

Chapter 8

Tendering and Construction Contracts

CHAPTER HIGHLIGHTS

- 📖 Tendering and construction contracts
- 📖 Process of tendering

- 📖 Document Required for pre-qualification

TENDERING AND CONSTRUCTION CONTRACTS

Contract as per the Indian contract act of 1872, means 'agreements which are enforceable as such having been made by free consent of the parties/by persons competent to contract for a lawful consideration and lawful object and which are not expressly declared to be void by any statute'.

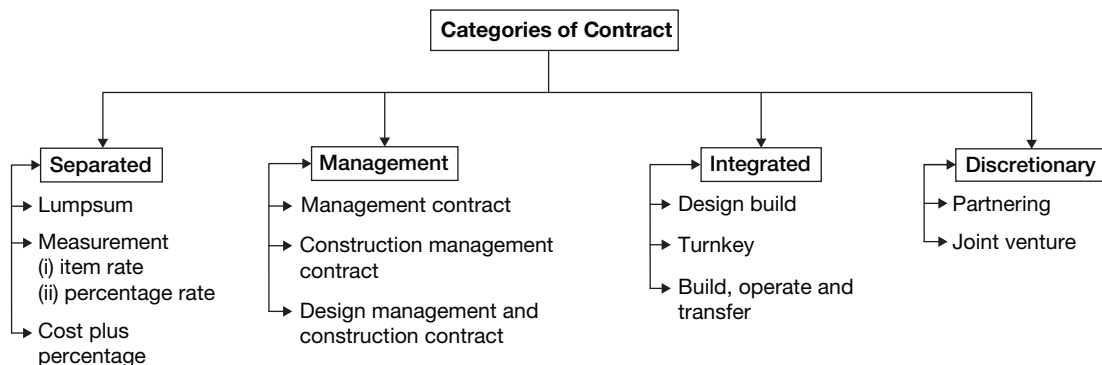
A construction contract, generally, consists of:

1. Contract drawings
2. Contract specifications
3. General condition of contract
4. Special conditions of contract

5. The agreement
6. The bill of quantities (BoQ)

Separated contracts have clear divisions between the design and construction responsibilities. In this method, sufficient time is needed for preparation of complete documentation by all consultants and, for the quantity surveyors to complete final estimate prior to inviting tenders.

- 1. Lumpsum contract:** In this type of contract, the contractor quotes a single lumpsum figure based on the total drawing and other details of the project. In this type of contract, the big advantage for the contractor is that he knows the amount of funds required for completion of the project. For a lumpsum contract to be successful it



should be ensured that the nature of work to be done must be reasonably measurable and contractor must be given all the facilities to which he is contractually entitled.

2. **Item rate contract:** In this, the rate of item quoted by the contractor is more important compared to the total amount of contract. It is in contrast to the lump sum contract, where the agreement is for delivering the entire project for a certain sum.
3. **Percentage rate contract:** In this form of contract the tender document contain the analysed schedule of rates for each item, in addition to the detailed estimated quantities expected in execution of works. In this contract for additional quantities of work done and for items not included in the bill of quantities, payment is made on basis of actual costs worked out on basis of appropriate analysis of rates, which are then modified in accordance with percentage agreed upon.
4. **Cost plus percentage contract:** In this contract, the client agrees to pay the contractor a certain percentage of actual cost incurred by the contractor while completing the job, in addition to cost itself. Thus the tender only quotes this percentage.
5. **Management contract:** In this type of contract the managing contractor is appointed at the earliest possible time. This helps the client to avoid dealing with large number of small contractors. The main responsibilities assigned for management contractor are:
 - (a) Preparation of overall construction schedule
 - (b) Preparation of work package schedule
 - (c) Assistance in subcontractor selection
 - (d) Co-ordinating among different sub contractors.
6. **Construction management contract:** In this type of contract, the contract manager is appointed by the client at an early stage to provide planning, management and coordination. The owner also appoints the designer and contractors for different works.
7. **Design, management and construction contract:** In this contract the contractor has to take care of design and construction, thus the client has to deal with a single agency for both design and construction.
8. **Design and build contract:** In this form of contract the contractor takes up the responsibility for both design and construction, based on basic plans drawn up by the client. In other words design and construction are handled with a single organizational structure, and a perennial conflict between the designer and contractor is avoided.

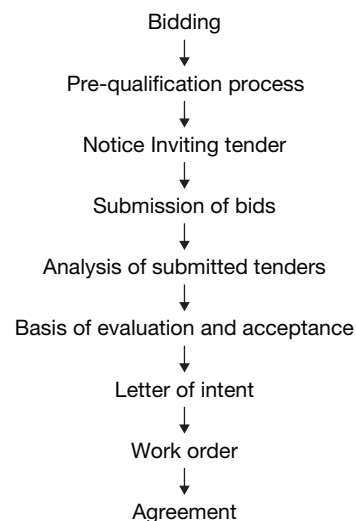
9. **Turnkey contract:** In this the comprehensive contract entrusts the responsibility of all activities involved to the contracting agency and the owner simply wants to turn the key at the completion to take over the facility.

10. **Built, operate and transfer (BOT) contract:** It is an extension tenancy contract. This gives responsibility of fund raising of project in contractor's court. In return the contractor is allowed to operate the facility for an agreed period of time to recover the cost incurred in the design and construction.

11. **Partnering:** This is a new form of agreement adopted within normal construction contracts or design, build contracts in which the client and the contractor together form a project team based on mutual confidence, then work together to manage the project to a successful conclusion, yielding a profit for both parties.

12. **Joint venture:** In large projects, very often no single contracting company has adequate expertise and/or resources to be able to bid alone and become the main contractor. In such cases, several contractors, pool in their resources and form a joint venture and bid for the project together.

PROCESS OF TENDERING

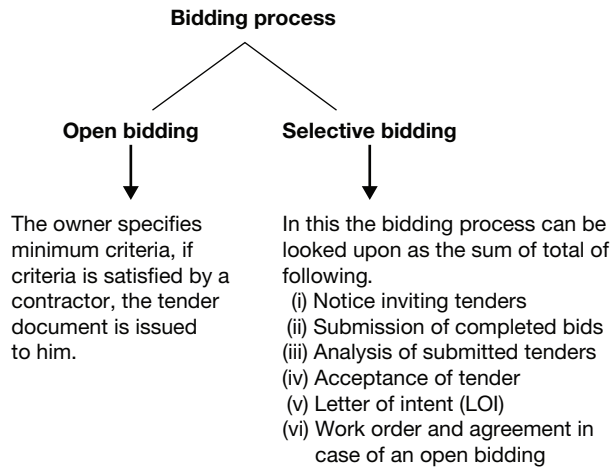


Bidding

The process of owner inviting parties to bid for a project and culminates in a contract being signed between owner and a party identified to carry out the job has been called 'bidding process'.

Bidding is classified into two types:

1. Open bidding
2. Selective bidding



Pre-qualification Process

1. It takes 8–10 weeks for the process to occur and involves considerable efforts on the part of the owner organization.
2. It involves selecting a pool of right contractors for the project.
3. The announcement of the pre-qualification process is advertised in leading dailies, trade journals, websites, etc.

DOCUMENT REQUIRED FOR PRE-QUALIFICATION

1. **Letter of transmittal:** A sample letter is to be submitted along with the pre-qualification document. In this document, the name and address of the applicant are mentioned in the specified fields.
2. **Power of attorney:** It is produced to state the signing authority as the power of an attorney.
3. **Financial information:** This statement shows the financial information of the applicant organization. Information like gross annual turnover, financial details of the applicant in the past 3 or 5 or 7 years, and profits earned for these periods same period are required to disclose.
4. **Details of similar works:** Detailed information on the experience of the applicant in executing projects of similar nature in the last five or seven years is submitted to the project owner.
5. **Concurrent commitment:** It means the projects under execution by the applicant or just awarded to the applicant. This information is required to assess the bid capacity of the applicant as well as to know the intention or willingness of the applicant to take up the proposed project.
6. **Certificates for completed jobs:** The applicants are supposed to establish their claim of experience by

producing completion certificates of the completed projects.

7. **Structure and organization:** It contains name and address of the applicant, contact information, legal status, particulars of registration, names and titles of directors and officers.
8. **Details of technical and administrative personnel:** The owner may wish to know about the proposed organization structure of the project, with details of qualification, responsibility and experience of the key members.
9. **Details of plant and equipment:** The owner wishes to know the availability of required plant and equipment with the applicants.

Notice Inviting Tender

The notice inviting tender contains following details:

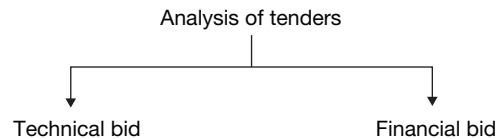
- Name of the authority inviting the bids
- Name of the project
- Condition for eligibility of contracting agencies to submit a bid
- Brief details of the project
- Estimated cost and time of completion of the project
- The cost of tender documents
- Earnest money to be deposited with completed order
- Date and time by which the bids are to be submitted and place of submission.
- The date and time of opening of bids.

Submission of Bids

Depending upon the nature and size of the project, the bids may be submitted as a single package or in two parts containing the technical and financial parts separately.

Analysis of Submitted Tenders

The submitted tenders are analyzed by breaking into two packages, namely, technical and financial packages.



Technical Bid

For a technical bid, the package should contain all the information that may be required to establish the credentials of tender (exclude financial requirements) and conditions relating to the particular project. The technical bid contains:

1. Earnest power of attorney.
2. Copy of the power of attorney.
3. Valid financial papers, such as income tax and sales tax clearance certificates.
4. Details of concurrent commitments and past experience.

5. Proposed project schedule.
6. The proposed organization chart for the project with appropriate details, including description of personnel responsibilities and resumes of the key personnel.
7. Detailed projection of cash flow.
8. Details of subcontractors proposed.
9. List of plant and machineries to be deployed in the project.
10. Details of materials proposed to be used, including their source and brand names where applicable.

Financial Bid

It consists of total price the contractor would require to complete the project. The total price and discount or rebate, if any, is conveyed to the owner by means of a cover letter included in the financial bid.

Basis for Evaluation and Acceptance

The tender evaluated based on the lowest cost is highly vulnerable to:

- Issues, like safety and quantity being compromised by an agency due to the intense competition that the method seeks to generate.
- Formation of pre-bidding (ring) among contracting agencies, which is equivalent of cartels. This tendency is essentially an outcome of conviction among the contracting

agencies that the owner has no alternative, but to execute the works and that all contractors benefit if they agree to a certain minimum cost.

- Tendency among the contracting agencies to first submit a low bid to secure the project, and then try to obtain additional payments through dispute resolution.

Letter of Intent

If the competent authority approves the recommendations of the tender committee, a letter of intent is issued to the contractor requesting him to submit the necessary documents, like partnership deed in case of partnership firm, and income tax clearance certificates, etc.

Work Order

After contracting agency accepts the offer and submits necessary documents, a work order is issued detailing the special terms and conditions, the mode of payment, the payment of security deposit, the total value of the contract, etc.

Agreement

At this stage, the contractor contacts the engineer-in-charge of the project, and while preparing to start work at the site enters into an agreement with the owner. The agreement includes previous relevant documents, i.e., the letter of contract, work order, letter of intent, the general conditions of contract, the special conditions of contract, specifications, and engineering drawings.

EXERCISES

1. The type of the contract, in which rate of each particular item is quoted separately is _____.
 - (A) lump sum contract
 - (B) item rate contract
 - (C) cost plus percentage contract
 - (D) percentage rate contract
2. Documents required for pre-qualification process includes _____.
 - (A) concurrent commitments
 - (B) certificates of completed jobs
 - (C) details of organization along with details of employees
 - (D) All of these
3. NIT refers
 - (A) Notice inviting tender
 - (B) Note invite tender
 - (C) Note invitation to take up
 - (D) Note invite to take up
4. Identify the correct sequence of the process in tendering
 - I. Notice inviting tenders
 - II. Submission of bids
 - III. Analysis of submitted tenders
 - IV. Acceptance of tender
 - V. Work order
 - VI. Letter of intent
 - (A) I, II, IV, III, V, VI
 - (B) I, II, III, IV, VI, V
 - (C) I, II, III, IV, V, VI
 - (D) I, II, VI, IV, III, V
5. Letter of intent _____.
 - (A) is issued to contractor
 - (B) is issued by contractor
 - (C) is issued to government authority
 - (D) is issued by government authority
6. Which of the following is not included in the technical bid?
 - (A) Copy of power of attorney.
 - (B) Proposed project schedule.
 - (C) Tax clearance certificates.
 - (D) Total price of the project.
7. During construction period, price variation clause in contracts caters to _____.
 - (A) increase in rate of only important materials
 - (B) variation in total cost of the project on adhoc basis

- (C) Variation in cost in materials, labors and petrol–lubricant elements
 (D) Rate of inflation

8. Identify the incorrect pair.

- (A) Piece work contract–Petty works and regular maintenance works.
 (B) Lump sum contract–Adopted for buildings, bridges, electrical works, etc.
 (C) Item rate contract–Payments were done earlier to the construction.
 (D) Labor contract–Not practiced in government.

9. Match List I with List II

List I	List II
a. Piece work contract	1. Not practiced in government
b. Lump sum contract	2. Payment made by detailed measurement of different items
c. Item rate contract	3. Adopted for buildings, roads, bridges and electrical works.
d. Labour contract	4. Petty works and regular maintenance work.

Codes:

- | | | | | | | | | | |
|-----|---|---|---|---|-----|---|---|---|---|
| a | b | c | d | a | b | c | d | | |
| (A) | 1 | 2 | 3 | 4 | (B) | 2 | 3 | 4 | 1 |
| (C) | 1 | 4 | 3 | 2 | (D) | 4 | 3 | 2 | 1 |

10. Which of the following is associated with tendering process?

- (A) Notice inviting tender (NIT)
 (B) Financial evaluation of bids
 (C) Letter of intent
 (D) All of these

11. If the payment is done based on the actual quantities of the item of works completed; that type of contract is referred as _____.

- (A) item rate contract
 (B) lump sum contract
 (C) cost plus % contract
 (D) turnkey contract

ANSWER KEYS

Exercises

1. B 2. D 3. A 4. B 5. A 6. D 7. C 8. C 9. D 10. D
 11. A