



<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

## **ASSESSMENT OF THE PUBLIC PROCUREMENT ACT 2003 (ACT663) ON PROJECT TIME PERFORMANCE OF CONSTRUCTION PROJECTS IN GHANA**

**Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>.**

<sup>1</sup>*Department of Building Technology, Cape Coast Polytechnic, Cape Coast, Ghana.*

<sup>2,3</sup>*Building Technology Department, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.*

### **ABSTRACT**

Contracts for both works and consultancy services take very lengthy periods to reach financial closure and are subject to unnecessary delays. The aim of the study is to investigate the effect of the Public Procurement Act (Act663) on the time performance of project delivery in Ghana. The objectives are to: (1) identify factors that define projects' time performance; (2) identify specific relations between the aforementioned 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. A survey was conducted among two hundred and twenty-five (225) 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 to identify the statutory time requirements for the pre-contract procurement stage activities. Eight factors that define time performance were identified from the findings. However, two exceeded the maximum period expected by the Act. 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 should be used by approving authorities when reviewing and approving reports.

**Keywords:** Assessment; Public; Procurement; Project; Timely

### **INTRODUCTION**

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 performance.

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.

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



<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

savings and efficiency in government expenditure. For example, South Africa's Department of Public Works (1997) define industry performance as: "doing the right job, at the right time, at the right cost and in the right way."

The World Bank (2003) establishes the five basic pillars of public procurement (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) anti-corruption measures.

### **Problem Statement**

Since the introduction of the Public Procurement Act in 2003 in Ghana, successive reviews 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 a need to improve on the efficiency, timeliness, and quality of construction and maintenance work in many developing countries.

Anvuur *et al.* (2006) argue that the performance of construction in Ghana is poor. 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). He 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.

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

Westring (1997) concludes that many private sector entities delivering works and services to government establishments try to limit their losses by cutting corners or abandoning the work altogether. This often has negative consequences for project execution, and leads to adversarial relationships developing between contractors and clients.

### **Aim**

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

### **Objectives**

The objectives are to:



<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

- Identify factors that define projects time performance;
- Identify specific relations between such 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 performance.

## LITERATURE REVIEW

### Procurement

According to ISO 10845:2010 procurement is 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 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 whole process contains several decisions about the services that will be delivered to local authorities and the communities they serve.

### 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, World Trade Organisation, 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.



<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K.<sup>2</sup>, and Nani, G.<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

In December 2003 the Government of Ghana enacted the Public Procurement Act 663. The Act became effective on 27<sup>th</sup> August 2004. 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. The Board makes administrative and institutional arrangements for procurement; stipulate tendering procedures and provide for purposes connected with these.

### **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 began in 1997, culminated into the enactment of the Public Procurement and Disposal of Public Assets (PPDA) Act 2003, and regulations 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.

### **Tendering Procedures in Accordance with the Public Procurement Act 2003, Act 663**

The tendering process also mandates some statutory periods which must be observed in the procurement of goods and services. These include:

**Contents of Invitation to Tender and Invitation to Prequalify for International Competitive Tender:** Section 48 clause (1) 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;

**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



<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

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;

**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.

**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.

**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;

**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.

**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.

### **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: lack of qualified procurement personnel, incorrect interpretation and application of some provisions of the procurement



<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

Act, lack of clear procedures for emergency procurement, lack of training Avenues or Institutions, poor record management (scattered files), poor handling of suppliers' complaints, poor procurement planning, mobilization & implementation, poor contract management and high cost of advertisement (PPA, 2007).

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 1998, Westring 1997, World Bank 1996, 2003)

## **RESEARCH METHODOLOGY**

The research strategy that was used to implement the empirical research, comprehensive literature reviews on the above objectives were reviewed. 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.

### **Target Population:**

There are Two hundred and twenty-five (225) 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 and 5 regional tender review board. There are also forty (40) registered construction firms with the Architectural Engineering Service Limited (AESL) in Cape Coast. The region from 2006 to 2011 had seventy-six (76) GET Fund construction projects that were supervised by AESL.

### **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 officials at the procurement outfits were in the best position to respond to the research questions.





<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

In view of this a census of Two hundred and twenty-five (225) members of tender committees and tender review board in the twenty (20) districts in Central Region including the Regional Tender Review Boards were purposively selected from the twenty districts including the Regional Tender Review Board members. 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.

### **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 was because of its feasibility and the need to ensure fair representation of each stratum as well as increase precision.

### **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. Rating scale was the second question format that was used, it is the most common formats for questioning respondents on their opinions of an object or attribute. The rating scale also reflect 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.

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%.

### **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. The use of question items and scales from previous research questionnaires was another way of obtaining quality data for the study. Preliminary findings were also rechecked for accuracy and consistency.



<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

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.

### **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 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.

## **FINDINGS**

### **Identification of factors that define projects time performance**

Table 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 and Contract Signature.

### **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 2 shows the standard time giving to each of the activities that defines the factors in objective (1).





<sup>1</sup>[kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup>[gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

<sup>1</sup>Bamfo-Agyei, E., <sup>2</sup>Nani, G., and <sup>3</sup>Hackman, J.K. (2015) Assessment of The Public Procurement Act 2003 (Act663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 537-551

Table 1: Factors that influence project time performance at procurement stage of projects

Item	Factor Or Activity Description	Ratings based on the respondents experience over time					Total	Mean	Standard Deviation
		← Least Influential			Most Influential →				
		1	2	3	4	5			
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	<b>4.40</b>	<b>0.41</b>
6	Post Review/ ETC/TRB approval	2(2)	3(6)	6 (18)	42 (168)	107 (535)	729	<b>4.56</b>	<b>0.35</b>
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

<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)<sup>1</sup>Bamfo-Agyei,E., <sup>2</sup>Nani,G ., and <sup>3</sup>Hackman,J.K. (2015) Assessment of The Public Procurement Act 2003 (Act663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1,No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 537-551*Table .2: Estimated Lead Times for National Competitive Tendering (Works)*

NO.	ITEM	MINIMUM TIME (WEEK(S))	MAXIMUM TIME (WEEK(S))
1	Preparation of Tender Documents	2	4
2	Prior Review/ ETC/TRB	1	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	1	2
7	Contract Award	1	2
8	Contract Signature	1	3
	<b>TOTAL</b>	<b>10</b>	<b>21</b>

*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.

### **Identification of the critical factors affecting time performance at the pre-contract 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 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 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
1	Post Review/ Evaluation Tender Committee / Tender Review Board approval	<b>4.56</b>	<b>0.13</b>	<b>0.35</b>
2	Tender Evaluation and Report Submission	<b>4.40</b>	<b>0.17</b>	<b>0.41</b>
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/Opening	1.71	0.36	0.60
8	Contract Signature	1.69	0.57	0.76



<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E.<sup>1</sup>, Hackman, J.K.<sup>2</sup>, and Nani, G.<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

The analysis on Table 3 that the above factors identified were also largely accepted by the respondents who are members of 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/Tender 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.

### **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. One of the bottlenecks that affected the Post Review/ Entity Tender Committee/Tender Review Board approval. 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.

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 improve their efficiency and speedy delivery of reviews and approval of evaluation reports, provisions for remuneration of members may also be considered.



<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

---

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.



<sup>1</sup>[kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup>[gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

Table 4: Estimated durations for National Competitive Tendering (Works)

NO	ITEM	Minimum Time (Week(s))	Maximum Time (Week(s))	DURATION IN WEEKS AT THE DISTRICTS IN CENTRAL REGION																			
				DISTRICTS																			
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)	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
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
	<b>TOTAL</b>	<b>10</b>	<b>21</b>	<b>14</b>	<b>22</b>	<b>25</b>	<b>21</b>	<b>18</b>	<b>12</b>	<b>12</b>	<b>19</b>	<b>20</b>	<b>23</b>	<b>19</b>	<b>25</b>	<b>20</b>	<b>25</b>	<b>22</b>	<b>19</b>	<b>21</b>	<b>23</b>	<b>20</b>	<b>18</b>

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



<sup>1</sup>[kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup>[gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

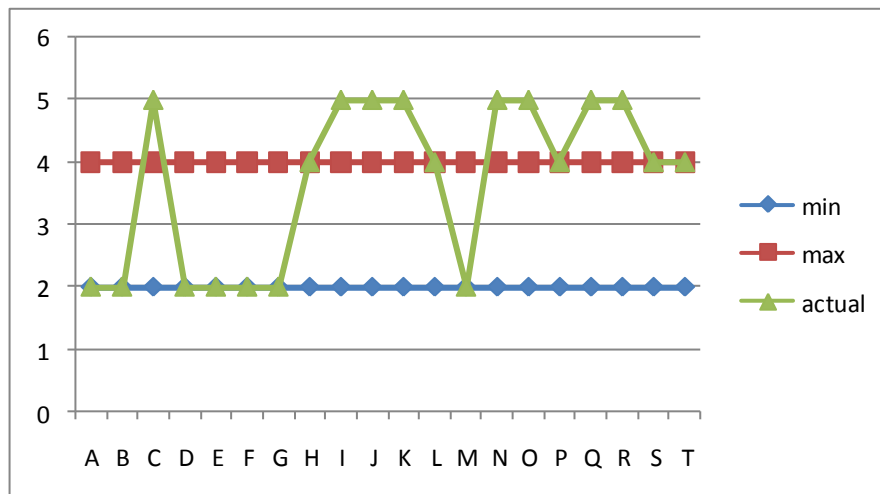


Figure 1: Quality Control Chart showing Duration in weeks spent on Tender Evaluation and Report Submission by each district in the Central Region

Eight (8) out of twenty (20) districts ( C;I;J;K;N;O;Q and R) representing 40% spent five weeks more than the maximum time on Tender Evaluation and Report Submission, while five districts (H;L;P;S and T) used the maximum time stated as standard and seven of the districts ( A;B;D;E;F;G and M) representing 35% used the minimum required period of two weeks duration to execute the activity.

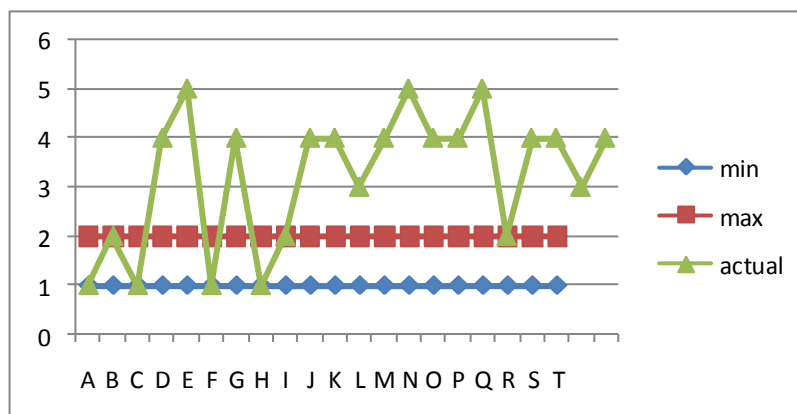


Figure 2: Quality Control Chart showing Duration in weeks spent on Post Review/ ETC/TRB approval by each district in the Central Region





<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

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 75% 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%

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.

## CONCLUSION

To minimize delays in the procurement process it is important to ensure that appropriate procurement method is assigned to the requirement because this is important for estimating the procurement lead-time. The need for external assistance to prepare the technical specifications, scope of work or a term 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.

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.



<sup>1</sup> [kwaminabamfoagyei@yahoo.com](mailto:kwaminabamfoagyei@yahoo.com)

<sup>2</sup> [gabrielnanik@gmail.com](mailto:gabrielnanik@gmail.com)

Bamfo-Agyei, E<sup>1</sup>, Hackman, J.K<sup>2</sup>, and Nani, G<sup>3</sup>. (2015) Assessment of The Public Procurement Act 2003 (Act 663) on Project Time Performance of Construction Projects in Ghana. In: Mojekwu, J.N., Ogunsumi, L.O., Ojigi, L.M., Atepor, L., Thwala, D.W., Sackey, S., Awere E., and Bamfo-Agyei, E. (Eds) African Journal of Applied Research. (AJAR) Journal, Vol.1, No.1 ISSN 2408-7920 January 2015, Cape Coast, Ghana. 533-548

## REFERENCES

- Anvuurl, A.; Kumaraswamy, M. and Male, S (2006). *“Taking Forward Public Procurement Reforms in Ghana”* CIB W107 Construction in Developing Countries International Symposium *“Construction in Developing Economies: New Issues and Challenges”* January 18th – 20th; 2006 – Santiago, Chile
- Bondzi, T. (2010). *“Public Procurement Authority: Electronic Bulletin November”* - December 2010, Vol 1, Issue 4
- Crown Agents (1998) *“The World Bank Procurement Audit in Ghana. Value for Money Audit Report for Ghana”*, Crown Agents for Overseas Governments and Administrations Ltd, UK.
- Construction procurement - Part 1: *Processes, methods and procedures International Organization for Standardization / 01-Jul-2012 ISO 10845-1:2010*
- Construction Industry Development Board (2006) *Procure 2010: Manual to Guide Infrastructure Development for the Soccer World Cup- Manual 4: Best Value Procurement*. Pretoria. Accessed 09-10-2012
- Hughes, M. (2005). *“Evaluation of the Local Government Procurement Agenda - Baseline Survey Report”*. The Office of the Deputy Prime Minister, London. Available at [www.odpm.gov.uk](http://www.odpm.gov.uk). [Last retrieved April 2, 2014].
- Knight, L. A., Harland, C. M., Telgen, J., Thai, K. V. & Callender, G. (2008), *Public Procurement: International Cases and Commentary*, Journal of Public Procurement, Volume 8, Issue 3, 303-322.
- PPA (2007), *“Public Procurement Authority (PPA) Annual Report”*, Republic of Ghana, pp. 18
- Westring, G. (1997) *Ghana Public Procurement Reform. An Audit Report prepared for the World Bank*, Stockholm: Advokatfirman Cederquist KB.
- World Bank (1996) *“Ghana 1996 Country Procurement Assessment Report”*, Washington, D.C.: The World Bank. [Last retrieved April 2, 2014].
- World Bank (2003) *Ghana 2003 Country Procurement Assessment Report*, Washington, DC: Ghana Country Department, The World Bank. [Last retrieved April 2, 2014].