



UNIT-4

Contracting and Types of Contracts

Learning Outcomes

By the end of this unit the learner will be able to:

- ✓ Discuss essential elements of a contract
- ✓ Explain the various types of contracts

Unit 4

Contracting and Types of Contracts

Definition of a Contract

Any agreement backed by law is known as a contract. Only people who signed the contract are bound by its terms and conditions, as well as the benefits and losses resulting from the agreement. The contract may or may not make provision for third parties. Third parties should not benefit or suffer from the contract unless they are included. The laws which govern contracts are usually based on local and state laws or they may be based on the location of the parties signing the contract.

Disputes may be settled by the engineer-in-charge or the courts. In the event of a dispute, the engineer's decision shall be accepted as final, provided both parties have already agreed to this course of action. Alternatively, aggrieved parties may go to court if they disagree with the engineer's ruling.

Essential Elements of a Contract

The law only recognises contracts containing certain essential elements, otherwise the contract shall be declared void. Elements of a valid contract are as follows:

1. Agreement

Contracts require both parties to agree to the terms and conditions. They must be written in unambiguous or non-ambivalent manner. Contracts should be simple and crystal clear in meaning to all signatories. An agreement is finalised when parties append their signatures to the contract. There is provision to nullify any contract if it turns out that there was no actual agreement between the parties.

2. Lawful Subject Matter

No contract signed must contravene the rule of law, state laws and public policies. Any contract which contravenes any of these conditions is declared as illegal subject matter. Examples of illegal contracts include contracts involving fraud, arms, collusion, gambling and speculation. Care must be taken to ensure that the subject matter of a contract is not against public policies. Subject matter must not lead to monopoly nor be against the interest and progress of the state or the public. Contracts are binding on people who signed them ignorantly without understanding the implication of the content of the contracts.

3. Valid Consideration

Consideration means undertaking reciprocating actions by parties who have signed a contract. Considerations have to be real, valid and valuable for the contract to be legal. The law protects all considerations and does not judge whether the contract is fair or not. The law will however, arbitrate in situations involving liquidated damages or debts. Acts of God, unilateral promises, and impossible promises are not enforceable by the law because they are not viewed as real

consideration. All considerations need to be stated unambiguously in the contract and not implied in order to avoid misinterpretation.

4. Competent Parties

Only persons who are sane, not minors or drunken can legally sign a binding contract. A drunken person 'who knows what he is doing' may sign a valid contract provided it has been 'made in good faith'. The law governs competency issues at all levels of the contract. It restricts the type of contract a corporation may enter into and the extent to which the contracting parties may exercise their technical competency in executing a project.

When a contract with a private corporation fails because it was the firm was incompetent, the corporation may be able to obtain compensation for services rendered. However, cancellation of contract with a public corporation does not warrant any compensation to be paid as a result of incompetence.

Provision of the Law with Regards to Form

The law requires certain types of contracts to be in writing. These contracts include:

- i. Contracts relating to the sale or lease of land and expressing interest in a land
- ii. Promise to pay a claim
- iii. Making payment for debt or paying for someone who has defaulted
- iv. Agreement which are not expected to be performed within a year of signing it
- v. Contract for the sale of equipments

Individuals, partnerships, or corporations may sign contracts with the contracting party. Whichever entity may qualify to sign a contract must ensure that 'the names or legal titles' of the signatories and their business addresses are included in the contract. Also, stamp seals or embossments may be incorporated into the contract.

The contract must also highlight the scope of service, the expected date of completion, the level of performance expected and other pertinent aspects of the project which are of the highest priority. Signatures must be appended to these milestone or highlights by authorized persons representing all parties signing the contract.

Types of Contract

Competitive Bid Contracts

This type of contract involves awarding contract to the lowest bidding party who is qualified to undertake the project. The winner is expected to have significant working capital. The bid winner should also be free from all litigations and he should not have ever defaulted and must be willing to provide the needed guarantees and sureties for the project. Selection of the winning bid is done either by the owner or the project engineer.

Lump sum Contracts

This contract involves the provision of a fixed amount for the whole duration of the project. It can be paid in instalment or tied to completion of each phase of the project. This contract assumes advance knowledge of the scope of work and all associated risks. It also assumes all bill of quantities submitted are identical. This type of contract is ideal for standardize construction projects where the quantities of resources required as well as the detailed specifications and all associated cost are specified in the tenders. The main advantage of this type of contract is that no extra personnel would be required for inspecting work and for determining the monthly rate of material consumption.

Unit Price Contracts

This type of contract requires the price per unit item and an estimate of total quantities of items to be determined in the tender bid. The winning tender is the one which offers the lowest price when the overall cost of items has been computed. Payment is made when agreed schedules of work has been completely carried out.

The scope of work, the nature of the work and detail design and drawings and estimates should be provided to assist the contractor to determine how much work needs to be done and potential problems to anticipate.

Combined Lump sum and Unit Price Contracts

Useful features of the lump sum and unit price contract may be combined under certain conditions to arrive at a combined contract. When it is difficult to determine the total quantity of item or work to be done, then unit price method may be applied. When certain sections of the work can be readily estimated and the exact quantities can be calculated, then a lump sum payment can be issued. This type of contract is suitable for constructing buildings.

Negotiated Contracts

A negotiated contract is awarded based on the contractor meeting certain criteria such as having the right equipment or facility, the right expertise and previous experience. Negotiated contract is prevalent in private sector and usually requires the contractor investing his own capital in the project. The owner pays back the cost of the project plus compensation for the use of contractor's facilities and expertise to get the job done.

Negotiated contracts take the form of cost-plus contracts with the owner controlling expenditure through approval of purchase orders, salaries of workers and contractor's expenses. Overhead costs may form part of the level of compensation or may be paid separately. The lump sum and unit price contracts may also be negotiated. Cost accounting and suitable methodology should be used to determine the actual cost of work.

Management Contracts

This contract type is not the conventional type of contract in which a contractor makes profit from subcontractors working for him. Management contract does not allow such manner of profit-making ventures. Instead, it makes use of contractors with high technical ability, integrity and administrative skills to undertake managerial functions. The contract may specify that the contractor undertake only managerial function of only supervising all aspects of the project including labour and purchasing materials or use his own facilities to execute part of the work.

Architect-Engineer Management Contract

It involves hiring a single firm of engineers or architects to execute all aspect of the project from design to planning and to management. This type of contract was mainly used in the USA during World War II for industrial projects. It is not recommended for undertaking large scale projects.

Incentive Type Contract for Work outside the Country

This type of contract is awarded to contractors willing to undertake projects overseas. The conditions of work may be fraught with uncertainties and danger and generally unfavourable in terms of resources required. This contract basically consists of cost-plus base fee plus incentive for executing the project at low cost. It is not recommended for local or domestic projects due to the complicated nature of the contract.

Purchase Orders as Contracts

A buyer and a vendor may enter into an agreement by signing a purchase order with terms and conditions as well as other details specifications agreed to. The buyer could be either the owner or the contractor. The vendor is the supplier of the materials. In order to enter into a formal purchase order contract or agreement, the buyer or the contractor has to prepare a purchase form with all terms and conditions included, filled by the buyer and signed by both parties. Terms, conditions and clauses may include guarantees, taxes, credit, discount, mode of delivery, terms of payment and the like. The buyer may use the purchase order as a basis to resolve any future dispute relating to the items ordered.

Subcontracts

A subcontract is an agreement between the prime or main contractor (who has been awarded the main contract by the owner) and subcontractors who are employed to undertake specialised duties such electrical works, mechanical works, HVAC, lift installation, etc. The subcontractor is also bound by the terms and conditions of the main or prime contract signed between the owner and the main contractor. The main contractor's function is limited to coordinating the activities of all subcontracted personnel to ensure they perform their assigned duties to the specified standard. Other duties expected of the main contractor include masonry, carpentry, concreting, and paint jobs, etc.

The agreement between the main contractor and the subcontractor can be a written acceptance letter by the subcontractor or an oral agreement. Important projects require a formal agreement containing details of the scope of work, duration, payment terms, rights and responsibilities and other pertinent specification for the job. The owner holds the contractor responsible for all work done and not the subcontractor. However, the owner may request a 'surety bond' from the main contractor to guarantee prompt payment for all services rendered by subcontractors to prevent aggrieved parties from taking legal action against the owner of the project. The main contractor must also submit to the owner, releases from all claims for the work done by all subcontractors.

Contracts for subcontractors are awarded on a competitive basis in order to minimise costs with approval of the Site Engineer. Three bids from the subcontractors may be accepted for each category of work. The engineer also protects the interest of the owner by ensuring that the main contractor enters into the right type of contract with the subcontractors. The lump sum or unit price type of contract is acceptable but the cost-plus type is not recommended for subcontractors.

The main contract dictates how much work will be performed by the subcontractors. If the contract is a cost-plus fixed type, the main contractor may carry up to 80% of the work with the remainder going to the subcontractor. On certain occasions, the entire project may be undertaken by subcontractor with the main contractor acting as the general manager.

Awarding Contracts

Awarding contracts to subcontractors is usually the prerogative of the main contractor because he is ultimately responsible quality of their work. Notwithstanding this, the owner may also want to be part of the process to safeguard his interest by appointing an engineer to be part of the selection of subcontractors. The subcontractors may enjoy a level of protection from the owner provided the owner requests for a list of subcontractors bids as part of the main contractor's bid. This way, there will be no bargaining between the subcontractor and the main contractor who may want to negotiate the price downward in order to increase his profit. Only bids satisfying selection criteria based on bill of quantities, design and specifications should be considered. All contracts awarded should specify the working conditions and responsibilities of the main contractor and subcontractors as well as how resources should be share between them.

Selection of Type of Contract

The onerous is on the owner to select the most suitable type of contract with the help of the project engineer. The choice between a negotiated and competitive bid contracts should be based the one which gives a comparative advantage. Competitive bid contracts are suitable when the owner has time at hand and detail plans are available to plan const and the scope of work. Here, the owner has more control on how the project is executed by undertaking regular quality control inspections. Lump sum or unit price contracts may be chosen depending on the type of construction. Negotiated contracts are suitable for projects requiring fast completion when only partial design and specification details are available to start the project. The cost-plus-fixed-fee contract may suffice on such occasions. The various

types of contracts should be analysed carefully depending on the nature of the project and the reputation of the contractor to determine the best option. Negotiated contracts could also take the form of lump sum or unit price contracts provided complete plans and specifications are available but the best choice is a competitive bid contract.

Further Reading:

- ✓ *J. R. Murdoch, Will Hughes, (2000), Construction Contracts: Law and Management*
- ✓ *Justin Sweet, Marc Schneier, (2013), Legal Aspects of Architecture, Engineering and the Construction Process*
- ✓ *M. P. O'Reilly, (2009), Civil Engineering Construction Contracts*

