

Study of Different Contract Conditions for Various Government Agencies

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Abstract—Contract conditions set out the principal legal relationship between the parties to a construction project, determining the allocation of risk and consequently, price. An agreement, conditions of contract, drawings, specifications and other documents comprise a typical construction contract. Conditions of contract define each contracting party's duties and privileges, and the rules by which they are to meet obligations and perform the work they agreed upon. The paper presents the study of general conditions of contracts with the help of tender documents of various types of works proposed by government agencies, also to give comparative analysis of public and private tendering process. This paper will also helpful to give remedial majors to improve contract work and conditions.

Index Terms— conditions of contract, tender, tender document, E-tender.

I. INTRODUCTION

A construction contract is a mutual or legally bidding agreement between two parties based on policies and conditions recorded in document form. It is specifically negotiated for the construction of an asset or a combination of assets that are closely interrelated or interdependent in terms of their design, technology and function or their ultimate purpose or use. There are several common forms of contract and project arrangements that may be selected by an owner for a construction project, depending on the individual circumstances and preferences. Understanding every little detail of the contract is extremely important. Past experience will not have an impact on what is written in the contract. Therefore, each new contract should represent a new agreement with its own rules and procedures.

The construction sector is heavily contractual. And it should be! Many parties are involved: employers (those who "buy" the construction works), the contractors (those in charge of the works), and the sub-contractors (those to whom certain parts of the works will be delegated), the professional consultants (the experts), the suppliers (where materials and equipment come from). And independently of the type of building to be delivered in the end, a wide range of areas are covered: design, engineering, management, building, warranties and guarantees – just to mention the more generic ones. Setting out where you are and what you have to do in this complex chain is absolutely essential so there can be no confusion throughout the process and there are clear routes to resolving any potential conflict. *Conditions of contract:* Contract conditions set out the principal legal relationship between the parties to a construction project, determining the allocation of risk and consequently, price. Contract conditions usually included in the book of specifications (or in the accompanying architectural drawings) of a contract, that set the minimum performance requirements for the contractor.

General Conditions: An agreement, general conditions, drawings, specifications and other documents comprise a typical construction contract. General conditions define each contracting party's duties and privileges, and the rules by which they are to meet obligations and perform the work they agreed upon.

Purpose: General conditions provide the legal framework for the construction contract and promote fairness among all contracting parties. When referenced in other owner and contractor sub-agreements, they maintain vital order and consistency.

Roles: General conditions detail the rights, responsibilities and relationships of the owner, contractor and prime architect or engineer who will be working with both parties throughout construction.

Rules: These conditions stipulate rules regarding subcontractors, changes, time, payments, completion, protection of persons and property, insurance, bonds, correction, termination, suspension, claims and disputes.

II. OBJECTIVES

- 1. To study the general and detail specifications of various nature of work.
- 2. To study the various technical parameter while floating the contract/tender.
- 3. To study the arbitration clause and their pros and cons.
- 4. To study the material management and site management.

III. METHODOLOGY

The following methodology has been adopted in the present study:

- 1. Study of various types of contract.
- 2. Paper literature survey.
- 3. Advantages & disadvantages of contract document for different types of work.



4. Remedial major to improve contract/work condition.

The study is primarily based on secondary data. The secondary data has been collected from various sources like internet, books, e-procurement websites, tendering process adopted by government agencies in India for various types of works.

A. Tender Documents

The various terms and conditions of contracts which are to be formulated while inviting tender for a civil engineering and architecture work are:

- 1. The notice inviting tenders (N.I.T.) is a standard approved form of a department.
- 2. Tender form with standard conditions of contract.
- 3. Schedule of quantities of works to be done and materials, tools and plants to be supplied by the department if any.
- 4. Special terms and conditions.
- 5. Complete specification of work, to be executed.
- 6. Special conditions and additional conditions of contract.
- 7. One set of approved drawing where necessary.

All the above documents are signed by contractor page by page, necessary entries are made and a forwarding letter on letter head of a contractor with bank draft (or other form of earnest money) are put in closed cover. The cover is then seated and dropped in the tender box within the time limit for the tender. The name of the work and the name of the contractor are super scribed on the cover.

B. Conditions of Contract

There are several clauses in the conditions of contract to govern the character of work to be carried out. Governments have their own standard conditions of contract provided in the printed tender form. The conditions specify mainly the following clauses:(1) Amount of security deposit, (2) Compensation for delay, (3) Action when whole of security deposite is forfeited, (4) Contractor remains liable to pay compensation, (5) Extention of time, (6) completion certificate, (7) Payment on certificate, (8) monthly bill, (9) Payment of bill, (10) Departmental materials, (11) Execution of work in accordance with drawing and specifications, (12) Alterations of designs and specifications, (13) No compensation for alterations, (14) Compensation in case of bad work, (15) Works to be open for inspection, (16) Notice before the work is covered, (17) maintenance period up, (18) Care of departmental tools and plants, (19) Labour, (20) Work on Sunday, (21) Contract may be rescinded, (22) Sum payable way of compensation by the contractor, (23) Changes in constitution, (24) Supervision by higher officers, (25) Arbitration etc.

C. Government Tendering

The Indian Government, along with State and local governments, their agencies and departments, buy many goods and services from the private sector, and provide a significant market opportunity for businesses. The government market provides many opportunities to tender for a wide range of goods and services, from large procurements and projects such as Defense, infrastructure and health, to supply of stationary and cleaning contracts. Government tendering involves various guidelines and procedures, such as the Commonwealth Procurement Guidelines, to ensure that the process is conducted in accordance with ethical, fair and transparent practices. As the Government is accountable to tax-payers and the society, they ensure that the tendering process is equitable and nondiscriminatory. Government procurement processes are designed to encourage competition and promote the efficient, effective and ethical use of government resources. In addition to winning new business, contracting with Government can offer many advantages to your business, including:

- 1. A valuable reference that may assist you to secure contracts in the private sector or overseas.
 - Experience gained is a strong selling point to other public authorities.
 - Provides a reliable source of business.

The core principle in Government tendering and procurement is achieving value for money. This does not just refer to offering the lowest price or best offer. Value for money can also be assessed by looking at factors including:

- 1. The relative risk of the proposal
- 2. Fitness for purpose
- 3. The performance history of the supplier
- 4. All direct and indirect financial costs and benefits over the life of the procurement
- 5. The flexibility of the proposal to adapt to possible change
- 6. The anticipated price that could be obtained, or cost incurred, at the time of disposal.

By accessing Government tenders, your business has the opportunity to gain a vast considerable amount of work from a reliable organization, offering not only contracts for work being tendered, but also an opportunity to obtain ongoing work through building relationships and establishing your business as a reputable and trustworthy supplier to government.

D. E-Tendering

The traditional systems of procurement in government departments through manual modes suffered from various problems such as inordinate delays (approximately 4 to 6 months) in tender/order processing, heavy work, multilevel scrutiny that consumes a lot of time, physical threats to bidders, cartel formation by the contractors to suppress competition, human interface at every stage, inadequate transparency, discretionary treatment in the entire tender process, etc. Though it is known to the departments that their traditional processes are inefficient, hardly any effort was taken to improve the system for obvious reasons. E-Tendering is a process of carrying out entire Tendering Cycle Online, including submission of Price Bid to harness Efficiency, Economy and Speed of Internet. Despite the apparent benefits of information technology (IT), many organizations have been slow to adopt e construction and in particular e-tendering. Many companies are approaching the use of e-tendering with caution in order to test



its practical advantages and encourage age confidence amongst staff before implementation to a general concern over security and legality issues. Tendering is a practice involving a complex web of legal issues, which must be known before tendering. The unguarded use of electronic technology in electronic tendering and post-tendering project management has created contradictory effects, such as the trade of between efficiency and security. The people are unsure of the legal impact of using the existing e-tendering project management system. For this reason, industry is reluctant to conduct contracting activities. Business has traditionally incorporated many elaborate procedures into their regular business processes to seek legal protections. E-tendering systems should also include appropriate security mechanisms for increasing the system's reliability.

E. FIDIC Forms

FIDIC. i.e. FEDERTION **INTERNATIONALE** DE INGENIEURS - CONSEILS (International Federation of Consulting Engineers) is an international organization based in Geneva that has been instrumental in the evolution of various standard forms of contracts used worldwide in civil engineering works. The World Bank has also adopted the FIDIC standard forms with suitable modifications for applications in the works carried out with its assistance. The key differentiator of the FIDIC based contract is the role assigned to the "Engineer" who is an impartial and independent expert who administers the contract between the parties viz. the "Employer" (i.e. the public body e.g. ULB) and the "Contractor". The conventional PWD forms used in our country did not adequately provide for the role of project management and supervision to be carried out by a consultant. The FIDIC form is eminently suitable for adoption in cases where the project management of the work is to be

TABLE I

1			
	EMD Deposit	Yes	Yes
2	Evolution and comparison of bids	No	Yes
3	Performance Security	After 24 months	After 18 months
4	Bank guarantee	No	5% of total contract price.
5	Form of contract agreement	Yes	Yes
6	Details of technical and administrative for work	No	Yes
7	Envelope system	Yes	No
8	Rejection of all tenders	Yes	Yes
9	Settlement of disputes	No any provision	Arbitrator appointed
10	Avoidance of delay	No any provision	Third Agency Appointed
11	complete projects	Yes	No. Work should be completed in time.
12	Quality control	Not check properly	Strictly check by company engineers
13	Advance payment	All payment in Rupees	All payment in Rupees
14	Insurance	Not provided	Provided
15	Currencies	All payment in Rupees	All payment in Rupees
16	Penalty for delay	Depends upon the Engineer in charge. But it penalty up to 500 to 2000 /- Rs. Per day.	Depends upon the Engineer in charge. But it penalty up to 500 to 5000 /- Rs. Per da
17	Environmental protection	No any provision	Strictly follows the environmental rules
18	Wastage of material		
	Cement	Nil	Nil
	Steel	10-12%	10-12%
19	Safety provision	No	Yes
20	Canteen	Not available	Available
21	Temporary electric supply	Available	Available
22	Rejection of all tenders	Yes	Yes
23	Housing for labours	Not available	Available
24	Explosive material	Explosive material	Strictly prohibitted
25	Bonus to before complete the work	No provision	2.5% of cost of project
26	Complete the process	2-3 months and above	1 month
27	Description of material	Yes given	Yes given
28	Fire prevention	No provision	Strictly fire prevention material available
29	Transport for labours	Not provided	Its available for all engineer and labours
30	Manpower for complete process	More required	Less required
31	Transference to process	Less	More
32	Quality of work	Less quality work done	work done Accurate quality work done
			work done



TABLE II COMBADICON OF E TENDED AND TRADITIONAL TENDED AS DED CASE STUDIES

COMPARISON OF E-TENDER AND TRADITIONAL TENDER AS PER CASE STUDIES			
E- tender	Traditional tender		
EMD deposit online process	EMD deposit at manually process		
Comparative statement automatically generated	Comparative statement done by manually.		
At any time within specified period upload document.	At not possible to upload document.		
Document saves in soft copy and in safe in position.	Document in hard copy and not possible to safe at time.		
Free from corruption and no chance to alter the quoted the rates.	Not possible to free from corruption and should be possible to changes quoted rates.		
Paper work is minimum.	Paper work is maximum.		
No deduction of tax	Deduct the tax		
No need of D.D. and deposited to manually.	D.D. and deposited to manually.		
Its transferring process	Its non-transfer process		
Time saving process	Time consuming process		
Its speedy process.	Its slow process.		
No any interference of political persons.	In this chance to interfere of political persons.		
Non awarded persons the EMD will be transfer to direct on his	In this process the EMD amount given after 2 months after opening of tender.		
bank account			
Tender not necessary to submit by hand	Tender submit by hand and before time		
Privacy of rates and other important document is possible.	In this no guaranty of privacy and to possible to lost the documents.		
Environmental friendly	Paper Based		
Anytime-Anywhere	Restricted Mobility		
Bidding possible on Holidays and after office hours	No work in Holidays and after office hours		
Automated and Accurate	Prone to human errors		
Full proof Security	Physical security		
Lifelong storage on CD	Wastage of space to store		
One click access to bids	Difficult to retrieve		

entrusted to an expert consultant, who functions as the "Engineer" to administer the contract. FIDIC has developed the following forms10 Conditions of Contract for Construction: These are forms used for construction contracts and are usually item rate type of contracts, although the form can also be used for lump sum contracts.

IV. COMPARISON

The Table-1 and Table-2, shows the comparison. *Recommendations for E-tendering*:

- 1. E-tender should apply at cost one lacks.
- 2. There should be the appointment of third party for the observation.
- 3. E-tender process can be done with the help of private companies for security and efficient process.
- 4. The use of the latest software's and technology for Etender process will provide more effectiveness and thus work can be completed earlier and fast.
- 5. For the less corruption in tender process there should be the compulsion to all departments to adopt the E-tendering process for all type of tender.

V. CONCLUSION

- 1. Main barriers in adoption of e-procurement in construction industry are organizational, technical, legal aspects.
- 2. Practitioners can use develop various new techniques like

build ability, construction ability, innovation, lean construction, sustainability and value engineering various through critical review of e-procurement/tendering method.

- 3. The major risks affecting the infrastructure project are systematically examined. For successful completion of any infrastructure construction project, it is necessary to study all aspects of project mentioned in contract documents/conditions of contract.
- 4. E-tender process has number of advantages over traditional tendering process such as document save in soft copy and in safe in position, free from corruption and no chance to alter the quoted the rates, paper work reduced.
- 5. The contract documents are used as a tool to manage risk by allocating risks to various agencies through various contracts.
- 6. Tendering provides clarity of the needs of the client, clear deadlines on availability of information and how each stage of the process will work.

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