

**A CRITICAL ANALYSIS ON ELECTRO-MECHANICAL WORKS OF PUBLIC
WORKS DEPARTMENT BASED ON KEY PERFORMANCE INDICATORS
TO COMPLY PPA 2006 & PPR 2008**

**Dissertation submitted in the partial fulfillment of the Requirements for
the Degree of Masters in Procurement and Supply Management**

**Submitted By
KANIJ FATEMA
MPSM, Batch X
ID: 15282005**

Masters in Procurement and Supply Management

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**BRAC Institute of Governance and Development
BRAC University**

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KanijFatema

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ID No. 15282005

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Supervised and Approved by

Dr. Nasiruddin Ahmed

Professor (Part-time)

BRAC Institute of Governance & Development (BIGD)

BRAC University



**BRAC Institute of Governance and Development
BRAC University**

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Dr. Nasiruddin Ahmed

Supervisor

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The Author

Abstract

Using Public funds for Public Works is of great responsibility and accountability for the procurement officials of the government. Transparency, efficiency, accountability, competitiveness, equitable treatment and free & fair competition are essential to be ensured in the procurement using public funds. In Bangladesh, these could not be ensured earlier due to a lack of proper rules and regulation. To streamline the public procurement activities, the Government of the People's Republic of Bangladesh has enacted Public Procurement Act (PPA) 2006 and thereafter issued Public Procurement Rules (PPR) 2008. Since then government agencies are bound to abide by the Act and Rules very strictly in their procurement activities. The Central Procurement Technical Unit (CPTU) of the Implementation Monitoring and Evaluation Division (IMED) is continually monitoring the compliance of PPA 2006 and PPR 2008 by the target agencies in the light of 45 predetermined Key Performance Indicators (KPI).

In spite of being a major procuring agency of the country PWD is not among the four target agency. At the time of selection of the target agency the amount of procurement in PWD is not in the first four, especially the scope of electro-mechanical works of PWD is very limited. But after that the amount of procurement has increased substantially.

Now PWD has procured more than Water development Board (one of the four target agencies). For not being in the list of initial selection, the procurement activities of PWD are not monitored keenly. Now it is required to take a look on PWD's procurement activities. The research has been designed under the questions if PWD's electro-mechanical works are following PPR 2008 completely or not; and if not, then the causes behind that. The main objectives of the present study are to find out the extent of compliance of PPR 2008 by PWD and to find out the gap of compliance and scope of improvement for implementation. The related literatures and reports, particularly from PWD and SRGB, have been thoroughly reviewed before conducting the main research work. The key findings of these reports have been compared and analyzed which helped to draw important conclusion of the study. A questionnaire survey was carried out to collect data of different projects undertaken by PWD. The study result shows a clear noncompliance to the rules of PPR 2008 in PWD in carrying out some of the compliance related KPIs. Among the 11 different compliance issues, it has been revealed that PWD is doing well in 7 KPIs. For other 4 issues namely submission of report by the TEC, Average number of days taken between submission of Tender Evaluation Report and approval of contract, Average number of days between final

approval and Notification of Award (NOA) and Percentage of Contracts where interest for delayed payments was made are not satisfactory and a clear improvement is required in these areas.

For improvement of these situations, some specific recommendations have been drawn. These are (i) Compiling the contractors profile (ii) Empowering the lower tier will decrease the time in approval process (iii) Strong adherence to law and effective internal auditing (iv) Payment of interest in case of delayed payment should be considered carefully to protect the interests of both the parties. (v) Introduction to e-gp (vi) Training on Procurement law (vii) To ensure the timely payment to the contractors by availing necessary funds required.

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	Abbreviations
AA	Approving Authority
ADP	Annual Development Programme
AO	Authorized Officer
BCC Bhaban	Bangladesh Computer Council Bhaban
CCGP	Cabinet Committee of Government Purchases
CIPS	The Chartered Institute of Purchasing and Supply
CPTU	Central Procurement Technical Unit
DoFP	Delegation of Financial Power
DPP	Development Project Proposal
E/M	Electro-mechanical
GCC	General Conditions of Contract
GFR	General Financial Rules
HOPE	Head of Procuring Entity
ICD	Intended Completion Date
IMED	Implementation Monitoring and Evaluation
KPI	Key Performance Indicators
PWD	Local Government Engineering Department
LTM	Limited Tendering Method
MoF	Ministry of Finance
MoP	Ministry of Planning
NOA	Notification of Award
OECD-DAC	Organization for Economic Co-operation and Development- Development Assistance Committee
OTM	Open Tendering Method
PD	Project Director
PE	Procuring Entity
PM	Project Manager
PPA 2006	Public Procurement Act 2006
PPR 2008	Public Procurement Rules 2008.
PPRP II	Public Procurement Reform Project (Phase II)
PWD	Public Works Department
RADP	Revised Annual Development Programme
SRGB	Survey Research Group of Bangladesh
TDS	Tender Data Sheet
TEC	Tender Evaluation Committee
TER	Tender Evaluation Report
TOC	Tender Opening Committee

Operational Definitions: PPR 2008

- (1) **"Advertisement"** means an advertisement published under Section 40 in newspapers, websites or any other mass media for the purposes of wide publicity;
- (2) **"Approval Procedures"** means the approval procedures of a Tender or a Proposal as detailed in Rule 36;
- (3) **"Approving Authority"** means the authority which, in accordance with the Delegation of Financial Powers, approves the award of contract for the Procurement of Goods, Works or Services;
- (4) **"CPTU"** means the Central Procurement Technical Unit, established by the Implementation Monitoring and Evaluation Division of the Ministry of Planning, for carrying out the purposes of the Act and these Rules;
- (5) **"Days"** means calendar days unless otherwise specified as working days;
- (6) **"Delegation of Financial Powers"** means the instructions with regard to the delegation of financial authority, issued by the from time to time, relating to the conduct of public Procurement or sub-delegation of financial powers under such delegation;
- (7) **"Head of the Procuring Entity"** means the Secretary of a Ministry or a Division, the Head of a Government Department or Directorate; or the Chief Executive, by whatever designation called, of a local Government agency, an autonomous or semi-autonomous body or a corporation, or a corporate body established under the Companies Act;
- (8) **"Intended Completion Date"** is the date on which it is intended that the

Contractor shall complete the Works as specified in the Contract and may be revised only by the Project Manager by issuing an extension of time or an acceleration order;

- (9) "**Key Performance Indicators (KPI)**" are quantifiable measurements, agreed to beforehand, that reflect the critical success factors of an organization.
- (10) "**Procurement**" means the purchasing or hiring of Goods, or acquisition of Goods through purchasing and hiring, and the execution of Works and performance of Services by any contractual means;
- (11) "**Procuring Entity**" means a Procuring Entity having administrative and financial powers to undertake Procurement of Goods, Works or Services using public funds;
- (12) "**Public funds**" means any funds allocated to a Procuring Entity under Government budget, or loan, grants and credits placed at the disposal of a Procuring Entity through the Government by the development partners or foreign states or organizations.
- (13) "**Public Procurement**" means Procurement using public funds;
- (14) "**Project Manager**" is the person named in the Contract or any other competent person appointed by the Procuring Entity and notified to the Contractor who is responsible for supervising the execution of the Works and administering the Contract.

Chapter One

Introduction

1.1 Background and context

"**Procurement**" means the purchasing or hiring of Goods, or acquisition of Goods through purchasing and hiring, and the execution of Works and performance of Services by any contractual means. When procurement is done with public money, then it is called public procurement.

Until 2003, there was no standard and legal framework for public procurement in Bangladesh and General Financial Rules (GFR) had regulated public procurement procedures and practices in Bangladesh. These rules were originally issued during the British period and slightly revised in 1951 under the Pakistani rule. After Bangladesh's independence, few changes were made to these rules in 1994 and 1999 respectively (Islam, 2011).

To ensure transparency and accountability in the procurement of goods, works or services using public funds, and ensuring equitable treatment and free and fair competition among all

persons wishing to participate in such procurement, the Government of the People's Republic of Bangladesh has enacted Public Procurement Act 2006 (hereinafter called PPA 2006) on 06 July 2006. Under the framework of PPA 2006, the government issued Public Procurement Rules 2008 (hereinafter called PPR 2008) which has come into effective on January 31, 2008. All these were the outcomes of the reform process taken by the government to streamline the public procurement. Earlier in 2003, Public procurement Regulations 2003 which was effective till the PPR 2008 was issued (Hoque, 2010).

Upon issuance of the PPA 2006 and PPR 2008, the government agencies are bound to follow the Act and Rules in the day to day procurement activities of their own. The Central Procurement Technical Unit (CPTU) of the Implementation Monitoring and Evaluation Division (IMED) of the Ministry of Planning have been established for carrying out the purposes of Section 67 of PPA 2006 which states as follows:

Section 67: *For carrying out the purposes of the Act, the Government shall, through a Central Procurement Technical Unit or any other unit established by it relating to procurement monitoring, coordination and management, perform the following responsibilities, namely –*

- a. Providing for monitoring compliance with and implementation of this Act through the authority as designated by the Government;*
- b. Arranging for performance of the necessary functions and responsibilities incidental thereto, through the authority as designated by the government and*
- c. Performing any other responsibilities as prescribed.*

To provide for monitoring compliance with implementation of this Act and Rules, the government of Bangladesh has undertaken Public Procurement Reform Project II (PPRP II) in 2009. The aim of project is to progressively improve the performance of public procurement system in Bangladesh, focusing largely on the target agencies, namely Bangladesh Water Development Board (BWDB), Roads and Highways Department (RHD), Local Government Engineering Department (PWD) and Rural Electrification Board (REB). Among the four components of PPRP II, the **Second** one is the strengthening procurement management at sectoral/agency level and CPTU to develop an MIS system for reporting procurement activities and M&E system for monitoring the compliance of PPA 2006 and PPR 2008 by the target agencies in the light of 45 predetermined Key Performance Indicators (KPIs) (**Appendix A**). The KPIs were developed taking cognizance of the OECD-

indicators within the overall framework of the PPA/PPR and its features within the local context.

1.2 Statement of the problem

Procurement of Goods, Works, and Services are also covered by the IMED's existing way of undertaking implementation monitoring and evaluation tasks but not monitored and evaluated on the basis of any key performance monitoring indicators. That's why CPTU of IMED is monitoring procurement performance through the PPRP-II project. CPTU has appointed a Project Implementation Support Consultant for each of the four target agencies. These consultants are submitting the procurement performance report of each agency on quarterly basis. Also, a consultancy firm, Survey Research Group (SRG) Bangladesh, appointed by CPTU, is submitting quarterly the reports to CPTU based on KPIs. Though it is reported that procurement performance of the target agencies are improving day by day, it would be wise enough to have an independent study to ascertain the procurement performance of the target agencies.

1.3 Significance of the proposed research

The procurement performance of the target agencies have been described and classified in terms of transparency, efficiency, competitiveness and compliance of government procurement rules and procedures. Among the four different categories, compliance of PPR 2008 is considered as the vital one. It is generally considered that if compliance is ensured, then the government purpose for ensuring value for money in the public procurement will be possible.

Among the four target agencies, PWD has a significant quantity of budget allocation against the projects in the Annual Development Programme (ADP).

1.4 Research Questions

This study aims to know the extent of compliance of PPR 2008 by PWD procurement activities. Also it is intended to know the hindrances which have been faced by PWD while complying with the rules of PPR 2008. Thus, the research questions for the present study are:

- i) Is PWD following PPR 2008 completely?*
- ii) If NO, then what are the causes behind this?*

1.5 Objectives of the Study

The objectives of the present study are as follows:

- i) To find out the extent of compliance of PPR 2008 by PWD.
- ii) To find out the gap of compliance and scope of improvement for implementation of PPR 2008 in PWD.
- iii) How to streamline the electro-mechanical works of PWD on the basis of KPIs set by PPA 2006 & PPR 2008.

1.6 Scope of the Study

Under the supervision of the Project Implementation Support Consultant appointed to PWD on behalf of CPTU, the procuring entity (PWD) is carrying out the monitoring and evaluation of their procurement performance in accordance with the set KPIs. But an independent study is intended from the concerned authorities to find out the gap of compliance of PPR 2008 in PWD. This study is such an approach for ascertaining the facts in PWD.

1.7 Limitations of the study

The limitations of this study have come from both its scope and its methodology. Survey was confined to electro-mechanical works of PWD Head Quarter and Dhaka. The respondents were selected mainly from the organization's head office and Sher-e-Bangla Nagar office of Dhaka city. On the other hand, officers were selected on the basis of researcher's convenience. Key informant interview was conducted on few senior officers and with the consultant engaged in PWD from CPTU. Time constraint was also one of the major limitations of the study. Most of the respondents had gathered different types of experiences in different projects; sometimes experiences were not generalized rather project-specific. This issue had come across during the interviews. Also the officers were requested to give answers based on their own perception. As the perceptions on situation varied from person to person, this may have been a major limitation of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Public Procurement Rules (PPR 2008): An overview

Public Procurement Rules (PPR) 2008 was framed by the Government of People's Bangladesh under the Public Procurement Act (PPA) 2006 which came into effective on January 31, 2008. The main objective of enacting PPA 2006 & introducing PPR 2008 was, generally, of achieving value for money, ensuring transparency, accountability, fair treatment in all public procurement throughout the public sector organizations of our country.

There are 130 Rules in PPR 2008 under nine chapters. Most of the Rules have several Sub-Rules. In chapter one, there are 3 Rules (Rule 1 to Rule 3) where preliminary issues like definition of key terms, scope and application of the Rules are given. There are 9 Rules (Rule 4 to Rule 12) in chapter two. Guideline for preparation of Tender or Proposal document, constitution of different committees for disposal of Tender or Proposal are given in this chapter. In chapter three, principles of public procurement is given. This is a very big chapter divided into twelve parts. There are total 48 Rules (Rule 13 to Rule 60) under chapter three where, among others, procedure for preparation of technical specification, preparation of terms of reference, procedure for rejection of Tender, Approval procedure of Tender, Contract administration and management are described. Rule 61 to Rule 89 constitutes chapter four where methods of procurement for goods and related services, works, physical services and their use are given. Processing of procurement including advertisement, pre-qualifications, processing of Tenders etc. are given in chapter five where there are 13 Rules (Rule 90 to Rule 102). In chapter six, guideline for procurement of intellectual and professional services is given where there are 24 Rules (Rule 103 to Rule 126). Rule 127 and Rule 128 constitute chapter seven and chapter eight respectively. Professional misconduct is described in chapter seven and E-government procurement is described in chapter eight. In chapter nine, miscellaneous issues are described where there are 2 Rules (Rule 129 and Rule 130)

As a part of literature review, the PPA 2006 and PPR 2008² with all amendments have been

studied thoroughly. The rules which seemed as the basis of compliance KPIs were reviewed keenly.

2.2 Key Performance Indicator (KPI): Meaning and importance

Key Performance Indicators, also known as KPI or Key Success Indicators (KSI), help an organization to define and measure progress toward organizational goals. These KPIs are quantifiable measurements, agreed to beforehand, that reflect the critical success factors of an organization. Once an organization has analyzed its mission and objectives, identified all its stakeholders, and defined its goals, it needs a way to measure progress toward those goals.

KPIs allow an organization to adequate measures of performances from the standardized activities. Importance of performance measuring is very significant, which also can be found in a proverb: *“If you want to improve something, you have to measure it”*, and another proverb: *“What get measured gets corrected”*-according to CIPS course guide book. Continual measuring is a base for continual improvements of organization performances which is one of the most important management principles.

SRGB grouped the 45 KPIs into four categories such as Compliance, Efficiency, Effectiveness, and Transparency. The Performance of the activities related to Procurement of the procuring entities of the four target agencies is assessed against each of the KPIs separately for (i) tenders/contracts each valued up to Tk. 20 million, (ii) tenders/contracts each valued above Tk. 20 million each at division level as well as at country level.

Moreover, CPTU has classified these 45 KPIs into 13 broad categories. These are (i) Invitation for Tender (IFT), (ii) Tender Submission, (iii) Tender Opening Committee (TOC) and Tender Evaluation Committee (TEC), (iv) Tender Evaluation, (v) Approval of Tender Evaluation Report (TER), (vi) Contract Award, (vii) Delivery/ Completion, (viii) Payments,(ix) Complaints, (x) Contract Amendments, (xi) Contract Dispute Resolution, (xii) Fraud and

Corruption and (xiii) Procurement Management Capacity.

2.3 Compliance, Efficiency, Competitiveness and Transparency: Meaning and significance

2.3.1 Compliance means the act adhering to, and demonstrating adherence to, a standard or regulation. In the context of procurement, compliance is the state of being in accordance with the relevant policies, rules and regulations. Compliance indicates to what extent the procuring entities adhere to the procurement rules and procedures specified in the PPA 2006 and PPR 2008. The level of adherence to government procurement rules attained by the procuring entities has been shown in **Appendix A**.

2.3.2 Efficiency here means the procurement efficiency. The maximum time allowable for completion of different Procurement activities are specified under the respective provisions of PPR 2008. The level of procurement efficiency attained by an agency is, therefore, measured by the average time an agency takes to complete a particular procurement activity in comparison to the time limit specified in PPRP-2008 for that activity. The four key performance indicators (KPIs) related to the procurement efficiency are: (i) percentage of cases tender evaluation completed within timeline (KPI-15), (ii) percentage of contract award decisions made within timeline (KPI-22), (iii) percentage of contract award decisions made within initial tender validity period (KPI-29), and (iv) percentage of contract completed within the scheduled time (KPI-30).

2.3.3 Competitiveness in public procurement is manifested by the degree of interest and willingness of the tenderers to participate in tenders. Competition is the most important factor to bring down the procurement cost. Competition has, therefore, a very positive role in the public tenders of Bangladesh. Wider dissemination of tender information increases competition, transparency and accountability. To attract the prospective tenderers, the tender notices should be distributed widely and the cost of tender documents should be kept low, so that the cost of entry for the potential tenderers may be the minimum. The notices of public tenders should be published in the national newspapers rather than in local ones. E-

tendering of e-procurement can cause wider, effective as well as quicker dissemination of tender information, Allowing longer periods of preparation of tenders encourages the potential tenderers to participate in the tenders. According to the procurement guidelines (PPR 2008 and Development partner's Procurement Guidelines), it is important to allow sufficient time to the tenderers for preparing the tenders. Packaging of tenders is also an important element to influence the tenderers entry and tendering decision. Capacity of the tenderers in terms of possessing appropriate equipment, capital, management skills, etc. restricts the tenderers to compete in big size tenders. The number of tenderers competing for a work is inversely proportional to the value and sophistication of the work for which tender is invited. Also, the number of tenderers competing in a tender valued less than Tk. 20 million is normally larger than the number of tenderers competing in a tender valued above Tk. 20 million.

Competition also measures the level of determination and seriousness of the tenderers in winning the tender. Stronger willingness leads the tenderers to purchase the tender documents, while firmer determination leads the tenderers to participate and submit tender and seriousness encourages them to comply with and fulfill all the prerequisites of the tender. The number of participants in a tender, demonstrate the degree of competitiveness. The four KPIs that measure competitiveness in procurement are: (i) average number of days allowed to prepare tender for submission (KPI-6) (ii) average number of tenderers who purchased tender document (iii) average number of tenderers who submission tender (KPI-9) and (iv) average number of responsive tenders (KPI-16).

2.3.4 Transparency in the public procurement is a vital and very sensitive issue.

The government is the largest purchaser of goods, works and services. There are national as well as international rules for procurement by the government agencies which sets the standards of Transparency and non-discriminatory treatment of contractors engaged for procurement of goods, works and services under the financial arrangement of GOB and the development partners. Lack of Transparency in government procurement favors inefficient companies by discriminating the good companies. A closed and/ or opaque procurement system can create opportunities for

corruption and wastage. The government agencies should, therefore, ensure publication of tender notice in well circulated national and local newspapers allowing a minimum number of days for submission of tender from the date of publication of the IFT as per the rules of PPR 2008 and/or of the funding agencies (KPI-1), (ii) publication of IFT each having an official estimated cost of Tk. 10 million and above in CPTU's website (KPI-28).

2.4 KPIs used in Public Procurement

2.4.1 IFTs Publication in widely circulated national/ local newspapers (KPI-1)

It demonstrates whether the procuring entities published all of their IFTs under the Open Tendering Method (OTM) in a minimum of two widely circulated national newspapers. The analysis of data collected from the procuring entities found by SRGB for a particular period demonstrates whether they published 100% of their IFTs in widely circulated national/local dailies to encourage the potential and interested tenderers to participate in the tenders.

2.4.2 Publication of IFTs each valued Tk. 10 million and above in CPTU's website. (KPI-2)

According to the provisions of PPR 2008, the government procuring entities are required to publish all of their IFTs valued Tk. 10 million and above in CPTU's website. So, the analysis of data collected from the procuring entities demonstrates to what extent they abided by this mandatory rules of the government. For example, here in the BCC Bhaban Project, the IFT was published in CPTU website.

2.4.3 Tenders following GoB Procurement Rules (KPI-3)

According to the provisions of PPR 2008, the government procuring entities are required to follow the rule of the government. Sometimes the procuring entity had to follow the development partner's procurement rule if mentioned in the prodoc or project document.

2.4.4 Tender following Development Partner Rules (KPI-4)

PPR 2008 also allowsto follow the development partner's procurement rules if mentioned in

the prodoc or project document. Usually it do not necessarily above any threshold limit. The respondents were asked to provide information both in PWD and RHD from their perception about the Percentage of Tenders following Development Partner Rules.

2.4.5 Multiple locations submission of tenders (KPI-5)

Initially both for GoB and Development Partners funded procurement has the option to ensure the more participation in tender to avoid cartels. Its implementation was also proved difficult. Both PWD and RHD they practice this rule in case-by-case basis. And now for the Development Partners funded procurement they used to follow the single point dropping of tenders.

2.4.6 Average number of days allowed to prepare tender for submission (KPI-6)

According to PPR 2008 and Development Partners' Procurement Guidelines, it is very important to allow sufficient time to the prospective tenderers to prepare their tenders against an IFT. Allowing a longer period for preparation of tenders encourages the potential tenderers to participate in the tender creating a congenial environment for higher competition. Therefore, the number of days allowed by a procuring entity from the date of publication of an IFT for preparation and submission of tenders by the potential tenderers indicates the expected level of competition. This has been clearly explained in Schedule II of PPR 2008. According to the provisions of PPR 2008, the allowable maximum time between publishing of an Invitation for Tender (IFT) and tender submission deadline depends upon the estimated value of the IFT. In general, it is minimum 14 days and maximum 28 days. However, for an emergency, time can be reduced to 10 days (in case of OTM) to 7 days (in case of LTM).

2.4.7 Percentage of tenders having sufficient tender submission time (KPI-7)

This indicator is for assessing transparency and complains in public procurement. The tenderers should be given sufficient time to prepare the tender by the tenderers. PPR 2008 specified different times for different types of procurement. The effectiveness of this KPI can be guessed from the application for increasing the tender submission deadline by the prospective tenderers.

2.4.8 Average number of tenderers who purchased tender document (KPI-8)

The number often refers purchasing a tender document in the primary indication of the degree of competition expected in tender. So, the higher is the number of tenderers that purchased tender document against an IFT, the higher is the expected degree of competition in the tender. More participation ensures value for money of public funds.

2.4.9 Average number of tenderers who submitted tender (KPI-9)

The level of determination and seriousness of the tenderers for winning a tender is considered as a measure of competition. Stronger willingness of the tenderers motivates them to purchase the tender documents; while firmer determination leads them to participate and submit tenders complying and fulfilling all the prerequisites of the tender. Therefore, the number of tenderers submitted tender also indicates the expected level of competition in the tender.

2.4.10 Ratio of number of Tender submission and number of tender document sold (KPI-10)

It is expected by the procuring entity that all the tender document sold should be submitted to ensure competition and transparency. The more the value of ratio more better result can be achieved.

2.4.11 Percentage of cases TOC included at least ONE member from TEC (KPI-11)

Rule 7 of PPR 2008 expresses how the Tender Opening Committee (TOC) will be formed and this is the base for KPI 11. According the to the provision of Rule 7, there should three members in the TOC one of them must be from Tender Evaluation Committee (TEC) and two others from concerned procuring entity and other organization.

2.4.12 Percentage of cases TEC formed by contract approving authority (KPI-12)

Formation of TEC by the Contract approving authority is a standard practice in public procurement. But variation of this can also exist in case of special circumstances. Usually, in

case of variation TEC formation is done by the authority higher than the contact approving authority.

2.4.13 Percentage of cases TEC included two external members outside the Ministry or

Division (KPI-13)

Percentage of cases TEC included two external members outside the Ministry or Division (KPI 13) is adhered to Rule 8 which has explained in Schedule II of PPR 2008. As per provision of Rule 8, TEC should be constituted with minimum five (5) and normally not exceeding seven (7) members, two (2) of whom at least shall be from outside the Ministry or Division or agencies under it. However, for low value procurement, TEC should be formed with minimum three (3) members, one (1) of whom shall be from other agency or procuring entity.

2.4.14 Average number of days between tender opening and completion of evaluation (KPI-14)

Rule 36 explains the procurement approval procedure which has been explained in more details in Schedule 3 of PPR 2008. This KPI is based on the stated rule earlier. Depending on the contract approving authority (CAA), it varies from 2 to 3 weeks.

2.4.15 Percentage of cases tender evaluation completed within timeline (KPI-15)

PPR-2008 has provided specific time limits for completion of evaluation tenders by the tender committees separately for the tenders each valued up to Tk. 20 million and above Tk. 20 million. The analysis of data collected in this regard from the procuring entities, therefore, indicates to what extent they have been able to complete evaluation of their tenders within the specified timelines.

2.4.16 Average number of responsive tenders (KPI-16)

Responsiveness of a tender is entirely dependent upon fulfilling all the prerequisites mentioned in the tender document which again is dependent upon the degree of willingness and capacity of the tenderers who submitted tender. A non-responsive tender reduces competition. Therefore, the higher the number of responsive tenders, the high is the level of

competition. The tenderers should also be known about the PPA 2006 and PPR 2008 as like by the government officials for procurement using public fund.

2.4.17 Percentage of cases TEC recommended for Re-Tendering (KPI-17)

Re tendering is not expected in public tendering process. The re-tendering process took higher time to complete the procurement. It also hampered the project progress as planned. It might the cause of poor specification prepared the PE or because of the negligence of the tenderer. The lesser the percentage indicates the better efficiency. Sometimes after taking sufficient care by the tenderer, the PE is compelled is to go for re-tendering.

2.4.18 Percentage of cases where tender process cancelled (KPI-18)

The reasons for cancellation of tender process might vary from organization to organization and also depends on time. If the HOPE or PE understand that the tender process did not followed the rules and regulations specified by the PPA(2006) and PPR(2008) and this will not ensure value for money, it is better to cancelled the whole tender process, that will ensure transparency.

2.4.19 Average number of days taken between submissions of tender evaluation report and approval of contract (KPI-19)

This KPI is also concerned with Rule 14 and 36 of PPR 2008. Depending on CAA, it varies from one (1) week (for PD, PM or AO) to two (2) weeks (HOPE, Ministry, CCGP).

2.4.20 Percentage of tenders approved by the proper financial delegated authority (KPI- 20)

Rule 36 also explains that Delegation of Financial Powers (DoFP) issued by Finance Division, Ministry of Finance (MoF) should be followed in case of approval of procurement/tender. This is a vital issue of ensuring transparency in procurement and has been base for KPI 20.

2.4.21 Percentage of cases TEC submitted report directly to the contract approving authority where approving authority is HOPE or below (KPI-21)

Where the Approving Authority is at the level of the Head of a Procuring Entity or Project Director (PD), Project Manager (PM), or an authorized officer (AO) as per DoFP, it is the rule to submit the Tender Evaluation Report (TER) by the TEC directly to the Head of the Procuring Entity (HOPE) or the Project Director, Project Manager, or the authorized officer for approval [Rule 36(3)]. This is the basis of KPI 21 which has been fixed for compliance monitoring of PPR (2008).

2.4.22 Percentage of contract awards decisions made within timeline (KPI-22)

PPR-2008 has also provided specific time limits for making contract award decisions separately for the contracts each valued up to Tk. 20 million and above Tk. 20 million. The PEs are usually tried to make it within stipulated timeframe. Still then in some cases it took more time specially where the decision depends beyond the PEs control.

2.4.23 Percentage of cases TER reviewed by person/ committee other than the contract approving authority (KPI-23)

This indicator indicates how frequently the TER reviewed either by a person or by constituting a committee. Review may be necessary for various reasons including complaint received, ensuring reliability of the committee and so on.

2.4.24 Percentage of Tenders approved by higher tier than the contract approving authority (KPI -24)

As per delegation of financial power threshold has been circulated to approve the tender of different categories. Still then due to bureaucratic practice some tender need to be approved by the higher authority than the authorized entity. This practice need to be stopped to reduce the time to complete the procurement cycle as well as increase the efficiency.

2.4.25 Average number of days between final approval and Notification of Award (KPI- 25)

This indicator originated from Rule 36 (4) which has been described in Schedule II of PPR 2008. It is generally within seven (7) working days of receipt of the approval but before expiry of the tender or proposal validity date. This has been carefully noticed in compliance monitoring of PPR 2008. Most of the PE try to comply this KPI.

2.4.26 Average number of days between tender opening and Notification of Award (KPI-26)

There are several steps need to complete from tender opening to notification of award. Delay in one or more than one steps will supplement the total delay in procurement process. This indicator is useful to measure the efficiency of the PE.

2.4.27 Average number of days between Invitation for Tender (IFT) and Notification of Award (KPI-27)

This indicator involved one more step to issue NOA against the competent tenderer compared to KPI-26. The performance of the procuring entity utilizing this KPI would measure the Compliance as well as efficiency. The less time require will have the better efficiency.

2.4.28 Publication of contract awards each valued Tk. 10 million and above in CPTU's website (KPI-28)

According to the provisions of PPR 2008, the government procuring entities are required to publish all of their contract awards each valued Tk. 10 million and above in CPTU's website. Therefore, the analysis of data demonstrates to what extent this mandatory rule of the government has been followed.

2.4.29 Percentage of contracts awarded within initial tender validity period (KPI-29)

A contract is required to be awarded to the selected tenderer obviously within the initial validity period of the relevant tender, as otherwise the selected tender may refuse to accept the award creating many complicacies. Awarding of a contract within the initial period of the relevant tender is one of the main yardsticks of measuring the efficiency of the concerned TOC, TEC and CAA. Therefore, analysis of the data collected in this regard from the procuring entities reveals how efficient they have been to award a contract to the selected tenderer within the initial validity period of the relevant tender.

2.4.30 Percentage of contracts completed within the scheduled time (KPI-30)

Any contract is expected to be completed within the scheduled time, as otherwise many complications including cost over-run, reputation loss, legal complicity may arise. Completing a contract within the scheduled time is the main yardstick to measure the contract management capacity of the concerned procuring entity as well as the contractor. Therefore, analysis of the data collected in this regard from the procuring entities reveals how efficiently they have been able to manage the relevant contract and the contractor.

2.4.31 Percentage of contracts having liquidated damage imposed for delayed delivery/completion (KPI-31)

As per Rule 39 (27), the contractor shall be liable to pay liquidated damages at the rate per day or week as specified in the contract for each day of delay from the Intended Completion Date (ICD) of the original contract or extended completion date provided that the total amount of liquidated damages shall not exceed the amount defined in the contract. On the basis of this, KPI 31 has been formulated for studying compliance of PPR 2008.

2.4.32 Percentage of contracts fully completed and accepted (KPI-32)

This KPI is used to measure the procurement performance of the PE's efficiency and effectiveness. The expenditure incurred for procurement need to be effective to ensure value for money of the public fund. Due to various reasons the contract could not be completed fully as designed. If contract could not be completed fully as per design it should be revised as per prevailing situation with both parties consent.

2.4.33 Average number of days taken to release payment from the date of certificate of PM/Engineer (KPI-33)

As a measure of compliance monitoring of PPR 2008, KPI-33 has been taken under consideration. This KPI-33 has been formulated from Rule 39(22). It has been specified that the Procuring Entity shall pay the contractor's bill certified by the Project Manager (PM) within twenty eight (28) days of the Project Manager's issuing a certificate of completion.

The less the days taken will facilitate the contractor and also worked as a motivating tool for contractor.

2.4.34 Percentage of cases (considering each installment as a case) with delayed payment (KPI-34)

The contractor need payment on time after completing the contract and accepted by the PE. But sometimes it becomes delayed to make payment to the contractor after fulfilling the all relevant requirement and submitting the papers on due time due to non-availability of fund on time or shortage of fund due to lack of planning and arranging the fund.

2.4.35 Percentage of contracts where interest for delayed payments was made (KPI-35)

Payment of interest is a mandatory requirement of PPR 2008. It is a right to get if not paid as scheduled during contract or any revised contract between the parties. As a compliance monitoring, it has been looked for whether interest were paid for the delayed payment or not. KPI 35 was solely developed for this to motivate the contractor. STD allow this sort of mechanism to minimize the cost of finance of the contractor.

2.4.36 Percentage of tender procedures with complaints (KPI-36)

Sometimes there are complaints arose due to mishandling of the contract either because of the PE or the contractor or other stakeholders. Any complaint is responsible for the delay which hampered smooth implementation of the procurement activities.

2.4.37 Percentage of complaints resulting in modification of award (KPI-37)

If there are complaints arose due to either party's interest it should be resolved to make the contract effective. For effective contract management it needs to modify the contract with the consent of both parties.

2.4.38 Percentage of cases complaints have been resolved (KPI-38)

The complaints rose by any party need to be resolved at early at possible without further escalation. It would be better to solve at the initial level. The complaints should be

resolved through ADR method to avoid litigation. Litigation took long time and it is expensive also. It also hampered the reputation of both parties and relationship also affected between the parties involved in the procurement process.

2.4.39 Percentage of cases review panel's decision upheld (KPI-39)

As part of Alternative Dispute Resolution (ADR) many contract's dispute to be finalized by the review panel as mentioned in the PPR (2008) as well as in the contract document. If the decision of the panel is not accepted by the either party it can sue in the court for mitigation of the complaints. Litigation process involved much time and it is expensive. Moreover, the reputational loss and relationship damage may also need to be thought by the both parties.

2.4.40 Percentage of contract amendments/variations (KPI-40)

If the procuring entity initially would not be able to specify the work or services to be procured under the contract or there rose necessity to change the scope of the contract it would create necessity to amend or need variations to be made to fulfill the requirements. Sometimes the initial contract could not cover the actual demand of the PE due the various reasons especially when the performance specifications and BOQ method were used.

2.4.41 Percentage of contracts with unresolved disputes (KPI-41)

Sometimes contract manger of the PE could not be able to resolve the disputes in spite of trying to mitigate the problems. This sort of situation is not desirable to any procuring entity. Still there might be a possibility to have any disputes without being solved because of either party's fault or negligence.

2.4.42 Percentage of cases fraud & corruption detected (KPI-42)

To ensure value for money, fraud and corruption need to be avoided or controlled properly by ensuring transparency in procurement activities. It can happen from both party and not desirable to anyone in usual course of procurement. Any party undergone with fraud/corruption hampered the procurement. The transparency of both the parties can ensure the protection of fraud/corruption. Also good governance of the PE's could prevent fraud/corruption. There should be a joint campaign to prevent fraud/corruption.

2.4.43 Average number of trained procurement staff in each procuring entity (KPI-43)

The procurement entity having personnel with proper training on procurement will ensure the better performance of the PE and can manage the contract with better efficiency and able to ensure the effectiveness of the procurement. The more trained personnel on procurement will ensure better practice of PPA and PPR in any organization. It would be better to organize/declare a prize for the best procurement officer as recognition in the organizational culture.

2.4.44 Percentage of procuring entity which has at least one trained / certified procurement staff (KPI-44)

The PE having no trained personnel on procurement would suffer in compared to that PE having at least one trained personnel in procurement. Though the selected two organizations are being the targeted agency of the CPTU, some PE may not have the trained procurement personnel due to new recruitment. But this is the management competency of that PE to ensure at least one trained procurement staff should be arranged at each procuring entity. Unless otherwise the dispute will arise and value for money would not be achieved.

2.4.45 Total number of procurement persons in the organization with procurement training (KPI-45)

The more personnel having procurement training in any organization will ensure good procurement practice and also ensure value for money especially in the public sector. If all the members of the procurement team having the training on procurement it will ensure the good practice of PPR and feedback from the practitioners will help the government to modify the Act and Rules as necessary for ensuring better value for money as well as to increase the effectiveness of the procurement activities.

2.5 Delegation of Financial Powers for Development Projects and Sub-delegation

Delegation of Financial Powers (DoFP) and sub-delegation thereof are important document closely linked to the PPR 2008. These documents have been issued by the Finance Division of the Ministry of Finance, Government of the People's Republic of Bangladesh. As a part of literature review of the present study, Delegation of Financial Powers has been

carefully studied and found out the contract approval capacity of different managers such as Project Director (PD), Head of Procuring Entity (HOPE), Ministry, CCGP etc.

2.6 Procurement Performance against standard KPIs: SRGB measured the procurement performance of PWD. For the comparison of the procurement performance measured by SRGB with the findings of this study will have a significance importance as the consultancy services provided by the SRGB have not been continued after December 2012.

CHAPTER THREE

METHODOLOGY

3.1 Methods of collecting data/Sampling method

A questionnaire survey was adopted for this study. Survey method was used as this is considered as the best method available to the social scientists interested in collecting original data. It gives a clear idea about the actual facts. A quantitative method was followed in this study.

The questionnaires were used for this study which is given in the **Appendix D**. But actual project data of BCC Bhaban was first collected from PWD E/M Division-7 to analyze essential data to have an overview of the whole project. These were used as significant secondary data which helped to see the revised Development Project Proposal of the project.

Table 1: Name of work:- Revised DPP for Vertical Extension of BCC Bhaban under the project “ Strengthening of BCC by Development of structure, 4th floor to 10th floor

			Taka in Lac.
	A. Electrical (Internal Electrification)		
	i).Internal Electrification of main building	(Area=10551sq.mx1420/-)	149.82
	ii). Special fittings fixture	L.S	20.00
	iii) Internal Electrification for Auditorium	L.S	20.00
	iii) Normal & Emergency MDB.SDB.DB control	L.S	20.00
	B. Electrical (External Electrification)		
	i) 400 KVA Generator including cables	1 Set.	70.00
	ii) 2000KVA sub-Station equipment & HT. LT cable	1 Set.	180.00
	iii) Compound security garden light * facade light	L.S	15.00
	iv) Earthing with lighting arrester system	1 Set.	23.00
	C. Mechanical		
	i) Split type Air-cooler and Split ducted type air cooler system	600 Ton	600.00
	ii) Passenger lift (2Nos x1600 kg.24 person 11 stop)	2Nos x 1600 kg.	90.00
	iii) Pump motor (For lifting water)	1 No	16.00

	iv) Fountain i/c pump control & cable	L.S	15.00
	D. IT Environment and support		
	i) Computer Networking system (LAN)	L.S	50.00
	ii) Telephone & PABX system	L.S	20.00
	iii) Access control system and entry scanner & security post	L.S	15.00
	iv) PVC pipe laying	L.S	10.00
	iii) PA& Conference system	L.S	30.00
	vi) Sound and stage lighting system	L.S	60.00
	E. Renewable energy		
	i) Solar energy plant (14KW) (14x3.00 Lac)		42.00
	F. Building Automation (E/M works) safety and security		
	i) Fire Detection protection & Alarm system	L.S	140.00
	ii) CCTV system	L.S	30.00
	iii) Building Automation (Occupancy. sensor, light dimmer intelligent & energy saving automation	L.S	150.00
	iv) Consultancy for building Automation, computer net working system,	L.S	5.00
	G. Other related works.		
	i) DESA/DESCO security fee	L.S	20.00
	i) Preparation of tender documents, honorium for TEC, TOC, Advertisement free etc.	L.S	5.00
		Total Tk:	1795.82

A questionnaire survey was adopted for collecting primary data from different stakeholders related to procurement activities of PWD and having an acquaintance with PPA 2006 and PPR 2008. For the in-depth study on compliance issues of PPR 2008, Questionnaire was given to all Division of PWD that are closely related to Electro-mechanical works with a general introduction of the research. Among them 20 (Twenty) Divisions replied with the procurement data of single project. Here both only closed ended questions were stipulated for getting the in-depth essence of procurement activities.

Before asking for filling the questionnaire, the general idea of the research objectives were exchanged with them. After the exchange of general idea of the research objectives, the questionnaire was given to them. They were requested to fill the questionnaire based on the

actual data of a specific project under his/her territory. Some electronics means was also used to collect feedback from some of the PWD persons affiliated with the project.

3.2 Selection of Study Area

PWD Head Quarters and District offices were selected for collection of data in the questionnaire. Due to time constraint of the present study, it was not possible to collect data from all the districts. The study was mainly focused on the BCC Bhaban's Electro-mechanical works; As the implementation of work from the ministry wise project progress report has been attached in **Appendix C**, from where we get the idea that most of the works of the project have been completed and some of them are on going and a few of them are not yet started as work order has recently been placed against those works. Especially those which are in the middle stage of their implementation were considered for the study, but some procurement information from the rough estimate of the works as stated bellow-

Name of work:- Rough Estimate for Vertical Extension of BCC Bhaban under the project " Strengthening of BCC by Development of structure, 3rd phase (11th floor to 14th floor)

			Taka in Lac.
	A. Electrical (Internal Electrification)		
	i).Internal Electrification(Non Residential Building)	(Area=6677sq.mx1420/-)	94.81
	ii). Special fittings fixture and metering system and safety control device	L.S	20.00
	iii) Normal & Emergency MDB.SDB.DB control in/c L.T cable etc.	L.S	50.00
	B. Electrical (External Electrification)		
	i) 400 KVA Generator including cables	1 Set.	60.00
	ii) Extension of Earthing with lightening arrester system	1Set.	15.00
	iii) Compound lighting from roof	L.S	5.00
	C. Mechanical		
	i) Split type Air-cooler and Split ducted type air cooler system	350 Ton	400.00
	ii) Passenger lift (1600 kg 24 person 15 stop with AVR)	(1No x50.00)	50.00

	iii) Observation /capsule lift.(1000Kg) 15 person 15 stop with AVR	1 No	90.00
	D. IT Environment and support		
	i) Computer Networking system	L.S	40.00
	ii) Telephone & PABX system	L.S	20.00
	iii) PA& Conference system	L.S	30.00
	vi) CCTV	L.S	20.00
	v) PVC pipe laying (For Telephone, PABX, Intercom CCTV, internet etc.		8.00
	vi) Access control system and entry scanner & security post	L.S	8.00
	E. Renewable energy		
	i) Solar energy plant	8Kw x3.00	24.00
	ii) Shifting of solar energy plant from 10 th floor to 14 th floor roof top	L.s	2.00
	F. Building Automation (E/M works) safety and security		
	i) Fire Detection protection & Alarm system	L.S	50.00
	ii) Building Automation (Occupancy. sensor, light dimmer intelligent & energy saving automation	L.S	50.00
	iii) Consultancy for building Automation, computer net working system, Fire protection and detection system etc.	L.S	5.00
	G. Other related works.		
	i) Preparation of tender documents, honorium for TEC, TOC, Advertisement free etc.	L.S	5.00
		Total Tk:	1046.81

But from **Appendix B**, we get the original approved official estimate on which the Projectwork was performed.

3.3 Study Period

Survey was conducted at different Division offices of PWD, Planning Commission, IMED, and TEC members of PWD from Roads and Highways Department (RHD) and Public Works Department (PWD) Dhaka, Bangladesh from December 2015 to May 2016.

3.4 Sample Size

For Questionnaire, the respondents were categorized in four different types namely i) PWD's employee, ii) TEC Members, iii) Persons who are dealing with PWD's projects iv)

Others. As there are numerous people are concerned with PWD's procurement activities of Electro-mechanical works, a total of 28 different officers given their data.

Projects for the study were randomly selected as PWD does not do a lot of Electro-mechanical Project work every year, and due to the time constrain of the dissertation.

3.5 Data processing and Analysis/Analytical Framework

As a means of processing, collected data have been cleaned, edited, arranged and coded before statistical analysis. The main statistical analytical tool used in this study was Statistical Package for Social Science (SPSS) to analyze and interpret the subject matter of the study and for preparing the frequency table & other tables and for constructing pie charts. 5-point Likert scale was used in the questionnaire to categorize the answers for easy analysis.

Microsoft Excel has been used for preparing Some of the tables related to the BCC Bhaban Project. Microsoft Word has been used for preparing the report.

Chapter Four

Result & Discussion

Aim of this study is to find out the level of compliance of PPR 2008 by BCCBhaban in its procurement activities. This study is specifically aimed to assess the gap of compliance and scope of improvement for implementation of PPR 2008 in BCCBhaban vertical extension 3rd phase.

4.1 Demographic overview of the respondents

Questionnaire survey has been conducted among officers mainly responsible for Vertical Extension of BCC Bhaban under the project “Strengthening of BCCBhaban by Development of structure”. These officers are from PWD and involved in the project in various engineering activities. Also the respondent holds different ranking and all of them are well acquainted with procurement process of BCCBhaban extension 11th floor to 14th floor.

Below is a summary of demographic information of respondents,

Table 3: Summary of demographic information of the respondents

Respondent's	Frequency	Percent
Organization		
PWD	28	100.0
Total	28	100.0
Designation		
Assistant Engineer	9	32.1
Senior Assistant Engineer	6	21.4
Executive Engineer	3	10.7
Administrator/Consultant	6	21.4
Project Director	4	14.2
Total	28	100.0
Relevancy with PWD		
Employee	9	32.1
TEC Member	5	17.8
Dealing with BCC Bhaban	12	42.8
Others	2	7.1
Total	28	100.0
Education Level		
Masters'	3	10.7
Bachelor	24	85.7
Others	1	3.6
Total	28	100.0
Training on PPA/PPR 2008		
Yes	25	89.3
No	3	10.7
Total	28	100.0

4.2 Overview of survey questionnaire:

The respondents were asked Seventeen (17) questions regarding compliance of PPR 2008 in BCC Bhaban's procurement activities for the Vertical extension from 11th floor to 14th floor. Questionnaire were asked to the respondents on compliance KPIs in a 5-point Likert scale where as 1 for "Very Poor", 2 for "Poor", 3 for "Neutral", 4 for "Good" and 5 for "Very Good". Frequency distributions of response are shown in Table 2 and Table 3 respectively

Table 4 :KPI_6

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Neutral	4	14.3	14.3	14.3
Good	13	46.4	46.4	60.7
Very Good	11	39.3	39.3	100.0
Total	28	100.0	100.0	

Table 5: KPI_11

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Neutral	2	7.1	7.1	7.1
Good	10	35.7	35.7	42.9
Very Good	16	57.1	57.1	100.0
Total	28	100.0	100.0	

Table 6: KPI_13

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Neutral	2	7.1	7.1	7.1
Good	9	32.1	32.1	39.3
Very Good	17	60.7	60.7	100.0
Total	28	100.0	100.0	

Table 7: KPI_14

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Poor	1	3.6	3.6	3.6
	Poor	3	10.7	10.7	14.3
	Neutral	4	14.3	14.3	28.6
	Good	8	28.6	28.6	57.1
	Very Good	12	42.9	42.9	100.0
	Total	28	100.0	100.0	

Table 8: KPI_19

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Poor	1	3.6	3.6	3.6
	Poor	2	7.1	7.1	10.7
	Neutral	4	14.3	14.3	25.0
	Good	10	35.7	35.7	60.7
	Very Good	11	39.3	39.3	100.0
	Total	28	100.0	100.0	

Table 9: KPI_20

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	1	3.6	3.6	3.6
	Neutral	7	25.0	25.0	28.6
	Good	9	32.1	32.1	60.7
	Very Good	10	35.7	35.7	96.4
	53.00	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

Table 10 :KPI_21

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	1	3.6	3.6	3.6

Neutral	11	39.3	39.3	42.9
Good	7	25.0	25.0	67.9
Very Good	9	32.1	32.1	100.0
Total	28	100.0	100.0	

Table 11: KPI_25

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Poor	1	3.6	3.6	3.6
Neutral	10	35.7	35.7	39.3
Good	10	35.7	35.7	75.0
Very Good	7	25.0	25.0	100.0
Total	28	100.0	100.0	

Table 12: KPI_31

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very Poor	1	3.6	3.6	3.6
Poor	4	14.3	14.3	17.9
Neutral	3	10.7	10.7	28.6
Good	14	50.0	50.0	78.6
Very Good	6	21.4	21.4	100.0
Total	28	100.0	100.0	

Table 13: KPI_33

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very Poor	2	7.1	7.1	7.1
Poor	1	3.6	3.6	10.7
Neutral	7	25.0	25.0	35.7
Good	9	32.1	32.1	67.9

Very Good	9	32.1	32.1	100.0
Total	28	100.0	100.0	

Table 14: KPI_35

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Very Poor	6	21.4	21.4	21.4
Poor	2	7.1	7.1	28.6
Neutral	4	14.3	14.3	42.9
Good	8	28.6	28.6	71.4
Very Good	8	28.6	28.6	100.0
Total	28	100.0	100.0	

Table 15: Central Tendencies & Standard Deviation of responses

	KPI_6	KPI_11	KPI_13	KPI_14	KPI_19	KPI_20	KPI_21	KPI_25	KPI_31	KPI_33	KPI_35
Mean	4.25	4.50	4.53	3.96	4.00	5.78	3.85	3.82	3.71	3.78	3.35
Median	4.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode	4.00	5.00	5.00	5.00	5.00	5.00	3.00	3.00 ^a	4.00	4.00 ^a	4.00 ^a
Standard Deviation	.70053	.63828	.63725	1.17006	1.08866	9.29499	.93152	.86297	1.08379	1.16610	1.52058

a. Multiple modes exist. The smallest value is shown

4.3 Overview of the Key Informant Interview

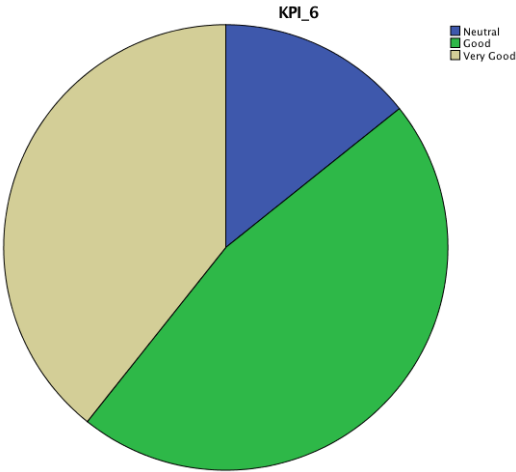
Key informant interview has been conducted with several engineers involved in strengthening of BCC Bhaban by development of structure, 3rd phase (11th floor to 14th floor). Most of the key informants mentioned that before PPR, General Financial Rules (GFR) was applied for the procurement of goods, works and services. The monitoring and evaluation of the then procurement activities were not so structured. These all were streamlined with the introduction of PPR 2003 and strengthened after PPR 2008.

All key informants were asked about the compliance of KPIs and in-depth opinion was expected for a clear view of the issue, understanding the same and concluding thereof. Also, the key informants were asked about the problems of compliance of PPR 2008 in their respective procurement activities. The opinion of the key informants were noted down and used for analyzing the findings of the questionnaire survey.

4.4 Findings of the questionnaire survey, analysis and discussion

KPI 6: BCCBhaban is maintaining time for ‘publishing Advertisement and Tender submission deadline’

The perception of the respondents varied for this question where 14% respondent encircled ‘neutral’ option of the questionnaire. 46% marked it it as ‘good’, and 39% said its ‘Very Good’. It is assumed that BCCBhaban is fairly following the rule, as the standard deviation yield small dispersion in responses. The mean, median, and mode of the responses are 4.25, 4.00 and 4.00 respectively.



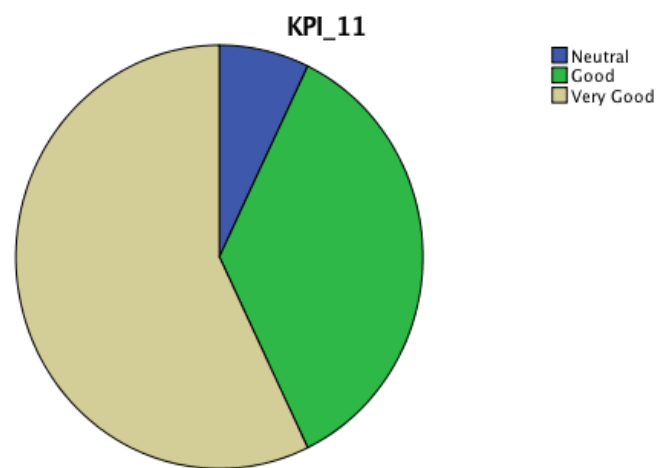
KPI 11: In BCCBhaban, TOC consist of at least one member from TEC

Majority respondents selected two options: ‘Very good’ and ‘Good’. 57.1% of respondents answered the question as ‘Very good’ and 37.7% answered it as ‘Good’. Only 7.1 % answered it as ‘neutral’, no ‘poor’ or ‘very poor’ were being recorded. This express that BCCBhaban is fairly complying tothe Rule 7 of PPR 2008 where Tender Opening Committee (TOC) is always consisted of at least one member from TEC. The standard

deviation of the response is 0.63828 which means a small effect on the study result. The mean, median and mode of the responses are 4.50, 5.00 and 5.00 respectively.

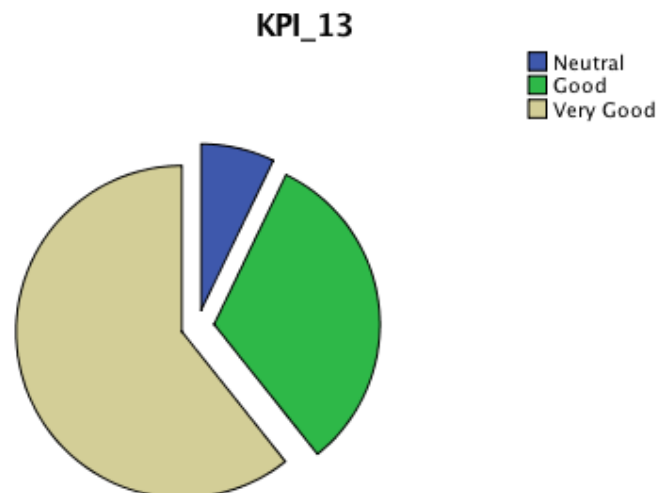
According to Schedule II [Rule 7] of PPR 2008, Tender Opening Committee (TOC) must include one (1) member from Tender Evaluation Committee (TEC). From the perceptions of the respondents of questionnaire survey and responses of the key informants, it can be said that

BCC is complying the Rule 7 of PPR 2008 as the responses are highly positive to this issue.



KPI 13: BCCBhaban followed the rule of including Two external members for TEC

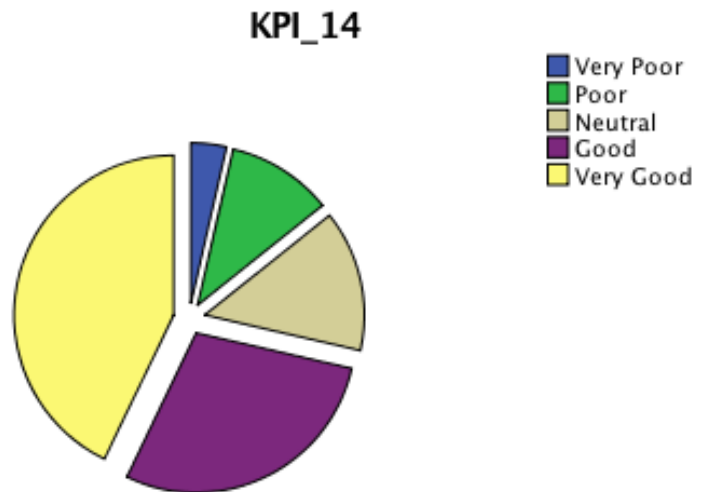
60.7% of the respondents have chosen 'Very good' while 32.1% verdict 'Good' on that question. 7.1% of the respondents remained 'neutral'. No one selected 'poor' or 'very poor' option. The standard deviation of the response is 0.63725, which means small effect on the study result. It indicates that BCCBhaban is complying the Rule 8 of PPR 2008 very fairly and two external members are included in the Tender



Evaluation Committee in general. The mean, median and mode of the responses are 3.97, 4.00 and 5.00 respectively.

KPI 14: BCC Bhaban followed standard time between tender opening and tender evaluation

In response to this question, 42.9% of the respondent have given their opinion as ‘Very Good’ while 28.6% opted for ‘Good’, 14.3% opted for ‘Neutral’ response to the question. 10.7% & 3.6% opted for ‘poor’ or ‘very poor’ respectively. The mean, median and mode of the responses are 3.964, 4.00 and 5.00 respectively. The standard deviation of the response is 0.63725

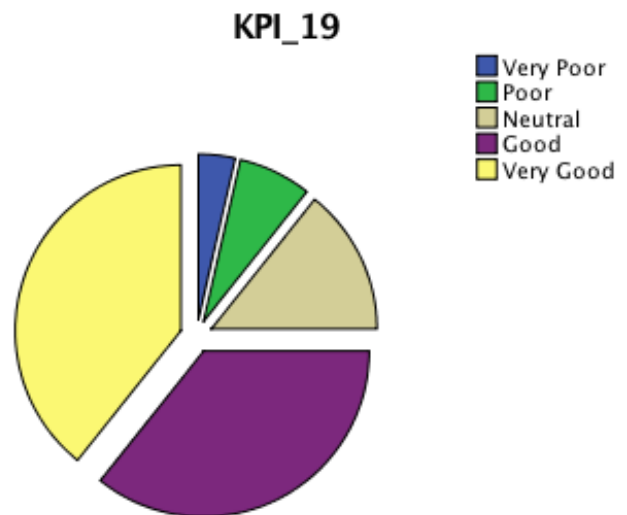


which means a small effect on the study result is present. It indicates that BCCBhaban is complying to the Rule 36 of PPR 2008 keenly following standard time between tender opening and tender valuation. Key informant interviews also reflected in the similar manner.

PI: 19 BCCBhaban followed standard time between submission and approval of

Tender Evaluation Report (TER)

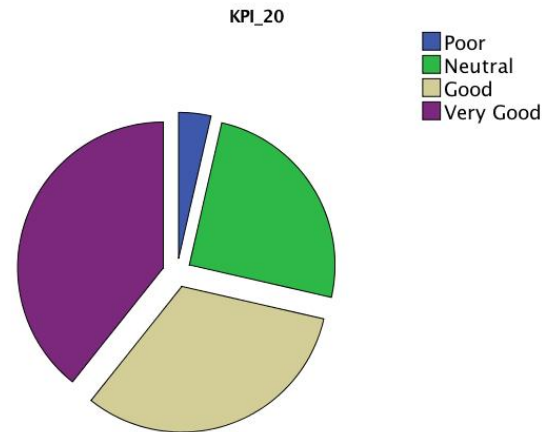
In this question, 39.3% respondents choose ‘Very good’ while 35.7% reported as ‘Good’ and 14.3% shown ‘Neutral’ response to the question. 7.1% marked it as ‘poor’ while 3.6% said its ‘very poor’. The mean, median, mode and standard deviation of the responses are 4.00,



4.00, 5.00 and 1.088 respectively.

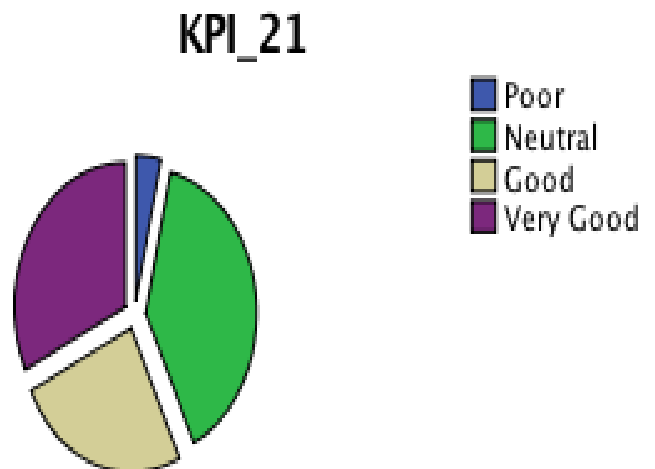
KPI 20: in BCCBhaban, tenders are approved by proper CAA with DFP

In response 35.7% of the respondent have given their opinion as 'Very good' while 32.1% reported as 'Good' and 25% ticked 'Poor' as response. 3.6% gave verdict for 'poor' none opted for 'very poor'. The mean, median, mode and standard deviation of the responses are 4.77, 5.78, 4.00 and 5.00 respectively. Similar results were found among the opinions of the interviewee while conducted the key informant interview. A standard deviation of 9.294 also indicates a significant effect on the study.



KPI 21: in BCCBhaban, TEC submits TER directly to the CAA

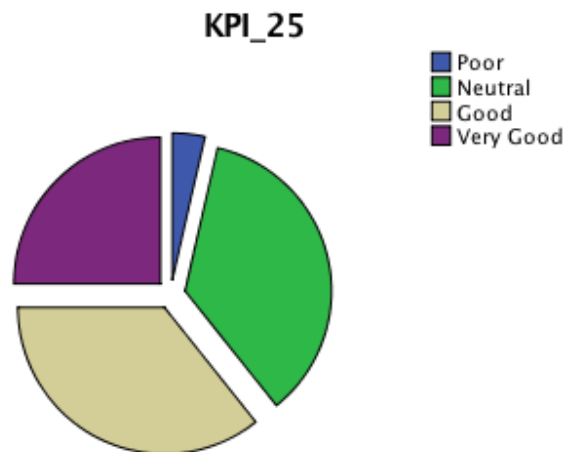
The perceptions of the respondents on this question in this question were also very scattered, 32.1% of the respondent opted for 'very good' while the minimum 3.6% ticked 'Poor'. The other 25% respondents chose 'Good' and 39.3% remained 'Neutral' in their opinion. However, no 'Very poor' answer was received. The mean, median, mode and standard deviation of the responses are 3.857, 4.00, 3.00 and 0.9315 respectively. Though majority of the respondent's perception



is 'Very good', but it can be said that BCCBhaban is complying this rule in a fairly basis as there some respondents choose 'Poor' option.

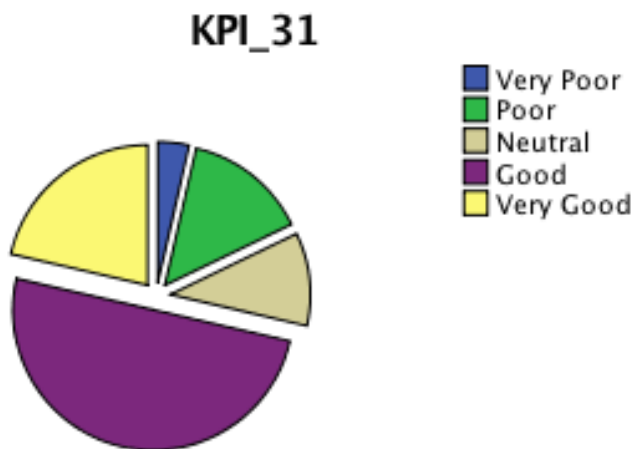
KPI 25: in BCCBhaban, timeline between approval of TER and issuance of NOA is followed properly.

In response to this question, respondents' choices were also scattered. 25% of the respondents (60%) answered the question as 'Very Good' and 35% answered it as 'Good'. 35.7% marked as 'neutral', and 3.6% respondents went for poor'. The mean, median, mode and standard deviation of the responses are 3.82, 4.00, 3.00 and 0.862 respectively. According to the responses regarding this requirement of PPR 2008, the present study indicates that BCC is fairly comply with this timeline.



KPI 31:in BCCBhaban, liquidated damage clause is imposed in the contracts where applicable as per Rule 39 (27)

In response to this question also, respondents' choices were also scattered majority of the respondents 50% answered the question as 'Good', while 21.4% opted for 'Very Good', 'Neutral' 10.7%, 'Poor' 14.3% and 'Very poor' 3.6%. Thus, there is an overall positive response to the question meaning. The mean, median, mode and standard deviation of the responses are 3.71, 4.00, 4 and 1.083

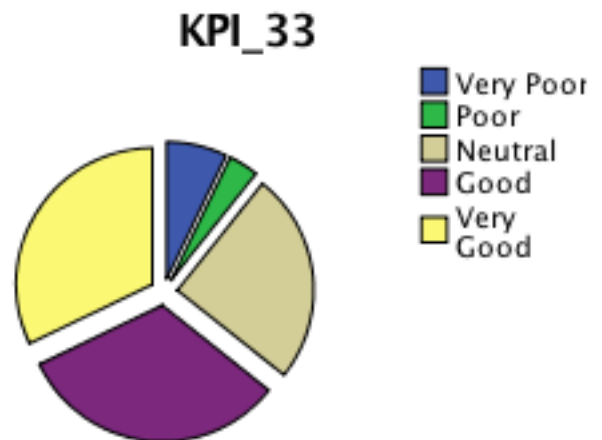


respectively.

As per Rule 39 (27) of PPR 2008, it is compulsory to include the liquidated damage clause in the contracts where applicable. Though the present questionnaire survey indicates an overall positive result towards imposing liquidated damage clause in the contract but the key informants' does not validate this.

KPI 33: in BCCBhaban, contractor payment is timely disbursed as per Rule 39 (22)

In response to this question, the respondents had shown a mixed response of their perceptions. 32.1% of the respondents opted for 'Very Good' while the same number of respondents for 'Good'. Among others, 25% opted for neutral, poor 3.6% & very poor 7.1%.shown their perception as 'Poor' while the rest 2.9% only replied as 'Very good'. There was no one answered the question as 'Very poor'. This has been shown in Table 3 and graphically expressed in Chart 10. The mean, median, mode and standard deviation of the responses are 3.11, 3.00, 3 and 0.676 respectively. While talked with the key informants, there found a perception that contractor's payment is timely disbursed.

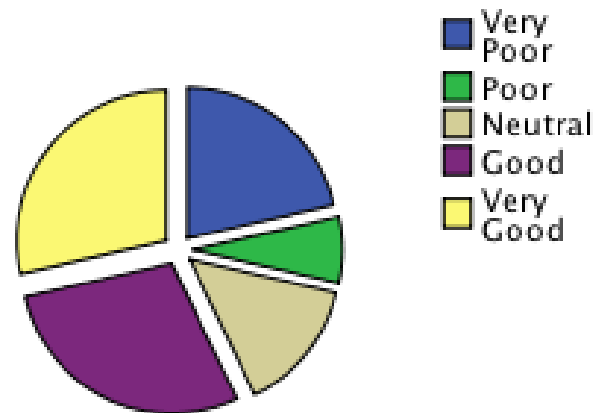


KPI 35: in PWD, interest is paid for delayed payment regularly

In this question equal number of respondents 28.6% marked it 'Very poor' and 'Good'. While 14.3% remain 'Neutral' in their perception 7.1% was in favor of the 'Poor' opinion. However, 21.4% stated their perception to this question as 'Very Poor'. The mean, median, mode and standard deviation of the responses are 3.35, 4.00, 4.00 and 1.5205 respectively.

Payment of interest for delayed payment is a mandatory requirement of PPR 2008. However, from the present study, it can be said that BCC Bhaban is not paying any interest for a delayed payment. While conducting key informant interview, the respondents expressed their opinion candidly that as there no provision of sufficient fund in the contract, the contractors never paid for a delayed payment.

KPI_35



Chapter 5

Conclusion & Recommendation

5.1 Conclusion

Compliance checking of PPR 2008 is a crucial issue for insuring good standards and value for money in the public procurement. The PPRP II has added a new dimension in the field of monitoring in the sense that it envisages to assess the compliance of the provisions of PPA-2006 and PPR-2008. This has made a shift from the existing approach and methods in dealing with procurement using public funds. Though awareness to some extent about PPA 2006 and PPR 2008 has already been developed within the officials and staffs of BCC Bhaban through mandatory application of PPR 2008 in practice and training, it will certainly take some time to get momentum of the reform activities.

The present study result shows an adherence to the rules of PPR 2008 in BCC Bhaban in carrying out most of the compliance related KPIs. Though varied in different quarters of the years, however it shows a gradual improvement since starting of monitoring.

In respect of KPI 6 (Average number of days between publishing of advertisement and Tender submission deadline), KPI 11 (Percentage of cases TOC included at least ONE member from TEC), KPI 13 (Percentage of cases TEC included Two external members outside the Ministry or Division), KPI 14 (Average number of days between Tender opening and completion of evaluation), KPI 19 (Average number of days taken between submission of Tender Evaluation Report and approval of contract) and KPI 20 (Percentage of Tenders approved by the proper financial delegated authority) and KPI 25 (Average number of days between final approval and Notification of Award (NOA)), BCC Bhaban is fairly following

the rules. There is great scope and need for improvement in these areas as to have a 100% compliance of PPR 2008. However, BCC Bhaban's performance in the areas of KPI 21 (Percentage of cases TEC submitted report directly to the Contract Approving Authority where Approving Authority is HOPE or below), KPI 31 (Percentage of Contracts having liquidated damage imposed for delayed delivery/completion), KPI 35 (Percentage of Contracts where interest for delayed payments was made) are not satisfactory and needs to improve these to a great extent. Moreover, compliance of KPI 33 (Average number of days taken to release payment from the date of certificate of PM/ Engineer) need to investigate more as there are ambiguity among the findings of present study.

5.2 Recommendations

From the present study, in BCC Bhaban Project, PPR 2008 is being complied around 70%. This is seen from the viewpoint of compliance of KPIs which are only 17 out of 45 key procurement performance indicators. For further improvement, following recommendations are drawn based on the study:

- Instead of traditional procedure, submission of TER directly to the Contract Approving Authority where Approving Authority is HOPE or below, should be practiced properly to ensure the compliance of Rule 36(3) of PPR 2008. The TEC should be empowered and every member of the TEC should have an understanding of this regulatory requirement. Proper mechanism should be developed within BCCBhaban Project so that it can be complied.
- Tender should be floated only after having sufficient fund. This would ensure

the timely payment to the contractor [Rule 39 (22)]

- Liquidated damage clause to be properly applied as per Rule 39 (27) of PPR 2008. The amount of liquidated damage per day or per week should be calculated on the basis of approximate real monetary loss for delay. Compensation event needs to be properly incorporated in the tender document so that contractors can get appropriate compensation if the situation arises so.
- Provision for payment of interest in case of delayed payment should be kept in the contract and implemented accordingly so that the rights of the contractor are protected.
- More collaborative engagement of the key stakeholders of the project has been recommended for the improvement of the requiring body satisfaction.
- Analyzing the **Appendix C**, we observe that most of the works have been completed, some of them are in progress and a few work orders are still in queue to be processed, that's why the contract value and cost overrun (if any) have not yet been calculated. As the study was based on PPR 2008, a comparatively new project was selected which was started after 2009. But some necessary steps can also be recommended to control the cost, quality and time constraint of BCC Bhaban Project.
- Intensive training programs should be arranged on Electronic Government Procurement as we know that e-GP follows PPA @006 & PPR 2008 in an effective and efficient way

References

Bangladesh Computer Council Electro-mechanical Works, tender document, tender opening report, tender evaluation report, project completion report; implemented by Public Works Department (PWD) E/M Division-7, Sher-e-Bangla Nagar, Dhaka.

Central Procurement Technical Unit (CPTU), Implementation Monitoring and Evaluation Division (IMED), Ministry of Planning (MoP), Government of the People's Republic of Bangladesh, retrieved on 19 February 2013 from <http://www.cptu.gov.bd/>

D. Velimirovic, M. Velimirovic and R. Stankovic 2011. Role and Importance of Key Performance Indicators measurement. *Serbian Journal of Management* 6 (1) (2011) 63 – 72
Hoque, R., 2010. 'Public Procurement Law in Bangladesh: From Bureaucratisation to Accountability', *NUJS LAW REVIEW*, vol.3, no.3, pp. 281-29, retrieved on 20 June 2011 from <http://www.nujslawreview.org>

MoF (1998). General Financial Rules (GFR), Finance Division, Ministry of Finance (MoF), Government of the People's Republic of Bangladesh, retrieved on 19 February 2013 from http://mof.gov.bd/en/index.php?option=com_content&view=article&id=48&Itemid=1

MoF (2004). Delegation of Financial Powers for Development Projects, Finance Division, Ministry of Finance (MoF), Government of the People's Republic of Bangladesh, dated: 22 December 2004

MoP (2008). Public Procurement Act (PPA) (2006), Central Procurement Technical Unit (CPTU), Implementation Monitoring and Evaluation Division (IMED), Ministry of Planning (MoP), Government of the People's Republic of Bangladesh. Bangladesh Gazette, dated: 27 January 2008

MoP (2008). Public Procurement Rules (PPR) (2008), Central Procurement Technical Unit (CPTU), Implementation Monitoring and Evaluation Division (IMED), Ministry of Planning, Government of the People's Republic of Bangladesh. Bangladesh Gazette, dated: 28 January

2008

MoP (2012). Annual Development Programme (ADP) 2012-2013. Ministry of Planning (MoP), Government of the People's Republic of Bangladesh

MoP (2012). Revised Annual Development Programme (RADP) 2011-2012. Ministry of Planning

(MoP), Government of the People's Republic of Bangladesh

SRGB (2012). Half-yearly Reports (July-December 2010 to January-June 2012) submitted to CPTU, IMED. Survey and Research Group of Bangladesh (SRGB)

SRGB (2012). Quarterly Reports (April-June 2010 to April-June 2012) submitted to CPTU, IMED. Survey and Research Group of Bangladesh (SRGB)

Appendices


Appendix-A

Key Performance Monitoring Indicators

Sl. No.	Indicator Category	Process Indicator	KPI No.	Performance Data
1	Invitation for Tender	Advertisement of Tender opportunities in Newspaper	1	Percentage of Invitation for Tender (IFT) published in Newspaper
		Advertisement of Tender opportunities in CPTU's website	2	Percentage of Invitation for Tender (above threshold) advertised in CPTU's website
		Tenders following GoB Procurement Rules	3	Percentage of Tenders following GoB Procurement Rules
		Tender following Development Partner Rules	4	Percentage of Tenders following Development Partner Rules
2	Tender Submission	Multiple locations submission Tenders	5	Percentage of Tenders allowed to submit in multiple locations
		Tender preparation time in Open Tendering Method	6	Average number of days between publishing of advertisement and Tender submission deadline
		Tender time compliance	7	Percentage of Tenders having sufficient tender submission time
		Sale of Tender documents	8	Average number of Tenderers purchased Tender Documents
		Tenderer Participation	9	Average number of Tenderers submitted Tenders
		Tenderer Participation Index	10	Ratio of number of Tender submission and number of Tender document sold
3	Tender Opening Committee (TOC) and Tender Evaluation Committee (TEC)	Tender Opening Committee formation	11	Percentage of cases TOC included at least ONE member from TEC
		Tender Evaluation Committee formation	12	Percentage of cases TEC formed by Contract Approving Authority
		External member in TEC	13	Percentage of cases TEC included Two external members outside the

Sl. No.	Indicator Category	Process Indicator	KPI No.	Performance Data
		Total Tender processing time	27	Average number of days between Invitation for Tender (IFT) and Notification of Award
		Publication of award information	28	Percentage of Contract awards published in CPTU's website
		Efficiency in Contract Award	29	Percentage of contracts awarded within initial Tender validity period
7	Delivery/ Completion	Delivery time	30	Percentage of Contracts completed/ delivered within the original schedule as mentioned in the contract
		Liquidated damage	31	Percentage of Contracts having liquidated damage imposed for delayed delivery/completion
		Completion rate	32	Percentage of Contracts fully completed and accepted
8	Payment	Payment release compliance	33	Average number of days taken to release payment from the date of certificate of PM/ Engineer
		Late payment	34	Percentage of cases (considering each installment as a case) with delayed payment
		Interest paid for delayed payment	35	Percentage of Contracts where interest for delayed payments was made
9	Complaints	Tender procedure complaints	36	Percentage of Tender procedures with complaints
		Resolution of complaints with award modification	37	Percentage of complaints resulting in modification of award
		Resolution of complaints	38	Percentage of cases complaints have been resolved
		Independent Review Panel	39	Percentage of cases review panel's decision upheld
10	Contract amendments	Contract Amendment/ variation	40	Percentage of contract amendments/ variations
11	Contract Dispute resolution	Unresolved Disputes	41	Percentage of Contracts with unresolved disputes

Sl. No.	Indicator Category	Process Indicator	KPI No.	Performance Data
12	Fraud & Corruption	Fraud & Corruption	42	Percentage of cases Fraud & Corruption detected
13	Procurement Management Capacity	Procurement training	43	Average number of Trained procurement staff in each procuring entity
			44	Percentage of procuring entity which has at least one trained/ certified procurement staff
			45	Total number of procurement persons in the organization with procurement training

 Shaded KPI's are Compliance KPIs

Name of work :- Estimate for Internal and External Electrification of the Construction of 15 storied BCC Bhaban 2nd phase (from 4th to 14th floor) as Estimated by PWD.

Sl.	Name of items	Qty.	Taka (in Lac)
A.	Electrical (Internal Electrification)		
	4th to 10th floor		
	i) Internal Electrification of main building (Area=10551sq.mx1425/-)	(Area=10551sq.mx1425/-)	127.00
	ii) Special fittings fixture	L.S	20.00
	iii) Internal Electrification for Auditorium	L.S	28.00
	iv) Normal & Emergency MDB.SDB.DB control panel (with metering arrangement with cable works)	L.S	59.00
	11th to 14th floor		
	i) Internal Electrification of main building (Non Residential Building) (Area=6677sq.mx1425/-)	(Area=6677sq.mx1425/-)	95.00
	ii) Special fittings fixture and metering system and safety control device	L.S	15.00
	iii) Normal & Emergency MDB.SDB.DB control in/c L.T cable etc. and metering arrangement	L.S	40.00
B.	Electrical (External Electrification)		
	4th to 10th floor		
	i) 400 KVA Generator including cables	1 Set.	80.00
	ii) 2000 KVA Sub-station equipments& HT., LT cables	1 Set.	120.00
	iii) Compound, Security, Garden light & Facade light	L.S	5.00
	iv) Earthing with lightening arrester system	1 Set	23.00
	v) Shifting & re-arrangement of 2 Nos. Sub-station & Generator including cable works	L.S	20.00
	vi) Lighting from roof (Metal halide light) for 11th to 14th floor	L.S	5.00
C.	Mechanical		
	4th to 10th floor		
	i) Air-condition Split type/ Split ducted type (for 4th, 5th & 6th floor) (300 Ton)	300 Ton	350.00
	ii) Passenger lift (2 x 800 Kg 11 person 11 stop extendable upto 15 stop.)	2 Set	80.00
	iii) Pump Motor (for lifting water)	2 Nos.	10.00
	iv) Fountain in/c. pump control & cable	L.S	0.00
	11th to 14th floor		
	v) Split type Air-cooler and Split ducted type air	0 Ton	0.00

	cooler system (only duct work & cable work)		
	vi) Passenger lift/ Bed lift (800 kg 11 person 15 stop with AVR) (1No x40.00)	(1No x40.00)	40.00
	vii) Observation/ capsule lift.(800Kg) 11 person 15 stop with AVR	1 No	50.00
D.	IT Environment and support		
	4th to 10th floor		
	i) Computer Networking system (LAN)	L.S	30.00
	ii) Telephone & PABX system	L.S	20.00
	iii) Access control system and Entry scanner & security post	L.S	5.00
	iv) PVC pipe laying	L.S	10.00
	v) PA & Conference system	L.S	28.00
	vi) Sound and stage light system	L.S	58.00
	11th to 14th floor		
	vii) Computer Networking system (LAN)	L.S	20.00
	viii) Telephone & PABX system	L.S	10.00
	ix) PVC pipe laying (for Telephone, PABX, Intercom CCTV, internet etc.)	L.S	8.00
	x) Access control system and Entry scanner & security post	L.S	0.00
E.	Renewable energy		
	i) Solar energy plant (14KW) (20KW x3.00 lac)	20KW x3.00 lac	90.00
F.	Building Automation (E/M works) safety and security		
	4th to 10th floor		
	i) Fire Detection, protection & Alarm system	L.S	190.00
	ii) CCTV System	L.S	20.00
	iii) Building Automation (Occupancy. sensor, light dimmer intelligent & energy saving automation)	L.S	80.00
	iv) Consultancy for building Automation and computer networking system etc.	L.S	2.00
G.	Other related works.		
	i) DESA/ DESCO security fee	L.S	20.00
	ii) Preparation of tender documents and others	L.S	5.00
		Total Tk:	1763.00

Appendix-C

Ministry wise Development Projects' over all Progress Report

PWD E/m Division-7, Dhaka

Name of Ministry: Ministry of Information & Communication Technology

Project Name **Vertical Extension of BCC Bhaban under the project " Strengthening of BCC by Development of structure, 3rd phase (11th floor to 14th floor)**

Project Time Frame: From June'2011 to July'2016

Sl No.	Project Name (According to RDPP)	Approved DPP Value (In Lac)	RDPP Value (In Lac)	Contract Value (In Lac)	Updated Position	Comment/Phase of Work
1	2	3	4	5	6	7
A.	Electrical (Internal Electrification)					
	4th to 10th floor					
	i) Internal Electrification of main building (Area=10551sq.m x 1425/-)	126.61	127	91.18	100%	Work Completed
	ii) Special fittings fixture	20	40	34.78	50%	Work in Progress in co ordination with false ceiling
	iii) Internal Electrification for Auditorium	10	28	28	100%	Work Completed
	iv) Normal MDB, SDB, DB control panel	20	59	36.03	70%	Work in Progress
	v) Emergency L.T cable, control switch for Auditorium	0	0	22.64	--	--
	11th to 14th floor				--	--
	i) Internal Electrification of main building (Non Residential Building) (Area=6677sq.mx1425/-)	--	95	46.7	95%	Work in Progress
	ii) Special fittings fixture and metering system and safety control device	35	35	33.82	50%	Work in Progress in co ordination with false ceiling
	iii) Normal & Emergency MDB.SDB.DB control in/c L.T cable etc. and metering arrangement	--	40	35.65	50%	Work in Progress
	iv) LED fittings (4-7th floor)	--		34.92	--	Work Order in Process
B.	Electrical (External Electrification)					
	4th to 10th floor					

	i) 400 KVA Generator including cables	70	80	79.13	70%	Shed construction has not yet been completed by Civil works, that's why could not be commissioned
	ii) 2000 KVA Sub-station equipments & HT., LT cables	150	120	89.33	100%	Sub-station has been commissioned
	iii) Compound, Security, Garden light & Facade light	5	5	4.98	--	Work Order has been processed
	iv) Earthing with lightning arrester system	23	23	19.93	--	Work in Progress
	v) Shifting & re-arrangement of 2 Nos. Sub-station & Generator including cable works	20	20	19.8	100%	Work completed
	vi) Lighting from roof (Metal halide light) for 11 th to 14 th floor	--	15	15	--	Work Order in Process
C.	Mechanical					
	4th to 10th floor					
	i) Air-condition Split type/ Split ducted type (for 4 th & 5 th floor) (350 Ton)	250	375	176	--	5 th & 6 th Floor's work is completed
	ii) Air-condition Split type/ Split ducted type (for 8 th & 9 th floor) (South side)	--	--	107	95%	As demanded by BCC Authority, 7 th Floor's both side and 9 th Floor's duct have been made
	iii) Passenger lift (2 x 800 Kg 11 person 11 stop extendable upto 15 stop.)	90	80	75.47	--	1 Lift has been installed & commissioned. Other Lift's work is in progress
	iv) Pump Motor (for lifting water) (25HP 02 Nos. Centrifugal pump motor with necessary works)	16	30	8.89	100%	Work Completed, has been hand over.
	v) Pump Motor (Stand by) (30 HP 01 No. Submersible pump motor)	--	--	9.52	--	Work in Progress
	vt) Sewerage pump for drain out water	5	5	4.82	--	Work in Progress
	11th to 14th floor				--	-
	v) Split type Air-cooler and Split ducted type air cooler system (only duct work & cable work)	--	25	24.45	--	Work in Progress
	vi) Passenger lift/ Bed lift (800 kg 11 person 15 stop with AVR) (1No x45.00)	--	40	42.85	100%	Work Completed

	vii) Observation/ capsule lift. (800Kg) 11 person 15 stop with AVR	--	50	52.57	--	Work in Progress
D.	IT Environment and support					
	4th to 10th floor					-
	i) Computer Networking system (LAN)	30	30	29.86	90%	Wiring work done, finishing is on going.
	ii) Telephone & PABX system	20	20	19.56	90%	Wiring work done, finishing is on going.
	iii) Access control system and Entry scanner & security post	--	5	9.92	90%	Wiring work done, finishing is on going.
	iv) PVC pipe laying	10	10	6.35	100%	Work completed
	v) PA & Conference system	30	28	--	100%	Work completed
	vi) Sound and stage light system	50	58	9.78	100%	Work completed
	11th to 14th floor					
	vii) Computer Networking system (LAN)	--	20	19.96	96%	Wiring work done, finishing is on going.
	viii) Telephone & PABX system	--	10	--		Wiring work done, finishing is on going.
	ix) PVC pipe laying (for Telephone, PABX, Intercom CCTV, internet etc.)	--	8	--	100%	Work completed
	x) Access control system and Entry scanner & security post	--	0	--		
E.	Renewable energy			--		
	i) Solar energy plant (30 KW)	42	90	56.86	--	Work processes, steel structure to be constructed
F.	Building Automation (E/M works) safety and security			--		--
	4th to 10th floor					
	i) Fire Detection, protection & Alarm system	140	190	169.76	70%	Work in Progress
	ii) Fire Extinguisher	15	15	8		Work Order Processed
	iii) Dehumidifier	--	--	6.78		
	iv) CCTV System	30	20	19.84	--	Work Order Processed

	v) Building Automation (Occupancy sensor, light dimmer intelligent & energy saving automation) (floor 6, 7, 9)	50	80	49.21	35%	7 th Floor's wiring is done. 6 th & 9 th Floor's work is on going
	v) Consultancy for building Automation and computer networking system etc.	--	2	--		
	<u>vi) Safety and Security Control System:</u> Archway Metal Detector, Baggage Scanner, Vehicle Control System (Vehicle Burner, Outdoor Reader, Vehicles Search Mirror, Loop Device, Stand with Notification Light, Cabling & Installation and other accessories)	--	52.42	52.42	--	Work Order in Process
G.	Other related works.					
	i) Poly signboard of BCC Bhaban	--	10	4.98	40%	Work in Progress
	ii) DESA/ DESCO security fee	10	20	--		
	iii) Preparation of tender documents and others	--	5			
			1955.42			

**BraInstitute of Governance & Development
BRAC University**

Survey Questionnaire

**Research Topic: Compliance to PPR 2008: A Critical Analysis on
PWD's Electromechanical Works based on KPIs**

This Survey questionnaire is developed to find out the extent of compliance of PPR 2008 in PWD's Electromechanical Works and if there are any obstacles of any form to follow PPR 2008. It is an academic pre requisite to successfully complete the **Masters in Procurement and Supply Management** in Braac Institute of Governance & Development (BIGD), BRAC University. Your kind and honest responses are of great valuable and high appreciation of the researcher. It is also needed to be mentioned here that the information provided by you are to be treated as confidential & will be used for the academic purpose only.

Part A: Respondent's Profile [Please encircle (x) where appropriate]

1.	Name of the respondent	:				
2.	Designation	:				
3.	Posting	:				
4.	Job Experience (years)	:	<5	5-10	11-15	15-20 20-25
5.	Relevance with PWD	:	Employee	TEC Member	Dealing with PWD's projects	Others (specify)
6.	Latest Educational Degree obtained	:				
7.	Obtained training on PPA/PPR 2008?	:	Yes / No.			

Part B: Following statements ask you about **PWD's practices of the KPIs as compliance to PPR 2008.** Please encircle (O) only one number that best suits your opinion on the following 1-5 points scales (**1= Very Poor, 2= Poor, 3= Neutral, 4= Good, 5= Very Good**).

sn	KPI No.	KPIs practices in PWD	Scale 1 to 5				
1	KPI-6	To me, PWD is maintaining time for 'publishing Advertisement and Tender submission deadline'.	1	2	3	4	5
2	KPI-11	To me, in PWD, TOC always consists of at least one member from TEC.	1	2	3	4	5
3	KPI-13	To me, PWD followed the rule of including Two external members for TEC.	1	2	3	4	5
4	KPI-14	To me, PWD followed standard time between tender opening and tender valuation.	1	2	3	4	5

5	KPI-19	To me, PWD followed standard time between submission and approval of Tender Evaluation Report (TER)	1	2	3	4	5
6	KPI-20	To me, in PWD, tenders are approved by proper CAA with DFP	1	2	3	4	5
7	KPI-21	To me, in PWD, TEC submits TER directly to the CAA.	1	2	3	4	5
8	KPI-25	To me, in PWD, timeline between approval of TER and issuance of NOA is followed properly.	1	2	3	4	5
9	KPI-31	To me, in PWD, liquidated damage clause is imposed in the contracts where applicable as per Rule 39 (27)	1	2	3	4	5
10	KPI-33	To me, in PWD, contractor payment is timely disbursed as per Rule 39 (22)	1	2	3	4	5
11	KPI-35	To me, in PWD, interest is paid for delayed payment regularly.	1	2	3	4	5

Your Opinion

12. BCC Bhaban needs to be maintained by 6 types of following E/M works, In how many you are involved in a year? You can select multiple options from 1-7

1. Internal Electrification
2. External Electrification
3. IT & Support
4. Mechanical (AC, Lift,etc)
5. Renewable Energy
6. Building safety
7. Documentations
8. All of Them

13. In your experience, for your role at BCC Bhaban EM works, how do you rate the following in terms of your management time and effort?

- a. Man:%
- b. Material:%
- c. Money:%
- d. Management:%

14. How do you rate the service level performed by the procurement function of BCC by Development of structure, 3rd phase (11th floor to 14th floor) in scale of 1-5

Lowest				Highest
1	2	3	4	5

15. Do you think the current procurement systems followed by the Procurement Function of BCC Bhaban need to be overhauled to meet present demand?

- a. No
- b. Yes

16. Do you think long term collaborative agreement with qualified approved suppliers can improve the quality and delivery performance?

- a. No
 - b. Yes
17. Do you think more open constructive engagement of stakeholders in the early stages of procurement can improve the satisfaction as of the Requiring Body?
- a. No
 - b. Yes