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KWAME NKRUMAH UNIVERSITY OF SCIENCE AND
TECHNOLOGY

COLLEGE OF ARCHITECTURE & PLANNING
FACULTY OF ARCHITECTURE AND BUILDING TECHNOLOGY

THE INFLUENCE OF THE PUBLIC PROCUREMENT ACT 2003
(ACT663) ON PROJECT TIME PERFORMANCE OF
CONSTRUCTION PROJECTS IN GHANA.

By

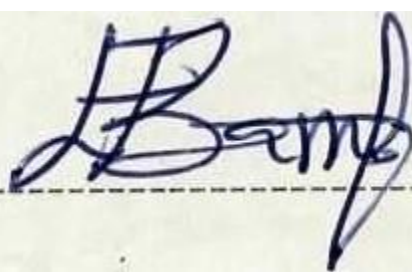
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A THESIS SUBMITTED TO THE DEPARTMENT OF BUILDING TECHNOLOGY
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR A DEGREE OF
MASTER OF SCIENCE IN CONSTRUCTION MANAGEMENT

MAY 2013
DECLARATION

I declare that I have fully undertaken the research reported herein under the supervision of Mr. LK. Hackman and Dr. G. Nani and that except portions where references have been duly cited, this dissertation is the outcome of my research.

28/10/2013



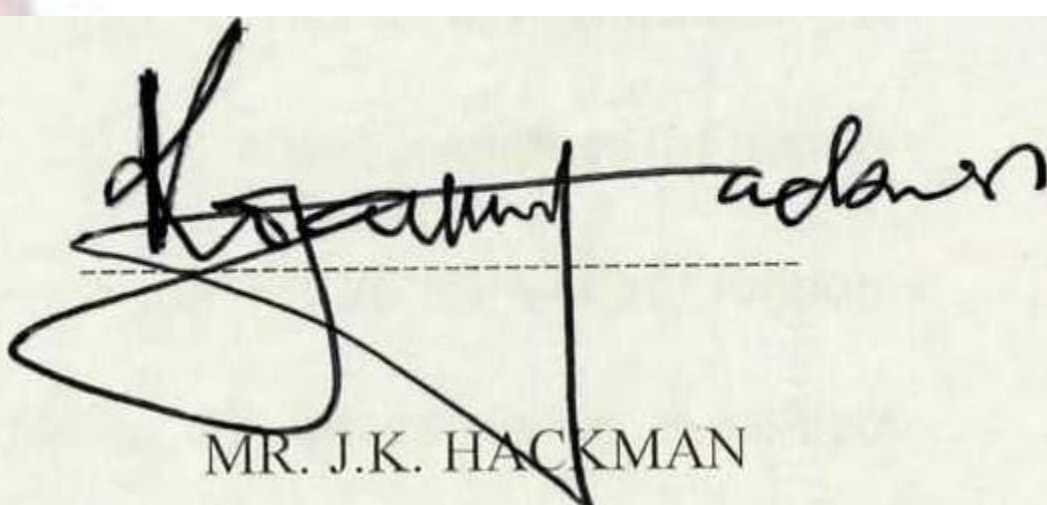
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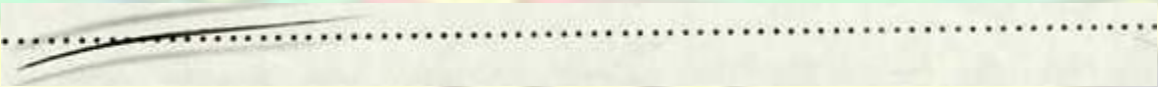

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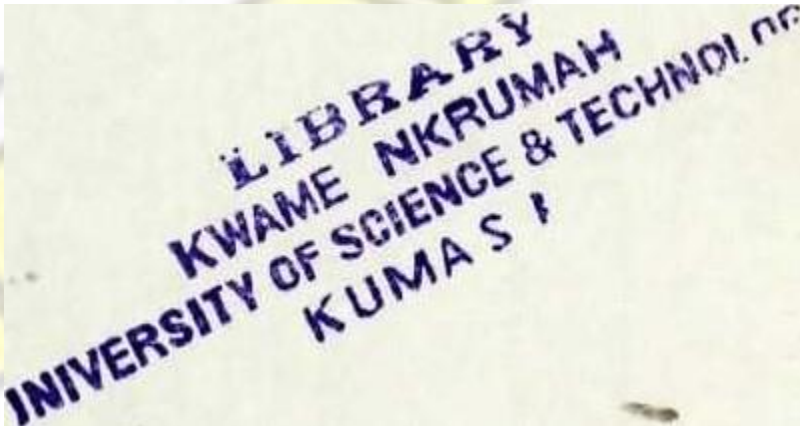
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ABSTRACT

The Public Procurement Act of Ghana 2003 (Act 663) has been in operation for ten years in Ghana, it was enacted in 2003 to address weaknesses in public procurement. Contracts

for both works and services take very lengthy periods to reach financial closure. The aim of the study is to investigate the effect of the Public Procurement Act (Act 663) on the time performance of project delivery in Ghana. The objectives are to: identify factors that define projects' time performance; identify specific relations between the aforementioned factors and the Public Procurement Act 2003 (Act 663); identify the critical factors affecting time performance at the pre-contract stage of public procurement, and identify the bottleneck in the public procurement Act that hinders project time performance. A survey was conducted among two hundred and forty-six (246) members of tender committees and tender review boards in the twenty (20) districts in the Central Region. The checklist and rating scale were adopted for designing the questionnaire. A content analysis was conducted on the public procurement act and associated manuals to identify the statutory time requirements for pre-contract procurement stage activities. Eight factors that define time performance were identified from the findings. However, two the factors exceeded the maximum period envisaged by the Act. They are Post Review / Evaluation Tender Committee, followed by Tender Evaluation and Report Submission, were perceived as the factors whose durations are most unstable and hence frequently affect project time performance at the procurement stage of a project. It was concluded

that longer periods were used by approving authorities in reviewing and approving
tenders.

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ACKNOWLEDGEMENT

I am grateful to our heavenly father Jehovah the giver of knowledge and wisdom.

With all respect and humility I will like to express my heartfelt appreciation to the Department of Building Technology, Cape Coast polytechnic for giving me the opportunity to study at the university.

I also wish to express my gratitude to LK. Hackman and Dr. G. Nani who made time out of their busy schedule to go through the work and offering constructive criticisms and comments to make this a success.

I will like to express my appreciation to my Head of Building Technology Department of Cape Coast Polytechnic Mr. SK. Ansah and the Head of Building Technology Department of Kwame Nkrumah University of Science and Technology Prof. J. Ayarkwa for their support.

Lastly I wish to thank members of the tender committee and Review Board in the twenty districts in Central Region and contractors for their willing attitude to contribute in the research.

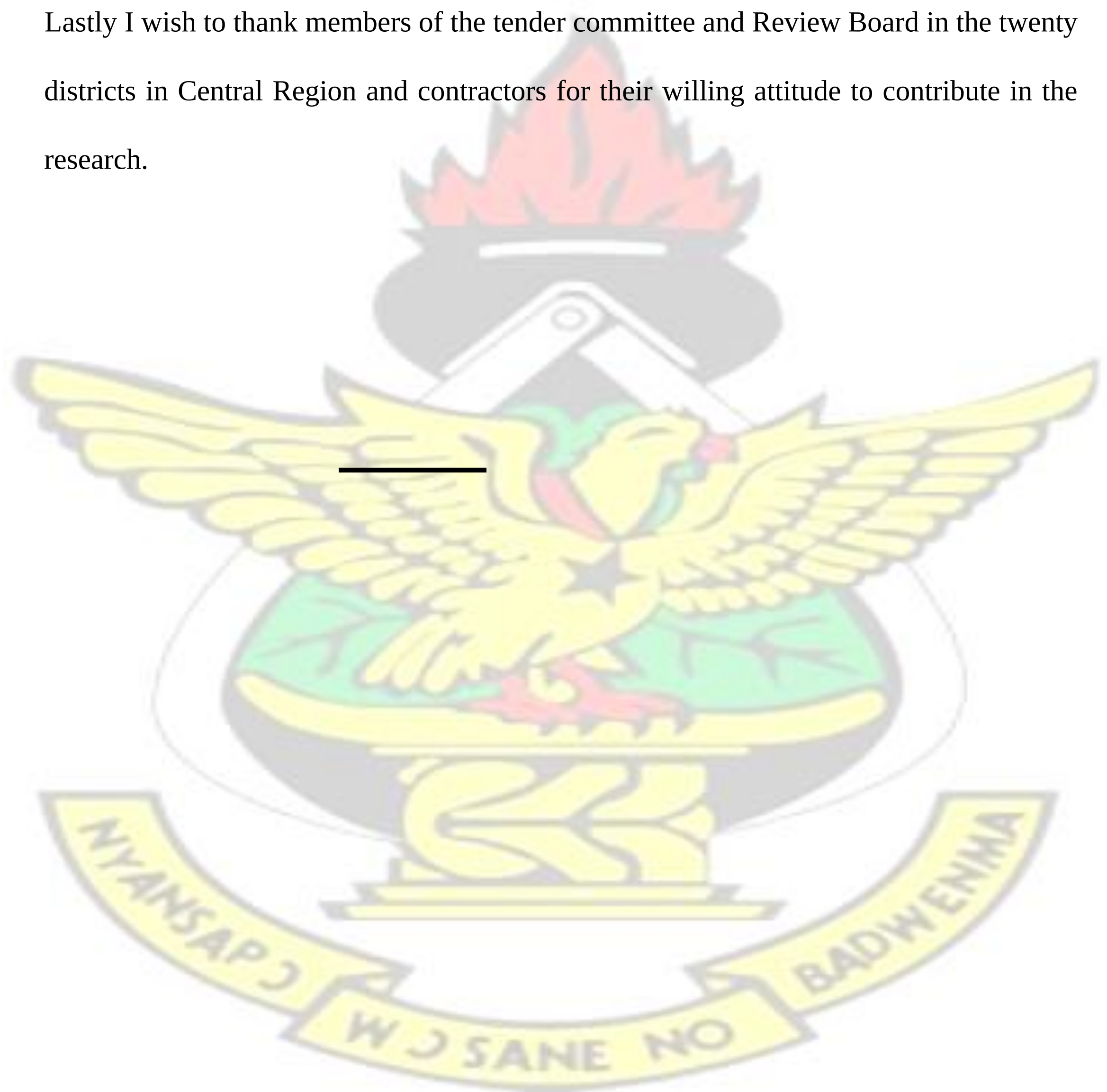


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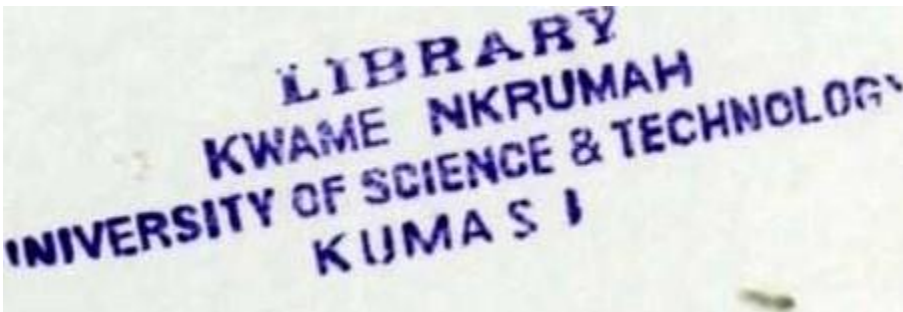
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CHAPTER ONE

IMPACT OF PUBLIC PROCUREMENT SYSTEM IN THE CONSTRUCTION INDUSTRY

1.1 Background

The Public Procurement Act 2003 (Act 663) which has been in operation for ten years in Ghana was enacted in 2003 to address the weaknesses in public procurement. This study explores the major issues in construction procurement in Ghana and analyses the potential impact of the Public Procurement Act on project time performance.

ISO 10845:2010 defines procurement as the process through which contracts are created, managed and fulfilled, including all the steps from the establishment of the project or products to be procured, soliciting and evaluating tender offers, awarding and administering contracts and confirming compliance with requirements.

Hughes (2005) defines procurement as the process of acquiring goods, works and services. Public procurement as a function of government includes decisions about the services that will be delivered to local authorities and the communities they serve.

Hughes (2005) alludes that Procurement is a process that spans from identification of needs through to the end of a services contract or the end of the useful life of an asset. It includes the design and delivery of those works, products or services, the assessment of their quality, and the evaluations and reviews that will lead to further procurement. The

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whole process contains several decisions about the services that will be delivered to local authorities and the communities they serve.

Improvement in the public procurement system that positively enhances project performance will have a direct and substantial impact on the overall economic situation of the country and result in rapid substantial infrastructural development and budgetary savings and efficiency in government expenditures. For example, South Africa's Department of Public Works (1997, p. 12) defines industry performance as: "doing the right job, at the right time, at the right cost and in the right way".

The Public Procurement Act (Act 663) establishes the five basic pillars of public procurement [World Bank 2003]: (1) comprehensive, transparent legal and institutional framework; (2) clear and standardised procurement procedures and standard tender documents; (3) independent control system; (4) proficient procurement staff; and (5) anticorruption measures.

1.2 Problem Statement

Since the introduction of the Public Procurement Act in 2003 in Ghana, successive research have revealed substantial inefficiencies and concluded that value for money was not being achieved in both government- and donor-financed procurement resulting in poor

project performance Anvuur et al. 2006). There is therefore the need to improve Al-the— efficiency, timeliness, and quality of construction and maintenance work in many developing countries.

Anvuur. et al (2006) argue that contracts for both works and services take very lengthy periods to reach financial closure and are subject to unnecessary delays. Amour. et al (2006) attribute the causes of the delays to extensive post-auard negotiations, delays in the preparation of technical specifications and drawings, delays in evaluation. reviews and approvals.

The World Bank report (2003) foresaw fiscal constraints and poor procurement practices have led to insecurity of funding for construction projects and created a constant spectre of delayed payments and payment arrears to contractors and consultants.

Thomas Bondzi (2010) admits that the manual of the Public Procurement or traditional procurement processes has certain disadvantages that increase cost as well as cause delays in the procurement process.

1.3 Aim

The aim of the study is to investigate the etÄèct of the Public Procurement Act (Act663) on time performance of project delivered in Ghana.

1.4 Objectives

The following objectives were identified to be of paramount importance in achieving aforementioned aim:

1. Identify the factors that define projects time performance;
2. Identify specific relations between such factors and the Public Procurement Act 2003 (Act 663);
3. Identify the critical factors affecting time performance at the pre-contract stage of public procurement, and
4. Identify the bottleneck in the Public Procurement Act that hinders project time performance.

1.5 Research Question

1. What are the factors that define projects time performance at the pre contract stage?
2. What are factors stated in the manual of the Public Procurement Act 2003 (Act 663)
3. What are the factors perceived as the most influential on project time performance at the pre contract stage?
4. What is the bottleneck in the Public Procurement Act that hinders project time performance at the pre contract stage?

1.6 Scope

The study focused on the operations of tender committees at the district level, consultant and contractors in relation to timing the tender stage. The geographical location of the Central Region was selected due to the decentralisation system being practised at the local

level hence a lot of common fund projects were procured. Competitive tendering for works was also considered in the study.

1.7 Significance

The findings of the study intended to improve project time performance of many construction projects in the region. The study would provide empirical data to facilitate proactive management action to improve the quality of procurement of construction works in Ghana.

1.8 Limitations of the Study

Some of the respondents were not available to participate in the research, while some members of the tender committee were not able to answer the questions because their background was not in construction.

CHAPTER TWO

DEVELOPMENT OF PUBLIC PROCUREMENT SYSTEMS IN

CONSTRUCTION INDUSTRY -A CONTEXTUAL REVIEW

2.1 Introduction

This chapter focuses on the literature review on the subject. The broad areas of this chapter include: the definition of procurement, reforms public procurement systems and construction industry, procurement rules and procedure, importance of procurement, challenges and consequences of procurement, procurement cycle, procurement assessment criteria and project performance and other African Public Procurement experience. It is intended for this chapter to unearth all the variables in the subject to enable analysis and discussion of the situation in the study area.

2.2 Procurement

Laryea (2012) recognises that the procurement process in construction covers the stages where the details of a project are specified, a builder is selected, and a contract awarded. The main difference of construction procurement and other related procurement is the scale and duration of the transaction. Construction work tends to take place over a long period of time, and infrastructure is expected to last many years.

The International Organisation for Standardisation on construction procurement describes the-prõCesses, methods and procedures for the establishment within an organization of a procurement system that is fair, equitable, transparent, competitive and cost-effective.

2.3 Reforms; Public Procurement Systems and Construction Industry

In most developing countries, the procurement function is transitioning from a clerical non-strategic unit to an effective socio-economic unit that is able to influence decisions and add value (Knight et al, 2007). Developing countries in one way or another have reformed their public procurement regulations. The reforms have not been limited to regulations only; they have included public procurement process, methods, procurement organizational structure, and the workforce. The reforms have been as a result of joint efforts with various development partners like the World Bank. International Trade Centre, WTO, and UNCTAD varying from country to country.

In 1996 the government of Ghana embarked upon an exercise to reform the Public Procurement System as an integral part of a wider Public Financial Management Reform Programme (PUFMARP). The exercise was to improve the overall public financial management in the country.

The reform exercise identified shortcomings and organizational weaknesses inherent in the country's procurement system. These include the absence of a comprehensive public procurement policy and the lack of a comprehensive legal regime to safeguard the integrity of the public procurement system. Others are the absence of a central body with the requisite capability, technical expertise and competence to develop a coherent public procurement policy.

Furthermore, the absence of clearly defined roles and responsibilities of individual procurement entities is a problem. There is no independent appeals process with power to address complaints from aggrieved bidders and provide corrective remedies. The lack of a clearly defined authority to allow procurement entities to undertake the procurement of goods, works and services with funds appropriated to them weakened the system and also needs to be addressed.

The enactment of the procurement law was needed to eliminate the various shortcomings and organizational weaknesses in the public procurement process.

In December 2003 the Government of Ghana enacted the Public Procurement Act 663. The Act became effective on 27th August 2004. It was a response to the bribery and corruption that was prevalent in the country's procurement system resulting in poorly executed projects which undermined the country's development. The Public Procurement Act 2003 is expected to promote competition, efficiency, transparency and accountability in the award of contracts to ensure that the country gets good value for its money. It established the Public Procurement Board, make administrative and institutional arrangements for procurement; stipulate tendering procedures and provide for purposes connected with these.

The Act superseded all existing procurement laws. It revoked the District Tender Board Regulation in 1975 and the Ghana National Procurement Agency Decree 1976.

(SMCD 55) and the Ghana Supply Commission Law 1990 (PNI)CL 245). The five basic pillars of a 'well-functioning procurement fiduciary management' are all addressed in the Public Procurement Act, which if completely implemented will create the necessary conditions for 'best value', transparency and accountability in public sector construction procurement (World Bank 2003).

However, the procurement reforms described above are not, of themselves, sufficient conditions for the achievement of value for money. The Country Procurement Assessment Report (CPAR) of Ghana in 2003 acknowledges this fact and calls for improved contract management and greater professionalism in the procurement litigation in order to reduce project time.

Procurement processes and procedures in Ghana have gone through a number of changes, with the main objective of reducing or at best eliminating corruption in public procurement, realizing value for money, efficiency in the procurement process among others. A major change was the passing of the Procurement Act, Act 663, in 2003.

2.4 Enactment of Public Procurement Act in African Countries

Records indicate that regulations affecting procurement practice in many African countries were enacted starting from 2003.

In Uganda, a wave of procurement reforms that begun in 1997, culminated into the

enactment of the Public Procurement and Disposal of Public Assets (PPDA) Act 2003, ané-yegulations 2003; Ghana had its act governing the public procurement in 2003 called the Public Procurement Act 2003 Act 663; Liberia was enacted in 2005 called Public Procurement and Concessions Act, 2005; Sierra Leone had its in 2004: Senegal called theirs Public Procurement Code which became their regulation in 2007; Republic of Benin had theirs in 2009 called the Public Procurement Code: In Zambia the Public Procurement Act 2008; In 2001 Botswana had the Public Procurement and Asset Disposal Act 2001; Kenya had their Public Procurement and Disposal Act in 2005; Malawi Public Procurement Act came into law in 2003; Rwanda Law on Public Procurement came into force in 2007; The Gambia Public Procurement Act was in 2001 : South Africa in 2009 had the Public Procurement Regulation; Tanzania had its in 2004 known as Public Procurement Act; Lesotho has the Public Procurement Regulation of 2006

In the next section the procurement strategy will be discussed in detail in finding out its importance to the procurement route.

2.5 Construction Procurement Strategy

The procurement strategy determines the appropriate procurement route, including the contract strategy, to fit the project objectives and current circumstances (OGC, 2003).

A procurement strategy describes the best way to achieve the objectives of a project and how to achieve best value for money on the basis of the whole life cost of an

infrastructure. A good procurement strategy would describe the methods and relationships involved in the acquisition of the works, goods, utilities and services (Laryea, 2012). He identifies some factors that affect procurement strategy as the project objectives; constraints: culture; risks; client's capabilities; and time. The objectives of a procurement strategy are to ensure that the correct goods and services are delivered at the correct time, cost and in the most effective way.

2.6 Procurement Assessment Criteria (PAC)

The construction industry involves risk at nearly every stage, once organisations, both consultancies and contractors, have been employed, then timely, correct decisions are essential to reduce risk and cost to clients and not inconsequentially, to the consultants and contractors themselves.

The design and construction of buildings is a balance, a compromise in the circumstances existing at the time between quality, time, cost and safety or put alliteratively, product, programme and price. Perpetually product quality will cost more and may be longer to achieve; programme time may need to be shorter than thought to be ideal, perhaps for commercial reasons, thereby causing product quality perhaps to be compromised and the price to increase.

Turner (1997) asserts that achieving the balance of product/ quality, with programme/ time and price/ cost is the challenge of building procurement. He identifies nine (9) procurement assessment criteria (PAC) as indicated below:

1. Timing

2. Controllable variation

3. Complexity

4. Quality level

5. Price certainty

6. Competition

7. Management

8. Accountability

9. Risk avoidance

2.7 Criteria Assessment of Procurement Method

2.7.1 Design and build procurement

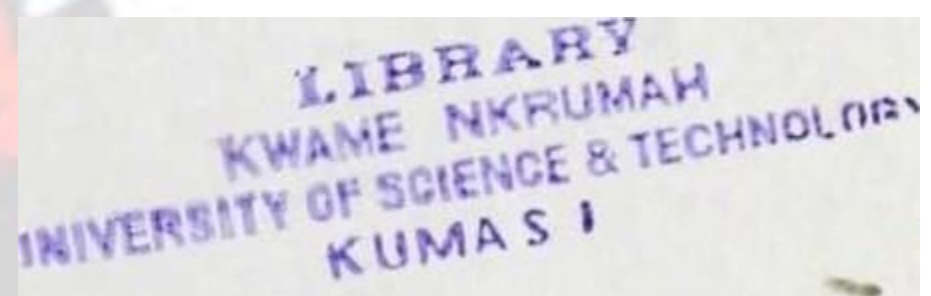
- ❖ Product- the quality may be as offered by a contractor or, more probably, as specified to a smaller or larger degree by a client's team and possibly developed by a contractor.
- ❖ Programme- the contract period is fixed but will be subject to extension if the client/ designer introduce changes, therefore some risk of over-run.
- ❖ Price- the contract price is fixed but is subject to adjustment if changes are introduced by the client/ designer, therefore some risk of price increase.

2.7.2 Traditional procurement

- ❖ Product- the quality is set out by the client's team and with proper monitoring of the contract requirement the quality level specified should be obtained.

- ❖ Programme- the contract period is fixed but will be subject to extension if the client/ designer introduce changes, therefore some risk of over-run.

——•XPrice- the contract price is fixed but is subject to adjustment if changes are introduced by the client/ designer, therefore some risk of price increase.



2.7.3 Management procurement

- ❖ Product- the quality is as the client's team specifies and with proper monitoring of the should be obtained.

- + Programme- whilst a programme is not usually a contract term a target date will be the objective of the management contractor or the construction manager but there is a risk of over-run.

- ❖ Price- price will not usually be fixed before construction starts. therefore a risk of price increase.

Rashid et al (2006) confirm that timing is disputably the principal reason why the traditional procurement route has lost some of its previous pre-eminence to procurement by design and build or by management routes.

2.8 Framework for Public Procurement

There is no comprehensive guidance on the scope and procedures of public construction procurement in Ghana. The procurement of construction works and services have been regulated mainly through circulars from the Ministry of Finance, which complement a set of procedures evolved by convention in connection with the control of procurement exercised by the ministry. Central, regional and district tender review boards review processes and provide concurrent approval to entity tender committees for contracts within thresholds defined by the Act. World Bank projects use the World

Bank Procurement Guidelines (World Bank 1995) and the World Bank Guidelines for selection of consultants (World Bank 1997).

The procurement method used for public works is the traditional method, with design split from construction. There is a provision for mandatory registration and classification of contractors under guidelines administered by the Ministry of Works and Housing. However, the Metropolitan, Municipal and District Assemblies maintain separate lists for the pre-qualification of contractors (Osei-Tutu et al, 2011).

The framework of procurement provided by the Act has statutory periods that must be observed. These mandatory periods add to the total pre-construction project time.

Prominent among these periods include

1. The period of meetings of the tender committees and the fact that before every meeting, notices must be served two weeks. This implies that meetings cannot

be held earlier than two weeks from the time meeting decisions are made (Clause 18).

2. Tenders need to be advertised in the newspapers for a period not less than 4 weeks

2.9 Procurement Methods Under Public Procurement Act 2003, Act 663

According to the Ghana's Procurement manual (PPB,2007) works is defined as work associated with the construction, reconstruction, demolition, repair or renovation of a building or structure or surface and includes site preparation, excavation, erection, assembly, instgllation of plant, fixing of equipment and laying out of materials,

decoration and finishing, and any incidental activity under a procurement contract.

The procurement methods that can be used for the procurement of Works are:

- International Competitive Tendering (ICT)
- National Competitive Tendering (NCT)
- Two-Stage Tendering (National or International)
- Restricted Tendering (National or International)
- Single Source (Direct Procurement)
- Request for Quotations (RFQ)

2.9.1 International Competitive Tendering

PPB, (2007) states that International Competitive Tendering is appropriate for high value or complex procurements, or where the works by their nature or scope, are unlikely to

attract adequate local competition. The Act requires the use of ICT for procurement of work above the threshold stated in Schedule 3.

2.9.2 National Competitive Tendering

In terms of lower value procurements, National Competitive Tendering is appropriate, where the works by their nature or scope are unlikely to attract foreign competition, or where there are justifiable reasons for the Procurement Entity to restrict tendering to domestic contractors. The Act permits the use of NCT for procurement of works valued between the thresholds stated in Schedule 3.

2.9.3 Restricted Tendering

The process by-direct invitation of a shortlist of pre-registered or known contractors is handled at the Restricted Tendering process, and is subject to a specific approval being granted by the Public Procurement Board:

It is an appropriate method of procurement where:

1. the requirement is of a specialised nature or has requirements of public safety, or public security which make an open competitive tender inappropriate;
2. due to the urgent nature of the requirement, an open competitive tender is not practical;
3. the number of potential contractors is limited; or
4. an open competitive tender has failed to bring an award of contract.

2.9.4 Two-Stage Tendering

PPB,(2007) identifies the Two-stage Tendering which a Procurement Entity invites tenderers in the initial stage to contribute to the detailed specification of the works. Following review and consultations, new detailed specifications for the works are prepared and a restricted tender issued in the second stage to all participants who were not rejected in the first-stage.

2.9.5 Single Source

Single source procurement from a supplier without competition (direct procurement) is subject to a specific approval using the Guidelines issued by PPB, (2007).

Single source procurement may be appropriate when: the purchase is for urgently needed remedial works, provided this is restricted to the minimum requirement to meet the urgent need until a procurement by other methods can be fulfilled; or the works can only

be provided by one source for physical, technical or policy reasons. e.g. requiring the use of proprietary techniques that are obtainable only from one source.

2.9.6 Request for Quotations (RFQ)

This is also known as -'shopping" and is based on comparing price quotations obtained from several suppliers, usually at least three, to ensure competitive prices.

Request for Quotations may be used when:

1. the estimated value is less than the threshold specified in Schedule 3 of the Act; and
2. the requirement is for widely available works activities such as redecoration, repairs, and minor alterations which do not require detailed specification and may be readily estimated by a contractor from a simple site visit.
3. For higher value or more complex requirements, it is recommended that a more appropriate Standard Tender Document and contract format should be used to protect the Procurement Entity.

The following paragraphs outline certain contents of the requirement of the tendering procedure covered in the Ghana Public Procurement Act 2003, Act 663.

2.10 Tendering Procedures

The Public Procurement Act 2003, Act 663 suggests the importance of project time performance at the following sections of the act which include:

2.10.1 Contents of Invitation to Tender and Invitation to Prequalify for International

Competitive Tender:

Section 48 clause (1) of the act notes that the invitation to tender shall contain the following information: (c) the desired or required time for the supply of the goods or for the completion of the works, or the timetable for the provision of the services;

2.10.2 Contents of tender documents and use of standard tender documents

Section 50 clause (1) Procurement entities shall use the appropriate standard tender documents stipulated in Schedule 4 with such minimum changes acceptable to the Board.

(3) The invitation documents shall include, (d) the nature and required technical and quality characteristics, in relation to the goods, works or technical services to be procured under section 33 including, but not limited to, (v) the desired or required time, if any when the goods are to be delivered, the construction is to be effected or the services are to be provided;

2.10.3 Submission of tenders

Section 53 clause (1) The procurement entity shall, (a) fix the place for, and a specific date and time as the deadline for the submission of tenders; and (b) allow tenderers at least six weeks to prepare their tenders for international competitive tendering. Clause (2) indicates that the time for preparation of tenders under national competitive tendering procedures shall not exceed four weeks.

2.10.4 Opening of tenders

Section 56 (2) the time for opening of the tenders shall be the same as the deadline for receipt of tenders or promptly after that deadline.

2.10.5 Evaluation of tenders

Section 59 (4) To determine the lowest evaluated tender, the procurement entity shall consider (b) the cost of operating, maintaining and repairing the goods or works, the time for delivery of the goods, completion of works or provisions of the services, the functional characteristics of the goods or works, the terms of payment and of guarantees in respect of the goods, works or services;

2.10.6 Acceptance of tender and entry into force of procurement contract

Section 65 (1) A tender that has been ascertained to be the successful tender in accordance with this Act shall be accepted and notice of acceptance of the tender shall be given within 30 days of the acceptance of the tender to the supplier or contractor submitting the tender.

Clause (7) If the supplier or contractor whose tender has been accepted fails to sign a written procurement contract within 30 working days of receipt of the notice of acceptance or fails to provide the required security for the performance of the contract, the procurement entity shall select a successful tender in accordance with section 59(3) from among the remaining tenders that are in force, subject to the right of the procurement entity to reject the remaining tenders.

2.10.7 Suspension of procurement proceedings

Section 82 clause (1) ~~Where review~~ proceedings are initiated, the procurement proceedings may be suspended for 7 days if the complaint is made.

2.11 Challenges of Existing Public Procurement Legislation

The Ghana Public Procurement Authority in its review in 2006 identified the weakness in the public institutions that need urgent attention. These are: inadequate of qualified procurement personnel, incorrect interpretation and application of some provisions of the procurement Act, cumbersome of clear procedures for emergency procurement, inadequate of training avenues or Institutions, record management (scattered files), handling of suppliers' complaints, mobilization & implementation, contract management and high cost of advertisement (PPA, 2007).

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

Osei-Tutu et al, (2011) in their work cited (ODPP, 2007) that building the capacity of service providers has been identified as one of the success factors of public procurement reforms. Many bidders are limited in various capacity issues including: lack of basic knowledge in the law, inadequate capacity to appreciate the standard tender documents, poor access to tender information and insufficient technical and managerial skills to be competitive in the tendering process.

Westring (1997) attributes the causes of the delays to extensive post-award negotiations, delays in the preparation of technical specifications and drawings, delays in evaluation, an extensive system of controls, reviews and approvals, and land ownership disputes. Project implementation has itself been characterised by extensive cost and time overruns and poor quality (Crown Agents 1998, Westring 1997, World Bank 1996, 2003)

The Construction Industry Development Board of South Africa in 2006 outlined some challenges facing the procurement process which acknowledge that the failure to comply with the legislative framework for procurement results in delay of the projects caused by lack of clarity in processes and procedures and at times end up in legal dispute.

It also indicates some short fall of the process as exclusion of certain eligible tenderers from competing for contracts; unfair and inequitable treatment of contractors; failure to achieve goals for which a preference is granted in the performance of the contract and escalation of project cost. Ofori (2007) concludes that the common feature of the existing procurement systems in developing countries is the amount of bureaucracy which results to inefficiencies, high costs and delays in project.

Osei-Tutu et al., (2011) comment that the public procurement is faced with the challenges imposed by a variety of environmental factors (external factors) such as market, legal environment, and political environment, organizational and socio-economic environmental factors. Regardless of the effort by the central government and its related

agencies and the acknowledgement that the procurement department is capable of adding value to the organization. still a large number of the internal act on their own and frequently bypass the procuring department.

2.12 Public Procurement Challenges: Internal Factors

Thai (2001) developed a model depicting the scope of public procurement that consists of five elements: policy- making and management; authorizations and appropriations; procurement regulations; procurement function in operations (processes, methods. organizational structure, and procurement workforce; and feedback) (Figure 2.1). Public procurement practitioners have always walked on a tight rope. Their ability to accomplish procurement objectives and policies is influenced very much by internal forces including:

- ❖ Interactions between various elements (as depicted by the five boxes in Figure 1) of the public procurement systems, various officials and organizations in the three branches of government, and various actors and sub-agencies within a department or executive agency and actors and organizations external to sub-agencies;
- ❖ Types of goods, services and capital assets required for an agency's missions;
- ❖ Professionalism or quality of procurement workforce;

_____ + Staffing levels (e.g., ratio of procurement practitioners to contract actions) and budget resources;

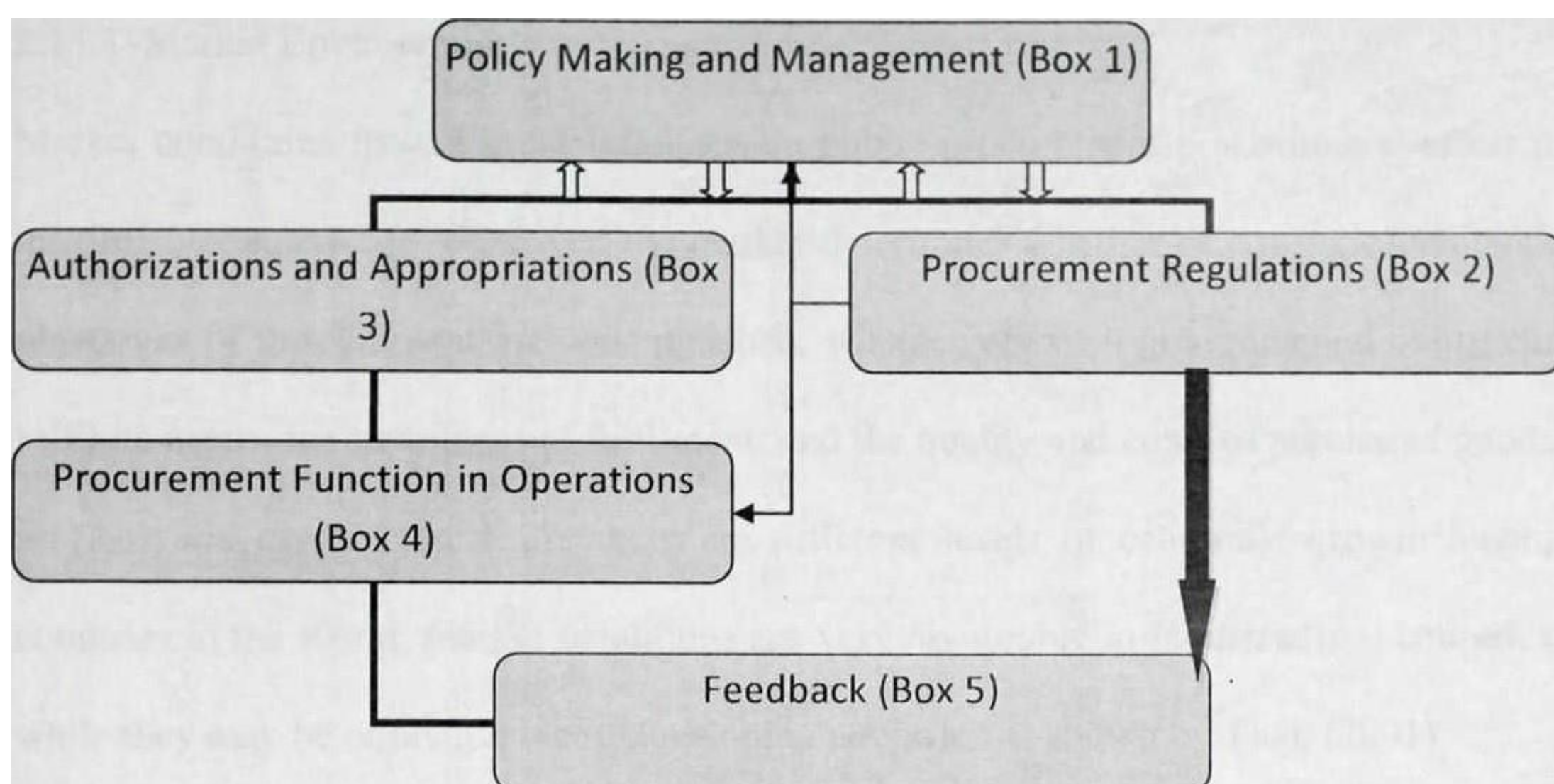


Figure 0.1: Procurement functions

Source: Thai (2001). Fig1.

- Procurement organizational structure such as the issue of centralization vs. decentralization;
- Procurement regulations, rules and guidance; and
- Internal controls and legislative oversight.

2.13 Public Procurement Challenges: External Factors

Thai, (2001) suggest that the Public procurement practitioners have always faced challenges imposed upon by a variety of environment factors including market, legal environment, political environment, organizational environment, and socio-economic and other environment factors.

2.13.1 Market Environment

Market conditions have a great influence on public procurement practitioners' effort to maximize competition. Moreover, the market determines whether or not socio-economic objectives of procurement are accomplished, whether or not a governmental entity can fulfil its needs; the timeliness of fulfilment; and the quality and costs of purchased goods, services and capital assets. As there are different levels of economic growth among countries in the world, market conditions are very favourable in industrialized countries, while they may be unfavourable in developing countries as shown by Thai, (2001)

Even under a perfectly competitive condition like that in the United States, some supplies and services are required only by the government (particularly for weapons systems) and are available in the market.

Also as markets become more and more globalized through regional and international trade agreements and treaties, public procurement practitioners face a greater challenge. In addition to compliance with their governments' procurement laws and policies and international trade requirements as mentioned above, they face additional challenges including communication, currency exchange rates and payment, customs regulations, lead-time, transportation, foreign government regulations, trade agreements. and transportation. Thus, "before embarking on a foreign purchasing program, public procurement practitioners must carefully assess the total cost implications and compare them to domestic costs" (National Institute of Governmental Purchasing, Inc., 1999, p. 34). Public procurement practitioners are torn between free trade agreements and their countries' economic development/stabilization policies when they face a hard choice between selecting domestic or foreign firms (Thai, 2001).

2.13.2 Legal Environment

Thai, (2001) argues that apart from public procurement regulations and rules, the legal environment refers to a broad legal framework that governs all business activities including research and development (regulations dealing with safety and health of new products), manufacturing (safety and health regulations at workplace and pollution control), finance (regulations dealing with disclosure of information), marketing (regulations dealing with deceptive advertising, disclosure of product characteristics), personnel (regulations dealing with equal opportunity for women and minorities), and contracts. Indeed, most aspects of contracts—public or private-- such as contract requirements, disputes, and breach of contract are governed under the same contract law. In developing and particularly transitional countries, where legal systems are not comprehensive, government contracts may need detailed provisions.

2.13.3 Political Environment

In a democracy many individuals, groups, and organizations in the private sector including trade associations, professional associations, and business firms or companies (commonly known as interest groups) are actively involved in all aspects of the public procurement system. Having various interests, objectives and beliefs, interest groups are involved in the public procurement system in several ways such as lobbying legislative bodies to pass or alter statutes, influencing implementation of these statutes, and influencing budget authorization and appropriations processes. Normally, a government program that is eventually adopted is a compromise among different views

of interest groups, policy makers and management. In this democratic environment, there are cases of a strong coalition of policy makers, bureaucrats and interest groups in their effort to get their programs adopted. This coalition has led to the concept of the 'iron triangle,' which is very popular in the area of defence procurement (Thai, 2001).

Public procurement practitioners have choices as they face various political pressures as well as sound economic decisions. This issue is more common in developing countries where perfect competition hardly exists. Large firms are more willing to make a small profit margin or even to take business losses by offering best bids. After small and weak firms are out of business, they will enjoy an imperfect competitive market.

2.13.4 Social, Economic, and Other Environment Forces

Thai, (2001) admits that while some countries impose social policies on their public procurement practices (such as a policy placing a fair proportion of government acquisitions with woman/minority owned small business, or economically disadvantaged areas), most governmental entities be it a developed or developing country or federal, state, and local governments use their large procurement outlays for economic stabilization or development purposes by preferring national or local firms over firms from other countries or other geographic locations. This environment would have a great impact on their practices as they may face an imperfect competitive market.



In addition to social and economic environment, public procurement practitioners are under other external pressures such as an environment protection movement, and foreign policy commitments.

2.13.5 Environmental Protection Concern or Green Procurement

Environment protection has been present in every country developed and developing-and environmentalists have placed a great deal of pressure on public procurement practitioners. This type of pressure can be seen frequently and across countries (Thai, 2001).

2.13.6 Foreign Policy

Many countries have used public procurement as a tool to achieve specific foreign policies. For example, in the 1980s, the Pakistani government bought 28 F-16 fighter jets, but the United States government withheld the contract because Pakistan was pursuing, against American wishes, the development of nuclear weapons. Public procurement practitioners in poor and weak countries are frequently facing the problem of having to deal with the foreign policy of other nations in their procurement decisions (Thai, 2001)

2.13.7 Environmental Forces

The public procurement system is also influenced by culture and technology. In a culture where giving gifts is a customary public relation practice, it is difficult to distinguish between gifts and bribes.

2.14 Understanding Current Public Procurement

The evolution of procurement, from a bureaucratic, manual process to an IT systems based approach has not obviated the apparent need to continue the search for a perfect public procurement system. Conflicting demands include the need to enhance government management of procurement within the constraints of a tender-driven contracting policy framework, while assuring high levels of probity, accountability and transparency, whilst also satisfying the diverse governance expectations of stakeholders.

Public/private partnerships have become more and more popular in public procurement, according to Thai, (2001). At the moment, there are several cases which give deep insights into the success factors of PPPs. As a result, PPPs are also seen as one key element for reforming the public sector in Germany, and leading towards many challenges for public procurement. As a result, PPPs are also seen as one key element for reforming the public sector in Germany, and leading towards many challenges for public procurement.

The next section tries to review other researchers work on factors that define projects performance in the construction industry and in what ways can the procurement system affects the project delivery.



2.15 Procurement Planning

Procurement Planning is a process of determining the procurement needs of an entity and the timing of their acquisition and their funding such that the entities operations are met as required in an efficient way.

2.16 Project Performance

The performance of construction in Ghana is poor and many reports have decried the public sector's lack of commercial edge in the exercise of its procurement function. Contracts for both works and consultancy services take very lengthy periods to reach financial closure and are subject to unnecessary delays (Anvuur et al. 2006).

A document of World Bank in 1996 concludes that fiscal constraints and poor procurement practice have led to insecurity of funding for construction projects and created a constant spectre of delayed payments and payment arrears to contractors and consultants. The accumulated interest on late payments and the frequent price changes due to extensive renegotiations, further exacerbate the funding problem (World Bank. 1996).

Rose (1995) defines performance measurement as the process of evaluating performance relative to a defined goal. It provides a sense of where we are and, more importantly, where we are going. She further stated that measurement can guide steady advancement toward established goals and identify shortfalls or stagnation. Willis and Willis (1996)

maintain the importance of measuring performance because it will indicate status and direction of a project.

It is widely accepted view that, at a minimum, performance measures of a project are based on time cost and quality (Barkley and Saylor, 1994). Atkinson (1999) noted that these three components of project performance as the 'iron triangle'. Conversely, Kumaraswamy and Thorpe (1999) suggest some criteria in measuring a project time performance. This includes meeting budget, schedule, and the quality of workmanship, stakeholder's satisfaction, transfer of technology, and health and safety. Similarly, Chan and Tam (2000) noted that various other key components also used in measuring project performance such as health and safety, environmental performance, user expectation/satisfaction, actor's satisfaction and commercial value.

Rashid et al (2006) point out that, in today's highly competitive and uncertain business environment, the client who is the major stakeholder, want speedier delivery of their project with early start of construction work, certainty of performance in term of cost, quality and time, value for money for their investment, minimal exposure to risk and early confirmation of design and price or cost.

Five variables have been identified for measuring project performance. They are cost, time, quality, health and safety and functionality,

2.17 Cost performance

Bubshait and Almohawis (1994) defines cost as the degree to which the general conditions promote the completion of a project within the estimated budget. Salter and Torbett (2003) indicate that cost variance was the most common technique used to measure design performance. It is not only confined to the tender sum, but the overall cost that a project incurs from inception to completion, which includes any costs arise from variations, modification during construction period and the cost arising from the legal claims, such as litigation and arbitration. It can be measured in terms of unit cost, percentage of net variation over final cost (Chan and Tam, 2000). Cost variance is a very important factor in measuring project performance because it indicates how much the project is over or under budget. Similarly, Georgy el al (2005) suggested the element of cost to measure the performance of engineering projects.

2.18 Time performance of project

It is very important for construction projects to be completed on time, as the clients, users, stakeholders and the general public usually looks at project success from the macro view where their first criterion for project success appeared to be the completion time (Lim and Mohamed, 2000). Salter and Torbett (2003) and Odell and Battaineh (2002) believe that time variance is one of the techniques for assessing project performance in construction projects. The element of time could indicate to project managers that the project was not running as smoothly as scheduled. Furthermore, Latham Report in 1994 suggested that

ensuring timely delivery of projects is one of the important needs of clients of the construction industry. Construction time can be regarded as the elapsed period from the commencement of site works to the completion and handover of a building to the client. The construction time of a building is usually specified before the commencement of construction—Construction time can also be deduced from the client's brief or derived by the construction planner from available project information. This period could account for an equal project time as the execution of works.

2.19 Quality performance

In the construction industry, quality is defined as the totality of features required by a product or services to satisfy a given need, or fitness for purpose (Parfitt and Sanvido, 1993). In other words, the emphasis of quality in construction industry is on the ability to conform to established requirements. Requirements are the established characteristics of a product, process or service as specified in the contractual agreement and a characteristic is any specification or property that defines the nature of those products, processes or services, which are determined initially by the client. In order to achieve a completed project that meets the client's expectations, all parties to a project must acquire an understanding of the client's expectations towards quality, incorporate them into the contract price and other contract documents to the extent possible, and commit in good faith to carry them out (Ganaway, 2006)

2.20 Health and safety

Bubshait and Almohawis (1994) defines Health and safety as the degrees to which the general conditions promote the completion of a project without major accidents or injuries. The measurement of safety is mainly focused on the construction period as most accidents occur during this stage. Throughout the world, construction industry is known as one of the most hazardous activities. Sousa and Teixeira (2004) notes that thousands of people are killed and disabling injury annually in industrial accident and they conclude



that construction workers worldwide have three times more chances of dying and two times more getting injured than any worker of other economic activity). In Malaysia, Social Security Organization (SOCSO) reported out of the total of 73 858 industrial accidents recorded in 2003, 4654 were occurred in construction industries with 2 per cent or 95 cases resulting in deaths. There is no single reliable measure of health and safety performance. Traditionally, the safety performance is measured through injury statistic. The main purpose of measuring health and safety performance is to provide information on the progress and current status of the strategies, processes and activities employed to control health and safety risks. Effective measurement not only provides information on what the levels are but also why they are at this level, so that corrective action can be taken.

2.21 Functionality

Chan (2001) considers 'functionality' as one success measure that is made in the post construction phase when the project is finished and delivered to service. Kometa et al (1995) argue that there would be no point in undertaking a project if it does not fulfil its intended function at the end. This indicator correlates with expectations of project participant and can best be measured by the degree of conformance to all technical performance specifications (Chan et al, 2002). Both financial and technical aspects implemented to technical specifications should be considered, achieving the fitness for purpose objective. Songer and Molenaar (1996) explain specification as workmanship

guidelines provided to contractors by clients or clients' representatives at the commencement of project execution. The measure of technical specification is to the

extent that the technical requirements specified can be achieved. In addition to that , Songer and Molenaar (1997) consider meeting specifications as one success criterion for design-and-build projects that is consistent with the measurement of technical performance, which is to be measured in both the preconstruction and construction phases when the technical requirements are laid down.

2.22 Critical Success Factors in Project Performance

Researchers have identified critical success and failure variables impacting on project performance. Belassi and Tukel (1996) admit some critical factors as: define of clear project goal, top management support, personnel recruitment and adequate project funding and planning for construction projects. The findings in Belassi & Tukel were supported by another research conducted by White and Fortune (2002). White and Fortune (2002) had drawn a conclusion that the three most critical Factors to the project's outcome were establishment of clear goals or objectives, support from senior management and adequate project funds or resources. Furthermore, according to Nguyen et al, (2004) their research had identified five critical success factors in project performance. These critical factors included competency of project manager, adequate funding until project completion, multidiscipline or competency of project team, commitment to project and availability of required resources.

Lim and Mohamed, (2000) attribute delayed payments by the client, shortage of labours, low labour productivity and delay in material delivery as the causes leading to project failure. In addition, project failure that related to personnel performance such as lack of

experience, site supervision, appropriate skills and knowledge were the top four possible problems encountered in modern construction industry (Lim & Mohamed, 2000). Odeh & Battaineh (2002) assert eight precise factor groups as suggested causes leading to project failure. The factor groups were listed as: client related, contractor related, consultant related, material related, labour and equipment related, consultant related, contract related and contractual relationships.

2.23 Stakeholders in Construction Industry

Doloi and Lim (2007) note that there is more comprehensive and extensive modern procurement methods were designed to preserve stakeholders' rights in the construction industry. It is reasonable to state that, as the clients' requirements on construction projects increase, the complexity of the projects will be increased proportionately. Therefore, greater risk of failures for medium to large size projects to achieve required project scope, time, cost and quality are expected.

3.1 Introduction

'This chapter focuses on the procedures and techniques that were used to conduct this empirical study. It is a quantitative research that measured with numbers, and analysed with statistical procedures in order to determine whether the theory holds true. Therefore primary and secondary data were the main basis of the study.

It contains the research design, target population, sample frame and size, sampling design, sampling procedures, and the research instrument structure and content. Measures had also been taken to ensure reliability and content validity. Finally, methods of data processing, analysis, and presentation were discussed, and followed by a statement on the discussion chapter.

3.2 Research design

The research is primarily quantitative in nature. The research strategy that was used to implement the empirical research comprehensive literature reviews on the above objectives was reviewed to see what other researchers have done, to gather the information on the factors that influence the time performance of construction projects from the previous researchers. Census method was used to cover the entire twenty districts in the Central region and purposive sampling technique was used to select the respondents who served on the tender board committee and the contractors in the researched locality. Structured questionnaires were used. Textual Analysis method involving content analysis was adopted to verify the time performance of the projects as stated in the Public Procurement guideline manual.

3.3 Target Population:

There are Two hundred and sixty-six (266) members of tender committees and tender review board in the twenty (20) districts in Central Region including the Regional Tender

Review Boards, comprising 6 tender committees members in each district, 5 district tender review board members and 5 regional tender review board members. There are also forty (40) registered construction firms with the Architectural Engineering Service Limited (AESL) in Cape Coast and one (1) consultant.

3.4 Sampling design

Census method was used to select all the twenty districts in the Central Region and purposive sampling technique which is a non-probability sampling technique was used to select the members of the district tender committee, Tender Review Board, contractors and the consultant in the districts in Central Region. This is because it was believed that all the members of both the tender committee and tender review board were in the best position to respond to the research questions.

In view of this a total of Two hundred and forty-six (246) members of tender committees and tender review board including twenty (20) contractors and a consultant from the twenty (20) districts in Central Region including the Regional Tender Review Board were purposively selected from the twenty districts including the Regional Tender Review Board members. A sample frame was derived from the associations of contractors. Simple random technique was employed to select the sample size of twenty contractors. The overall population was 40 and each contractor was assigned a number from 1 to 40 and table of random numbers was used to get the required number.

3.5 Sampling Procedure

Adequate measures were taken to minimize bias as a prelude to the sample selection process. For instance, the study ensured that the respondents were within the research area.

The rationale for adopting the census and purposive methods were because of its feasibility and the need to ensure fair representation of each stratum as well as increase precision. The techniques were adopted because it is the most trustworthy method of securing a truly representative of a population; it also ensures that all forms of researcher biases are eliminated. After ensuring that the selection procedures had guaranteed a sufficiently representative working sample the next step was to develop a measuring instrument for gathering data from respondents.

3.6 Research instrument structure and content

Questionnaire was the main data collection instrument used for the study. Two formats of opinion questions (subjective measurement) were used to collect the data and these were the checklist and rating scale. The checklist question format was used because it is specially designed for a group of respondents who have accurate information and can answer the questions with a high degree of certainty. The respondents in this research are the district tender committee members, tender review board members, contractors and a consultant hence checklist question format was used. Rating scale was the second question format that was used, it is the most common format for questioning respondents on their opinions of an object or attribute. The rating scale also reflects the intensity of the particular judgment involved hence the research wanted to find out on the factors that influence the time delivery at the pre-contract stage. The questionnaire was appropriate because it was assumed that the procurement officials as well as the contractors and consultants were literate and for that matter they could be able to respond to the questions unaided. Questionnaire facilitated the collection of data that ensured the best matching of concepts with reality; it provided the same responses from a given set of respondents and helped reduce inconvenience caused by unfavourable interview times and busy schedules.

Two hundred and forty- six (246) questionnaires were sent to all members of the District Tender Committee and the Review Board members including the contractors and consultant in all the twenty districts in the region. One hundred and sixty (160) questionnaires were answered and returned representing a response rate of 65%.

Generally emphasis was placed on operations of tender committee at the district level, consultants and contractors in relation to the duration pre-contract procurement stage as explained earlier in the paper.

3.7 Validity and reliability of procedures

Questionnaire and interview items were peer reviewed and cross validated by people with research experience to ensure scale consistency, reliability, and content validity.

Preliminary findings were also rechecked for accuracy and consistency.

This stage revealed the suitability of the methods and instruments that were employed in the study. This consequently led to early detection of errors and distortions in the questionnaire which were corrected in the process. This helped the researcher to familiarize himself with the research environment and also offered the opportunity to practice research in real situation before the main study began (Sarantakos, 1998: 292293).

3.8 Data processing and analysis

Descriptive statistics method was used to analyse the data. A measure of central tendency was applied to find the most typical value for the critical factors that influence time performance at the pre-contract stage. Hence data analysis involved calculations of means and standard deviation, and construction of tables. Quality control chart graph was employed to analyse the data whether the actual duration data conformed to the standard

duration data stated in the Manual of the Public Procurement Act 663 and frequencies to facilitate the description and explanation of findings.



CHAPTER FOUR

RESULTS, ANALYSIS AND DISCUSSIONS

4.1 Introduction

The chapter presents results, data analysis and interpretation. Descriptive statistics method was used to analyse the data. A measure of central tendency was applied to find the most typical value for the critical factors that influence time performance at the precontract stage. Hence data analysis involved calculations of means and standard deviation to measure the degree in which the data is spread around the mean, and construction of tables. Quality control chart was employed to analyse the data whether the actual duration data conformed to the standard duration data stated in the Manual of the Public Procurement Act 663 and frequencies to facilitate the description and explanation of findings.

4.2 Identification of factors that define projects time performance

The first objective was to identify the factors that define projects time performance and from the findings presented on Table 4.1 identified eight factors that define the time performance and these are Preparation of Tender Documents; Prior Review/ Entity Tender Committee /Tender Review Board; Advertising/Tender Invitation; Tender Close/()pening: Tender Evaluation and Report Submission; Post Review/ Entity Tender Committee /Tender Review Board approval; Contract Award and Contract Signature.

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Item	Factor Or Activity Description	Ratings based on the respondents experience over time								
		Least Influential			Most Influential					
		1	2	3	4	5	Total	Mean	Standard Deviation	
1	Preparation of Tender Documents	105(105)	12 (24)	25 (75)	13 (52)	5 (25)	281	1.76	0.88	
2	Prior Review/ ETC/TRB	58 (58)	81(162)	12 (36)	6 (24)	3 (15)	295	1.84	0.63	
3	Advertising/Tender Invitation	14 (14)	8 (16)	30 (90)	33(132)	75(375)	627	3.91	0.65	
4	Tender Close/Opening	128(128)	17(34)	10 (90)	3 (12)	2 (10)	274	1.71	0.60	
5	Tender Evaluation and Report Submission	1 (1)	4 (8)	23 (69)	34(136)	98(490)	704	4.40	0.41	
6	Post Review/ ETC/TRB approval	2(2)	3(6)	6 (18)	42 (168)	107 (535)	729	4.56	0.35	
7	Contract Award	68 (68)	49(98)	28(84)	12(48)	3 (15)	313	1.95	0.61	
8	Contract Signature	90 (90)	45 (90)	15(45)	5 (20)	5 (25)	270	1.69	0.76	

$$SD = \sqrt{\frac{\sum_{i=1}^n f_i (x_i - \bar{x})^2}{\sum f - 1}}$$

4.3 Identification of specific relations between factors in objective (1) and the Public Procurement Act 2003 (Act 663)

Textual analysis method involving content analysis was employed to verify the time performance of the projects as stated in the Public Procurement guideline manual. The manual came out with Estimated lead times for National Competitive Tendering of works. Table 4.2 shows the standard time giving to each of the activities that defines the factors in objective (1).

Table 0.2: Estimated Lead Times for National Competitive Tendering (Works)

NO.	ITEM	MINIIMUM "MME. (WEEK(S))	MAXIMUM TIME (WEEK(S))
	Preparation of Tender Documents	2	
2	Prior Review/ ETC/TRB		2
3	Advertising/Tender Invitation	2	4
4	Tender Close/Opening	Same date	Same date
5	Tender Evaluation and Report Submission	2	4
6	Post Review/ ETC/TRB approval		2
7	Contract Award		2
8	Contract Signature		3
	TOTAL	10	21

Source: Manuals-Public Procurement Act, 2003(Act 663)

The content analysis on the Public Procurement guideline manual revealed that the minimum standard time is ten (10) weeks and the Maximum standard time is twenty-one (21) weeks. The maximum Estimated lead times for National Competitive Tendering of works involving the Preparation of Tender Documents; Advertising/Tender Invitation and

Tender Evaluation and Report Submission recorded maximum duration of four (4) weeks each.

4.4 Identification of the critical factors affecting time performance at the precontract stage of the Public Procurement Process

The third objective focuses on identifying critical factors affecting time performance at the pre-contract stage of the Public Procurement process. The Table 4.3 looks at the critical factors affecting time performance at the pre-contract stage of the Public Procurement Act, 2003(Act 663) using the means, variances and the Standard deviations.

Table 0.3: Critical factors affecting time performance at the pre-contract stage of the Public Procurement Act, 2003(Act 663)

NO	FACTORS/ ACTIVITY	MEAN	Variance	Standard Deviation
	Post Review/ Evaluation Tender Committee / Tender Review Board approval	4.56	0.13	0.35
2	Tender Evaluation and Report Submission	4.40	0.17	
3	Advertising/Tender Invitation	3.91	0.42	0.65
4	Contract Award	1.95	0.38	0.61
5	Prior Review/ Evaluation Tender Committee / Tender Review Board	1.84	0.40	0.63
6	Preparation—of Tender Documents	1.76	0.77	0.88
7	Tender Close/()pening	1.71	0.36	0.60
8	Contract Signature	1.69	0.57	0.76

The analysis on Table 4.3 shows that the above factors identified were also largely accepted by the respondents who are members ol' the procurement Entity Tender

Committees, Tender Review Boards, and contractors. From the findings using the means, variances and the Standard deviations two critical factors that influenced the time performance of the pre-contract stage of the Public Procurement were identified as Post Review/ Entity Tender Committee / Tender Review Board approval and Tender Evaluation and Report Submission. It is apparent that Post Review/ Entity Tender Committee / Tender Review Board approval topped the critical factors with a mean rating of 4.56 and a standard deviation of 0.35, it was followed by Tender Evaluation and Report Submission with a mean rating of 4.40 and a standard deviation of 0.41. With the standard deviation values for the two critical factors the values were small hence there was no greater variation from the mean hence the information is empirical accurate. Though the Advertising/render Invitation had a mean of 3.91 however the standard deviation value was higher recording 0.65 indicating a greater amount of variation this is because most of the districts used the maximum stipulated duration giving in the Public Procurement manual of Ghana. Post Review/ Entity Tender Committee / Tender Review Board; Tender Evaluation and Report Submission were perceived as the factors whose durations are most unstable and hence frequently affects project time performance at the procurement stage of a project. Though Contract Award; Prior Review/ Entity Tender Committee / Tender Review Board Tender Close/()opening and Contract Signature, recording mean of 1.95; 1.84; 1.71 and 1.69 respectively, were perceived to be less influential.

4.5 Identification of the bottleneck in the public procurement Act that hinders project performance

The fourth objective was to identify the bottleneck in the public procurement Act that hinders project performance. From the data collection most of the tender committee members in the districts noted that most of the members at times do not meet the quorum

and the reason given was that members of these committees mostly offer these services for free. It is therefore not possible to leave their mainstream economic activities and attend to the duty call of tender committees and tender review boards. Consequently, there must be considerations on which critical evaluation reports must be subjected to approval of these committees.

The financial thresholds was also a factor that created some challenges though, this was duly captured in Section 94 deals with Review of threshold levels and indicated that the threshold levels specified in Schedule 3 of the Act (Act 663) as shall be reviewed by the board and presented by the minister for approval of Parliament. findings from the districts revealed that the figures have been reduced in value due to price escalations over the 9 years period of existence of the Act. The Procurement law may need to be reviewed to make adequate provision to accommodate the effect of price adjustment. This provision may control the types of projects forwarded to these committees. reduce stress on their function, improve quality of procurement reviews and also improve the time performance of projects in the country. In order to improve efficiency and speedy delivery of reviews and approval—OT evaluatory-re-visions for remuneration of members should be considered.

Consequently, persons must be motivated to be efficient with time in the preparation of document, and evaluation reports. In addition, members of tender committees must be encouraged to be timely in review and approval of evaluation reports.

It is therefore obvious that one may need to control the duration of these activities in order to reduce the time for pre-contract activities.

Tender Invitation which is also considered as an activity with high influence on project time performance appears to have inflexible time duration. This is so because the Act has

categorically indicated how much minimum time notices must be placed in newspapers before tenders are opened. Consequently, much may not be achieved in trying to reduce the duration of this activity. However, respondents were clearly of the view that tender closing or opening and contract award (after approval from the committees) do not pose a threat to the time performance of the project.

In spite of these general trends in the influence of the various factors (activities) on the time performance of projects, the various districts have portrayed variations in durations of pre-contract procurement of stage of projects (Table 4.3 above). This variation could be attributed to differences in how each district might manage the critical influencing factors such as 'review/ approval by the Entity Tender Committee /Tender Review Board', and 'Tender Evaluation and Report Submission'.

DURATION IN WEEKS AT THE DISTRICTS IN CENTRAL REGION																								
DISTRICTS																								
NO.	ITEM	Minimum Time (Week(s))	Maximum Time (Week(s))	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
1	Preparation of Tender Documents	2	4	3	4	4	3	3	3	2	2	3	4	2	4	4	3	2	4	2	4	3	2	
2	Prior Review/ ETC/TRB	1	2	1	2	2	4	1	1	1	2	1	2	2	2	2	4	2	4	2	2	2	2	
3	Advertising/Tender Invitation	2	4	4	4	4	4	2	2	2	4	4	4	2	4	4	4	4	2	4	4	4	2	
4	Tender Close/Opening	Same date (SD)	Same date (SD)	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	SD	
5	Tender Evaluation and Report Submission	2	4	2	2	5	2	2	2	2	4	5	5	5	4	2	5	5	4	5	5	4	4	
6	Post Review/ ETC/TRB approval	1	2	1	4	5	1	4	1	2	4	4	3	4	5	4	4	5	2	4	4	3	4	
7	Contract Award	1	2	2	4	4	5	5	1	2	2	2	2	2	2	2	2	2	2	2	2	3	2	
8	Contract Signature	1	3	1	2	1	2	1	2	1	1	1	3	2	4	2	3	2	1	2	2	1	2	
	TOTAL	10	21	14	22	25	21	18	12	12	19	20	23	19	25	20	25	22	19	21	23	20	18	

Source: Manuals-Public Procurement Act, 2003(Act 663) and Field work

Source: Manuals-Public Procurement Act, 2003(Act 663) and Field work

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A

From the findings District A recorded fourteen (14) weeks and was within the maximum and minimum period stated in the manual of the Public Procurement Act 663 of Ghana. The district fully utilized the maximum time given for advertisement.

District B

The findings as shown in Table 4.4 revealed that District B spent additional two weeks at the contract award stage and the Post Review/ Entity Tender Committee/Tender Review Board approval stage that accounted for the actual duration of twenty-two weeks exceeding the standard maximum period of twenty-one weeks. The reason given is that more time was spent in preparing the documentation of the contract.

District C

District C had some challenges with the actual duration used for the following activities: Tender Evaluation and Report Submission, Post Review/ Entity Tender Committee/Tender Review Board approval and Contract Award, the district used additional periods of 1,3 and 2 weeks respectively hence recording twenty-five (25) weeks exceeding the standard maximum period of twenty-one (21) weeks. The district topped those districts under consideration as using more additional duration.

District D

District

District D utilized the maximum period of 21 weeks though the district spent additional two weeks on the Prior Review/ Entity Tender Committee/Tender Review Board and three weeks on the Contract Award. The reason given was on some detail of the contract not being completed and also documentation challenge.

District E

District E recorded an actual time of eighteen (18) weeks and was able to work within the maximum period of 21 weeks though the district spent additional two weeks on the Post Review/ Entity Tender Committee/Tender Review Board approval and three weeks for contract award. The reason given was that most of the review members are not workers at the assembly but expert from other departments so there is a challenge when they are invited moreover they are not paid as tender review board members, so some are not motivated to carry out the activity.

District F

District F recorded twelve (12) weeks and was within the maximum and minimum period stated in the manual of the Public Procurement Act 663 of Ghana. Though the district went beyond the minimum often (10) weeks.

District G

District G recorded twelve (12) weeks and was within the maximum and minimum period stated in the manual of the Public Procurement Act 663 of Ghana. Though the district went beyond the minimum often (10) weeks.





H

District H recorded an actual time of nineteen (19) weeks and was able to work NS itthin the maximum period of 21 weeks though the district spent additional two weeks on the Post Review/ Entity Tender Committee/Tender Review Board approval. The reason given was that most of the review members are not workers at the assembly but expert from other departments so there is a challenge when they are invited moreover they are not paid as tender review board members. so some are not motivated to carry out the activity.

District I

District I recorded an actual time of twenty (20) weeks and was able to work within the maximum period of 21 weeks though the district spent additional two weeks on the Post Review/ Entity Tender Committee/Tender Review Board approval and one week for Tender Evaluation and Report Submission. The reason given was that most of the review members are not workers at the assembly but expert from other departments so there is a challenge when they are invited moreover they are not paid as tender review board members, so some are not motivated to carry out the activity.

District J

From the data collection District J was not able to achieve the standard maximum duration given by the guideline of the Public Procurement manual. Tender Evaluation and Report Submission and Post Review/ lžntity Tender Committee/Tender Review Board approval, the district used additional periods of 1 and week respectively hence recording twenty-three (23) weeks

eding the standard maximum period of twenty-one (2 1) weeks.

District
K

District K recorded an actual time of nineteen (19) weeks and was able to work within the maximum period of 21 weeks though the district spent additional one week in Tender Evaluation and Report Submission and two weeks on the Post Review/ Entity Tender Committee/Tender Review Board approval. The reason given was that most of the review members are not workers at the assembly but expert from other departments so there is a challenge when they are invited moreover they are not paid as tender review board members, so some are not motivated to carry out the activity.

District L

District L had some challenges with the actual duration used for the following activities: Post Review/ Entity Tender Committee/Tender Review Board approval and Contract Signature, the district used additional periods of 3,1 and 2 weeks respectively hence the twenty-five (25) weeks exceeding the standard maximum period of twenty-one (21) weeks. The district C, L and N topped those districts under consideration as using more additional duration.

District M

District M recorded an actual period of twenty (20) weeks and was able to work within the maximum period of 21 weeks though the district spent additional two weeks on the Post Review/ Entity Tender Committee/Tender Review Board approval. The reason given was that most of the review members are not work s at the assembly but expert from other departments so there is a challenge—when they are invited moreover they are not paid as tender review board members, so some are not motivated to carry out the activity.

District
N

District N had some challenges with the actual duration used for the following activities: Prior Review/ Entity Tender Committee/Tender Review Board, Tender Evaluation and Report Submission and Post Review/ ETC/TRB approval, the district used additional periods of 2,1 and 2 weeks respectively hence recording twenty-five (25) weeks exceeding the standard maximum period of twenty-one (21) weeks. The district topped those districts under consideration as exceeding the maximum limit. The district C,L and N topped those districts under consideration as they use additional period beyond maximum period.

District O

District O had some challenges with the actual duration used for the following activities: Tender Evaluation and Report Submission and Post Review/ Entity Tender Committee/Tender Review Board approval, the district used additional periods of 1 and 3 weeks respectively hence recording twenty-five (22) weeks exceeding the standard maximum period of twenty-one (21) weeks.

District P

District P recorded an actual duration of nineteen (19) weeks and was able to work within the maximum period of 21 weeks though the district spent additional two weeks in Prior Review/ Entity Tender Committee/Tender Review Board. The reason given was that most of the review members are not workers at e assembly but expert from other departments so there is a

District
challenge-when they are invited moreover they are not paid as tender review board members,
so some are not motivated to carry out the activity.

Q

District Q utilized the maximum period of 21 weeks though the district spent additional one week on Tender Evaluation and Report Submission and two weeks on the Post Review/ Entity Tender Committee/Tender Review Board approval. The reason given was on some detail of the contract not being completed and also documentation challenge.

District R

District R had some challenges with the actual duration used for the following activities: Tender Evaluation and Report Submission and Post Review/ Entity Tender Committee/Tender Review Board approval, the district used additional periods of 1 and 2 weeks respectively hence recording twenty-five (25) weeks exceeding the standard maximum period of twenty-one (21) weeks.

District S

District S recorded an actual time of twenty (20) weeks and was able to work within the maximum period of 21 weeks though the district spent additional one week on the Post Review/ Entity Tender Committee/Tender Review Board approval and one week Contract Award. The reason given was that most of the review members are not workers at the assembly but expert from other departments so there is a challenge when they are invited moreover they are not paid as tender review board members, so some are not motivated to carry out the activity.

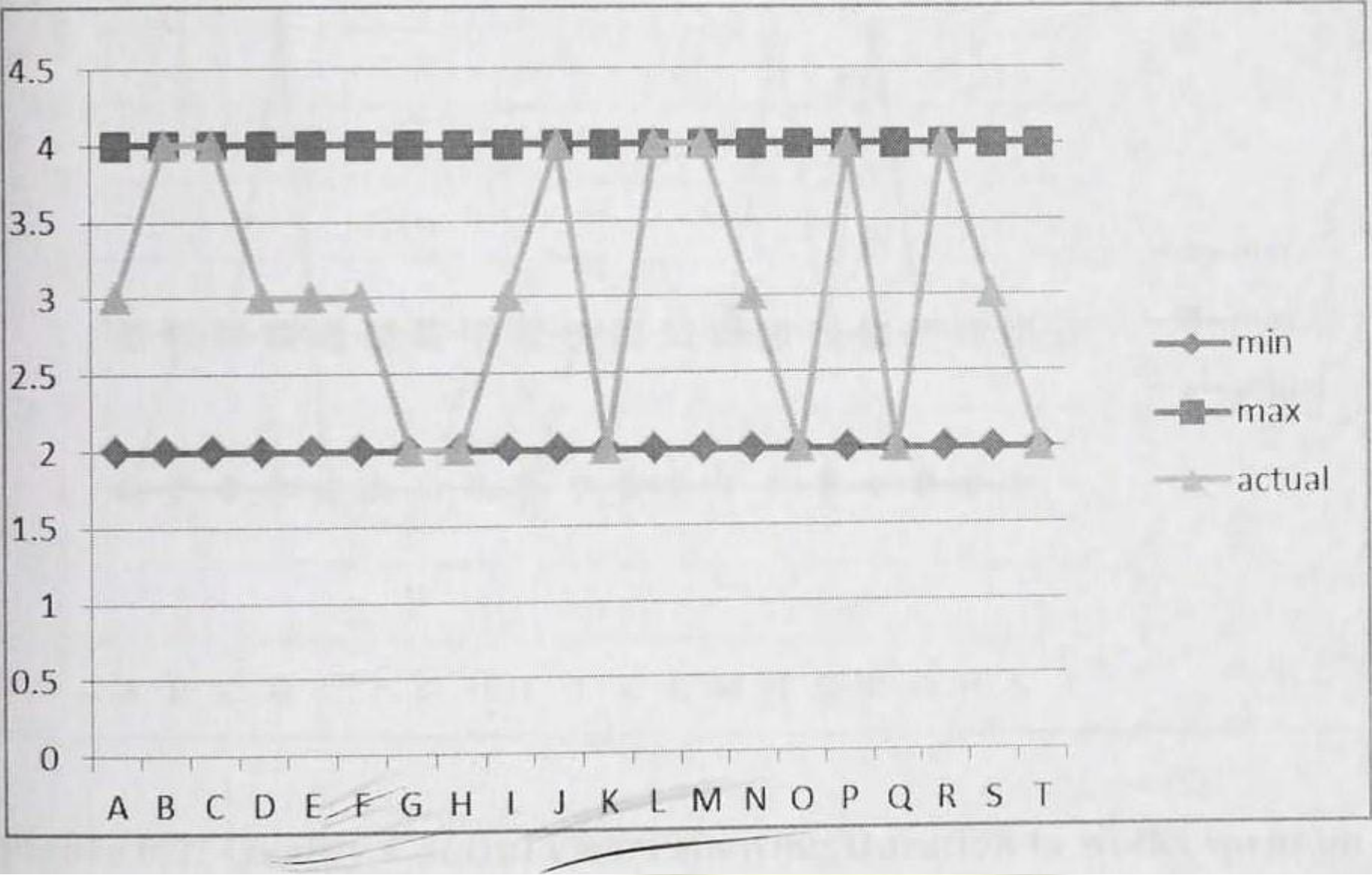


District
T

District T recorded an actual time of eighteen (18) weeks and was able to work within the maximum period of 21 weeks though the district spent extra two weeks on the Post Review/ Entity Tender Committee/Tender Review Board approval. The reason given was that most of the review members are not workers at the assembly but expert from other departments so there is a challenge when they are invited moreover they are not paid as tender review board members, so some are not motivated to carry out the activity.

Period used for Preparation of tender at the Districts

The quality control chart of the time spent on the Preparation of tender indicated that all the twenty districts in the Central Region under study were within the maximum period of four (4) weeks.



District

Figure 0.1: Quality Control Chart showing Duration in weeks spent on Preparation of
tendãbÇEach District in the Central Region

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Seven out of the districts (District B;C;J;L;M;P and R) representing 3600 used the maximum period stipulated on the guidelines iør determining completion timescales cited on the manuals of the Public Procurement Board of Ghana. \While Districts A;D;E;F;I;N and S recorded three (3) weeks above the minimum duration of (2) vseconds. Six out of the t"enty districts (G;H;K;O;Q and T) representing 30% used the minimum duration of two (2) vseconds.

Period used for Prior Review/ ETCTIRB at the districts

The quality control chart of the time spent on the prior rexiew/ esaluation tender committee/ tender review board indicated that three (3) out of the twenty districts and P) representing 15% spent four (4) weeks more than the maximum time allotted tor the instead of the maximum duration of two (2) weeks.

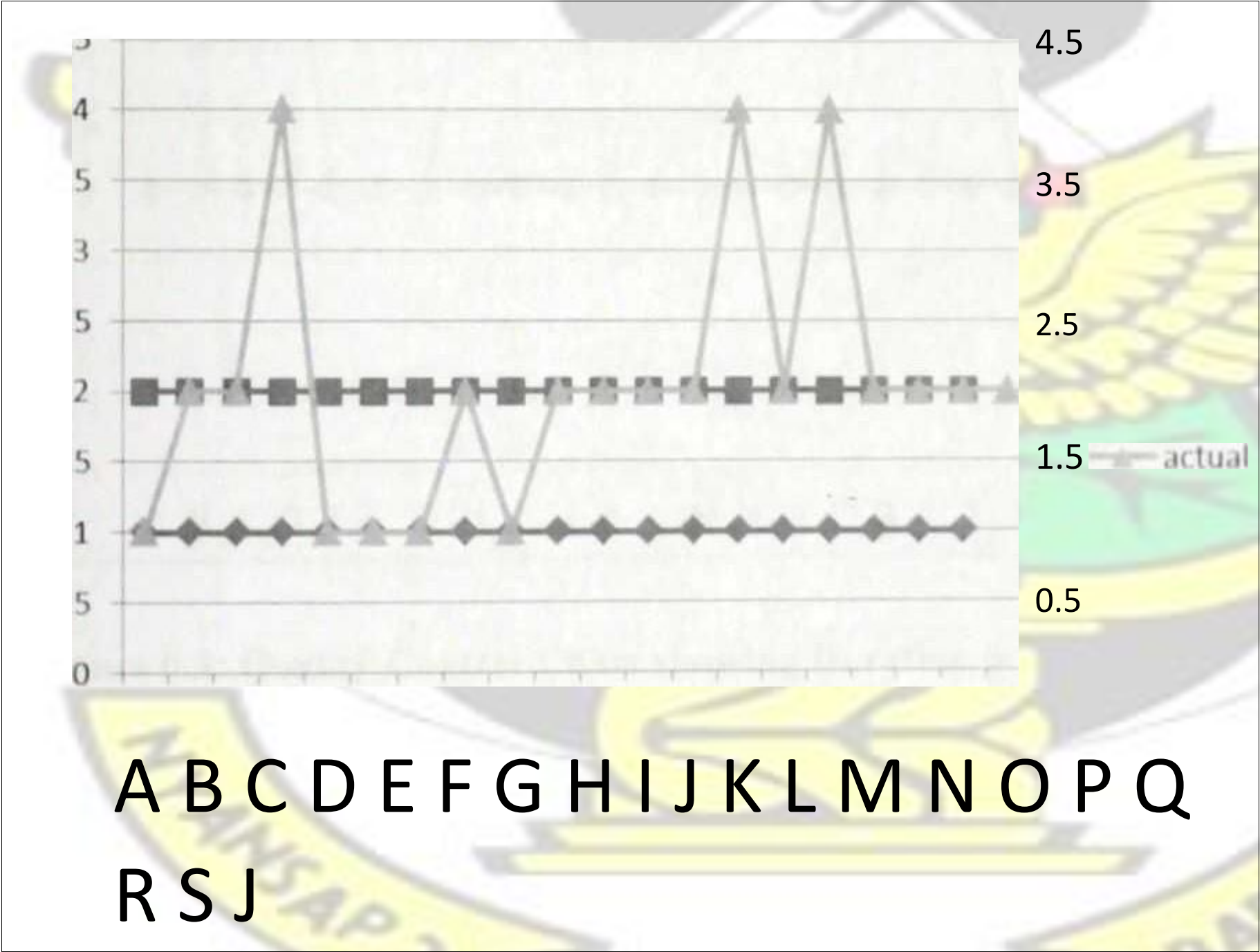


Figure 0.2: Quality Control C_ba.ve-showing Duration in weeks spent on Prior Review/ ETC,rrRB by each district in the Central Region

Twelve (12) out of the twenty districts (and T) representing 60%
B;C;H;J;K;L;M;O;Q;R;S

spent the maximum period of two weeks, however five districts (A; E;F;G and I) representing 25% spent the minimum period of one (1) week to carry out the activity.

Period used for Advertising/Tender Invitation at the districts

The quality control chart of the time spent on the advertising/tender invitation indicated that none of the district went above the control chart; the actual duration they used was within the minimum and maximum.

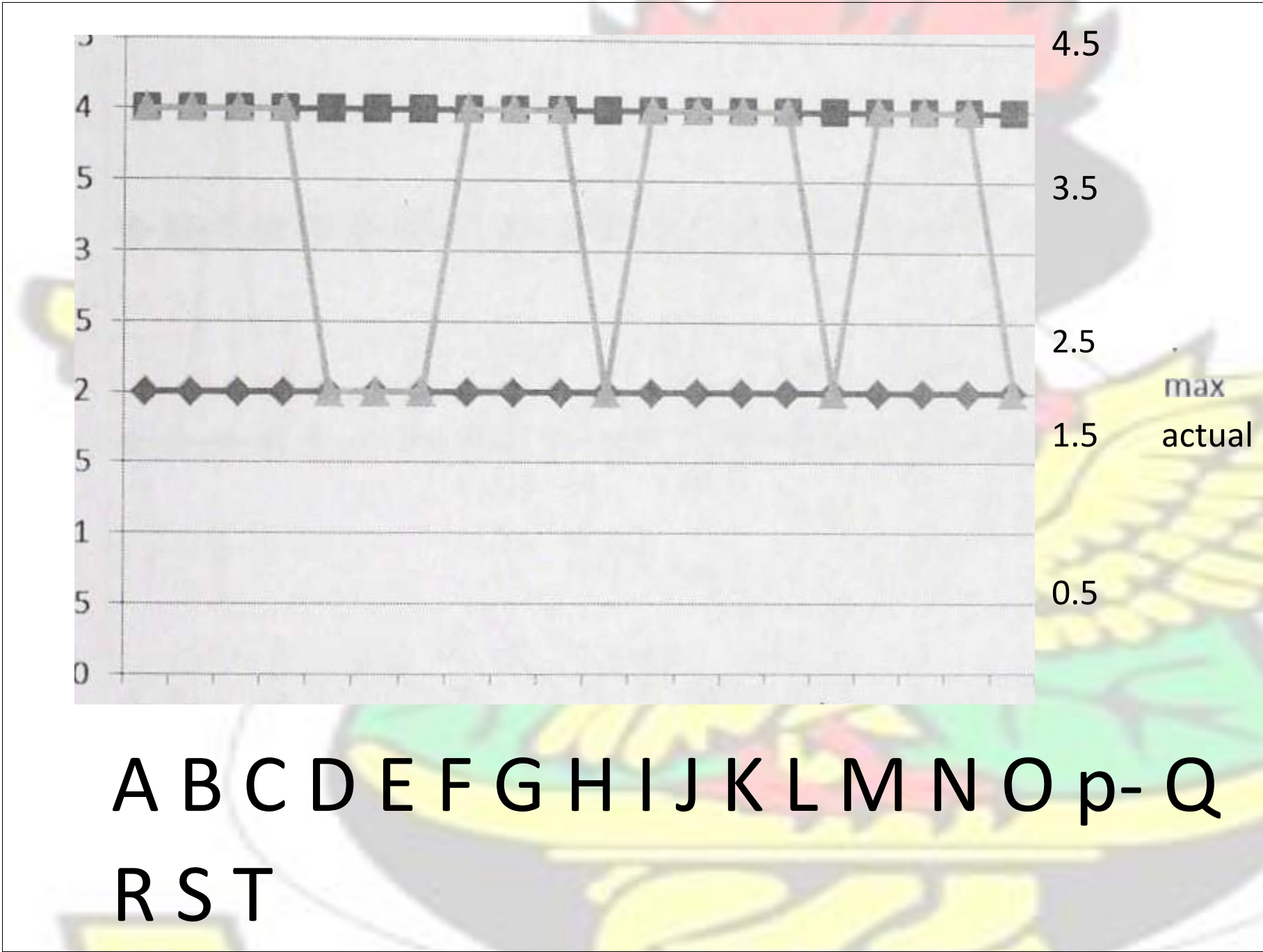


Figure 0.3: Quality Control Chart showing Duration in weeks spent on Advertising/Tender Invitation by each district

Fourteen (14) out of the twenty districts (A;B;C;D;H;I;J;L;M;N;O;Q;R and S) representing 70% spent four (4) weeks as the stipulated maximum time allotted for the activity, while six districts (E;F;G;K;P and T) representing 30% spent two (2) weeks as the minimum as the standard stated.

Period for Tender Evaluation and Report Submission at the districts

Eight (8) out of twenty (20) districts (C:I:J:K:N:O:Q and R) representing spent time ssecks more than the maximum time on tender Evaluation and Report Submission. While time districts H:L:P:S and T) used the maximum time stated as standard and soen of the districts (E:F:G and M) representing 35% used the minimum required' period of ssecks duration to execute the activity.

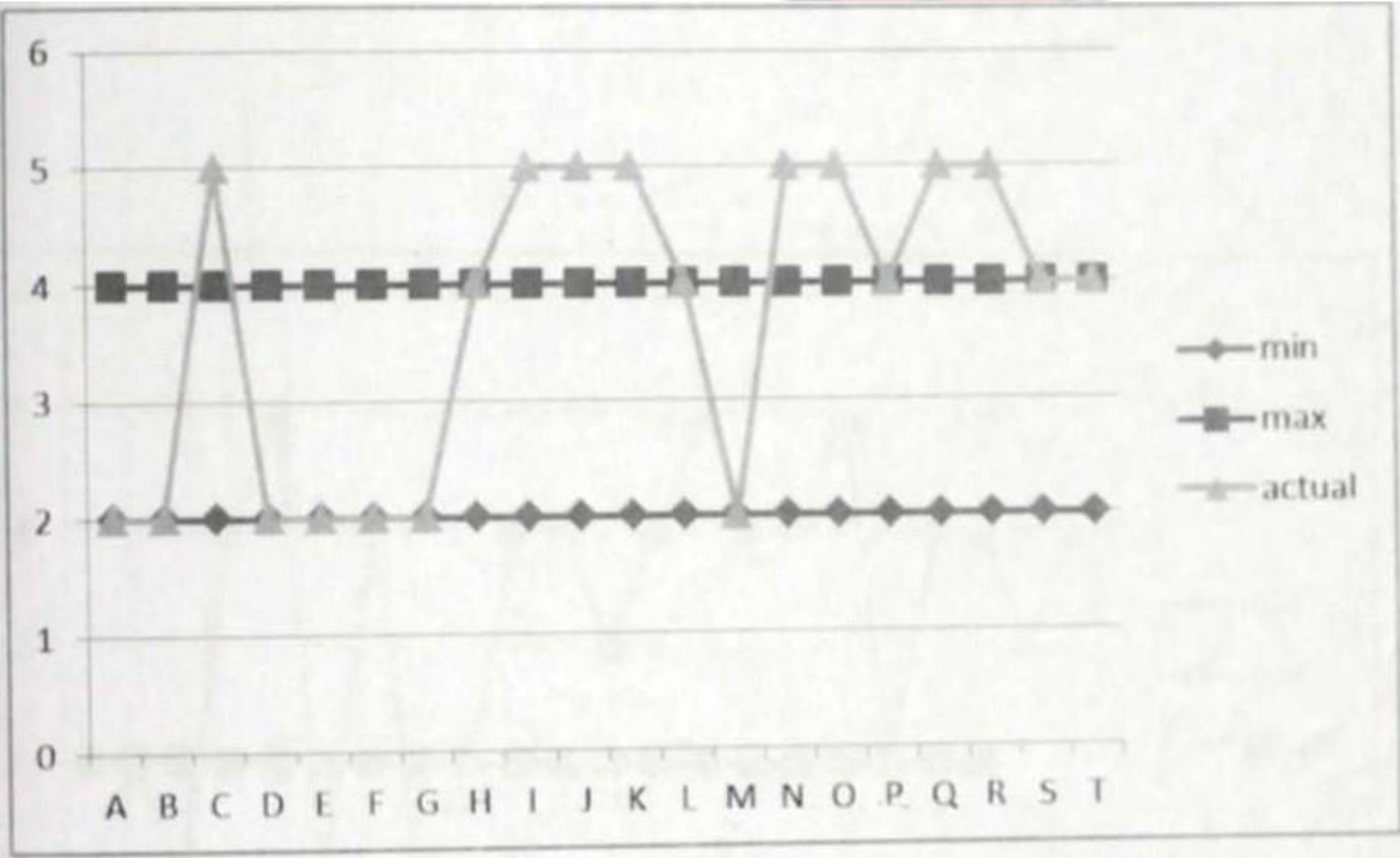


Figure 0.4: Quality Control Chart showing Duration in ssecks spent on Tender Esaluation and Report Submission by each district in the Central Region

Period for
Post Review/ ETC/TRB approval at the districts

Fifteen (15) out of the twenty (20) districts (B;C;E;H;I;J;K;L;M:N:O:Q:R:S and T) representing 750/0 actual duration used to execute the post review activity went beyond the maximum period of two weeks stated in the guideline for timescale in the manual of public procurement Act 663 of Ghana one of the reason cited was that most of the members of the review board are not workers of the assembly and makes it difficult to meet as a group . They used 3 to 5 weeks while three (3) of the districts (A;C and F) representing 15% , utilized the minimum duration of one week and two (2) districts (G and P) used the maximum period required of two weeks representing 10%



Figure 0.5: QualityControl Chaves-howiiiig Duration in weeks spent on Post Review/ ETC/TRB approval by each district in the Central Region

contract award at the districts

Five (5) out of the twenty (20) districts (B;C;D;E and S) representing 25% went beyond the maximum period of two weeks stated in the guideline for timescale in the manual of public

Period for procurement Act 663 of Ghana one of the reason cited was more time was spent on documentation. They used 3 to 5 weeks while fourteen (14) of the districts (A;G;H;I;J;K;L;M;N;O;P;Q;R and T) representing 70% , utilized the maximum duration of two weeks and one (1) district (F) used the minimum period required of one week representing 5%

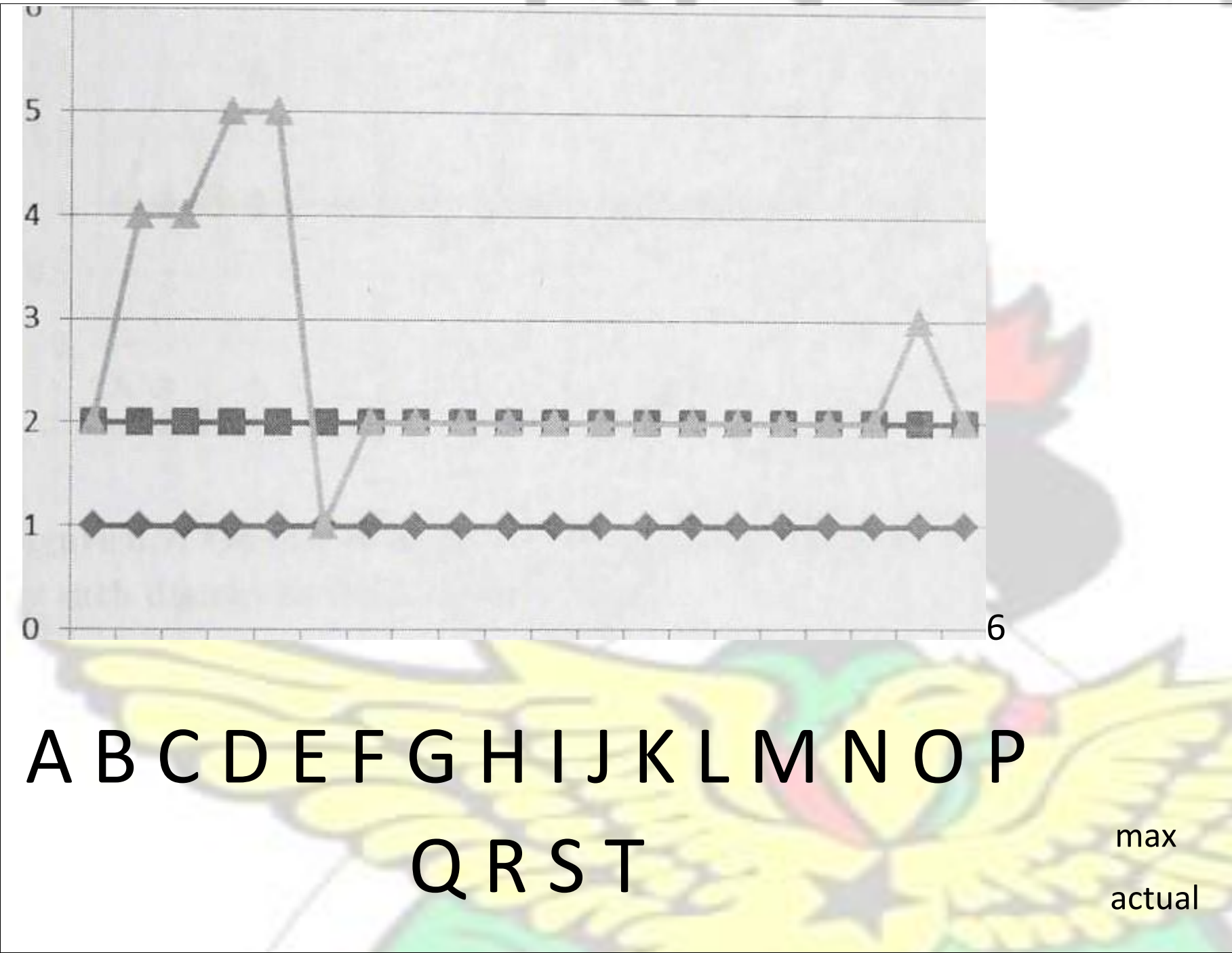


Figure 0.6: Quality Control Chart showing Duration in weeks spent on contract award by each district in the Central Region

Contract Signature at the districts

Only one out of the twenty districts (L) went beyond the maximum limit and districts (VI and N) used the required maximum period while nine of the districts and T) used two weeks. Eight districts (A;C;E;G;H;I;P and S) utilized the one week minimum duration. B;D;F;K;M;O;Q;R



Period for

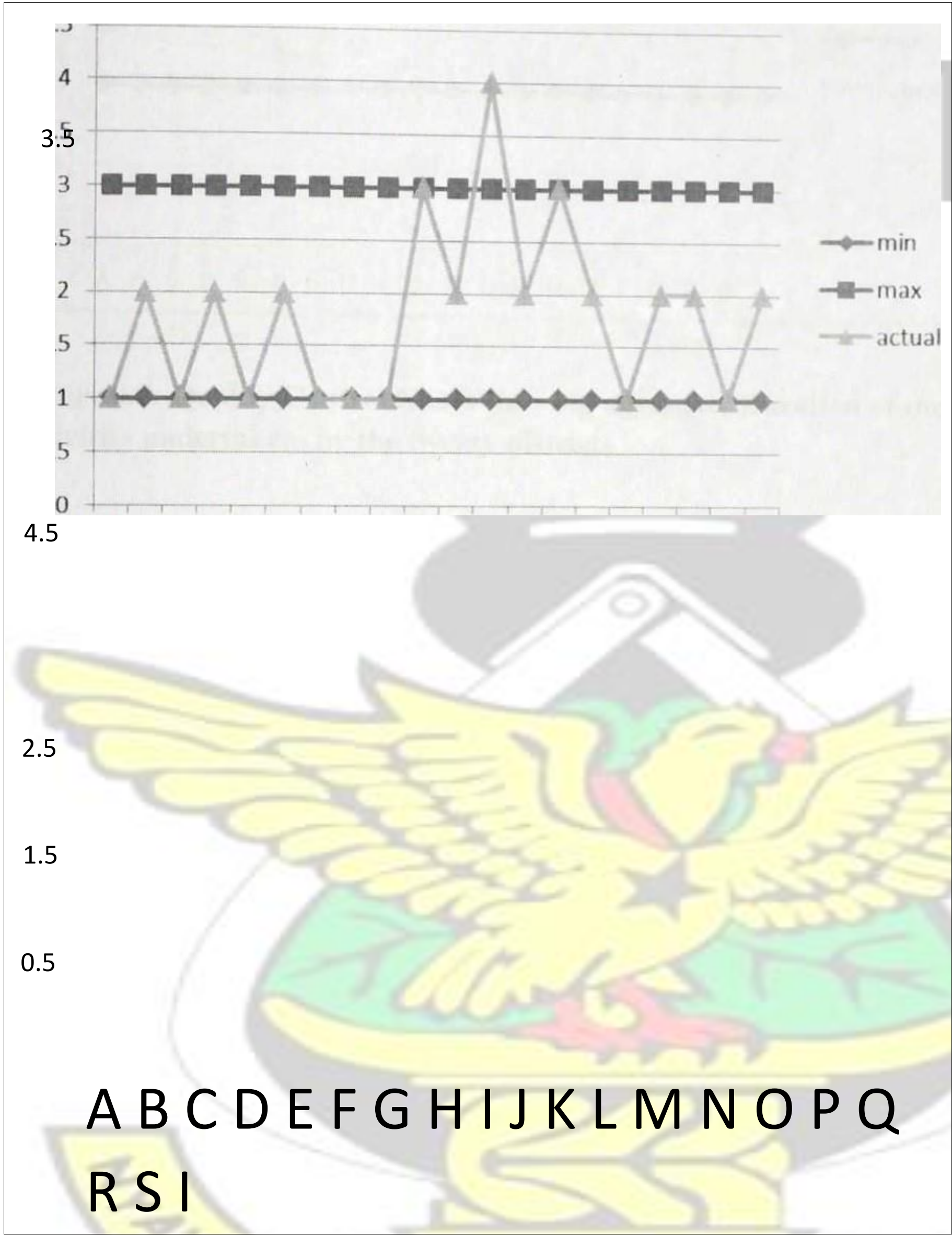


Figure 0.7: Quality Control Chart showing Duration in weeks spent on Contract Signature by each district in the Central Region

Period for

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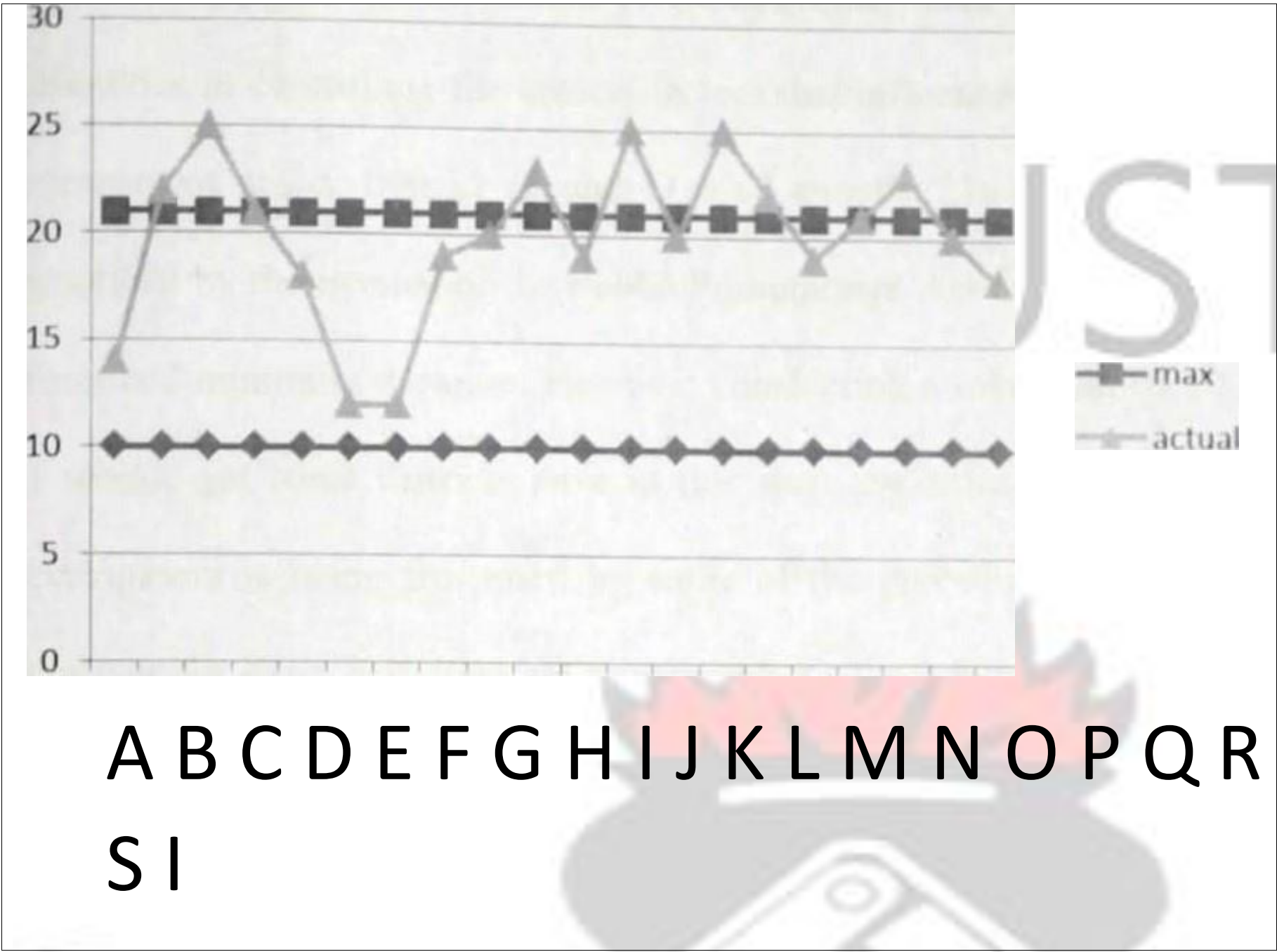


Figure 0.8: Quality Control Chart showing aggregate Duration of the eight procurement activities undertaken by the twenty districts

The minimum and maximum Estimated Lead Times for National Competitive "lendering (Works) are prescriptions of the Public Procurement Act. 2003 (ACT 663) and the accompanying Manual and guidelines. The minimum time is 10 weeks or 2 months 2weeks while the maximum time is 21 weeks or 5 months and I week for procurement of construction works through competitive tendering.

Out of the twenty districts in the Central Region used for this research. District

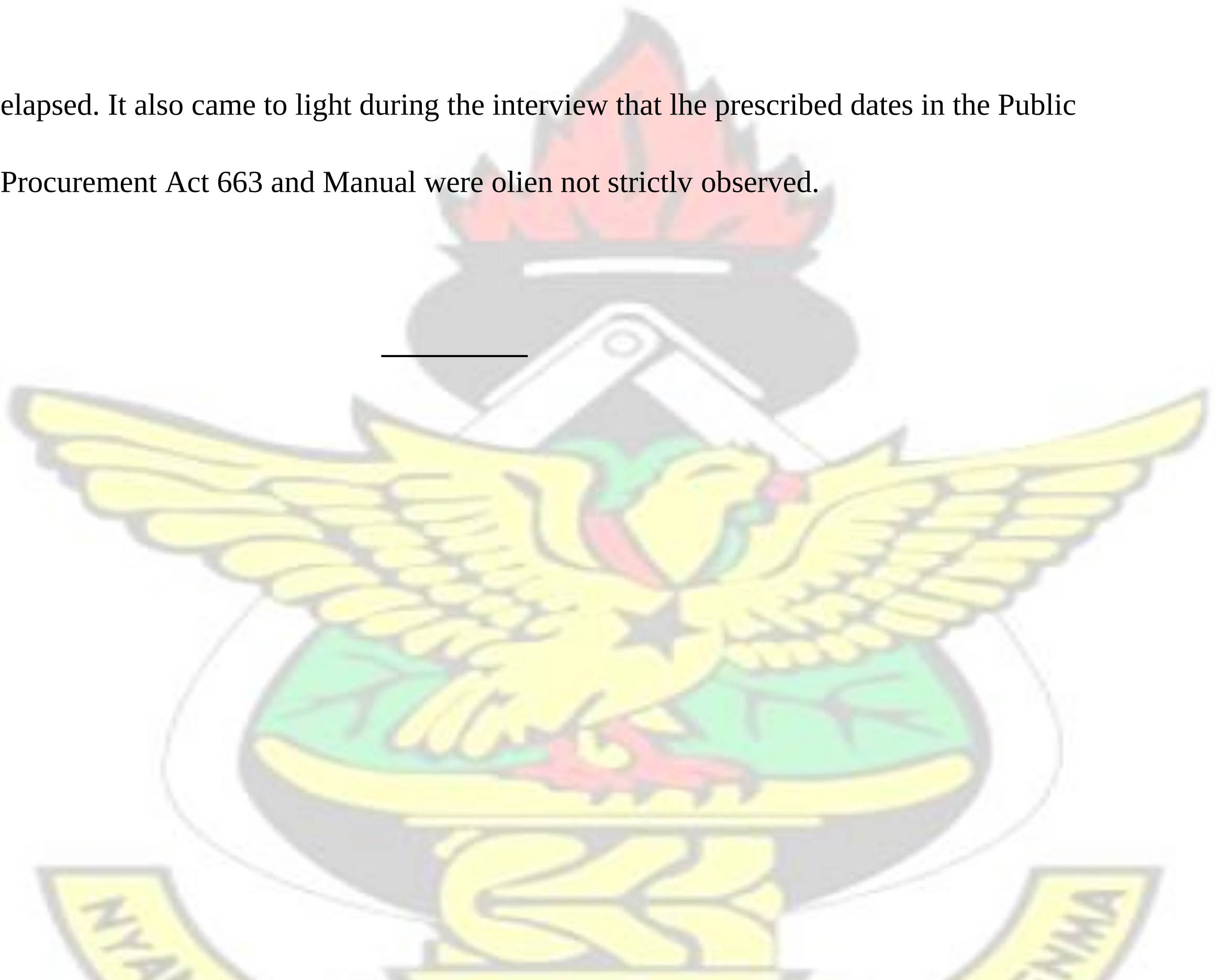
A;E;F;G;H;I;K;M;P;S and T used 14;18;12;12;19;20;19;20;19;20 and 18 weeks respectively to go through the pre-contract _____ procurement stage this is higher than the stipulated minimum time stated on the Manuals of the Public Procurement Act, 2003 (ACT 663) but ithin the maximum time. This wasdue to adherence to the schedule by committee members; howexcr there

were late submission of evaluation reports. District C, K and N recorded 25. 25 and 25 weeks respectively, which are higher than maximum prescribed time. This indicates that the two districts have difficulties in controlling the critical factors that influence timely of the project at this procurement stage. District I) and Q used exactly 21 weeks which is the maximum period prescribed by the manual of the Public Procurement Act 663. None of the districts recorded the prescribed minimum duration. However considering a minimum of 10 weeks and maximum of 21 weeks, yet some districts have at this stage exceeded the maximum. is an indication that development is being frustrated by some of the procedures prescribed by the Act. The time durations for these activities are comparable to the construction durations of same projects in some instances. It is obvious, efforts must be made to reduce this time periods and hence improve the time performance of projects.

Reasons given by respondents indicated that when certain thresholds are exceeded approval has to come from the tender review board. Though the services required of the tender Board is demanding, there are no provisions to pay members, hence it is often difficult to form a quorum for meetings. Consequently, procurement proceedings are often suspended. Other respondents claimed that the process of approval is bureaucratic, which spans through the pre-contract stage. Political interference was also cited as a setback.

Some respondents cited the bureaucracy and the attitude of officials who serve on the tender committee. Where the procurement had to go through several stages up to the central Tender Committee before decision is taken. a lot more time than stated in Table 3 could have

elapsed. It also came to light during the interview that the prescribed dates in the Public Procurement Act 663 and Manual were often not strictly observed.



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CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1 Introduction

This chapter presents the summary of the study, conclusions that have been arrived at and recommendations. Also presented in this chapter are areas for further research which were identified during the conduct of the study.

5.2 Factors that define projects time performance

The first objective of identifying factors that define projects time performance was achieved in the findings on Table 4.1, identified eight factors that define the time performance and these are:

Preparation of Tender Documents; Prior Review/ Entity Tender Committee (Tender Review Board ;Advertising/Tender Invitation; Tender Close/Opening; Tender Evaluation and Report Submission; Post Review/ Entity Tender Committee /Tender Review Board approval; Contract Award; Contract Signature.

5.3 Estimated Lead Times of factors during Pre-contract Stage

These factors as compared during a textual analysis of the guideline of Public Procurement Act 663 Manual revealed that they were major activities that needed to carry at an estimated duration, hence the second objective was achieved as shown on Table 4.2. It revealed that the minimum standard lime is ten (10) weeks and the Maximum standard time is twenty-one (21) weeks. The maximum Estimated lead times for National Competitive Tendering of works involving the Preparation of

Documents; Advertising/Tender Invitation and Tender Evaluation and Report Submission recorded maximum duration of four (4) weeks each.

5.4 Critical Factors Affecting Time Performance

The third objective was to identify the critical factors affecting time performance at the precontract stage of the Public Procurement. This was also achieved as shown on Table 4.3, descriptive statistics method was used to analyse the data. A measure of central tendency was applied to find the most typical value for the critical factors that influence time performance at the pre-contract stage. Two factors among the eight factors were identified to be the critical

factors and these are Post Review/ Entity Tender Committee /Tender Review Board approval with a mean rating of 4.56 and a standard deviation of 0.35 and Tender Evaluation and Report Submission with a mean rating of 4.40 and a standard deviation of 0.41. With the standard deviation values for the two critical factors the values were small hence there was no greater variation from the mean.

5.5 Bottleneck in the Public Procurement Act That Hinders Project Performance

The fourth objective to identify the bottleneck in the public procurement Act that hinders project performance was achieved from the data collection it was revealed most of the tender committee members in the districts noted that most of the members of the Review Board at times do not meet the quorum. The reason given was that members of these committees mostly offer these services for free. It is therefore not possible to leave their mainstream economic activities and attend to the duty call of tender review boards. Consequently, there must be considerations on which critical evaluation reports must be subjected to approval of these committees.

Some respondents cited the bureaucracy and the attitude of officials who serve on the tender committee. Where the procurement process had to go through several stages up to the central Tender Committee before decision is taken, a lot more time than stated in Table 4.4 could have elapsed.

Tender Invitation which is also considered as an activity with high influence on project time performance appears to have inflexible time duration. This is so because the Act has categorically indicated how much minimum time notices must be placed in newspapers before tenders are opened. Consequently, much may not be achieved in trying to reduce the duration of this activity. However, respondents were clearly of the view that tender closing or opening and contract award (after approval from the committees) do not pose a threat to the time performance of the project.

The background of some of the members of the tender committee as stipulated by the Act are not skilled in procurement issues of works, some do not have construction related background.

5.6 Recommendation

As indicated on Table 4.4 and Fig 4.8 that shows the quality control chart seven (7) out of twenty districts representing 35% went beyond the maximum standard period as recorded in the Guideline of the Public Procurement Manual and no district in Central Region used the minimum standard period.

Hence to minimize delays in the procurement process it's important to ensure:

- The need for external assistance to prepare the technical specifications, scope of work or terms of reference of the requirement has been considered.
- An evaluation panel with the proper technical skills is identified, selected and approved early enough and is available to begin the evaluation process on schedule.

- The approving authority will be available and is committed to reviewing and approving procurement documents within an agreed timeframe.

Two factors among the eight factors were identified to be the critical factors as shown on Table 4.2 and these are Post Review/ Entity Tender Committee /Tender Review Board approval with a mean rating of 4.56 and a standard deviation of 0.35 and Tender Evaluation and Report Submission with a mean rating of 4.40 and a standard deviation of 0.41.

The financial thresholds was also a factor that created some challenges though, this was duly captured in Section 94 which deals with Review of threshold levels' and indicated that the threshold levels specified in Schedule 3 of the Act (Act 663) as shall be reviewed by the board and presented by the minister for approval of Parliament. Findings from the districts revealed that the figures have been reduced in value due to price escalations over the 9 years period of existence of the Act. The Procurement law may need to be reviewed to make adequate provision to accommodate the effect of price escalations on these thresholds. This provision may control the types of projects forwarded to these committees, reduce stress on their function, improve quality of procurement reviews and also improve the time performance of projects in the country. In order to improve their efficiency and speedy delivery of reviews and approval of evaluation reports, provisions for remuneration of members may also be considered.

Consequently, persons must be motivated to be efficient with time in the preparation of document, and evaluation reports. In addition, members of tender committees must be encouraged to be timely in review and approval of evaluation reports.

It is therefore obvious that ~~one may need to~~ control the duration of these activities in order to reduce the time for pre-contract activities.

The work of the tender board committee should not be interfered with by political representatives when it comes to the selection of the contractor for the job but competence should be the hallmark. Electronic procurement system should be introduced to reduce the bureaucratic nature of the process in relation to time..

The section of the Public Procurement Act 2003, Act 663 that deals with the composition of the tender committee and tender review board should be reviewed to appoint members with the skill in construction procurement. The act purpose was to improve transparency but apart from this factor members with requisite skill can be encouraged to carry out quality pre-contract stage of the procurement.

Avoiding delays in the procurement process not only saves time and money, it also permits the timely award of contracts. A delayed contract award could cause a chain reaction of delays on other dependent procurements. This is especially important in project procurement management because it could delay the completion of the project. All the four objectives were achieved in this research.

5.7 Areas for Further Research

The following areas were identified for further research;

Establishing the average estimated lead times of factors during Pre-contract Stage for the National Competitive Tendering.

Establishing Procurement model in Ghana and the use of E-procurement in improving time performance at the tendering stage.

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APPENDIX : QUESTIONNAIRE

QUESTIONNAIRE
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COLLEGE OF ARCHITECTURE AND PLANNING
DEPARTMENT OF BUILDING TECHNOLOGY EMMANUEL
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RESEARCH TOPIC: THE INFLUENCE OF THE PUBLIC
PROCUREMENT ACT 2003 (ACT663) ON PROJECT TIME
PERFORMANCE OF CONSTRUCTION PROJECTS IN GHANA.

This research is part of a Master's Thesis being conducted in the Department of Building Technology, Kwame Nkrumah University of Science and Technology, KNIJST, Kumasi. The study is based on a selected sample in Central Region, so your participation is important. The outcome of this study will enhance knowledge on the influence of the Ghana Public Procurement Act on project time performance of construction projects.

Participation in this study is voluntary, and all who participate will remain anonymous. Your name is not needed. All information offered will be treated confidentially, and the results will be presented in such a way that no individuals may be recognized.

OCCUPATIONAL DATA FOR TENDER COMMITTEE MEMBERS, TENDER REVIEW
BOARD MEMBERS, CONTRACTORS' AND CONSULTAN]S

Please provide the correct information by ticking in the appropriate box and fill in the blank where necessary

- 1. Name of Organization... .
- 2. Number of years spent in your organization.
- 3. What are the types of tendering covered under the act / method of procurement do you usually award?

Competitive tendering

Two-stage tendering (experiment-ãÇGch)

Restricted tendering

Under Single-source procurement (TIME)

Any Other (Specify) -----

4. How influential are the following factors that influence project time performance at procurement stage of projects during tendering process?

Please tick appropriate cell.

Item	Factor Or Activity Description	Ratings based on the respondents experience over time				
		Least Influential		Most Influential		
		1	2	3	4	5
1	Preparation of Tender Documents					
2	Prior Review/ ETC/TRB					
3	Advertising/Tender Invitation					
4	Tender Close/Opening					
5	Tender Evaluation and Report Submission					
6	Post Review/ ETC/TRB a roval					
7	Contract Award					
8	Contract Si ature					

5. How long does it take to Prepare Tender Documents?

I week minimum

2 weeks minimum

3 weeks minimum

4 weeks minimum-----More---twa7One month

6. How long does the Prior Review/Evaluation Tender Committee [Tender Review Board take?

1 week

2 weeks

3 weeks

4 weeks

More than one month

7. How long does the Advertising/Tender Invitation Last?

2weeks

4 weeks

6 weeks

8weeks

More than two months



8. What is the Duration of the Tender Close/Opening period?

Same date

☐

Different date

☐

9. What is the duration of the Tender Evaluation and Report Submission?

I week

2 weeks

3 weeks

4 weeks

More than One month

10. How long does it take the Post Review /Evaluation Tender Committee/Tender Review Board approval?

I week

2 weeks

3 weeks

4 weeks

More than One month

I 1. What is the duration of tix• Contract Award rxrû)d?

I week

2 weeks

3 weeks

4 weeks

More than One month

Other

Not sure

Other

More than One month

12. What is the duration of Contract Signature?

I week

2 weeks

3 weeks

4 weeks

More than One nu)nth

