

King Fahd University Of Petroleum And Minerals

College of Environmental Design

CEM 520

CONSTRUCTION CONTRACTING

TERM PROJECT

Evaluation of Contract Administration for Public Projects in
Saudi Arabia

By

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Abstract

The study has been done to evaluate the Saudi Government Procurement Laws and Regulations (GPLR) articles that have relation with construction contracts. It would also provide effective measures which help in managing in construction contract in public project. Information's were collected through a survey questionnaire method. The questionnaire has been sent 100 Government Department and Organization. It was divided into three divisions: bidding phase, construction phase and contract administration.

The results of the survey have shown wide acceptance and support by respondents of the proposed practice of prebid qualification, prebid conference, contract award, labor and material payment bond, contract award, labor and material payment bond and change orders. Moreover, measures like safety, GPLR updating and QC / QA program has received highest ranking.

Finally, recommendation and results of study were introduced to Ministry of Finance and National Economy for review and use.

Introduction

1.1 Background

Government procurement and regulations (GPLR) is the system that governs and regulates all public activities in the Kingdom like purchasing, supplies and construction project. It consists of many articles that deal with constructing contracting. The articles has been published in 1977 and due to the rush need to such issue like cost of constructions were not given top priority. An investigation was made to correct existing GPLR as well as adding necessary requirement with the help of concerned government agency. The investigation shows the following findings:

1. No major revision has been done on GPLR since 1997.
2. No systematical procedure for updating the GPLR
3. GPLR articles are not applied strictly during contract administration
4. GPLR articles are not evaluated regularly

1.2 Objective of This Study

The objectives of the Study are:

1. Study and evaluating GPLR articles which relates to construction contracting
2. Providing an adoptable measures that helps in managing construction contracting in public projects.

1.3 Scope and Limitations

The study focuses on related articles of GPLR to construction contracts and will be limited to fixed prize (lump sum) and unit price contracts.

1.4 Significance of the Study

The study evaluates some GPLR articles which are related to construction contracting by showing the weakness and obstruction that could end up with problem during bidding process or execution of the contract. The study is directed toward improving laws and regulations concern with such construction activities.

Literature Review

2.1 Public Spending on Construction

During the boom of Saudi Economy (last two decades), construction industry has developed drastically. The following tables shows expenditures on construction since 1975 up to 1995.

Years	1975	1975 - 1980	1980 - 1985	1985 - 1990	1990 – 1995
Expenditures in thousands of millions SR	31	295	674	231	108

2.2 Public Tendering

GPLR, which has been issued by Royal Decree No. M/14, Dated March 27, 1997 has 14 articles related to government tendering. Those articles explain basic rules and procedures for purchasing and other construction activities. Mainly, the most famous type of contracts is known as the fixed price contract.

2.3 Tendering Stage

2.3.1 Overview

The main activities or process of tendering stage can be described briefly in Figure 1.

Figure 2 The Main Activities of tendering stage in the Kingdom

2.3.2 Bonds

In construction contracting, bonds are usually used to protect owner in case the contractor fails to fulfill the agreed requirements in the contract or during bidding stage. Bonds discussed in this study are:

1. Bid Bond
2. Performance Bond
3. Labor and Material Payment Bonds

The following table shows the amount of bonds in Saudi Arabia as per GPLR (Article M/s/D of the law)

Bonds	Bond Required Amount
Bid Bond	1% of the base bid price
Performance Bond	5% of the contract price
Material Labor Payment Bond	5% of the contract price

2.4 Construction Stage

2.4.1 Progress Payment (Partial Payment)

It is the amount of money to be submitted periodically (Monthly for example) upon the request of payment from contractor as a compensation from performed work in proceeding month (Fisk 1982). As per payment can be submitted to a contractor for an executed work by measurement and in accordance with unit price upon bill of quantity, which is approved by engineer and accepted by owner.

2.4.2 Advance Payment

Advance payment is the initial amount of money to be submitted to a contractor to start work and prior to any progress payment (Fisk 1982). Article 8 of GPLR in Saudi Arabia permits a maximum of 10% of contract value.

2.4.3 Retainage

It is the percent of money held by an owner (particularly in public work project) from progress payment and given later to contractor (Fisk 1982).

2.4.4 Change Order

It is written to the construction contractor signed by the owner or by his representatives that contains a modification of the contract. This change gives the authority to contractor to alter or adjust the contract sum or the contract time. As per GPLR (article 25 permits) the owner during the execution the contract to increase or decrease the amount of the work by a proportion not exceeding 20% of the value of the contract.

2.4.5 Delay Penalties

It is the amount of money to be deducted from a contractor in case if he fails to complete the project on time. As per GPLR (article 37), a penalty has three parts of the period of delay with a total that should not exceed 10% of the contractor value.

2.4.6 Differing the Site Conditions (DSC)

They are the conditions encountered at the site of the project. These DSC's allow the contractor to readjust the contract as a result of founded subsurface or latent physical condition at the site. The standard public work contract (article), requirements the contractor to examine and

inspect the site and the surrounding prior to submitting his tender by using proper testing method.

2.4.7 Insurance

As might be normal in public project, a contractor prior to commencing the work, he should furnish to the owner a certificate of insurance in a form satisfactory to the owner (clough 1981). As per GPLR (article 30) the contractor is liable for the total or partial collapse of the construction erected by him, if this occurs within ten years.

3. Survey Methodology

3.1 Research Design

A questionnaire was designed of and sent to many concerned government agencies. The objective of the questionnaire was to collect a data by utilizing the feedback obtained from respondents in regard of proposed practice of some GPLR articles and measures that helps in effectively managing a construction contract.

3.1.1 Questionnaire Design

The questionnaire contains an official letter to the concern agency as well as term definitions. The questions were divided into three phases me into tendering phase and it contains bid bonds, bidder's qualification, prebid conference and contract award. Construction phase that contains preconstruction conference, perform one bond, labor and material bond, advance, payment, differing site conditions change orders, payments penalty of delay and insurance. Contract administration phase in which statement are designed to evaluate opinion of respondents are then classified on a 4 point scale ranging from "strongly agree" to "strongly disagree".

3.1.2 The Pilot Study

A pilot study was performed before releasing the actual questionnaire eleven engineer from Dammam are were asked to fill questionnaire form in order to evaluate the questionnaire. The pilot study findings were to restate two questions (384) in tendering phase, to restate 3 questions

(46,688) in construction phase and to add two more quiet contract administrative phase.

3.1.3 Population

The main population in this study are all concerned government department which has the authority to tender or surprise any public construction project like ministry of finance and nationally economy. A total of 100 authorities of 45 different agencies were invited in the questionnaire.

3.1.4 Data Collection

Questionnaire paper were sent on 5th Feb. 1992 and only 80 out of 100 have responded to questionnaire. The 80 completed questionnaire were used for the analysis. The data was analyzed by using computer program designed specially to GPLR analysis.

4. Results

The chapter will provide a summary of the result of the questionnaire only 80 responses have been received out of 100 questionnaires that have been sent to 100 governments department.

The result will be shown as follows:

A. Bidding Phase (Tendering Phase)

1. Bid Bond (Preliminary guarantee)
2. Bidders Qualification
3. Prebid Conference
4. Contract Award

B. Construction Phase

1. Pre – Construction Conference
2. Performance Bond (Final Guarantee)
3. Labor and Material Payment Bond
4. Advance Payment
5. Site Conditions
6. Retainage
7. Change Orders
8. Penalty of Delay
9. Insurance

C. Contract Administration

1. GPLR Manual
2. Standard public Works Contract
3. Payments
4. Value Engineering
5. Local Products and Contractors

6. QC/QA Program
7. Safety
8. Coordination
9. Contract Administration Program
10. Standard Construction Contract Administration Manual

Summary of the Results Questionnaire

A. Bidding Phase (Tendering Phase)

Q#	Title	Practice	Freq.	Perc. (%)
1	Bond	1% of Bid Price (*)	59	74
		5% of Bid Price	16	20
2	Bidder's Qualification	Pre-Bid Qualification	37	47
		Double – Envelope System	30	38
3	Pre-bid Conference	Required	51	64
		Not Required	26	32
4	Contract Award	Project Estimate	45	60
		The Lowest Bidder (*)	18	24

Table 4.21 Tendering Phase Statistics (First and Second Ranks)

B. Construction Phase

Q#	Title	Practice	Freq.	Perc. (%)
1	Pre-Construction Conference	Mandatory	60	79
		Elective	13	17
2	Performance Bond	5% of contract price	39	50
		10% of contract price	30	38
3	Labor and Material Payment Bond	Important and Issued with performance bond	30	41
		Important but carry different percentage	26	35
4	Advance Payment	The owner may pay 10% of contract price to contractor (*)	42	53
		Varied Depends on Contract size	16	20
	A. Amount	Paid after contract signing (*)	21	28
		After mobilization	20	27
B. Time	Any time after contract signing			
	And upon contractor request	20	27	
5	Site Condition	Inclusion of change clause	29	37
		The contractors have the risk (*)	27	34
6	Retainage	Hold last payment but not less than 10% of the contract value (*)	37	48
		Hold 10% for each payment till end	12	16
7	Change orders	A. Amount + 20% - 20%	43	58
		B. Time + 10% - 20% (*)	23	31

Q#	Title	Practice	Freq.	Perc. (%)
8	Penalty of Delay	Current practice (*)	25	34
		Current practice but no percentage	12	16
		Max. 10% penalty but disperse to 25% of contract duration & another 5% penalty if > 25% C.D.	12	16
9	A. Project	Contract > 5 million (S.R.) is to submit insurance policy covers the project & its basic component (*)	37	53
		Any contract is to submit contractor's all risk and public liability insurance covers all project component and expected risks including third party liability	28	40
		Contractor pays GOSI 2% or workman salary (*)	44	58
	B. Workmen	Work men compensation insurance policy by contractor	25	33
		C. Structure	No policy required (only contractual obligation of 10 ears warrantee) (*)	45
	Insurance policy covers the structure and third party liability for ten years		32	40

Table 4.22 Construction Phase Statistics (First and Second Ranks)

C. Contractor Administration

Rank#	Q#	Description	A.I. (%)	Ordinal Scale
1	18	Safety plan submission by contractor	92	S. Agree
2	22	Development of contracts administration manual	92	S. Agree
3	3	GPLR manual updating and Distribution	91	S. Agree
4	17	QC/QA program submission by contractor	91	S. Agree
5	16	Saudization (10% of Contractor's Staff)	91	S. Agree
6	21	Initiation of contract administration program	89	S. Agree
7	20	Establishment of "Coordination Department"	86	S. Agree
8	19	Establishment of "Safety Department"	86	S. Agree
9	12	Use of value engineering on large projects	86	S. Agree
10	11	Reimbursement of contractor for delay	81	Agree
11	7	Development of contract documents	80	Agree
12	4	GPLR Organization & Agreement	78	Agree
13	13	Use of local products (LP) by contractor	78	Agree
14	2	GPLR evaluation & revision	76	Agree
15	10	Holding up amounts of payments	76	Agree
16	14	The absence of a tool to implement the law of (LP)	75	Agree
17	5	SPWX clearance & completion	66	Agree
18	15	30% law disobedience by foreign contractor	64	Agree
19	1	GPLR clearance & completion	63	Agree
20	9	Procedures of processing the payments are easy	62	Agree
21	8	Contractors monthly payments paid on time	62	Agree
22	6	SPWC administration problems	59	Agree

Table 4.23 Contract Administration By Rank

5. Conclusion and Recommendation

5.1 Conclusion

The results of survey questionnaire that has been received from (80) government departments has indicated to the following points

A. Bidding Phase

1. The current practice of (1%) bid price as bid bond was highly supported by respondents.
2. Pre – Bid qualification and double envelope system received high support respectively.
3. Holding a Pre – Bid conference should be mandated.
4. Using a project estimate as a base for contract award was highly recommended by the respondents.

Construction Phase

1. Strong Support to have mandatory pre – construction conference.
2. Five percent (5%) of contract price performance bond has received highest support.
3. Strong support of requiring labor and material payment bond.
4. The current practice of allowing the owner to pay the contractor (10%) of contract price as an advance payment bond received the highest support.

5. The current practice of retaining the last payment of the contractors but not less than (10%) of the contract value received dominant support.
6. The Current practice of change order which states that the amount of work increased or decreased should not exceed 20% of the contract value has received highest support.
7. The Current method of calculating the delay penalty received adequate support and the collective result showed strong desire by the respondents to increase the penalty.

C. Contract Administration

The statements were arranged as in summary ranked by percentage basis.

5.2 Recommendations

1. Result obtained from questionnaire should be considered by legislator.
2. GPLR articles should be revised and updated periodically and then distributed to all concerned government departments.
3. A Pre – Qualification technique for contractor' procurement should be developed promptly to replace the current practice.
4. A Project estimate should be used as a base for budget allocation and contract awards.
5. Labor and material payment bound should be mandated.
6. Value engineering incentive clauses should be development by using the other countries experience.

7. A systematic procedural method should be developed and used for strict enforcement and implementation of laws.
8. GPLR should encourage a Saudization program in the private sector to have a minimum of (10%) of their employees.
9. Inclusion of QC/ QA program and safety plan clauses the SPWC.
10. Standard construction contract administration manual (SCAM) should be developed and used in public projects.

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