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DECLARATION

I hereby declare that this work is the result of my own original research and has neither in whole nor in part been prescribed by another degree elsewhere. References to other people's work have been duly cited.

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ABSTRACT

This study was conducted to explore Procurement Risk associated with Contract Closeout in a case study of Metropolitan Assemblies in Tema and Accra, and selected public institutions (AESL and PWD) in the Greater Accra Region. The objectives of the study were to identify the current procedural requirements for contract closeout, to identify procurement risks associated with contract closeout and to establish strategies for effective contract close out. The study took a quantitative and explorative approach, a structured questionnaire survey was administered to officials of the state institutions involved (i.e. AMA, TMA, AESL and PWD) who have insight into procurement or make relevant procurement decisions in their various departments. Data collected was further analyzed using descriptive statistic (Pie chart) Mean and Median. The study revealed that making of final account completion and excess payments or deductions, Completing Contractors audit and ensuring Contractors closing statement is complete were touted as the most important steps in the procedural requirements of contract closeout in the construction industry. Secondly excess budget due to delay in contract closeout, delays in identification and resolution of potential areas of conflict and delays in identification and collection of overpayment to contractors were seen among others to be the major risk elements in untimely contract closeout. Finally, payment of interest penalties when payments are made late, prioritization of contract closeout and identification of possible closeout delays for redress before time majored as some of the strategies for effective contract closeout. A number of recommendations were made to the assemblies and public institutions including: the need for risk treatment actions, creation of awareness about inherent risk in the procurement process, rewarding employees for closeout completion, proper management information systems to monitor the contract closeout process, employment of quick closeout procedures to reduce backlog of unscheduled audits,

partnering to reduce disputes in contract closeout, proper monitoring of the procurement process and the need for final payments and invoices amongst others.

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DEDICATION

Glory and most honour be to God Almighty for the strength, wisdom and directions given to me throughout these periods spent in school and for this Project. I dedicate this Thesis to my lovely and hard working wife, Mrs. Gifty Korley and my children, Kaleb and Karine Markwei.

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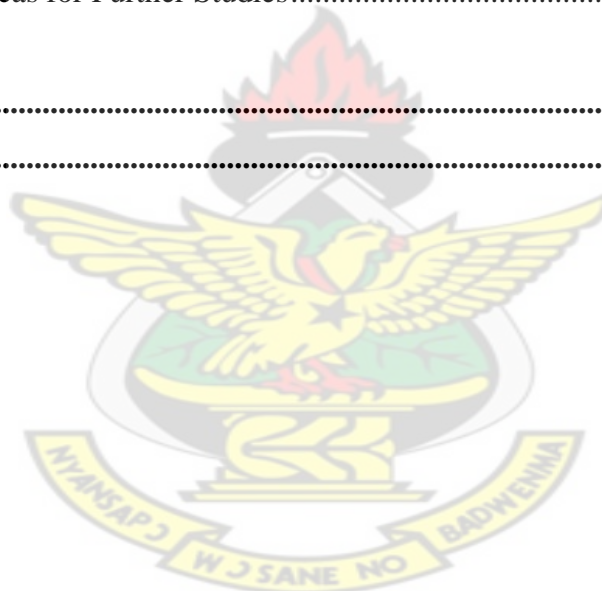
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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Procurement is the business management function that ensures identification, sourcing, access and management of the external resources that an organisation needs or may need to fulfill its strategic objectives (CIPS-Australia, 2006). It includes activities and events before and after the signing of a contract as well as the general management activities associated with a range of contracts: pre-contract activities such as planning, needs identification and analysis, and sourcing; post-contract activities such as contract management, supply chain management and disposal; and general activities such as corporate governance, supplier relationship management, risk management and regulatory compliance (*Ibid*). All these are the various stages that a given procurement contract has to go through in order to deliver the required output to meet the needs of the client. However each of these stages and processes are not without associated risks so the need to ensure the right steps taken to bring the contract to a close.

However, contract closeout represents a significant stage in every contract which requires an attention. Hence, Contract closeout refers to verification that all administrative matters are concluded on a contract that is otherwise physically complete (Bathmann, 1990). In other words, the contractor has delivered the required supplies or performed the required services or works and the client has inspected and accepted the works/supplies or services (Information Technology Project Management-ITPM, 2007). Notwithstanding, most entities fail to close out various contracts and that poses a lot of risks to the project, compounding the inherent risks for same which must be considered even at the inception stages of the project so that measures are instituted to manage them. Some of these risks according to Valovcin

(1995) include Client's exposure to contractors' financial difficulties, increased risk of using current year funds to pay for prior year obligations, the misuse of client's-furnished property, possible overpayments to contractors and large backlogs which disrupt the normal flow of work in contracting offices among others.

Procurement Entities must perform a myriad of duties throughout the procurement process, which severally contribute to the inefficient execution of the contract closeout. The contract closeout process can be detailed, lengthy and time-consuming. The mechanics of the closeout process and the individuals involved vary by contract type and complexity of the item being procured (Valovcin, 1995). More so, it seems many contractors have little incentive to accelerate the process and achieve timelier closeout factor in lukewarm management attention and it is obvious why this process has gone awry (*Ibid*). Consequently contract closeout is inevitable with associated risk which has become an integral part of procurement process. The application of a risk management process improves procurement outcomes by: identifying and reducing exposure to risk; providing greater certainty and insight to support decision-making; and improving contingency planning for dealing with risks and their impacts (Thorpe, 2012). Risk is the possibility that an expected outcome will not occur or that an unforeseen event, usually detrimental to the outcome sought through the procurement process, will occur. It's usually measured by: consequences - what will happen; and likelihood - the chances of it happening (*Ibid*).

1.2 PROBLEM STATEMENT

Universally, contract closeout process has been found to be an area that is not performed in an efficient manner and requires greater management attention (Auditor General, Department of the Army, 1985), a problem which is peculiar to many developing countries like Ghana. According to their Advisory Report on “Contract Closeout Process” the consequences of the inefficient execution of this process are extremely detrimental, resulting in increased backlog of work and interest cost, fraud, legal claims among others. Again it is the responsibility of the procurement entity to expedite necessary actions to bring a given procurement contract to a close so as to eliminate or reduce additional cost associated with a contract which is not closed. A number of researches including Patton (1992) have shown that contractors have little incentive to initiate the process if they do not anticipate any benefits. This therefore emphasizes the need for closeout initiation by the Procurement Entity.

It is in the light of this, that the study seeks to explore the procurement risk associated with contract closeout on the part of procurement entities.

1.3 RESEARCH QUESTIONS

In order to accomplish the objectives of this thesis, fundamental research questions have been developed. The primary research questions included:

1. What are the current procedural requirements for contract closeout?
2. What are the risks associated with contract closeout?
3. What are the strategies for effective contract close out?

1.4 AIM AND OBJECTIVES OF THE STUDY

1.4.1 Aim

The main aim of this study was to explore procurement risk management in contract closeout by procurement entities.

1.4.2 Objectives

In achieving, the aim of the study the following objectives were advanced:

- To identify the current procedural requirements for contract closeout;
- To identify procurement risks associated with contract closeout; and
- To establish strategies for effective contract close out.

1.5 SCOPE

The scope of the study was to examine the management of risks through contract closeout and to find out the challenges and risks associated with unclosed contracts. Geographically the study considered procurement entities in the Metropolitan Assemblies in the Greater Accra Region.

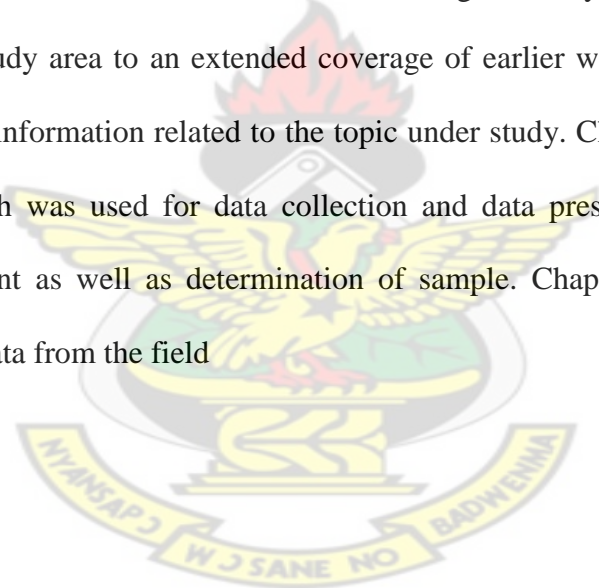
1.6 METHODOLOGY

This study adopted quantitative research method using questionnaire survey administered to various procurement entities in the Greater Accra Metropolis. The major sampling technique for this study was purposive approaches. Various instruments were used to gather data from primary and secondary sources. The primary sources of data were gathered through the questionnaire survey. The secondary information was also obtained from the various publications, reports, thesis, textbooks, newspapers, reports/articles, journals, bulletins and relevant documents elsewhere to make up the literature review. The SPSS (Statistical

Package for Social Sciences) software application was used for this analysis. In analyzing the data, descriptive statistical tools such as bar graphs and pie charts complemented with mean, median and standard deviations was employed.

1.7 ORGANIZATION OF THE RESEARCH

This section outlined how the research work was organized and structured. It was divided into five main independent chapters (body matter) besides the front and end matters as follows: Chapter one gave a general introduction of the study looking at the problem statement, research questions, aim and objectives, justification and scope of the study, methodology and limitations which was encountered during the study. Chapter two reviewed the literature on the study area to an extended coverage of earlier works. This presented a desk study of relevant information related to the topic under study. Chapter three focused on the methodology which was used for data collection and data presentation: questionnaire design and development as well as determination of sample. Chapter four dealt with the empirical analysis of data from the field



CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter seeks to give an insight on the various aspects of the project topic to give an in-depth understanding of the research area. The chapter starts with a conceptual explanation of contract closeout and overview of the construction procurement processes. The review attempts to cover at length the current procedural requirements for contract closeout, procurement risks associated with contract closeout; and strategies for effective contract close out.

2.2 CONCEPT OF CONTRACT CLOSEOUT

Closing out a contract is essential to the procurement process as well as the ability to continue to carry out the Entities activities fiscally in light of the reduced budget. Contract closeout is an often overlooked aspect of contract administration and it is often regarded as the most distasteful activity of the contracting process (Dee, 2013). Timely closeout is required to ensure that the Entity receives the quantity and quality of goods and services it has procured and paid for. Prompt closeout, according to Bethmann (1990), allows for early detection of fraud, waste or abuse by contractors or suppliers and more importantly, provides the opportunity to identify unliquidated obligations which can be reprogrammed to meet other needs of the organization.

Contract closeout is the final stage of the contract administration phase of the contracting process. The closeout process ensures all actions started during earlier phases of the contracting process have been completed by both the contractor and the client (FAR, 1986). The closeout process begins when the contract is terminated or when the contractor

delivers and the client accepts the works or supplies or services. A contract is "closed out" when the products or services have been delivered or completed and all administrative actions from both the contractor and the client have been completed (Motherway, 1993). The office administering the contract (i.e. the Procurement Entity) is responsible for initiating the contract closeout process. Many administrative actions and documents are required from both the contractor and the client. On the larger contracts the efforts of several activities must be coordinated by the administering office, the Procurement Entity (Motherway, 1993).

2.3 OVERVIEW OF PROCUREMENT PROCESS IN GHANA

The following is a summary of the processes involved in procurement (of goods, works & services) in the public sector of Ghana according to the Public Procurement Authority of Ghana.

2.3.1 Planning Procurement

Generally, planning enables organizations to, among other things, determine performance standards, establish overall direction, anticipate and avoid future problems and reduce the risks of uncertainty, identify and commit resources towards the achievement of goals, determine and develop performance standards, and effectively coordinate various activities in the organization (PPB Manual, 2005). The Public Procurement Act 663 provides for the activity of planning under Part 3 section 21. What the foregoing means is that it is imperative that procurement entities would need to plan their procurement for the coming year by the 30th of November of the preceding year. The plan would be reviewed and approved by their Entity Tender Committees (ETCs), after which the plans are updated every quarter.

2.3.2 Tendering Process

The requirement to advertise the intention to buy goods and works is spelt out by Section 47 of Act 663 for procurement using International and National Competitive Tendering. Advertising is required for invitations to tender if there is no pre-qualification. The object of advertising is to provide wide and timely notification of tendering opportunities so as to obtain maximum competition by informing all potential tenderers and to afford equal opportunities to all qualified and eligible tenderers without discrimination. For reasons of transparency, fairness and impartiality, tender documents should be provided for all eligible tenderers by the procuring entity.

Procurement entities are to provide tender documents to suppliers and contractors in accordance with procedures and requirements that were stated in the advertisement. The price at which the tender document is sold should be enough to recover the cost of printing and the document being made available to suppliers and contractors. Sufficient quantities of tender documents should be made available as many as there are tenderers. It is an offence to deny any supplier or contractor the opportunity to participate in any tender simply because stocks of documents are exhausted. Tenders should be opened immediately after the close of tenders. The Procurement Unit will need to ensure smooth operation of the proceedings, prepare minutes of the opening and advise the chairman of the opening session on procedural issues if requested. Public Procurement Act (Act 663, 2003)

A Tender Opening Committee is usually constituted and is made up of at least three persons including the Chairperson. The Chairman of the Tender Opening Committee controls and directs the /Tender Opening and does not allow tenderers representatives to interfere with the work of the Committee. Any objections by a Tenderer to the procedures or decisions of the tender opening should be made in writing to the Head of the Procurement Entity. Section 55

of the Act states that the provision of tender security is required for all International and National competitive tenders for procurement of goods, and works.

In the case of Procurement of consultants services tender security is not required. The use of security is important, in particular, in international trade where the Purchaser may not know the Tenderer or Supplier's professional ability, financial position and credibility. Therefore it is normal for the Purchaser to demand that the Tenderer's or Supplier's ability to perform in accordance with the instructions or contractual obligations be secured with a financial guarantee.

2.2.3 Contracts Management

A formal contract document will be drawn up, using the agreed terms and conditions, and signed by both parties. Simpler requirements may use a purchase order or where existing framework contracts exist, contracting may consist of placing a call-off order under the existing contract. The awarded contract must then be managed, to ensure that both the buyer and supplier perform their contractual obligations. Activities may include expediting delivery, arranging inspection or freight forwarding, checking bank guarantees, establishing letters of credit, making arrangements for receipt and installation of goods, verifying documentation and making payments.

Works contracts will often require technical supervision by an engineer/project management team to ensure quality, time schedule and cost. Contracts for consultancy services often require the direct participation of the buyer or client organisation, as the recipient of training or technical advice or in responding to studies or reports.

2.3.4 Monitoring and Evaluation

Controlling the performance of the procurement function and ensuring its efficiency and effectiveness is essential to the management of the procurement process. It is vital to evaluate how well the procurement process has gone, identify any weaknesses or problems and agree actions to prevent similar problems in the future. Evaluation may include a formal procurement audit. Procurement monitoring is an essential part of procurement management and control linked to compliance with Act 663 and procurement. This will involve the management of entity, staff of PPA, private sector, oversight bodies (internal and external audit), civil society (including NGOs), project beneficiaries, and media (PPA Annual Report, 2008).

2.3.5 Appeals and Complaints

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

In Ghana, the Authority established seven (7) member Appeals and Complaints Panel comprising legal procurement experts, and representatives from the private and public sectors which was inaugurated in 2007. In the same year the Panel successfully concluded fourteen (14) cases out of twenty (20) cases received (PPA Annual report, 2007). The appeal and

complaints procedures allowed bidding firms with the chance to show their disapproval before the procurement process is completed, as well as thereafter (Alam, 1995).

2.4 CONTRACT CLOSEOUT

Contract closeout is a less noted phase of the procurement process; yet, when performed efficiently and effectively, it can protect the government's interests and identify significant funds for current-year program priorities (Office of Inspector General, 2006). The closeout process for a contract generally starts with the final receipt and acceptance of material or services ordered and payment of the final invoice. The process continues through a myriad of tasks necessary to complete portions of the contract's requirements and ends when all actions are completed and the contract file is placed in records holding (Bathmann, 1990). Timelines are allocated to various types of contract regarding contract close out-table 2.1. (Knauer, 2007; Gillette, 2002; OIG, 1991; OIG, 2013; Motherway, 1993)

The primary objectives of contract closeout are:

- *to identify and resolve, before memories fade, any uncompleted obligations or pending liabilities on the part of either the client or the contractor and;*
 - *to ensure that contract-related decision and actions have been properly documented.*
- (Motherway, 1993)

Table 2.1 Timelines for Contract Closeout

Contract Type	Calendar Months After The Month in Which Physically Completed
Contracts Using Simplified Acquisition Procedures	Evidence of Receipt and Final Payment
All Other Firm Fixed Price Contracts	6 Months
Cost-Reimbursement Contracts including Time and Material (T&M) and Labor Hour (LH) contracts.	36 Months
All Other Contract Types	20 Months

(Knauer, 2007; Gillette, 2002; OIG, 1991; OIG, 2013; Motherway, 1993)

2.5 DEFINITION OF TERMS

2.5.1 Contract Closure Process

The process of ensuring that all required contractual actions or obligations and contract administration have been successfully completed (Bethmann, 1990).

2.5.2 Date Physically Completed

The date the client accepts the final goods or services that have been contracted for. This date signifies the start date for the contract closeout time-frame requirement (Patton, 1992).

2.5.3 Physically Completed Contract

A contract is physically completed when the contractor has delivered all supplies or all services and the client has inspected and accepted such supplies or services; all options if any have expired; there is evidence of final payment; and all administrative action such as litigation, a claim or an appeal is completed (Bandy, 1998; Patton, 1992).

2.5.4 Procuring Entity

The PE is the one who awards the contract for the client and is the primary point of contact between the client and the contractor. The PE has ultimate responsibility for the closeout of contracts they have awarded.

2.5.5 Over-aged Contract

A physically completed contract that has not been closed within the time-frames required by the FAR (Sherman, 1995).

2.5.6 Unliquidated Obligation

Appropriated funds that have been obligated to a contract, but have neither been paid to the contractor nor deobligated from the contract (Bethmann, 1990).

2.5.7 Closeout

The process of settling all outstanding contractual issues to ensure that each party has met all of its obligations, and documenting the contract file accordingly (Motherway, 1993).

2.5.8 Completion Statement

A formal statement by the contractor stating that all supplies and/or services have been furnished to the Client (Patton, 1992).

2.5.9 Contract Closeout Files

Refers to files containing the records of all contractual actions. During contract closeout, these files must be updated and forms authorizing contract closeout must be completed (Patton, 1992).

2.5.10 Contract closeout

Is the final process of contract administration performed to ensure that the contractor has complied with all the contractual requirements and that the client has also fulfilled its obligations (Hearn, 1990).

2.5.11 Obligation

A legal liability for the client to pay a contractor the amount stated in the contract. Obligations are recorded in the financial accounting records of the client. Once an obligation is incurred (at contract award), those funds are restricted and cannot be used for any other purpose unless they are obligated (Auditor General Report, 1985)

2.6 PROCEDURAL REQUIREMENTS FOR CONTRACT CLOSEOUT

In Ghana, the Public Procurement Act-Act 663 does not have an express procedural step to closing out procurement contracts as pertaining to some of the most advanced countries like the United States of America. This makes it difficult for any PE to undertake such critical aspect of procurement which must be done. This could probably be the reason why most procurement contract in Ghana end in stalemate. However, a few provisions could be found in some of the PPA's Standard Tender Document which one could use as a guide to closing out some of these procurement contracts, even though it may not be the express procedural steps that is applicable to all contracts.

2.6.1 Completion

- The contractor is expected to put a request to the Project Manager to issue a Certificate of Completion of Work done upon certification by the Project Manager.

2.6.2 Taking Over

- The client shall take over the site and the works within seven days of the Project Manager's issuing of the Certificate of Completion

2.6.3 Final Account Preparation

- Contractor shall supply the PM with detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period
- The PM then shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account-if it is correct and complete.
- If it is not, the PM shall issue within 56 days a schedule that states the scope of corrections or additions that are necessary.
- If the Final Account is still unsatisfactory after resubmission, the PM shall decide on the amount payable to the Contractor and issue a payment certificate.

2.6.4 Operating and Maintenance Manuals

- If "as built" drawings and /or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.
- If the Contractor does not supply the drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the PM's approval, the PM shall withhold the amount stated in the Contract Data from payments due the Contractor.

2.6.5 Termination

- The Employer or Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- Some of them include stoppage of work by contractor for 28 days when it has not been sanctioned by the PM, instruction by PM to Contractor to delay work, either party going bankrupt etc.

2.6.6 Payment upon Termination

- If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the PM shall issue a Certificate for the value of the work done and Materials ordered less advance payment received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed.
- If the total amount due the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.
- However if the Contract is terminated as a result of the Employer's breach or convenience, the PM shall issue a certificate for the value of the work done, materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel, the Contractor's cost of protecting and securing the work, and less advance payment received up to date of the certificate

2.6.7 Property

- All Materials on Site, Plant, Equipment, Temporary Works and Works shall be deemed to be the property of the Employer if the Contract is terminated by the Contractor.

2.6.8 Release from Performance

- If the Contract is frustrated by the outbreak of war or by any other event, the PM shall certify that the contract has been frustrated.
- Contractor shall make the site safe and stop work after receiving the certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

On the other hand, there is a standard procedural requirement for contract closeout in the US which could be found in the Federal Acquisition Regulation, (1998)-Part 4.804-5, some of which could be adapted for use in Ghana-if not all. This closeout process will typically commence once the Procurement Entity has evidence that the contract is physically complete. The process begins with an initial contract funds status review in order to identify and inform the contracting office if excess funds are available on the contract. Once this action is completed, the administrative closeout procedures commence in which the PE will ensure that, if applicable, the:

- *Disposition of classified material is completed;*
- *Final patent report is cleared;*
- *Final royalty report is cleared;*
- *There is no outstanding value engineering change proposal;*
- *Plant clearance report is received;*
- *Property clearance is received;*
- *All interim or disallowed costs are settled;*
- *Price revision is completed;*
- *Subcontracts are settled by the prime contractor;*
- *Prior year indirect cost rates are settled;*
- *Termination docket is completed;*
- *Contract audit is completed;*
- *Contractor's closing statement is completed;*
- *Contractor's final invoice has been submitted; and*
- *Contract funds review is completed and deobligation of any excess funds is recommended.*

When the actions above have been verified, the contracting officer administering same shall ensure that a contract completion statement, containing the following information, is prepared:

- *Contract administration office name and address (if different from the contracting office);*
- *Contracting office (PE) name and address;*
- *Contract number;*
- *Last modification number;*
- *Last call or order number;*
- *Contractor name and address;*
- *Dollar amount of excess funds, if any;*
- *Voucher number and date, if final payment has been made;*
- *Invoice number and date, if the final approved invoice has been forwarded to a disbursing office of another agency or activity and the status of the payment is unknown;*
- *A statement that all required contract administration actions have been fully and satisfactorily accomplished;*
- *Name and signature of the contracting officer; and*
- *Date.*

When the statement is completed, the entity shall ensure that:

- *The signed original is placed in the contracting office contract file (or forwarded to the contracting office for placement in the files if the contract administration office is different from the contracting office); and*
- *A signed copy is placed in the appropriate contract administration file if administration is performed by a contract administration office.*

The final step of the contract closeout process involves the storage and disposition of the contract files. The FAR states that agencies shall prescribe procedures for the handling,

storing and disposing of contract files (Federal Acquisition Regulation, (1998)-Part 4.805). In addition, this reference also specifies retention periods for certain contractual documents.

2.6 PROCUREMENT MANAGEMENT RISKS

Procurement in the public sector demands the highest integrity. The slightest error or inconsistency in conducting procurement processes or activities can lead to accusations. Even if ultimately proved to be without merit, these accusations can cause significant and lasting damage to the reputation of an individual and/or a procurement agency (Barden, 2010). In most procurement situations buyers have to choose among a set of suppliers. The buyer must choose which suppliers to order from and how much to order from each supplier. Risk is part of the procurement environment. Its management is key to effective and efficient delivery. It involves systematic identification, analysis, treatment and where appropriate accepting the risks. Risk Management is the identification, assessment, prioritization of risks and treatment of risks (Hubbard, 2009).

2.7 PROCUREMENT RISKS ASSOCIATED WITH CONTRACT CLOSEOUT

Many agencies suddenly have recognized that they have a problem with contract closeout. Some managers with little knowledge of the contracting process assume that it can be corrected quickly and easily, but a problem many years in the making will not go away overnight. (Gillette, 2002)

Timely contract closeout is the primary step to ensure the client's best interests are protected. According to the Auditor General Report (1985) on the US Army on "Contract Closeout Process" the consequences of the inefficient execution of this process are extremely significant and detrimental. The prudent PEs should comprehend the magnitude of these

impacts and recognize their ramifications. Although the majority of these adverse impacts are readily apparent, others are not as evident or easily understood (Valovcin, 1995). In his thesis on 'Streamlining the Contract Closeout Process' Valovcin (1995) delineate some of the detrimental impacts of delayed contract closeout:

2.7.1 Monetary Impact Risks

The monetary impact of untimely contract closeout emanates from several outcomes including unliquidated obligations, negative unliquidated obligations and unnecessary interest costs.

- i. **Unliquidated Obligations:** Appropriated funds are available for obligation for a definite period; annual or multi-year. These funds are considered obligated once they are placed on contract. The funds become expended when the contractor receives payment. Fund balances are available to make obligation adjustments for a period of two years after an appropriation succeeds its period of availability.

Unliquidated obligations however are those unused and unneeded funds that remain on physically completed contract after some portion of the obligated funds have been expended. Timely deobligation would permit the reprogramming of these funds to satisfy unfunded budget contingencies. However, these funds can potentially be lost if delayed contract closeout actions cause funds to be deobligated after they have expired

- ii. **Negative Unliquidated Obligations:** Refers to appropriate funds approved by congress (parliament) that are used to pay the Government's commitments. Control procedures are in place to ensure an organization does not spend more money than appropriated. Obligations are recorded when an agency enters into a contract. These obligations are liquidated when payments are made. Typically, the amount paid should be equal or less than the amount obligated. In theory, unliquidated obligations

should never be negative; in reality, negative unliquidated obligations have reached large dollar values.

According to the General Accounting Office (1989), there are three primary causes for negative unliquidated obligations:

- *the contractor being paid too much;*
- *a wrong appropriation account citing when payment to make; and*
- *obligation, payment or collection information being inaccurately or incompletely processed.*

Untimely contract closeout actions will permit negative unliquidated obligations to go unchecked. Timely contract closeout actions, specifically contracts funds review, can potentially identify and correct these problems before they reach monumental proportions.

- iii. **Interest Costs:** In conjunction with the adverse effects caused by negative unliquidated obligations, delayed contract closeout can result in unnecessary interest costs to the client if the excess payments to contractors are not recovered in a timely manner.

There are three major reasons why contractors are overpaid (General Accounting Office, 1989);

- *contract modifications decrease the contract price and related obligation below the amount already paid to the contractor,*
- *duplicate payments are made for the same invoice, and*
- *progress payments are made to contractors before work is actually completed when the final payment is made to the contractor.*

These overpayments tie up funds that can otherwise be used to satisfy other unplanned or unfunded requirements. Additionally, the overpayments become interest-free loans to the contractors while simultaneously contributing to the interest on the national debt. Delayed

contract closeout actions will prevent the prompt identification and collection of the overpayments.

2.7.2 Government-Furnished Property

Government-Furnished Property (GFP) refers to that property, material or equipment directly acquired by the Government and subsequently made available to the contractor for use on a particular contract. Contractors are responsible and liable for the GFP in their possession unless otherwise provided in the contract. Delayed contract closeout can cause GFP to needlessly remain in the possession of contractors which increases the potential for loss, damage or abuse of the property. In the AGs Audit Report(1987) on 'Contract Closeout Process' on the US Army, revealed discrepancies of more than \$930,000 between the amount of GFP given to contractors and the amount recovered by the Army. Recovery of this property was delayed for up to 53 months due to untimely contract closeout (Auditor General Report, 1987). Prompt contract closeout will ensure the timely return of GFP to Government control and not in the contractor's plant where the potential exists for needless acquisition of similar property.

2.7.3 Increased Backlog

Delayed contract closeout actions typically create work backlogs in contracting organizations. These backlogs can disrupt the normal operations of the organization as evidenced when management shifts resources to reduce the backlog. The intensive and extraordinary effort applied is usually of a short-fused nature. This type of effort causes operating errors and internal control failures. Additionally, many contracting offices resort to diverting personnel from other contracting functions in order to clear the backlog which

adversely impacts the normal administrative function of the organization (Auditor General Department, 1985; Gillette, 2002).

2.7.4 Fraud or Waste

Fraud or waste can exist for individual contracts and are often discovered during contract closeout. The detection and resolution of problems such as contractor cost mischarging and defective pricing may be delayed when closeout actions are late (Valovcin, 1995).

2.7.5 Other

Some other significant impacts of untimely contract closeout include:

1. Legal Claims: Legal claims against both the Government and contractor tend to be minimized when contract closeout actions are completed in a timely manner. Timely contract closeout tends to promptly identify and resolve potential areas of conflict (Bethmann, 1990).
2. Records storage: Punctual contract closeout actions, including the disposition of records, will ensure organizations do not physically maintain an excess amount of contract records on hand. The presence of excess records awaiting closeout actions may result in certain files being misplaced or lost.

2.8 RISK ASSOCIATED WITH CONTRACT CLOSEOUT

Virtually most audit report regarding contract closeout has sought to establish the reasons why the process of closing a contract has gone awry. Thus it is imperative that PEs recognize the root causes that disrupt the closeout process in order to militate against them. The following reasons have been espoused by Valovcin (1995) to be some of the risk leading to the stagnation in the process of closing a contract:

2.8.1 Low Priority

The FAR requires the cognizant contract administration office to perform a wide variety of duties. The successful execution of these duties depends on the relative priority placed upon them and the resources allocated to them. Apparently in Ghana virtually all PEs give the contract closeout process and required closeout actions low priority. In fact they do not consider closeout to be an important part of the contracting process and did not understand the adverse effects of delayed closeout. He further postulates that Low priority and limited manpower were the number one reasons provided in the survey for not initiating the closeout process as soon as the contract is physically completed. These two reasons go hand-in-hand; management allocates personnel to functions with a high priority, whereas a function with a low priority does not receive the attention and personnel resources needed to complete the job.

2.8.2 Inaction by the Contractor

The contractor is required to perform certain actions to facilitate the contract closeout process (e.g., settle all subcontracts, submit final indirect cost rates, and submit GFP inventory schedules). Any inaction on the contractor's part may jeopardize the timely closeout of the contract as evidenced in the findings of one audit report (Auditor General Report, 1987). Contractors contributed to delayed contract closeout for all types of contracts. Delays have been found to exist in submitting overhead data, negotiating overhead rates and contract prices, submitting draft and final invoices, and responding to queries from contracting offices; there are still no incentives for the contractor to achieve timely closeout. Other research studies have found that contractors have little incentive to accelerate the process and achieve timelier contract closeout if they do not anticipate receiving additional payment.

Rather, the contractor places importance on being awarded contracts via the administrative paperwork associated with the closeout of contracts (Patton, 1992).

2.8.3 Lack of Internal Controls

Internal controls consist of the policies, procedures and/or management information systems in place within an organization that are used to monitor, control and obtain feedback concerning the effectiveness of various processes. The lack of an effective internal control system may result in a process operating out of its intended parameters with no corrective action implemented. Actions such as obtaining missing documents, resolving questions about missing receipts, recovering government-furnished property and deobligating excess funds have been found to delay or not completed. For many contracts, the contracting offices may not be aware of the need for corrective action because they did not have a system for identifying actions needed to close out individual contracts.

2.8.4 Inaction by the Administration Contract Officer

The ACO is responsible for executing the majority of the closeout actions as espoused earlier. Additionally, the ACO must coordinate the actions of various organizations (e.g., contractor, buying office and paying office) involved in the contract closeout process and ensure that each agency has completed the required actions and submitted the appropriate documentation. Any delay on the part of the ACO will ultimately delay the contract closeout process.

They often fail to make required fund reviews on physically complete contracts or are late in recovering overpayments to contractors. These factors were the major cause of untimely contract closeout.

2.9 STRATEGIES FOR EFFECTIVE CONTRACT CLOSE OUT

Contract closeout is often a forgotten and neglected part of the contract administration process. The contract closeout process helps to insure that the Government's interests have been protected. The process attempts to resolve any contractual concerns and assures all contract requirements have been fulfilled. It encompasses many aspects and issues embodied within the contract. The following outlines some of the ways of achieving effective contract closeout (Valovcin, 1995).

2.9.1 Acceptance of the Contractor's Independently Audited and Certified Indirect Cost Rates.

The submission, audit and approval of indirect rates are complex and time consuming. Much like Certified Cost and Pricing Data, this espouses that the contractor bear the burden of this task by having the overhead rates audited by an independent accounting agency and certified to be current, accurate and complete. A statement addressing allow ability, allocability and reasonableness would also be included. The client would retain audit rights for a specified period and the contractor would be liable for any excess payments received due to erroneous certified rates.

Transferring this task to the contractor accomplishes two objectives: (i) the contractor is motivated to submit timely and accurate rates because final payment now hinges on an action for which they are directly responsible, and (ii) the client does not have to contend with resource allocation and constraint issues for overhead rate audits and negotiations. Additionally, client auditors can concentrate on field-pricing audits and final invoice audits.

2.9.2 Establishment of Effective Controls that Provide an Incentive for Contractors to Achieve Timely Contract Closeout.

The client must first establish a comprehensive list of requirements for which the contractor is responsible during the closeout process. These criteria can be incorporated into the contract. Once these conditions have been promulgated, the ramifications of the contractor's failure to comply with these requirements must be addressed. Specific consequences may include reductions in contractor profits, monetary penalty and/or reduction in final indirect rates. Whatever sanction is selected; it must be penal enough so the contractor avoids any action that would thwart the closeout process. Once contractors understand their actions or inactions will adversely impact their financial posture, there will be enough incentive to assist the process run smoothly.

2.9.3 Make Funds Review/Deobligation of Excess Funds a Priority in the Contract Closeout Process

A review of the funding status and recommendation for deobligation of excess funds should be accomplished for all contracts. Timely funds review and deobligation of any excess funds will minimize the amount of unliquidated obligations in the client's financial accounts. It will also permit reprogramming these funds to valid unfunded requirements. The potential to recoup millions of dollars should be a paramount concern for all contract managers, especially in today's austere funding environment

2.9.4 Establish Specific Time-frames for each Step/Factor of the Contract Closeout Process based on contract type and Monetary Value.

The majority of the contract closeout steps do not have any prescribed time-frames for execution. The contractor and client attempt to accomplish all the applicable tasks within the prescribed time limit promulgated for contract type. This complicates the process and contributes to the untimely closeout of contracts.

The Government should establish realistic time standards based on contract type and pecuniary value for each contract closeout factor. This would enable the contractor and client to effectively plan throughout the process and commit the requisite resources to the urgent tasks. Realistic time frames will also facilitate the closeout process. Each player in the process would be aware of the performance requirement and should execute accordingly.

2.9.5 Creation of a "Teaming" Arrangement with the Contractor to Facilitate Closeout Procedures.

Establishing a teaming arrangement with the contractor will help facilitate all aspects of contract management. The free flow of information that emanates from this type of arrangement would expedite certain tasks in the closeout process. Additionally, up to date knowledge of the contractor's costs and rates would be factors the PE can consider when deciding the magnitude of contract audits and reviews. Issues that stall the process can be jointly discussed and resolved. The importance and priority of the contract closeout process would be the same for both the contractor and Government. A teaming concept should promote timely and effective contract closeout.

2.10 TOOLS AND TECHNIQUES FOR CLOSING PROCUREMENTS

The tools and techniques for the contract closure process are the items you need to facilitate contract closure (Kumar, 2011). They are:

Procurement audits - This is a structured review of the procurement process with the purpose of identifying successes and failures from the planning through the executing stage of the project. The lessons learned from the audit can be applied to other phases of the same project (if it is a phase closeout) or to other projects within the same performing organization.

2.10.2 Settlement negotiations

Negotiations are a tool, a technique, and a skill that become very useful during the procurement closure process. Negotiations are used to give a proper closure through settlements to all outstanding claims, issues, and disputes. If direct negotiations fail, the option of some kind of mediation or arbitration should be explored. Obviously, the legal department of your organization should be involved here in case of any issues.

2.10.2 Records management system

This is a part of the project management information system and can be used to manage contract documentation and records. For example, you can use this system to archive documents, maintain an index of contract and communication documents, and retrieve documents.

2.11 Principles of Contract Closeout

The following principles as outlined in the CAM (2011) should be kept in mind when undertaking contract closeout:

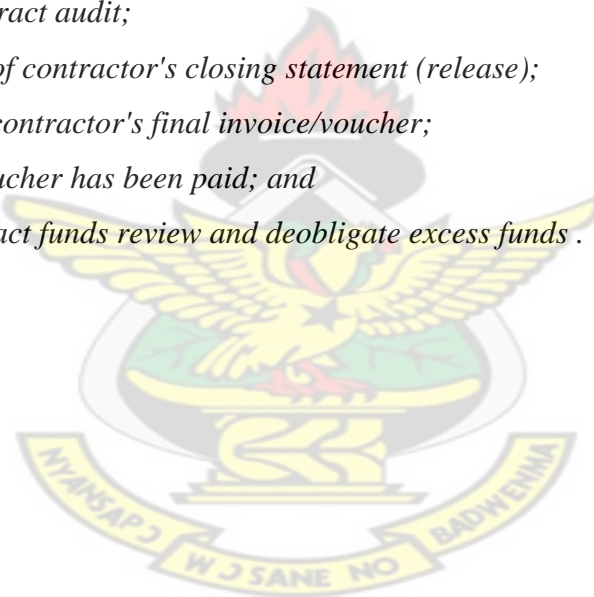
Closing out a contract takes time and the amount of time generally varies by contract type. Closeout activities will be more difficult and time consuming for contracts under which the client has the largest portion of risk, e.g., cost-reimbursement, level-of-effort, or incentive contracts. Each contract is a separate entity containing specific terms, provisions, and requirements. To properly conduct a closeout, a contract must be viewed in this light. The contract should not be handled as if it is exactly like all other contracts awarded in a continual, repetitive process. Prior to starting any closeout activity, the entire contract file, including all correspondence, invoices or vouchers, and other materials in the file should be reviewed. Failure to read the contract file could result in overlooking items and the possible loss of substantial amounts of funds. A complete inventory of all actions needing attention under the contract should be made at the start of the closeout process. This inventory should identify the actions required and an estimated date of completion for each action.

The last and perhaps most important principle in contract closeout are following up. Because the contract or small purchase has been completed, many think that the contract has fulfilled its purpose and will not give a high priority to their closeout responsibilities. A follow up plan must be developed and followed to ensure that all steps of the closeout are performed in a timely manner. The plan should include frequent and persistent follow up to see that all the information and data needed is received and that the closeout process proceeds within the time standards established by the FAR.

CHECKLIST FOR CONTRACT CLOSEOUT

It is the responsibility of Procuring Entity to ensure that the work under a contract has been completed and the contract is ready for closeout prior to final payment. This checklist can serve as a tool to assist the Entity during that process. Each contract is unique and the Entity should customize the checklist as required to meet its particular circumstance. Some of the Checklist includes:

- *Issue interim contract completion statement;*
- *Ensure disposition of classified material is completed;*
- *Receive final patent/royalty report clearance;*
- *Ensure there are no outstanding value engineering change proposals;*
- *Ensure property clearance is recorded;*
- *Receive and file plant clearance report ;*
- *Settle all interim or disallowed costs;*
- *Complete price revision;*
- *Ensure Prime contractor has settled Subcontracts;*
- *Settle prior year indirect cost rates;*
- *Ensure submission of final subcontracting plan report;*
- *Complete termination docket;*
- *Completed contract audit;*
- *Ensure receipt of contractor's closing statement (release);*
- *Review/submit contractor's final invoice/voucher;*
- *Ensure final voucher has been paid; and*
- *Complete contract funds review and deobligate excess funds .*



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This study sought to explore the procurement risk associated with contract closeout on the part of procurement entities in selected state agencies and Metropolitan Assemblies in the Greater Accra Region.

3.2 STUDY AREA

The study focused on the procurement contract closeout and risks associated with it on the part of various procurement entities in the public sector. It involved finding out the current procedural requirement for contract closeout, the various risks associated with contracts that is not closed on time, and also coming out with strategies for effective contract closeout for procurement entities in the public sector.

3.3 STUDY POPULATION

The target population of the study comprised Director of Procurement, Director of Works, Quantity Surveyors, Architects, Engineers, Presiding Members and Budget Officers in the Accra and Tema Metropolitan Assemblies and other public agencies (AESL and PWD).

3.4 STUDY DESIGN

The study took a quantitative and explorative approach. This involved the collection of data from various procurement entities at the AMA, TMA and selected public institutions (PWD and AESL) with structured questionnaires. This enabled researcher to generalize results using statistical methods. These public institutions comprise different categories of officials who make up the procurement entities and because the researcher wanted to reduce biases,

increase representation and analyze the study from different perspectives, all the different categories of procurement officials with varying characteristics were selected.

3.5 SAMPLE SIZE AND SAMPLING TECHNIQUES

The Tema and Accra Metropolis, Architectural and Engineering Services Limited and the Public Works Departments have a very large population and it will be very difficult and impossible to undertake such a survey without sampling. Purposive sampling technique was therefore used to determine the sample size. In conducting a research study, it is practically impossible, time-consuming and too expensive to test every individual in the entire population.

Therefore smaller chunks of a unit sample are chosen to represent the relevant attributes of the whole of the units (Graziano & Raulin, 1997). In view of this, a sample size of thirty five (35) officials was used out of which thirty (30) responded, comprising six (6) Directors of procurement, fifteen (15) Directors of works, two (2) Heads of Quantity Surveying, five (5) Budget Officers and two (2) Presiding Members were used.

3.6 DATA COLLECTION METHODS AND INSTRUMENT

The research instrument used was basically structured questionnaires. The nature of the questionnaires was such that they helped respondents to provide relevant responses. Prior to the administration of the questionnaires, researcher visited the respective institutions to familiarize himself with some of the respondents. It was after this that the questionnaires were administered.

It was envisaged that five (5) working days would be spent in administering the questionnaires but instead seven (7) working days were used. This was because some of the

respondents were not available at the time of the researcher's visit, so the date had to be re-scheduled. Structured questionnaires format of Thirty Four (34) questions were administered.

The areas covered in the questionnaire included respondent's demographic characteristics, procedural steps for contract closeout, the risks associated with the contract closeout and the strategies for effective closeout. The questionnaires were put in a simple five (5) point Likert Scale where respondents ranked by ticking appropriately.

3.7 DATA ANALYSIS

This study employed quantitative method of data analysis. The Statistical Package for Social Sciences (SPSS) was used for data entry and analysis of the data collected. Data preparation was the initial step to convert raw data into structured format that was more appropriate for the analysis. Tasks in this stage included data editing to detect and correct, possible errors and omissions that were likely to occur so as to ensure consistency of responses of respondents, data coding to enable respondents to be grouped into limited number of categories and data entry, frequency distributions, percentages, and descriptive analysis of exploring procurement risks associated with contract closeout.

Means and Standard deviations were generated and results expressed in tables. The findings were critically examined to ensure consistency with the research objective and appropriate conclusion and recommendation were subsequently made.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

This chapter presents the collated data, and analyses the data to address the specific objectives in Chapter One of the study. The major areas the chapter discusses include respondent's background, the procedural requirements for contract closeout in the construction industry, the various risks associated with untimely contract closeout, and the possible strategies for effective contract closeout in the construction industry.

4.2 DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

The demographic information of the surveyed respondents is discussed in this section of the study. The major socio demographic characteristics discussed were the position or rank of the respondents, the highest level of education of the respondents and the working experience of the respondents in the construction industry. The result of the demographic information of the surveyed respondents is presented in Table 4.1.

Table 4.1: Demographic Information of the Respondents

Demographic Data	Frequency	Percent
Position or rank of respondent		
Director of procurement	6	20.0
Director of works	15	50.0
Head of quantity surveying	2	6.7
Head of architecture	0	0.0
Head of engineering	0	0.0
Budget officer	5	16.7
Presiding member	2	6.7
Highest Level of Educational Qualification		
Diploma or HND	6	20.0
First degree	17	56.7
Master's degree	7	23.3
Doctorate degree	0	0.0
Years of experience		
Less than 5 years	1	3.3
5-10 years	18	60.0
11-15 years	9	30.0
16-20 years	2	6.7
21+ years	0	0.0

Source: Field Survey, 2014

From Table 4.1, out of the total surveyed respondents of 30, the majority were in the position or rank of director of works in their respective construction companies. However, 20.0% were directors of procurement, 6.7% were in the rank of head of quantity surveying, and

16.7% were also in the position of budget officers. The highest level of education of the majority (56.7%) of the surveyed respondents was first degree. However, 20.0% and 23.3% at the time of the study had diploma/HND and master's degree respectively. The working experience of the majority of the surveyed respondents in the construction industry was 5 to 10 years. Moreover, 30.0% also had 11-15 years of experience in the construction industry at the time of the study. It is therefore believed that with the educational status and the level of working experience in the construction industry, the respondents were in appropriate position to provide in-depth information regarding the numerous procurement risks associated with contract closeout.

4.3 PROCEDURAL REQUIREMENTS FOR CONTRACT CLOSEOUT

Administrative procedures required to close a contract are considerable. Therefore the procedures required to be followed by construction firms in contract closeouts are discussed in this section of the study. to achieve this objective, the respondents were presented with 12 steps or procedures normally followed by construction firms in closing contracts to indicate the level of importance of each step in the closing processes by choosing from 'Not Important' [1] to 'Most Important' [5]. The result of the responses of the surveyed 30 respondents is presented in Table 4.1.

Table 4.2: Procedures Required For Contract Closeout

Procedural Requirement	Mean	Std. Dev.
Disposition of classified materials is completed	3.47	0.94
Final patent report is cleared	3.87	0.68
Final royalty report is cleared	3.77	0.68
Plant clearance report is received	3.60	0.62
Property clearance report is received	4.07	0.69
All interim or disallowed costs are settled	4.23	0.68
Price revision is completed	4.20	0.55
Subcontractors are settled by main contractor	4.03	0.96
Contractors audit is completed	4.50	0.73
Direct payments to subcontractors and suppliers are settled by clients	3.40	1.40
Contractors closing statement is completed	4.23	0.82
Final account is completed and excess payments or deductions are made	4.60	0.50
Rank: [Not important-1, Less Important-2, Moderately Important-3, Important-4, Most Important-5]		

Source: Field Survey, 2014

From Table 4.1, the mean response of 3.47 indicates that the majority of the respondents regard the completion of the disposition of classified materials as an important step in contract closeout in the construction industry. The mean response of 3.87 implies that the majority of the surveyed respondents agreed to the clearance of the final patent report as an important step in the procedural requirement for contract closeout. The majority of the

surveyed respondents agreed to the clearance of final royalty report as an important step in the procedural requirements for contract closeout as shown by the mean response of 3.77. The mean response of 3.60 shows that the majority of the surveyed respondents of the study agreed to the receiving of plant clearance report as an important step in the procedural requirements for contract closeout in the construction industry in Ghana. The mean response of 4.07 however indicates that the majority of the surveyed respondents of the study agreed to the receiving of property clearance report as an important step in the procedural requirements for contract closeout. The mean response of 4.23 indicates that the surveyed respondents of the study agreed to the settlement of all interim or disallowed costs as an important step in the procedural requirements for contract closeout in the construction industry in Ghana.

Furthermore, the mean response of 4.20 indicates that the surveyed respondents agreed to the completion of price revision as an important step in the procedural requirements for contract closeout in the construction industry. The surveyed respondents also agreed to the settlement of subcontractors by contractors as an important step in the procedural requirements for contract closeout in the construction industry as shown by the mean response of 4.03. The mean response of 4.50 indicates that the majority of the surveyed respondents agreed to the completion of contractors audits as an important step in the procedural requirement for contract closeout. The mean response of 3.40 indicates that the majority of the surveyed respondents agreed to the settlement of clients by direct payments to subcontractors and suppliers as a moderately important step in the procedural requirements for contract closeout. The mean response of 4.23 indicates that the majority of the surveyed respondents agreed to the completion of the contractors closing statement as an important step in the procedural requirements of contract closeout in the construction industry. Making of final account completion and excess payments or deductions are also regarded by the majority of the

surveyed respondents as the most important step in the procedural requirements of contract closeout in the construction industry as shown by the mean response of 4.60. From the finding of study with regard to the procedural requirement of contract closeout, it is evident that there are some elements or steps in the Federal Acquisition Regulation (1998) abided by construction firms in Ghana in contract closeout, though it is generally assumed that in Ghana, the Public Procurement Act-Act 663 does not have an express procedural steps to closing out procurement contracts as pertaining to some of the most advanced countries like the United States of America.

4.4 RISKS ASSOCIATED WITH UNTIMELY CONTRACT CLOSEOUT

This section of the study identifies and discusses the numerous risks associated with untimely contract closeouts in the construction industry in Ghana. To achieve this objective, the respondents were presented with 9 forms of risks to indicate their level of impact on untimely closeouts by choosing from 'Least' [1] to 'Highest' [5]. The result of the responses of the surveyed 30 respondents is presented in Table 4.3.

Table 4.3: Risks Associated With Untimely Contract Closeout

Risks of Untimely Contract Closeout	Mean	Std. Dev.
Excess budget due to delay in contract closeout	4.10	0.61
Delay in contract closeout leading to any increased interest cost	3.93	0.74
Delay in correction of duplicated payments to contractors	3.23	1.28
Overuse of government provided property for the project by the contractors	3.47	1.43
Creation of work backlog in contracting organisation	3.07	1.36
Delays in detection of fraud	3.20	1.35
Delays in detection of waste	3.33	1.37
Delays in identification and collection of overpayment to contractors	3.57	1.33
Delays in identification and resolution of potential areas of conflict	4.07	1.14
Rank: [Least-1, Lower-2, High-3, Higher-4, Highest-5]		

Source: Field Survey, 2014

From Table 4.3, the mean response of 4.10 indicates that the majority of the surveyed respondents agreed to excess budget due to delay in contract closeout as higher form of risk in untimely contract closeout. Consistent with this finding is the study of Valovcin (1995) that showed that firms sometimes engage in spending over and above their obligated funds or budgets therefore resulting to negative unliquidated obligations. The General Accounting Office (1989) attributes negative unliquidated obligations to the contractor being paid too much; a wrong appropriation account citing when payment to make; or obligation, payment or information collection is inaccurately or incompletely processed. The mean response of 3.93 indicates that the majority of the surveyed respondents of the study agreed to delays in

contract closeout leading to any increased interest cost as a higher form of risk in the construction industry. This finding is consistent with the study of Valovcin (1995) that indicates that the monetary impact of untimely contract closeout emanates from several outcomes including negative unliquidated obligations and unnecessary interest costs. Valovcin (1995) further indicated that delayed contract closeout is often the result of unnecessary interest costs to the client if the excess payments to contractors are not recovered in a timely manner.

The mean response of 3.23 indicates that the respondents agreed to delays in correction of duplicated payments to contractors as higher form of risk associated with untimely contract closeout. The mean response of 3.47 indicates that the surveyed respondents ranked higher the overuse of government provided property for the project by the contractors as risks associated with untimely contract closeout in the construction industry. An evidence of overuse of government property as an associated risk with contract closeout delay is provided In the AGs Audit Report(1987) on 'Contract Closeout Process' on the US Army, revealed discrepancies of more than \$930,000 between the amount of Government Furnished Property given to contractors and the amount recovered by the Army. Recovery of this property was delayed for up to 53 months due to untimely contract closeout (Auditor General Report, 1987). The creation of work backlog in contracting organisation is ranked as high by the majority of the surveyed respondents as a form of risk associated with untimely contract closeout in the construction industry as shown by the mean response of 3.07. Valovcin (1995) is also in agreement with the finding of this study that delayed contract closeout actions typically create work backlogs in contracting organizations. The backlogs are believed to disrupt the normal operations of the organization as evidenced when management shifts resources to reduce the backlog (Valovcin, 1995).

The mean response of 3.20 indicates that majority of the surveyed respondents ranked delays in detection of fraud high as a form of risk associated with untimely contract closeout. The mean response of 3.33 indicates that the surveyed respondents ranked delays in the detection of waste as risk associated with untimely contract closeout. Consistent with the finding of this study, Valovcin (1995) indicated that fraud or waste can exist for individual contracts and are often discovered during contract closeout. The detection and resolution of problems such as contractor cost mischarging and defective pricing may be delayed when closeout actions are late (Valovcin, 1995). A delay in identification and collection of overpayment to contractors was ranked higher as a form of risk associated with untimely contract closeout as shown by the mean response of 3.57. The mean response of 4.07 indicates that the majority of the surveyed respondents ranked higher delays in identification and resolution of potential areas of conflict as a form of risk associated with untimely contract closeout in the construction industry. Consistent with the finding of this study, Bethmann (1990) indicated that untimely contract closeout tends to promptly lead to potential areas of conflict.

4.5 STRATEGIES FOR EFFECTIVE CONTRACT CLOSEOUT

The various strategies for effective contract closeout are discussed in this section of the study. To achieve this objective, the respondents were presented with 10 possible strategies from literature to indicate their effectiveness in contract closeout by choosing from 'Not Important' [1] to 'Most Important' [5]. The result of the responses of the surveyed 30 respondents is presented in Table 4.4.

Table 4.4: Strategies for Effective Contract Closeout

Effective Strategies	Mean	Std. Dev.
Contract closeout should be prioritized	4.33	0.88
Identification of possible closeout delays for redress before time	4.33	0.76
Proper management of the administration of contract records	4.13	0.63
Payment of interest penalties when payments are made late	4.50	0.73
The assignment of contract closeout to contract specialist or contract administrator who will officially conduct closeout	4.13	0.51
Corrective measures established to address any discrepancies identified that will delay closeout	4.30	1.06
The insertion of clauses in contracts that require parties to a contract to meet their obligations in a precise time-frame	4.17	0.83
Penalize by penalty fee on any party that does not comply with timely closeout	4.17	1.02
The introduction of automation to help determine contracts that are due for closing	4.13	1.14
The contracting officer and/or disbursing officer should have access to the status of all contracts under their responsibility	4.03	0.93

Rank: [Not important-1, Less Important-2, Moderately Important-3, Important-4, Most Important-5]

Source: Field Survey, 2014

From Table 4.4, the mean response of 4.33 indicates that the majority of the surveyed respondents agreed to the prioritization of contract closeout as an important strategy for effective contract closeout. The mean response of 4.33 indicates that the surveyed

respondents agreed to the identification of possible closeout delays for redress before time as an important strategy for effective contract closeout. The mean response of 4.13 indicates that the surveyed respondents agreed to proper management of the administration of contract records as an important strategy for effective contract closeout in the construction industry. The mean response of 4.50 indicates that the majority of the surveyed respondents agreed to the payment of interest penalties when payments are made late as an important strategy for effective contract closeout in the construction industry. The surveyed respondents also agreed to the assignment of contract closeout to contract specialist or contract administrator who will officially conduct closeout as an important strategy for effective contract closeout as shown by the mean response of 4.13. The mean response of 4.30 indicates that the majority of the surveyed respondents agreed to corrective measures established to address any discrepancies identified that will delay closeout as possible important strategy for effective contract closeout in the construction industry. The mean response of 4.17 indicates that the majority of the respondents agreed to the insertion of clauses in contracts that require parties to a contract to meet their obligations in a precise time-frame as an important strategy for effective contract closeout in the construction industry. The mean response of 4.17 also indicates that the majority of the surveyed respondents agreed to the penalizing by penalty fee on any party that does not comply with timely closeout as an important strategy for effective contract closeout in the construction industry. The mean response of 4.13 indicates that the majority of the surveyed respondents agreed to the introduction of automation to help determine contracts that are due for closing as an important strategy for effective contract closeout in the construction industry in Ghana. The mean response of 4.03 also indicates that the majority of the surveyed respondents agreed to the contracting officer and/or disbursing officer ensuring access to the status of all contracts under their responsibility as an important strategy for effective contract closeout in the construction industry in Ghana.

CHAPTER FIVE

SUMMARY OF FINDING, CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

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

5.2 SUMMARY OF FINDINGS

This research was set to find answers to the following: 1) What are the current procedural requirements for contract closeout, 2) What forms of risks are associated with untimely contract closeout, and 3) what strategies can be implemented to ensure effective contract closeout in the construction industry. Rigorous field works was conducted and below are the main findings:

5.2.1 Procedural Requirements for Contract Closeout

The study revealed that contract closeout requires the completion of disposition of classified materials. Further procedural requirements for contract closeout in the construction industry in Ghana are clearance of final patent report, clearance of final royalty report, receiving of plant clearance report, receiving of property clearance report, settling of all interim or disallowed costs, completion of price revision, settling of subcontractors by main contractors, completion of contractors audit, settlement of direct payments to subcontractors and suppliers by clients, completion of contractors closing statement, and make a final account completion and excess payments or deductions.

5.2.2 Risks Associated With Untimely Contract Closeout

The various risks revealed to be associated with untimely contract closeouts in the construction industry in Ghana include excess budget due to delay in contract closeout, increased interest cost, delay in correction of duplicated payments to contractors, overuse of government provided property, creation of work backlog in contracting organisations, delays in detection of fraud, delays in detection of waste, delays in identification and collection of overpayment to contractors, and delays in identification and resolution of potential areas of conflict.

5.2.3 Strategies for Effective Contract Closeout

The study revealed several possible strategies to ensure effective contract closeout in the construction industry including prioritization of contract closeout, Identification of possible closeout delays for redress before time, Proper management of the administration of contract records, Payment of interest penalties when payments are made late, assignment of contract closeout to contract specialist or contract administrator who will officially conduct closeout, establish corrective measures to address discrepancies that would delay closeout, insertion of clauses in contracts that require parties to a contract to meet their obligations in a precise time-frame, penalize by penalty fee on any party that does not comply with timely closeout, introduction of automation to help determine contracts that are due for closing, and the contracting officer and/or disbursing officer should have access to the status of all contracts under their responsibility.

5.3 CONCLUSION TO THE STUDY

Risk management in construction projects is considered as an important part of the management process. Since risk in construction projects associated with three major principles, which are Time, Cost and Quality. Many construction firms the world over including those in Ghana rarely meet contract closeout requirements for several reasons. This phenomenon therefore increases the probability of risks in procurement associated with contract closeout. Some of the common risks revealed to be associated with delays in contract closeouts in the procurement process in Ghana were excess budget due to delay in contract closeout, increased interest cost, delay in correction of duplicated payments to contractors, over use of government provided property, creation of work backlog in contracting organisations, delays in detection of fraud, delays in detection of waste and others. However, the study revealed that these risks can be mitigated through stringent strategies such as prioritization of contract closeout, Identification of possible closeout delays for redress before time, Proper management of the administration of contract records, Payment of interest penalties when payments are made late and many others. Based on these conclusions, several recommendations have been made in the next section.

5.4 RECOMMENDATION

Based on the findings of the study, the various risks associated with delay in contract closeouts can be reduced or mitigated through the numerous recommendations made below:

5.4.1 Need for risk treatment actions

There is the need for suitable plans to avoid risks occurring during projects should be developed in consultation with the project participants who are responsible for each identified risk. The risk treatment actions should include the following activities: risk description,

responsibility for action, status of risk action planning, further action required, budget and resources required, timing and reporting processes. Details of the organizational structures and processes for the continuing management and monitoring of risk throughout the lifetime of the project should be developed by project participants or project manager, as well as specific details of strategies to deal with individual identified risks.

5.4.2 Creation of awareness about inherent risk in the procurement process

To reduce the numerous risks in the closeout, there is the need to encourage project participants or team members to be aware of, and understand the risks inherent in the procurement process. Project team members shall be trained and taught to identify risks, quantify risks and define appropriate response and mitigation plans designed to prevent the risk occurring, backed up with a contingency plan. There is also the need to establish a separate closeout function within the contracting organization in order to emphasize the importance of contract closeout. Although the contract specialist continues to work with the contractor through physical completion under "cradle-to-grave" contract administration, this does not prohibit a separate group from performing the closeout function.

5.4.3 Rewarding employees for closeout completion

Rewarding employees through incentive awards (i.e., on-the-spot cash awards) for the highest number of closeouts completed is a good motivation factor. Also, using measurements standards such as those prescribed in the FAR for closing various types of contracts helps to keep the focus on the closeout effort. Cross-training in contract closeout is good for contract specialists as it helps them to understand the importance of writing good contracts.

5.4.4 Proper Management Information Systems to monitor the contract closeout process

There is the need to consider using a management information system with milestones to track contract closeout from physical completion through final payment. Integrating the closeout system with a word processing capability allows for automatic generation of closeouts letters which speeds up the closeout process. Also, using contractor support for data entry services may be an alternative when in-house resources are limited.

5.4.5 Employment of quick closeout procedures to reduce backlog of unscheduled audits

To reduce backlog of unscheduled audits, there is the need to employ quick closeout procedures to the extent practicable to reduce the audit workload. When a determination can be made that there is no evidence of fraud or waste, the contractor's performance is good, and there is no history of unallowable costs, then quick closeout procedures may be appropriate. Also, performing risk assessments to determine contractors that should be audited will help to better manage the audit workload and using more fixed price contracts helps to reduce the requirements for contract audits. There is also the need to encourage contractors to submit their final vouchers in a timely manner to avoid delays in requesting the final closeout audit under cost reimbursement contracts.

5.4.6 Partnering to reduce disputes in Contract Closeout

To reduce delays in identification and resolution of potential areas of conflict, an alternative dispute resolution technique known as "partnering" should be considered. Creating a partnership agreement with the contractor helps to avoid disputes. Having the partnership agreement signed by all parties -- the contracting officer and the contractor -- creates a buy-in to the overall goal: "Completion on time, within budget, and without claims."

5.4.7 Proper monitoring of the procurement process

There is the need to ensure that all monitoring issues have been resolved. The monitoring plan should also be updated and documented to meet all monitoring requirements accurately and ensure they reflect the status of all monitoring activities as outlined in the monitoring plan. Furthermore, the Risk Assessment should be updated and completed to reflect the status of all monitoring activity. It should also be ensured that all agency specific required approvals have been received and the Contractor has complied with all contractual terms and conditions.

5.4.8 The need for Final Property and final security Close Out

There is the need to ensure that the property inventory report has been received from the contractor. There is also the need to ensure that all Government owned property, real or person, either furnished by the government or acquired by the contractor for the account of the Government has been accounted for and all property inventory and ownership issues are resolved including disposition of any equipment, licenses purchased, or warranty information under the contract. There is also the need to ensure that there has been a disposition of all classified material (Proprietary, Trade Secrets, Sensitive, Confidential, Personal/Privacy) generated to or accessed by the contractor in the performance of the contract.

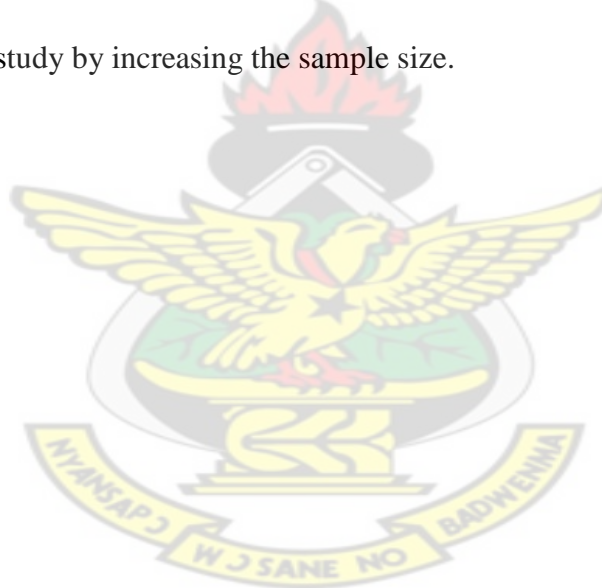
5.4.9 Need for final payments and invoices

There is the need for auditors to ensure that all disallowed payments, performance, deliverables, or suspended costs been resolved. They should also ensure that all reconciliation has been completed in conjunction with a financial report to verify that all payments have been paid, and refunds, rebates, and/or credits have been annotated in the contract file. There is also the need to ensure that all excess funds, such as un-liquidated obligations have been

verified and the de-obligations of funds have been accomplished and final invoice has been received, reviewed, accepted and paid.

5.5 LIMITATIONS AND AREAS FOR FURTHER STUDIES

The current study was limited to providing insight into the current procedural requirements for contract closeout, identifying the risks associated with untimely contract closeout and strategies for effective contract closeout. Therefore, any further study could be widened to capture other forms of risks associated with areas in the procurement process. Furthermore, the current study was limited to a small sample size of 30 which limits the generalizability of the study. Therefore further studies in this area could enhance the validity, reliability and generalizability of the study by increasing the sample size.



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KNUST



APPENDIX

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

COLLEGE OF ARCHITECTURE AND PLANNING

DEPARTMENT OF BUILDING TECHNOLOGY, KUMASI

My name is Maynard Korley, M.Sc. Procurement Management Student from Department of Building Technology at Kwame Nkrumah University of Science and Technology, Kumasi researching on the topic **“Exploring Procurement Risk Associated with Contract Closeout: A Case Study of Metropolitan Assemblies in Tema and Accra, and selected public institutions (AESL and PWD)”** This research questionnaire has been designed to solicit views from Procurement Entities based on their experience on procurement entities. It is aimed at:

- **To identify the current procedural requirements for contract close-up;**
- **To identify procurement risks associated with untimely contract closeout;**
- **To establish strategies for effective contract closeout**

I would like to convey my appreciation for your cooperation in completing these questions. If you have any questions and contributions about this research, please mail at Maynardkorley@yahoo.com or call 0243035735/0260994440. The questionnaires are in three sections namely, procedural requirements for contract closeout, procurement risks associated with delays in contract closeout and strategies for effective contract closeout.

Please tick [✓] where appropriate

Thank you in advance for your participation and assistance with this study

Socio-demographic information

Please tick () where applicable

Questionnaire No.....

Position/Rank

- a. Director of Procurement
- b. Director of Works
- c. Head of Quantity Surveying
- d. Head of Architecture
- e. Head of Engineering
- f. Budget Officer
- g. Presiding Member

What is your highest educational qualification?

- a. Diploma or HND
- b. 1st Degree
- c. Masters
- d. Doctorate

Years of Experience

- a. (Less than 5years) b. (5-10years) c. (10-15years) d. (15-20years) e. (more than 20years)

The table below represents procedural requirements for a contract closeout. Rank these requirements from 1 to 5. **Please tick [✓] where appropriate by indicating the level of importance.**

Table 1

1=not important, 2=less important, 3= moderately important, 4=important, 5= most important

No.	Procedural requirements	Level of Importance				
		1	2	3	4	5
1	Disposition of classified materials is completed					
2	Final patent report is cleared					
3	Final royalty report is cleared					
4	Plant clearance report is received					
5	Property clearance report is received					
6	All interim or disallowed costs are settled					
7	Price revision is completed					
8	Subcontractors are settled by main contractor					
9	Contractors audit is completed					
10	Direct payments to subcontractors and suppliers are settled by clients					
11	Contractors closing statement is completed					
12	Final account is completed and excess payments or deductions are made					

The table below represents risk associated with untimely contract closeout. Rank these risk from 1 to 5, **Please tick [√] where appropriate by indicating the level of impact for each risk.**

Table 2

1=Least, 2=Lower, 3=High, 4-Higher, 5= Highest

No.	Risks	Degree of Impact				
		1	2	3	4	5
1	Lost of excess budget due to delay in contract closeout					
2	Delay contract closeout leading to any increased interest cost to client					
3	Delays in correction of duplicated payments to contractors					
4	Overuse of government provided property for the project by the contractor					
5	Creation of work backlog in contracting organization					
6	Delays in detection of fraud					
7	Delays in detection of waste					
8	Delays in identification and collection of overpayment to contractors					
9	Delays in identification and resolution of potential areas of conflict					

Table 3

The table below represents strategies for effective contract closeout. Rank these strategies from 1 to 5, Please tick [✓] where appropriate by indicating the level of importance for each strategy.

1=not important, 2=less important, 3= moderately important, 4=important, 5= most important

No	Strategies	level of Importance				
		1	2	3	4	5
1	Contract closeout should be prioritized					
2	Identification of possible closeout delays for redress before time.					
3	Proper management of the administration of contract records					
4	Payment of interest penalties when payments are made late					
5	The assignment of contract closeout to contract specialist or contract administrator who will officially conduct closeout.					
6	Corrective measures established to address any discrepancies identified that will delay closeout.					
7	The insertion of clauses in contracts that require Parties to a contract to meet their obligations in a precise Time-frame.					
8	Penalize by penalty fee on any party that does not comply with timely closeout.					
9	The introduction of automation to help determine contracts that are due for closing					
10	The Contracting Officer and/or Disbursing Officer should have access to the status of all contracts under their responsibility					