

# UNIVERSITY OF NAIROBI

# IMPACT OF PUBLIC PROCUREMENT PROCEDURES ON DELIVERY OF MAINTENANCE WORKS

Case of The Ministry of Housing, National Social Security Fund and Kenyatta National Hospital Maintenance Projects

#### Catherine Mutava

# BA (Land Economics) Hons (UON)

# B50/60348/2010

A Research Project Submitted as Part Fulfillment for the Award of Master of Arts Degree in Construction Management, Department of Real Estate and Construction Management, School of the Built Environment, University of Nairobi

July, 2012



# **DECLARATION**

I Catherine Mueni Mutava hereby declare that this research project is my original work and has not been presented for the award of a degree in any other university.

Signature. Called Signature
Date 19th NOVERTIBER ROTA
This project has been submitted for examination with our approval as the university supervisors.
Professor Paul Syagga.
Date Date
EL 11 V
Dr Sylvester Masu. XMV0
Date $19-11-2012$ .

#### **ACKNOWLEDGEMENTS**

My special thanks go to the Government of Kenya through the Ministry of Housing for sponsoring me to undertake the postgraduate study program. The cooperation and support accorded to me by my Director Mr. Patrick Bucha and Senior Assistant Director Mrs. Anne Luvinzu during the period of study is also highly appreciated.

Secondly, I thank in a special way my supervisors Prof. Paul Syagga and Dr. Sylvester Masu for their positive criticism and guidance that shaped this work. The whole academic staffs in the department of real estate and construction management is also appreciated. They invariably prepared me to undertake the research project

This study benefited from constructive insights provided by staff of Ministry of Housing – Estates Department, National Social Security Fund and Kenyatta National Hospital who filled the questionnaires and were also interviewed. I sincerely thank them.

I would like to thank my work colleagues Mrs. Grace Mwangi, Mr. Adolf Abuga, Mr Julius Mwangi and my classmates for their presence and encouragement during the study

Special thanks go to my immediate family especially my husband for the understanding and encouragement during the study period.

To all those who assisted me in carrying the study and have not been specifically mentioned, I thank you all.

To the Almighty God, I return all the glory

# **DEDICATION**

To my family, you are my inspir	iration	ration	1
---------------------------------	---------	--------	---

#### **ABSTRACT**

The public procurement system in Kenya has been undergoing reforms consistent with the global trend since the mid 1990s, most notably within the periods covering 1997-2001 and 2005.

The delivery of maintenance projects in Kenya is highly dependent on the efficacy and efficiency of the public procurement and tendering procedures. The procurement procedure leading to tender awards is too long depending on the choice of procurement method which cannot arrest an emergency.

Maintenance has very unique characteristics especially for corrective maintenance which is never planned and yet it is an emergency which is supposed to be addressed as it occurs. This is one of the many challenges faced by Public Institutions posed by Public Procurement and Disposal Act (PPDA). In addition equipment failure can create safety hazards, costly downtime while waiting for parts, and increased costs due to the associated disruptions. If parts are hard to find, out of service times can be greatly increased.

The intent of this research was to evaluate the challenges posed by PPDA on procurement for emergencies or unplanned maintenance in Kenya. It explored the effects of the PPDA on the delivery of unplanned maintenance projects; the challenges faced while carrying out public maintenance projects as well as determine the best and most suitable procurement and tendering system for emergencies. The hypothesis was Public procurement and tendering procedures have no effect on delivery and maintenance of projects. Data was collected using questionnaires and structured interview schedule administered some via face to face survey method and others mailed to a sample of 40 procurement and maintenance officers.

The findings indicate that the Public Procurement and Disposal Act affect Public Procurement and tendering of corrective maintenance projects in the public institutions. The major challenges being delays in terms of time due to a lot of documentation required, cost overruns and compromised quality of works. Thus approving the alternate and disapproving the null hypothesis.

The study therefore concludes that PPDA to be reviewed to make it more inclusive and responsive to the requirements of procurement for emergencies. The government should ensure the existing legislative framework and regulations are enjoined with monitoring and evaluation framework which would be crucial in successful implementation of PPDA. A vote for emergency response should also be set aside because with restrictions imposed by the PPDA most of the prequalified contractors are not always ready to provide the services within a short notice owing to liquidity problems.

. .

# TABLE OF CONTENTS

DECLA	ARATIONii
ACKNO	OWLEDGEMENTSiii
DEDIC	ATIONiv
ABSTR	v
TABLE	E OF CONTENTSvi
LIST O	F TABLESix
LIST O	OF FIGURESx
LIST O	OF PLATESxi
ACRO	NYMSxii
СНАРТ	FER ONE
BACKO	GROUND OF THE STUDY1
1.1	INTRODUCTION1
1.2	RESEARCH PROBLEM
1.3	Research Objective6
1.3.	.1 Specific Objectives were to:
1.4	Research Questions
1.5	Research Hypothesis
1.6	Significance of the Study7
1.7	Scope and Justification8
1.8	Organization of the Study8
1.9	Definition of Terms9
1.9	.1 Procurement9
1.9	.2 The Public Procurement and Disposal Act, 2005 (PPDA)
1.9	.3 Tendering9
CHAP	ΓER TWO10
LITER	ATURE REVIEW10
2.1	Introduction
2.2	Functional Definition of the Public Authority

2.3	Prir	nciples of the Procurement
2.	3.1	Value for Money
2.	3.2	Ethical Standards
2.	3.3	Competition12
2.	3.4	Transparency
2.	3.5	Accountability
2.4	Glo	bal Practices
2.	4.1	Basic Principles of Public Procurement
2.	4.2	Public Procurement Procedures
2.	4.3	Challenges in public procurement systems
2.5	An	Overview of the Public Procurement and Disposal Act 2005
2.	5.1	Open Tendering Part V of PPDA
2.	5.2	Alternative Procurement Procedures (PART VI OF PPDA)33
2.6	Bui	lding Maintenance
2.	6.1	Classification of Maintenance
2.	6.2	Components of maintenance
2.7	Cor	nceptual framework42
СНАН	PTER	THREE45
RESE	ARCI	H DESIGN AND METHODOLOGY45
3.1	Intr	roduction45
3.2	Des	scription of the Case Studies45
3.	2.1	Kenyatta National Hospital (KNH)
3.	2.2	National Social Security Fund
3.	2.3	Ministry of Housing
3.3	Res	search Design47
3.4	Pop	oulation48
3.5	San	nple Size and Sampling Procedure50
3.6	Dat	ta Collection Method and Instruments/ Research Instruments

3.	6.1 Qu	nestionnaires51	
3.	6.2 Str	ructured Interviews52	)
3.	6.3 Ph	otographs52	)
3.7	Piloting	g of Questionnaires52	2
3.8	Data A	nalysis Design53	3
3.9	Testing	g of the Research Hypothesis53	3
CHAI	PTER FO	UR54	1
DATA	ANALY	SIS, PRESENTATION AND INTERPRETATION OF FINDINGS54	1
4.1	Introdu	ction54	1
4.2	The Re	sponse Rate54	1
4.3	Genera	l Information55	5
4.4	Effects	of PPDA on the Procurement of Maintenance Projects5	7
4.5	Challer	nges faced in carrying out Public Maintenance Projects	2
4.6	The Ide	eal Public Procurement and Tendering Systems for Emergencies	2
4.7	Chapte	r Conclusions	5
CHAI	PTER FIV	VE70	5
DISC	USSION	OF FINDINGS, CONCLUSION AND RECOMMENDATIONS70	6
5.1	Introdu	action	5
5.2	Discus	sion of Study Findings70	6
5.3	The St	udy Hypothesis7	8
5.4	Conclu	isions7	8
5.5	Recom	mendations7	9
5.6	Areas	of Further Study8	1
REFE	ERENCES	S AND BIBLIOGRAPHY8	2
APPE	NDICES	8	5
App	endix 1-Q	Questionnaire8	5
App	endix 2- 1	Interview Schedule9	0
App	endix 3- l	Research Permit and Authorisation9	3

# LIST OF TABLES

Table 1-1: Procurement and Tendering Timings	5
Table 2-1 Steps in Procurement Process.	35
Table 3-1 Distribution of Government Quarters per County	48
Table 4-1 Response Rate	55
Table 4-2 Working Experience	56
Table 4-3 Level of Management	56
Table 4-4 Emergency Projects and Cost Variation due to PPDA	58
Table 4-5 Time Taken for Maintenance Request to be Responded to	59
Table 4-6 Effects of PPDA on procurement for maintenance emergency services	61
Table 4-7 Challenges Encountered in Maintenance Emergency Procurement	63
Table 4-8 The Challenges Posed by PPDA in Carrying out Emergency Maintenance Projects	64
Table 4-9 Restricted Tendering	67
Table 4-10 Open Tendering	68
Table 4-11 Direct Tendering	68
Table 4-12 Recommendations to ensure emergency procurement is effective	71
Table 4-13 How to Make PPDA Responsive to Maintenance Emergency Projects?	73
Table 4-14 Factors Impending the Effective Corrective Maintenance in the Institution	74

# LIST OF FIGURES

Figure 2-1 Stages in the Open Tender Process	31
Figure 2-2 Types of Maintenance	38
Figure 2-3 Continuum of Maintenance for Buildings	40
Figure 2-4 Conceptual Framework	44
Figure 4-1 Frequency of Preparing Public Procurement Plans	57
Figure 4-2 Maintenance Policy	60
Figure 4-3 Challenges Faced in Procurement for Maintenance Services	65
Figure 4-4 Can the Procurement Plans be Reviewed?	66
Figure 4-5 Tendering Procedures Used	69
Figure 4-6 Procedure Applied for Emergency or Unplanned Maintenance	70
Figure 4-7 Recommendations	72
Figure 4-8 Institutions that have Manual Used in Performing Preventive Maintenance	74

# LIST OF PLATES

Plate 4-1 Broken Down Septic Tank the Case of Kilifi County		6	2
---	--	---	---

# **ACRONYMS**

PPDA Public Procurement and Disposal Act

CPAR Country Procurement Assessment Review

PPOA Public Procurement Oversight Authority

PPD Public Procurement Directorate

IPR Independent Procurement Review

PPCRAB Public Procurement Complaints, Review and Appeals Board

EU European Union

VFM Value for Money

OECD Economic Cooperation and Development

TEC Tsunami Evaluation Coalition

NGOs Non Governmental Organizations'

USD United States Dollar

M&E Monitoring and Evaluation

BS British Standard

U.S.A United States of America

SPSS Statistical Package for Social Sciences

KNH Kenyatta National Hospital

I.D.H Infectious Disease Hospital

NSSF National Social Security Fund

#### **CHAPTER ONE**

#### BACKGROUND OF THE STUDY

#### 1.1 INTRODUCTION

The delivery of maintenance projects in Kenya is highly dependent on the efficacy and efficiency of the public procurement and tendering procedures. At the beginning of 2000s, Kenya engaged in major procurement reforms under the combined pressures. Donors pushing for procurement reforms as a condition for lending and from the business community complaining of inefficient procurement which resulted in poor infrastructure and inefficient services.

The public procurement system in Kenya has been undergoing reforms consistent with the global trend since the mid 1990s, most notably within the periods covering 1997-2001 and 2005. Previous to these reforms, the legal framework governing public procurement was very amorphous, providing a conducive environment for the perpetration of various malpractices in public procurement including the endemic corruption that characterized the system.

A Country Procurement Assessment Review (CPAR) funded by the World Bank through the Public Procurement Assessment Reform and Enhanced Capacity Project was carried out in 1997. It revealed that there were serious shortcomings in the Kenyan public procurement system, unearthing the centrality of public procurement in the economy and laid ground for Public Procurement Reforms launched on 25th November, 1998 whose pillars of strengths were transparency, accountability and value for money (Juma, 2010 PPOA Bulletin –June 2010).

With the official launch of Public Procurement Reforms, the country set itself on the reforms road in the area of public procurement by putting in place a unified legal and regulatory framework to guide the reforms. This was realized through the gazettement of the Exchequer and Audit Act (Public Procurement), Regulations, 2001 which harmonized all the Treasury circulars and manuals governing procurement in the public sector and put in place an institution to oversee development and implementation of the public procurement policy in Kenya and improve transparency. This led to the creation of the Public Procurement Directorate (PPD) to oversee the public procurement process in Kenya; and the Public Procurement Complaints, Review and Appeals Board (PPCRAB) to handle tendering disputes. Despite this being a huge stride towards reforms, an Independent Procurement Review (IPR) of the Kenyan procurement system, carried out in 2005, and pinpointed various weaknesses. Top being the need for fundamental procurement principles in the procurement process to

be anchored in an Act of Parliament rather than being relegated to Regulations (Juma, 2010 PPOA Bulletin –June 2010).

Thus it was necessary to extend further the procurement reform process and have a sound legal framework through an Act of Parliament to allow for proper enforcement and remedy the issues arising from the Independent Procurement Review (IPR) report.2.

The landmark in the reforms was in 2005 when the Public Procurement and Disposal Act, 2005 was enacted by Parliament. The Act established three independent bodies; an oversight body, the Public Procurement Oversight Authority (PPOA), Public Procurement Oversight Advisory Board and the Public Procurement Administrative Review Board. The Act repealed all other laws relating to procurement in public entities ensuring that all procurement is done under one umbrella. It also widened the scope of application of the law and provided a proper basis for enforcement. With the gazettement of the subsidiary legislation, the Public Procurement and Disposal Regulations 2006, the law became operational on 1<sup>st</sup> January, 2007 (Kirugu, 2010 PPOA Bulletin).

The Public Procurement and Disposal Act, of 2005 was therefore assented to on 26<sup>th</sup> October 2005 (revised in 2009) to establish procedures for procurement and the disposal of unserviceable, obsolete or surplus stores and equipment by public entities. The following objectives were to be achieved;

- a) maximization of economy and efficiency
- b) promotion of competition and to ensure that competitors are treated fairly
- c) promotion of the integrity and fairness of the procedures
- d) increased transparency and accountability in the procedures
- e) increased public confidence in the procedures, and
- f) facilitation of the promotion of local industry and economic development

Despite of progress made, the new procurement regime still faces the following challenges;

i. The new procurement regime lacks a firm legal basis. The Minister for Finance can potentially simply repeal the regulations and retain a great deal of power that can be used to hamper reforms. In 2003, for example, all public procurement officers were suspended, allegedly to purge procurement process of corruption.

- ii. The exemption of National Security and Defence Procurements from the new regulations. This should be considered a flaw of the system, as a number of corrupt security procurements have been exposed by the media, including the Anglo Leasing scandal (Madara Ogot, 2009).
- iii. Additional challenges in emergency related procurement that need to be taken into account when designing relevant policy options to address corruption risks in procurement processes.

#### 1.2 RESEARCH PROBLEM

Recent reports in the newspaper have highlighted that The Parliamentary Committee on Transport wants the Government to simplify procurement procedures to prevent Ministries from returning funds to Treasury at the close of every financial year. (Standard Newspaper.15/6/2011) "It is sad that the money was not used despite being allocated for projects," said the Committee Chairman (David Were, 2011).

He noted that the Government should review the Procurement Act to enable ministries release funds for projects without delays. "How can money be returned yet some of the contractors who were given tenders in various constituencies have not been paid their money?"

In addition to the above challenges the other public institutions governed by PPDA are not exceptional from these procurement woes since they are governed by the same Act which include;

Overpricing (buying at inflated prices) and lack of a structured authorization of expenditure levels. The competition amongst bidders lacks fairness and transparency. Due to Inappropriate application of procurement methods there is uncontrolled low value procurement of items, poor procurement records and documentation and excessive delays in the procurement process. There is conflict of interest among players in the procurement system due to lack of legal permanence and enforcement

In operationalisation of The Public Procurement and Disposal Act, the ills facing corrective maintenance in the public sector result from the stringent procedures stipulated in the Act that have not been addressed. This is an area which has not been addressed even by the academia and therefore the researcher will be exploring procurement procedures in the public sector for corrective maintenance services, noting that Buildings are very important to mankind. Whether public or private they represent a high level of investment in terms of capital, materials, labour, land and time. Man spends over 80% of his time in buildings. Dilapidated and unhealthy buildings in decaying environment depresses the

quality of life, contributes to poor health and thus low productivity. There is need for proper management in order to preserve such investments to remain in habitable condition and sustain its lifespan and ensure safety in its usage. (Draft National Maintenance Policy, 2011)

The provided procurement procedures leading to tender awards are too long and not suitable for an emergency. The PPDA stipulates the specific time frame (statutory periods) for which a tender should be evaluated advertised and adjudicated as shown in Table 1.1. There is no statutory time limit for both request for quotation and direct procurement and can be applied in times of emergencies. This is not the case because request for quotation one allowed to spend up to a maximum of Kshs. 0.5m which may not be adequate and the quotations must be evaluated also. As for direct procurement approvals have to be sought from inspection and acceptance committee. These bureaucracies involved make this procedure unsuitable for corrective maintenance.

Table 1-1: Procurement and Tendering Timings

Procurement	Tender	Tender	Tender	Appeal	Minimum
Method	Preparation	Evaluation	Adjudication	Window	No. of Days
International open tender	Min 31 days	Up to 35	l day	14 days	46 days
National open tender	Min 21 days	Up to 35 days	1 day	14 days	37 days
Restricted tender	Min 14 days	Up to 35 days	1 day	14 days	30 days
Request for proposal	Min 14 days	Up to 35 days	1 day	14 days	30 days
Request for quotations	No statutory limitations	No statutory limitations	No statutory limitations	No statutory limitations	No statutory limitations
Direct procurement	No statutory limitations	No statutory limitations	No statutory limitations	No statutory limitations	No statutory limitations

## Source; (Kenya Procurement Journal Issue No. 6 June 2010- Quarterly PPOA Bulletin)

Maintenance has very unique characteristics especially when it comes to corrective maintenance unlike planned maintenance. Though not planned for the institutions should be in a position to address it as soon it occurs. This is one of the many challenges faced by Public Institutions posed by PPDA. In addition equipment failure can create safety hazards, costly downtime while waiting for parts, and increased costs due to the associated disruptions. If parts are hard to find, out of service times can be greatly increased.

Preventive maintenance which is scheduled maintenance and has specific time frames can avoid many of the problems associated with reactive maintenance. It is proactive and can reduce downtime costs, eliminate recurring problems, extend the useful life of a piece of equipment or a building and save energy.

This has led to maintenance decisions being left to expediency thus representing a series of ad hoc and unrelated compromises between immediate maintenance needs and the availability of funds resulting

into dilapidated state of disrepair, run down values and economic blight in many public buildings and residential neighbourhoods.

A knowledge gap therefore exists about the challenges posed by Public Procurement and Disposal Act on the procurement of maintenance services and especially emergencies or unplanned maintenance. It is this gap that the study seeks to fill by exploring the following objectives and evaluating the most appropriate procedures for procurement and tendering.

# 1.3 Research Objective

The main objective of the study was to establish the effect of the Public Procurement and Tendering Procedures on delivery of maintenance projects.

# 1.3.1 Specific Objectives were to:

- a. Establish the effects of the Public Procurement and Disposal Act on the procurement of public maintenance projects
- b. Evaluate the challenges faced in carrying out public maintenance projects
- c. Determine the ideal procurement and tendering system for emergencies and other unplanned maintenance projects in the public sector

#### 1.4 Research Questions

- 1) What are the effects of Public Procurement and Disposal Act on procurement for services of maintenance projects in the public sector?
- 2) What are the challenges faced while carrying out building maintenance projects?
- 3) Which is the best and most suitable procurement system for public maintenance services?

## 1.5 Research Hypothesis

The study investigates the challenges posed by the public procurement and tendering procedures on delivery on maintenance projects and has the following null and alternate hypothesis;

H<sub>0</sub>= Public procurement and tendering procedures have no effect on delivery of maintenance of projects.

H<sub>A</sub>=Public procurement and tendering procedures have effect on the delivery of maintenance of projects.

#### 1.6 Significance of the Study

While this study may be of value to any person interested in, procuring any service in the Kenyan public sector, it is hoped that the findings will specifically benefit the following groups of people.

# i. The Government and the Policy Makers

The Government and the policy makers stand to benefit from the findings of the study as they will gain insight on methods to apply to while procuring for maintenance services in public institutions.

#### ii. Academics

The study is expected to contribute to the existing literature in the field of procurement and more specifically for maintenance purposes. Future scholars can use this research as a basis for further research in the area of procuring maintenance services.

#### iii. Estates and Maintenance Officers

The study stands to benefit all the estates and maintenance officers in the public institutions as they will understand the best way of procuring services for maintenance purposes.

In Kenya there is no comprehensive study done after the introduction of public procurement act on its effect on the tendering and procurement procedures by government institutions whether it has improved the performance management of maintenance projects.

This study explored the impact of Public Procurement and Disposal Act on the procurement and tendering for corrective maintenance projects.

## 1.7 Scope and Justification

The study concentrates on procurement and tendering procedures as stipulated in the Public Procurement and Disposal Act (PPDA) which regulates public institutions on procurement for goods and services.

The study dealt with procurement for corrective maintenance services in the public sector. Unplanned or emergencies or corrective maintenance has some unique characteristics which The Act did not take into consideration. This poses great risks for instance when a breakdown occurs eg sewage spillage which needs to be sorted out immediately and the services cannot be procured at the same rate of breakdown. It is a challenge for both the maintenance and procurement officers to procure the services immediately.

#### 1.8 Organization of the Study

This study is organized into five chapters

Chapter 1 forms an introduction of the study and contains the preliminary items forming the background of the study, statement of the problem, study objectives, research questions, significance and justification of the study.

Chapter 2 provides a review of the books, articles and researches related to the subject of the research as theoretical and practical foundations for the research. The theories and concepts in the literature review becomes the basis for identifying and understanding public procurement and tendering procedures.

Chapter 3 explores the methodological guide for the conduct of the study particularly the type of data to be gathered, sampling method, analysis approaches, and ethical concerns such as credibility and reliability of the research.

**Chapter 4** contains data presentation and analysis directed towards answering the problems identified in the research.

And finally **Chapter 5** contains the conclusions and recommendations of the researcher based on the data presented and analyzed.

#### 1.9 Definition of Terms

#### 1.9.1 Procurement

According to the Oxford Dictionary, Procurement is the process of obtaining supplies of something, especially for a government or an organization. It is also the process that is used to deliver construction projects (Ashworth and Hogg, 2000) in the Construction Industry. The Procurement Process embraces the following phases: initiation, preliminary design and development, detailed design, contracts and procurement, manufacture and construction, commissioning, operation and maintenance (McCaffer, 2001).

In the context of the study, procurement is a formal process of acquiring services for un-planned maintenance works.

#### 1.9.2 The Public Procurement and Disposal Act, 2005 (PPDA)

PPDA is a national law in Kenya that defines procurement as the acquisition by purchase, rental, lease, hire purchase, license, tenancy, franchise, or by any other contractual means of any type of works, assets, services or goods including livestock or any combination with the prime goal of gaining value for money.

#### 1.9.3 Tendering

According to McGeorge & Adams (2003) Tendering is a purchasing procedure whereby potential suppliers are invited to make a firm and unequivocal offer of the price. Tendering is a call for tenders or merely 'Invitation to treat'. Tendering is a formal and legal procedure of soliciting tender offers in order to select the most suitable service provider or supplier (Tasmania, 2006).

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviews literature on public procurement and nature of maintenance of buildings. It covers secondary materials related to the conceptual issues as well as definitional and other factors affecting procurement.

According to the Oxford Dictionary, Procurement is the process of obtaining supplies of something, especially for a government or an organization. It is also the process that is used to deliver construction projects (Ashworth and Hogg, 2000) as cited by Muriithi (2006) The Procurement Process embraces the following phases: initiation, preliminary design and development, detailed design, contracts and procurement, manufacture and construction, commissioning, operation and maintenance. (McCaffer, 2001).

#### 2.2 Functional Definition of the Public Authority

Muller (2008) observes that whereas the classical German law of public procurement presents a formal definition of a public authority, EU law views the public authority in a functional way. From the latter point of view, the legal form assumed by the public authority is of no importance. It is only the function the public authority is fulfilling at the time that is taken into consideration.

#### Public authorities include, among others:

- i. Territorial bodies (e.g. federation, states, etc.) as well as their separate properties
- ii. Other legal entities under public or private law which were created in order to fulfil non-profit tasks in the public interest and which are financed, essentially controlled or supervised by public offices
- iii. Associations whose members are categorized under either (i) or (ii) above
- iv. Companies in the field of drinking water or energy supply or in the transportation or telecommunication sector, whenever they operate on the basis of exclusive or extraordinary governmental rights or are controlled by public authorities who fall into one of the categories from (i) to (iii)

- v. Companies whose construction works as defined by law is financed to more than 50% by public authorities who fall into one of the categories from (i) to (iii).
- vi. Item V is also applicable when the companies mentioned are not compensated for their work in cash, but rather with the right to use the building facilities

# 2.3 Principles of the Procurement

Bauld and McGuinness (2006) note that the key principles underpinning public procurement are:

- a) Economy; value for money,
- b) Ethical Standards,
- c) Competition,
- d) Transparency and
- e) Accountability.

# 2.3.1 Value for Money

Value for money (VFM) is the most important principle of procurement. VFM in the public sector entails consideration of the contribution to be made to advancing government policies and priorities while achieving the best return and performance for the money being spent (Bauld and McGuinness, 2006).

Sometimes the government is at liberty to consider other criteria than the lowest price; for example technical capabilities, qualifications of key personnel, and past performance records in awarding contracts to potential suppliers (Cummings and Qiao, 2003). Some of the barriers which need to be overcome in order to achieve VFM are weak governing bodies, politics, tradition, and lack of education and training programmes (Palmer and Butt, 1985). Procurement is a purchasing activity whose purpose is to give the procuring entity or project owner best value for money. For complex purchases, value may imply more than just price, for example, since quality issues also need to be addressed. Moreover, lowest initial price may not equate to lowest cost over the operating life of the item procured. But the basic point is the same: the ultimate purpose of sound procurement is to obtain maximum value for money.

Benchmarking VFM can often be very difficult. VFM is a very broad concept encompassing a range of factors, and it is very important to understand the implications it has for the public sector. Although VFM criteria often seem self explanatory, benchmarking VFM can be difficult where the subject

matter is technically complex, requires sophisticated understanding and there is no universally accepted methodology to follow (Bauld and McGuinness, 2006)

#### 2.3.2 Ethical Standards

Ethics is another important principle of government procurement. Purchasing professionals are held to higher standards of ethical conduct than people in other professions, yet some do not even know what is expected of them (Atkinson, 2003). If the workforce is not adequately educated in such matters, this may lead to serious consequences; including, breaches of codes of conduct. According to Atkinson (2003) there are approximately 500,000 professional purchasing people in the United States and only 10 per cent of these have been members of a professional Supply Chain Management Association which trains members in purchasing ethics, and the rest are not even aware that there are ethical and legal standards involved in procurement.

Recent developments in the United States of America, the United Kingdom, and other developed countries have shown that the practice of making financial contributions to Party funds or to Members of Parliament in order to secure benefits are prevalent in both developed and developing countries (Rege, 2001). However, procurement related corruption tends to be a serious problem in developing countries rather than in developed countries. World Bank studies put bribery at over \$1million per year accounting for up to 12 percent of the GDP (Gross Domestic Product) of nations like Nigeria, Kenya, Venezuela (Nwabuzor, 2005) and Sri Lanka. The main cause of corruption is poverty in these regions. This has resulted in corruption among government procurement officials in developing countries such as Bangladesh, India, SriLanka, Nigeria and Venezuela. There is also a weak enforcement of the rule of law in these regions (Nwabuzor, 2005), and therefore urgent measures are needed to cope with the corruption in developing nations.

#### 2.3.3 Competition

Competitive tendering is the means by which most goods and services are procured. Before moving on it is perhaps best to understand how competition occurs in procurement. For example, in Australia, if the Melbourne Ports Authority is interested in the purchase of Gantry Cranes, the Ports Authority will advertise and call for bids from potential suppliers. In this process there will be bids from major suppliers and a technical evaluation committee would be involved in the decision-making process

while a tender board and technical evaluation committee would evaluate whether bids are in accordance with the technical requirements they have stipulated in the tender conditions.

In this process competition occurs. The supplier's credibility in carrying out previous contracts of this nature, the price and the most competitive bidder will be awarded the tender. The most important information source for suppliers is the tender advertisement and, for the contracting authorities, the bids submitted and provision of inaccurate data will result in misunderstandings and increased costs (Erridge et al, 1999). The better the quality of information provided the less likely that it will result in an unsatisfactory purchase (Erridge et al, 1999, pp. 37-42).

#### 2.3.4 Transparency

The function of transparency is also important in procurement and it refers to openness. Transparency therefore is an essential aspect of ensuring accountability and minimizing corruption, and has gained prominence in Organizations for Economic Cooperation and Development (OECD) countries, and is particularly associated with the rise of the governance agenda as transparency is a core governance value (Smith-Deighton, 2004).

Government procurement is one area where corruption is rampant in both developing and developed countries. (Nwabuzor, (2005). The recipients of clandestine payments may not only be the officials who are responsible for decision making but also ministers and political parties. Transparency requires governments to adhere to higher standards of conduct by ensuring that conduct will be open to scrutiny (Smith-Deighton, 2004). The obligation to invite tenders, the transparency of the procedures used in awarding contracts and the right which the agreement would give to aggrieved suppliers to challenge the decisions would restrain both domestic and foreign suppliers from making under-the table payments and deter public officials and political parties from receiving such payments (Rege 2001, pp. 485-515).

Transparency in government procurement will provide an assurance for both domestic and foreign investors that contracts will be awarded in a fair and equitable manner. In all markets, a lack of transparency in the sense of absence of information on rules and practices could operate as a barrier to trade and may affect foreign suppliers more than local ones (Arrowsmith, 2003). These rules would also ensure that goods and services are obtained at the most economic prices and thus lead to a reduction in costs.

According to Rege (2001) the most important benefit of transparent and open procedures is the impact which their adoption may have on the level of corruption in countries where it is widespread. Therefore, transparency promotes trust by allowing stakeholders to see and judge the quality of government actions and decisions (Smith-Deighton, 2004). Good procurement establishes and then maintains rules and procedures that are accessible and unambiguous. It is not only fair, but should be seen to be fair.

#### 2.3.5 Accountability

The concept of accountability does not only apply to the public sector (Barrett, 2000). The Boards of private sector organizations are also accountable to their stakeholders (Hughes, 2003). Public servants have to take the influence of politics into consideration in the implementation of their duties while the private sector gives more attention to the market mechanism (Stewart, 1999). Accountability, an important principle of government procurement, comes into play at both the national and international levels. At the international level, governments are often involved in trading activities and procure goods and services such as defence equipment, provide or receive aid, and operate diplomatic posts in other nations and the conduct of these activities results in financial risk exposures, and accountability problems.

At the national level public sector managers have to deal with a more competitive environment than has been the common practice in the past. The public is also demanding greater accountability and better service (Gunasekaran, 2005). Therefore, managing the risks associated with the complex competitive environment give rise to accountability problems (Barrett, 2000) as the roles and responsibilities of the participants in the process are not clear. Good procurement holds its practitioners responsible for enforcing and obeying the rules. It makes them subject to challenge and to sanction, if appropriate, for neglecting or bending those rules. Accountability is at once a key inducement to individual and institutional probity, a key deterrent to collusion and corruption, and a key prerequisite for procurement credibility.

Public service agencies strive to maximize overall 'value for money' for citizens. This requires consideration of issues such as client satisfaction, the public interest, fair play, honesty, justice and equity (Barrett, 2000; Korosec and Bartle, 2003). Recent theorists also point to the importance of public administration as a moral and ethical concern and recognize that administrative action is permeated by moral choices and are therefore models of not only technical and professional competencies but also of moral behaviour (Schlosser, 2003).

A sound procurement system is one that combines all the above elements. The desired impact is to inspire the confidence and willingness-to-compete of well-qualified contractors, suppliers and consultants. This directly and concretely benefits the procuring entity or project owner and its constituents, responsive contractors and suppliers or consultants, and the donor agency providing the project finance.

#### 2.4 Global Practices

#### 2.4.1 Basic Principles of Public Procurement

#### i. Competition and Economy

These principles are not to be considered as existing separate from one another, but rather as existing in close interdependency. That is to say, the EU competition principle derives from the notion that competition among several bidders leads to real market prices and conditions, which in turn in the majority of cases guarantees the public authorities that they are conforming to the principle of economic budgeting.

#### ii. Transparency

According to (Trepte, 2007) the principle of transparency also serves the above purpose. Transparent processes are meant to ensure that all procurements by public authorities can be reviewed in order to make sure that they conform to the regulations prohibiting discrimination.

This principle goes hand in hand with the principle of competition, as only processes that are transparent can enable true competition and make distortions so apparent as to virtually prevent them. The transparency principle gives way to regulations such as those governing the publication of a tender notice and the public notification of the results.

#### iii.Non-Discrimination

The principle of non-discrimination is also tightly interwoven with the principle of competition. It calls for equality in the treatment of all of the bidders – and this independent of whether or not they are domestic bidders or bidders from other Member States of the European Union. The latter are to have the same rights as domestic companies to offer, and ultimately to provide their services. All of the bidders are to be treated equally throughout all of the phases of the procurement process, thereby ensuring equal chances for all of them.

## iv. Special Support for Small and Mid-Sized Independent Businesses

The German assimilation of European law presents a certain exception to the principle of equal treatment in the procurement process by its application of the principle of special support for small and mid-sized independent businesses, which consists of breaking down large orders into various "specific and partial lots". That offers bidders a chance to compete who would otherwise not be able to do so, not being in a position to cover the whole range of services necessary to fulfil the order and/or not having the financial backing to do so. This special support principle allows them to compete for orders for services limited to the special kind they provide and for only a share of the entire project

# 2.4.2 Public Procurement Procedures

# The most important types of procedures

Both German and EU public procurement law foresee essentially three different ways to place orders for contracted construction work and services and for purchase orders - the open procedure, the restricted procedure and the negotiation procedure. Somewhat different terminology is used in the case of procurement under the threshold values, which are carried out in accordance with the basic paragraphs of the **standard building contract terms** and **standard contracting terms** but the procedures are nonetheless virtually identical. The open procedure is equal to the public call for bids, the restricted procedure is the equivalent of the restricted call for bids and the negotiation procedure is the same as single tender action (Arrowsmith, 2006).

As a general rule, the public authority is committed to select the open procedure unless special reasons permit the use of the non-open or even the negotiation procedure. German public procurement law deviates somewhat from the EU directive, according to which only the choice of the negotiation procedure requires special reason and leaves choosing between the open and restricted procedures up to the decision of the public authority.

#### a. Open Procedure

In an open procedure, any company interested in participating has the opportunity to submit a proposal. The proposal must conform to the requirements of the administrative department that issued the call. No alterations of the standard application documents, e.g. of the legal terms and conditions

contained in them are permissible, as that would make it very difficult if not impossible to compare the offers. The terms of contract are thus laid out exclusively by the office calling for the bids. Any violation of this principle by a bidder automatically disqualifies him and his submission is rejected.

In parity with these restrictions, the public call for bids must also mention all of the things that are necessary for a bidder to submit a proper and complete proposal. This often presents a major challenge to the public authorities, particularly when they are dealing with highly technical subject matter. In such cases, the bidders are allowed to ask questions during the submission phase of the process in order to clarify the content of the call for proposals. The answers to these questions are shared with all of the bidders so as to conform to the principles of non-discrimination and transparency.

The forbiddance of any modification of the terms and conditions of the call for bids is particularly worthy of notice with respect to the general terms of business and standard contract forms that are preferentially used by U.S. companies. Such standardized forms cannot be successfully submitted in an open procedure in Germany. In the event that a bidder cannot or does not want to fulfil all the requirements of a call for proposals, the most he can do is submit a so-called "auxiliary bid" Whether or not auxiliary bids are even permissible or whether or not they are only permissible in the context of a main tender can be derived from the public announcement of the call for bids (Bovis, 2007).

Outside of the submission of auxiliary bid, the only possible way to influence the terms and conditions of the offer is to file an official administrative complaint and initiate review proceedings. However, this is only possible when there has been some violation of public procurement law, and allegations to that effect seldom hold up under close legal scrutiny. On the other hand, a violation of public law can indeed exist if the announcement of the call for bids made it impossible to submit a clear offer because it failed to make certain essential statements or because it contained contradictory statements. It is also important to note that in an open procedure, the bidder who receives the contract is the one who has submitted the most economical offer. With the announcement of the winner, the order is automatically placed and a legally binding contract for the services as described comes into being.

#### b. Restricted Procedure

In a restricted procedure, only certain companies are requested to submit a proposal. They are companies that have been selected in a preliminary participation contest, the request for participation in contracts. On the other hand, the request for participation is open to all companies and any of them can submit proposals for participation. In the request for participation, they are required to make

statements in regard to their special know-how, performance capability and reliability that can be used to judge their eligibility for the second round (Stergiou, 2009).

In the case of procurements under the threshold amounts, the law does not absolutely require that an open request for participation be held preliminary to a restricted call for bids. If the administrative office issuing the call has sufficient knowledge of the market, it can do away with the request for participation.

In this procedure as well, just as was the case in the open procedure, an application for a contract has to be submitted precisely the way indicated by the administrative office issuing the call, which is to say that there can be no modifications of the standardized submission forms and the bidders are not allowed to attach their own general terms of business of standard contracts. Subsequent corrections or negotiations of the proposals are likewise impermissible.

## c. Negotiation Procedure

This procedure is an exception that comes into play only when the important reasons mentioned by the standard official terms of contract permit it. For example, this is the case when no economic results can be expected from an open or a non-open procedure, when such a procedure has already been conducted without producing any economically feasible results, when there is only one particular company that is capable of providing the required service, or when there is time pressure due to the occurrence of unforeseen events and it is no longer possible to carry out any other procedure. Depending on the reason for initiation of the negotiation procedure a preliminary participation contest may or may not be required.

#### d. Competitive Dialogue/ Negotiation

This new procedure is used for very complex projects only, where the public authority is not able to give a detailed specification for the requested performances. Therefore, the public authority has to select a number of companies which shall create such a specification in dialogue with the public authority and each other. Afterwards the public authority chooses again some or all of these companies for a kind of a restricted procedure, where the corresponding companies each may submit a detailed tender according to the developed specification.

Negotiations are generally not permitted in the case of tendering procedures since this would, *prima facie*, open up the possibility of unequal treatment and discrimination (Stergiou, 2009). However, the possibility of negotiation was introduced and may be used during the open or selective procedures under the stated conditions. Effectively, provided the intention to do so was indicated in the invitation to participate, negotiations may be conducted with the bidders. Even in the absence of such an indication, recourse may also be had to negotiations where it appears from the evaluation that no one tender is obviously more advantageous in terms of the specific evaluation criteria set out in the notices or tender documentation.

The purpose of the negotiations is primarily to identify the strengths and weaknesses in the tenders and the negotiations must be kept confidential so that no information shall be provided that is intended to assist particular participants to bring their tenders up to the level of other participants. The process must be non-discriminatory and the entities must, in particular, ensure that

- a) Any elimination of participants is carried out in accordance with the criteria set forth in the notices and tender documentation:
- b) All modifications to the criteria and to the technical requirements are transmitted in writing to all remaining participants in the negotiations;
- c) All remaining participants are afforded an opportunity to submit new or amended submissions on the basis of the revised requirements; and
- d) When negotiations are concluded, all participants remaining in the negotiations shall be permitted to submit final tenders in accordance with a common deadline.

#### Formal steps in the evaluation of submitted tenders

Muller (2008) notes that once the submission deadline has been surpassed, all of the tenders received are evaluated and successively weeded out according to the following criteria:

#### a) Automatic disqualification

The first tenders to be weeded out are those that do not comply with the obligatory rules and regulations (e.g. missing signature).

## b) Discretionary disqualification

Not all rules and regulations absolutely require compliance and automatically disqualify any tenders that do not comply. In some cases, noncompliance can result in disqualification though not necessarily. The next step involves the evaluation of cases of such noncompliance and the decision of whether to disqualify them or not.

#### c) Rejection of bidders not qualified for the job

In the next round, the tenders are examined with the intention of determining whether or not the bidders create the impression of being qualified to properly render the services offered. That is done mainly by examining the attached documents and the statements made in regard to technical know-how, performance capability and capacity as well as reliability. This evaluation corresponds to the evaluation process that is followed in preliminary contests for participation. The tenders of any bidders which do not meet these criteria are added to the rejection pile.

#### d) Content evaluation

Only the remaining tenders are evaluated in terms of their content. Here the service offered and the price that is asked for it is the most important evaluation criteria. The evaluation criteria have to have been uniformly selected. Some government offices offer assistance to public authorities in the determination of the uniform criteria to be used in evaluating tenders.

In so far as certain items contained in the tender require further explanation, the administrative office issuing the call for bids can ask the bidders questions and communicate with them solely for the purpose of removing any doubts. It is, however, impermissible to make any modifications to the tenders during or as a result of such exchange. The most economical tender is then selected on the basis of the criteria previously selected.

#### e) The Limited Procedure.

Under this procedure (previously called "single tendering"), a procuring entity may contact a supplier or suppliers directly and individually and negotiate the terms of a contract directly with that supplier or suppliers (Bovis, 2007).

Limited tendering applies in the following circumstances;

- i. in the absence of tenders in response to an open or selective tender, or when the tenders submitted have been collusive, or not in conformity with the essential requirements in the tender, or from suppliers who do not comply with the conditions for participation provided for
- ii. when, for works of art or for reasons connected with protection of exclusive rights, such as patents or copyrights, or in the absence of competition for technical reasons, the products or services can be supplied only by a particular supplier and no reasonable alternative or substitute exists;
- iii. in so far as is strictly necessary when, for reasons of extreme urgency brought about by events unforeseeable by the entity, the products or services could not be obtained in time by means of open or selective tendering procedures;
- iv. for additional deliveries by the original supplier which are intended either as parts replacement for existing supplies, or installations, or as the extension of existing supplies, services, or installations where a change of supplier would compel the entity to procure equipment or services not meeting requirements of inter-changeability with already existing equipment or services (Arrowsmith, 2006).
- v. when an entity procures prototypes or a first product or service which are developed at its request in the course of, and for, a particular contract for research, experiment, study or original development. When such contracts have been fulfilled, subsequent procurements of products can be done
- vi. when additional construction services which were not included in the initial contract but which were within the objectives of the original tender documentation have, through unforeseeable circumstances, become necessary to complete the construction services described therein, and the entity needs to award contracts for the additional construction services to the contractor carrying out the construction services concerned since the separation of the additional construction services from the initial contract would be difficult for technical or economic reasons and cause significant inconvenience to the entity. However, the total value of contracts awarded for the additional construction services may not exceed fifty per cent of the amount of the main contract;
- vii. for new construction services consisting of the repetition of similar construction services which conform to a basic project for which an initial contract was awarded and for which the

entity has indicated in the notice intended procurement concerning the initial construction service, that limited tendering procedures might be used in awarding contracts for such new construction services; for products purchased on a commodity market;

viii. For purchases made under exceptionally advantageous conditions which only arise in the very short term. This provision is intended to cover unusual disposals by firms which are not normally suppliers, or disposal of assets of businesses in liquidation receivership. It is not intended to cover routine purchases from regular suppliers;

## f) Accelerated Procurement Procedures

Accelerated procurement procedures establish alternative procedures to operate during times that demand enhanced flexibility, responsiveness and accountability by public organisations. Within this category there are two types of accelerated procurement: emergency procurement and non-emergency accelerated procurement. Emergency procurement is used in contexts where life, property or equipment is immediately at risk or standards of public health, welfare or safety need to be re-establish without delay.

Examples include government's responses to natural disasters (e.g. earthquakes, floods and typhoons) and epidemic risks. Non-emergency accelerated procurement procedures are used in contexts where unforeseen circumstances arise and require an urgent response by public organisations. In comparison to emergency procedures, non-emergency accelerated procurement should be used only as an exception and not the norm (Stergiou, 2009).

#### 2.4.3 Challenges in public procurement systems

According to (Stergiou, 2009) large amounts of public funds are expended to purchase goods and services from the private sector and most of the procedures are conducted manually, where two risks are eminent i.e. human error, which exceptionally high considering the numerous processes and movement of documents that stretches over a long time frame and equally potent risk of corruption during the stages of the procurement process.

At each stage of the public procurement process, there are particular risks involved;

Stage 1 risks

a. In adequate choices of procedures

- b. Lack of adequate assessment and planning
- c. Insufficient timeframe preparation
- d. Inconsistent practices across the bidders in the first stage

#### Stage 2 risks

- a. The selection of suppliers have inconsistent bidders' information
- b. Conflict of interest situations are prevalent
- c. Lack of access to record procedures
- d. Biased towards favoured bidders
- e. Collusive bidding resulting in incorrect prices

#### Stage 3 risks

- a. Contract administration has insufficient monitoring process
- b. No transparency in contracts being awarded
- c. There lack of separation of financial duties especially involving the payment process.

The United Nations (2004) article 9(2) provided that a procurement system should ensure adequate internal control and risk management. The procurement system should have installed an arrangement of integrated systems that link various functions such as budgeting and planning, procurement procedures and the contract or project implementation process

#### Corruption in public procurement-

Public procurement is a government activity most vulnerable to corruption, collusion, fraud and manipulation.

Types of corruption schemes prevalent could be classified under 5 main streams namely

- 1) **Kick backs** is where illegal secret payments are made as a return for a favour or a bribe and usually calculated in the form of a percentage, a share, a cut, a commission or a payoff. These include
  - a. Bias in contractor selection
  - b. Preferential treatment for certain contractors
  - c. Contractors allowed to quote higher prices
  - d. Frequent use of the same contractors
  - e. Receiving of regular gifts from contractors
- 2) Bid rigging it happens when bidders collude with one another and keep the bid amount at a predetermined level especially in a competitive public tender environment. This intentional manipulation is done by the members of the bidding group who submitted common bids. The interested bidders agree in advance the following details; who would submit competitive bids, at what prices, who would win and how the profits would be shared among the bidders. This process would involve public officials, who are responsible for conducting the tender and who are willing to collaborate with the bidders in the bid rigging fraud. Some of the common red flags of bid rigging according to Ware et al (2007) are;
  - a. Different bidders submitting similar bidding value
  - b. The winning bidder delegating or subcontracting part of the contract to the losing bidders
  - c. Evidence of physical alteration of more than one bid
  - d. Same handwriting and information content found in the tender documents
  - e. Apparent connections between bidders
  - f. Similarities between specifications among the bidders and the winning contractors' product or services
- 3) Using 'front' or 'shell companies': The shell company is an entity created by an employee usually in the name of a spouse, a close relative, a friend or even using a fictitious name, with the intention to commit crime (Ware et al, 2007). Often the shell company proves to be nothing

more than a fabricated name and a post office box or mail drop address that an employee uses to collect the fruits of the fraud. Using the shell companies, the corrupt officials could 'fix' the tender processes and put artificial pressure on the other bidders in order to ensure that their company would secure the contract being awarded and benefit from it

- 4) Excess payments made to legitimate vendors: this occurs when dishonest vendors do the following; either they submit multiple bills on different contracts or on work orders for work performed, or even though the expense was incurred only once they intentionally submit false bills or they submit duplicate or inflated invoices. A fraudulent public official could collude in this scheme and share in the profits by writing similar work orders under different contracts and accepting the multiple billings. Thus, this would create unnecessary surplus claims to the vendors involved, known as 'excess payments'
- 5) **Misrepresentation of facts:** the bidders or vendors lie about their previous contracts secured or made an exaggeration of their previous experience in order to secure the contract from the government. In this case the public officials conspires with the selected bidder to enable the bidder to earn a contract which in actual fact the bidder would not have won if the rules of the tender had not been modified to the bidders advantage

# Red flags related to this scheme

- a. The absence of minutes of the meeting for the process of bid opening by the procuring public official
- b. Minutes of the meeting were not verified in the original bidding form by the relevant authorized committee members and/or by the respective bidders who participated in the bidding process
- c. Excessive number of corrections, such as alterations, amendments and modifications in the bidding form submitted

No stringent follow up by the public procurement officials to ensure that all the information on the documents submitted were authentic and accurate

# The context and consequences of corruption in emergency procurement

An emergency response requires the purchase and delivery of a vast range of goods and services: medical supplies and equipment, drinking water, food, sanitation equipment, transportation, power, shelter and housing, non-food items, communication equipment, and more. Private companies are typically contracted to supply these goods and services. The purchases may follow on from long-term agreements with specific firms, based on sound pre-emergency tender procedures describing the cooperation to take place once an emergency occurs. However, many requirements cannot be anticipated, or organized in advance, and rapid acquisitions will often be necessary. Corruption is linked to a host of negative consequences for both beneficiaries and the providers of aid (Lambsdorff, 2006).

When bribery is involved, the contract is not necessarily awarded to the firm offering the best price/quality combination. As a result, the agency may receive badly maintained vehicles, expired medicines, or diluted cement. In addition to affecting the quantity of goods and services, corruption can have a huge impact on quality as well. Some form of business benefit is a main motivation behind bribery, and hence corruption can increase the market power of the best bribers. Higher profits and more contracts enable a firm to augment further its market power through other (honest) mechanisms, such as more extensive advertising or a reduction in prices to squeeze out competitors in certain segments of the market. The ultimate outcome of more market power for one or a few firms will be higher prices for all customers. That is, all donors and agencies will have to pay more for the required products (whether they are involved in corruption or not). Furthermore, as the urgency of an emergency decreases bargaining power anyway, rapid procurement is particularly prone to inflated prices and expenditures (Le Billon, 2005).

However, corrupt procurement officers are not only biased in their choice of supplier, but also in their prioritisation of procurement projects. Bribes will seldom be obtainable in all markets, and a corrupt official may shift the focus of acquisition to sectors where bribes and personal benefits are easier to gain. Besides, if the bribe is calculated as a percentage of the total contract, the corrupt official is likely to exaggerate investments in certain products or services, at the expense of other needs. This could result in the acquisition of too many computers or power generators, or an overstated concern with shelter construction while real priorities lay elsewhere. In addition to the tangible consequences described, corruption can undermine trust in the individual agencies involved, and in the humanitarian system as a whole. Media coverage of corruption may affect the way in which both beneficiaries and the donor public perceive aid providers. Those seeking to discredit particular agencies or interventions

can exploit such reports. In some cases, exposure of corruption can lead to reduced donor support (TEC, 2006).

# Why and how corruption occurs?

The risk of corruption depends on a number of factors, including the opportunity to influence decisions, the existence of obtainable benefits, and the possibility of getting away with the offence. The way the corruption is conducted depends on the circumstances and the good or service in question. For instance, a sudden demand for tents, roofing, and other materials creates opportunities for collusion between suppliers and subsequent demands for bribes as a means to guarantee supply. Cement can be mixed with sand and other materials to inflate volume.

Payoffs can be made to accept incomplete shipments of medicine, or drugs that are low quality, expired, or counterfeit. Customs officers can purposely hold up medical supplies that are urgently needed in order to extract a bribe. Bribes can also be made by firms to gain knowledge about contract arrangements and prices for services such as communications and electricity. And when it comes to transport management, collusion between drivers and suppliers may lead to falsification of receipts and other paperwork, fuel can be siphoned off from the stocks or vehicle tanks, and government and procurement officers can collaborate to collect 'taxes' on cars and other imports that are legally exempt from duties following an emergency. Corruption can even occur before operations start.

During the needs assessment stage, responsible officials may exaggerate or skew the kinds of products and services supposedly required for their personal benefit. Alternatively, they might direct supplies and services to certain areas rather than to other, needier locations. It is important to note, however, that many practices have an unclear legal status, in spite of complex rules, procurement reforms, and more detailed legal definitions of corruption. Rather than engage in clear-cut corruption, firms will often try to influence procurement through less risky 'grey zone' behaviour, through cultivating contacts in the donor environment.

Marketing activities verge on corruption when they include benefits targeted at specific individuals, and result in favourable contracts. With the aim of reducing corruption risk, aid-funded procurement usually follows specific formal procedures whether donors, governments, or NGOs conduct the procurement. The procurement regulations inform principles about how to make the choice of what to request, qualification and identification of suppliers, tender procedures, communication between buyer and suppliers, evaluation of bids and assignment of the contract, and evaluation of the procurement and control (Arrowsmith and Davies, 1998). Hence, they describe how the acquisitions should be

carried out, and when derogations are acceptable. Corruption represents a violation of the regulations or the principles behind them.

A procurement officer's incentive to take part in corruption will depend on;

- i. the amount and value of possible benefits, and
- ii. his or her professional integrity: that is, the degree to which a staff member's attitudes and behaviour aligns with the goals and achievements of the institution that they represent. In emergency contexts, officers may even divert small sums to meet the survival needs of their extended family and associates. Institutional loyalty can easily flag over the course of rapid management turnovers common to relief operators.

# Factors that affect opportunities for corruption

Opportunities to participate in corruption will vary according to certain procurement characteristics. Some factors apply to all procurement situations, while others are unique to the emergency context:

- a) Size and location of contract: responsibility for procurement lies with different individuals and offices, depending on the size of the contract. The largest contracts (more than USD 100,000, for instance) are often secured in agreement with headquarters' staff. A regional office or an office in the capital of the country of operation will normally handle medium-sized contracts. Emergency workers located in the area of the operation, including the workforce hired locally, usually negotiate small contracts.
- b) Complexity: the more technology involved, or seemingly involved, the easier it is to cover corruption. Rose-Ackerman (1999, p. 29) warns, however, about the opportunities for corruption in the procurement of simple and cheap consumable goods, such as medicines and foodstuffs, as it is more difficult to monitor their delivery.
- c) Discretion: the more discretion a procurement officer has to determine demand and preferences, the easier it is to cover improper influence over his or her decisions. In emergencies, procurement officers normally exercise high levels of discretion in terms of identifying beneficiary needs.

- d) Reduced financial controls: in emergency situations, normal financial control procedures are often 'fast tracked' to enable staff to respond flexibly and quickly to needs as they arise. Intime and ex-post monitoring and evaluation (M&E) procedures are frequently cursory at best, and ad hoc acquisitions, even where framework agreements exist, are more readily accepted. Corrupt individuals will exploit this weakness, and perhaps be attracted to emergency-related projects because they provide better opportunities to get away with such offences.
- e) Increased demand for emergency supplies: the more pressure there is to complete a contract the easier it is to cover corruption, and the more opportunities there are to inflate the price of a business contract with a bribe. Emergencies regularly create a significant rise in the demand for important products, such as plastic sheeting, tents, and medicines. As prices soar, bribes and other improper costs will be harder to detect.
- f) Pressure to spend: bribes are often calculated as percentages of the total contract amount. The bigger the potential contract, the more important it is for a firm to acquire it, and the more willing they might be to take risks in the form of corruption. In emergency settings, donors and aid agencies experience enormous pressure to spend donations quickly, and therefore are likely to favour larger contracts with a few suppliers rather than many small contracts that are difficult to manage.

#### Hidden violations of procurement rules

Corruption can also occur in a way that makes it look like all procedures are respected, for instance:

- i. **Limited invitation:** it is often too easy to cheat with regard to the rules of announcement: the call for bids may go out to a limited number of suppliers, or very late, so that the bribing supplier is the only firm that is informed in due time to make a bid.
  - The announcement can also be communicated to 'fake competitors' that are clearly unable to supply the needed commodity or service. Another problem occurs when the procuring agency receives bids and quotes that seem to come from different bidders, but which in fact come from the same bidder in order to protect a territorial supplier. Forging signatures on bids—or

supplying them on different letterheads— to make it look like they come from different suppliers is yet another (crude yet common) tactic.

- ii. **Shortlisting/pre-qualification:** the inclusion on a shortlist—the register of firms that are considered qualified to participate in the tender—normally provides another opportunity for a procurement officer to receive bribes. However, the procedure of shortlisting remains a potential risk for corruption.
- iii. Evaluation criteria and choice of technology: another way of making the procedure appear as if ordinary rules have been respected is to match the evaluation criteria with the unique qualities of the bribing firm. For instance, requirements may call for aluminium washbasins (offered by the supplier of bribes), not plastic ones, or buses (owned by the briber), not vans, to transport victims.
- iv. **Misuse of confidential information:** firms may offer bribes to obtain confidential information about the other candidates' bids. Some examples of such information include: the relative importance of various elements in a discretionary evaluation; details on the opportunity to negotiate the contractual conditions after the contract is awarded; or opportunities to get extensions to the project or promises of impaired quality controls.
- v. Political and diplomatic pressure: political pressure can influence procurement decisions. Domestic politicians may have personal or professional ties to certain firms, and may misuse their authority to ensure that these firms' products are purchased for the emergency operation. Diplomatic pressure in the form of tied aid can also bias procurement decisions. Canada, France, Germany, and the US, for example, require that a certain percentage of aid go through domestic suppliers. In many cases, such political pressure is legal. However, corruption can also occur in relation to those contracts.

# 2.5 An Overview of the Public Procurement and Disposal Act 2005

Open tender is the standard method under the public procurement and disposal act 2005. The following methods are also available under stipulated circumstances: restricted tendering, direct procurement,

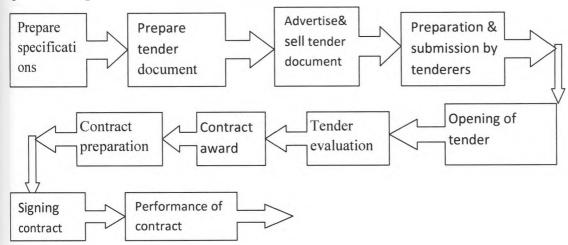
request for proposals, request for quotations, and procedure for low value procurements and specifically permitted procurement procedures.

# 2.5.1 Open Tendering Part V of PPDA

# Stages in the Open Tender Process

The procurement process follows a carefully established procedure. This process involves several stages as diagrammatically depicted and explained in figure 2-1.

Figure 2-1 Stages in the Open Tender Process



# Source; Mwangi, PPOA (2009), Presentation to Public Health Systems Training

# i. Preparation of Specifications

A specification is simply a definite description of what is needed or wanted for use by the user. The user must approve specifications. Specifications take many forms and must be updated on the basis of market realities, must be part of the bid documents, must come before the preparation of bidding documents and must be prepared by those who know what is required or by a procurement agent or a consultant in case of complex specifications.

# ii. Preparation of Tender Documents

There are standard tender documents for each type of procurement. All procurement entities are supposed to use the standard tender documents as provided by the PPOA.

#### iii. Advertise and Sell Tender Documents

Tenders must be advertised in order to give equal opportunity to all suppliers in the local area. The period during which potential suppliers are given time to respond to advertisements is 21 days. The tender advertisements should specify the project/item description, required qualifications, closing and submission dates.

# iv. Preparation, Submission and Opening of Tender Documents

Tenders are to be received and opened in the manner stated in the tender documents. Improperly filled documents are rejected. For the purpose of receiving tender bids, each organization maintains a tender box and a tender register. Tenders are opened by a tender committee of at least three members. Bidders are then allowed to attend the tender opening to witness the process of opening.

#### v. Evaluation of Tender

Preliminary evaluation should lead to the decision of who to evaluate technically. The technical evaluation will be conducted by the technical evaluation committee on resources, equipment, legality and other related matters. The financial evaluation will be conducted by secretariat but only on the bidders who have been technically qualified. Evaluation must be done within 30 days after opening of tenders.

#### vi. Contract Award

The secretary to the tender committee should prepare all the required documentation. Awards should be made to the lowest evaluated bidder for standard off-the-shelf items, and to the best evaluated bidder for specialized items.

#### vii. Contract Preparation

The first thing here is for the tender committee to make its decision on whom to award the contract on the basis of all the available information. Awards by tender committee shall be final and binding unless successfully appealed against or vetoed by the authorized person of the committee.

## viii. Signing of Contract

After the contract award by the tender committee the manager ensures that the contract is prepared and be signed by the two parties to the contract.

#### ix. Performance of Contract

After the contract is signed the supplier/ contractor shall be responsible for performing the contract in accordance with the terms and conditions of the contract and the relevant committee shall be responsible for the management of the contract.

# 2.5.2 Alternative Procurement Procedures (PART VI OF PPDA)

# a) Restricted Tendering Method

This method is used in procuring large and complex goods, services or works. The procedures are similar to those used in open tendering, except that the invitations to tender are addressed to a limited number of qualified candidates. Candidates to be invited using restricted tender should not be less than three.

## b) Direct Procurement

Direct procurement means procuring directly from a particular provider. This procurement method may be used for goods, works and services without any limit provided the following conditions are fulfilled there is only one person who can supply the goods, works or services being procured there is no reasonable alternative or substitute or there is an urgent need for the goods, works or services being procured, and because of the urgency, the other available

methods of procurement are impracticable, and the circumstances that gave rise to the emergency were not foreseeable and were not as a result of dilatory conduct on the part of the procuring entity.

The procurement entity that uses direct procurement need to record the basis upon which it determines that the conditions for using this method are satisfied, and in addition make a report to the authority within 14 days. The expenditure must be in line with the real prevailing market price.

# c) Request for Proposals

This method is only applicable for procurement of services. There is no maximum value for a procurement using this method. The procurement is initiated by the head of the user department, the contract is awarded by the tender committee, and the contract is signed by the head of the procuring entity or accounting officer. The procuring entity should begin by first inviting for expressions of interest, followed by requests for proposals from those determined to be qualified, a technical followed by financial evaluation of the proposals received, and determination of the best bid, followed by a contract.

# d) Request for Quotations

For the procurement of goods, works and services, this method can be used up to a maximum level of expenditure of Kshs. 1million, 2million, and 1million respectively. The procurement is initiated by the head of the user department, the contract is awarded by the tender committee if above Kshs. 0.5million or the procurement committee if under this amount, and the contact is signed by the head of the user department if below Kshs. 0.5million and the head of the procuring entity if above Kshs. 0.5million. The inspection and acceptance committee does the inspection and acceptance.

This method of procurement is suitable for goods, works, and services subject to the thresholds above. Quotations have to be in sealed envelopes.

# e) Low Value Procurement

A low value procurement method may be used to procure for goods, works, or services whose value does not exceed Ksh. 30,000. There is no minimum value. The procurement is originated by the head of the user department, the contract is awarded by the user, the contract is signed by the head of the procurement unit, and inspection and acceptance is by the stores officer. In low value procurement, the procurement unit procures the goods, works or services from a reputable outlet or provider through direct shopping. An invoice is then raised and paid.

# f) Specially Permitted Procurement Procedure

In accordance with section 92(1-4) a procuring entity may use a procurement procedure specially permitted by the authority which may include 'concessioning' and design competition where concessioning means a procurement that encourages the mobilisation of private sector resources for the purpose of public financing, construction, operation and maintenance e.g. built-own-operate while 'design competition' means procurement procedure for obtaining competitive bids for services which are creative in nature e.g. architecture. Urban design projects etc.

The following are the generic steps for procurement of goods, services and works;

**Table 2-1 Steps in Procurement Process** 

No.	Step description	Responsibility	The timeliness
1	Prepare procurement plan	Head of Department	1wk
2	Consolidate and present procurement plan containing details of the goods, works or services required to the head of procuring entity for approval	Head of Procurement Unit	3days
3	Review and if satisfied, approve procurement plan	PS	5days

No.	Step description	Responsibility	The timeliness
4	Invite quotations from at least 3	Head of procurement	14days
	suppliers appearing in the register	unit	
	of prequalified / known suppliers		
	or invite bids through open or		
	restricted tenders in line with PPD		
	act and regulations		
5	Evaluate bids and recommend for	Evaluation Committee	28day
	selection of the best in terms of		
	price and quality		
6	Make award to the lowest	Tender/ procurement	2 days
	evaluated bidder	committee	
7	Communicate award to successful	Head of procurement	7 days
	bidders and debrief unsuccessful	unit	
	bidders simultaneously		
8	Prepare the contract for supply of	Head of procurement	1 day
	goods, works or services and the	unit	
	arrangement for the signing		
	between the selected supplier and		
	the institution		
9	The written contract shall be	Head of procuring	14 days
	signed after an elapse of the 14	entity and supplier	
	days from the date of award		
	notification		
10	Contract administration	Representatives of	2 days
		procuring entity and	
		the supplier	
11	Supply of goods and services or	Supplier/ contractors	7 days
	completion of works as per terms		
	and conditions of contract	_	
12	Inspection and verification of	Inspection and	2 days
	rendered services or completed	acceptance committee	
	works or goods		
13	Payment of suppliers and	Procurement unit and	7 days

No.	Step description	Responsibility	The timeliness	
	contractors	accounts department		
14	Record keeping	Procurement unit and all departments	1 day	

Source; PPOA Journal June (2010)

This is a clear indication of time taken in the Kenyan context to procure for any service in the public institutions. There is no specialised form of dealing with unplanned maintenance. While in other countries unplanned cases seems to be well taken care of in their legislation and also open for scrutiny. When it comes to malpractices they cut across the board and thus a problem to both developed and undeveloped countries

# 2.6 Building Maintenance

British Standard (BS 3811: 1964) defines maintenance as 'a combination of any actions carried out to retain an item in or to restore it to, an acceptable standard'. The actions referred to are those associated with initiation, organization, and implementation. It envisages two processes: 'retaining', i.e. work carried out in anticipation of failure, referred to as 'preventive maintenance' and 'restoring', i.e. work carried out after failure, referred to as 'corrective maintenance'. There is also the concept of an 'acceptable standard' which may be construed as acceptability to the person paying for the work, to the person receiving the benefit or to some outside body with the responsibility for enforcing minimum standards. Additionally it can also be construed more widely as acceptability to the public at large or to specific sections of the public. Clearly however there are no absolute standards which would be equally acceptable to everybody or which would remain acceptable to the same group of people over a period of time.

According to the British Standard (B. S. (3811) 1974), maintenance is defined as work undertaken in order to **keep** or **restore** every facility (i.e. every part of the site, building and content) to an acceptable standard and cost:

- a. To keep here means that defects are prevented from developing
- b. To **restore** means that minor defects, if they are allowed to occur, are then corrected;
- c. Acceptable standard and acceptable cost indicate that maintenance work is tailed to suit individual needs and conditions.

# 26.1 Classification of Maintenance

A classification of maintenance simply into routine or remedial, or planned and unplanned categories is clearly of rather limited value. The audit commission considered a better division of maintenance to be the following;

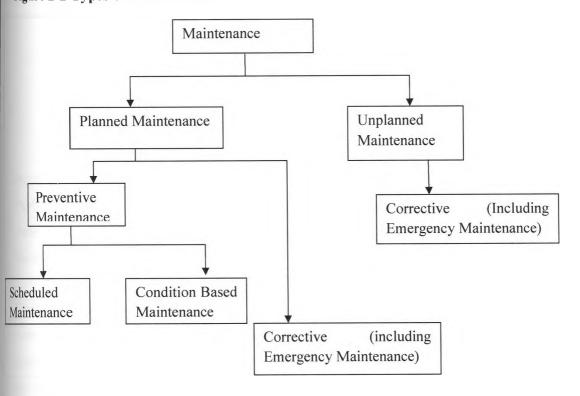
# 1. Strategic Repairs and Maintenance

This represents work required for the long term preservation of an asset, and includes planned maintenance of the building fabric. These are normally items that can be planned for because to some extent, they can be foreseen and budgeted for.

# 2. Tactical repairs and maintenance

These items relate to day to day work of a minor nature, in response to immediate need.

Figure 2-2 Types of Maintenance



Source; BS 3811: 1984

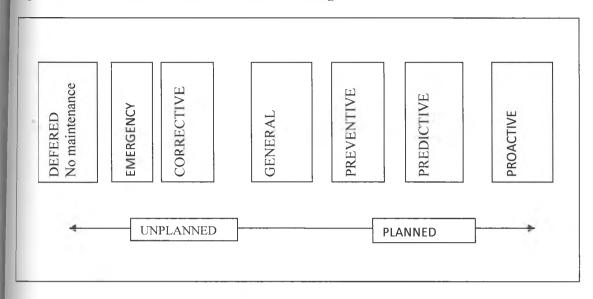
BS 3811 categorizes building maintenance by means of the following terms and definitions.

- i. Planned maintenance: "The maintenance organized and carried out with forethought, control and the use of records to a predetermined plan."
- ii. Unplanned maintenance: "The plan carried out to no predetermined plan." It refers to work necessitated by unforeseen breakdown or damages. For example, the ripping-off of a building, through the action of a storm, and its remedial action constitute unforeseen damages. It can also be termed unexpected and unavoidable maintenance.
- iii. Preventive maintenance: "The maintenance carried out at predetermined intervals or corresponding to prescribed criteria and intended to reduce the probability of failure or the performance degradation of an item."
- iv. Corrective maintenance: "The maintenance carried out after a failure has occurred and intended to restore an item to a state in which it can perform its required function."
- v. Emergency maintenance: "The maintenance which it is necessary to put in hand immediately to avoid serious consequences." This is referred to as day-to-day maintenance, resulting from such incidents as gas leaks and gale damage.
- vi. Condition-based maintenance: "The preventive maintenance initiated as a result of knowledge of the condition of an item from routine or continuous monitoring."
- vii. Scheduled maintenance: "The preventive maintenance carried out to a predetermined interval of time, number of operations, mileage, etc."
- viii. Running maintenance: "Maintenance which can be carried out whilst an item is in service."

Procurement for maintenance services can be a challenge especially with the public institutions where Public Procurement Act stipulates the procedures to be followed. Depending on the class of maintenance it will determine which procedure to apply and especially for planned maintenance it becomes easy to blend in to the system.

Planned maintenance is usually planned for in many times a year prior which means any procurement procedure depending on the cost can be applied. But for unplanned maintenance where we have emergencies the only applicable procedure again is the direct procurement procedure which again with the conditions attached makes it also difficult for the services to be delivered timely. In addition you find in the public institutions when these emergencies are hampered by lack of funds since there is no kitty set aside to be utilized in such circumstances.

Figure 2-3 Continuum of Maintenance for Buildings



Source; Office of the Legislative Auditor, Minnesota, U.S.A

At one end is **deferred maintenance**, which occurs when projects are identified as necessary but put off due to lack of resources. Next along the continuum are unplanned activities including emergency maintenance, such as restoring lost electrical power, and corrective maintenance, such as fixing a broken window. Emergency and corrective maintenance occur as the need arises; neither is planned far in advance.

Planned maintenance follows on the continuum, although the maintenance categories are not mutually exclusive. General maintenance is the upkeep of building components to restore them to their original conditions or to keep them in good working condition. Preventive maintenance follows on the continuum.

#### 2.6.2 Components of maintenance

Maintenance involves a considerable amount of work which Harper (1969) categorized into three components namely; Servicing, Rectification and Replacement.

1. Servicing - Servicing is essentially a clearing operation undertaken at regular intervals of varying frequency and is sometimes termed day-to-day maintenance. Daily sweeping of floors, monthly washing and cleaning of windows and regular painting for decoration and protection every four years are some examples of servicing. However, as more equipment that is sophisticated is introduced so more complicated service schedules become necessary. Servicing

becomes necessary because of constant use of facilities, the effect of the weather and atmospheric conditions on the components of the building.

- 2. Rectification Rectification work usually occurs fairly early in the life of a building; but it can also occur sometime within the life span of the building. It arises from shortcoming in design, inherent fault in or unsuitability of component, damage of goods in transit or installation and incorrect assembly. Rectification represents a fruitful point at which to reduce the costs of maintenance, because it is available. All that is necessary at any rate in theory is to ensure that components and materials are suitable for their purpose and are correctly installed. Rectification work could be reduced by the development and use of performance specifications and codes of installation (Lee, 1987). Rectification is the response to inherent defects in design, construction or installation stages of the building process. This provides an opportunity to "trade off" current capital expenditure against future maintenance costs.
- 3. Replacement Replacements occur at all costs in buildings. It is inevitable because service conditions cause materials to decay at different rates. Much replacement work stems not so much from physical breakdown of the materials or element as from deterioration of the appearance (Seeley, 1987). This is because the extent of exposure of materials to the vagaries of the weather varies, and the weather in specific locations also vary whilst the capacity of elements of buildings in withstanding changes and different intensities of the weather vary. This therefore becomes necessary as a result of material decay due to these differential rates of weather conditions. Physical breakdown of materials or elements as well as deterioration appearance may necessitate replacements.

However, this brings the problem of distinguishing between maintenance and improvement, which has not been resolved satisfactorily by many definitions. It is however, generally conceded that maintenance should include reasonable elements of improvement, for example, the replacement of worn out component with up-to-date version. Where the intention of work done is to increase efficiency in the use of the building by adding facilities, which were not there previously, the work should be classify as improvement. However, it is logical therefore to extend the meaning of maintenance to cover some localized improvement (Lee, 1987).

Maintenance can also embrace renovations, which consist of work done to restore a structure, service and equipment by a major overhaul to the original design and specification, or to improve on the original design. This may include limited additions and extensions to the original building.

the literature reviewed it is worth noting there are weaknesses of PPDA against procurement for extremely or unplanned or corrective maintenance services.

need to urgently and critically deal with the challenge of provision of reliable, transparent and data & information. This would be used as a benchmark towards a successful system. The data of successful tender process and the inherent value for money in procurement is in the data contract implementation. It should be accompanied with a capacity building in contract implementation. It should be accompanied with a capacity building in contract implementation of tender evaluation and need to be improved. Rotational use of prequalification across the board is you find that some prequalified providers never get invited at all to bid while others are are not standardised with clear dispute resolution mechanism is wanting, local purchase orders being are not standardised with clear dispute resolution mechanism provisions.

ever the PPDA has contributed immensely in promoting the competition between the economic peators. This guarantees equal treatment and non discrimination of economic operators. It ensures afficient utilisation of public funds through applying the awarding procedures by the contracting corities. The awarding of public procurement contracts are subject to no discrimination, ensurement, efficient utilisation of resources, equal treatment and assumption of responsibility.

# Conceptual framework

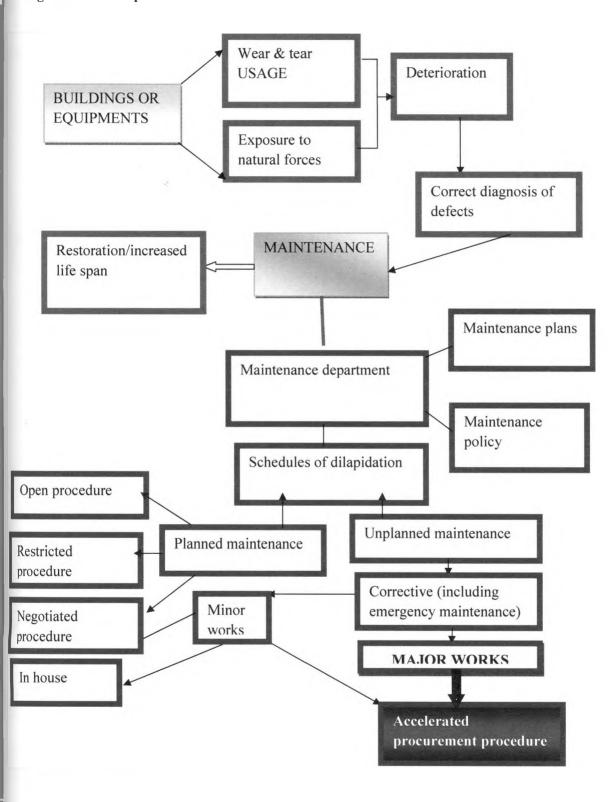
to the special characteristics of maintenance and especially for corrective or emergency it is benefit in the various countries the most common public procurement procedure to address the situation. As the interval of the various countries the most common public procurement procedures are open, restricted and negotiated and may not address procurement for corrective maintenance appropriately. The argency maintenance needs to be dealt with immediately since it can be a health hazard and posing the risks to the occupants or users of the buildings. At least in all the jurisdictions the cost of the intenance is related to the mode of procurement depending on the threshold. In case of planned the intenance any procurement method can be applied comfortably unlike ad hoc maintenance

summary after reviewing of procurement systems in other jurisdictions it is evident that their natures are responsive to all types of eventualities and situations thus accelerated or negotiated radering and procurement procedures. In other situations, there are exemptions clearly put in the law werning public procurement and since this freedom can also be abused the emergencies projects are

monitored and evaluated. Therefore in case of unplanned or emergency maintenance it can be dealt with the soonest before further damage as per Figure 2.4.

Accelerated procurement procedures establish alternative procedures to operate during times that demand enhanced flexibility, responsiveness and accountability. Unplanned or emergency projects are some of the cases which demand enhanced flexibility on the procedures applied to arrest the situations. Where there is time pressure due to an occurrence of unforeseen events negotiation procedure can be used but the only challenge as provided by the PPDA is that some permissions should also be granted. This makes it inappropriate in cases of emergency.

Figure 2-4 Conceptual Framework



Source; Author, 2012

# **CHAPTER THREE**

# RESEARCH DESIGN AND METHODOLOGY

#### 3.1 Introduction

This chapter presents the research methodology of the study. It describes and justifies the methods and processes that were used in order to collect data that was used in answering the research questions. The chapter is presented under the following sections namely: description of case studies, research design, population, sample size, sampling procedures, data collection instruments and data analysis.

# 3.2 Description of the Case Studies

Since the Public Procurement and Disposal Act applies to all public institutions both the main stream government and also parastatals. The study explored three case areas mainly because of limited time and financial resources available as listed below;

- (a) Ministry of Housing
- (b) National Social Security Fund and
- (c) Kenyatta National Hospital

#### 3.2.1 Kenyatta National Hospital (KNH)

KNH has turned 106 years and it had its Centenary Celebration in 2001. The Hospital was built to fulfil the role of being a National Referral and Teaching Hospital, as well as to provide medical research environment. Established in 1901 with a bed capacity of 40, KNH became a State Corporation in 1987 with a Board of Management and is at the apex of the referral system in the Health Sector in Kenya.

It covers an area of 45.7 hectares and within the KNH complex are College of Health Sciences (University of Nairobi); the Kenya Medical Training College; Kenya Medical Research Institute and National Laboratory Service (Ministry of medical services).

KNH has 50 wards, 22 out-patient clinics, 24 theatres (16 specialized) and Accident & Emergency Department with a bed capacity of 1800 beds. The hospital offers a wide range of diagnostic services such as Laboratories, Radiology/Imaging and Endoscopy among other specialised services. Sometime,

the average bed occupancy rate goes to 300%. In addition, at any given day the hospital hosts in its wards between 2500 and 3000 patients. On average the hospital caters for over 80,000 in-patients and over 500,000 out-patients annually.

In 1987, the hospital became a state corporation and maintenance operations which were under Ministry of works, were to be undertaken by K.N.H., staff residential quarters, staff leased houses and I.D.H. up to when it became Mbagathi District Hospital. Maintenance Department, later on in 1995 was merged with the hospital transport section and became Maintenance and Transport Department.

From the above statistics, it's worth noting the vital role the institution plays in offering of health services to the public. Therefore, an effective procurement system would ensure that the institution performs its role of delivering health services without the challenges likely to be posed by current PPDA.

# 3.2.2 National Social Security Fund

The National Social Security Fund (NSSF) was established in 1965 by an Act of Parliament (CAP 258 of the Laws of Kenya) in order to administer a provident fund scheme for all workers in Kenya. Initially the fund operated as a government department under the Ministry of Labour but as its membership grew and its operations became complex, the NSSF Act was amended in 1987 to transform it into an autonomous State Corporation. Since 1988, the Fund has been operating under a Board of Trustees, which is constituted by representatives of 3 key stakeholders: the government, workers, and employers.

NSSF is Kenya's single largest investor in the housing industry currently with an investment portfolio worth over Sh100 billion in residential and commercial premises in Nairobi. Some of its notable investments include the NSSF complex at Community, Hazina Trade Centre which houses Nakumatt Lifestyle, Kitisuru Estate, Mountain View estate in Kangemi, Kapsoya Estate in Eldoret, and NSSF House and Hazina Polana Hotel in Mombasa.

# 3.2.3 Ministry of Housing

It was established as a full pledged ministry in the year 2004 but previously it existed as a department under the Ministry of Roads and Public Works since the 1970's. Currently it has several departments namely Housing, Housing Infrastructure Development, Civil Servants Housing Scheme, Slum

Upgrading, Administration and Estates. The research concentrated on the Estates Department which deals with maintenance activities and is established throughout the country. Maintenance allocation funds were being done per district previously but currently they are channelled through the county offices. The role of the Ministry cannot be over emphasized as maintenance activities that arise call for quick response.

# 3.3 Research Design

A research design provides a framework for the collection and analysis of data (Bryman, 2001). It is this regard the research established the challenges faced in public institutions in line with procurement procedures for unplanned maintenance services (Zikmund, 2003) also defines a research design as a master plan specifying the methods and procedures for collecting and analysing data. According to Bryman (2001), after a researcher has identified a research problem and has reviewed the relevant literature, the next step involves developing a research design for conducting the research.

According to Yin (2003) the design comprises descriptive research, case study, survey, exploratory, historical research, causal comparative / experimental research, co-relational and observational research. Case study research is not limited to a single source of data, as in the use of questionnaires to carry out a survey study. In fact, good case studies benefit from having multiple sources of evidence (Yin, 2004). It is on this strength that the research investigated three public institutions i.e. The Ministry of Housing, National Social Security Fund and Kenyatta National Hospital whose procurement procedures are governed by the Public Procurement and Disposal Act.

Vogt (2005) defines descriptive research design as a research design that is used to obtain information concerning the current status of the phenomena. The design involves a process of collecting data in order to answer questions concerning the current status of the subject in the study. Descriptive studies are more informative and designed to describe something that is currently ongoing so as to determine and report the way things are and establish what is happening (Cooper & Schindler, 2006).

The research adopted a descriptive design since it is more informative which informed on the challenges being faced in these public institutions in terms of procurement for maintenance services. In collecting case study data, the main idea is to "triangulate" or establish converging lines of evidence to make the findings as robust as possible. (Yin 2004) this will ensure that there is no biasness in the results therefore the reason for investigating the three institutions. Whereas the Ministry of Housing and Kenyatta National Hospital are institutions providing basic services and would suffer challenges

posed by PPDA while NSSF have the funds to undertake maintenance under short notice but still guided by the provisions of PPDA as it is a public institution.

# 3.4 Population

According to (Mugenda, 2009) the population refers to an entire group of individuals, events or objects having a common observable characteristic. Mugenda and Mugenda (2003) defines a target population as that population to which a researcher wants to generalize the findings of a study. Since the researcher is conducting a research in three institutions thus target population will vary. For the Ministry of Housing, Table 3.1 indicates the 47 counties and the number of government quarters for each under the Ministry of Housing, therefore the officers in charge of maintenance and procurement were targeted.

Table 3-1 Distribution of Government Quarters per County

-		No of Houses Per county as
No	Counties	at June 2011
1	Nairobi	16,967
2	Isiolo	443
3	Marsabit	401
4	Kakamega	665
5	Vihiga	209
6	Busia	578
7	Narok	347
8	Mombasa	4,186
9	Lamu	105
10	Trans-Nzoia	344
11	Turkana	471
12	Elgeyo/Marakwet	119
13	Nandi	511
14	West Pokot	412
15	Samburu	170
16	Nyandarua	374
17	Tharaka Nithi	160
18	Meru	681

	-	No of Houses Per county as
No	Counties	at June 2011
19	Kiambu	2,249
20	Muranga	855
21	Nyeri	1243
22	Embu	993
23	Kirinyaga	511
24	Kajiado	701
25	Makueni	293
26	Machakos	1047
27	Kwale	406
28	Tana River	102
29	Taita/Taveta	575
30	Nakuru	1,917
31	Laikipia	210
32	Bungoma	646
33	Baringo	589
34	Kitui	562
35	Kisumu	2923
36	Homa Bay	270
37	Migori	233
38	Garissa	328
39	Wajir	523
40	Mandera	154
41	Kericho	631
42	Bomet	217
43	Kisii	617
44	Nyamira	344
45	Siaya	430
46	Kilifi	537
47	Uasin Gichu	852
		67,343

As for the National Social Security Fund (NSSF) and the Kenyatta National Hospital (KNH) the target population is all the employees in the departments of supplies and procurement and the engineering and maintenance for KNH while for NSSF maintenance is in the property and investment portfolio.

# 3.5 Sample Size and Sampling Procedure

Cramer and Hewitt (2004) define a sample size as the actual number of elements, cases or entities in a population that will be studied. Mugenda and Mugenda (2003) asserts that the size of a sample is an important element in determining the statistical precision with which population values can be estimated. Where time and resources allow, it is good to use a large sample since small samples do not reproduce the salient characteristics of the population to an acceptable degree. Several approaches can be used to determine the sample size. These approaches include using a census for a small population, imitating a sample size of similar studies, using published tables and applying formulas to calculate a sample size (Yin, 2003; Zikmund, 2003).

According to Mugenda & Mugenda (2003) for descriptive studies usually a sample of ten percent (10%) of the accessible population is enough. Ministry of Housing is represented in the 47 counties therefore the sample size

$$= 10 \text{ x accessible population}$$
100

$$= \underline{10 \times 47}$$

$$100$$

$$= 4.7 \text{ say } 5 \text{ samples}$$

However, after attaining the sample of five counties, the researcher purposefully considered the top five counties in terms of the number of quarters or government houses as this would determine the rate of procurement process and funds allocated for procurement for maintenance. In each of the 5 counties selected for the study, the researcher further used convenience sampling method which is a type of non probability method where the individuals selected for inclusion in the sample were the easiest to access. The researcher therefore selected 4 respondents within the procurement and maintenance department of the each county. This gave a target of 20 respondents within the Ministry of Housing in all of the counties.

For the cases NSSF and KNH, the researcher further conveniently included 10 employees in the supplies and maintenance departments within each institution attaining a target population of 20 respondents. Therefore, the total target population for the research was 40 respondents.

#### 3.6 Data Collection Method and Instruments/Research Instruments

Data for this study was collected from both primary and secondary sources. A descriptive approach was applied to collect primary data by the use of structured/ closed ended questionnaires and interview schedules from the selected respondents on their view on the effects of the Public Procurement and Tendering Procedure on the delivery of maintenance projects and also the challenges they face in the carrying out maintenance of public projects. Secondary data which was mainly sourced from the library and records and journal within the institutions helped to determine the ideal procurement and tendering system for emergencies and other unplanned maintenance projects in the public sector. Data collected were opinions from the respondents and records on maintenance projects.

# 3.6.1 Questionnaires

A questionnaire is a data collection tool, designed by the researcher and whose main purpose is to communicate to the respondents what is intended and to elicit desired response in terms of empirical data from the respondents in order to achieve research objectives (Mugenda & Mugenda, 2003).

Questionnaires can cover a large number of people and a researcher can use them to reach a wide geographic coverage. They are relatively cheap and no prior arrangements are needed before posting. They avoid embarrassment on the part of the respondents as it allows them to consider responses, especially where there are pre-coded options. They also allow for possible anonymity of respondent and have no interviewer bias if administered correctly. Interviewer bias is the opinion or prejudice on the part of an interviewer which is displayed during the interview process and may affect the results of the interview (Kothari, 2004; Cooper & Schindler, 2006).

The questionnaires were administered to the procurement officers and maintenance officers in all the three institutions so as to establish the challenges faced in the procurement for unplanned maintenance services as per the sample size. 40 questionnaires were administered to the respondents in all the institutions who were randomly picked for KNH and NSSF while for Ministry of Housing purposefully determined.

#### 3.6.2 Structured Interviews

They were used to elicit data from the public institutions with the application of Public Procurement Act the challenges they were encountering and their feeling on what could be done to improve and take care of procurement for unplanned maintenance. For the interviews, 40 interviewees were targeted and they were picked through convenient sampling in all the situations. In the Ministry of Housing there are different cadres dealing with maintenance activities but the respondents of interest are the building surveyors, maintenance officers and the procurement personnel who would give an insight into the challenges they face posed by the Public Procurement and Disposal Act in procuring for unplanned maintenance services.

Interviews were preferred in this case because they provide in depth data and it is possible to obtain data required to meet specific objectives. With honest and personal interactions one will be able to extract sensitive and personal data

# 3.6.3 Photographs

A camera was used in capturing the programmes or unfinished works/ projects from the various public institutions since they are varied. This was done alongside the interviews

# 3.7 Piloting of Questionnaires

The questionnaire was field tested by the researcher to assess the relevance of the questions, the understanding of respondents, identification of any ambiguities, as well as the general availability of the various categories of information needed. The questionnaires were pretested immediately before embarking on serious data collection exercise where they were self administered to a few employees at KNH and NSSF in the relevant departments while for the Ministry, stations within Nairobi County were interrogated. This is to make sure that the responses given are in line with the expectations and if not amendments to be done early enough. Validity is the accuracy and meaningfulness of inferences, which are based on the research results. Reliability is a measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda & Mugenda, 2003). With the pretesting of the questionnaires this gave a proof of the validity and reliability of the data.

# 3.8 Data Analysis Design

Data analysis is a practice in which raw data is ordered and organized so that useful information can be extracted from it. Analysis of the data was done using both qualitative and quantitative analytical techniques. Tables, charts, percentages and textual write-ups of the data gathered among others were used in the case of the quantitative technique, while descriptions and pictures were used in the case of the qualitative analysis.

The data collected from the field was first edited to remove errors made during data collection. Edited data was then coded and entered into the computer for analysis using Statistical Package for Social Sciences (SPSS version 15). Descriptive statistics such as means, percentages and frequency distributions were used to describe data. Presentation of data was done on tables, pie charts and bar graphs.

# 3.9 Testing of the Research Hypothesis

Testing of the research hypothesis or research proposition was achieved by the determination of the number of the respondents interviewed who acknowledged that the Public Procurement Regulations affect the procurement process for maintenance emergency services. How the Public Procurement Regulations affect the procurement for maintenance emergency services was also used as an evidence for testing the hypothesis.

## CHAPTER FOUR

# DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

# 4.1 Introduction

This chapter presents the data of the study that was carried out to evaluate the challenges posed by the Public Procurement and Tendering Procedures on delivery of maintenance projects; the case of Ministry of Housing, National Social Security Fund and Kenyatta National Hospital Maintenance Projects. The objectives of the study were threefold and included;

- a. Establish the effects of the Public Procurement and Disposal Act on the procurement of public maintenance projects
- b. Evaluate the challenges faced in carrying out public maintenance projects
- c. Determine the ideal procurement and tendering system for emergencies and other unplanned maintenance projects in the public sector.

A sample size of 40 respondents from the organizations was purposively selected for the purpose of the study. Questionnaires and interviews were used as the main instruments of data collection in the study. In this chapter, the data obtained from the research instruments are examined, analysed and interpreted in line with the purpose and objectives of the study to illustrate how the study achieved its objectives, with a summary of the findings presented at the end of the chapter.

# 4.2 The Response Rate

The study targeted 40 respondents being the procurement and maintenance officers within the targeted organizations. From the total sample size of 40 members, 90.0% positively responded to the survey request. The percentage of those interviewed is statistically adequate to represent the whole. Furthermore, Babbie (2007) suggested that any return rate over 50% can be reported, that over 60% is good, and that over 70% is excellent which was exceeded by the survey as indicated by the survey's response rate.

In a bid to improve the response rate, the respondents were first approached through telephone calls by the researcher. The questionnaire was then hand delivered to those who agreed to participate in the study through the assistance of research assistants. All the respondents were experienced procurement and maintenance officers within the organizations. The information provided by them was therefore considered to be reliable. The response rate is indicated in Table 4.1.

**Table 4-1 Response Rate** 

Category	Questionnaires	Questionnaires Response l	
	Sent	Returned	(%)
NSSF	10	10	100.0
Ministry of Housing	20	17	85.0
Kenyatta National Hospital	10	9	90.0
Total	40	36	90.0

Source; Author, 2012

Mugenda and Mugenda (2003) further asserts that in questionnaire administration, a response rate of 50% is adequate for analysis and reporting. He further suggests that 60 % is good response while 70% is very good. Therefore the general response rate of 90.0% in this study is very good and sufficient for data analysis, reporting and drawing conclusions.

## 4.3 General Information

The purpose of this section was to collect general information and biographical data from the procurement and maintenance officers e.g. working experience. The information was intended to set the context for the questions in the subsequent sections.

Of the respondents who work within the procurement and maintenance departments of each institution surveyed, a higher percentage of 36.1% had worked within the institution for 12 and above years, followed by 25.0% for 6-8 years and 11.1% for both 1-2 and 3-5 years. 61.1% of the respondents are at the middle level management within the institutions, 8.3% belong to top level and low level management equally. 86.1% of the institutions surveyed make procurement plans against 11.1% who don't. The procurement plans are mainly made on annual basis 50.0% against 41.7% under the guidance of Public Procurement and Disposal Act as noted by the 94.4% of the respondents interviewed. These illustrate the emphasis made by the management of the institutions in the

implementation or the level of the implementation of the PPDA during the procurement process for maintenance and further the authentication or the validity of the responses obtained from the respondents. Tables 4.2 and 4.3 illustrate these variations.

**Table 4-2 Working Experience** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-2 years	4	11.1	11.1	11.1
	3-5 years	4	11.1	11.1	22.2
	6-8 years	9	25.0	25.0	47.2
	12 and above	13	36.1	36.1	83.3
	Not Applicable	6	16.7	16.7	100.0
	Total	36	100.0	100.0	

Source; Author, 2012

The intention of getting to know the duration of experience with the institutions was foremost to test the suitability of each responded. The Longer the period the more reliable will be the responses from the respondents.

**Table 4-3 Level of Management** 

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Top level management	3	8.3	8.3	8.3
	Middle level management	22	61.1	61.1	69.4
	Low level management	8	22.2	22.2	91.7
	No Response	3	8.3	8.3	100.0
	Total	36	100.0	100.0	

Source; Author, 2012

This is an indication majority of the respondents were in middle level management and in most of the institutions these are the most active members in any project management and therefore well informed since they are hands on.

15,45%
■ Quarterly
■ Annually

Figure 4-1 Frequency of Preparing Public Procurement Plans

Source; Author, 2012

Procurement plans which guides the works which will be carried out within a certain financial year are mostly done annually and never for emergencies. This means unforeseen circumstances like the emergencies are not planned for and in case they occur it is certain delays will be inevitable as monies are being solicited.

# 4.4 Effects of PPDA on the Procurement of Maintenance Projects

The main effect of PPDA on the procurement and maintenance projects is the increase in maintenance cost which the respondents notes that it moves from better to worse as indicated by 75.0% of the respondents. The data in Table 4.4 was obtained from the Procurement Department of the Ministry of Housing indicating the increase in maintenance cost due to the effects of PPDA.

Table 4-4 Emergency Projects and Cost Variation due to PPDA

COUNTY	PROJECT	REQUEST	RESPONSE	SERVICES	TOTAL	INITIAL	FINAL
		FOR	FUNDS	PROCURED	DELAY	COST	COST
		FUNDS	GIVEN ON	ON		(KSHS)	(KSHS)
		DATED					
Muranga	Due to the	10/5/2012	30/6/2012	15 days	65 days	374,875	412,362.5
_	storms we've						,
Muranga	had damaged		:				
South	roofs and trees						
South	falling on						
	quarters						
	resulting to						
	collapsed						
	structures						
	Strattares						
Kajiado –	Electrical faults	12/4/2012	30/6/2012	10 days	79 days	2,253,996	2,524,475
Masimba							
Health		}					
Centre							
Nakuru	Fencing -5 acres	28/4/2012	30/6/2012	20 days	53 days	5,000,000	6,200,000
	plot threatened						
	by grabbers						
Kwale –	Desludging	26/3/2012	30/6/2012	10 days	95days	95,364	104,900
Hospital	septic tanks and						
Quarters	soak pits						
Kwale -	Fallen tree on	9/2/2012	22/2/2012	15 days	35 days	99,500	111,440
Diani	some roof						
Kilifi	Drainage work	2/2/2012	30/6/2012	12days	162 days	254,144	277,016
	repairs						
	(collapsed						
	septic tanks						

Source; Ministry of Housing, Procurement Department, 2012

Even in times of serious occurrences as illustrated above e.g. broken drainage sewer funds are not always available on time because as indicated in the requests above, funds would be availed at certain times on average two months. Once the funds are availed more time is taken before the contractors are procured to carry out the various projects. What was an emergency in the first instance then ceases to be and it becomes a norm and does not change the situation from being a health hazard

Other effects are summarized in Table 4.8 based on time taken to procure for maintenance projects.

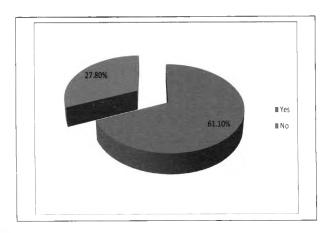
Table 4-5 Time Taken for Maintenance Request to be Responded to

		Frequency	Percent
Valid	1-3 months	23	63.9
	6-12 months	6	16.7
	More than 12 months	1	2.8
	It depends on the nature and scale of work	1	2.8
	Depends on the nature of work	1	2.8
	It depends on the nature of the maintenance needs and availability of funds or materials	1	2.8
	Total	33	91.7
Missing	System	3	8.3
Total		36	100.0

Source; Author, 2012

Of the respondents 63.9 % of them indicated that it takes between one to three months before maintenance requests are responded to. The nature of maintenance needs and availability of funds is not a consideration owing to the 2.8% respondents. This implies that the time taken is too long for corrective maintenance and the nature of maintenance is not always a prerequisite in times of funding.

Figure 4-2 Maintenance Policy



Source; Author, 2012

Of the 36 respondent interviewed, 61.1% indicated that their institutions had maintenance policy against 27.8% that don't have as depicted in figure 4.2. This means the procurement for emergencies have not been well articulated in the policy where it could have been given exemptions. The PPDA affects the procurement for emergency services in the ways indicated by the respondents in Table 4.6, with the main challenge being documentation processes that consumes a lot of time.

Table 4-6 Effects of PPDA on procurement for maintenance emergency services

		Frequency	Percent
Valid	Documentation	7	19.4
	consumes a lot of time	/	17.4
	Delays	7	19.4
	Time delays and vested	2	5.6
	interests	2	5.0
	Increase of time taken to	1	2.8
	respond to maintenance	1	2.8
	Various ways	1	2.8
	Buying putting order of	1	2.0
	procuring things	1	2.8
	During emergency cases	1	2.8
	Slow down		
	implementation of	3	8.3
	emergency works		
	No Response	2	5.6
	Total	25	69.4
Missing	System	11	30.6
Total		36	100.0

The major effect on procurement for emergencies is time which arises from the long documentation procedures and approvals. There are also too many players and the emergency cases that needed urgent attention aggravates further compromising the quality of the structures. This can be depicted in Plate 4.1.

Plate 4-1 Broken Down Septic Tank the Case of Kilifi County



Source; Field Survey, 2012

From the data obtained from the field survey discussed above, it's worth noting that the PPDA affects immensely the delivery of emergency maintenance projects in terms of time; for instance majority of emergency maintenance projects take 1 to 3 months before they are responded which aggravates the situation, eventually by the time of the procurement for maintenance of the emergency projects the available funds are not adequate to cater for the aggravated situation hence the problems are not solved or quality of the projects are compromised.

Due to the time overrun, the cost of maintenance for emergency projects have tended to increase as illustrated in Table 4.4 due to the inflation affecting the cost of materials and labour which is not factored in at the delayed time of procurement.

# 4.5 Challenges faced in carrying out Public Maintenance Projects

When it comes to emergency maintenance procurement, the challenges faced due to the effects of PPDA highlighted above were noted as; backlog is too big 13.9%, lack of funds 30.6%, inadequate funding, 5.6%, lack of enough personnel in the county level 5.6%, carelessness of the building occupants/lack of maintenance culture by occupants 5.6% and burglary or theft that end up damaging building fabric 5.6%. The summary of this is as illustrated in Table 4.7.

Table 4-7 Challenges Encountered in Maintenance Emergency Procurement

		Frequency	Percent
Valid	Backlog is too big	5	13.9
	Lack of funds	11	30.6
	Inadequate funding		
	because only 40% of the	2	5.6
	rental revenue is retained	2	3.0
	for maintenance		
	Lack of enough		
	personnel in the county	2	5.6
	level		
	Carelessness of the		
	building occupants/lack	2	5.6
	of maintenance culture	2	3.0
	by occupants		
	Burglary or theft that end		
	up damaging building	2	5.6
	fabric		
	Lack of adequate and		
	knowledgeable staff or	1	2.8
	personnel		
	Total	26	72.2
			27.8
			100.0

From the foregoing the stated effects of PPDA on public procurement for emergency maintenance projects there are many challenges faced by the executors of the projects. The main challenge being lack of sufficient funds in times of the emergencies and where the funds are availed the respondents indicated that the bureaucratic procedure makes it difficult to respond on time. Personnel are also a challenge especially with the ministry where you find the officers manning the various counties are too few to be able to handle the works adequately. In most of the outstations the research established that

the procurement officers are quite few and the officers carrying out procurement lack the relevant knowledge. This affects greatly procurement for emergency maintenance projects.

The respondents interviewed 97.2% acknowledged facing challenges in the implementation of the PPDA in the procurement of maintenance projects. Some of the challenges faced by the procurement officers in the implementation of PPDA are indicated in Table 4.8.

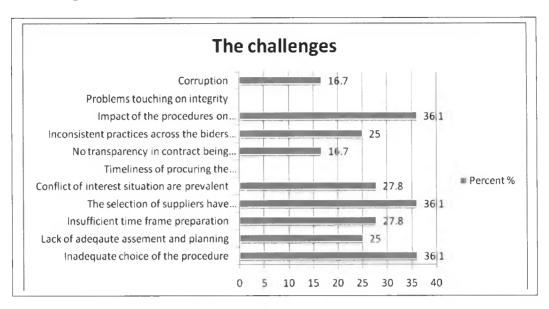
Table 4-8 The Challenges Posed by PPDA in Carrying out Emergency Maintenance Projects

Challenge	Frequency
Inadequate choice of the procedure	13
Lack of adequate assessment and planning	9
Insufficient time frame preparation	10
The selection of suppliers have inconsistent bidder's information	13
Conflict of interest situation are prevalent	10
Timeliness of procuring the services/delivery	5
No transparency in contrast being awarded	6
Inconsistent practices across the bidders in the first stage	9
Impact of the procedures on implementation of maintenance works	13
Problems touching on integrity	12
Corruption	6

Source; Author, 2012

From the survey it was established that many are the challenges that are faced by procurement and maintenance officers as they procure for emergency maintenance projects are posed by PPDA thus defeating the purpose for the legislation. About 36.1 % indicated that the procurement procedures provided are not adequate. This implies that more procedures should be incorporated in the Act to ensure that all forms of procurement are catered for.

Figure 4-3 Challenges Faced in Procurement for Maintenance Services



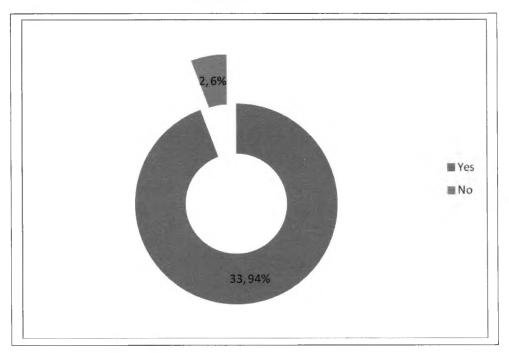
Some of the recommendations for the challenges include training of all stakeholders 5.6%, reviewing the conflicting clauses to match with reality on the ground 5.6%, need to review the law regularly 19.4%, review of the sections that are conflicting and causing delays 5.6%, increase time frame for planning 2.8%, overall aim should be efficiency hence issues causing delays can be looked within compromising quality and promoting abuse 2.8%.

Some of the lengthy procurement procedures as stipulated in PPDA should not be applied in case of emergency, shortening the process and time required to complete, the procurement procedure should be within hours and may be audited later by internal service, Provision of more methods of procurement especially for emergency work, provision on handling emergency with little or no difficulty, Simplify the rules to be understood by all stakeholders, enforce s implementation procedures and follow ups or monitoring, Amend the PPDA and there should be harsh and strict patterns for attendees and the PPDA should be amended to simplify the procedures since some maintenance projects are usually very urgent. The respondents indicated that the proper management of the above challenges the ideal procurement and tendering system for emergencies and other unplanned maintenance projects is achievable within the public sector.

To further counter some of the challenges acknowledged above and to help achieve the ideal procurement system for emergencies, the respondents 91.7% of the respondents indicated that once the

procurement plans are in place they can be reviewed enable the procurement for emergency maintenance. This is illustrated in Figure 4.4.

Figure 4-4 Can the Procurement Plans be Reviewed?



Source; Author, 2012

For the respondents who indicated that the procurement plan can be revised gave the reasons that it has to go back to the tendering committee because there are floating tenders and can only be reviewed before evaluating. When procuring for maintenance services, the tendering procedures applied in public sector are as indicated in Figure 4.5 with the main one being restricted tendering method 53%, open tender 35%, direct tender 8% and negotiated tender 4% and the time taken which is a major challenge for each of the tendering methods as indicated below respectively in Tables 4.9, 4.10 and 4.11.

**Table 4-9 Restricted Tendering** 

		Frequency	Percent
Valid	2 months and 17	7	19.4
	days	,	17.1
	1 month and 20 days	2	5.6
	2 weeks	4	11.1
	1 week	1	2.8
	2 months	1	2.8
	3 months	13	36.1
	1 month	2	5.6
	No response	4	11.1
	Total	34	94.4
Missing	System	2	5.6
Total		36	100.0

Restricted tendering 36.1% of respondents indicated that it takes about three months for the procurement procedure to be concluded. Therefore it cannot be applied for corrective maintenance. Unlike in the literature where Stergiou, 2009 asserted that accelerated procedure should be an alternative during times that demand flexibility, responsiveness and accountability. Table 4.9

**Table 4-10 Open Tendering** 

		Frequency	Percent
Valid	2 months and 17 days	4	11.1
	1 month and 20 days	2	5.6
	2 weeks	3	8.3
	1 week	1	2.8
	2 months	2	5.6
1	1 month	8	22.2
	1 month and 10 days	2	5.6
	Immediately	1	2.8
	No response	1	2.8
	Total	24	66.7
Missing	System	12	33.3
Total		36	100.0

Open tendering majority indicated that it takes around one month before the procurement is completed as indicated in table 4.10. Corrective maintenance therefore one cannot afford to wait for a month.

**Table 4-11 Direct Tendering** 

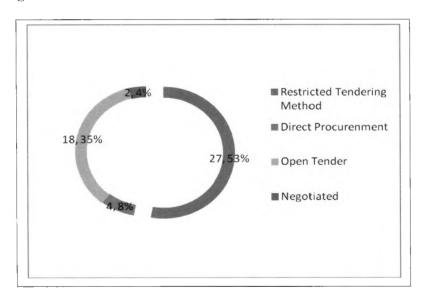
		Frequency	Percent
Valid	1 month and 20 days	1	2.8
	2 weeks	3	8.3
	2 months	1	2.8
	3 months	1	2.8
	Immediately	1	2.8
	5 months	3	8.3
	No response	1	2.8
:	Total	11	30.6
Missing	System	25	69.4
Total		36	100.0

Source; Author, 2012

As per table 4.11 the procurement and maintenance officers about 2.8% said that direct procurement is possible to be responded to immediately. The majority expressed their dissatisfaction with it in times of emergencies because it cannot arrest a situation. This would mean another form of procurement should be employed without the many requirements. As per the literature scholars indicated that we can have a procurement system enjoined with monitoring and evaluation. Where one can always find out later after the situation has been sorted out whether it was done to the satisfaction of the institutions.

With the three procedures well illustrated above open tendering, restricted and direct tendering procedures it is very clear with the amounts of time taken they cannot arrest an emergency. Restricted tendering method is mostly used as shown in Figure 4.5 and it can deliver for planned and not unplanned maintenance

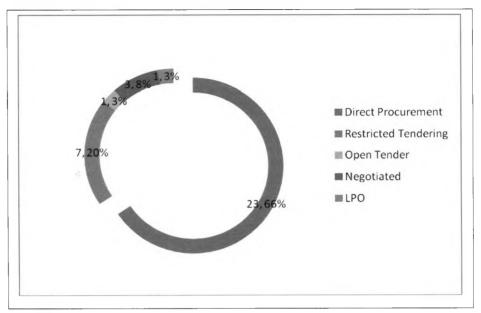
Figure 4-5 Tendering Procedures Used



Source; Author, 2012

In cases of emergency or corrective or unplanned maintenance the tendering procedure used by the institutions are as indicated in Figure 4.6 with greatest preference given to direct procurement 66%. Direct procurement method is the only provision given in the PPDA to be used in times of emergencies and public institutions have no choice rather than to comply whether it delivers or not and this is a bad situation. It is not as direct as it is stated because there are some approvals supposed to be given before one procures the services.

Figure 4-6 Procedure Applied for Emergency or Unplanned Maintenance



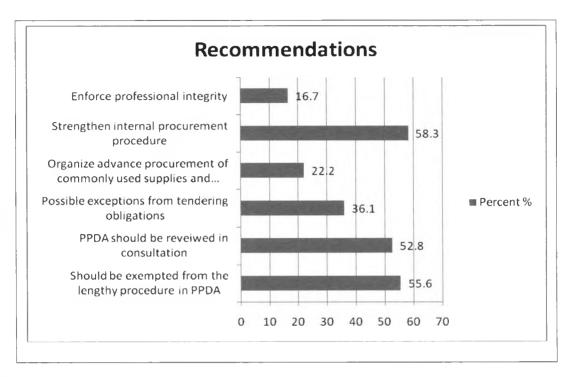
The respondents, 77.8%, indicated that in their own opinion, the procedures were not adequate against 19.4% and they recommended the following to be done to ensure the process is effective as indicated in Table 4.12.

Table 4-12 Recommendations to ensure emergency procurement is effective

Recommendation	Frequency
Should be exempted from the lengthy procedure in PPDA	20
PPDA should be reviewed in consultation with stakeholders	19
Possible exceptions from tendering obligations	13
Organize advance procurement of commonly used supplies and services	8
Strengthen internal procurement procedure	21
Enforce professional integrity	6

With the many challenges posed by the PPDA as indicated in table 4.12 and figure 4.7 majority felt that something should and can be done to ensure procurement for corrective maintenance is effective. These emergencies 55.6 %recommended for them to be exempted from the lengthy procedures stipulated in the PPDA. The stakeholders should also be consulted during review of the Act to ensure all interests are catered for.

Figure 4-7 Recommendations



It can only be construed that a system is successful if it is effective, efficient and cost effective and that would be the joy of many procurement and maintenance officers being able to respond to unplanned maintenance cases. That's why many of them recommends that the PPDA to be reviewed in consultation with the relevant stakeholders for it to become more responsive.

## 4.6 The Ideal Public Procurement and Tendering Systems for Emergencies

From the above discussions, the respondents have acknowledged the challenges faced in the procurement of emergencies and other unplanned maintenance in the public sector. Some of the suggestions made to improve service delivery include the need to review the PPDA to allow emergency purchases as illustrated in the summary made in Table 4.13. Further 63.9% of the respondents indicated that the emergencies are not well taken care of in the Act against 2.8% as there are inadequate funds set for the emergencies. Some of the factors that are impending the effective corrective maintenance in the institutions are the long approval levels to issues service orders, the long procurement procedures, the approval levels also cause delays and financial limitations hindering immediate undertakings by the institutions. These factors are summarized in Table 4.14 indicating the frequencies. The respondents 44.4% also indicated that the institutions have no maintenance manual

used when performing preventive maintenance, managing emergency situation against 27.8%. Figure 4.8 indicates the variations.

Table 4-13 How to Make PPDA Responsive to Maintenance Emergency Projects?

		Frequency	Percent
Valid	PPOA Act to be reviewed on the	1	2.8
	emergency purchases	1	2.0
	Regular services of the rule that	8	22.2
	govern the procedures	o	22.2
	Review to allow for emerging	2	5.6
	procurement	2	5.0
	Review the Act	2	5.6
	Improve procurement procedures and		
	educate public and clients on	1	2.8
	maintenance		
	The procurement procedure should be		
	internalized and audited later from	1	2.8
	internal services		
	Make procurement procedure short	,	2.0
	and precise	1	2.8
	Ensure the term contract are captured	,	2.9
	well	1	2.8
	Need to have customer care officers to		•
	receive complains	l	2.8
	To enhance threshold for procurement		2.0
	and in particular direct method	1	2.8
	Temporary imprest should be added	. 41	
	and adequate	1	2.8
	Accountability among stakeholders	3	8.3
	888.00	1	2.8
	Total	24	66.7
Missing	System	12	33.3
Total	,	36	100.0

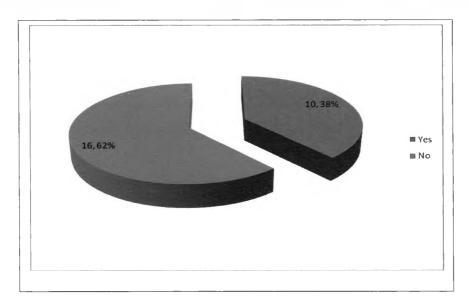
Source; Author, 2012

Table 4-14 Factors Impending the Effective Corrective Maintenance in the Institution

		Frequency	Percent
Valid	Approval levels to issue service orders	2	5.6
	Long procurement procedures	17	47.2
	Approval level causes delays	3	8.3
	Financial limitations hinder immediate undertakings	1	2.8
	No Response	4	11.1
	Total	27	75.0
Missing	System	9	25.0
Total		36	100.0

There are various factors which impede effective maintenance in the institutions visited as shown in table 4.14 the main factor being the long procurement procedures. Time is of essence in times of emergencies but with the long procedures would mean a lot of time wasted. This affects the costs and eventually the quality of the projects.

Figure 4-8 Institutions that have Manual Used in Performing Preventive Maintenance



Source; Author, 2012

The PPDA is major impediment in to the delivery of emergency maintenance projects whose effects and challenges are as discussed above. Therefore, the ideal procurement system should factor in cost of maintenance, time and quality for it to be successful.

# 4.7 Chapter Conclusions

From the institutions surveyed, the type of maintenance arrangement preferred is periodical 58.3%, routine 13.9% and corrective arrangement which account 2.8%. Funding for emergency maintenance is not adequate and is mainly based on the prepared annual major maintenance programme. Major maintenance is cyclic after every 5 years and not enough to cater for corrective maintenance and repairs. Therefore from the findings it has come out clearly that PPDA poses major challenges on the delivery of projects for emergency maintenance and has affected them greatly in terms of time, cost and quality

#### CHAPTER FIVE

# DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 5.1 Introduction

The purpose of this study was to evaluate the challenges posed by the Public Procurement and Tendering procedures on delivery of maintenance projects; the case of Ministry of Housing, National Social Security Fund and Kenyatta National Hospital maintenance projects. The objectives of the study included:

- a. Establish the effects of the Public Procurement Disposal Act on the procurement of public maintenance projects
- b. Evaluate the challenges faced in carrying out public maintenance projects
- c. Determine the ideal procurement and tendering system for emergencies and other unplanned maintenance projects in the public sector.

Accordingly, research questions were formulated in line with the research objectives, which the researcher set out to look for answers.

With a sample of 40 respondents selected purposefully from the public institutions; the researcher used a questionnaires and interview schedule to gather information related to the study. The study findings were analysed, presented and interpreted. This chapter therefore presents discussions of the study findings, conclusion and recommendations on important issues that arose from the study and finally recommends areas for further research work.

#### 5.2 Discussion of Study Findings

It is evident from the analysis that the Public Procurement and Disposal Act caused various challenges in the Public Procurement and Tendering of corrective maintenance projects within the public institutions. The major findings are discussed as follows in line with the research objectives

The first objective was to establish the effects of the Public Procurement Disposal Act on the procurement of public corrective maintenance projects. The extensive literature reviewed indicated that a sound procurement system is one that inspires the confidence and willingness to compete of well qualified contractors. This would benefit directly and concretely the procuring entity or project owner

and the financier. The major effects noted by the research are the time delays due to a lot of documentation required during process time delays are also due to vested interests among the procurement officers the increase time taken to respond to maintenance, buying and putting order of procuring materials and finally slows down the implementation of emergency works There are also too many players and the emergency cases that needed urgent attention aggravates further compromising the quality of the structures. With these effects it is clear that the procurement system is not sound.

Due to the time overrun, the costs of maintenance for emergency projects have tended to increase due to the inflation affecting the cost of materials and labour which is not factored in at the delayed time of procurement.

Second objective was to evaluate the challenges faced in carrying out public maintenance projects. The United Nations article provided that a procurement system should ensure adequate internal control and risk management. The system should install integrated systems that link various functions such as budgeting and planning, procurement procedures and the contract or project implementation. The survey indicated that there are various challenges faced by the executors of the projects. The main challenge being lack of sufficient funds in times of the emergencies and where the funds are availed the respondents indicated that the bureaucratic procedure makes it difficult to respond on time. Personnel are also a challenge especially with the ministry where you find the officers manning the various counties are too few to be able to handle the works adequately. Carelessness of the building occupants due to lack of maintenance culture by occupants, burglary or theft that end up damaging building fabric and finally the lack of adequate knowledge among the staff or personnel are also other challenges identified. These are challenges which can be overcome with an integrated procurement system.

In the normal situation, cases of emergency maintenance encountered include, lifts, generator maintenance, plumbing, electrical faults, show stands preparations, blocked and overflowing sewerages, leaking water closets, bathtubs, taps and emergency occasioned by weather patterns.

Lastly the third objective was to determine the ideal procurement and tendering system for emergencies and other unplanned maintenance projects in the public sector The PPDA is major impediment in to the delivery of emergency maintenance. Other jurisdictions use accelerated procurement procedures in times that demand enhanced flexibility, responsiveness and accountability. Emergency procurement is used in contexts where life, property or equipment is immediately at risk or

standards of public health, welfare or safety need to be re established without delay. Therefore, the ideal procurement system should factor in cost of maintenance, time and quality for it to be successful. Some of the suggestions made to improve service delivery include the need to review the PPDA to allow emergency purchases. Some of the factors that are impending the effective corrective maintenance in the institutions are the long approval levels to issues service orders, the long procurement procedures, the approval levels also cause delays and financial limitations hindering immediate undertakings by the institutions

# 5.3 The Study Hypothesis

The study investigated the challenges posed by the public procurement and tendering procedures on delivery on maintenance projects and had the following as null and alternate hypothesis;

H<sub>o</sub>= Public procurement and tendering procedures have no effect on delivery and maintenance of projects

H<sub>A</sub>=Public procurement and tendering procedures has effect on the delivery and maintenance of projects

From the findings of the study discussed above, the respondents 75.5% of those interviewed asserted that the PPDA which guides the procurement and tendering procedures in the public sector has effects on the delivery and maintenance of projects. The main effect of the PPDA on the procurement and maintenance of projects is the increase in maintenance cost mainly due to time overrun as this process consumes a lot of time. For instance, 63.9% of the respondents indicated that it takes about 1 to 3 months for maintenance request to be responded to. The respondents further noted that the documentation during this process consumes a lot of time and also the vested interests determine how long the process takes. Therefore, these effects evident from the respondents enables the researcher to reject the Null Hypothesis (H<sub>0</sub>) that Public procurement and tendering procedures have no effect on delivery and maintenance of projects and accepts the Alternative Hypothesis (H<sub>A</sub>) that Public procurement and tendering procedures has effect on the delivery and maintenance of projects.

#### 5.4 Conclusions

The Public Procurement and Disposal Act was enacted to provide guidelines for Public Procurement and Tendering in the public sector. The Act has greatly affected procurement for corrective maintenance the major effect noted by the research being the time delays. The bureaucratic processes

due to the provisions of the Act has rendered the processes difficult and time consuming hence fail to serve the main purpose especially in the procurement of emergency services. Lack of a clear and well-defined procurement procedure for emergency services in the public institutions has made the procurement process for emergency services bureaucratic.

With evaluation of the challenges faced in carrying out public maintenance projects The main challenge was lack of sufficient funds in times of the emergencies and where the funds are availed the respondents indicated that the bureaucratic procedure makes it difficult to respond on time

The study proposes that the PPDA be reviewed especially to allow for effective procurement for emergency services in the public sector and ensure smooth running of the organization. It's worth noting that the effective procurement for emergency services is a sound business and management strategy, for any institutions regardless of size, and will lead to having a positive impact on the service delivery. This should not be regarded only as a requirement under the law, but should become and remain a core management strategy. Emergency Procurement plans with senior management commitment will improve productivity and employee's moral hence should be encouraged. Therefore, the ideal procurement system should factor in cost of maintenance, time and quality for it to be successful.

#### 5.5 Recommendations

This study on the challenges posed by the Public Procurement and Disposal Act on procurement for maintenance services within the public institutions and the challenges faced in its implementation would be incomplete without recommending strategies to overcome the challenges and make procurement successful. The recommendations are drawn from insights from respondents discussed in chapter four as well as experiences from other countries where procurement for emergencies has been implemented with high level of success. These recommendations were done in line with the study objectives

**Procurement model** is a procurement model for emergency services which is easy to administer, flexible and cost effective should be adopted which is accelerated and does not have to go through the whole procurement processes. This model should be incorporated in the PPDA and the Regulations as procurement and tendering procedure to ensure smooth response to emergencies. This model is geared towards overcoming the challenges posed PPDA and the effects of time, cost overruns and compromise of quality

**Policy support,** we note that the ideal procurement system should factor in cost of maintenance, time and quality for it to be successful. The results of the analyzed data a big percentage has advocated for review of the PPDA, therefore the government should review regulations and policies which impact on procurement to ensure they support emergency services. This should include;

- a) The regulations on public procurement to be expanded to cover all forms of procurement including procurement for emergencies which is not tied to some bureaucratic approvals through professional associations' in the drafting or revision of procurement laws, regulations and guidelines.
- b) Establish a feedback mechanism to monitor and evaluate the implementation of PPDA through the PPOA which will ensure that successes of public procurement are documented and shared and the emerging challenges are identified and appropriate measures taken to address them. This will enable the implementers of the act to constructively influence the implementation strategy

## c) 'From procurement officer to "contract manager'

Public procurement systems in countries have moved increasingly from a situation where procurement officers are expected to comply with rules to a context where they are given more flexibility to achieve the wider goal value for money. As countries have developed flexible regulatory frameworks and simplified procedures, a trend is to develop uniform documentation to ensure consistent implementation of rules in order to raise awareness about evolving procurement standards.

The government should also reform its institutions to ensure efficiency in public procurement by improving management information through aggregation of demand, lowering prices through reduced production costs and transaction costs and enhancing the efficiency of the supply chain. It may also reinforce the integrity and neutrality of the public procurement system since:

- The central public procurement body often has a "firewall" position that avoids direct contact between the contractors and end-users;
- Promoting integrity and auditing actual practices is easier in a single entity than hundreds of government entities, and contributes to more uniform and professional working methods;
- Transparency and openness are often a key factor for the credibility of the public procurement body to achieve good results for end-users of the contract, in particular government agencies, in their negotiations with bidders.

**Inadequate funding;** A vote for emergency response should be set aside because with restrictions imposed by the PPDA, most of the prequalified contractors are not always ready to provide the services within a short notice owing to liquidity problems.

#### 5.6 Areas of Further Study

This research project was undertaken with constraint on time and money and its scope is limited in terms of addressing the impact of public procurement tendering procedures on delivery of maintenance services.

Therefore, there is need for further research in the following areas;

- a) The development of a Comprehensive Computer-based System of Performance Measurement for Tender Evaluation Process versus delivery of emergency services
- b) Research into the causes and consequences of delays in tendering procedures in Kenyan public institutions
- c) A comparative study of procurement and tendering procedures in both private and the public sector.

#### REFERENCES AND BIBLIOGRAPHY

- Arrowsmith, S & A. Davies. (1998). *Public procurement global revolution*. London: Kluwer law international.
- Arrowsmith, S. (2006). The past and future evolution of EC procurement law: from framework to common code. *Public contract law*.
- Arrowsmith, S. (2003). Transparency in government procurement: the objectives of regulation and the boundaries of the World Trade Organisation. *Journal of world trade*, 283-303.
- Ashworth, Allan & Keith. (2000). Construction Economics. Willi's practice and procedure for the quantity surveyor in procurement.
- Atkinson, W. (2003). New buying tools present different ethical challenges. *Purchasing*, 27-30.
- Babbie, E. (1998). The practice of social research. California: Wadswork publishing company.
- Barret, P. (2000). Balancing accountability and efficiency in a more competitive public sector environment. *Australian journal of public administration*, 58-71.
- Bauld, S & McGuinness K. (2006). Value for money. Summit, 9 (1), 20-21.
- Bovies, C. (2007). Public procurement law. London: Edward elgar publishing.
- Brown, A. (2007). Seeing through transparency: the requirement to advertise. *Public contracts and concessions under the EC treaty*.
- Bryman, A. (2001). Research methods and organisation studies. London: Unvil Hyman.
- Collins. (2003). English Dictionary. New York: HarperCollins.
- Cooper D.R & Schindler P.S. (2003). *Business research methods* (8th ed.). New Delhi: McGraw-Hill companies Inc.
- Cummings, G & Qiao Y. (2003). The use of qualification based selection in public procurement: a survey research. *Journal of public procurement*, 215-226.
- Drijber B. J & Stergiou H.M. (2009). Public procurement law and internal market law. *CML From theory to practice*.
- Erridge A, Fee R & Mcllroy, J. (1999). An assessment of competitive tendering using transaction cost analysis. *Public money & management*, 37-42.

- Flybjerg, B. (2004). Five misunderstandings about case study research. Seale: C. Gobo.
- Gunasekaran, A. (2005). Benchmarking in public sector organisations. Benchmarking.
- Hughes, J. (2003). Accountability rules. Supply management, 17-18.
- John McGeorge & Jonnette Adams. (2003). *Tender evaluation training programme*. New Zealand: Transit.
- Kothari, R. (2004). Research methodology methods and techniques (Second ed.). New Delhii: New age international.
- Kothari, R. (2003). Research methodology Quantitative techniques for managerial decisions (First ed.). New delhi: New age international.
- Kumar, R. (1999). Research methodology. A step by step guide for beginners.
- Kumekpor, T. (2002). Research methods and techniques of social research. Accra: Sonlife press and services.
- Lambsdorf, J. G. (2006). Causes and consequencies of corruption: what do we know from a cross section of countries. Northampton: Eldward elger publishing.
- Lambsdorff, J. G. (2001). Exporters ethics some diverging evidence. *International journal of comparative criminology*, 27-44.
- Le-Billion, P. (2005). Buying peace or fuelling war: the role of corruption in armed conflicts. *Journal of international development*, 413-426.
- Lee, R. (1987). Building maintenance management. Oxford: Oxford university press.
- Lewa, M. (2007). Management and organisation of public procurement in Kenya: A review of proposed changes. Nairobi: University of Nairobi.
- McCaffer. (2001). Project procurement system selection model. American society of civil engeneers.
- McGowan. (2007). Clarity at last. Low value contracts and transparency obligations.
- Mugenda, O Mugenda. (2003). Research methods. Nairobi: Acts press.
- Mwangi, J. (2009). Public health systems training. Kenya procurement journal.
- Nwabuzor, A. (2005). Corruption and development: new initiatives in economic openness and strengthened rule of law. *Journal of business ethics*, 59 (1), 121-138.

- Palmer R. D & Butt A.H. (1985). Value for money in the public sector, the decision makers guide.

  Oxford: Basil Blackwel ltd.
- Peter, S. (2010). Government procurement: new recognition, new challenges. *Kenya procurement journal* (6).
- Preib, H. (2010). An overview of regulation in 46 jurisdictions world wide. London: Business res limited.
- Rege, V. (2001). Transparency in government procurement: issues of concern and interest to developing countries. *Journal of world trade*, 35 (4), 485-515.
- Rose-ackerman, S. (1999). Corruption and government causes, consequences and reform. Boston: Cambridge university press.
- Schlosser. R, Taylor & Gulick. (2003). A comparison of two legendary change agents. *Construction and engineering economics*.
- Seeley, H. (1987). Building maintenance. London: The macmillan press.
- Stephen, M. (2006). The role of procurement method in project performance: a comparative study between traditional and alternative methods. Nairobi: University of Nairobi.
- Stergiou, H. (2009). The increasing influence of primary EU law on EU public procurement law. EU and WTO law on services.
- Tasmania. (2006). Department of treasury and finance. Guidelines on tender evaluation using weighted criteria for building works and services, 2.
- Trepte, P. (2007). Public procurement in the EU. A practitioner's Guide. Oxford: OUP.
- Tsunami Evaluation Coalition. (2006). Joint evaluation of the international response to the Indian Ocean Tsunami. London.
- United Nations. (2004). United nations convention against corruption.
- Ware G.S, E. Campos & G Noone. (2007). Corruption in public procurement: A perennial challenge. *The many faces of corruption*.
- Waugh, D. (1995). Geography, an integrated approach (Second ed.). London: Mayfield.
- Yin, R. (2003). Case study research: Design methods. Newbury Park: Sage.
- Zikmund, W. (2003). Business research methods. Texas: Harcourt college publishers.

#### **APPENDICES**

# Appendix 1-Questionnaire

# QUESTIONNAIRES FOR PUBLIC INSTITUTIONS



## UNIVERSITY OF NAIROBI

#### Letter of introduction to the institutions

Dear Sir/Madam.

I am currently undertaking a Masters of Arts Degree in Construction Management at the University of Nairobi. In fulfilment of the requirements of the course am carrying out a research project on the topic "The Challenges Posed By the Public Procurement and Tendering Procedures on Delivery of Maintenance Projects".

To conduct the research, I have sampled the institution as a source of data for the study. Accordingly, I would be grateful if you could complete the attached questionnaire. Your assistance in facilitating this research is highly appreciated and information provided will be treated with strict confidence and will be used for the purpose of this academic study only. Individuals will not be identified in the report or any other subsequent dissemination of the information.

Thank you very much for your time and co-operation.

Yours Faithfully,

#### Catherine Mutava (B50/60348/2010 (Cell Phone Number 0722-498960)

The series of questions in this questionnaire are designed to obtain organizational response on procurement procedures for unplanned or corrective / emergency maintenance in public institutions.

# Procurement procedures for Maintenance services

To be answered by procurement officers / building surveyors / maintenance officers carrying out maintenance

Name of Insti	tution
1.	In which respondent category are you?
	Procurement Officer Maintenance Officer/Building Surveyor
2.	For how long have you worked in the Ministry of Housing?
	1-2 Years 3-5 Years 6-8 Years 9-11 Years
	12 and above
3.	In which respondent category are you?
	Top level management Middle level management
	Lower level management
	Does your institution make procurement plans? Yes No and if yes are they
C	done?
	Quarterly
	Annually
	Biannually
(	Other (please specify)
5. l	Do the Public Procurement and Disposal Act guide your procurement procedures?
Y	es No explain
6.	Are there any challenges which you face in applying the PPDA?
	Yes
	a) Inadequate choices of procedures

	b)	Lack of adequate assessment and planning	
	c)	Insufficient timeframe preparation	
	d)	Inconsistent practices across the bidders in the first stage	
	e)	The selection of suppliers have inconsistent bidders' information	
	f)	Conflict of interest situations are prevalent	
	g)	Impact of the procedures on implementation of maintenance works	
	h)	Timeliness of procuring the services/ delivery	
	i)	problems touching on integrity	
	j)	Contract administration has insufficient monitoring process	
	k)	No transparency in contracts being awarded	
	1)	corruption	
		No Please explain	
7.	With	those challenges what would you recommend to be done to the PPD	A?
8.		e the procurement plans are in place can they be reviewed?	
	No		
0	And	if No explain	
9.	And  Whe	if No explain  en procuring for maintenance services what tendering procedures do year.	ou apply?
9.	And  Whe	en procuring for maintenance services what tendering procedures do ye	ou apply?
9.	And Whe a) O b) Re	en procuring for maintenance services what tendering procedures do ye	ou apply?

I0. How I	ong does each procedure above take you?
a)	
b)	
c)	
d)	
11. In cas	se of emergency or corrective or unplanned maintenance which procedure do you
a)	
b)	
c)	
d)	
e)	Any other please specify
-	ur opinion do you feel that procurement for emergencies are adequately catered for
	procurement Act?
Yes	
No	
a.	Should be exempted from the lengthy procedures in PPDA
b.	PPDA should be reviewed in consultation
c.	Possible exceptions from tendering obligations
d.	Organize advance procurement of commonly used supplies and services
e.	Strengthen internal procurement procedure
f.	Enforce professional integrity

g. Operate common procurement systems for bulk supplies									
13. What are the effects of Public Procurement Act on procurement for services of									
maintenance projects in the public sector									
a. Delays before cases are responded to									
b. Lengthy procedures									
c. Maintenance cases move from better to worse									
d. Increased maintenance costs									
e. Any other please specify									
14. How long does it take for maintenance request to be responded to? less than a month									
1-3 months 6-12 months More than 12 months other please specify									
15. Does your institution have a maintenance policy?									
Yes No									
If yes what is the procurement strategy									
16. Does the procurement strategy address emergency or unplanned maintenance?  Yes No									
17. In your normal duties what cases of emergency maintenance do you encounter?									
Please list them in order of seriousness									
a									
b									
C									
d									

Thank you so much for taking your time to fill out this questionnaire.

# **Appendix 2- Interview Schedule**

# INTERVIEW SCHEDULE FOR PROCUREMENT/MAINTENANCE/ BUILDING SURVEYOR PERSONNEL

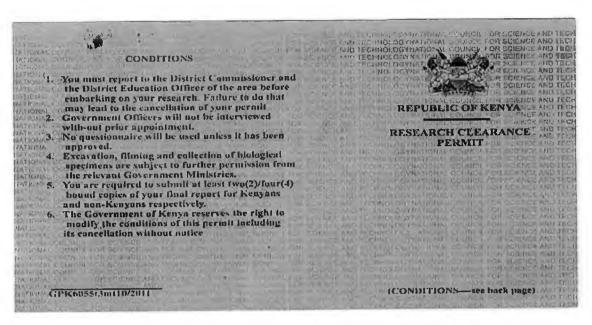
The series of questions in this questionnaire are designed to obtain organizational responses on procurement procedures for emergency maintenance.

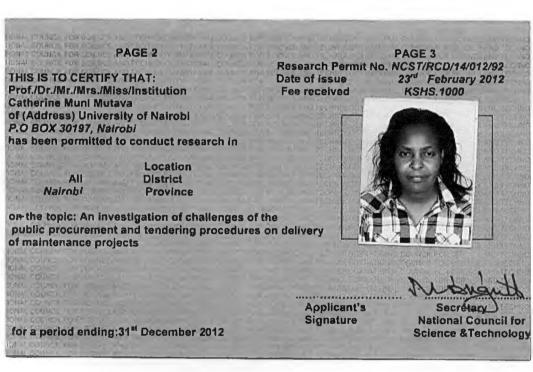
Name of t	he in	stitutio	1	•••••		• • • • • • • • • • • • • • • • • • • •	• • • • • •							
	1.	Does	your	insti							pol	-		•••••
	2.		s, who		-		•						• • • • • • • •	
	3.	What ty	pe of m	aintena	ance ar	ranger	nent	do yoı	ı have	in place	<del>?</del> ?			
		Period	ic ( ) Ro	outine (	) Nor	ne ( )	Preve	entive	( )					
		Other	please sp	ecify.										
								•••••						
				• • • • • • • •			•••••		• • • • • • • •	• • • • • •				
	4.	Do you	inspect	the bu				ne its	mainte	enance	needs?	Yes (	) If y	es how
		often	and	d	if	No		(	)	ple	ase	give	Ī	reasons
	5.	Is mair	itenance	fundin	g adeq	uate?.		• • • • • • • • • • • • • • • • • • • •			•••••	•••		
					• • • • • • •									
			• • • • • • • • •	• • • • • • • •	• • • • • • •					• • • • • • • • • • • • • • • • • • • •	•••			
	6.	How	long	does	it	take	to	respo	ond	to m	aintenar	nce i	equest/	needs?
		• • • • • • •						• • • • • • •						
									• • • • • • •	• • • • • • • • •	• • • • • • • • • • • • • • • • • • • •		• • • • •	

7.	Does the institution have a written long-range plan for maintenance and repairs that									
	extends out a minimum of three to five years?									
8.	How well are you equipped	ed in terms of per	sonnel and equipmen	nt for the maintenance						
task confronting the institution?										
	Personnel/Artisans	Qualification	Number of each	What is the ideal						
	e.g. masons etc	Quantitudition	Trained of Gaen	number						
	Artisans – masons,			namou						
	,									
	painters, carpenters,									
	electrician etc)									
	Charge hands									
	Inspector									
	buildings/electrical									
0	Is there a plan to reduce	dafarrad maintan	ance that includes a	list of major deferred						
9.	9. Is there a plan to reduce deferred maintenance that includes a list of major deferred									
	maintenance projects rank	ed by level of seve	erity and urgency?							
1	10. What factors in your opinion are impeding the effective corrective maintenance in the									
	institution?									
11	. Does the institution hav	re a maintenance	manual used when	performing preventive						
	maintenance,	managing	emergency	situations						
	etc?									
12	2. When it comes to em	ergency mainten	ance procurement o	f the services which						
	12. When it comes to emergency maintenance procurement of the services which challenges do you encounter?									

13.		would								challenges?
	How	•••••	Public	Procurer	nent	Regula	ations af	 fect y	our proc	urement for
15.	In you	r opinion do	o you fe		Č					
										•••••
16.	What	would yo	ou sugg	gest to	be do	one so	as to	impro	ve servi	ce delivery?

# **Appendix 3- Research Permit and Authorisation**





#### REPUBLIC OF KENYA



# NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349 254-020-310571, 2213123, 2219420 Fax: 254-020-318245, 318249 When replying please quote secretary@ncst.go.ke

P.O. Box 30623-00100 NAIROBI-KENYA Website: www.ncst.eo.le-

Our Ref: NCST/RCD/14/012/92/4

23rd February, 2012

Catherine Mueni Mutava University of Nairobi Department of Real Estate & Construction Management P. O. Box 30197 - 00100 NAIROBI

#### **RE: RESEARCH AUTHORIZATION**

Following your application for authority to carry out research on "An investigation of challenges of the public procurement & tendering procedures on delivery of maintenance projects: Case study of the Ministry of Housing, NSSF & Kenyatta National Hospital maintenance projects" I am pleased to inform you that you have been authorized to undertake research in Nairobi Province for a period ending 31st December 2012.

You are advised to report to the Permanent Secretary, Ministry of Housing, the Director, Kenyatta National Hospital & the Managing Trustee, NSSF, Nairobi before embarking on the research project.

On completion of the research, you are expected to submit two hard copies and one soft copy - pdf of the research report/thesis to our office.

DR. M. K. RUGUTT, PhD, HSC DEPUTY COUNCIL SECRETARY

Copy to:

The Permanent Secretary Ministry of Housing

"The National Council for Science and Technology Is Committed to the Promotion of Science and Technology for National Development