

Assessment of Construction Contract Documents for Use in Urban Local Bodies in India

Dr. Jyotirmoy Sarma

Independent Researcher, P-706, Supertech Icon, Nyay Khand 1, Indirapuram, Ghaziabad-201014

Abstract - In India, Urban Local bodies (ULBs) are entrusted with implementation of large infrastructure projects. In many occasions, Special Purpose Vehicles (SPVs) are formed within office of urban local bodies for implementation of large projects. These SPVs become parts of the ULBs with several officials working with dual roles in the ULBs and the SPVs. It has been found that many of the ULBs and the SPVs do not use nationally or internationally recognized formats of contract documents during implementation of the projects. Only in some ULBs of big cities, formats of contract documents prescribed by CPWD, MOSPI, etc. are used. These formats of contract documents have limitations for use in large projects. Therefore, in most of the large infrastructure projects funded by World Bank, Asian Development Bank and other external funding agencies, FIDIC based contract documents are used. FIDIC contract documents have advantages and useful to increase performance of construction process. In the research paper, the author has made a comparative analysis of FIDIC and MOSPI standard contract documents and recommends on use of appropriate contract documents in projects implemented by ULBs or any SPVs working within them. Use of an appropriate format of contract documents is an institutional reform necessary in urban local bodies in India.

Key Words: ULB, SPV, CPWD, MOSPI, FIDIC, Contract Document

1. INTRODUCTION

In India, Urban Local bodies (ULBs) are given responsibilities by central and state governments to implement large infrastructure projects funded by them. In many occasions, Special Purpose Vehicles (SPVs) are formed within office of urban local bodies for implementation of large projects. These SPVs become parts of the ULBs with several key officials working with dual roles in the ULBs and the SPVs. It has been found that most of the ULBs and the SPVs do not use nationally or internationally recognized formats of contract documents during implementation of the projects. Some of such recognized contract documents are prepared by FIDIC (International Federation of Consulting Engineers), ICE (Institution of Civil Engineers), NEC (New Engineering Contract), JCT (Joint Contracts Tribunal), CPWD (Central Public Works Department, Govt. of India), MOSPI (Ministry of Statistics and Program Implementation, Govt. of India). Only in some ULBs of big cities in India, formats of contract documents prescribed by CPWD, MOSPI, etc. are used. These

formats of contract documents have limitations for use in large projects. Therefore, in most of the large infrastructure projects funded by World Bank, Asian Development Bank and other external funding agencies, FIDIC based formats of contract documents are used. FIDIC contract documents have advantages and useful to increase performance of construction process. In the research paper, the author has made a comparative analysis between FIDIC and MOSPI standard contract document, which are recognized major international and national contract documents. Based on the analysis, the author has recommended appropriate contract documents to be used in projects implemented by ULBs or any SPVs working within them. Use of appropriate contract documents in construction projects in ULBs is very important as performance of ULBs in implementation of construction project depends to a large extent on adequate contract management and quality of contract documents used.

2. MAIN CONTENTS OF MOSPI CONTRACT DOCUMENTS:

The main contents of contract documents prepared by MOSPI (Ministry of Statistics and Program Implementation, Govt. of India) include Invitation for Bids (IFB), Section 1 Instructions to Bidders, Section 2 Forms of Bid and Qualification Information, Section 3 Conditions of Contract, Section 4 Contract Data, Section 5 Specifications, Section 6 Drawings, Section 7 Bills of Quantities and Section 8 Forms of Securities.

A summary of different subsections of Section 3 on Conditions of Contract is as below:

General: The sub section includes different definitions, provisions on appointment of nodal officer to work between employer and contractor, sub-contracting, employer's and contractor's risk, insurance, access to sites, safety procedures, appointment of adjudicator, procedure for settlement of disputes, etc..

Time Control: The sub section includes provisions on submission of a work program by contractor after issue of letter of acceptance, extension of intended completion date due to compensation event or variation, early warning to contractor about delay in project, etc.

Quality Control: The sub section includes provisions for identifying defects in construction, carrying out quality tests by contractor, correction of defects observed within defect liability period, etc.

Cost Control: The sub section includes provisions for changes in contract prices due to variation of quantities,

adjustment of rates, payment for variations, payment procedures, payment of final bills, compensation events, price adjustments, retention money, liquidated damages, advance payments, etc.

Finishing the Contract: The sub section includes provisions on taking over of works from contractor, final payment to contractor, submission of as built drawings and O & M manual by contractor, termination of contract by employer and contractor, etc.

Special Conditions of Contract: The section includes provision to be made by contractor for engagement for staff and labour, their housing, feeding and transport. It also includes provision on need to comply with all labour and related legislations by the contractor.

3. SUMMARY OF CONTENTS IN FIDIC CONTRACT DOCUMENTS:

FIDIC is the international federation of consulting engineers or *Federation Internationale des Ingenieurs Conseils*. FIDIC was founded in 1913 by the national associations of three European countries and now has membership from over 60 countries. The FIDIC contract documents have traditionally been based on the principle of balanced risk sharing and widely accepted by employers and contractors in the world. There are different forms of FIDIC Contract documents reflecting different procurement approaches. FIDIC Red Book is scoped around works predominantly designed by the Employer, while FIDIC Yellow Book is used for works primarily designed by the Contractor. Additionally, FIDIC Silver Book is intended for use on turnkey projects, while the FIDIC Gold Book is appropriate for Design Built Operate projects. The contents of a FIDIC standard contract document includes Letter of invitation to tender, Instructions to Tenderers, Form of Letter of Tender and Required Appendices, Conditions of Contract (General and Particular), General information and data, Technical information and Data, Specifications, Drawings, Schedules from the Employer, Details of schedules and other information required from Tenderers, Required Forms of Agreement, Securities and Guarantees.

A summary of the clauses of General Condition of standard FIDIC Contract document, updated in year 2017, is given below:

Clause 1 - General provisions: The clause includes different definitions relating to contract agreement, letter of acceptance, commencement date, time of completion, tests on completion, taking over certificate, defect notification period, performance certificate, interim payment certificate, final payment certificate, retention money, performance security, variation, etc. It also specifies priority of documents in contract agreement.

Clause 2 - The Employer: The clause includes provisions on Employer's duty in handing over the site to the contractor as handing over of site is a significant event and should be

properly managed by the employer. It also includes provisions on required assistance of employers in obtaining various permits, licenses and approvals, information to be given by employer on financial arrangement, if requested by contractor, etc.

Clause 3 - The Engineer: The clause includes provisions on obligation of employer to appoint engineer to carry out duties, duties and authority of Engineer, provisions of delegation of authority by Engineer, instructions by Engineer, replacement of Engineer, etc.

Clause 4 - The Contractor: The clause includes provisions on obligations of the contractor such as design (if specified in contract), execute and complete the works, provide performance security, ensure quality assurance, submit progress report, etc.

Clause 5 - Nominated Subcontractors: The clause includes provision of engagement of nominated subcontractor by contractor according to the engineer's instructions for doing part of the whole work.

Clause 6 - Staff and Labour: The clause includes provisions on obligation of the contractor to engage staff and labour, making their payment, feeding, transport, appropriate housing, rates of wages, conditions of labour, working hours, facilities to be provided to staff and labour, precautions to taken to maintain health and safety.

Clause 7 - Plant, Materials and Workmanship: The clause includes provisions for required submission of samples of construction materials by contractor before use, inspection by Engineer, arrangement by Contractor for conducting specified tests for quality control, etc.

Clause 8 - Commencement, Delays, and Suspension: The clause includes provisions on obligation of the employer to inform commencement date of the contract, circumstances that allow extension of time of completion to contractor, delay damages that can be imposed by the employer, authority of engineer to instruct the contractor to suspend progress of part or all of the works with notifying the cause for the suspension.

Clause 9 - Tests on Completion: The clause includes provisions on obligation of contractor to carry out tests specified in contract agreement and agreed upon, tests on completion of works.

Clause 10 - Employer's Taking Over: The clause includes provisions on Engineer's authority for taking over, receiving application from contractor to take over, issue of taking over certificate or reject applications, listing any deficiencies, etc.

Clause 11 - Defects Liability: The clause includes provisions on cost of remedy of defective works to be borne by contractor, provision of extension of defect liability period, issue of performance certificate to contractor, etc.

Clause 12 - Measurement and Valuation: The clause

includes provisions measurement of works for making payment, method of measurement, evaluation of each item of work.

Clause 13 – Variations and Adjustments: The clause includes provisions on obligation of contractor to execute variation order, contractor's claims about unavailability of required goods for execution of works under variation.

Clause 14 – Contract Price and Payments: The clause includes provisions on valuation of works executed by contractor, advance payment to contractor, submission of application for interim payment certificate by contractor to the engineer, issue of interim payment certificate by engineer.

Clause 15 – Termination by Employer: The clause includes provisions on Entitlement of Employer to terminate the contract and list of causes that will entitle to employer to terminate the contract.

Clause 16 – Suspension and Termination by Contractor: The clause includes provisions on entitlement of suspension of work by contractor and list of causes that entitle the contractor to terminate the contract.

Clause 17 – Risk and Responsibilities: The clause mainly divides the risks and responsibilities of the employer and contractor.

Clause 18 – Insurance: The clause includes provisions for required insurance for works and contractor's equipment, insurance against injury to persons and damage to property and insurance for contractor's personnel.

Clause 19 – Force Majeure: The clause defines Force majeure as exceptional event and circumstances beyond the control of the employer and the contractor and resulted consequences.

Clause 20 – Employer's and Contractor's Claims: The clause includes the provision that the contractor shall give notice of claim to the Engineer not later than 28 days after the Contractor became aware of the need to make a claim.

Clause 21 – Disputes and Arbitration: The clause includes provisions on appointment of members of DAAB (Dispute Avoidance/Adjudication Board. Unless there is a conflict with the governing law of the Contract, all formal disputes must be referred to a Dispute Avoidance/Adjudication Board for a provisionally binding decision as a condition precedent to arbitration.

4. COMPARISON OF FIDIC AND MOSPI CONTRACT DOCUMENTS :

A comparison has been made between provisions available on FIDIC and MOSPI contract document with respect to major contract management issues encountered in construction projects. The comparison is as below:

- i) Handing over site to contractor: As per FIDIC contract document, failure to hand over construction site to contractor is a compensation event. Similar provision is also included in MOSPI contract document.
- ii) Variation of Works: As per FIDIC contract document, variation can be for change in quantities, changes in levels, additional work, omission of work, etc. Contractor is bound by such variation unless the contractor promptly gives notice for difficulties. Similar provision has been included in MOSPI contract document.
- iii) Claim for Extension of Time and Additional Payment: As per FIDIC contract document, Contractor is entitled for extension of time due to variation, extremely adverse climatic condition, delay or impediments due to Employer, etc. Contractor is also entitled for payment for any additional work. But, contractor will have to apply for extension of time and additional payment within 28 days after he becomes aware of the circumstances. MOSPI contract document also has similar provisions.
- iv) Cost Escalation: As per FIDIC contract document, If table of cost adjustment data is included in particular conditions of contract, the amount payable to the contractor shall be adjusted for change in cost of labour, goods and other inputs to the work. MOSPI document also has similar provisions.
- v) Imposition of Penalty to Contractor: As per FIDIC contract document, delay damages shall be the sum mentioned in particular conditions of contract. Delay damages shall be damages due to delay by contractor. MOSPI document has stringent provision on liquidated damage to be imposed on contractor due to delay in construction works.
- vi) Termination by Employer: Employer can terminate contract due to visible intention of non continuation of performance, subcontracting the whole work without permission, contractor becomes bankrupt or insolvent or goes into liquidation, gives or offers to give bribe, etc. Similar provision has been also included in MOSPI contract document.
- vii) Final Payment to Contractor: As per FIDIC contract document, Engineer shall issue final payment certificate within 28 days after receipt of final statement. MOSPI contract document has specified that final payment should be made within 60 days from receipt of final bill from the contractor.
- viii) Settlement of Dispute: Both FIDIC and MOSPI contract document has specified procedures for settlement of disputes.

An analysis on comparison of MOSPI and FIDIC contract documents also has been done with respect to certain quality criteria that affects in performance of construction projects. The comparison is given below:

- i) **Clarity and Simplicity:** One of the main causes of disputes in construction project is misunderstanding and misinterpretation of contract clauses. Both FIDIC and MOSPI contract document have clarity and simplicity.
- ii) **Flexibility:** FIDIC contract can be used for both international and domestic projects. It is compatible with the jurisdiction of any country. MOSPI contract is prepared for domestic projects within India.
- iii) **Effective Project Management:** Both FIDIC and MOSPI contract documents are designed to focus more on the risk, liabilities and responsibilities of the parties. In both the contract documents, aspects of project management are limited to submission of work program, projected cash flow statements and periodic project progress reports by the contractor.
- iv) **Partnering:** In construction project, the contractor should undertake a project in a spirit of mutual trust and co-operation. This needs to be reflected in the contract clauses. Both FIDIC and MOSPI contract documents have no such provision.
- v) **Risk Allocation and Management:** Major risks in construction projects are:
 - a) Delays in availability of labor, material and equipment
 - b) Time overrun by the contractor
 - c) Poor quality of work done by the contractor
 - d) Unforeseen ground condition
 - e) Permits and licences to be obtained by contractor
 - f) Cost involved with changes in design and scope of work made by employer
 - g) Changes in quantity of works
 - h) Delays caused by employer due to lack of payment, inability to get approvals, delayed progress payments to contractor.
 - i) Exceptional bad weather
 - j) Estimation errors or design error

FIDIC is based on the principle of balanced risk sharing and provisions on sharing of all the risks by the employer and contractor are included in FIDIC document. Similar provisions are also included in MOSPI contract document.

- vi) **Force Majeure and Prevention Events:** The force majeure events are of a great importance. FIDIC has a

clause on this. Similar provision is also included in MOSPI contract document.

- vii) **Unforeseen Site Condition Risks:** Unforeseen physical obstructions can be encountered in major construction projects. FIDIC obliges the employer to provide the contractor with the available data about the site. MOSPI contract document also has similar provisions.
- viii) **Variations and Claims (extension of time and additional expense):** FIDIC adopts the traditional approach to variations and claims. FIDIC has separate clauses that justify claims, which are spread out over the whole contract and cross-referenced. Also, FIDIC does not consider time and cost claims simultaneously. Thus, there is no automatic right to costs compensation under the extension of time claims. MOSPI contract document have also provisions on variation and claims on additional cost and extension of time.
- ix) **Dispute Avoidance and Resolution:**

The main reasons for disputes in construction projects are imposing of penalty by client, retention of security deposit, delay in settlement of final bills, deductions made by the client in the final bill as against that claimed by the contractor, claims made by contractor in respect of changes in design, variation etc. not honoured by the client, increase in duration and overall cost of the project, quality of construction, variation in specifications by contractor without client's or his engineer's approval, changes made by client without giving due consideration for variation in time and cost, valuation in variations, etc. Both FIDIC and MOSPI contract document have included detailed provisions for settlement of disputes.
- x) **Project Organisation:** FIDIC contract document has a separate clause on engineer to be engaged by employer. The engineer has two main duties. Firstly, he is the employer's agent for design, supervision of construction works and contract administration. Secondly, he is a neutral and independent third party responsible to decide and determine the contractor's claims for additional payment or extensions of time and to resolve disputes fairly between the contractor and the employer. In MOSPI contract document, the nodal officer is responsible for similar role. But, unlike FIDIC documents, details of duties of Nodal officer are not specified in MOSPI contract document.

5. APPROPRIATE CONTRACT DOCUMENT FOR USE IN URBAN LOCAL BODIES IN INDIA :

It has been observed that use of both FIDIC and MOSPI contract document are useful for speedier implementation and success in any construction project. Both FIDIC and MOSPI contract ensures balanced risk allocation between the owner of project and the contractor. It has been found that MOSPI contract document has most of provisions similar to FIDIC contract documents. The main issues to be

addressed further in these contract documents are quick, time bound and unbiased settlement of disputes and establishing fair and balanced industrial relationship between the employer and contractor. Also, additional project management aspects need to be included in the contract documents to assist in construction process. These contract documents need to be modified further in future to include the above aspects. In spite of some deficiencies, both the contract documents can be very useful. But, in many urban local bodies in India neither FIDIC nor MOSPI contract documents are followed. This results in delay in project completion, cost overrun and disputes with contractors. Because of use of poor quality contract documents, contractors involved in construction works awarded by these ULBs are dependent on whims of officials of the ULBs. The situation compels the contractors to adopt corrupt practices and use patronage from higher officials and politicians.

6. CONCLUSIONS:

It has been observed that, use of FIDIC and MOSPI contract documents in urban local bodies in India can be very useful to increase performance in construction of projects. Use of appropriate contract document will attract reputed contractors to participate in construction projects in the ULBs. It is strongly recommended that for all large works for which international bids are invited, FIDIC contract document is used by the ULBs. For all other infrastructure works for domestic or national bids, MOSPI contract documents should be used.

Disclaimer: The findings and conclusions presented in the paper are personal opinion of the author.