# KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

# DEPARTMENT OF BUILDING TECHNOLOGY COLLEGE OF ARCHITECTURE AND PLANNING

CHALLENGES FACING PROCUREMENT UNIT OF ELECTRICITY

COMPANY OF GHANA AT THE PRE-CONTRACT STAGE UNDER THE

PUBLIC PROCUREMENT ACT 2003 (ACT 663)

BY

**DANIEL BADU AGYEKUM BSc.** (Hons.)

A DISSERTATION SUBMITTED TO THE DEPARTMENT OF BUILDING
TECHNOLOGY, IN PARTIAL FULFILMENT OF THE REQUIREMENT OF
THE MASTER OF SCIENCE DEGREE IN PROCUREMENT MANAGEMENT

**NEVEMBER, 2014** 

### **DECLARATION**

I declare that except portions where references have been duly cited, this dissertation is an outcome of my own work to the best of my knowledge towards the award Mater of Science degree in Procurement Management, and that it has not in part or whole been presented for an award elsewhere.

K	NUST	
DANIEL BADU AGYEKUM		
Student's Name	Signature	Date
<u>\</u>	113	
I declare that I have supervised the	student in undertaking the research r	reported herein
and I confirm that the student has m	y permission to present it for further a	ssessment.
CHE!	W FIF	
PROF. EDWARD BADU		
Supervisor	Signature	Date
I confirm that the student has duly e	effected all corrections suggested by the	e examiners in
conformity with the department's re	equirements	
ZWJS	TANE NO	
PROF. JOSHUA AYARKWAH	······································	
Head of Department	Signature	Date

### **DEDICATION**

I dedicate this work to the Creator of all creatures for His divine protection and guidance, and my lovely wife, Angella Adjei-Adamki Agyekum for her untiring support and prayers.



### **ACKNOWLEDGEMENT**

First and foremost, I sincerely express my profound gratitude to the Almighty God who has been my guidance, protector and comforter despite all the impediments.

This report owes a profound gratitude to Prof Edward Badu, Provost; College of Architecture and Planning for assisting me develop the topic and efficiently supervising the work. Prof. I am very much grateful to you for your invaluable contributions to see this dissertation to a successful end.

My profound thanks also go to all lecturers of the Department of Building Technology for their contributions and suggestions during the seminars especially Mr. Kojo Hohoabu for all his advice and encouragement.

I am also very grateful to the various authors whose works I have acknowledged in my references.

I would like to thank my lovely wife; Angella Adjei-Adamki Agyekum for her inspirational support, Kissi Ernest and Dennis Bio for their support and assistance.

WASAN

### **ABSTRACT**

The procurement process has become increasingly more complex, particularly with recent demands for more transparency, accountability and budget constraints. The object of procurement of works cannot be achieved properly if at the pre-contract stage one is unable to properly define, schedule and understand the proposed construction as a result of non-compliance with legal framework. The aim of the study was to identify the challenges with procurement of works at pre-contract stage under the Public Procurement Act 2003 (Act 663). Hence the specific objectives were to establish the level of compliance of pre-contract stage activities with the Public Procurement and the implementation challenges as per the Act 663 by Electricity Company of Ghana. The scope of the study focused on the Premises/Estates Directorate of the Electricity Company of Ghana. Structured questionnaires were used to obtain data for this study. The study revealed that several pre-contract stages activities in the Public Procurement Act are being complied by the Electricity Company of Ghana. More so, the study confirmed that the Directorate's procurement activities are faced with challenges such as illiteracy and inadequate contract management skills among some contractors; the need to cancel tendering and seek offers again; lack of sanctions to public officials for poor performance; shortage of experience professional staff; lack of knowledge of legal framework; delays in establishing full time operational procurement units with the full complement of staff; difficulty in obtaining bid security; low bid prices offered by bidders due to award of contract to the lowest evaluated bidder; lack of career development path been established for procurement in the civil service inconsistencies in tender evaluation; delay in payment of works executed by contractors; lack of incentives to follow proper procurement procedures. In pursuit to mitigate the challenges faced by the Directorate, the study recommends among others: sourcing of procurement experts to train and educate staffs, stiffer punishment to flouters and nonadhering entities to the Public Procurement Act, incentive such as tax rebate to increase the appetite of companies in adhering or complying with the Public Procurement Act, 663, provision of adequate and prompt funding for procurement activities by all stakeholders including companies and government.

# TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENTSLIST OF TABLES	vi
LIST OF FIGURES	xii
W. Charles	
CHAPTER ONE	1
GENERAL INTRODUCTION	
1.1 BACKGROUND OF THE STUDY	1
1.2 PROBLEM STATEMENT	4
1.3 AIM AND OBJECTIVES OF THE RESEARCH	5
1.3.1 Aim of the Research	5
1.3.2 Objectives of the Research	6
1.3.3 Research Question	6
1.4 JUSTIFICATION OF STUDY	6
1.5 RESEARCH METHODOLOGY	7
1.6 SCOPE OF RESEARCH	8
1.7 ORGANIZATION OF RESEARCH	8

CHAPTER TWO	, 9
LITERATURE REVIEW	, 9
2.1 INTRODUCTION	. 9
2.2 CONCEPTS OF PROCUREMENT	. 9
2.2.1 Historical Evolution of Procurement	9
2.2.2 Definition of Procurement	10
2.2.3 Importance of procurement	12
2.3 INTRODUCTION OF THE PUBLIC PROCUREMENT ACT 2003 (Act 663)	13
2.3.1 Legal Framework of Procurement	13
2.3.1.1 Public Procurement Act 2003 (Act 663);	14
2.3.1.1.1 Objectives of the Act 2003 (Act 663)	15
2.3.1.1.2 Scope of Application of the Act 2003 (Act 663)	15
2.3.1.1.3 Functions of the Act 2003 (Act 663)	15
2.3.1.1.4 Institutions the Act 2003 (Act 663) Applies to:	16
2.3.2 Public Procurement Regulation;	16
2.3.3 Public Procurement Manual;	16
2.3.4 Public Procurement Guidelines; and	17
2.3.5 Standard Tender Documents;	17
2.4 PROCUREMENT STRUCTURES	17
2.4.1 Public Procurement Authority	18
2.4.2 Procurement Entity	19
2.4.3 Head of Entity	19
2.4.4 Procurement Unit	20
2.4.4.1 Functions of Procurement Unit	20

2.4.5 Entity Tender Committee	22
2.4.5.1 Establishment of Entity Tender Committee	22
2.4.5.2 Functions of State Enterprise Tender Committee	22
2.4.6 Tender Evaluation Panel	23
2.5 PROCUREMENT PROCEDURES	. 23
2.5.1 Planning Procurement	23
2.5.2 Tendering Procedures	24
2.5.3 Contracts Management	25
2.5.4 Monitoring and Evaluation	26
2.5.5 Appeals and Complains	27
2.6 GHANA PROCUREMENT ASSESSMENT REPORT (GPAR)	28
2.7 ASSESSMENT OF PUBLIC PROCUREMENT ENTITIES	. 28
2.8 PUBLIC PROCUREMENT LAW AND IMPLEMENTATION CHALLENGES	. 30
2.9 PROJECT LIFE CYCLE	. 32
2.9.1 Pre-Contract Stage Activities	.35
CHAPTER THREE	. 38
RESEARCH METHODOLOGY	38
	. 50
3.1 INTRODUCTION	. 38
3.2 HISTORICAL PROFILE OF ELECTRICITY COMPANY OF GHANA	. 38
3.2.1 Vision of Electricity Company of Ghana	39
3.2.2 Mission of Electricity Company of Ghana	39
3.3 RESEARCH DESIGN	39

3.4 THE STUDY AREA	40
3.5 RESEARCH POPULATION	41
3.6 SAMPLE FRAME	41
3.7 RESPONSE RATE	42
3.9 DATA COLLECTION INSTRUMENT	43
3.9.1 Primary Data	43
3.9.2 Secondary Information	43
3.10 QUESTIONNAIRE DESIGN	44
No. of the contract of the con	
3.10.1 Questionnaire Administration	44
3.10.1 Questionnaire Administration	
3.11 DATA ANALYSIS	45
	45
3.11 DATA ANALYSIS	45
3.11 DATA ANALYSIS  CHAPTER FOUR  DISCUSSION AND ANALYSES	45 46 46
3.11 DATA ANALYSIS  CHAPTER FOUR  DISCUSSION AND ANALYSES	45 46 46
3.11 DATA ANALYSIS  CHAPTER FOUR  DISCUSSION AND ANALYSES	45 46 46 46

CHAPTER FIVE	2
SUMMARY OF FINDING, CONCLUSION AND RECOMMENDATION 62	2
5.1 SUMMARY OF FINDING	2
5.1.1 Experience with the PPA, 6636	2
5.1.2 Pre-Contract Stages Activities	3
5.1.3 Challenges in Directorate Implementation	3
5.2 CONCLUSION6	4
5.3 RECOMMENDATION 6.	5
5.3.1 Education and Training in the Procurement Process	
5.3.2 Sanctions for Non-Compliance	
5.3.3 Provision of Incentive6	
5.3.4 Adequate and Prompt Funding6	
5.4 LIMITATIONS AND AREAS FOR FURTHER STUDIES6	7
The state of the s	
REFERENCES6	Q
APPENDIX 1	2
15 10 SHE	
WY SANE NO BROWN	

# LIST OF TABLES

Table 3.1: Classification of Respondents	42
Table 4.1: Demographic Characteristics of Respondents	47
Table 4.2: General Information on the Public Procurement Act	49
Table 4.3: Pre-Contract Stages Activities	51
Table 4.4: Challenges in the Implementation of Directorates	
Table 4.5: Kendall's Concordance Test	61



## LIST OF FIGURES

Figure 2.1: PLC of Construction Projects (source: Bennet, 2003	)34	1
•		
Figure 2.2: Pre-contract stage of Construction Projects (source:	Ankoma 2014)36	ó



### **CHAPTER ONE**

### **GENERAL INTRODUCTION**

### 1.1 BACKGROUND OF THE STUDY

Contract failures have been on the increase arising from poor procurement practices based on ignorance of the requisite procurement procedures to be followed, to ensure effectiveness and efficiencies in procurement (Acquaye, 2011). Planning for the successful completion of construction projects within the procurement of works cycle is a challenging and complex task faced by multiple parties such as clients, consultants and contractors. The successful execution of construction projects is heavily impacted by making the right decision at the right time. According to Mohammed et al. (2007), construction project life cycle involves three stages namely Pre-contract stage, Construction and Post-construction. However, Acquaye (2011) categorized public procurement procedures into two divisions, which are Pre-contract Procedures and Post-Contract Procedures.

Every institution involved in a procurement process needs to be aware of the challenges that can arise at the pre-tender stages. If not aware of the steps to take to avoid issues that can arise, companies may become entangled in costly litigation, experience economic loss and/or suffer from project delays (Swartz and Ackerley, 2008). Different individuals have different priorities and objectives. It increases the need for efficient decisions from clients, consultants (acting on behalf of clients) of contractors (Mohammed, et al, 2007). For instance, a contractor is required to make decision to

determine either to participate in the tender or not and selection of the most qualified contractor to execute the project by clients. Conventionally, decisions makers tend to make decisions based on a blend of their intuition, subjective judgement based on past experience and emotion. This kind of practice does not guarantee consistent decision and lead to be bias (Mohammed, et al, 2007). In complex environment, undetermined and insufficient external information as input during making decision could trigger to unfair, incomplete and poorly constructed result (Sauter, 2005). It is therefore necessary that Procurement Entities and organizations are informed and made aware of the consequences of the challenges in poor procurement practice, in good time, to save such entities from collapse, or avoidable losses (Acquaye, 2011).

According to Kakwezi & Nyeko (2010), for decades procurement performance has been attracting great attention from practitioners, academicians and researchers due to poor performance resulting from non-adherence of proper processes and procedures. This is partly as a result of how public institutions deal with the procurement process. In Ghana, the Public Procurement Act 2003 (Act 663) has given regulated and structured processes and procedures to adopt in an attempt to procure goods, works and services through fair, transparent and non-discriminatory manner and also the accountability and judicious use of Public funds through the appropriate channels in order to achieve value for money. This can only be feasible if the procurement processes are duly followed. Given the variety of functions of transactions, varying from the purchase of stationery, office furniture, vehicles, insurance services, technical services, consulting services, through to the acquisition of complex satellites and missiles, and the construction of

hospitals, schools, roads, rails, power stations, airports and the like (Sirinivasan, 1997). In Ghana, public procurement accounts for 50% to 70% of the national budget (after personal emoluments) 14% of Gross Domestic Products (GDP), 24% of total imports (World Bank CPAR 2013). In buttressing this, Thai (2001) argued that Public procurement consumes a substantial amount of public money. It was estimated that in Malawi in 2005, public procurement constituted 40% of total expenditure, Uganda also had 70% (Development Procurement Committee OECD, 2005).

Traditionally, the legal framework for procurement activities in the public sector of Ghana was enormously minimal (Westring, 1997). Before then, it was Ghana Supply Commission which was responsible for the procurement of all public goods. Their services were improper planning for required goods, inadequate database and associated problems in the timely acquisition of funds which resulted in late delivery. In response to these developments, most public sector institutions decided to conduct their own procurement activities. These procurements were carried out to achieve value for money. This therefore calls for the enactment of sustainable public procurement laws to provide a legal framework for public procurement activities. Hence the Public Procurement Act, 2003 (Act 663) of Ghana.

The objectives of the Public Procurement Act, 2003 (Act 663) is to harmonise the processes of public procurement in the public service to ensure a judicious, economic and efficient use of state resources in public procurement and ensure that public procurement is carried out in a fair, transparent and non-discriminatory manner. The

ultimate objective of procurement is to add value to the organization in fulfilling its mandate, goals and objectives (UN, 2006).

The importance of Public Procurement calls for assessment of how these procurement processes are conducted in an attempt to achieving the main objectives of the reforms. After the passage of the Public Procurement Act, 2003 (Act 663) over a decade ago, it was mandatory for all public institutions to set up a procurement unit which will be responsible for procurement and the implementation of the Procurement Act, 2003 (Act 663). The Electricity Company of Ghana as a public institution responded to this call by setting up a procurement unit to streamline its procurement activities and also ensures that it adheres to the procurement process. Consequently, Public Procurement Audit Report (2008) revealed that a fraction of the public institutions were not achieving value for money due to non-compliance of the Public Procurement Act 2003 (Act 663).

### 1.2 PROBLEM STATEMENT

The procurement process has become increasingly more complex, particularly with recent demands for more transparency, accountability and budget constraints at the precontract stage (Swartz and Ackerley, 2008). Mistakes made in the procurement process at the pre-contract stage can lead to economic loss and/or litigation. The objectives of procurement of works cannot be achieved properly if at the pre-tender stage one is unable to properly define, schedule and understand the proposed construction as a result of non-compliance with legal framework: the consequence of which will be a potential

for receiving incomplete tenders or tenders that are too high or too low, entangle in costly litigation and /or suffer project delays.

In Ghana, every institution that uses state funds for its operations is supposed to comply with the Public Procurement Act (Act 663). The implementation of the Public Procurement Act is very crucial to these institutions: it is to address the loopholes in the system in which millions of cedis of the state funds were misapplied through procurement activities.

There are a number of civil construction projects being executed across the length and breadth of the country by Electricity Company of Ghana which hardly meet their estimated schedule. The non-adherence of the procurement process goes a long way to affect the procurement function: effectiveness and efficiency which in turn does not allow public institutions to achieve their corporate goals as well as the object of the Public Procurement Act, 2003 (Act 663) (Acquaye, 2007).

### 1.3 AIM AND OBJECTIVES OF THE RESEARCH

This section brings to the fore the aim, objectives and research questions.

SANE

### 1.3.1 Aim of the Research

The main research aim was to identify the challenges with procurement of works at precontract stage under the Public Procurement Act 2003 (Act 663) in Electricity Company of Ghana.

### 1.3.2 Objectives of the Research

This research seeks to achieve the following objectives:

- To establish the level of compliance of pre-contract stage activities as per the
   Public Procurement Act 663 of 2003; and
- To identify the implementation challenges associated with procurement activities at Electricity Company of Ghana.

# KNUST

### 1.3.3 Research Question

- 1. Is pre-contract stage activities adopted by Electricity Company of Ghana established in the Public Procurement Act 663?
- 2. What are the challenges faced by Electricity Company of Ghana in their procurement activities?

### 1.4 JUSTIFICATION OF STUDY

The research work will serve as a useful source of reference for practitioners, academicians and researchers who may conduct further research into pre-tender activities or in a related field. The findings of this research will also add to existing known facts in the area of pre-tender stages in procurement of works. The result will also provide a framework for ensuring effective and efficient procurement process in Electricity Company of Ghana so as to enhance good corporate governance through transparency and accountability.

In conclusion, it is expected that the study will assist the government of Ghana especially Ministry of Energy in regulating and structuring procurement activities of Electricity Company of Ghana for effective and efficient procurement operations in order to obtain value for money.

# 1.5 RESEARCH METHODOLOGY

This section of the research outlined the information to be obtained in relation to the research by taking into consideration the research method, research approach, data collection approach, sample frame and data analysis techniques to be adopted for the research. This included sourcing of credible information and scientific data from existing literature through journals and books relating to the research topic. The enquiry was largely depended on personal interviews, discussions with experts in procurement operations and a self-administered survey questionnaire to collect empirical primary and secondary data based on the results obtained from the reviewed literature from the field. The questionnaires included open and close-ended questions which were designed and administered to procurement practitioners within the Electricity Company of Ghana. Purposive sampling technique was used in selecting the sample size from various actors and stakeholders engaged in procurement in Electricity Company of Ghana. Descriptive statistics (percentages and frequencies) and Kendall's ranking test was used in the analysis of the data collected via Statistical Package for Social Sciences (SPSS) version 16. The relevant conclusions were drawn after the analysis, followed by research report.

#### 1.6 SCOPE OF RESEARCH

The research covered the Premises Directorate of Electricity Company of Ghana; a state owned institution. Contextually, the study assessed the level of compliance at the precontract stage as per the Public Procurement ACT 663 and challenges associated with the implementation.

# KNUST

### 1.7 ORGANIZATION OF RESEARCH

This section outlined how the research work was organized and structured. It was divided into five main independent chapters (body matter) besides the front and end matters as follows: Chapter one gave a general introduction of the study looking at the problem statement, research questions, aim and objectives, justification and scope of the study, methodology and limitations which was encountered during the study. Chapter two reviewed the literature on the study area to an extended coverage of earlier works. This presented a desk study of relevant information related to the topic under study. Chapter three focused on the methodology which was used for data collection and data presentation: questionnaire design and development as well as determination of sample. Chapter four dealt with the empirical analysis of data from the field survey and as presented in chapter three. It also answered all the research objectives and questions. The final chapter contained the summary of findings, conclusion and recommendations of the whole study as well as where future research attempts can be sought if there is the need to undertake a study in the same field.

### **CHAPTER TWO**

### LITERATURE REVIEW

### 2.1 INTRODUCTION

This chapter delves in to the reviews undertaken on Pre-contract stage activities theoretically. The review focuses on the overview of Pre-contract stage activities associated in the Procurement of Works and the varied perceptions expressed by various stakeholders in the Procurement of Works arena. The Public Procurement Authority (PPA) has also given some directives to the key issues regarding pre-contract activities. In this chapter, a number of relevant literatures on Pre-contract stage activities in the procurement of works are presented in order to establish and provide answers to the research questions.

### 2.2 CONCEPTS OF PROCUREMENT

### 2.2.1 Historical Evolution of Procurement

There is strong evidence of active trade between China and what were then the city-states of the region we now call Greece nearly 3000 years ago, (Shen 1996). As the centuries passed, the Silk Road from Asia to Europe provided an important transfer station for products and ideas from China and other Eastern cultures and the emerging societies in Europe. Most had quite sophisticated social networks and this trade was probably linked to the emergence of work specialization in Greek societies as agriculture developed into cultivation and animal husbandry. Blainey (2004) suggests that possibly ten percent of the people in this region lived in villages and towns and

performed non-agricultural tasks that were assisted by local as well as long distance trade and contracting. Similarly, more self-sufficient societies also emerged around this time in Egypt and Mesopotamia where the growth of large cities, often of substantial construction, was associated with more sophisticated organizations and societies.

As Roberts (1983) notes: Their brick technology was advanced enough by the end of the Sumerian period to make possible very large buildings with columns and terrace. The earliest surviving potter's wheel was found at Ur. Soon, by 3000BC the wheel was being used for transport. Another invention of the Sumerians was glass, and specialized craftsmen were casting in bronze. This example of innovation raises further questions: where did the raw materials come from? There is no metal in southern Mesopotamia. Clearly, a widespread network of contacts abroad is in the background, above all with the Levant and Syria, huge distances away, but also with Iran and Bahrain, down the Persian Gulf. Before 2000BC Mesopotamia was obtaining goods – though possibly indirectly – from the Indus Valley [now the site of modern Pakistan]. Together with the evidence of documentation, it makes an impression of a dimly emerging international trading system already creating important patterns of interdependence.

### 2.2.2 Definition of Procurement

Lynch (2012) defines public procurement as directly associated with the acquisition of goods, services and construction works to support national and local government operations and, most importantly, to provide public goods and services.

Public Procurement is defined as the acquisition by public bodies, such as government department and municipalities of various goods, works and services that they need for their activities using public funds by making a contact with another entity (Sirinivasan, 1997) be it public or private. The definition of the overall purchasing task is "to obtain materials, goods and services at the right quality, in the right quantity from the right source delivered to the right place at the right time at the right price, to achieve an organizational objective.

According to the Public Procurement Act, 2003 (Act 663), Public Procurement is 'the acquisition of goods, works and services at the best possible total cost of ownership, in the right quantity and quality, at the right time, in the right place for the direct benefit or use of governments, corporations, or individuals, generally via a contract' (PPA Module, 2007).

However, Ayitey (2009) also has the view that Public Procurement is the process by which organizations acquire goods, works and services using public funds. It is a comprehensive process that runs from proper procurement planning, budget allocation, bids invitation, bids evaluation, award of contract, contract management, performance measurement, monitoring, auditing and reporting. Furthermore, Weele (2005) also sees procurement as the allocation of raw materials, supplies, other consumable items and services as well as assets such as machinery, laboratory equipment, office equipment and buildings to ensure that the business's manufacturing and marketing processes operate effectively. Weele continues that procurement differs from purchasing in that procurement includes all the activities required to get the product from the supplier to the final destination, which includes the purchasing function, stores, traffic and transportation, inspecting and quality control and assurance.

All the above authors' definition contains the key element of procurement. Their concepts clearly identify procurement as a cycle phenomenon to acquire goods, works and or services through fair, equitable, transparent, competitive as well as being as effective. It is evident from their concepts of procurement that tendering is part of procurement and as a result the study focuses on tendering which is discussed below.

# 2.2.3 Importance of procurement

According to Sirkin (n.d) cited by Boston Consulting Group, procurement has taken on greater strategic importance in multinational companies in recent years — and it will assume even greater significance in the years to come. Sirkin further continues that organizations with high-performing functions consistently outperform their rivals on a range of financial indicators and as such the best companies are building advanced talent-management strategies into the very heart of their procurement organizations.

The sheer magnitude of the public procurement dollar expenditure outlay has a dramatic impact on the economy and thus, needs to be well managed Thai (2009). In all countries in the world, estimates of the financial activities of public procurement officials are believed to be on the order of 10% - 30% of the GNPC (Calendar & Mathews. 2000). The total expenditure for all levels of government in 24 industrialized nations ranges between 29.8 and 55.9 percent of gross Domestic Product (OECD, 2005). The significance of public procurement cannot be overemphasized considering the huge financial commitment that is usually involved in the procurement process Ayitey (2012). It is estimated that procurement spending amounts to somewhere between 15% to 22% or more of a country's gross domestic product, approximately 1.5 trillion Euros annually

in the European Union and over \$500 billion at the federal level in the United States ADB Procurement Forum report cited by Lynch (2012).

Ayitey (2012) cited by Thai (2001) the public procurement is an integral function of governments in both developed and a developing country as the huge financial outflows has a great impact on their economies that needs prudent management. Public procurement has a direct impact on the following: the successful delivery of government projects and public services, sound public financial management by achieving value for money in government expenditure, reducing corruption, encouraging private sector growth and investment. In Ghana, statistics show that Public Procurement account for 50% to 70% of the national budget (after personal emolument), 4% of GDP and 24% of total imports. Implicitly, Public Procurement therefore has both economic and social impact on the country (World Bank 2003).

### 2.3 INTRODUCTION OF THE PUBLIC PROCUREMENT ACT 2003 (Act 663)

### 2.3.1 Legal Framework of Procurement

Public procurement is governed by the procurement legal framework, which is a law or regulation (or part of a law or regulation) that is sanctioned by the judicial system of a particular country. This sets the rules for the management of public procurement Lynch (2012). Legal and procurement practices have a special emphasis on; legal issues as related to the definition of quality of buildings in performance criteria and the definitions of possible related liabilities depending national and international legal framework review of related legal practices and procedures in support of collecting best

practices and producing legal guidelines (Fenn et al, (2005). Lynch (2012) further continues that procurement legal framework is usually further develop into policies and procedures, procurement and contract administration manuals and guidelines, including standard solicitation documents that are used to call for offers from contractors, suppliers and service providers. Adherence to the public procurement law is obligatory; any infraction is punishable by law.

NUST

The language of public procurement policies, procedures, guidelines, manuals and standard solicitation documents must align with what is established in the public procurement legal framework. The procurement legal and institutional frameworks (procurement rules) govern everything from the identification of a requirement through to the closing out of a contract; sometimes including disposal, re-utilization and destruction of goods. The following are the legal frameworks covering public procurement activities in Ghana:

### 2.3.1.1 Public Procurement Act 2003 (Act 663);

An Act of the Parliament to provide for public procurement, establish the Public Procurement Board; make administrative and institutional arrangements for procurement; stipulate tendering procedures and provide for purposes connected with these.

### 2.3.1.1.1 Objectives of the Act 2003 (Act 663)

The main objectives of the Act 2003 (Act 663) are given in section 2 and are to:

- Harmonise public procurement procedures in the public service;
- Secure judicious, economic and efficient use of state resources; and
- Ensure public procurement is fair, transparent and non-discriminatory manner

### 2.3.1.1.2 Scope of Application of the Act 2003 (Act 663)

Scope of application of the Act 2003 is outlined in section 14(1) as follows:

- Procurement financed from public funds-wholly or partly;
- Procurement of goods, works services and contract administration;
- Disposal of public stores and equipment; and
- Procurement financed by funds and loans taken by the Government of Ghana, including foreign aid.

### 2.3.1.1.3 Functions of the Act 2003 (Act 663)

The Public Procurement Act (Act 663) has the following functions:

- Establishes the Public Procurement Authority, Entity Tender Committees and Tender Review Boards;
- Specifies, outline rules for procurement methods, procedure and appeals, by tenderers and disposal of stores;
- Defines offences and applicable penalties;
- Specifies thresholds in Schedules to the Act; and
- Authorizes the issues of Regulations, which are enforceable under the Act

### 2.3.1.1.4 Institutions the Act 2003 (Act 663) Applies to:

The Public Procurement Act 2003 (Act 663) applies to the following intuitions, Section 14(2):

- Central Management Agencies
- Government Ministries, Departments and Agencies
- Sub-vented Agencies
- Governance Institutions
- State Owned Enterprises (when using public funds)
- Public Universities, Schools, Colleges and Hospitals
- The Bank of Ghana and Financial Institution owned or majority-owned by Government
- Institution established by Government for the general welfare of the public

### 2.3.2 Public Procurement Regulation;

Regulations are issued by the Minister for Finance in consultation with Public Procurement Board (PPB), under section 97 of the Act 663. They contained detailed rules and procedures for all aspect of the procurement system, the operations of PPA and procurement entities and the conduct of procurement activities.

### 2.3.3 Public Procurement Manual;

This is issued by the PPA. It provides practical guidance and step-by-step procedures for undertaking procurement in accordance with the Act. It contains standard forms to assist with procurement record keeping.

### 2.3.4 Public Procurement Guidelines; and

The guidelines are issued by the Public Procurement Authority (PPA) under the Act and provide supplementary guidance on specific topics, for example:

- Disposal;
- Single source procurement;
- Margins of preference; and
- Further guidelines are issued as required by PPA

### 2.3.5 Standard Tender Documents;

These are issued by the PPA and listed in Schedule 4 of the Act. They comprise standard invitation and contract document for procurement of all values. There are separate standard tender documents for goods, works and services.

### 2.4 PROCUREMENT STRUCTURES

Part II of Act 663 sets out the structures which are to be set up to carry out procurement in the Public Service. Each of these structures is set up in accordance with the appropriate composition outlined in Schedule 1 and 2 of Act 663.

The main structures as outlined in Part II and which fall within the scope of this work are:

- Public Procurement Authority;
- Procurement Entity;
- Head of Procurement Entity;

- Procurement Unit;
- Entity Tender Committees;
- Entity Review Boards; and
- Tender Evaluation Panel

### 2.4.1 Public Procurement Authority

The Public Procurement Authority acts as the statutory advisory and co-coordinating body on procurement (Part 1 of Act 663). All Procurement Entities, Tender Committees and Tender Review Boards are required to abide by the technical guidelines and regulatory instructions issued by the PPA. The PPA has responsibility for the overall co-ordination, direction and development of Government procurement practices and procedures. The Authority is entrusted with 21 functions under Section 3 of the Act which are summarized as follows:

- Formulation/Development of public procurement policy, setting standards, rules, instructions and other regulatory instruments on public procurement;
- Monitoring compliance with requirements established by legislation;
- Obtaining and ensuring dissemination of information relating to public
   Procurement;
- Facilitating and supporting capacity building in public procurement;
- Organizing and participating in administrative review of complaints and appeals on public procurement;
- Maintaining registers of procurement entities, members and secretaries of tender committees, and of suppliers, contractors, consultants, and records of prices;

- Investigating and debarring from public procurement suppliers, contractors and consultants who have contravened the provisions of the Act and Regulations, and communicating a list of debarred firms to procurement entities;
- Through an annual procurement forum, providing a platform for discussion of issues relating to public procurement; and
- Assisting the local business community to become competitive and efficient suppliers to the public sector.

### 2.4.2 Procurement Entity

A Procurement Entity is an organization or person that has legal/administrative mandate for procurement purposes (Chapter 2.2, Procurement Manuel). In order words, any entity conducting public procurement under the Act. A Procurement Entity is responsible for all procurement activity of the entity in compliance with the law and any regulations or administrative instructions issued by the Ministry of Finance in consultation with the Authority (Section 15, (1) Act 663). Section 15 (2) provides the role and responsibilities of the head of an procurement entity.

### 2.4.3 Head of Entity

Each Procurement Entity has a head that is responsible for taking decisions on procurement and all matters arising there from (Section 15(2). The head of entity is required to establish a procurement unit to undertake all activities related to procurement within the entity in accordance with the Act and shall appoint or designate a proficient procurement person with the requisite qualifications, experience and skills as head of the

procurement unit to undertake the detailed activities of procurement on behalf of the procurement entity (Regulation 15).

### 2.4.4 Procurement Unit

A Procurement Unit is an outfit in a procurement entity with the responsibility of superintending procurement. The head of the Procurement Unit (and his/her team) shall be responsible for undertaking and co-coordinating all detailed procurement activities with the procurement entity.

### 2.4.4.1 Functions of Procurement Unit

The functions of the procurement unit include:

- Receiving procurement requests from originating officers, checking that, the
  proposed procurement is within the approved procurement plan and that, budget
  funds are available prior to commencement of procurement proceedings;
- That, funds are properly committed prior to issue of any contract or purchase order;
- Co-coordinating the preparation of specifications, terms of reference, bills of
  quantities, drawings, shortlist or advertisements and prequalification, tender or
  request for quotation documents. When so required by the Tender Committee,
  submission of documentation for review by the tender committee prior to issue;
- Arranging the publication of advertisements and notices of contract award.

- Co-coordinating the process of opening of tenders and quotations and ensuring the preparation of formal records of tender or quotation opening in accordance with Section 56 of the Act;
- Participating in evaluation activities of the tender evaluation panel where necessary and assisting in preparation of formal evaluation reports;
- Preparing submissions for approval of award by the appropriate authority in accordance with the threshold values established in Schedule 3 of the Act.
- Maintaining and updating the database of Suppliers, Contractors and Consultants;
- Participating in negotiations with Consultants where necessary or other tenderers where expressly permitted in the Act or Regulations;
- Preparing notification of awards and contracts;
- Arranging publication of notices of contract awards;
- Preparing contract documents and purchase orders in line with the award decision;
- Preparing and issuing tender rejection and tenderer debriefing letters.
- Preparing contract variations and modifications;
- Assisting with inspection and acceptance of goods, works and services; and
- Maintaining procurement records in accordance with Section 28 of the Act and the Regulations.

### 2.4.5 Entity Tender Committee

Section 17 of the Act 663; mandates each procurement entity to establish a Tender Committee in the manner set out in schedule 1.

### 2.4.5.1 Establishment of Entity Tender Committee

Tender Committee is established at the following levels:

- Central Management Agency/Ministry/Sub-vented Agency;
- Tender Committee for Regional Co-coordinating Council; and
- Metropolitan/Municipal/District Tender Committee.

For the purposes of this research, emphasis is being put on Central Management Agency/Ministry/State Enterprise.

### 2.4.5.2 Functions of State Enterprise Tender Committee

- Review procurement plans in order to ensure that they support the objectives and operations of the Entity;
- Confirm the range of acceptable costs of items to be procured and match these with the available funds in the entity's approved budget;
- Review the schedules of procurement and specifications and also ensure that the
  procurement procedures to be followed are in strict conformity with the
  provisions of this Act 663, its operating regulations and guidelines;
- Ensure that the necessary concurrent approval is secured from the relevant Tender Review Board, in terms of the applicable threshold in Schedule 3 of the Act 663 prior to the award of the contract:

- Facilitate contract administration and ensure compliance with all reporting requirements under the Act 663; and
- Ensure that stores and equipment are disposed of in compliance with the Act
   663.

### **2.4.6 Tender Evaluation Panel**

Section 19 of the Act establishes a Tender Evaluation Panel by each procurement entity to evaluate tenders and assist the tender committee in its work. A panel is an ad hoc body (Regulation 19(20) of not more than five members constituted for a specific procurement package. The panel includes members with skills, knowledge and experience relevant to procurement requirements.

### 2.5 PROCUREMENT PROCEDURES

### 2.5.1 Planning Procurement

Generally, planning enables organizations to, among other things, determine performance standards, establish overall direction, anticipate and avoid future problems and reduce the risks of uncertainty, identify and commit resources towards the achievement of goals, determine and develop performance standards, and effectively coordinate various activities in the organization

(PPB, 2005). The Public Procurement Act 663 provides for the activity of planning under Part III, Ssection 21. What the foregoing means is that it is imperative that

procurement entities would plan their procurement for each year by the end of 30th November of the preceding year. The plan would be reviewed and approved by their Entity Tender Committees (ETCs), after which the plans are updated every quarter. The list of entities who submitted their procurement plans are published in the Public Procurement Bulletin. In 2010, only 164 entities out of over 1000 entities across the country submitted their annual procurement plan. As at October, 2011 only199 entities submitted their plan to Public Procurement Authority (PPA Procurement Bulletin 2010/2011).

### 2.5.2 Tendering Procedures

The requirement to advertise the intention to buy goods and works is spelt out by Section 47 of Act 663 for procurement using International and National Competitive Tendering. Advertising is required for invitations to tender if there is no prequalification. The object of advertising is to provide wide and timely notification of tendering opportunities so as to obtain maximum competition by informing all potential tenderers and to afford equal opportunities to all qualified and eligible tenderers without discrimination. For reasons of transparency, fairness and impartiality, tender documents should be provided for all eligible tenderers by the procuring entity. Procurement entities are to provide tender documents to suppliers and contractors in accordance with procedures and requirements that were stated in the advertisement. The price at which the tender document is sold should be enough to recover the cost of printing and the document being made available to suppliers and contractors. Sufficient quantities of tender documents should be made available as many as there are tenderers. It is an

offence to deny any supplier or contractor the opportunity to participate in any tender simply because stocks of documents are exhausted.

Tenders should be opened immediately after the close of tenders. The Procurement Unit will need to ensure smooth operation of the proceedings, prepare minutes of the opening and advise the chairman of the opening session on procedural issues if requested. A Tender Opening Committee is usually constituted and is made up of at least three persons including the Chairperson. The Chairman of the Tender Opening Committee controls and directs the /Tender Opening and does not allow tenderers representatives to interfere with the work of the Committee. Any objections by a Tenderer to the procedures or decisions of the tender opening should be made in writing to the Head of the Procurement Entity. Section 55 of the Act states that the provision of tender security is required for all International and National competitive tenders for procurement of goods, and works. In the case of Procurement of consultants services tender security is not required. The use of security is important, in particular, in international trade where the Purchaser may not know the Tenderer or Supplier's professional ability, financial position and credibility. Therefore it is normal for the Purchaser to demand that the Tenderer's or Supplier's ability to perform in accordance with the instructions or contractual obligations be secured with a financial guarantee.

## 2.5.3 Contracts Management

A formal contract document will be drawn up, using the agreed terms and conditions, and signed by both parties. Simpler requirements may use a purchase order or where

existing framework contracts exist, contracting may consist of placing a call-off order under the existing contract.

The awarded contract must then be managed, to ensure that both the buyer and supplier perform their contractual obligations. Activities may include expediting delivery, arranging inspection or freight forwarding, checking bank guarantees, establishing letters of credit, making arrangements for receipt and installation of goods, verifying documentation and making payments. Works contracts will often require technical supervision by an engineer/project management team to ensure quality, time schedule and cost. Contracts for consultancy services often require the direct participation of the buyer or client organization, as the recipient of training or technical advice or in responding to studies or reports. According to PPA Annual report (2009) Contract completion rate for the year is about 68%. This signified that contract management is a major challenge for most entities.

# 2.5.4 Monitoring and Evaluation

Controlling the performance of the procurement function and ensuring its efficiency and effectiveness is essential to the management of the procurement process. It is vital to evaluate how well the procurement process has gone, identify any weaknesses or problems and agree actions to prevent similar problems in the future. Evaluation may include a formal procurement audit. Procurement monitoring is an essential part of procurement management and control linked to compliance with Act 663 and performance outcomes such as value for money, professionalism and code of conduct in

procurement. This will involve the management of entity, staff of PPA, private sector, oversight bodies (internal and external audit), civil society (including NGOs), project beneficiaries, and media (PPA, 2008).

## 2.5.5 Appeals and Complains

Part VII –Review -Section 78 of Act 663 deals with the procedures to be used in handling complaints received from aggrieved parties involved in the procurement process. Any supplier, contractor or consultant that claims to have suffered, or that may suffer loss or injury due to a breach of a duty imposed on the procurement entity, may seek review in accordance with this Part. Procurement decision-making process needs to be properly followed and documented so that complaints can be investigated within the strict time frame. Those involved in audit and in the prosecution of procurement related offences may be able to provide examples of where sanctions could not be applied as a result of poor or inadequate procurement records.

In Ghana, the Authority established seven (7) member Appeals and Complaints Panel comprising legal procurement experts, and representatives from the private and public sectors and was inaugurated in 2007. In the same year the Panel successfully concluded fourteen (14) cases out of twenty (20) cases received (PPA, 2007). The appeal and complains procedures allowed bidding firms with the chance to show their disapproval before the procurement process is completed, as well as thereafter (Ayitey, 2012).

# 2.6 GHANA PROCUREMENT ASSESSMENT REPORT (GPAR)

The World Bank in its 2003 CPAR made specific recommendation to the Government of Ghana, among other things, transition arrangements for establishing the public procurement board, establishment of procurement units by procurement entities, improving on stores management, reducing the bureaucracy involve in the processing of payment certificates for contractors and suppliers and ensuring that value for money is achieved in sole source contracts (CPAR, 2003).

Subsequently, the Public Authority has been conducting annual procurement assessment via its Benchmarking, Monitoring and Evaluation Directorate. The main objective of the assessment is to find out how the procurement 'good practices' enshrined in the Act 663 and its accompanying documents are being employed in the public entities and to inculcate into the public sector Entities the need to monitor and evaluate procurement performance. It is therefore hoped that ultimately, public entities will adopt this assessment approach and use it on their own for procurement assessment. (Ayitey, 2012)

#### 2.7 ASSESSMENT OF PUBLIC PROCUREMENT ENTITIES

Increasing the effectiveness, efficiency and transparency of procurement systems is an on-going concern of governments and the international development community. All countries have recognized that increasing the effectiveness of the use of public funds, including funds provided through official development assistance (ODA) requires the existence of an adequate national procurement system that meets international standards and that operates as intended.

The regular and continuous assessment of procurement entities in countries of their national procurement systems with regard to their compliance with the procedures, rules and regulations setup in the Public Procurement Laws has been embraced worldwide. As indicated in (OECD, 2006), the baseline indicator assesses the strengths and weakness of National Procurement Systems. The indicator covers the legal and regulatory instruments from the highest level (national law, act, regulation, decree, etc.) down to detailed regulation, procedures and bidding documents formally in use. These indicators can be broken down into eight sub-indicators which are individually scored. These are: Scope of application and coverage of the legislative and regulatory framework, Procurement Methods, Advertising rules and time limits, Rules on participation, Tender documentation and technical specifications, Tender evaluation and award criteria, Submission, receipt and opening of tenders and Complaints Performance indicators includes: Implementing regulation that provide defined processes and procedures not included in higher-level legislation, Model tender documents for goods, works, and services, Procedures for pre-qualification, Procedures suitable for contracting for services or other requirements in which technical capacity is a key criterion, User's guide or manual for contracting entities and General Conditions of Contracts (GCC) for public sector contracts covering goods, works and services consistent with national requirements and, when applicable, international requirements (OECD, 2005). For a public entity in a developing country to conduct procurement performance assessment, there are numerous challenges that are encountered. Notably among them are:

- there are many ways of measuring that may be in use,
- most measures are irrelevant
- There is no way of standardizing the measurements and iv) conducting performance measurement is costly (Kakwezi & Nyeko,2010).

#### 2.8 PUBLIC PROCUREMENT LAW AND IMPLEMENTATION CHALLENGES

In most developing countries, the procurement function is transitioning from a clerical non-strategic unit to an effective socio-economic unit that is able to influence decisions and add value

(Knight et al, 2008). Developing countries in one way or another have reformed their public procurement regulations. The reforms have not been limited to regulations only; they have included public procurement process, methods, procurement organizational structure, and the workforce. The reforms have been as a result of joint efforts with various development partners like the World Bank, International Trade Centre, WTO, and UNCTAD varying from country to country.

In addition, public procurement is faced with the challenges imposed by a variety of environmental factors (external factors) such as market, legal environment, political environment, organizational and socio-economic environmental factors. Regardless of the effort by the central government and its related agencies and the acknowledgement that the procurement department is capable of adding value to the organization, still a large number of the internal customers act on their own and more frequently bypass the procuring department (Schiele & McCue, 2006). This problem requires establishment of

clear procurement procedures and performance standards. Performance when adopted will provide the decision-makers in the procurement department with unbiased and objective information regarding the performance of the procurement function (Knudsen, 1999). Several countries have instituted reforms in their public procurement processes (Hunja, 2003). This is aimed at purging the public procurement sectors, encouraging competition, transparency, efficiency and ensuring accountability. These reforms have not come without difficulties (Hunja, 2003). The challenge include poor dissemination of the procurement law (Azeem, 2007), lack of proper training for the managers of the procurement process (Forgor, 2007).

The Country Procurement Assessment Report of Ghana in 2003 revealed that most Ministries, Departments and Agencies (MDAs) and District Assemblies (DAs) staff responsible for procurement were not procurement-proficient, even though they have been trained. The report contended that, application of the PPA and the Standard Tender and Contract Documents will not be successful without broad training and "refresher" programs and encouragement of officials in charge of procurement. In view of this, the PPA initiated a training programme in 2007 throughout the country with the aim to build the capacity of personnel responsible for the management of procurement in various institutions. This exercise unfortunately could not be sustained due to financial difficulties thereby leaving most Procurement Managers completely ignorant in the application of the law.

Building the capacity of service providers has been identified as one of the success factors of public procurement reforms. Many bidders are limited in various capacity issues including: lack of basic knowledge in the law, inadequate capacity to appreciate the standard tender documents, poor access to tender information and insufficient technical and managerial skills to be competitive in the tendering process (ODPP, 2007). Political interference with the procurement process is also a big challenge to the implementation process and public procurement reforms. A good number of politicians think that they have the right to intervene in the procurement procedures thereby leading to a capricious procurement decisions (World Bank, 2004). The lack of career development path and low salaries of procurement personnel also militates against procurement reforms implementation (World Bank, 2003). Poor records keeping and delays in payment of contractors and suppliers have also been cited as some of the crucial factors that challenges the procurement reforms implementation (Azeem, 2007).

# 2.9 PROJECT LIFE CYCLE

Each activity or process, regardless of its operation and area of business domain, has a beginning and an end. The term Project Life Cycle (PLC) is used as a management tool to improve a projects performance (Ropel and Gajewska, 2011). The scopes of life cycles differ among industries and diverse terminologies with various phases are used depending on the sector. However, several terms are often used within one particular

sector even though a number of phases vary (Smith et al, 2006). He affirmed various forms of PLC frameworks abound as a result of variety of project types.

In construction projects, a PLC framework would consist of eight succeeding phases including: Pre-feasibility, feasibility, design, contract / procurement, implementation, commissioning, handover and operation (Smith et al, 2006). In contrast, Pinto and Prescott (1998) presents a four stage PLC developed by Adams and Brandt as the most widely used framework, where conceptualization, planning, execution and termination are the main phases. A similar model as proposed by Westland (2006) identified initiation, planning, execution and closure as the principal project steps. Another model was developed by Ward and Chapman (2003) which sets up concept, planning, execution and termination to constitute a PLC. The same authors made a further division for each of the four phases in another publication. Such fragmentation makes the Risk Management Process a more effective one (Ward and Chapman, 2004). Since each project is unique, a framework used in one project can turn out to be completely inapplicable in another. Therefore, each framework serves only as a guide for the development of another to suite the particular needs of a project.

However, Bennet (2003) presents a PLC framework which is typical for construction projects. The framework differs from those models mentioned above. It consists of six phases of different lengths and includes: Pre-project phase, planning and design phase, contractor selection, project mobilization, operations and close-out and termination phase.

The industry requires a special approach due to the complexity of projects undertaken and thus, such modified PLC could bring benefits to the project (Bennet, 2003). Figure 2.1 presents a graphical illustration of the six phases as proposed by Bennet (2003).

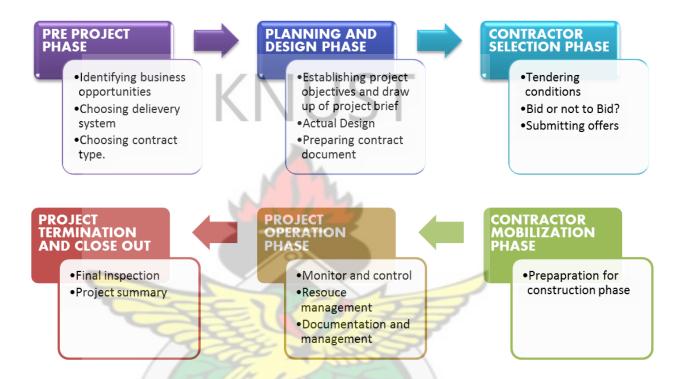


Figure 2.1: PLC of Construction Projects (source: Bennet, 2003)

WUSANE

## 2.9.1 Pre-Contract Stage Activities

Acquaye (2011) indicates that pre-contract stage activities commences from feasibility studies, through the architectural or engineering studies and detailed drawings, preparation of tender documents, invitation for tenders, opening and evaluation of tenders, seeking approval from appropriate authority before award of contract up to the formation of a contract as well as contract documents preparation to signing of the contract agreement.

Flanagan and Norman (1993) noted that the Pre contract stage of a project is faced with various forms of challenges which according to PMI (2000) threaten project objectives. The framework developed by Bennet (2003) as shown in figure 2.1 connote two separate areas: the first three considers one aspect of a construction project whiles the last three considers another aspect. The Pre project phase, Planning and Design phase and Contractor selection phase all constitute the Pre contract stage of a construction project. However, several processes and activities are undertaken under each phase of the stages and for the purposes of this research a framework similar to that of Bennet (2003) considering only the Pre contract phase, as shown in figure 2.2 will be adopted.

WUSANE

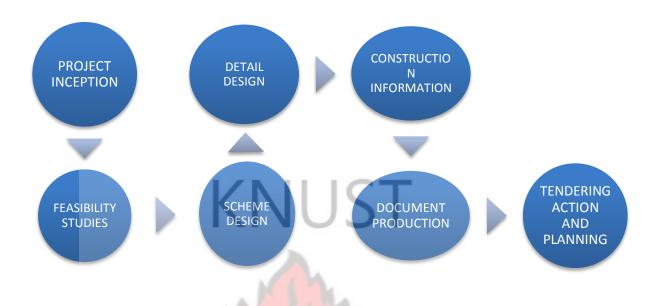


Figure 2.2: Pre-contract stage of Construction Projects (source: Ankoma 2014)

In the feasibility stage, the client declares his intentions through a design brief indicating the initial design ideas. Key project participants are engaged to program the works with the various time frames being set, the nature of the project being examined in its entire state. The key project actors (consultants) then examine the client's proposal to determine its viability and to make sure there are no problems and constraints associated with the proposed type of structure and the location of the site. Also, at the feasibility stage the financial requirements and planning controls associated with the project is considered.

According to Neighbor (2006) the scheme design stage is the creative phase of a project. Outline proposal are made and consist of drawings (sketch plans) showing the arrangement of spaces, shapes, circulation patterns, orientation among others.

Also the materials to be used including its sizes, colors, textures, and other aesthetic factors together with the associated cost are considered at this stage. Detailed designs are then prepared after a thorough assessment has been done on the scheme designs prepared earlier on.

Specifications and detail working drawings are then developed defining all the elements of proposed building and associated level of workmanship. These make up the Construction Information to be stipulated in the contract documents. Bills of quantities are then prepared consisting numerical measurement of all the material and labor required to construct the new building. The quality of these documents has a direct relationship with pricing (Baker et al, 1999). Tendering arrangements are put in place and competitive prices will be obtained from selected contractors. Tenders are then analyzed and a contract will be made between the client and the successful contractor to construct the building as designed.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 INTRODUCTION

This chapter commences with a brief historical profile of Electricity Company of Ghana and further highlights on the best method that would enable the research aim and objectives to be achieved. It further dealt with the research design; study area, research population and sampling procedures as well as analytical procedures were presented. The chapter further dealt with the presentation of data gathered, sampling techniques, and instruments for data collection, questionnaire design and administration of data analysis.

# 3.2 HISTORICAL PROFILE OF ELECTRICITY COMPANY OF GHANA

The Electricity Company of Ghana is a limited liability Company wholly owned by the Government of Ghana and operating under the Ministry of Energy (ME). The Company was incorporated under the Companies Code, 1963 in February 1997. It began as the Electricity Department on 1st April 1947 and later became the Electricity Division in 1962. It was subsequently converted into the Electricity Corporation of Ghana by NLC Decree 125 in 1967. Until July 1987, the responsibility for distributing and supplying power in the country rested on ECG. The Government created the Northern Electricity Department (NED) as a subsidiary of Volta River Authority (VRA) in 1987 which took over from ECG the responsibility for the management of electric power distribution in

Brong Ahafo, Northern, Upper East and Upper West Regions. The Company (ECG) is however responsible for the distribution of electricity in the southern part of Ghana namely, Ashanti, Central, Eastern, Greater Accra, Volta and Western Region.

## 3.2.1 Vision of Electricity Company of Ghana

To be among the Leading Electricity Distribution Companies in Africa.

# 3.2.2 Mission of Electricity Company of Ghana

To Provide Quality, Reliable and Safe Electricity Services to Support the Economic Growth and Development of Ghana.

# 3.3 RESEARCH DESIGN

The research design adopted by the researcher for this study was exploratory one. According to Gay (1990) as cited by Budu (2014), exploratory research involves collecting data in order to test hypothesis or to answer questions concerning the current status of the subject of the study. It is a field of study which adopts descriptive and exploratory approaches for data collection.

Yin (1993) defines the exploratory research method as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used. It identifies the relevant research population

made up of stakeholders such as the director of premises/estate and procurement practitioners within the premises/estate directorate of Electricity Company of Ghana.

The study uses non-probability random sampling approach to select a sample size and respondents for data collection. Various research instruments were used to collect data from primary and secondary sources. Both structured and semi-structured questionnaires and field observations were used to collect primary data on the assessment of the level of compliance of procurement of works at pre-tender stage in Electricity Company of Ghana.

For secondary data, annual reports, articles, textbooks and journals and procurement manuals were collected on public procurement. The data was analyzed using both qualitative and quantitative analysis. Tables, figures, and graphs are used to present and analyze the research data gathered from primary and secondary sources.

#### 3.4 THE STUDY AREA

The study area by the researcher for the purpose of this research centered on the Premises/Estate Directorate of Electricity Company of Ghana, a sub-vented company owned by the government of Ghana.

#### 3.5 RESEARCH POPULATION

A research population can be defined as the totality of a well-defined collection of individuals or objects that have a common, binding characteristics or traits. The population for this study comprised all those who are involved in public procurement activities within the Premises/Estates Directorate of Electricity Company of Ghana. The main reason for using this category of people is that their activities directly or indirectly has a bearing on public procurement. The research covered a population of thirty one (31) procurement personnel including director of the directorate, quantity surveyors, architects, managers, civil construction supervisors, structural engineers and estate managers.

#### 3.6 SAMPLE FRAME

Electricity Company of Ghana is a state institution owned by the Government with very large population and it will be very difficult and impossible to undertake such a survey without sampling. Purposive sampling techniques were therefore used to determine the sample size of thirty one (31). In conducting a research study, it is practically impossible, time-consuming and too expensive to test every individual in the entire population.

The purposive sampling technique was adopted. The intention was to gain an insight into the phenomena hence, the need to choose personnel who are connected with the procurement practices in the institution. For the purpose of this study, respondents were

classified into their area of specialization in the following category as indicated in the table below:

**Table 3.1: Classification of Respondents** 

Category of Respondents	Number of respondents
Quantity Surveying	7
Civil Construction Supervision	14
Estate Management	2
Structural Engineers	3
Architecture	2
Others	3
Total	31

Source: Researcher's Field Work, 2014

#### 3.7 RESPONSE RATE

A total number of Thirty One (31) questionnaires were administered to the respondents out of which Twenty Eight (28) were obtained and valid for the data analysis. These valid questionnaires used for the analysis yielded 90.32% of response rate. This indicates that, the response rate was quiet high and reflects the views of the entire population. The success of the responses was achieved as a result of frequent visits to the various offices to ensure that the questionnaires were answered, completed and retrieved.

#### 3.9 DATA COLLECTION INSTRUMENT

The data collection methods or techniques formed an important part of this research.

According to Patton (1990) using more than one data collection instrument strengthens and gives credibility to the study. The use of more than one data collection instrument portrays a true picture of the case under study. In this regard, the researcher gathered the required data from two (2) different sources. This approach was used because it revealed issues that could not be raised in using only one data collection instrument. The study made use of primary and secondary data sources in order to gather relevant information for the study.

## 3.9.1 Primary Data

The main research instruments used were questionnaires and field observations. This was done with the focus on the objectives set in the study. The primary data were collected from the selected respondents within the sample frame in the research population. The analysis of the study was substantially based on this data.

# 3.9.2 Secondary Information

The researcher himself referred to various publications of foreign and local origin, books, journals, articles, newspapers, reports obtained from libraries, PPA, Public Entities, and the internet on the subject to obtain additional information in order to answer the questions set in the problem definition.

## 3.10 QUESTIONNAIRE DESIGN

The research questions were developed by the researcher and were reviewed by some experts in academia and in procurement practice. Subsequently, a pilot test of the questionnaire and interview was conducted for five (5) participants in order to identify and eliminate potential ambiguity in the questionnaire. Generally, the questionnaire is designed to collect general data from the staff and officers at the Premises/Estate Directorate of Electricity Company of Ghana. These questions were grouped in categories to collect data on Personal Data, General information on Public Procurement Act 663, Pre-Contract Activities and Implementation Challenges Encountered in Procurement Activities.

Items on implementation challenges were rated by participants on four-point levels of scale from 1-4; Strongly Disagree, Disagree, Agree and Strongly Agree and was further tested using Kendall's coefficient of concordance. The instrument for Pre-Contract Activities consisted also was scaled from 1-4 with the statement: Not Often, Often, Most Often and Not at All respectively. Additionally, the methodology for assessment of national procurement systems jointly developed by the organization for Economic Cooperation and Development (OECD)/Development Assistance Committee and World Bank has been adopted in this research.

# 3.10.1 Questionnaire Administration

The initial questionnaires were pilot tested to ensure that the questions were clear and not ambiguous, such that responses would be consistent with the purpose of the study.

Few questions were reviewed as a result of non-response from the respondents of the pilot study. This was done to improve the reliability and validity of the questionnaire. The questionnaires were self-administered on one-to-one basis to the respondents willing to fill or provide answers to the questionnaire at the Directorate premises. The completed questionnaire was taken by the researcher after frequent visits to the offices of the respondents. The primary data collected was reviewed by the researcher to ensure maximum accuracy, legibility, completeness, consistency and to reduce ambiguity.

## 3.11 DATA ANALYSIS

In this study, both quantitative and qualitative methods were employed in the data analysis. The Statistical Package for Social Sciences (SPSS) version 16 was used for data entry and analysis of the data collected. Data preparation was the initial step to convert raw data into structured format that was more appropriate for the analysis. Tasks in this stage included data editing, data coding and data entry, frequency distributions, percentages, and descriptive analysis of assessing the level of compliance of the Act 663. Data collected were collated and analyzed using various statistical models such as Kendall's ranking test to illustrate the data.

#### **CHAPTER FOUR**

#### **DISCUSSION AND ANALYSES**

This chapter of the study analyzes the collated data and presents the result in an attempt to providing answers to major research questions in chapter one of the study. The major areas the chapter discusses include the background information of the respondents, the knowledge and experience capacity of the staffs of the Electricity Company of Ghana, the pre-contract stages activities of the Electricity Company of Ghana and directorate implementation challenges of the Company.

# 4.1 SOCIO DEMOGRAPHIC BACKGROUND OF RESPONDENTS

This section of the study discusses the background information of the surveyed staffs of the Electricity Company of Ghana. The socio demographic characteristics discussed in this section of the study include age of respondents, the highest educational level of respondents, the respondents' area of specialization, the respondents' years with the directorate, respondent's position with the directorate and the respondent's years in the position with the directorate. The results of these major socio demographic variables are presented in Table 4.1.

**Table 4.1: Demographic Characteristics of Respondents** 

Demographic	Respondents	Percent
Age group		
18-30 years	3	10.7
31-40 years	9	32.1
41-50 years	11	39.3
51-60 years	5	17.9
Level of education	CT	
Msc	0	0.0
BSc	16	57.1
HND	5	17.9
CTC I/II	7	25.0
Area of specialization	1	
Civil Construction	8	28.6
Architecture	1	3.6
Quantity survey	5	17.9
Others	14	50.0
Years with the directorate	337	
0-5 years	11	39.3
6-10 years	7	25.0
11-15 years	6	21.4
15+ years	4	14.3
Position with the directorate	BADY	
Director	0	0.0
General manager	0	0.0
Manager	3	10.6
Senior staff supervisor	23	82.1
Others	3	14.3

Years in the position with the directorate		
0-5 years	19	67.9
6-10 years	0	0.0
11-15 years	5	17.9
15+ years	4	14.3
15 + yours	т	14.5

Source: Field Survey, 2014

From Table 4.1, out of the total surveyed respondents of 28, the majority (39.3%) were in the age group of 41 to 50 years, whereas 32.1% were also in the age category of 31 to 40 years. This implies that the majority of the surveyed respondents are within the economic age bracket or the active working population of Ghana (GLSS, 2000). The highest level of education of the majority (57.1%) of the surveyed respondents is BSc or first degree in various areas of study. However, 17.9% of the surveyed respondents at the time of the study had HND, whereas 25.0% had CTC I/II. The specialized area of the majority (50.0%) of the surveyed respondents of the study were in other areas such as project management, building technology, construction and project management, civil engineering, and structural engineering. However, 28.6% and 17.9% of the surveyed respondents were engaged in specialized areas like civil construction and quantity surveying respectively. The majority (39.3%) of the surveyed respondents have been with the directorate for 0 to 5 years, whereas 25.0% have been with the directorate for 6 to 10 years. The position of the majority (82.1%) of the surveyed respondents in the directorate is senior staff supervisory position. The years of experience of the majority (67.9%) of the surveyed respondent with the directorate were between 0-5 years.

However, 17.9% and 14.3% of the surveyed respondents have also been in the directorate position for 11 to 15 years and 15 years plus respectively. Based on the educational and directorate experience of the surveyed respondents, the majority were therefore in excellent position to provide the needed information for the study.

# 4.2 PUBLIC PROCUREMENT ACT, 663

The respondents' knowledge, training and participation capacity on the Public Procurement Act, 663 of Ghana is discussed in this section of the study. The result as shown by the responses of the 28 surveyed staffs of the Electricity Company of Ghana is presented in Table 4.2.

Table 4.2: General Information on the Public Procurement Act

Milled	Yes	No	Total
Ever heard of the PPA before	28(100.0)	0(0.0)	28(100.0)
Have training on the PPA	15(53.6)	13(46.4)	28(100.0)
Participate in the pre-tender activities in the	23(82.1)	<b>5</b> (17.9)	28(100.0)
directorate	BADY		

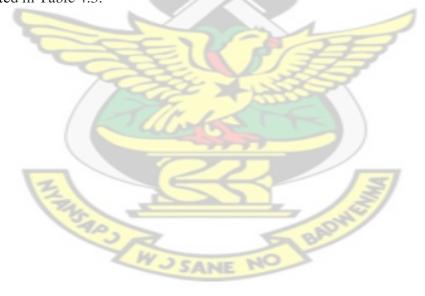
Source: Field Survey, 2014

From Table 4.2, out of the total surveyed respondents of 28, all of them have heard of the Public Procurement Act 2003 (Act 663). Furthermore, 53.6% of the surveyed respondents have had training on the Public Procurement Act 2003. The majority

(82.1%) of the surveyed respondents of the study have participated in the pre-contract activities in the directorate.

#### 4.3 PRE-CONTRACT STAGES ACTIVITIES

The compliance of the directorate of the Electricity Company of Ghana with the precontract stages activities established in the Public Procurement Act 2003 (Act 663) is discussed in this section of the study. To achieve this objective, the respondents were presented with 14 activities to rate them based on their performance in the Electricity Company of Ghana by choosing from 'Not often' to 'Not at all'. To achieve this objective, the response of the 28 surveyed staffs of the Electricity Company of Ghana is presented in Table 4.3.



**Table 4.3: Pre-Contract Stages Activities** 

Pre-Contract Stage Activities	Scale			
	1	2	3	4
Directorate prepare procurement plan annually		12(42.9)	15(53.6)	1(3.6)
Procurement plan is followed by management	2(7.1)	11(39.3)	15(53.6)	
Directorate submit its procurement plan to the Tender Committee	3(10.7)	10(35.7)	14(50.0)	1(3.6)
Directorate divide its procurement packages into lots	3(10.7)	8(28.6)	17(60.7)	
Use PPA's Standard Tender Documents (STD) in procuring works contract	4(14.3)	6(21.4)	17(60.7)	1(3.6)
Directorate evaluate tenderers base on the STD	2(7.1)	7(25.0)	19(67.9)	
Directorate require from tenderers additional documents to substantiate their	4(14.3)	5(17.9)	17(60.7)	2(7.1)
information provided in the STD				
Directorate disqualify tenderers who provide false documentations	1(3.6)	12(42.9)	14(50.0)	1(3.6)
Directorate engages in pre-qualification	1(3.6)	6(21.4)	18(64.3)	3(10.7)
Directorate supply pre-qualification documents to tenderers upon request	3(10.7)	5(17.9)	16(57.1)	4(14.3)
Communication with tenderers is in writing		5(17.9)	20(71.4)	3(10.7)
Directorate keep record of your procurement proceedings	1(3.6)	6(21.4)	20(71.4)	1(3.6)
Directorate rejects tenders and/or proposals prior to informing participating		10(35.7)	12(42.9)	6(21.4)
tenderers				
After signing of contract, directorate publish notice of procurement awards	8(28.6)	7(25.0)	13(46.4)	

Rank: Not Often-1, Often-2, Most Often-3, Not At All-4

Source: Field Survey, 2014

From Table 4.3, out of the total surveyed respondents of 28, the majority (53.6%) asserted that the Electricity Company of Ghana 'most often' directorate prepares procurement plan annually. The majority (53.6%) of the surveyed respondents of study indicated that the management body of the Electricity Company of Ghana 'most often' follows procurement plans. The directorate of the Electricity Company of Ghana is also believed by the majority (50.0%) of the surveyed respondents to 'most often' submit its procurement plan to the Tender Committee. Generally, planning enables organizations to, among other things, determine performance standards, establish overall direction, anticipate and avoid future problems and reduce the risks of uncertainty, identify and commit resources towards the achievement of goals, determine and develop performance standards, and effectively coordinate various activities in the organization (PPB, 2005) and hence the employment of these activities would enhance the performance of the Company.

The majority (60.7%) of the surveyed respondents of the study indicated that the directorate of the Electricity Company of Ghana 'most often' divides its procurement packages into lots. The majority (60.7%) of the surveyed respondents agreed that the Electricity Company of Ghana 'most often' uses the PPAs Standard Tender Document (STD) in procuring works contract. Procurement entities are to provide tender documents to suppliers and contractors in accordance with procedures and requirements that were stated in the advertisement. The price at which the tender document is sold should be enough to recover the cost of printing and the document being made available to suppliers and contractors (PPB, 2005).

The directorate of the Electricity Company of Ghana is believed by the majority (67.9%) of the surveyed respondents of the study to 'most often' evaluate tenderers based on the PPAs Standard Tender Documents (STD). The majority (60.7%) of the surveyed respondents of the study agreed that the directorate of the Electricity Company of Ghana 'most often' require from tenderers additional documents to substantiate the information provided in the STD. The majority (50.0%) of the surveyed respondents of the study indicated that the directorates of the Electricity Company of Ghana 'most often' disqualify tenderers who provide false documentations. A Tender Opening Committee is usually constituted and is made up of at least three persons including the Chairperson. The Chairman of the Tender Opening Committee controls and directs the /Tender Opening and does not allow tenderers representatives to interfere with the work of the Committee. Any objections by a Tenderer to the procedures or decisions of the tender opening should be made in writing to the Head of the Procurement Entity.

However, the majority (64.3%) of the surveyed respondents agreed that the directorate of the Electricity Company of Ghana engages in pre-qualification. The majority (57.1%) of the surveyed respondents indicated that the directorate of the Electricity Company of Ghana 'most often' supplies pre-qualification documents to tenderers upon request. The majority (71.4%) of the surveyed respondents of the study indicated that the directorate of the Electricity Company of Ghana 'most often' communicates with tenderers in writing. The directorate of the Electricity Company of Ghana was agreed by the majority (71.4%) of the surveyed respondents to 'most often' keep records of procurement proceedings. The Procurement Unit ensure smooth operation of the

proceedings, prepare minutes of the opening and advise the chairman of the opening session on procedural issues if requested (PPB Manual, 2005).

The directorate of the Electricity Company of Ghana is believed by the majority (42.9%) of the surveyed respondents to 'most often' reject tenders and/or proposals prior to informing participating tenderers. After signing of contract, the directorate of the Electricity Company Ghana is believed by the majority (46.4%) of the surveyed respondents to 'most often' publish notice of the procurement awards.

# 4.4 DIRECTORATE IMPLEMENTATION CHALLENGES

This section of the study identifies the major challenges in the implementation process of the directorate of the Electricity Company of Ghana. To achieve this objective, the surveyed respondents were presented with a list of 20 challenges revealed in literature as impeding organizations capacity in implementing its directorate. The task of each respondent was to indicate the level agreement to the listed factors in Table 4.4 as challenges in the directorate implementation process of the Electricity Company of Ghana by choosing from 'Strongly agree' [4] to 'Strongly disagree' [1]. The Table 4.4 displays the mean ranks and by extension, the ranks of the challenges as adjudged by the 28 surveyed staffs of the Electricity Company of Ghana. The result of Table 4.4 was obtained following the non-parametric test for k-related samples in SPSS 17. The level of agreement between the 28 surveyed staffs of the Electricity Company of Ghana was tested using the Kendall's coefficient of concordance since there are three or more judges or respondents and the result of the agreement level of the surveyed respondents is presented in Table 4.5.

**Table 4.4: Challenges in the Implementation of Directorates** 

	Scale				Kendall's Rank Tes		
Challenges	1	2	3	4	Mean	Rank	
Illiteracy and inadequate contract management skills among some	0(0.0)	1(3.6)	14(50.0)	13(46.4)	16.29	1	
contractors							
The need to cancel tendering and seek offers again	3(10.7)	4(14.3)	17(60.7)	4(14.3)	12.57	2	
Lack of sanctions to public officials for poor performance, non-	3(10.7)	8(28.6)	11(39.3)	6(21.4)	11.95	3	
compliance with the law and code of ethics							
Shortage of experience professional staff	5(17.9)	5(17.9)	13(46.4)	5(17.9)	11.48	4	
Lack of knowledge of legal framework	7(25.0)	3(10.7)	13(46.4)	5(17.9)	11.30	5	
Delays in establishing full time operational Procurement Units with the	4(14.3)	9(32.1)	9(32.1)	6(21.4)	11.30	5	
full complement of staff							
Difficulty in obtaining bid security	5(17.9)	7(25.0)	11(39.3)	5(17.9)	11.29	7	
Low bid prices offered by bidders due to award of contract to the lowest	2(7.1)	11(39.3)	9(32.1)	6(21.4)	11.11	8	
evaluated bidder							
Lack of career development path been established for procurement in	4(14.3)	6(21.4)	16(57.1)	2(7.1)	11.02	9	
the civil service	1						
Inconsistencies in tender evaluation and interference in the contract	5(17.9)	9(32.1)	9(32.1)	5(17.9)	10.38	10	
award process by unauthorized parties							
Delay in payment of works executed by contractors	5(17.9)	8(28.6)	13(46.4)	2(7.1)	10.20	11	
Lack of incentives to follow proper procurement procedures	7(25.0)	5(17.9)	13(46.4)	3(10.7)	9.91	12	
Low level of ceilings set for Entity Tender Committees to operate within	5(17.9)	10(35.7)	12(42.9)	1(3.6)	9.75	13	
Inadequate capacity in effective procurement planning	3(10.7)	13(46.4)	12(42.9)	0(0.0)	9.27	14	
Loss of confidence in the procurement process	9(32.1)	7(25.0)	8(28.6)	4(14.3)	9.18	15	
Inadequate funding to execute procurement activities	10(35.7)	3(10.7)	14(50.0)	1(3.6)	9.16	16	
Lengthy and cumbersome procurement process	8(28.6)	8(28.6)	8(28.6)	4(14.3)	9.16	16	
Inadequate record management systems for the procurement process	5(17.9)	13(46.4)	9(32.1)	1(3.6)	8.91	18	
Inadequate capacity in effective procurement planning	8(28.6)	8(28.6)	9(32.1)	3(10.7)	8.82	19	
Accusation of conflict of interest, bribery and corruption	13(46.4)	6(21.4)	5(17.9)	4(14.3)	6.96	20	

Rank: Strongly Disagree-1, Disagree-2, Agree-3, Strongly Agree-4

Source: Field Survey, 2014

From Table 4.4, out of the total surveyed respondents of 28, the majority (46.4%) agreed to the illiteracy and inadequacy of contract management skills among some contractors as a major challenge in the implementation of directorates. From the Kendall rank test, the level of illiteracy and inadequacy of contract management skills among some contractors with a mean rank of 16.29 is regarded as the most pressing challenge in the implementation of the directorate of the Electricity Company of Ghana as is ranked first. The high level of illiteracy and inadequacy of contract management skills often emanates from poor dissemination of the procurement laws (Azeem, 2007). The majority (60.5%) of the surveyed respondents of the study agreed to the need to cancel tendering and seek offers again as a major challenge in the directorate implementation process. The respondents also agreed to the need to cancel tendering and seek offers again as the second most pressing challenge in the implementation of directorate as shown by the mean rank of 12.57. Lack of sanctions to public officials for poor performance, non-compliance with the law and code of ethics was agreed by the majority (60.7%) of the surveyed respondents as a major challenge in the implementation process of directorates. The lack of sanctions to public officials for poor performance, non-compliance with the law and code of ethics as a major challenge in the implementation process of directorate was ranked third as shown by the mean rank of 11.95. The majority (46.4%) of the surveyed respondents agreed to the shortage of experience professional staffs as a major challenge in the implementation of directorates. Shortage of experience professional staffs in accordance with the Kendall's rank test is ranked the fourth most pressing challenge in the directorate implementation process as shown by the mean rank of 11.48. Consistent with this finding is the study of

Forgor (2007) that indicates lack of proper training for the managers of the procurement process is a major challenge in the implementation of the Procurement Act. The Country Procurement Assessment Report of Ghana in 2003 revealed that most Ministries, Departments and Agencies (MDAs) and District Assemblies (DAs) staff responsible for procurement were not procurement-proficient, even though they have been trained. The Report further suggests that the application of the PPA and the Standard Tender and Contract Documents will not be successful without broad training and "refresher" programs and encouragement of officials in charge of procurement.

The majority (46.4%) of the surveyed respondents agreed to the lack of knowledge of legal framework caused by poor dissemination of the Procurement Act and Regulation as a major challenge in the implementation of directorate. The lack of knowledge of legal framework as challenge in the implementation of directorate is ranked fifth by the Kendall rank test as shown by the mean rank of 11.30. The delays in establishing full time operational procurement units with the full complement of staff was agreed by the majority (53.5%) of the surveyed respondents of the study as a major obstacles in the implementation process of directorates. The delays in establishing full time operational procurement units with the full complement of staff was ranked fifth by the Kendall rank test as shown by the mean rank of 11.30. The majority (57.2%) of the surveyed respondents of the study agreed to the difficulty in obtaining bid security (i.e. Bid Bond/ Guarantee, Performance Bond/ Guarantee and Mobilization Bond/ Guarantee as a major challenge in the implementation process of directorates, and this challenge was ranked seventh as shown by the mean rank of 11.29. Low bid prices offered by bidders due to

award of contract to the lowest evaluated bidder was also agreed to as a major challenge in the implementation process of directorate by the majority (53.5%) of the surveyed respondents of the study, the Low bid prices offered by bidders due to award of contract to the lowest evaluated bidder was ranked as the eight major challenge through the Kendall rank test as shown by the mean rank value of 11.11. The majority of the surveyed respondents of the study agreed to lack of career development path been established for procurement in the civil service as a major challenge in the implementation process of directorate; and this factors through the Kendall rank test was ranked as the ninth most pressing challenge in the directorate implementation process as shown by the mean rank value of 11.02. Consistent with this finding is the report of the World Bank (2003) that suggests that lack of career development path and low salaries of procurement personnel also militates against procurement reforms implementation. The majority of the surveyed respondents also agreed to the inconsistencies in tender evaluation and interference in the contract award process by unauthorized parties as a major challenge in the directorate implementation process. The inconsistencies in tender evaluation and interference in the contract award process by unauthorized parties was also ranked tenth by the Kendall rank test as shown by the mean rank value of 10.38.

From Table 4.4, out of the total respondents of 28, the majority (46.4%) agreed to the delay in payment of works executed by contractors as a major problem in the implementation process of directorate. The delays in payment of works executed by contractors as a challenge in the implementation process of directorate was ranked eleventh as shown by the mean rank value of 10.20. Azeem (2007) also cites delays in

payment of contractors and suppliers as some of the crucial factors that challenges the procurement reforms implementation. The majority (46.4%) of the surveyed respondents of the study agreed to lack of incentives to follow proper procedures, caused by weak monitoring and enforcement as a major challenge in the directorate implementation process. Lack of incentives to follow proper procedures, caused by weak monitoring and enforcement as a major directorate implementation challenge was ranked twelve as shown by the Kendall's mean rank value of 9.91. The majority (42.9%) of the surveyed respondents of the study from the Electricity Company of Ghana agreed to low level of ceilings set for Entity Tender Committees to operate within as a major challenge in the implementation process of directorate of the company. The low level of ceilings set for Entity Tender Committees to operate within was ranked thirteenth by the Kendall rank test as shown by the mean rank value of 9.75. Inadequate capacity in effective procurement planning was disagreed by the majority (46.4%) of the surveyed respondents as a major challenge in the implementation process of the directorate of the Electricity Company of Ghana. However, inadequate capacity in effective procurement planning as a challenge in the directorate implementation process was ranked fourteenth as shown by the Kendall mean rank value of 9.27. The majority (57.1%) of the surveyed respondents also disagreed to the loss of confidence in the procurement process as a major challenge in the implementation process of the directorate of the Electricity Company of Ghana. The Loss of confidence in the procurement process as a challenge in the implementation of directorate was ranked fifteenth as shown by the mean rank value of 9.18. The majority (50.0%) of the surveyed respondents agreed to inadequate funding to execute procurement activities as

a major challenge in the implementation process of the directorate of Electricity Company of Ghana. The challenge of inadequate funding to execute procurement activities in the implementation of the company's directorate was ranked sixteenth as shown by the mean rank value of 9.16. The majority (57.2%) of the surveyed respondents of the study disagreed to the lengthy and cumbersome procurement process as a major challenge in the implementation process of the directorate of the Electricity Company of Ghana. Lengthy and cumbersome procurement process as challenge in the directorate implementation process was also ranked sixteenth as shown by the mean rank of 9.16. The majority (46.4%) of the surveyed respondents of the study also disagreed to inadequate record management systems for the procurement process as a major challenge in the implementation process of the directorate of the Electricity Company of Ghana, the inadequate record management systems for the procurement process as a challenge in the implementation process of directorate was ranked eighteenth as shown by the Kendall mean rank value of 8.91. Existing literature is also consistent with the finding of the study that poor records keeping are a major challenge in the procurement implementation process (World Bank, 2003; ODPP, 2007). However, the least two ranked challenge of the Electricity Company of Ghana in the implementation process of directorate were inadequate capacity in effective procurement planning, and the accusation of conflict of interest, bribery and corruption in some procurement processes ranked nineteenth and twentieth respectively.

**Table 4.5: Kendall's Concordance Test** 

Test statistics	Values	
N	28	
Kendall's W <sup>a</sup>	0.142	
Chi-Square	75.476	
Degree of freedom	19	
Asymptotic significance	0.000	

a. Kendall's Coefficient of Concordance

Source: Output of SPSS Version 16

The level of agreement between the 28 surveyed staffs of the Electricity Company of Ghana was tested using the Kendall's coefficient of concordance since there are three or more judges or respondents. The result of Table 4.5 measures the level of agreement among the surveyed respondents with regards to the challenges of the Electricity Company of Ghana in implementing the directorate of the company.

The test statistics (chi-square) indicates that the respondents agreed to the ranking order of the listed challenges in the implementation process of the directorate of the Electricity Company of Ghana in Table 4.4. This is because the significance of the chi-square test at 1% indicates the rejection of the null hypothesis of 'no agreement' between the judges or respondents. The level of agreement as indicated by the Kendall's coefficient of concordance value of 0.142 is approximately about 14%.

#### **CHAPTER FIVE**

# SUMMARY OF FINDING, CONCLUSION AND RECOMMENDATION

This chapter mainly focused on key finding of the research problem analysis, measures to be taken in order to improve the sector and conclusion of the study. The recommendations constitute principally managerial level policies.

#### **5.1 SUMMARY OF FINDING**

This research was set to find answers to the following: 1) Is pre-contract stage activities adopted by Electricity Company of Ghana established in the Public Procurement Act 663, 2) what are the challenges faced by Electricity Company of Ghana in their procurement activities. Rigorous field works was conducted and below are the main findings:

# 5.1.1 Experience with the PPA, 663

The study revealed high level of awareness among the staffs of the Electricity Company of Ghana with regards to their training experience and participation in pre-tender activities in the directorate and the Public Procurement Act in general.

#### **5.1.2 Pre-Contract Stages Activities**

The study revealed several pre-contract stages of activities in the Public Procurement Act complied by the Electricity Company of Ghana. The directorate most often prepare procurement plan annually and this plan is followed by management. The directorate of the Company submits its procurement plan to the Tender Committee and divides the procurement packages into lots. The Company uses PPA's Standard Tender Documents (STD) in procuring works contract and directorate evaluate tenderers base on the STD. The directorate most often requires from tenderers additional documents to substantiate their information provided in the STD, and so disqualify tenderers who provide false documentations. The directorate of the Electricity Company of Ghana was revealed by the study to most often engage in pre-qualification and supply pre-qualification documents to tenderers upon request. The tenderers are most often communicated to in writing. The directorate was found to most often keep record of procurement proceedings, rejects tenders and/or proposals prior to informing participating tenderers; and after signing of contract, publish notice of procurement awards.

### 5.1.3 Challenges in Directorate Implementation

Some of the major challenges revealed by the study to hinder the implementation process of the directorate of the Electricity Company of Ghana include illiteracy and inadequate contract management skills among some contractors, the need to cancel tendering and seek offers again, lack of sanctions to public officials for poor performance, non-compliance with the law and code of ethics, shortage of experience professional staff, lack of knowledge of legal framework, delays in establishing full time

operational procurement units with the full complement of staff, difficulty in obtaining bid security, low bid prices offered by bidders due to award of contract to the lowest evaluated bidder, lack of career development path been established for procurement in the civil service, inconsistencies in tender evaluation and interference in the contract award process by unauthorized parties, delay in payment of works executed by contractors, lack of incentives to follow proper procedures, low level of ceilings set for entity tender committees to operate within, and inadequate capacity in effective procurement planning in that order of their magnitude.

#### **5.2 CONCLUSION**

The procurement process in the world-over has become increasingly more complex, particularly with recent demands for more transparency, accountability and budget constraints. There is therefore the need to have staffs with the capacity to handle and participate at all levels of the procurement process including the pre-tendering activities in the directorate. From the study, the surveyed staffs were aware of the Public Procurement Act, 663 and have some level of procurement training as required by the Act and also participate in the pre-tendering activities in the directorate of the Electricity Company of Ghana. The Electricity Company of Ghana in an attempt to enhancing transparency and accountability in the procurement process adhere to several stages of activities of the pre-contract required by the Public Procurement Act, 663. For instance, the company prepare procurement plan annually and submit it plan to the Tender Committee among other activities. However, in the phase of the various pre-contract

stages activities complied by the Company, there are several challenges confronting it in the directorate procurement implementation process. Some of the major challenges in the Company's directorate implementation process include illiteracy and inadequate contract management skills among some contractors, the need to cancel tendering and seek offers again, lack of sanctions to public officials for poor performance, non-compliance with the law and code of ethics, shortage of experienced professional staff, lack of knowledge of legal framework and many others. Based on these findings, there is therefore still the need for improvement in the directorate implementation process of the Company so as to enhance general performance of the Company.

#### 5.3 RECOMMENDATION

Based on the findings of the study, the various challenges associated with the directorate implementation process can be reduced or mitigated through the numerous recommendations made below:

# **5.3.1 Education and Training in the Procurement Process**

To enhance the capacity of the management in staff in the Procurement Act, 663, there is the need for various companies and government of Ghana to provide educational and training programmes for the staffs. Experts or professionals in procurement can be sourced to train and educate staffs of the company or some staffs can be sponsored to acquire the necessary educational and procurement training skills. These programmes in

the long term would enhance the experience of the staffs and knowledge capacity in public procurement.

## **5.3.2 Sanctions for Non-Compliance**

The Government of Ghana and the appropriate institutions in the country should also ensure that flouters and non-adhering companies to the Public Procurement Act are given stiffer punishment to serve as deterrent to others. Proper sanctions should be metered out to public officials for poor performance, non-compliance with the law and code of ethics of the PPA.

### **5.3.3 Provision of Incentive**

The Government of Ghana can also put in place measures as an incentive to increase the appetite of companies in adhering or complying with the Public Procurement Act, 663. Tax rebate can be a positive incentive to enhance adherence, whereas negative incentive like stiffer punishment can also be implemented.

### **5.3.4** Adequate and Prompt Funding

There is the need to provide adequate and prompt funding for procurement activities by all stakeholders including companies and government. Adequate and prompt funding could serve as an incentive for companies to adhere to the procurement procedures established in the PPA, 663.

### 5.4 LIMITATIONS AND AREAS FOR FURTHER STUDIES

The current study was limited to providing insight into company's compliance with the pre-contract stage activities of the Public Procurement Act, and the challenges of companies in the directorate implementation process. Therefore, any further study could be widened to capture other forms of activities in the pre-contract stages and post-contract stage of the procurement process. Furthermore, the current study was limited to a small sample size of 31 which limits the generalizability of the study. Therefore further studies in this area could enhance the validity, reliability and generalizability of the study by increasing the sample size.



#### REFERENCES

- Ackerley, G., Swartz, L. B. & Swartz, L.B., (2008). Managing Risk at the PRE-TENDER STAGES of your Construction Project.
- Acquaye, J.A. (2007). "A Comparative Analysis of the Effect of Lowest Price Rule Supplier Selection Strategies on Road Contracts Performance in Ghana."

  Unpublished Master's Dissertation, University of Birmingham, UK.
- Ankomah Mark (2014). "A study of Risk Associated with the Pre-contract Stage of Construction Project In Ghana." Thesis submitted to the Department of Building Technology-Kwame Nkrumah University of Science and Technology, Kumasi.
- **Ayitey J. (2009),** "Assessing Depreciation for Valuation Purposes A

  Decompositional Approach" Journal of Science and Technology, 2009
- Azeem V. (2007) "Impact of the Public Procurement Act, 2003 (Act 663) in Ghana Integrity Initiative's Perspective". Paper Presented at a Special Forum on Improving Efficiency and transparency in Public Procurement through Information Dissemination.
- Baker, S., Ponniah D. and Smith, S., (1999). "Risk response techniques employed currently for major projects". *Construction Management and Economics*, Vol. 4, pp. 205–213
- Bennett, F.L., (2003). "The Management of Construction: A Project Lifecycle Approach". Oxford: Butterworth Heinemann.
- Blainey G. (2004), "A Very Short History of the World". Camberwell: Penguin Books
- Budu Terry (2014). "Challenges Associated With Procurement of Public Works At

  Pre-Tender Stage in The Dormaa East District Assembly." Thesis submitted to
  the Department of Building Technology Kwame Nkrumah University of
  Science and Technology, Kumasi.
- Chapman, C.B. and Ward, S.C., (2003). "Project risk management: Process, techniques and insights". 2<sup>nd</sup> Edition, Chichester: John Wiley and Sons. Ltd.
- **Flanagan, R., Norman, G., (1993)**. *Risk management and construction*, Oxford; Blackwell publishing, pp. 224

- **Forgor, E. S. (2007).** Proposed amendments to make procurement flexible: The practical experiences of District Chief Executives with respect to the implementation of the Public Procurement Law, Decentralization Agenda, 1-3.
- **Gay, I. R. (1990).** Educational research, competencies for analysis and applications.

  Merrill Publishing Company
- Ghana Living Standard Survey 4 1998, "Labour Force Model", Ghana Statistical Service
- **Hal Sirkin** (n.d.). The Boston Consult Group Special Report. "The Importance of Procurement in Global Environment."
- **Hunja**, R. R. (2003), "Obstacles to public procurement reform in developing countries", in Arrowsmith, S. & Trybus, M (Eds.) Public Procurement: The continuing Revolution. Kluwer International.
- Kakwezi P. & Nyeko S. (2010), Procurement Processes and Performance: Efficiency and Effectiveness of the Procurement Function. Retrieved September 14 2013from website: http://www.ippu.or.ug/index.php?option=com-docman&task
- Osei-Tutu, E., Badu, E., Owusu-Manu, D., (2010). Exploring Corruption Practices in Public Procurement of Infrastructural projects in Ghana. International Journal of Managing Projects in Business. Vol. 3 No. 2, 2010, pp. 236-256.
- Osei-Tutu E, S. Mensah and C. Ameyaw (2011), The level of Compliance with the Public Procurement Act (Act 663) in Ghana
- Jorge Lynch (2012), Public Procurement and Contract Administration: A Brief Introduction. Vol.1 Uk: Lean Publishers
- Knight, L. A., Harland, C. M., Telgen, J., Thai, K. V. & Callender, G. (2008),
  Public Procurement Public Procurement: International Cases and Commentary,
  Journal of Public Procurement, vol 8 Issue 3, 303-322.
- Knudsen, D. (1999). Procurement Performance Measurement System: Focusing on the Swedish Public Sector from Lund Institute of Technology web site:

  <a href="http://www.tlog.lth.se/documents/publications/Lic\_Daniel\_Knudsen.PDF">http://www.tlog.lth.se/documents/publications/Lic\_Daniel\_Knudsen.PDF</a>
- Mohammed O, H. Abdul-Rahman, M. Othman (2007), "Are Knowledge Management Levels and Effort in Construction Sufficient? The Case of a

- *Developing Economy*, "Malaysian Construction Research Journal, vol.1, no. 1 pp. 1-24, 2007.
- **Neighbour, K., (2006).** "A guide to construction project: Best practices for the procurement and delivery of a project", 2<sup>nd</sup> edition, UK, RAIA publications.
- **ODPP Annual Report.** (2007), Office of the Director of Public Procurement Annual Report, 2007. Malawi.
- Organization for Economic Co-operation and Development (2005) "Paris

  Declaration on Aid Effectiveness. Ownership, Harmonisation, Alignment, Result
  and Mutual Accountability." Paris, France: World Bank.
- **Patton, M. Q. (1990),** "Qualitative Evaluation and Research Methods", Second Edition Newbury Park, CA: Sage Publications.
- Project Management Institute (PMI), (2000). "A Guide to the Project Management Body of Knowledge", PMBOK 2<sup>nd</sup> Edition, Project Management Institute, Pennsylvania, pp.216.
- Pinto J.K. and Prescott J. E., (1998). Variations in Critical Success Factors over the Stages in the Project Life Cycle. *International Journal of Project Management*. Vol. 14, pp. 5-18.
- Public Procurement Act, 2003 (Act 663) of Ghana, Ghana Publishing Corporation (Assembly Press), Accra.
- Public Procurement Authorithy (PPA) Annual Report (2008). National Public Procurement Annual Report, Ghana
- Public Procurement Board (PPB) Manual (2005)
- Roberts R, (1983). The Pelican History of the World. Harmondsworth: Penguin Books.
- Ropel, M. and Gajewska, E., (2011). "Risk Management Practices in a Construction Project A case study". Master of Science Thesis in the Master's Program Design and Construction Project Management. Chalmers University of Technology, Goteborg Sweden.
- **Sauter V. L. (2005),** "Competitive Intelligence Systems: Qualitative DSS for Strategic Decision Making," ACM SIGMIS Database, vol. 36, no. 2, pp. 43-57, 2005.

- **Schiele, J. J. and McCue, C. P. (2006).** Professional service acquisition in public sector procurement, International Journal of Operations and Production Management, 26(3), 300-325.
- Seglah Harrison (2013). "Assessing the Level of Compliance of the Public

  Procurement Act 2003 (Act 663) in Public Institutions: A Case Study of

  Koforidua Polytechnic". Dissertation submitted to the Department of Building

  Technology Kwame Nkrumah University of Science and Technology, Kumasi.
- **Shen, F.** (1996), Cultural Flow Between China and the Outside World Throughout History. Beijing: Foreign Language Press.
- Sirinivasan, R. (1997), "Public Procurement and the World bank", Paper

  Presented at the Regional Conference on Public Procurement Reforms in

  Central Asia, Istanbul, Turkey, April.
- Smith, N.J.; Merna, T. and Jobbling, P., (2006). "Managing Risk in Construction Projects". 2nd Edition Oxford: Blackwell Publishing.
- **Thai, K.V.** (2001). Public Procurement Re-Examined, *Journal of Public Procurement,* vol. No. 1 pp. 9-50
- Thai, K. V. (2004). Challenges in public procurement. In Challenges in Public

  Procurement: An International Perspective, Vol. 3. Boca Raton FL, USA: PR

  Academics Press
- **UN Procurement Practitioner's Handbook, 2006.** Retrieved May 13 2014 from website:http://www.ungm.org/Areas/Public/pph/ch03.html#chpter3
- Van Weele J.A. (2005) Purchasing and Supply Chain Management-Analysis Planning and Practice. US: Thomson Learning Business Press.
- Ward Stephen and Chapman Chris (2003), 'International Journal of Project Management, 2003 Elsevier.
- Westland J., (2006). "Project Management Life Cycle: A Complete Step-by-step Methodology for Initiating Planning Executing and Closing the Project".
- Westring G., (1997). Ghana Public Procurement Reform. An Audit Report prepared for the World Bank, Stockholm: Advokatfirman Cederquist KB.
- World Bank (2003), "Ghana 2003 Country Procurement Assessment Report", Washington DC: Ghana Country Department, The World Bank.
- **Yin, R.** (1993). Application of case study research. Newbury Park, CA: Sage Publishing.

#### APPENDIX 1

# KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

# COLLEGE OF ARCHITECTURE AND PLANNING DEPARTMENT OF BUILDING TECHNOLOGY OUESTIONAIRE

#### **Introduction:**

Daniel Badu Agyekum is my name, Msc. Procurement Management student from Kwame Nkrumah University of science and Technology, Kumasi. This research questionnaire has been designed to solicit your views and information regarding the topic: "Challenges Facing Procurement Unit of Electricity Company of Ghana the Under the Public Procurement Act 2003 (Act 663)". It is aimed to:

- Establish the level of compliance of pre-contract stage activities under the Public Procurement Act 663 by Electricity Company of Ghana.
- Identify the challenges at pre-contract stage in the procurement of works at Electricity Company of Ghana.

The questionnaire is in four sections:

- Personal Data
- General Information on Public Procurement Act 2003 (Act 663)
- Pre-Contract Stage Activities
- Implementation challenges encountered in pre-contract stages

It is strictly for academic purpose and all information provided will be kept confidential.

Your anonymity is highly ensured.

In case you have any questions or contributions kindly contact me on 0244682975/0209059430 or email: dagyekumecggh.com/kofibaduagyekum@gmail.com.

I am very grateful and appreciative of the time spared to completing the questionnaire Please kindly read through the following questions, tick  $[\sqrt{\ }]$  and/or give answers where appropriate and accordingly.

SECTION A: PERSONAL DATA
1. Age Group:
a.18-30years [ ] b. 31-40years [ ] c. 41-50years [ ] d. 51-60years [ ]
2. Level of education:
a. Msc [ ] b. BSc [ ] c. HND [ ] d .CTC I/II [ ]
Others specify
3. Indicate your area of specialization
4. How long have you been with the Directorate?
a. 0- 5 years [ ] b.6- 10years [ ] c.11-15years [ ] d. 15 years plus [
5. Tick to indicate your position with the directorate.
a. Director [ ] b. General Manager [ ] c. Manager [ ]
d. Senior Staff Supervisor [ ] Others specify
6. How many years have you been in the above position?
a. 0-5 years [ ] b.6-10 years [ ] c. 11-15 years [ ] d.15-20 years [ ]
SECTION C: GENERAL INFORMATION ON PUBLIC PROCUREMENT AC
663
7. Have you heard of the Public Procurement Act 2003 (Act 663) before?
a. Yes [ ] b. No [ ]
8. Have you had any training on public procurement?
a. Yes [ ] b. No [ ]
9. Do you participate in the pre-tender activities in your directorate?
a Vac [ ]

# SECTION B: PRE-CONTRACT STAGES ACTIVITIES

The table below represents the pre-contract stages activities established in the Public Procurement Act 2003 (Act 663). Rate your directorate compliance with the Act using the scale below:

1 –Not often; 2 – Often; 3 – Most often; 4. – Not at all

ACTIVITIES	SCALE				
ACTIVITIES		2	3	4	
10. Does your directorate prepare procurement plan annually?					
11. How often is the procurement plan followed by management?					
12. Does your directorate submit its procurement plan to the Tender					
Committee?					
13. Does your directorate divide its procurement packages into lots?					
14.Does you use PPA's Standard Tender Documents (STD) in					
procuring your works contract?					
15. Does your directorate evaluate tenderers base on the STD?					
16. Does your directorate require from tenderers additional documents					
to substantiate their information provided in the STD?					
17. Does your directorate disqualify tenderers who provide false					
documentations?					
18. Does your directorate engage in pre-qualification?					
19. Does your directorate supply pre-qualification documents to					
tenderers upon request?					
20. Are your communication with tenderers in writing?					
21. Does your directorate keep record of your procurement					
proceedings?					
22. In case your directorate rejects tenders and/or proposals do you					
inform the participating tenderers?					
23. After signing of contract, does your directorate publish notice of					
procurement awards?					

# SECTION D: IMPLEMENTATION CHALLENGES

On a scale of 1-4, indicate the level of agreement to the following challenges pertaining to your directorate in the table below:

Scale: 1 – Strongly Disagree; 2 – Disagree; 3 – Agree; 4 – Strongly Agree;

		CHALLENGES			
Implementation Challenges	1	2	3	4	
24. Lack of knowledge of legal framework caused by poor					
dissemination of the Procurement Act and Regulation					
25. Lack of incentives to follow proper procedures, caused by					
weak monitoring and enforcement					
26. Inadequate capacity in effective procurement planning					
27. Delay in payment of works executed by contractors					
28. Accusation of conflict of interest, bribery and corruption in					
some					
procurement processes.	1				
29. The delays in establishing full time operational Procurement	5				
Units with the full complement of staff					
30. Inadequate/lack of funding to execute procurement activities					
31. Illiteracy and inadequate contract management skills among					
some contractors					
32. Inadequate capacity in effective procurement planning	7				
33. Accusation of conflict of interest, bribery and corruption in					
some procurement processes.					
34. Lengthy and cumbersome procurement process					
35. Inconsistencies in tender evaluation and interference in the					
contract award process by unauthorized parties.					
36. Lack of career development path been established for					
procurement in the civil service					
37. Lack of sanctions to public officials for poor performance,					
non-compliance with the law and code of ethics.					

38. Inadequate record management systems for the procurement			
process			
39. Lack/ Loss of confidence in the procurement process by			
suppliers,			
contractors and other service providers			
40. Shortage of experience professional staff.			
41. Low bid prices offered by bidders due to award of contract to			
the lowest evaluated bidder			
42. Difficulty in obtaining bid security (i.e. Bid Bond/ Guarantee,			
Performance Bond/ Guarantee and Mobilization Bond/ Guarantee			
43. The delays in establishing full time operational Procurement	ļ		
Units with the full complement of staff			
44. The need to cancel tendering and seek offers again			

