

## UNIT IV

**Contracts and Management of Contracts:** Engineering contracts and its formulation, Definition And essentials of a contract, Indian Contract Act1872, types of contracts and clauses for Contracts, Preparation of tender documents, Issues related to tendering process, Awarding Contract.

- **Introduction**

Contract Management is critical for ensuring the supplier/contractor/consultant and the Borrower meet their contractual commitments to time, cost, quality and other agreed matters. It requires systematic and efficient planning, execution, monitoring, and evaluation to ensure that both parties fulfill their contractual obligations with the ultimate goal of achieving and contractual results. It involves:

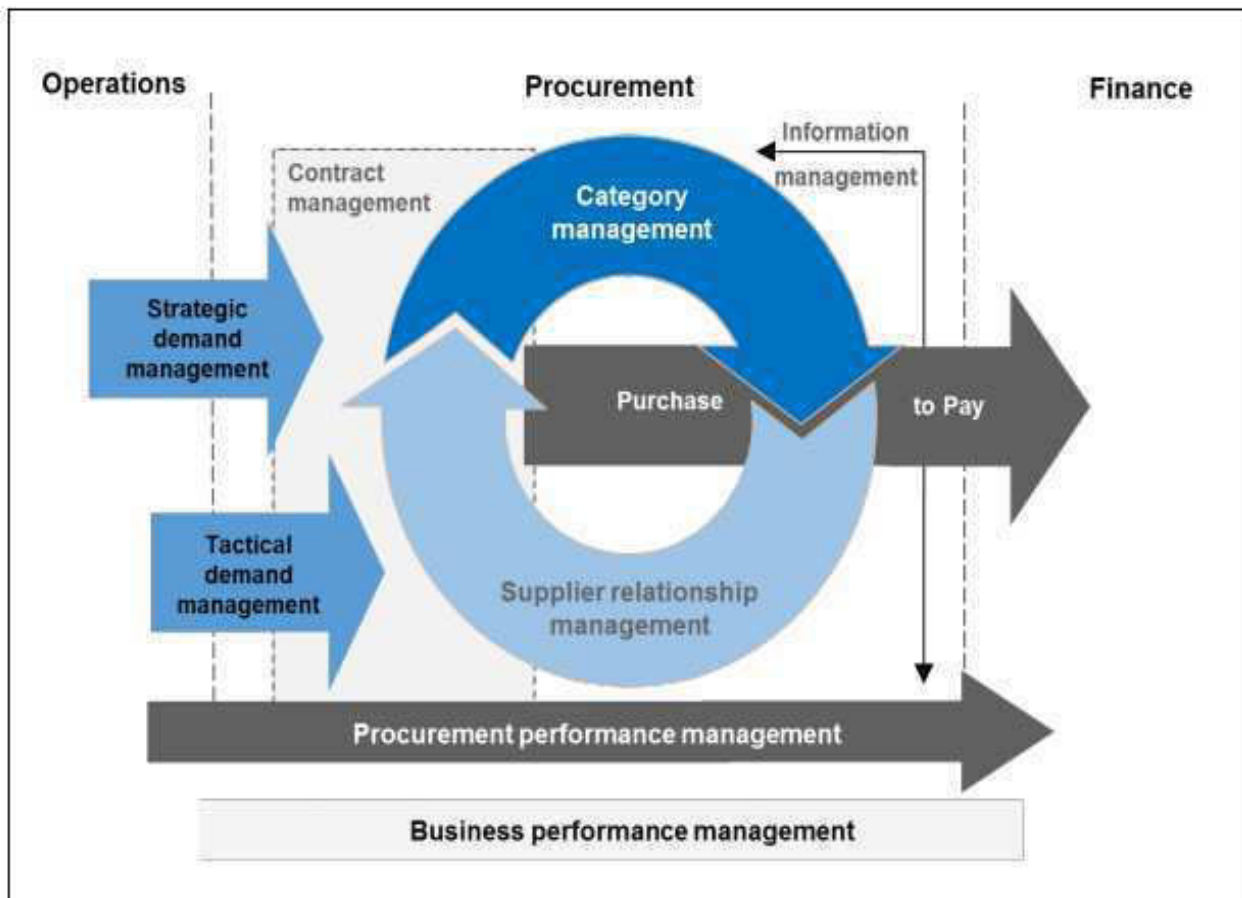
- Tracking and monitoring cost, time, quality and deliverables.
- Collaborating to improve performance and promote opportunities for ongoing innovation e.g. value engineering in appropriate contracts.
- Being clear on roles and responsibilities of both Borrower and supplier/contractor/consultant.
- Managing relationships with the supplier/contractor/consultant and key stakeholders.
- Managing payments in accordance with agreed terms.
- being proactive throughout the contract to anticipate problems and issues before they arise and
- Managing problems and issues as they arise, quickly, effectively, fairly, and in a transparent manner.

From the Borrower's perspective, effective Contract Management also:

- Ensures the supplier/contractor/consultant delivers upon its commitments.
- Obtains best Value for Money during the life of the contract.
- Manages supply risks for the duration of the contract.
- Continually challenges to drive best value in its contracts.
- Ensures effective contracts that continue to deliver the requirements.
- demonstrates best procurement practice in the management of contracts and
- Provides evidence to support any audits.

While Contract Management is typically positioned within a Procurement and/or Project Management/Delivery function in a Borrower's organization - it has significant upstream and downstream effects to an organization's broader operations and finance groups (Figure 1). In addition to managing individual contracts, many Borrower organizations have programs of multiple contracts that also need to be managed in a joined-up manner. Therefore, a robust, integrated Contract Management program can be used to increase contract standardization

and visibility across the entire Borrower organization – ensuring no contract expires unintentionally, and is managed appropriate to deliver VFM (securing supply and value for the Borrower, in a planned and coherent manner on an ongoing basis).



Effective Contract Management enables Borrowers to holistically manage contracts from planning, through to execution and beyond. The key value Contract Management provides is the ability to look at the end-to-end lifecycle of a given contract. Contract Management directly impacts a Borrowers delivery of services to its citizens, the cost, degree of compliance, and reporting of results. Contract Management primarily focuses on creating, executing and managing contracts across three (3) key implementation phases:

- Plan contract
- Execute contract; and
- Manage contract.

The “Plan” phase enables the successful execution of contracts. During the “Execute” phase, Borrowers engage the supplier/contractor/consultant following an agreed procurement process. Lastly, in the “Manage” phase, Borrowers monitor and manage supplier/contractor/consultant performance to ensure that contractual commitments made are actually delivered, and that benefits are optimized (monitoring, may also include Bank

supervisory activities). Figure II below outlines the contract management framework with the three (3) phases with defined capabilities and associated functions.

- **Engineering contracts and its formulation**

An engineering, procurement and construction (EPC) contract is the most common form of contract used to undertake construction works by the private sector on large-scale and complex infrastructure projects. Under an EPC Contract, a contractor is required to deliver a complete contract for a fixed price by a fixed date. The engineering and construction contractor will carry out the detailed engineering design of the project, procure all the equipment and materials necessary, and then construct to deliver a functioning facility or asset to their clients. Companies that deliver EPC Projects are commonly referred to as EPC Contractors.

- **Formulation**

- Commercial management of engineering projects including the role and responsibilities of corporate managers, market analysis, structuring of procurement options, development of contractual terms and conditions, and the pricing of work.
- Estimating and tendering engineering works via work breakdown structures, work method statements, risk identification and tendering principles. Contract administration and project control functions and techniques including time and money negotiations and cash flow management are also covered through the use of detailed case study material.
- The agency of contractor may, if economical or expedient, be utilized for the proper execution of works of construction, repairs or maintenance on lines under construction and on open lines. Materials which are in short supply or materials requiring test certificates for quality control like cement, steel etc.
- Supplies of Building Materials - Such as bricks, tiles, lime, cement, steel, ballast, bamboos, bellies, matting, door, windows, ballast, moored, stone chips, fire bricks, shingle, pitching stone etc. which are not usually stocked or purchased by the stores department. Contracts relating to these three classes will, for the purpose of this code, be termed as "Works Contracts" as distinguished from "Stores Contracts" which pertain to the supply of stores arranged by the stores Department.

- **The Indian Contract Act, 1872**

Gradually importance of the enactment of general law regulating the contracts and to define and amend certain parts of law relating to contracts common to all was felt and this gave birth to the Indian Contract Act, 1 September 1872. An agreement, which creates legal obligation, in order to be valid and binding must possess certain essentials. These essentials are the essential elements of a contract. The following are the essentials or characteristics or features of a valid contract.

- **Essential Elements of a Contract**

Essential Elements of a Contract as defined in Section 10 of the Indian Contract Act 1872

1. Agreement - Offer and Acceptance
  2. Legal purpose
  3. Lawful Consideration
  4. Capacity to contract
  5. Consent to contract
  6. Lawful object
  7. Certainty
  8. Possibility of Performance
  9. Not expressly declared void
  10. Legal formalities like Writing, Registration etc.
- **Offer and Acceptance**

There must be two parties to an agreement i.e. one party making the offer and the other party accepting it. The terms of the offer must be definite and the acceptance of the offer must be absolute and unconditional. In other words, offer and acceptance must be both lawful i.e. it must conform to the rules laid down in the Indian Contract Act.
  - **Consideration**

An agreement to be enforceable by law must be supported by consideration. Consideration means an advantage or benefit moving from one party to the other. In short, it means 'something in return'. An agreement is legally enforceable only when both the parties give something and get something in return. A promise to do something, getting nothing in return, is usually not enforceable by law.
  - **Capacity of Contract**

The parties to the agreement must be competent of entering into a valid contract. A person is said to be competent if he is  
(a) Age of majority (b) of sound mind and (c) not disqualified from contracting by law to which he is subject.
  - **Free Consent**

Any agreement must be based on free consent of the parties in order to become a valid contract. The consent of the parties is said to be free when they are of the same mind on all the material terms of the contract. The parties are said to be of the same mind when they agree about the subject-matter of the contract in the same sense and at the same time. Free consent does not exist when it is obtained by coercion, undue influence, fraud, mistake or misrepresentation.
  - **Lawful Object**

The object of the agreement must be lawful. It is unlawful if the object is forbidden by law, illegal, immoral or opposed to public policy. Any agreement with an unlawful object cannot be enforced by law.
  - **Legal Relationship**

The intention of the parties to the agreement must create legal relationship between them i.e. an agreement in the nature of a commercial bargain. In the absence of such intention, the agreement cannot be enforced by law. An agreement which is enforceable by law at the option of one or more of the parties - thereto, but not at the option of the other or others, is a voidable contract.

- **Types of contracts and clauses for Contracts**

The following forms of contract are primarily intended for application to works contracts

- Lump sum Contract
- Schedule Contract
- Piece work Contracts
- EPC Contracts

- **Lump sum contract**

It is a contract under which the contractor is engaged to carry out a work or effect supply as specified and within a given period for a fixed total sum; his receipt of this sum being dependent on his completing the work or supply to specification and time; irrespective of the actual quantities and kinds of work done or materials supplied in achieving his results (Para 1205-E).

In the case of such contracts a scale of rates or prices may be agreed upon by which enhancement or reduction from the lump sum may be regulated in the event of any departure from the work or supply as specified being made subsequently under the order of competent authority; or by which reductions may be made, at the discretion of competent authority for failure on the contractor's part to conform to specification. (1206-E)

- **Schedule Contract:**

The schedule contract is a contract under which the contractor is engaged to carry out a work or effect supply as specified within a given period, at fixed unit rates or prices for each of the various items comprising such work or supply, the sum he is to receive depending on the actual quantities and kinds of work done or materials supplied in completing the work or supply to specification and time. It is not repugnant to the above definition to show in such contracts the approximate amount of the contract, based on approximate quantities and the fixed unit rates (1207-E).

- **Piece Work Contract:** This means a contract under which only unit rates or prices for various kinds of work or materials are agreed upon, without reference either to the total quantity of work to be done or material supplied; within a given period. The zonal contract adopted on the Railways fall under this category (1208-E). Note: Agreeable to the above definition of a piece work contract:

(a) The Railway may indicate its intention as to the maximum value of the orders, it is likely to place, but the contractor cannot claim to be given an order for more than one unit of work or supply.

(b) After the contract is executed, specified orders for work or supply may be placed against it

(c) Rate of progress may not be specified; but if it is not satisfactory, the contract can be terminated

(d) New Works, additions and alterations to existing structures, special repair works and supply of building materials subject to the contract value of each such work not exceeding 2 lakh.

(f) Conveyance of materials e.g. bricks, lime, sand etc.

- **EPC Contract:** An engineering, procurement and construction (EPC) contract is the most common form of contract used to undertake construction works by the private sector on large-scale and complex infrastructure projects. Under an EPC Contract, a contractor is

required to deliver a complete contract for a fixed price by a fixed date. The engineering and construction contractor will carry out the detailed engineering design of the project, procure all the equipment and materials necessary, and then construct to deliver a functioning facility or asset to their clients. Companies that deliver EPC Projects are commonly referred to as EPC Contractors.

- **Preparation Of Tender Documents**

Tender documents are prepared and sent out to potential contractors to seek tenders (bids) at tender phase.

Typically, the tender documents will consist of all or some of the following documents:

- **Cover letter**

A formal letter inviting contractors to tender it will advise when and where their completed tender should be returned.

- **Invitation to tender**

This provides guidance on how the tender documents are to be completed.

- **Form of tender**

A covering document prepared by the client and signed by the tendering contractor to indicate that they understand the tender, accept the various terms and conditions of the contract, and other requirements of participating in the tender exercise.

- **Terms and conditions of contract**

This document sets out the legal framework and the obligations of both parties signed up to the contract. Tendering contractors must read this document in conjunction with the other tender documents.

- **Bill of quantities**

This document is used as the basis of submitting the tender where all prices for carrying out the work are given. The bill of quantities assists tendering contractors in producing an estimate of costs for their tender. It also provides a fair and accurate system for tendering. Each invited contractor bids against the bill of quantities, stating their price for each item of work. Their priced bill of quantities constitutes their offer. As the bill is made up of prescribed items of work, it is possible to compare both the prices directly between each tender - this lets you make a detailed assessment of which aspects of a tender offer good or poor best value. The prices on the bill of quantities can also assist with negotiations with the preferred tender at later stages in the tender exercise.

- **Design drawings** (general layout plan, construction drawings)

These are clear and concise detailed documents about the construction site, path construction and any other related feature/ structure works. They are the essential ingredients for informing contractors of exactly what is required to complete all the work.

- **Specifications**

This document sets out what needs completing to set standards, including policies, procedures or guidelines. It sets out the performance standards and the outcomes expected. It describes the materials and workmanship standards. They do not include cost, quantity, or drawn information, and so need to be read alongside the terms and conditions of the contract, bill of quantities, and construction drawings.

- **Quality requirements**

A questionnaire about how the tenderer intends to provide the contracting service, including supporting evidence demonstrating relevant experience. This information will help evaluate the quality of the tender.

- **Tender evaluation criteria**

A document advising how returned tender will be evaluated against each other and the contract awarded.

- **Tender return label**

A simple label giving the time and date that a tender must be returned.

- **Pre-construction information**

A document giving relevant information about the project that might influence the health and safety of the path of design and work.

Tendering contractors must follow the instructions and information given in each tender document provided, as failure to do so may prevent you as the client from considering the tender properly.

Producing a tender document could appear bureaucratic for what could be seen as a small path project. However, time spent preparing a tender document can save time and money when the work is carried out at construction phase. There is also extra financial security in having a legally binding agreement with a contractor (or principal contractor). The contractor gets the security of knowing that there will be no surprises on a site at their cost, which will make them more likely to price a tender competitively. In addition, you as the client get the security of knowing that the project will be completed on time and budget.

**1. Receiving of Tenders:** Tenders can be dropped in the tender box or received by registered post. The tenders received by post should be entered in the Tender register and the time of receipt should be recorded on the cover of the tender and deposited before the closing time in the tender box (Para 1247-E). In case of e-tendering, tenders can be received only electronically on IREPS portal.

**2. Opening of Tenders:** Tenders should be opened at the specified time, date and place by the officer nominated for the purpose. The presence of Accounts representative at the time of opening of tenders is required. The sale of tender papers should be stopped four hours before opening of tenders. In case of e-tendering, tender papers should be available immediately after publication of NIT till closing time of tender and tenders be opened at specified time and date on IREPS portal only.

- **Precautions to be observed while Opening the Tenders**

The officer, who opens the tenders and the Accounts representative witnessing the tender opening, should –

(i) Initial (with date) the cover containing the tender, front cover page of the tender and every page of the tender on which the rates or special tender conditions are quoted.

(ii) Initial (with date) all corrections in the schedule of quantities, schedule of materials, to be issued and specification and other essential parts of the contract document.

(iii) Mark and initial all over writing in red ink. The corrections, over writing and omissions should be serially numbered and the total number of such corrections etc. should be clearly mentioned at the end of each page of the schedule attached to the tender paper and attested with date.

(iv) Clearly indicate on each page of schedule attached to the tender, any ambiguities in rates quoted by the tenderers in words or figures.

(v) Should specifically record whether samples have been supplied or not along with tender (Para 1249-E). The names of the tenderers and rates quoted by each tenderer should be read out, wherever practicable, to the tenderers or the representatives, who may be present at the time of opening of the tenders. While opening the tenders, no opportunity should be given to any tenderer to repudiate, amend or explain the 19 rates and or any condition quoted in the tender no tender should be entertained from any party in his private capacity who is directly or indirectly connected with Govt. service or for which the specified earnest money has not been received (Para 1250-E). In case of e-tendering, the offer will be opened on IREPS portal by the competent authority using their Digital Signature certificates.

**3. Tender Register:** Particulars of tenders should be noted in a register which should include the following information:

(a) Name of work. (b) Tender notice no. (c) Nature of Tender (d) Date of opening of tenders (e) Earnest money required (f) Serial No. (g) Name of tenderer (h) Date of application (i) Cash received (j) Cash remitted (money receipt no. & CR note no. with date) (k) Tender forms no. (l) Signature of issuing officer (m) Signature of tenderer (n) Remarks

The tender register should be signed by the representative of the Executive and Accounts who open the tenders. The original tenders should always be kept in the custody of a Gazetted Officer till Tabulation Chart is prepared and got signed by the Tender Opening Committee. In case of e-tendering, the Chart should be prepared by portal and signed by Tender Opening Committee.

**4. Comparative Statement:** After the tenders are opened, the tender documents should be in the custody of a Gazetted Officer till the tender is finalized. A Comparative Statement of rates, amounts, quantities and other important tender conditions should be prepared by a responsible staff for which necessary office order fixing responsibility of the staff concerned should be issued prior to giving the work to him. Each and every page of the comparative statement must be signed by the staff preparing it and checked and signed by the section in-charge. The Executive Officer and the respective Accounts officer should carry out 100% check of the comparative statement and sign each and every page thereof and not the last page only.

The comparative statement should also show the following information:

(a) Position regarding deposit of earnest money.

(b) Late & delayed tenders should be entered prominently in red ink It must be ensured that all tenders received are tabulated in the comparative statement and put up to the Tender Committee along with briefing note duly vetted by finance for their consideration without any screening by any other official.

**5. Briefing Notes:** A briefing note shall be prepared by the In-charge of the section dealing with tenders, signed by Executive Officer. The briefing note will be vetted by Associate Finance.

The basic information in the Briefing note should be on the following format:



(i) Tender notice no. (ii) Description of works (iii) Approx. cost as per Tender Notice (iv) Number of approved contractors to whom tender notice was sent (in case of Limited Tender only) (v) Number of tenders sold (vi) Number of tenders received and opened (vii) Date of opening of tenders (viii) Original tenders placed at (ix) Comparative Statement (Tender Chart) placed at (x) Number of tenders accompanied with requisite amount of earnest money.

The briefing note shall contain the following information in detail:

- The name of tenderers, their tendered rates and value of work
- Particulars of earnest money deposits
- Position of approved plans and sanctioned estimate whether N.S. Rates included in the tender schedule 21.
- Latest accepted rates for similar nature of work in the same or contiguous area, prevailing Zonal rates and market rates in the area
- In case of tenders for residential buildings, the comparison of rates with ceiling cost
- Comments on tenderers special conditions/variations from standard specification and special conditions to the tenders particularly in regard to their financial implications on the rates and value of the work
- Comments, if any, on working conditions prevailing in the area
- Any special circumstances which may affect the rates in the area
- Comparison of rates offered with the estimated cost of the work/with last accepted rates
- Comments on financial sanding, technical competence and capacity of tenderers.

The briefing notes shall be prepared under the direction of the concerned Executive Officer. He will ensure that all aspects enumerated above are included in the briefing note and sign each page of the briefing notes. The financial evaluation will be done by the Chief Draftsman assigned for the job and shall be checked by Chief Draftsman. They will be responsible to the correctness of the comparative statement and the briefing note and sign each page of the same. The section in-charge dealing with the tenders shall ensure that all special conditions have been accounted for and that comparison has been made with prevailing rates of the area and sign on each page of the briefing note. of finance branch will be responsible for the verification of the financial data etc. in the briefing notes and put the same to the Accounts Officer in finance wing along with the relevant records for his vetting and signature on each page. Only the signed and vetted copies of briefing note shall be circulated amongst the T.C. Members well in advance preferably along with T.C. Meeting notice.

**6. Delayed/Late Tenders:** Tenders received before the time of opening, but after due date and time of receipt of tenders are delayed tenders. Tenders received after the specified time of opening of the tenders are late tenders. Late/Delayed/Post tender offers are to be dealt as per instruction contained in Board's letter no.

- **Contract awarding:** - It is the method used during a procurement in order to evaluate the proposals (tender offers) taking part and award the relevant contract. Usually at this stage the

eligibility of the proposals have been concluded. So it remains to choose the most preferable among the proposed. There are several different methods for this, which are obviously related to the proposition method asked by the procurement management.

## Methods

- **Least price**

This method is the simplest and oldest of all. Under this the procurement contract is awarded to the best price. Some relevant methods are these of examining the overall or in parts and in total discount in a given price list or on a given budget.

- **Most economically advantageous**

This is applicable to proposals of different quality within the limits set. Under this the proposals are graded according to their price for value and the contract is awarded to the one with the best grade. Similar to this is the grading of the proposals according to time, making the proposals needing less time of implementation seems more valuable.

- **Mean value**

The contract is awarded to a bid closer to the mean value of the proposals. This may apply to procurements where numerous proposals are expected and there is a need for a market-representing value

- **Exclusion of the extremes**

Under this method the proposals that are deviating the most from the mass of the proposals are excluded and then the procedure continues with one of the above methods.