach Publications.
53. Pigou, A. C. (1932) *The Economics of Welfare*. London: Macmillan and Co.
54. Public Procurement Oversight Authority Brochure, August 2009; available at: <http://www.oecd.org/dataoecd/12/28/45397347.pdf>
55. Public Procurement Oversight Authority, "Assessment of the Procurement System in Kenya", October 2007: Available at: <http://www.oecd.org/dataoecd/6/12/41583965.pdf>.
56. R. Amoussou-Guenou, "Legal Aspects of EProcurement", A Paper Presented at the Asian Development Bank International Conference on EProcurement, 20-25 June, 2005, Seoul, Korea, p. 1-18.
57. R.B. Kim, "Transformation of Emerging Economy to a Knowledge-Based Economy: Korean Case." 9(1) *Global Business Review* 149-156 (2008).
58. Ralf Cimander, Meik Hansen and Herbert Kubicek, "Electronic Signatures as Obstacle for Cross-Border EProcurement in Europe", Available at: [https://www.eid-stork.eu/dmdocuments/public/Electronic SignaturesAsObstaclesForCross-BorderEProcurementInEurope_LessonsFromThePROCUREProject.pdf](https://www.eid-stork.eu/dmdocuments/public/Electronic%20SignaturesAsObstaclesForCross-BorderEProcurementInEurope_LessonsFromThePROCUREProject.pdf).
59. Ramadhan S. Mlinga, *Tanzanian Policy Framework Towards Achieving Value For Money In Procurement*, Tanzania Public Procurement Regulatory Authority.
60. Read about the VeriSign and GlobalSign in their following websites, <http://www.verisign.com/> and <http://www.globalsign.com/> respectively.
61. Richard A. Posner, *Theories of Economic Regulation*, *The Bell Journal of Economics and Management Science*, Vol. 5, No. 2 (Autumn, 1974), pp. 335-358.
62. Roderic G. Broadhurst, Peter N. Grabosky, *Cyber-crime: the Challenge in Asia*, Hong Kong University Press, 2005.

63. Roland Amoussou-Guenou, "Legal Aspects of EProcurement", International Conference On EProcurement Organized by Asian Development Bank Institute (ADB) Public Procurement Service (PPS) of Republic of Korea, The United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) 20 – 25 June 2005, Seoul, Korea.
64. S. Croom and A. Brandon-Jones, "Impact of eProcurement: experiences from implementation in the UK public sector, 13 *Journal of Purchasing & Supply Management* 294 (2007), at p. 295.
65. S.A. MacManus, "Designing and Managing the Procurement Process", in J.L. Perry (ed.), *Handbook of Public Administration*, 2nd Ed (San Francisco, CA: Jossey-Bass, 1996), pp. 590-610.
66. Said Assar and Imed Boughzala, "Collaborative features in French public eProcurement", A Paper presented at the AIM Conference 2006; Available at: <http://subs.emis.de/LNI/Proceedings/Proceedings92/gi-proc-092-005.pdf>
67. Shell, R. (2001) Electronic Bargaining: the Perils of E-Mail and the Promise of Computer-assisted negotiations. *Wharton on making decisions*, ed. Stephen Hoch, Howard G. Kunreuther. New York, Wiley.
68. Spang-Hanssen, Henrik Stakemann, *The Future of International Law: Cybercrime* (2008). Available at SSRN: <http://ssrn.com/abstract=1090876>.
69. Stephen E. Fieberg, (2006) Privacy and Confidentiality in an e-Commerce World: Data Mining, Data Warehousing, Matching and Disclosure Limitation, *Statistical Science*, Vol. 21, No. 2, 143–154. Available at: http://projecteuclid.org/DPubS/Repository/1.0/Disseminate?view=body&id=pdfview_1&handle=euclid.ss/1154979817.
70. Sun Microsystems. "Sun counters educational digital divide", Sun Microsystems press release, 2002.
71. The Benefits of Click-Wrap Contracts over Shrink-Wrap Contracts. Available on: http://www.designireland.net/index.php?http%3A//www.designireland.net/alpha/controller/view_article.php%3Foid%3D00000000015.
72. Thevenet, Cédric (Nov 2005) "Cyberterrorisme, mythe ou réalité?". From the World Wide Web : http://www.terrorisme.net/pdf/2006_Thevenet.pdf.

73. Tipton, H. F. (2007). *Information Security Management Handbook* (6th ed.). Boca Raton: Auerbach.
74. Transparency International Handbook, “Curbing Corruption in Public Procurement”, 2007, and cited at page 15, “United Nations Convention against Corruption: implementing procurement-related aspects,” Conference Room Paper submitted by the United Nations Commission on International Trade Law to the Second session of the Conference of the States Parties to the United Nations Convention against Corruption (CAC/COSP/2008/CRP.2).
75. Uhuru Kenyatta, “Public Procurement Reforms in Kenya”, Remarks by the Permanent Secretary, Treasury at the Opening of the 2nd Annual Public Procurement Stakeholders Consultative Forum at the Kenyatta International Conference Centre on 31st July, 2009.
76. UNCITRAL Model Law on Electronic Signatures with Guide to Enactment, 2001.
77. UNDP. *Human Development Indicators 2003: Adult literacy rate (% age 15 and above)*. 2003. @:
78. UNICITRAL, “United Nations Convention against Corruption: implementing procurement-related aspects”, A Discussion Paper submitted to the Conference of the States Parties to the United Nations Convention against Corruption, Second session Nusa Dua, Indonesia, 28 January-1 February 2008; http://www.uncitral.org/pdf/english/working_groups/wg_1/INF.2.pdf
79. United Nations Convention on Contracts for the International Sale of Goods Summary. Available at: http://www.uncitral.org/uncitral/en/uncitral_texts/sale_goods/1980CISG.html.
80. United Nations Convention on the Use of Electronic Communications in International Contracts Summary. Available at: http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/2005Convention.html.
81. VeriSign Website: <http://www.verisign.com/>. Accessed on the 29 September 2010. VeriSign is one of the renowned certification authorities in the World.
82. W. Odiambo and P. Kamau, “Public Procurement: Lessons from Kenya, Tanzania and Uganda” (OECD, Working Paper No. 208, 2003) available at <http://www.oecd.org/dataoecd/59/11/2503452.pdf>.

83. Wanja Thairu, "Application of E-Government in Kenya: Current Status and Future Prospects", Available at: <http://www.mu.ac.ke/academic/schools/is/journal/articles/thairu1.pdf>
84. Wayne A. Wittig, Public Procurement and the Development Agenda, International Trade, CH-1211 Geneva 10, Switzerland.
85. Weimann, Gabriel (2006). *Terror on the Internet: The New Arena, the New Challenges*. United States Institute of Peace, U.S
86. Whitelaw, K. 1998. *Terrorists on the Web: Electronic 'Safe Haven'*. US News & World Report, Vol.124, p. 46.
87. Wolfgang Hahnkamper, (2005), Acceptance of an Offer in Light of Electronic Communications Journal of Law and Commerce, Vol. 25.