# KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

# EFFECTIVENESS OF EVALUATION PROCESSES TO INCREASE ORGANISATIONAL TRANSPARENCY AND EFFICIENCY IN CONTRACTS MANAGEMENT: KMA

BY

# MICHAEL OWUBA AMOAH

(BSc. Procurement and Supply Chain Management)

A Thesis submitted to the Department of Construction Technology and Management, in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE
PROJECT MANAGEMENT

**NOVEMEBER, 2018** 

# **DECLARATION**

I hereby declare that this thesis submission is my own work towards the MSc. Procurement Management and that to the best of my knowledge, it contains no material previously published by another person nor material which has been accepted for the award of any other degree of the university except where due acknowledgement has been made in the research study.

MICHAEL OWUBA AMOAH (PG8911217)
(STUDENT)
SIGNATURE:
DATE:
CERTIFED BY;
DR. TITUS EBENEZER KWOFIE
(SUPERVISOR)
SIGNATURE:
DATE:
CERTIFIED BY;
PROF. BERNARD KOFI BAIDEN
(HEAD OF DEPARTMENT)
SIGNATURE:
DATE:

#### **ABSTRACT**

The selection of the contractor is one of the main decisions' clients must make and it is crucial to the successful completion of the project. As a basic rule of thumb, contracting authorities and clients rely on a competitive environment basically because resources are in shorter supply than the needs that needs encountered. Given the crucial nature of complicated mechanisms needed for the proper use of public funds, the basic principle of spending is defined by the principle of transparency and accounts rendered to the public. This research aimed to assess the evaluation procedures employed by public institutions that leads to increased transparency and successful contract execution and management. Literature Review was carried out and it delved into issues pertinent to the evaluation and selection of contactors in public institutions. SPSS software, descriptive statistics and Relative Importance Index (RII) was used in the Analysis of data. Tender price as quoted by contractors, the Arithmetic accuracy of bid documents and the financial stability of bidding contractors were seen to be the top factors considered in the evaluation process by public institutions. Furthermore, the refusal of collection of money, gifts, favors, etc. from tenderers, the protection of confidential information and the documentation of information forms the top practices that aid in improving transparency within the evaluation process and the institution. It was also further discovered that the provision of skilled resources by the contracting party, clearly defining roles and responsibilities in the execution of contracts and comprehending the full technical implications prior to the execution of a contract aids in efficiently managing a contract. Nonetheless, it is recommended that the communication channels at the institutions should be properly developed to allow bidders and personnel get regular updates on the processes of contracts management within the institution. Additionally, protection of confidential information pertaining to the project should be kept confidential to avoid giving an unfair advantage to bidders to a contract

**Keywords:** Contracts Management, Evaluation Processes, Organisational Transparency

# TABLE OF CONTENTS

DECLARATION
ABSTRACTi
TABLE OF CONTENTSii
LIST OF TABLESix
LIST OF FIGURES
ACKNOWLEDGEMENTSx
DEDICATIONxi
CHAPTER ONE
INTRODUCTION
1.0 INTRODUCTION
1.1 BACKGROUND
1.2 PROBLEM STATEMENT
1.3 RESEARCH QUESTIONS
1.4 AIM5
1.5 OBJECTIVES OF THE STUDY5
1.6 SCOPE OF THE STUDY
1.7 RESEARCH METHODOLOGY6
1.8 LIMITATIONS OF THE STUDY
1.9 ORGANISATION OF THE STUDY

1.10 SUMMARY	8
CHAPTER TWO	9
LITERATURE REVIEW	9
2.0 INTRODUCTION	9
2.1 AN OVERVIEW OF THE GHANAIAN CONSTRUCTION INDUSTTRY	9
2.2 PUBLIC PROCUREMENT OVERVIEW	10
2.2.1 The Conceptual Definition of Procurement	10
2.2.2 Public Procurement System in Ghana	12
2.3 THE TENDER EVALUATION PROCESS	14
2.3.1 Laws Governing the Tender Evaluation Process	16
2.4 THE PROBLEM WITH THE EVALUATION PROCESS	18
2.5 CONCEPTUAL DEFINITION OF TRANSPARENCY IN PROCUREMENT PROC	ESSES 20
2.6 THE PRINCIPLE OF TRANSPARENCY IN EVALUATION PROCESSES	21
2.6.1 The Main Features of Transparency	22
2.7 ACHIEVING TRANSPARENCY IN THE EVALUATION PPROCESS	23
2.8 CONTRACTS MANAGEMENT	25
2.9 THE BENEFITS OF EFFICIENT CONTRACT MANAGEMNT	26
2.10 THE STAGES OF CONTRACT MANAGEMENT	27
2.11 THE CONTRACTS MANAGEMENT CYCLE	29
2.11.1 Strategy, Structure and Resources	29
2.11.2 Implementation	31

2.11.3 Development	32
2.11.4 Life Cycle Management	33
2.12 INEFFICIENCIES OF CONTRACTS MANAGEMENT	34
2.13 SUMMARY	35
CHAPTER THREE	36
RESEARCH METHODOLOGY	36
3.0 INTRODUCTION	36
3.1 RESEARCH STRATEGY	36
3.2 RESEARCH PARADIGM	37
3.3 QUANTITATIVE RESEARCH	38
3.4 UNIT OF ANALYSIS AND DATA SOURCES	39
3.5 CONTENT OF THE QUESTIONNAIRE	39
3.5.1 Scope of the questionnaire survey	39
3.6 SAMPLING AND SAMPLING SIZE SELECTION	40
3.7 DATA PRESENTATION AND ANALYSIS	42
3.8 CHAPTER SUMMARY	42
CHAPTER FOUR	43
DATA ANALYSIS AND DISCUSSION	43
4.0 INTRODUCTION	43
4.1 RESPONDENTS DEMOGRAPHY	43
4 1 1 Respondents Department	43

4.1.2 Educational Level	45
4.1.3 Years of Experience	46
4.2 FACTORS CONSIDERED IN THE EVALUATION PROCESSES EMPLOYED	BY KMA 47
4.3 TRANSPARENCY OF EVALUATION PROCEDURES	51
4.4 EFFECIENCY OF CONTRACTS MANAGEMENT ACTIVITIES OF KMA	55
CHAPTER FIVE	59
CONCLUSION AND RECOMMENDATIONS	59
5.0 INTRODUCTION	59
5.1 RESEARCH OBJECTIVES MET	59
5.1.1 Factors considered in evaluation processes employed by public institutions	59
5.1.2 Transparency of evaluation procedures employed in public procurement	59
5.2.3 The Efficiency of contract management activities within the public organisation	ons 60
5.2 RECOMMENDATIONS	60
5.3 CONCLUSION	61
5.4 AREA FOR FURTHER STUDY	61
REFERENCES	62
APPENDICES	68
APPENDIX "A"	68

# LIST OF TABLES

Table 4.1 Respondent's department within the organisation	44
Table 4.2 Educational Level of Respondents	45
Table 4.3 Respondents Level of Experience	46
Table 4.4 Factors Considered in the Evaluation Processes	48
Table 4.5 Transparency of Evaluation Procedures	52
Table 4.6 Efficiency of Contracts management	56

# LIST OF FIGURES

Figure 2.1- The Stages of Public Procurement	. 12
Figure 2.2 Inculcating transparency at every Stage of the Tendering process	. 24
Figure 2.3 The Contract Management Cycle	. 28
Figure. 4.1 Bar Chart of the Respondent's Department	. 44
Figure 4.2 Respondents Level of Experience	. 47

#### **ACKNOWLEDGEMENTS**

This thesis would not have been possible if not for the strength, comfort and provision of the Almighty God. Unto the Lord be the glory, for great things he has done and even greater things he will do. On this moment of submission of my thesis, I would like to thank each one that I have come across in this path of my journey, whose lives have inspired me and from whom I have learnt to live the life.

I express my sincere thanks to Dr. Titus Ebenezer Kwofie my supervisor for his invaluable advice, excellent guidance and encouragement. His insight into the subject has always made me realize and understand the subject in a broader perspective. I extend my special thanks to him for accepting me as his student and encouraging me to explore. I am extremely grateful for the confidence he had in me.

Aba Afful, what can I say. Your contributions to this work, patience, the sleepless nights, thank you so much for all you have done for me. You will forever be remembered.

Finally, but not the least, I would like to mention the support of my family. Who have made this thesis a reality by having faith in me and for instilling in me the courage to strive and achieve higher goals in life.

To God be the Glory.

# **DEDICATION**

Understand that in order to achieve anything, it requires faith and belief in yourself. Remember all things are possible for those who believe.

With my heart, this work is dedicated to my lovely family. Mavis, Joanna and Irene for their patience and understanding throughout the study. My siblings and mother Joanna. Mum, thanks for the encouragement. I really love you.

#### CHAPTER ONE

#### INTRODUCTION

#### 1.0 INTRODUCTION

This chapter provides the general knowledge to the background of the study. It includes the introduction, the statement of problem and research questions to be answered. The research aim and objectives for carrying out the study and the method used in collecting data and the limitations and scope of the study are also addressed in this section. The chapter concludes on the organisation of the study from its start to the end.

#### 1.1 BACKGROUND

For most developing economies, the backbone of growth is heavily dependent on procuring the right projects or infrastructure, quality goods and services at highly competitive costs (Boateng, 2014). These public projects are fundamentally funded with taxpayer's monies and has over the years called for issues of ensuring transparency and accountability (Puri and Tiwari, 2014). Often, the competitive form of tendering is used in the public procurement of projects. Oppong (2013) states that it is evident the use of the competitive tender offers client's competitive prices of projects, products or services they wish to acquire. As a basic rule of thumb, contracting authorities and clients rely on a competitive environment to achieve resourceful use of stipulated budgets. They buy products of the best quality at the lowest prices basically because resources are in limited supply compared to the needs that need to be met. A competitive market environment allows for innovation in the commodities and the services offered (Georgieva, 2017).

The selection of a contractor is one of the main decisions clients must make and it is crucial to the successful completion of the project (Hatush and Skitmore, 2005). An evaluation process is hence utilized to aid in this phase (Cheng and Li, 2004). Ki-Moon Ban (2012) in a public report from the United Nations rightly emphasized the importance of transparency in Public Procurement stating that "transparency is a core principle of high-quality public procurement". The importance of an open and a transparent procurement system cannot be overemphasized. It improves the competitive market, increases efficiency and innovation and reduces the possibility of unfairness or corruption in the process (UNOPS, 2012).

In public procurement policies and laws, transparency and accountability form an important element. Given the nature of complicated mechanisms needed for the proper use of public funds by contracting firms and commercial organisations, the basic principle of spending is defined by the principle of transparency and accounts rendered to the public (Georgieva, 2017).

Heitling (2012) posits a definition for transparency in the legal context stating that it is the availability, accessibility and lucidity of actions of governments. It is the belief that allows persons impacted by decisions and business dealings to have access to not only the basic facts and figures behind decisions but also the mechanisms and processes guiding them (Public Procurement Authority, 2011). Transparency in procurement takes form in a wide range of practices, such as publishing procurement policies, advance publication of procurement plans, public announcement of tender notices, disclosure of evaluation criteria in bid documents and the publication of contract awards and prices paid to mention but a few (UNOPS, 2012).

Evaluation is generally described as assessing the strengths and weaknesses of programs, policies, personnel, products, and organizations (Boateng, 2014). The reasons for evaluation however differ

from one entity to another. In this study evaluation is performed to appropriately select the responsive tenderer to execute a project in accordance to client needs, within budget and time.

This critical phase in contractor election involves activities such as the receipt, opening, comparison and the classification of bids, reporting and the recommendation of the most responsive and appropriate contractor for selection (Boateng, 2014). At every stage of the evaluation process, a thorough examination of data pertaining to the individual bids received bearing in mind the overall project goals would inevitably lead to the selection of the appropriate contractor (Puri and Tiwari, 2014).

In Ghana, the processes and guidelines for effective evaluation to obtain the most qualified and suitable contractors to undertake projects are laid out in Public Procurement Act (Act 914), an amended version of Act 663 (2003) which became effective as of 2016. The Act is enforced by the Public Procurement Authority of Ghana. The objective of this Procurement Body as stipulated by the Act is to "...to ensure that public procurement is carried out in a fair, transparent and non-discriminatory, environmentally and socially sustainable manner" (Public Procurement Authority, 2016). The Act prescribes several measures of transparency in an attempt to win the trust of the public in the execution of public procurement activities. For instance, the firm observance of competition in the execution of public procurement, the role of representatives of tenderers throughout tender openings, the release of evaluation criteria preceding the commencement of tendering processes, as well as the publication of tender and disposal notices and contract awards all point to Ghana's commitment to entrench the principles of transparency into its public procurement system (Public Procurement Authority, 2011).

The selection of contractors leads to the execution phase of any project. It is at this stage where, effective and efficient management processes would guide the project towards a successful end

(Arhin, 2013). The appropriate management of contracts from the inception stage to the closure of the contract has always been regarded as an intrinsic core aspect of organisational processes.

The National Audit Office (2016), posits that achieving transparency in any contract management is strongly influenced and highly dependent on the proceedings of the tendering and the contract award phase. The terms and conditions that has been agreed on and the nature of the relationship between the client and the contracting party directly influence the management of contracts. This position therefore views the contract management phase as a continuation of the evaluation and award rather than a distinct phase within the procurement process (National Audit Office, 2016).

#### 1.2 PROBLEM STATEMENT

With the tight growth in the economies of developing countries, many national and local governments acquire goods and services from the private sectors through the process of public procurement (Mishra, 2015). Approximately, governments spend up to 10 - 15 percent of Gross Domestic Product on the purchasing of goods and services within economies of developing countries (UNOPS, 2012). With such significant contributions of the GDP to the economy, efficiency of government procurement is a very important issue.

It is recorded that the 1990s witnessed the birth of a variety of procurement initiative reforms by both industrial and developing nations. This reflected the heightened public awareness of political and bureaucratic corruption in general (Evenett and Hoekman, 1997). Chapman and Glatz (2009) observed that the present state of society required the profession of public procurement to emphasize and entrench the principles of transparency in procurement process for the public.

With the shift in the basic function of procurement entities from merely "taking orders" to actually "placing orders", this very nature has required the body to take up the burden of greater

responsibilities in controlling the major market decisions and thereby resulted in the greater need for accountability and transparency in all processes it embarks on (Chapman and Glatz, 2009).

Evaluation process has a bearing on enhancing transparency and efficiency in contract management. Hence the focus of this study is to appraise the evaluation process in enhancing transparency and efficiency in contract management.

## 1.3 RESEARCH QUESTIONS

The study seeks to provide answers for the following research questions posed;

- 1. What factors are considered in the evaluation processes carried out by public institutions?
- 2. What is the extent of transparency of evaluation procedures employed in public procurement of goods, works and services?
- 3. What contract management activities are carried out within public organisations?

#### **1.4 AIM**

The aim of this study is to assess the evaluation procedures employed by public institutions that leads to increase transparency and successful contract execution and management.

#### 1.5 OBJECTIVES OF THE STUDY

The specific objectives are:

- To identify the factors considered in evaluation processes employed by public institutions
- To assess the extent of transparency of evaluation procedures employed in public procurement
- To assess the efficiency of contract management activities within the public organisations

#### 1.6 SCOPE OF THE STUDY

This study is limited in geographical size to the Ashanti Region and focuses on Kumasi within the Region. Kumasi is an area highly populated and has seen a steep economic growth as evidenced in the numerous projects being undertaken in the area. It is the second largest city within Ghana and has over the years seen a quantum leap in infrastructural development.

The contextual framework however, would be limited to the Kumasi Metropolitan Assembly (KMA) which is the public institution responsible for the affairs of the Kumasi Metropolis. To this end, the study is conducted on professionals situated within the environs of the Kumasi Metropolis. The Kumasi Metropolitan Assembly was chosen because it is directly involved in the procurement of public works within the metropolis. Evaluation and selection of contractors form an intricate part of this procurement process. It therefore affords this research the appropriate environment for collecting data on issues raised in the study.

#### 1.7 RESEARCH METHODOLOGY

The research questions and objectives outlined for the study dictates what method to opt for in carrying out this study. The study would take the form of a combination of the Qualitative and the Quantitative method of data collection and analysis to adequately report the findings.

The purpose of aims and objectives identified for this study allows for data to be collected through primary and secondary sources. The primary data would be gathered through questionnaires and interviews with staff and personnel of the Kumasi Metropolitan Assembly particularly the department that overlooks the evaluation of tendered bids. The data would then be analysed using tables and figures to offer a graphical representation of survey results. The Statistical Package for Social Sciences (SPSS) would be used to analyse and categorize the data from the field survey. The

Secondary information is obtained from accepted journals, conference proceedings, books and other online sources.

#### 1.8 LIMITATIONS OF THE STUDY

This study like most is not without constraints. The constraints identified however do not in any way invalidate the findings and recommendations posited in this study. The following are some challenges identified during the study;

- Personnel of the contextual organisation were reluctant in divulging information relating to issues of organisational systems
- 2. The failure and reluctance of some respondents to properly answer survey questions although initially agreed upon

#### 1.9 ORGANISATION OF THE STUDY

This study is categorised under five main chapters. The first provides background information of the study which includes introduction, problem statement, research questions and objectives, research methodology and scope of the study. The second chapter presents literature relevant to the study. The third chapter defines the research design, sampling frame, questionnaire administration and data analyses. It embodies the method opted for in carrying out the research. Chapter four discussed the results and findings of the data from the previous chapter while the final chapter chapter five, presents a summary of the findings, recommendations and the conclusion of the study.

# 1.10 SUMMARY

This first chapter provides background information of the study. This comprised of the introduction, problem statement, research questions, aim and objectives, research methodology and scope of the study. The succeeding chapter is Chapter two which presents literature relevant to the study in focus.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.0 INTRODUCTION

This chapter focuses on a review of literature relevant to the study in focus. It provides an overview of the procurement and tender evaluation practices within the construction industry. This chapter further disseminates the issue of transparency in procurement processes and its applicability to the construction industry. The chapter then concludes on suggestions proposed in the attainment of transparent unbiased procurement processes.

#### 2.1 AN OVERVIEW OF THE GHANAIAN CONSTRUCTION INDUSTTRY

Anaman et al (2007) define the construction industry as a group of firms with closely correlated activities concerned with the construction of real estates, buildings, private and public infrastructure. It also refers to all economic tasks focused on the manufacture, revamp, conservation or extension of fixed assets.

In Ghana the construction industry, as with many developing countries, plays a crucial part in the nation's economy, through its influence in the gross national domestic product and the provision of jobs (Amoa-Abban, 2017). Undeniably, the interdependence between the construction industrial sector and the economic growth of any developing country has been spoken of by numerous writers and in all cases, there is an indication of a direct relationship between investments in construction and economic development.

The Ghanaian building construction firms encompass many business ventures of varying sizes as classified and registered by the Ministry of Water Resources, Works and Housing (MWRW&H) as

D1K1, D2K2, D3K3 and D4K4. These categories are dependent on elements like the yearly income, plant holding, staff, etc. (Boateng, 2014). The D1K1 class of contractors are the larger firms, whilst D2K2 contractors are medium and D3K3 and D4K4 are the small firms (Edmonds et al, 1984). According to MWRW & H, larger firms, are listed as financial class 1, adept in undertaking projects of any value. The medium firms i.e. class 2 firms can undertake projects up to US\$500,000, whereas the small firms (class 3) are able to undertake projects up to US\$200,000. Class 4 firms under small firms are capable of undertaking projects up to US\$75,000.

It is reported that the majority of the construction firms in Ghana fall under the medium and small firms and do not have the requisite technology, machinery and trained staff to execute projects effectively and proof is given by the fact that national mega construction projects are given over to the few large foreign contracting firms (Oppong, 2013). In 2011, the President of the Republic of Ghana in his nation's address spoke of plans by the government to commit more than 4% of the annual budget in the construction of a vast number of public projects aimed at bridging the infrastructural deficit of the nation. These projects would require the selection of suitable contractors in the execution of the project (Abdul-Jamil, 2014). The contractors selected would dedicate, time, technical abilities, managerial capabilities and finances all to an economic low price. This has become a huge matter of concern to the construction industry and the Ghanaian economy at large (Oppong, 2013).

#### 2.2 PUBLIC PROCUREMENT OVERVIEW

# 2.2.1 The Conceptual Definition of Procurement

ISO 10845:2010 defines procurement as the forming, execution and managing of contracts. It encompasses all phases from the identification of a project or goods to be acquired, soliciting and

assessing bids, awarding and controlling contracts and authorizing acquiescence with requirements. Similarly, Hughes (2005) terms Procurement as a procedure that ranges from the needs to the closure of a contract or the end of the valuable life of an asset. It consists of the design and delivery of those works, goods or services, the valuation of their quality, and the assessment and reviews that will generate additional procurement (Hughes, 2005).

In the context of project management, procurement refers to the entire process of obtaining products, works and services from outside the clients' institution. Procurement in construction, involves obtaining resources (materials, plant, Labour, services) to design, execute and commission a structure that offers the best possible value for money over its life cycle for the client (Cartlidge, 2009). Yet again, Highton (2012) define procurement in the context of construction as the process used to deliver construction projects. Wright (1999) posits that public procurement structures are the link between public needs such as hospitals, roads, housing needs and so on; and providers in the private sector. It is rooted in fiduciary obligation of government administrations to deliver goods and infrastructure to the populace (Odhiambo and Kamau, 2003).

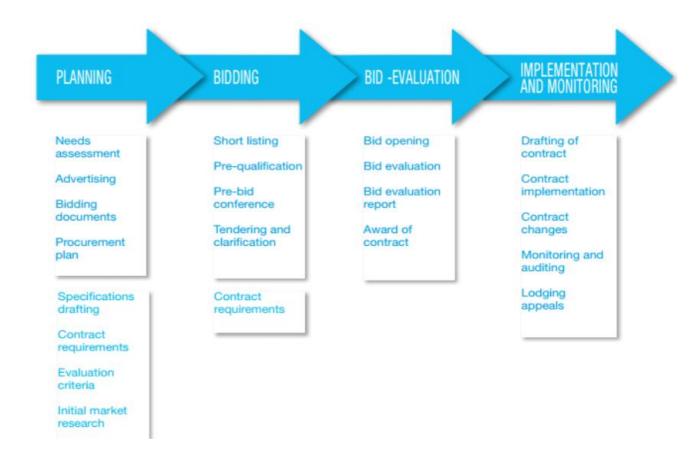


Figure 2.1- The Stages of Public Procurement

Source: (Transparency International Azerbaijan, 2014)

# 2.2.2 Public Procurement System in Ghana

In the attainment of the proposed Millennium Development Goals (MDGs) operational and competent public procurement systems are indispensable in the advancement of sustainable development (OECD, 2007). Public procurement systems are at the core of the way public funds are utilised since budgets are transformed into amenities principally through the government's acquisition of goods, works, and services. Regrettably, many developing countries have procurement systems that are predominantly frail and exist to waste the rare domestic and foreign means (Odhiambo and Kamau, 2003).

The significance of public procurement cannot be overstated bearing in mind the ginormous financial commitment, usually involved in the process (Thai, 2001). In its report, the World Bank (2003) predicted that the annual worth of goods, works and services publicly procured is pegged at 600 million USD proportionate to about 10% of the country's GDP. In order to improve the socio-economic well-being of developing countries, strengthening the procurement capabilities should be a vital core and a necessary feature of programs formulated to meet the international commitment in eradicating poverty(OECD, 2007).

Governments all over the world have tried to restructure their tender evaluation procedures through set processes to remove biased competition in the selection and award of projects to contractors(Georgieva, 2017). The government of Ghana, in this vein passed the Public Procurement Act (Act 663, 2003), to define and control its procurement processes (Abdul-Jamil, 2014). In Ghana and as stipulated by the Public Procurement Act, the successful bidder for proposed projects should be the lowest evaluated bidder. The procedures for the award of contracts to the lowest bidder are spelled out in the Act.

In Ghana, the lowest bidder system is practiced. This has significant consequential effects on the contractor's performance on project execution and delivery (Public Procurement Authority, 2011). In the National Competitive Bidding (NCB) practice where the lowest bid comes out successful for instance, there are significant indications of winning contracts failing to complete or facing numerous delays because of unreasonably low tenders that negatively affect the performance of the contractor selected (Anvuur et al, 2006). Anvuur et al (2006) further reports that, the practice of low bids is common in the industry, where contractors hope that the difference can be made up in claims and variations as the work progresses.

#### 2.3 THE TENDER EVALUATION PROCESS

It is believed that the public sector's method of bid evaluation, intent as it does exclusively on bid prices, is among the chief grounds of problems encountered in the delivery of projects. When confronted with a scarcity of work, contractors are most likely to submit low bids to keep running in the short term (Oppong, 2013). They have hopes of somehow raising supplementary income through 'claims' or cutting down costs to recompense. This denotes that the involuntary selection of the lowest bidding contractor is highly risky (Hatush and Skitmore, 2005). To amend this method is not an easy task as most clients from the public sector are answerable for their decisions and this especially is problematic when the situation of awarding a contract to a bidders other than the lowest emerges.

The most frequently used method for selection of contractors by far is the competitive bidding process in which the lowest *evaluated* bidder is awarded the contract. There have been many modifications in various countries, the variations however still aid in the attainment of the common objective of opting for a qualified contractor on a competitive basis (Hatush and Skitmore, 2005).

Hatush and Skitmore (2005) further state that countries such as Denmark, Italy, Portugal, Peru, South Korea, Saudi Arabia, Canada, the USA and France, have adopted certain procedures that will do away with the control of the lowest tender price in the selection of contractors. However, whatever selection method is used should consider at its core the three criteria, namely; time, cost and quality (Fong and Choi, 2000)

The evaluation procedure considers the preliminary assessment of the bid offers submitted, and defined as being valid, to examine their responsiveness to stipulations and requirements as spelled out in the advertisements, examine their cost, and define their price. The basis for consequent selection of the bid that best reflects and provides value for the clients' money coupled with the defined prerequisites specified in the solicitation document is the evaluation. WHO (2017) proposes three key

criteria that evaluation entities and bodies should consider in carrying out the evaluation process to improve the standards and objectives Procurement Laws seek to achieve. They are identified below;

# • Independence of evaluations and evaluation systems:

The evaluation process should be unbiased and autonomous in its role from the processes of policy-making. The process should deliver and manage programmatic and clerical work.

## Credibility of evaluations:

The credibility of evaluation is dependent upon the level of expertise and objectivity of evaluators, the meticulousness and transparency of evaluation methods used, and the appropriateness of evaluation procedures selected to be used.

#### Utility of evaluations:

In order that evaluation findings would have an impact on decision-making, the findings must be professed as significant and convenient. It should also be presented in a clear and concise manner. Findings must complement organizational knowledge and performance improvement.

Babich and Pettijohn (2004) express their view on the best value for money stating that solely price is not always the only standard in the evaluation of bids. Criteria other than price such as the accessibility, quality, time, maintenance cost and provisions, life cycle cost, etc. are part of the equations and considerations used to define the best return on investment in the procurement of the goods, services or works. In accordance with the relevant and applicable law, rules and procedures and with the use of an evaluation criteria and method predetermined in the solicitation document, evaluation is directed by a selected evaluation team in order to perform a fair and unbiased evaluation (Odhiambo and Kamau, 2003). The need for transparency in the evaluation process also calls for

documentation in an evaluation report every step taken during the entire process and is subsequently the basis for the recommendation of award of contracts (Babich and Pettijohn, 2004).

Due to the large use and involvement of public funds in the procurement and execution of public projects, they are to be closely evaluated and monitored to ensure that the public expenditure is used wisely. With the possibility of biased and unfair contracts awards, the open tender process is among the many ways implemented to lessen the likely conflict of interest and to uphold cost-efficiency and transparency in public project procurement. At present, all public departments have been asked to abide with the current procurement guidelines with the development of the open tender system. This was done to ensure that transparency and liability in project procurement among the public sectors is upheld.

# 2.3.1 Laws Governing the Tender Evaluation Process

The Reforms of the Public Procurement Laws in Ghana

Against the backdrop of safeguarding the rationality and the worth of money in the public procurement settings, the government of Ghana in 1996 launched the Public Financial Management Reform Programme (PUFMARP) to improve management of finances in Ghana. Ameyaw et al (2012) states that the programme highlighted loops in the procurement system such as the lack of a central body with technical expertise, lack of an all-inclusive public procurement policy, and the absence of clearly defined roles and responsibilities for procurement bodies.

The Public Procurement Act, Act 663 was then enacted in 2003 and established the Public Procurement Authority (PPA) as the sole authorized entity in-charge of the effective execution of the Act (Abdul-Jamil, 2014). The PPA was charged to ensure an astute, economic, and effective use of public resources in an impartial, transparent and non-discriminatory means while promoting a

competitive Local industry. Again, the PPA, is mandated to perform intermittent assessments of procurement activities carried out by entities to reveal probable gaps that could be bridged through policies and programmes.

The World Bank (2003) in its report stated five basic pillars on which the system of public procurement is established. They were identified to be;

- 1. the legal and institutional framework
- 2. standardized procurement procedures and tender documents
- 3. independent control system
- 4. proficient procurement staff
- 5. Anti-corruption measures.

In 2016 however, the Public Procurement Act 2003 (Act 663) underwent an amendment that reformed it to become the present Public Procurement Act 2016, (Act 914). These reforms in the laws and procedures are aimed at eradicating corruption in the procurement process, controlling expenditure and also inculcating discipline in the use of public finances (Public Procurement Authority, 2011).

In 2003, the Country Procurement Assessment Report of Ghana, publicized that most personnel of Ministries, Departments and Agencies (MDAs) and District Assemblies (DAs) in charge of procurement roles were not adept in procurement, even though they had undergone some form of training. The report further revealed that the application of the PPA and the Standard Tender and Contract Documents will be unsuccessful without expansive training and 'refresher' courses for officials responsible for procurement.

Forgor (2007) agrees with this view stating that, the lack of proper preparation of managers on the procedures and processes of procurement is a problem confronting reforms of procurement regulations. This hence supports Azeem's (2007) statement that, the poor diffusion of the laws of procurement is one of the hindrances to the smooth execution of an efficient system of public procurement.

#### 2.4 THE PROBLEM WITH THE EVALUATION PROCESS

All across the globe, states spend up to 20% of their annual budgets on public procurement, which amounts to about 9.5 trillion US dollars (Transparency International Azerbaijan, 2014). Azerbaijan (2014) further reports that about 25% of these funds are lost to corruption. Corruption is deeply rooted in the evaluation and selection of contractors for the execution of public projects.

The quantum of money changing hands through corruption in public procurement is estimated between \$390-400 billion per annum all over the world. In Sub-Saharan Africa alone, it is estimated that corruption is present in about 70% of public procured contracts. This results in an estimated 20-30% rise in contracts sums (Mawenya, 2008). There is no outstanding proof that the passage and enforcement of the Public Procurement Act has had any noteworthy impact in curbing the problem of corruption in public procurement in Ghana. As a matter of fact, annual Corruption Perceptions Indices (CPI) released by Transparency International, ranked Ghana as the 62nd and 69th most corrupt country, out of 183 countries worldwide in the years 2010 and 2011 respectively (Transparency International, 2012). CIPS and NIGP (2012) in their report emphatically states that "the public procurement should to the greatest extent practicable, be transparent in its practices, processes, policies and relationships with all stakeholders, while ensuring protection of confidential information"

Reforms in evaluation and procurement processes are reported by the United Nations in 2011 to be embarked on by economies of developing nations when there is a need for a "true reform". This deals with problems of transparency, in-equitability and corruption among others within the procurement system which make it inefficient and in need of a reform (Report and Procurement, 2011).

Lengwiler and Wolfstetter (2006) postulates that corruption continues to pervade developing countries because of weak institutional structures and the lack of operative monitoring mechanisms in place. Public procurement has therefore been viewed as an area of widespread waste and corruption (Thai, 2004; Jones, 2007).

In the situation where there are huge systemic loopholes coupled with sloppiness in legal and organizational systems, compounded by non-transparency there needs to be rigorous effort in ensuring the strict execution and enforcement of laws to attain the purpose for which those laws were passed in the first place. Studies conducted in Uganda, Tanzania and Kenya exposed the corrupt practice in the public procurement system mainly through hidden violations of laid down procurement rules (Transparency International, 2009). Where there is the low exposure of breaches of the law, weak implementation of rules and regulations, wrongdoers are encouraged to abuse the law with liberty (Ameyaw, Mensah and Osei-t, 2012). If procurement laws and regulations are not enforced to the latter, issues of corruption will continue to escalate.

Hunja (2003) reveals that the combination of lack of practicability in application of existing regulations coupled with weak enforcement creates ginormous opportunities for the abuse of the procurement system often with total impunity. Stating as a matter of fact, public authorities will go great lengths to create the semblance of strict compliance with procedures and requirements while seriously compromising the intent and spirit of such rules (Ameyaw, Mensah and Osei-t, 2012).

One challenge that continues to re-appear in the problems facing the evaluation process is political interference. The World Bank (2004) reports that a good number of politicians believe they have the right to interrupt procurement processes hence resulting in unreliable procurement decisions.

#### 2.5 CONCEPTUAL DEFINITION OF TRANSPARENCY IN PROCUREMENT PROCESSES

Transparency as defined by CIPS and NIGP (2012) is the timely, comprehensible access to information. Furthermore, it assists in safeguarding against deviations from just and equal treatment. By applying transparency within organisational processes, it protects the integrity of processes and the interest of the organization, stakeholders, and the public (CIPS and NIGP, 2012).

Indeed, there is not much theoretical accord on what transparency in procurement essentially refers to in practice. The doubtful meaning of transparency depicts the volume of the responsibilities placed on the parties to the procurement process, which differ considerably across national legal contexts (Oppong, 2013).

As a result of the differing methods to defining the very core and applicability of transparency, it has invariably led to dissimilar outcomes in its drive to combat and eradicate corruption and its inferences (Heitling, 2012). Notwithstanding, there has been two approaches in defining the transparency in government procurement:

- Strictly describing the main purpose of the procurement to ensure non-discriminatory and openness throughout the proceedings
- ❖ Defining the obligations which should be mandatory in the proceedings to ensure a proper level of transparency (Knutsen-öy, 2015).

The concept of transparency is not a new concept. In Public affairs, its roots are found in the efforts of democratic societies to bring openness to governmental and public dealings (Sabo, 2012).

Transparency in summary is termed as one of the most important elements in public procurement policies and laws and this comes because of the nature of the complicated systems utilised in the proper use of public funds.

#### 2.6 THE PRINCIPLE OF TRANSPARENCY IN EVALUATION PROCESSES

Studies show that the principle of transparency is closely related to the quantum of information to be provided concerning the orders and procedures, and the publicity of the actions/inactions of the contracting entities on the selection of a contractor (Report and Procurement, 2011). In defining this principle there are some narrow definitions that limit it only to the advertisement of the notice of public requirements and ensuring the required minimum level of publicity with respect to procedures (Heitling, 2012).

Generally, transparency is viewed as the concept of ensuring morality and publicity at the various phases in the evaluation process, to enable bidders and regulatory authorities to monitor and control its progress and establish that the contract has been granted and subsequently satisfied (or not) and that the entire process was conducted in a legitimate and just unbiased manner (Ohashi, 2006).

There are other dimensions of the principle of transparency that expands the functions to ensure an economic and modest environment, the ability to monitor and control the enforcement and execution of procurement, and utilise this tool as an anticorruption measure (Kaspar and Puddephatt, 2012). The principle places an onus on governments and governmental institutions to ensure publicity of their actions.

Georgieva (2017) identifies three main mechanisms or pillars for transparency:

- ❖ Facilitating coordination consensus on a treaty norm
- \* Reassurance of no advantage by similar actions and compliance with norms
- ❖ Deterrence against actors contemplating non-compliance

# 2.6.1 The Main Features of Transparency

They are categorised into two features to which its most distinguishable functions belong.

#### Representative features

Under this feature transparency exhibits the following characteristics;

- Provision of information
- Legality of state institutions
- Exhibiting the political will for open-governance
- Strengthening the relationship between state institutions and the public (Georgieva, 2017)

#### Control features

Under this feature, transparency demonstrates the following defining characteristics

- Permitting the monitoring of the actions/inactions of all government entities
- Clarity about the rights and obligations of individual organisations
- Allowing the public to be part in the decision making of the governmental propositions
- Anticorruption tools against "backdoor" influence to the detriment of society (Georgieva, 2017).

The characteristics examined above help measure the level of democracy in a society. Often, it is alleged that the more advanced a government's publicity bodies are, the more developed the society is too. Transparency is dictated by the interest of the interest, in that the tasks carried out by state bodies be performed for the public good – effectively economically and sustainably (Magrini, 2006).

#### 2.7 ACHIEVING TRANSPARENCY IN THE EVALUATION PPROCESS

As emphasized repeatedly, transparency in public procurement is critical. The manner in which governments portrays itself in its business dealings directly affects public view and the public's confidence in good governance (Sabo, 2012). In addition to reassuring the public's good will and strengthening the trust, practical business advantages offered by transparency are increased competition and better value for works, goods and services (WHO South-East Asia, 2017).

Considering governments spending size and scope, it is critical that stakeholders have assurance in the public procurement process. A transparent and informative public procurement process inspires this confidence through the unrestricted and open exchange of information, heightened knowledge, enhanced efficiency, and decline of the potential for corruption and waste (Transparency International Azerbaijan, 2014)

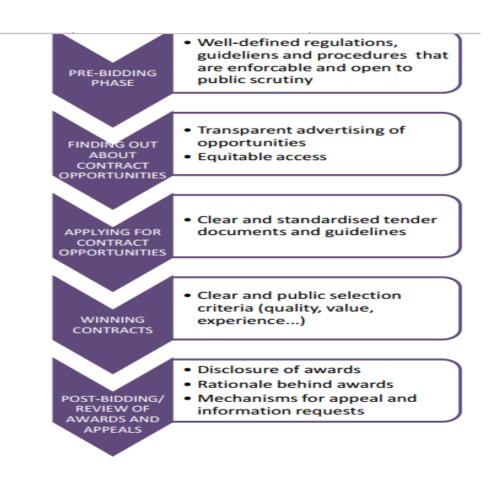


Figure 2.2 Inculcating transparency at every Stage of the Tendering process

Source: (UNOPS, 2012)

Some examples of means of incorporating transparency into procurement systems are seen below. These practices as identified by WHO- South East Asia (2017) should include, but are not limited to:

- Clearly expressed, readily available regulations, policies, and procedures
- Complete, timely, and accurate information
- Equal access and opportunity to all qualified contractors
- The elimination of "insider's" middlemen when it comes to accessing public procurement information or the opportunity to do business with government
- Ensuring that specifications do not limit competition

- Education opportunities for contractors at regularly held information sessions
- Standardization of procurement documents including: bids, quotes, proposals and registration documents (WHO South-East Asia, 2017).

#### 2.8 CONTRACTS MANAGEMENT

The management of contracts essentially is a measure of the degree to which entities follow through the performance of the awarded contracts. This comprises of the mobilization and planning, implanting, supervision, inspecting, control of inventory and communication matrixes for reporting.

Under agreed terms and conditions, a formal document (contract) is drawn and all parties to the contract sign to render it legally binding. Following this, successful projects would require that the contract be properly and closely managed. In the management of contracts, all parties are monitored to ensure that contractual obligations are duly performed. General tasks under contracts management include the verification of documents, arranging for prompt payments, inspection, balancing of accounts, receipt and installation of goods and updating progress of works reports.

For contracts of works, it often requires a team of technical supervisors to ensure the project is kept running at the specified quality, on time and within costs. A study by Ameyaw (2007) observed that, a very low level of compliance was recorded for most contracts managed. He further revealed that a vast majority of public entities forsook the management of contracts. This he attributed to the low enthusiasm recorded during the performance phase of contracts as compared to the awarding phase of the contract. Coupled with the lack of information updates on projects the performance phase often fails with the lack of regular check-ins to keep parties to the contract up-to-date with the happenings of the project.

According to the study, it was recorded that the regular reports expected from project managers such as supervision reports, delivery reports, stock and inventory reports and project monitoring reports were not adequately prepared and filed in all the firms surveyed.

## 2.9 THE BENEFITS OF EFFICIENT CONTRACT MANAGEMNT

Within both the public and the private sectors, there exists an increasing pressure to eliminate unnecessary costs and to improve the operational and the financial performance of the various sectors. The need and benefits of efficiently managing contracts comes as a result of the emergence of new regulatory requirements, an increase in the volume and complexity of contracts and globalization.

The adoption of a more formalized and structured contractual management procedure has come about from the growing recognition on the essence of automation and an improvement in the contract procedures to satisfy analytical and compliance needs. In view of this, technology has come to facilitate these processes with the birth of software programs that are tailored to the managerial needs of organisations.

Elsey (2007) notes that a contract management system is successful if;

- Service delivery arrangements continue to satisfactorily meet the needs of both parties along with the realization of the business benefits and value for money
- The business benefits and the overall value for money expected are being attained
- Suppliers are co-operative and responsive to keep the system running
- The firm comprehends the full extent of its accepted obligations within the contracts signed
- There are no surprises within the contracts that would lead to disputes

# 2.10 THE STAGES OF CONTRACT MANAGEMENT

The management of contracts is founded on the idea that a contract comprises of an agreement and a form of partnership with acquired obligations and rights that are to be fulfilled by all parties to the agreement to attain set goals or objectives. Though popularized, contract management is not set to find faults but facilitate the identification of problems and the finding of solutions to the problems identified. In contract management, a set of stages are identified which are intended to enable parties work closely together in pursuance of the set goals (UN procurement practitioner's handbook – 2006).

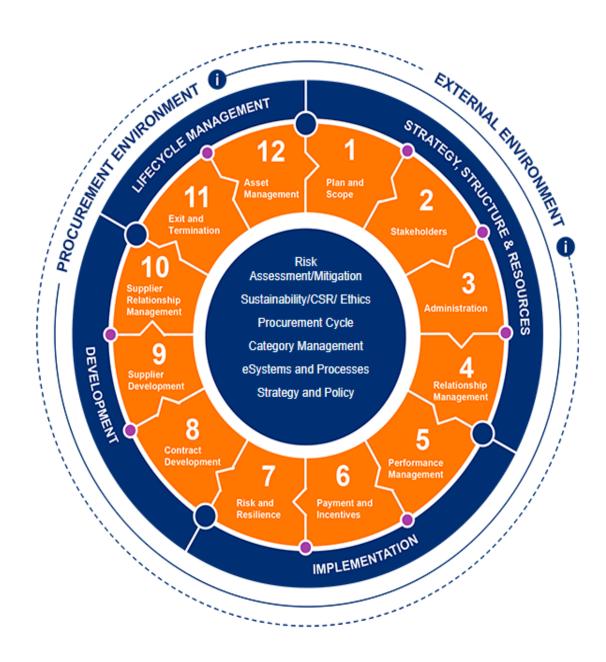


Figure 2.3 The Contract Management Cycle

Source: CIPS, 2014

## 2.11 THE CONTRACTS MANAGEMENT CYCLE

The Contract Management cycle is a concept that view the contract management as a continuous process that ensures all parties to an agreed contract adhere to their accepted contractual obligations. Additionally, the process ensures that any likely and possible future amendments to the contracts are properly negotiated to avoid unfairness and disputes (Elsey et al. 2007; Ameyaw et al. 2012)

The Cycle from Fig 2.3 is expounded on below.

# 2.11.1 Strategy, Structure and Resources

# 1- Plan and Scope

Elsey (2007) noted that to Plan the scope simply implies that the job at hand is being prepared for smart working by prioritizing activities, allocating resources, identifying risks, considering the chances and factors for success, defining the extent of the contract (i.e. identifying what the contract would and would not cover), how and when the obligations would be performed and the criteria that would-be used in assessing the performance of the contract by both parties. In contracts that require the acquisition of items, materials or machinery, specifications and life cycle costs are to be considered. The costs of acquiring, maintaining and disposing off as well as the transitioning to move smoothly from contract to contract should all be considered at this phase (UN procurement practitioner's handbook, 2006;)

### Stakeholders

In the execution of contracts, it is essential that good working and professional relationships exist and are maintained between all stakeholders of the project (both internal and external). Although dependent on the size and the nature of the contract, the external relationships can be basic and transactional in nature or it could be as complex and involved to achieve cultural fits in establishing collaborative working relationships (Ohashi, 2006). One often neglected aspect of contract

management is the management of stakeholders. It is imperative to note that all stakeholders have different needs and as such should be managed separately and appropriately. This requires good and constant communication and information flow to avoid overlapping responsibilities or forcefully relieving stakeholders of their duties or worse creating more obligations for the stakeholders. The key is hence to have a clear understanding of the main contract and have an efficient system of communication and reporting.

### Administration

Heralova (2013) asserted that the success or otherwise of a contract lies in the fundamental principle of good contract administration. This involves activities such as reporting, dates and times for decision-making, notices of termination, etc. All such tasks are to be closely monitored through a well-defined and clear process that makes use of appropriate levels of technology in each process. Amendments to the contracts are to be recorded and communicated clearly to all stakeholders and parties to the contract on a timely basis. Good contract administration requires that a contract once signed demands that work be commenced in all earnestness as it is a schedule of activities and responsibilities which are to be adhered to.

## Relationship Management

It is imperative that a contracts manager fully understands and can demarcate his role and the role of others involved in the contract. The contract manager is responsible for maintaining and managing the relationships amongst the stakeholders and parties to ensure they deliver (Elsey et al. 2007; Heralova, 2013).

The processes for the resolution of disputes and the remedies available to them should be unambiguously defined and enforced to ensure that problems are dealt with effectively and early enough. A system for obtaining feedback and complaints should be identified early to facilitate the

early recognition of issues. The contract manager should realize that the skills required to execute responsibilities may be lacking in staff and hence it may be necessary to train staff (Elsey et al. 2007).

# 2.11.2 Implementation

# Performance Management

Performance management ought to be structured at the onset of the project. Right from the start of the project, a framework that includes details of all Key Performance Indicators (KPIs), Service Level Agreements (SLAs), reporting, metrics to be used, procedures on problem and dispute resolution, contact points, escalation, invoicing and payment proceedings, etc. is to be put in place (Elsey et al. 2007; Heralova, 2013).

## Payment and Incentives

The terms on Payments and Incentives as part of the contract are negotiated. Failure to comply with this agreement is deemed a breach of contract as with the failure to comply with the other terms of the contract. With high value contracts for instance, where time is of the essence payments such as staged payments are to be done on time and to the agreed amounts due. Where the client delays in payment, this is tantamount to a material breach of contract. A material breach of contract exists when one party fails to perform a major part of a contract thereby relieving the non-breaching party of obligation to fulfill the contract. When terms of incentive such as incentives for improvements in performance are built into a contract the legal position remains the same. For this reason, when a contract manager does not have the authority to approve and release payments on time, it is advisable to avoid negotiating the term and involve another party with the right authority to do so (Elsey et al. 2007; Heralova, 2013).

## Risk and Resilience

This phase generally considers the obligations and remedies one can apply in mitigating risk and to ensure resilience in the sections of legal compliance, corporate ethics, government-level disruption, geographical risks, functional and performance risks and risks technical in nature more specifically cyber relations between organisations.

# 2.11.3 Development

# Contract Development

Contract development is an important consideration because during the course of the project execution changes are inevitable. The change can be may be internal or external. External changes likely to affect the contracts include a change in governmental policies or legislative levels, the emergence and adoption of new technologies and a change in project dependencies which demand that new set criteria be adopted. These changes whether internal or external demand proper handling to maintain control. Changes may cause ripple effects throughout the project and hence it is advisable to closely monitor changes throughout the contract (Elsey et al. 2007; Heralova, 2013).

# Supplier Development

This phase in contract management demands that a supplier should deliver in accordance with the agreed contract. In the course of supply, it is ideal that the suppliers may develop efficiencies that would bring benefits such as time and cost savings or the improvement in quality. This requires that there should be a constant collaborative effort for Continuous Improvement Activities to obtain more sustainable options with better cost savings and would aid in identifying bottlenecks on time and develop plans to eliminate or mitigate them (Elsey et al. 2007; Heralova, 2013).

Supplier Relationship Management (SRM)

The ultimate goal of SRM is to identify efficiencies which would unavoidably add value and would increase the profitability of the organisation. SRM focuses on creating the right relationship and environment in order to streamline work processes. This demands the establishment of the right relationships with parties to take advantage of the various benefits each brings to the table to ensure continuity of work processes and reduction of risks (Ameyaw et al. 2012; Elsey et al. 2007).

# 2.11.4 Life Cycle Management

### Exit and Termination

Although it may seem to be an aspect not considered so early in a project it is nevertheless too early to consider the termination of the contract or the close-out. The onus lies on the contract manager to ensure the contract comes to a successful close. Consideration is given to the final payments, acceptance criteria from all stakeholders of the project and the handing over of all necessary documentation should there be a continuing phase of the project (Elsey et al. 2007; Ameyaw et al. 2012; Kornevs, 2014).

# Asset Management

Over time, assessment will be carried out to determine whether the requirements of the business has since been amended and whether or not the early on signed agreement still holds despite such changes. Lessons learnt from the process and how they can be incorporated to improve the process should be captured. The cycle then begins all over (Elsey et al. 2007; Kornevs, 2014).

### 2.12 INEFFICIENCIES OF CONTRACTS MANAGEMENT

Undoubtedly, managerial inefficiencies have consistently been an issue facing stakeholders within the Ghanaian construction Industry. In Ghana, literature on contract management is saturated with failures of major contracts resulting from inefficient contracts management.

By nature, the field of contract management contains a myriad of challenges that prevent organisations from attaining the optimum operational efficiency. Although some may be minor, other challenges they face consume marginal profits and lessen the chances of sustainable operability. One of such challenges dealt with is the management of verbal contracts. Although these contracts are to hold up as legal contracts, they are in fact open to interpretation by each party. This does not however mean to say verbal contracts do not hold. In fact, there are some verbal contracts that hold up longer than some written contracts do. Verbal contracts agreed upon in high spirits may not be fulfilled when relationships between the parties turn sour. It is for this reason that contracts are preferred by many to be in writing, so parties are bound by the specific terms they both agree on to perform. Verbal contracts are more likely to fail than written contracts (Kornevs, 2014)

Again, the record keeping of project and contract costs manually is a leading inefficiency concept in contract management. In Ghana, digitalization has yet to reach the grassroots contractors which make up the majority of the contractors registered in the country. As such, most records of payments and monetary calculations are performed manually. This inefficient system of record keeping, and accounting do not allow a client or the contracting party to have a snapshot of the entire project budget. In 2011 for instance, the Pentagon retained as much as 5.2 million US dollars as payments to Boeing after they failed to meet the standards for internal reporting, monetary in nature (Kornevs, 2014)

# **2.13 SUMMARY**

The proper enforcement and execution of the Public Procurement process is probably one of the surest ways to eliminate corruption and improve transparency in spending of public funds. This Chapter reviewed literature on the public procurement process in Ghana and the various reforms procurement laws have undergone to combat corruption and make procurement systems more efficient. Furthermore, the chapter reviewed literature on the loopholes in the procurement process and its effect on the economy as well as the very principle of transparency that should be guiding procurement procedures. Some suggestions for attaining transparency in procurement procedures were reviewed.

#### CHAPTER THREE

### RESEARCH METHODOLOGY

## 3.0 INTRODUCTION

This chapter details out the methodology phase of the study. The chapter reveals the methods and the steps adopted in a systematic manner to organize the work properly. It also describes the research approach and design, philosophical considerations as well as the collection, analysis and presentation of the primary data collected with the sole aim of addressing the key issues raised by the research questions, aim and specific objectives.

### 3.1 RESEARCH STRATEGY

The research strategy mainly reveals the approach espoused for the study. It discusses amid others the philosophical positions of the study, strategy adopted, the designated research plan and the motive for the choice as well as the research course. This section also describes the traditional research approaches: qualitative and quantitative approaches, what they demand and the fundamental reasons why the quantitative method was selected for this research. Finally, the section will identify and seek to justify the strategy that was employed for the research. The strategy of the research states how the research objectives will be outlined, and the research approach used depends on the purpose of the study. The purpose of the methodology and the research design is to improve organizational transparency and efficiency in contract management. The research design also deals with the framework for data collection and analysis, the structure that guides the execution of techniques for the collection and analysis of data, which provides the connection between empirical data to its conclusion, in a logical sequence to the initial research question of the study (Sarpong, 2012) and includes experimental, survey, action research and case study (Baiden, 2006).

### 3.2 RESEARCH PARADIGM

According to Saunders et al. (2007), they identified that there are three main philosophical positions of social research which constitute ontology, epistemology and axiology. The essence of these knowing the philosophical status is to enable the selection of the instrument of research. Each contains important differences that influence the thoughts about research process. Ontology deals with the beliefs of the researcher about the nature of reality about the social world and what can be known of it (Spencer et al. 2003).

Fitzgerald and Howcroft (1998) defined ontology as comprising two extreme positions: relativist and realist positions. It described the realist positions as that, the external world consists of pre-existing hard and tangible structures. These they indicated existed independently of an individual's ability to acquire knowledge. The relativist position is described as holding the multiple existences of realities as subjective constructions of the mind. In that, the perception of reality is directed by socially transmuting terms and varies according to language and culture. There are also two aspects of ontology namely; objectivity and subjectivity (Saunders et al., 2007). On the hand, Epistemology is concerned with ways of knowing about reality learning about the social world and focuses on the questions such as: how we can know about reality and what the basis of knowledge is (Spencer et al. 2003). Simply put, it is concerned with what constitutes acceptable knowledge in the field of study (Saunders et al, 2007). Axiology is an aspect of philosophy that studies judgments about value. It is the process of social enquiry with which we are concerned here. The effect of values in all stages of the research process is of great importance if credible research results are to be expected (Saunders et al, 2007). Debate on this subject, according to these authors, border on three main issues. First is the bond between the researcher and the researched. Second are the viewpoints about truth, and the third

is the way knowledge is acquired. As discussed by these authors, one basic difference is the ideologies of a scientific investigation and what it entails.

# 3.3 QUANTITATIVE RESEARCH

Quantitative research is a research strategy that highlights the quantification and measurement during the collection and the analysis of the data (Bryman, 2004).

Quantitative research was outlined as a distinctive research strategy. Quantitative research is based on the measurement of quantity or amount (Coolican, 2014). This can be applied in situations that can be expressed in terms of quantity. In a wider view, it can also be referred to as comprising a collection of numerical data and as demonstrating a view of the relationship between theory and research as deductive, a predilection for a natural science approach (particularly inclusive of positivism), and as having an objectivist conception of social reality. It should not be considered that the only thing that distinguishes it from a qualitative research strategy is its ability to quantify aspects of social life. The very fact that it has a unique epistemological and ontological position proposes a good deal more than the mere presence of numbers (Bryman, 2004).

Quantitative research can be adopted based on the following reasons, organizes accurate data and permits the study of relations between facts and those in accord with philosophy, it is deductive and therefore connected with confirmation of theory and hypothesis testing, uses questionnaires, makes use of tests and existing databases, involves hard data, structured, large sample size, analyzed using statistical methods, conclusive findings used to suggest a final course of action, and finally natural science model, in particular positivism.

## 3.4 UNIT OF ANALYSIS AND DATA SOURCES

The data used for this analysis were mainly of two sources; primary and secondary data. To gain the full understanding of this study, depict the research gaps and properly position the work in its definite setting, an extensive literature was conducted. The secondary sources include existing literature review from scientific journals, conferencing proceedings, working papers, technical papers and many others. Primary data was obtained from the Kumasi Metropolitan Assembly (KMA). This means while the literature review positioned the study within its theoretical context, the field survey with questionnaire was used in the collection of empirical data.

# 3.5 CONTENT OF THE QUESTIONNAIRE

Questions are designed and presented clearly to enhance the quality of responses and the response rate. This is also to ensure that the right questions are asked, well understood and right and credible facts are given. The first section or part of the questionnaire which is also known as the demographic part will be used to explore the background data about the respondents. Questions such as the profession, experience, educational level and the nature of the assembly. The second part of the questionnaire was a close-ended questions based on the objectives.

# 3.5.1 Scope of the questionnaire survey

The questionnaires was administered and retrieved personally by the researcher. To help the respondents to give credible and needful information for the study, the researcher will help by giving them with any explanations of the questions when needed. The presence of the research will also help in the completion of the questionnaire as well as improve the response rate. The response rate was 87.5%

### 3.6 SAMPLING AND SAMPLING SIZE SELECTION

Sampling is the selection of units of analysis for the study. This study adopted the purposive sampling, and this is because under this type of sampling technique, the researcher is being exposed to various stakeholders who have experience with the issue of the study. According to Seale (1999), sampling is referred to the selection of the unit of analysis for a study. However, this study uses the case study method for data collection. The case study method constitutes a careful and complete observation of a social unit, thus the unit being a person, a family, an institution, a cultural group or a whole community (Kothari, 2004). Also, according to Odum (1929) cited in Kothari (2004), the case study method is a technique by which an individual factor be it an institution or just an episode in life of an individual or group in its relationship to any other in the group. With this study uses the Kumasi Metropolitan Assembly as its case study.

According to the Central Limit Theorem (CLT), the mean of a quantity of data will be nearer to the mean of the population under study as the sample size increases, nonetheless the definite distribution of the data, and whether it is normal or non-normal. Consequently, as a generally accepted rule, sample sizes equivalent to or greater than 30 are considered adequate and satisfactory for the central limit theorem to be established. With proportionate stratification, the sample size of each stratum is proportionate to the population size of the stratum. Strata sample sizes are determined by the following equation

$$n_h = (N_h / N) * n$$

where;

 $n_h$  is the sample size for stratum h,

 $N_h$  is the population size for stratum h,

N is total population size, and

n is total sample size.

Therefore, for our Sample Size determination

Planning Unit Stratum

<u>= 13</u>

**Budgeting Unit Stratum** 

$$= (22/65) * 35$$

<u>= 12</u>

Works Department Stratum

$$= (6/65) *35$$

<u>= 3</u>

Stores Stratum

$$=(13/65)*35$$

<u>= 7</u>

### 3.7 DATA PRESENTATION AND ANALYSIS

The raw data was gathered and processed to put into a form suitable for analysis. The amount of data collected for the study was reviewed and appropriately analyzed. This section describes the processing and the analysis of the quantitative data collected and provides at the end of the section, a summary of the methods adopted for the analysis on the data collected for the study.

Prior to analyzing quantitative data, Oppenheim (1992) prescribed a routine which should be followed. This includes: assigning numbers to instruments; giving each entry a name; entering them into relevant statistical package and others. In relation to the above, the individual responses to be collected was aggregated into larger units and was entered and processed by the Statistical Package for Social Sciences (SPSS version 20) for the analysis. The statistical tool used to run the analysis will be descriptive statistics and the Relative Importance Index which will be used for the ranking of variables identified. The data collected will be presented using simple graphs and tables using Microsoft Excel.

### 3.8 CHAPTER SUMMARY

This chapter addressed the various methodology available for the research and the reason for the adoption of the methodology used for this research. The research approach used, and the method of data collection was discussed that is the use of survey questionnaire. This chapter also explains the unit of analysis and data sources, content of questionnaire survey and the data presentation and analysis.

### **CHAPTER FOUR**

## DATA ANALYSIS AND DISCUSSION

## 4.0 INTRODUCTION

This section contains the discussions of data analyzed from the outcomes of respondents using S.P.S.S. module of data collection. The tools engaged for the analysis were the Relative Importance Index (RII) ranking technique and Descriptive statistics. This section presents the outcomes of respondents which have been thoroughly analyzed and discussed in the form of texts, figures and tables. Thirty- five questionnaires were retrieved for the analysis.

## 4.1 RESPONDENTS DEMOGRAPHY

# **4.1.1 Respondents Department**

For the purposes of validating the responses received and the credibility of the respondents, information on their demography was collected for the study.

Respondents were first required to indicate the department they work with within the organisation.

The data collected was analysed and is tabulated in Table 4.1.

Table 4.1 Respondent's department within the organisation

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
Planning Unit	13	37.1	37.1	37.1
Budgeting Unit	12	34.3	34.3	71.4
Works Department	3	5.7	5.7	77.1
Stores	7	20.0	20.0	97.1
Total	35	100.0	100.0	

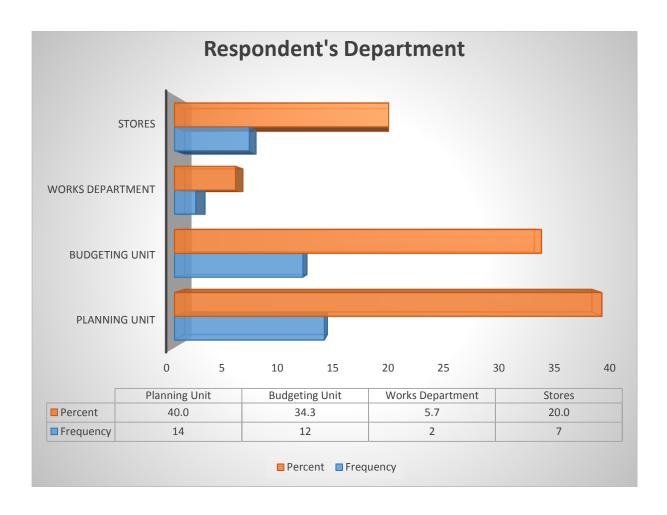


Figure. 4.1 Bar Chart of the Respondent's Department

Source: Field Survey, 2018

From the responses obtained, 13 which were of the greater majority were from the Planning Unit. They represented 37.1% of the respondents chosen for the study. 34.3% representing 12 respondents were from the Budgeting Unit. The Stores department and the Works department being the least represented were 7 and 3 in number respectively and their percentages are 20% and 5.7%

## **4.1.2 Educational Level**

Respondents were inquired about their educational background. The data pooled was analysed and subsequently presented as seen in Table 4.2.

**Table 4.2 Educational Level of Respondents** 

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
Certificate Level	7	20.0	20.0	20.0
Advance Diploma/ First Degree	18	51.4	51.4	71.4
Diploma	6	17.1	17.1	88.6
Master's Degree	4	11.4	11.4	100.0
Total	35	100.0	100.0	

Source: Authors Construct, 2018

The Table 4.2 shows that respondents used for the study have an educational background enough to understand and disseminate the issues presented in this study. The Advance Diploma / First Degree holders were the highest respondents used. They were 18 in number and represented 51.4% of respondents. Certificate level holders were the second highest frequency 7 in number and representing 20% of respondents. Diploma and Master's Degree holders had 6 and 4 respondents accounting for 17.1 % and 11.4% of the respondents.

# **4.1.3 Years of Experience**

Respondents were to indicate their number of years of experience in the procurement practice. This question was posed to give credibility to the study. Their years of experience within the field and practice of procurement provides the assurance that responses received can be relied on as representing the actual practices on the ground.

The responses obtained were tabulated in Table 4.3 as seen below.

**Table 4.3 Respondents Level of Experience** 

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 3 years	7	20.0	20.0	20.0
Between 3 and 5 years	13	37.1	37.1	57.1
Between 5 and 10 years	6	17.1	17.1	74.3
More than 10 years	9	25.7	25.7	100.0
Total	35	100.0	100.0	

Source: Author's Construct, 2018

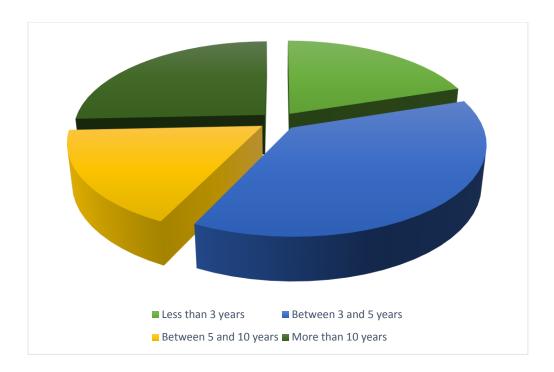


Figure 4.2 Respondents Level of Experience

Source: Field Survey, 2018

# 4.2 FACTORS CONSIDERED IN THE EVALUATION PROCESSES EMPLOYED BY KMA

On a Likert Scale of 1 to 5 where 1- Not important, 2- slightly important, 3- important 4- very important and 5- extremely important, respondents were inquired to grade the factors that were considered in the evaluation and selection of contractors.

The data collected was analyzed with the SPSS software. Data analysis was performed with the Relative Importance Index rank technique. The scores obtained was then ranked from the highest to the lowest ranked score.

The scores are tabulated as seen in Table 4.4.

**Table 4.4 Factors Considered in the Evaluation Processes** 

FACTORS	Total	RII	Rank
	Weights	Score	
Tender price as quoted by contractors	146	0.817	1 <sup>st</sup>
Arithmetical accuracy of bid documents submitted	145	0.816	2 <sup>nd</sup>
Financial stability of bidding contractor	143	0.810	3 <sup>rd</sup>
Plant and equipment holding as at the time of submitting bid	142	0.806	4 <sup>th</sup>
Capacity of company to complete proposed projects	141	0.806	5 <sup>th</sup>
Technical competence of bidding contractor	139	0.794	6 <sup>th</sup>
Organization and management capabilities	139	0.794	7 <sup>th</sup>
Past failed projects of bidding company	139	0.794	8 <sup>th</sup>
Classification of bidding company	138	0.789	9 <sup>th</sup>
Available plant/equipment for project through reliable and safe acquisition options	137	0.783	10 <sup>th</sup>
Past client/ contractor relationship	137	0.783	11 <sup>th</sup>
Ability to formulate practical and realistic programs and timelines by contracting party	132	0.754	12 <sup>th</sup>
Operational procedures	130	0.743	13 <sup>th</sup>
Methodology for managing subcontractors	128	0.731	14 <sup>th</sup>
Standard of workmanship as employed by the contractor	128	0.731	15 <sup>th</sup>
Access to credit loans and facilities by contractor	127	0.726	16 <sup>th</sup>
Method statement employed by the bidding contractor in carrying out the proposed works	127	0.726	17 <sup>th</sup>
Extent of use of subcontractors	121	0.691	18 <sup>th</sup>
Experience of company with similar project	98	0.560	19 <sup>th</sup>
Proposed site organization and movement on site	98	0.560	20 <sup>th</sup>
Number of staff in the outfit of the bidding contractor	96	0.549	21 <sup>st</sup>

Source: Field Survey, 2018

From the ranked scores above, respondents in their opinion ranked tender price quotation as the highest and most important factor considered in the evaluation processes employed by the institution. With a score of 0.817, the tender price used in the evaluation of bids.

Tender price as quoted by contractors forms one of the common bases in the selection and evaluation of contractors. This is because of the limited capital resources available to clients. As such, the use of tender price as a factor in evaluation offers clients the advantage of obtaining projects to economic costs. This results supports the assertion made by Nutakor (2007) who attributed lowest bids to be the results of competitive bid systems. The competitive bids as used by the KMA offers them efficiency and innovation by the competing contractors which would lead to them obtaining projects at specified quality and at the lowest price. There exists empirical evidence where winning contracts selected on the basis of low bids fail to complete or experience numerous delays because of the unreasonably low bid figures quoted. Anyuur et.al (2006) posits that the practice of quoting low bids is because they are confident of making up the difference in the course of the project with claims and variations and fluctuations in market price.

It is then not deviant to the results obtained which indicate that the highest of the ranked factors considered in the evaluation is the tender price quoted by the contractor. Hitherto, there have been a plethora of studies which propose better systems of selecting successful contractors as the use of tender price as the underlying factor most times leads to the selection of incompetent and unsuitable contractors, disputes and litigation between the contracting parties and a myriad of other construction related issues.

Second on the rank is the Arithmetical accuracy of bid documents submitted with an RII score of 0.816 Errors and arithmetical inconsistencies as well as oversights in calculations present a possibility of inaccurate estimates which may lead to varied problems later. Procurement entities require that

bidders are as accurate with their submissions as it needs be although there is room to adjust errors in bids dependent on the nature of the error. Hatush and Skitmore (1998) in their literature provided evidence as to the effects of calculation errors on the final prices quoted and the likely problems that crop up in the course of the project execution. They attributed some claims and disputes to the arithmetical inaccuracies of tender documents submitted which when not properly evaluated would become binding contracts that lead to huge losses to both contracting parties (Hatush and Skitmore, 1998)

Financial stability of bidding contractor ranked third with a score of 0.810. The Ghanaian construction environment is structured in a manner that may cause the insolvency of contractors who are not financially sound. With issues of delayed payments, variation orders and fluctuations in market prices, it is pertinent that bidders are financially sound and capable of pre-financing in most cases enough to carry through the project. The contractor's ability to fund or receive a reliable source of fund is as suggested by the PPA Act 914(2016), an indication of the contractor's good performance in his execution of the project. With the nature of the Ghanaian construction industry, Cost et.al, (2004) asserted that a submission of a bank statement from a reputable bank or financial institution becomes a guide for an evaluation panel and allows for contractors to work promptly and satisfactorily.

The ranked scores revealed that the three factors that least impacted the selection of contractors were the experience of the company with similar project, proposed site organization and movement on site and number of staff in the outfit of the bidding contractor. The rank scores for these factors were 0.560, 0.560 and 0.519 respectively.

# 4.3 TRANSPARENCY OF EVALUATION PROCEDURES

As reported by literature, there are some fundamental guidelines and principles adopted in each region over the world to encourage transparency of procurement procedures. Respondents were required to tick on a scale of 1 to 5 the degree to which these procedures were employed and adhered to as well as how transparent the practices in their opinion were.

The results were presented in Table 4.5.

**Table 4.5 Transparency of Evaluation Procedures** 

PRACTICES	Total Weight	RII	Rank
No money, travel, meals, entertainment, gifts, favors, discounts or anything of material value is requested or received from tenderers or prospective tenderers	145	0.829	1 <sup>st</sup>
Confidential information is not revealed either directly or indirectly to any tenderer or prospective tenderer;	141	0.806	2 <sup>nd</sup>
Communication of information shall be in writing and all other forms shall be confirmed in writing.	138	0.789	3 <sup>rd</sup>
Public procurement information is published free of cost.	138	0.789	4 <sup>th</sup>
Official procurement documents are not destroyed, damaged, hid or improperly changed	137	0.783	5 <sup>th</sup>
Future employment with a tenderer or prospective tenderer is not discussed or accepted	137	0.783	6 <sup>th</sup>
Procurement documents such as bids, quotes, proposals and registration documents are standardized	137	0.783	7 <sup>th</sup>
Access to confidential information is prevented	135	0.771	8 <sup>th</sup>
Information is published at least in a commonly available media such as newspaper of wide national circulation	135	0.771	9 <sup>th</sup>
The same channels and timeframe are used for all interested parties	135	0.771	10 <sup>th</sup>
Notice of Awards of contract is published on the website of the Authority	134	0.766	11 <sup>th</sup>
Information is presented in a user-friendly and easily comprehensible manner for all interested parties to understand the procurement processes	134	0.766	12 <sup>th</sup>
Information broadcasted and received is complete, timely, and accurate	134	0.766	13 <sup>th</sup>
Grounds for disqualification of bidders are communicated upon request though evidence or reasons of disqualification is optional	133	0.760	14 <sup>th</sup>
Regulations, policies, and procedures are clearly expressed and readily available	133	0.760	15 <sup>th</sup>
No tenderer is favored or discriminated against in the drafting of technical specifications or standards or the evaluation of tenders;	131	0.749	16 <sup>th</sup>
Pre-qualified bidders can participate in subsequent procurement proceedings	129	0.737	17 <sup>th</sup>
Under no circumstance is a competing vendor allowed to write the specifications for a procurement	129	0.737	18 <sup>th</sup>
The provision for aggrieved tenderers or procurement entities to take up matters in court	128	0.731	19 <sup>th</sup>
The evaluation panel performs its functions according to the predetermined and published evaluation criteria	123	0.703	20th
Bidders are promptly notified when they have been pre-qualified, and the names of pre-qualified bidders are made known to the public upon request	122	0.697	21 <sup>st</sup>
Specifications in bid documents do not limit competition	94	0.537	22 <sup>nd</sup>

Source: Field Survey, 2018

Ranking the highest by responses analysed, the refusal of collection of money, gifts, favors, etc. from tenderers ranked first. With a score of 0.829, this practice is highly held and practiced in the organisational strive to attain transparency in all its procedures. Gifts and monetary transactions are prohibited from taking place between bidders and members of the evaluation panel. Habtermichael (2009) asserted that the tender evaluation stage is the most susceptible to fraudulent practices of various forms including bribery, fraud, and abuse of power, extortion and favoritism. In this vein therefore, the Public Procurement Act (Act 914) does not give room for the soliciting and receipt of payments of any kind. It is a common corrupt practice for tenderers to pay their way through the evaluation process in order to win contracts. Since the preparation of tender documents is highly time-consuming and expensive, the payments of monies can be viewed as a shortcut to the award of contracts. The underlying motives as posited by Ameyaw et al (2013) maybe to gain information, speed up administrative and bureaucratic processes, receipt of preferential treatment, the elimination and disqualification of competitors, influencing of outcomes of legal and regulatory processes and the overlooking of sub-standard work. These monies received or sought after by members of the evaluation panel are tantamount to corruption and bribery an offense punishable by law.

The protection of confidential information ranked second with a rank score of 0.806. In as much as we seek to attain a transparent process, information considered as sensitive and confidential to bidders are not to be divulged to the public. Where bidders entrust such information to the procurement entity, they are to take reasonable steps in protecting such information. Arhin (2013) states that there are some information that can be disclosed ahead of the evaluation process and those that are to be kept confidential until a successful bidder is selected. In order to be fair and legal, information pertinent to the preparation of tenders are provided for all parties. Although the disclosure of information is subjective and dependent on the nature of the procurement proceedings, it

however does not mandate the panel to disclose documents and information that may hitherto be subject to objections by the party (Boateng, 2014).

Communication being key to the success of any process is upheld in the principles of transparency as well. Respondents data analysed placed the communication of information in writing as the third ranking principle of transparency. Arhin (2013) asserts that to deem the communication between the contracting parties as successful, there needs to be homogeneity and consistency in the communication process at all levels in the organisation. These are to be established at the onset of the project. Furthermore, it is common knowledge that the documentation of information is very crucial and comes in handy where disputes arise. In the Ghanaian industry, the use of orders, queries, and letters is very common as this allows for proper record keeping. It is for the purposes of record keeping that information, queries, orders and variations are to be put in writing. Even if it all such information is communicated alternatively, it must be confirmed in writing. At the onset of the project, it should be established the means and medium of communication to avoid disputes and misunderstanding in the course of the project execution (CHIPS and NIGP, 2012).

According to the RII analysis performed, the guiding principles with the least ranks with scores of 0.703,0.697 and 0.537 representing the performance of the evaluation panels functions in accordance to the published criteria, the prompt notification of bidders should they be pre-qualified and finally the use of specifications that do not limit competition.

# 4.4 EFFECIENCY OF CONTRACTS MANAGEMENT ACTIVITIES OF KMA

In accordance with the third objective which concerns the efficiency of contracts management activities of KMA, respondents were asked to rank on the scale of 1 to 5 where 1- Not efficient, 2-Barely efficient, 3- Fairly efficient, 4- Efficient, 5- Highly efficient. The efficient contracts management system activities listed in the survey questionnaire was obtained from projects. The results that were obtained and analysed using the RII rank techniques is shown below.

**Table 4.6 Efficiency of Contracts management** 

Factors	Total Weight	RII Score	Rank
As far as is possible it is ensured that the other contracting party can provide enough skilled resources	138	0.789	1 <sup>st</sup>
The responsibilities of the various parties and of what is expected from each is clearly understood	138	0.789	2 <sup>nd</sup>
Enough expertise is retained to understand the technical directions in contracts entered	137	0.783	3 <sup>rd</sup>
The principles of good communication i.e., awareness of new demands in partnership arrangements and leadership are employed	136	0.777	4 <sup>th</sup>
Risks are identified and anticipated as such provisions are made for them in contracts signed	136	0.777	5 <sup>th</sup>
Payments are made to contractor or supplier as	136	0.777	6 <sup>th</sup>
The arrangements for service delivery continue to be satisfactory to both customer and provider	135	0.771	$7^{\mathrm{th}}$
Rules and procedures are set down on how a variety of issues are handled to ensure that problems are resolved quickly and constructively	133	0.760	8 <sup>th</sup>
There are clearly defined responsibilities of both parties	133	0.760	9 <sup>th</sup>
The service provider is co-operative and responsive	132	0.754	10 <sup>th</sup>
Processes for managing the contract which provide the level of control contracting parties need is utilised	129	0.737	11 <sup>th</sup>
Clients are aware of their obligations under the contracts signed	128	0.731	12 <sup>th</sup>
Satisfactory progress of project delivery can be monitored	128	0.731	13 <sup>th</sup>
The need for flexibility particularly in partnership agreements is recognized	128	0.731	14 <sup>th</sup>
The terms of the contract are ready to be adapted to reflect change and unforeseen problems	127	0.726	15 <sup>th</sup>
Regular and routine feedback is given to contractors on their performance per contract	105	0.600	16 <sup>th</sup>

Source: Field Survey, 2018

Upon running the test to rank the activities listed, the highest ranked with a score of 0.789 was ensuring the provision of skilled resources by the contracting party. In executing contracts, the availability of resources (man, materials, machinery and money) is crucial to the success and completion of the project. It is therefore pertinent that the contracting party should possess the skilled Labour or resources to execute the project. Odhiambo and Kamau (2003) affirms this asserting that the skilled labour force of any organisation possesses the know-how and the experience to undertake more complex job functions dues to their educational levels and levels of expertise. By the provision of skilled personnel on the job, quality is ensured at the end of the project delivery. With the increased awareness of the need for education and training, the Ghanaian construction industry is gradually increasing practices for efficient contract management to attain maximum results on the projects undertaken (Arhin, 2013).

Clearly defining roles and responsibilities in the execution of contracts goes a long way in preventing disputes and misunderstandings. It was ranked the second highest with a score of 0.789. At the onset of the project, if roles and responsibilities are not defined it tends to breed disputes especially where there are overlaps of responsibilities and neglect of duties. Personnel who do not have clearly defined duties tend to overdo what they are not required or equipped to perform or end up completely neglecting duties they are to perform. Oppong (2013) is of the view that when roles and responsibilities are clearly defined within any group, accomplishing group goals becomes easier. Members of the team without coordinate and corporate more and are more productive when they know exactly what is expected of them. There is less jostling about and productivity is maximized. To avoid this and continue to work efficiently it is constantly being advised to clearly define duties and roles for each person involved in the contract (Thai, 2001)

Since the construction industry is flooded with technicalities, it is important to accrue a technical understanding of the specifications and demands of the contracts. This factor was ranked third with a score of 0.783. With each project being a unique comprising of varying technical requirements, the parties to the contract are to comprehend the full technical implications of executing the contract. Obtaining the full technical import of the contract in question is an essential step to attaining a successful contract execution. This would influence the decisions of contractors and the client in the acquisition of personnel and equipment and their use at the various stages of the project execution (Boateng, 2014). The least ranked factors were the need for flexibility in partnership agreements, the adaptation of terms to reflect unforeseen circumstances and the regular feedback given to contractors. They each had RII scores of 0.731, 0.726 and 0.60 respectively.

#### **CHAPTER FIVE**

### CONCLUSION AND RECOMMENDATIONS

### 5.0 INTRODUCTION

This Chapter summaries the study by concluding on the information gathered and analyzed. The previous chapters of this study were the introduction, literature review, methodology and findings respectively. This chapter additionally proposes recommendations for future work.

### 5.1 RESEARCH OBJECTIVES MET

# 5.1.1 Factors considered in evaluation processes employed by public institutions

The SPSS tool was used in the organisation of data collect from the survey performed. The RII ranking techniques was used in ranking certain key factors considered in the evaluation processes employed by public institutions. From the data obtained, the key factors considered in the evaluation process includes the technical competence of bidding contractor, financial stability of bidding contractor, the arithmetical accuracy of bid documents submitted, plant and equipment holding as at the time of submitting bid, capacity of company to complete proposed projects, tender price as quoted by contractors and the organization and management capabilities of the bidding contractor. In identifying these factors, the first objective for the study has been successfully met.

## 5.1.2 Transparency of evaluation procedures employed in public procurement

The second objective which sought to address the issues of transparency of evaluation procedures in public procurement proceedings was dealt with in the survey questionnaires used. Upon collection and analyzing of data in this section, the results were ranked, and the findings of the study determined that a culture where no monies or gifts and favors are requested or received is the most influential

factor that would aid in the drive towards attaining transparent proceedings. These gifts and monies are tantamount to bribe and are subject to punishment under the law. Additionally, the study revealed that the protection of confidential information from tendered or prospective tenderers aids is crucial in attaining transparent public procurement. Other factors such as the communication of all information in writing for record-keeping, the publication of information in a nationally recognized newspaper and the inclusion of specifications that do not limit competition

## 5.2.3 The Efficiency of contract management activities within the public organisations

In attaining this objective, respondents were asked to rank on a Likert scale which activities they considered as efficient in the execution of contracts. The highest scored ranks from the RII technique used directed the findings of this study. In this, it was found that as far as is possible it is ensured that the contracting party can provide enough skilled resources for the project in review. Additionally, the responsibilities of the various parties and what is expected from each is clearly understood. Furthermore, it was found that enough expertise should be retained to understand the technical directions in contracts entered and the principles of good communication i.e., awareness of new demands in partnership arrangements and leadership are employed. Finally, risks should be identified and anticipated as such provisions are made for them in contracts signed

# **5.2 RECOMMENDATIONS**

Based on the study conducted the following recommendations can be drawn from the study;

• The use of tender price as a major determining factor in contractor evaluation is highly prone to deceit and cost overruns especially in instances when bidders have implemented a back-end loading or front-end loading scheme. As such a method of assessment better suited to our construction culture would be enough in the contractor selection and evaluation process.

- Measures should continue to be put in place to reduce the occurrence and likelihood of exchange of gifts during the tendering process.
- The communication channels at the institutions should be properly developed to allow bidders
  and personnel get regular updates on the processes of contracts management within the
  institution
- Protection of confidential information pertaining to the project should be kept confidential to avoid giving an unfair advantage to bidders to a contract

## **5.3 CONCLUSION**

This study set out to assess the evaluation procedures employed by public institutions that leads to increased transparency and effective contract execution and management. At the end of the study, it can be concluded that the Kumasi Metropolitan Assembly has put in place measures to encourage transparency in their evaluation procedures. From the survey and study conducted, the issues of transparency within evaluation procedures of public procurement requires some improvement to become fully efficient. The Public Procurement Act (Act 914) solely is incapable of addressing the issues of transparency and effective contracts management, it requires aid from the organisations procedures.

## 5.4 AREA FOR FURTHER STUDY

The research whilst completed at this stage, has opened up opportunities for further research in many other areas. Further studies should be conducted to establish the challenges involved in organisational transparency in contract management. It is also important to carry out a study in the evaluation processes in contract management in private sector organisations.

#### REFERENCES

- Abdul-Jamil, I. (2014) The Challenges of Contract Management in the Procurement Processes in Ghana. Kwame Nkrumah University of Science and Technology, KNUST.
- Ameyaw, C., Mensah, S. and Osei-t, E. (2012) 'PUBLIC PROCUREMENT IN GHANA: THE IMPLEMENTATION CHALLENGES TO THE PUBLIC', 2003(December 2015). doi: 10.14424/ijcscm201012-55-65.
- Amoa-Abban, K. (2017) 'The Impact of Abandoned Government Housing Projects in Ghana (Specifically Affordable Housing Projects)', *International Journal of Advanced Engineering Research Technology*, 5(6), pp. 439–452.
- Anaman, K. A., & Osei-Amponsah, C. (2007). Analysis of the causality links between the growth of the construction industry and the growth of the macro-economy in Ghana. *Construction management and economics*, 25(9), 951-961.
- Anvuur, A., Kumaraswamy, M., & Male, S. (2006). Taking forward public procurement reforms in Ghana. In *Proceedings of the 2006 CIB W107: Construction in Developing Countries*International Symposium: Construction in Developing Economies: New Issues and Challenges. CIB.
- Arhin, M. (2013) Strategies for Improving Procurment Processes in the Award of Contracts in Public Sector Procurment in Ghana: A Case Study of Municipal Assemblies in the Brong Ahafo Region. Kwame Nkrumah University of Science and Technology, KNUST.
- Azeem, V. (2007). Impact of the Public Procurement Act, 2003 (Act 663) in Ghana integrity initiative's perspective. In a special forum on improving efficiency and transparency in public procurement through information dissemination.

Babich, K. Pettijohn, 2004. Sourcing in public sector procurement-United Nation.

Baiden, B. K. (2006). Framework for the integration of the project delivery team (Doctoral dissertation, © Bernard Kofi Baiden).

Boateng, V. (2014) An Examination of Tender Evaluation Practices in Metropolitan, Municipal and District Assemblies in Ashanti Region. Kwame Nkrumah University of Science and Technology, KNUST. Available at: http://ir.knust.edu.gh/bitstream/123456789/6268/1/Victor Boateng.pdf.

Bryman, A. (2004). "Social Research Methods". [2nd Ed]. Oxford: Oxford University Press.

Cartlidge, D. (2009) Quantity Surveyors Pocket Book. 1st editio.

Chapman, S. G. I. and Glatz, K. (2009) 'Accountability and Transparency in Public Procurement:

American Recovery and Reinvestment Act of 2009 Goals Versus Local Government

Standards'.

Cheng, E. W. L. and Li, H. (2004) 'Contractor selection using the analytic network process', *Construction Management and Economics*, 22(10), pp. 1021–1032. doi: 
10.1080/0144619042000202852.

CIPS and NIGP (2012) Transparency in Public Procurement.

Coolican, H. (2014). *Research Methods and Statistics in Psychology*, sixth edition. London and New York: Psychology Press.

Elsey, B., & Chi-Hang Tse, R. (2007). The contract management cycle. *Journal of Workplace Learning*, 19(8), 511-525.

Evenett, S. J. and Hoekman, B. (1997) 'Transparency in Government Procurement: What can we

- expect from international trade agreements?', pp. 1–23.
- Fitzgerald, B., & Howcroft, D. (1998). Towards dissolution of the IS research debate: from polarization to polarity. *Journal of Information technology*, *13*(4), 313-326.
- Fong, P. S.-W. and Choi, S. K.-Y. (2000) 'Final contractor selection using the analytical hierarchy process', *Construction Management and Economics*, 18(5), pp. 547–557. doi: 10.1080/014461900407356.
- Georgieva, I. (2017) Using Transparency Against Corruption in Public Procurement: A Comparative Analysis of the Transparency Rules and their Failure to Combat Corruption. Springer International Publishing. doi: 10.1007/978-3-319-51304-1.
- Hatush, Z. and Skitmore, M. (2005) 'Evaluating Contractor Prequalification Data: Selection Criteria and Project Success Factors', *Construction Management and Economics*. 2nd edn, 15(1997), pp. 129–147.
- Heitling, O. (2012) 'The Principle of Transparency in Public Procurement', (June).
- Heralova, R. S. (2013). Life Cycle Cost Analysis in Public Procurement. *Central Europe towards*Sustainable Building, 1-4.
- Highton, J. (2012). Life-cycle costing and the procurement of new buildings: The future direction of the construction industry. *Public Infrastructure Bulletin*, *1*(8), 5.
- Hughes, M. (2005) Evaluation of the Local Government Procurement Agenda Baseline Survey Report. London. Available at:
  - http://www.academia.edu/2606912/The\_Influence\_of\_The\_Public\_Procurement\_Act\_2003\_Act663\_on\_Project\_Time\_P.

- Hunja, R. R. (2003). Obstacles to public procurement reform in developing countries. *Public Procurement: The Continuing Revolution, Kluwer Law International*, 13-22.
- Kaspar, B. L. and Puddephatt, A. (2012) 'Benefits of transparency in public procurement for SMEs: General lessons for Egypt', (March).
- Ki-Moon, B. (2012). Address to Stanley Foundation Conference on the Responsibility to Protect.

  New York City, New York, January, 18.
- Kornevs, M., Kringos, N., & Meijer, S. (2014, June). A research agenda for green procurement of infrastructures. In Engineering, Technology and Innovation (ICE), 2014 International ICE Conference on (pp. 1-7). IEEE.
- Kothari, C. R. (2004) *Research Methodology: Methods & techniques*. 2nd revise. Edited by N. Delhi. New Age International (P) Limited.
- Knutsen-öy, K. (2015) Transparency in Public Procurement Processes A Case Study of a Swedish

  Public Procurement Process in the Consultancy Market. KTH Industrial Engineering and

  Management.
- Lengwiler, Y., & Wolfstetter, E. (2006). Corruption in procurement auctions.
- Magrini, P. (2006) 'Transparency in e-procurement: the Italian Perspective How was Public Administration in Italy before the 1990s? And e procurement?', (January).
- Mawenya, A. S. (2008). Preventing Corruption in African Procurement.
- Mishra, A. (2015) 'Importance of Transparency in Public Procurement and Role of Integrity Pact', NPPO Digest, (April), pp. 1–6.

National Audit Office (2016) 'Good practice contract management framework', *National Audit Office Press Office*, (December).

Nutakor, G. (2007). Assessing final cost of construction at bid time. *Cost engineering*, 49(6), 15.

Odhiambo, W. and Kamau, P. (2003) Public procurement: Lessons from Kenya, Tanzania and Uganda.

Odum, H. (1929) An introduction to Social Research.

OECD (2007) 'SIGMA support for improvement in governance and management'.

Ohashi, H. (2006) 'E ¤ ects of Transparency in Procurement Practices on Bidding Behavior : A Case Study of the Experience of Municipal Public Works', (March).

Oppenheim, A. N. (1992)."Questionnaire Design, Interviewing and Attitude Measurement", [New Edition]. London: Continuum

Oppong, F. (2013) A Study on Performance of Contractors Selected Using the Lowest Bid Evaluation

Method as Major Criteria for Government Projects in Ghana, A Kumasi Study. Kwame

Nkrumah University of Science and Technology.

Public Procurement Authority (2011) 'Enhancing Transparency in Public Procurement', *E- Procurement Buletin*, 2(4), pp. 1–9.

Public Procurement Authority (2016) 'Public Procurment Act ,2016 (Act 914)'.

Puri, D. and Tiwari, S. (2014) 'Evaluating The Criteria for Contractors' Selection and Bid Evaluation', *International Journal of Engineering Science Invention ISSN (Online*, 3(7), pp. 2319–6734. Available at: www.ijesi.org.

Report, A. S. and Procurement, U. N. (2011) 'Report on United Nations Procurement'.

Sabo, B. (2012) Transparency in the Public Sector: Its Importance and How Oracle Supports Governments Efforts.

Saunders, M., Philip, L., & Adrian, T. (2007). Research Methods for Business Students- fourth edition. Harlow, England: Prentice Hall Financial Times.

Seale, C. (1999). Quality in qualitative research. Qualitative inquiry, 5(4), 465-478.

Spencer, L., Ritchie, J., Lewis, J., & Dillon, L. (2003). Quality in qualitative evaluation: a framework for assessing research evidence.

Thai, K. V. (2001) 'Public Procurement Re-Examined', *Journal of Public Procurement*, 1(1), pp. 9–50. Available at: http://ippa.org/jopp/download/vol1/Thai.pdf.

Transparency International Azerbaijan (2014) Transparency Mechanisms in Public Procurement.

UNOPS (2012) Transparency and Public Procurement.

WHO South-East Asia (2017) Transparency, Accountability, Monitoring and Evaluation.

Wright, P. K., & Evans, A. G. (1999). Mechanisms governing the performance of thermal barrier coatings. Current Opinion in Solid State and Materials Science, 4(3), 255-265.

#### **APPENDICES**

## APPENDIX "A" SURVEY QUESTIONNAIRE

# EFFECTIVENESS OF EVALUATION PROCESSES TO INCREASE ORGANISATIONAL TRANSPARENCY AND EFFICIENCY IN CONTRACTS MANAGEMENT: KMA.

Kwame Nkrumah University of Science and Technology,

College of Art and Built Environment,

**Faculty of Built Environment,** 

**Department of Construction Technology and Management.** 

Dear Sir / Madam

I am a student from the Department of Building Technology, KNUST Kumasi. I wish to conduct a study on the Effectiveness of Evaluation Processes to Increase Organisational Transparency and Efficiency in Contracts Management: KMA.

I hereby invite you to participate in the above-mentioned study. Completion of the questionnaire is completely voluntary and returning the completed questionnaire will be considered as your consent to participate in the survey. The questionnaire will take you about 5 minutes to complete.

All data held are purely for research purposes and will be treated as strictly confidential. No name will be ascribed to any response.

In the event of questions or queries, please do not hesitate to contact us. Thank you for your time and valid contribution in advance.

Yours faithfully,

Mr. Michael Kojo Owubah - MSc Researcher

Email- kooowuba@yahoo.com

Dr. Titus Kwofie - Supervisor of MSc Research

Email – tituskwofie@gmail.com

Please answer the under listed questions as accurately as possible.

### **SECTION A**

#### A. BACKGROUND OF RESPONDENT

This section contains a list of questions to obtain information on the demography (background) of respondents chosen for the study. Kindly answer the following questions by ticking where appropriate.

1.	What is your Professional role in within the organisation?						
	[ ] Planning Unit	[ ] Works Department					
	[ ] Budgeting Unit	[ ] Stores					
	Others, kindly specify						
2.	Please tick the appropriate box to indicate the qualification	e level of your Education and/or Professional					
	[] Certificate level	[ ] Diploma					
	[] Advance diploma/First degree	[] Master's Degree					
	[] Other Professional qualification:						
3.	Please indicate your years of experience in production	curement practices?					
	[] Less than 3 years						
	[] between 3 and 5 years						
	[] Between 5 and 10 years						
	[] More than 10 years						

### **SECTION B**

#### B. FACTORS CONSIDERED IN THE EVALUATION PROCESSES EMPLOYED BY KMA

Below is a list of factors considered in the evaluation and selection of contractors.

Rank on a Likert Scale of 1-5 the importance of the listed factors below in your opinion.

1- Not important, 2- slightly important, 3- important 4- very important, 5- extremely important.

No.	Factors		2	3	4	5
1	Tender price as quoted by contractors					
2	Arithmetical accuracy of bid documents submitted					
3	Financial stability of bidding contractor					
4	Access to credit loans and facilities by contractor					
5	Technical competence of bidding contractor					
6	Number of staff in the outfit of the bidding contractor					
7	Plant and equipment holding as at the time of submitting bid					
8	Organization and management capabilities					
9	Available plant/equipment for project through reliable and safe acquisition options					
10	Extent of use of subcontractors					
11	Ability to formulate practical and realistic programs and timelines by contracting party					
12	Capacity of company to complete proposed projects					
13	Past failed projects of bidding company					
14	Past client/ contractor relationship					

15	Classification of bidding company			
16	Experience of company with similar project			
17	Proposed site organization and movement on site			
18	Operational procedures			
19	Method statement employed by the bidding contractor in carrying out the proposed works			
20	Methodology for managing subcontractors			
21	Standard of workmanship as employed by the contractor			

#### C. TRANSPARENCY OF EVALUATION PROCEDURES

Below are listed some guiding principles and indicators of transparency in evaluation procedures. On a scale of 1 to 5 kindly tick where appropriate the degree to which they are employed in your organisational processes. The 5-point scale is defined as follows;

# 1- Not transparent, 2- Barely transparent, 3- Transparent, 4- Transparent, 5- Extremely transparent

Category	Indicators	1	2	3	4	5
1	The evaluation panel performs its functions according to the predetermined and published evaluation criteria					
2	The provision for aggrieved tenderers or procurement entities to take up matters in court					
3	Bidders are promptly notified when they have been pre- qualified, and the names of pre-qualified bidders are made known to the public upon request					
4	Pre-qualified bidders can participate in subsequent procurement proceedings					
5	Grounds for disqualification of bidders are communicated upon request though evidence or reasons of disqualification is optional					
6	Access to confidential information is prevented					
7	Communication of information shall be in writing and all other forms shall be confirmed in writing.					
8	Information is published at least in a commonly available media such as newspaper of wide national circulation					
9	Notice of Awards of contract is published on the website of the Authority					
10	Information is presented in a user-friendly and easily comprehensible manner for all interested parties to understand the procurement processes					
11	The same channels and timeframe are used for all interested parties					

12	Public procurement information is published free of cost.			
13	Official procurement documents are not destroyed, damaged, hid or improperly changed			
14	No tenderer is favored or discriminated against in the drafting of technical specifications or standards or the evaluation of tenders;			
15	Confidential information is not revealed either directly or indirectly to any tenderer or prospective tenderer;			
16	No money, travel, meals, entertainment, gifts, favors, discounts or anything of material value is requested or received from tenderers or prospective tenderers			
17	Future employment with a tenderer or prospective tenderer is not discussed or accepted			
18	Regulations, policies, and procedures are clearly expressed and readily available			
19	Information broadcasted and received is complete, timely, and accurate			
20	Specifications in bid documents do not limit competition			
21	Under no circumstance is a competing vendor allowed to write the specifications for a procurement			
22	Procurement documents such as bids, quotes, proposals and registration documents are standardized			

#### D. EFFECIENCY OF CONTRACTS MANAGEMENT ACTIVITIES OF KMA

Listed below are efficient contracts management activities generated from literature. On a Likert scale of 1 to 5 kindly tick where appropriate the degree to which they are employed in your organisational processes. The 5-point scale is defined as follows;

### 1- Not efficient, 2- Barely efficient, 3- Efficient, 4- Efficient, 5- Highly efficient

No.	Indicators	1	2	3	4	5
1	Clients are aware of their obligations under the contracts signed					
2	Satisfactory progress of project delivery can be monitored					
3	The service provider is co-operative and responsive					
4	The arrangements for service delivery continue to be satisfactory to both customer and provider					
5	The terms of the contract are ready to be adapted to reflect change and unforeseen problems					
6	The need for flexibility particularly in partnership agreements is recognized					
7	Processes for managing the contract which provide the level of control contracting parties need is utilised					
8	Enough expertise is retained to understand the technical directions in contracts entered					

	As far as is possible it is ensured that the other			
9	contracting party can provide enough skilled			
	resources			
	Rules and procedures are set down on how a variety			
10	of issues are handled to ensure that problems are			
	resolved quickly and constructively			
	The principles of good communication i.e.,			
11	awareness of new demands in partnership			
	arrangements and leadership are employed			
12	The responsibilities of the various parties and of			
12	what is expected from each is clearly understood			
12	There are clearly defined responsibilities of both			
13	parties			
1.4	Regular and routine feedback is given to contractors			
14	on their performance			
1.5	Risks are identified and anticipated as such			
15	provisions are made for them in contracts signed			
1.0	Payments are made to contractor or supplier as			
16	per contract			
	l .			