

# Project Procurement and Supply Chain

Prepared by Dr. Tarek Mohamed

PMG 433

Lecture 9



The background features five vertical panels of varying heights and widths. The first panel on the left is dark blue. The second panel is dark brown. The third panel is dark brown and contains a white icon of a graduation cap. The fourth panel is dark brown and contains a white icon of a play button. The fifth panel is dark brown and contains a white icon of a magnifying glass. The sixth panel is dark brown and contains a white icon of a target. The seventh panel is dark brown and contains a white icon of a book. The eighth panel is dark brown and contains a white icon of a person at a desk.

# Contract Management

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# Course Agenda

Chapter

- 
- 1. Understand the meaning of contract management.**
  - 2. Describe the types of contracts.**
  - 3. Explaining the contracts parties.**
  - 4. Describe the contract terms and conditions.**
  - 5. Discuss the different remedies for breach of contract.**

## Contract management

- **Contract management** has been defined as “ the process which ensures that all parties to a contract fully understand their respective obligations enabling these to be fulfilled as efficiently and effectively as possible to provide even better value for money”.
- This process commences with the identification of the purchaser’s needs and concludes with the completion of the contract.
- **Further, the process has two dominant characteristics:**
  - **Risk identification, apportionment, and management.** Related to contract performance
  - **Relationship management.** Between the purchaser and supplier

# Types of Contracts

A prudent project manager and contract management team, therefore, will have a thorough understanding of the following:

- ☐ **Procurement process and post-tender (bid) negotiation**
- ☐ **Assumptions made by the purchaser and the supplier**
- ☐ **Purchaser's expectations of the service relationship**
- ☐ **Contract terms and conditions**

## ❑ Contract terms and conditions;

### For example:

- Purchaser's duties and responsibilities under the contract
- Supplier's obligations under the contract
- Main cost determinants, how they relate to the outputs and quality standards, and how they will be measured
- Certification and payment mechanism
- Purchaser's and supplier's rights if things go wrong
- Legal implications of the contract for which they are responsible

## ➤ Goods and services necessary

- For the completion of projects are procured through the use of contracts with suppliers.
- Likewise, main suppliers use contracts to procure from subcontractors; while contracts in their own right, they are generally referred to as subcontracts (denoting a relationship to the main contract).

# Contracts

- **A contract** is an agreement between two parties under which one party promises to do something for the other in return for a consideration, usually a payment.
- This places obligations on both parties to fulfil their part of the agreement.
- It is also the foundation for the relationship between the parties.
- Elements of a valid contract vary depending on country of origin

# Contract Management

- **The parties to a contract are as follows:**
- **The purchaser.** The party that acquires or obtains goods or services by payment or at some cost. Alternatively referred to as the buyer, client, customer, employer, owner, proposer, sponsor, user, and so on.
- **The supplier.** The provider of goods and services. Also referred to as the contractor, main supplier, main contractor, prime contractor, prime supplier, seller, vendor, and so on

# Contract Management

- Deciding whom to ask to do the work, sending appropriate documentation to potential sellers, and obtaining proposals or bids
- A bidders' conference can help clarify the buyer's expectations
- Although not a party to the contract, most contracts make reference to the following:
  - **A project manager.** The person who leads the purchaser's contract management team. Alternatively, the terms "architect," "contract manager," or "engineer" may be used.
  - **The subcontractor.** A supplier to the main supplier, main contractor, prime contractor, prime supplier, and so on.

# Contract Management

- While contracts can take the form of a single document, generally, commercial contracts comprise several documents. **For example:**

## ➤ **The contract agreement.**

- Itemizes the documents comprising the contract.
- It includes the identities of the parties and defines the scope of work, the contract price, and the schedule for its execution.

## ➤ **General specification and scope of work.**

- Describe the scope of work to be undertaken, the technical standards required, and the administrative procedures to control the implementation of the project.

# Contract Management

- **General conditions of contract.** Normally a recognized standard form of contract. This details the obligations to produce and to pay, clarifies the offer and acceptance, allocates risks, describes the consequences of failure to pay or produce, and includes relevant issues, for example, insurances, bonds, safety, industrial relations, defects, and disputes, and so on.
- **Special conditions of contract.** These cover additions and amendments to the general conditions as required by the purchaser and specific circumstances of the project.
- **Administrative and coordination procedures.** Frequently the procedural aspects of a contract are covered separately as an appendix to the general conditions.

## Letters of Intent

- **Occasionally**, letters of intent are used as an interim arrangement to permit a successful bidder to start work in advance of signing a contract and in the knowledge that they will ultimately be awarded the contract. To be operative, a letter of intent must have the properties of a contract and refer to those elements of the bid where agreement has been reached.
- **As a minimum**, a valid letter of intent should always state that the purchaser
- Intends to place a contract with the supplier;
- Wishes the supplier to begin work in advance of the contract; and
- Authorizes the supplier to begin work in advance of the contract.

## Subcontracts

- **In parallel** to the contract between the purchaser and the supplier (the main contract), the supplier employs subcontractors and suppliers of materials, plant, equipment and services, and so on.
- **The supplier** is generally held responsible for any subcontracted work, and the purchaser, within the main contract, retains the right to vet subcontractors and limit the extent to which the work is subcontracted.
- **The supplier** may be free to choose the terms of subcontracts, or alternatively the terms may be required to correspond, “back-to-back,” with those of the main contract.

- Purchasers may also reserve the right to nominate subcontractors, requiring the supplier to enter into a subcontract with a subcontractor chosen by the purchaser or the project manager, usually to carry out specialist work.
- Contracts, therefore, require specific clauses to manage specific risks imposed by nomination, for example, in relation to the default of the nominated subcontractor, and to ensure that the supplier pays the nominated subcontractor.

# Contract Terms

- The terms of a contract are all the rights and obligations agreed between the parties, together with any terms implied by law.
- **Express and Implied Terms, Incorporation by Reference**
- **Express terms.** Those terms that are stated (written) within a contract
- **Implied terms.** For example, within English law, those terms that form part of a contract but are not expressed.

## **Implied terms include the following:**

- **Conformity with statutes**
- **Supplier's responsibility for their subcontractors**

## Contract Terms

- **Fitness for purpose:** provided the purpose has been communicated to the supplier and has not been overruled by an imposed specification.
- **Furtherance of purpose,** where both parties endeavor to perform the contract as best as they can.
- **Duty to utilize competence and care.**
- **Supplier's liability to execute the work at a reasonable pace.**

# Conditions and Warranties

- The terms of a contract under English law can comprise conditions and warranties.
- A condition is a key term within the contract: a promise of considerable magnitude.
- Failure to fulfil the promise entitles the injured party to terminate the contract and to claim damages for failure to comply.
- A warranty is a less serious term within the contract.
- Failure to comply with such a term entitles the injured party to claim damages but not to terminate the contract.

# Contract Strategy and Type

- The provisions of a contract should do the following:
- **Define the responsibilities of the parties.** For example, define the project's objectives and priorities; project finance, innovation, development, design, quality, standards, procurement, scheduling, implementation, installation; project management, safety, inspection, testing, commissioning, and managing operating decisions.

# Contract Strategy and Type

## ➤ **Allocate risk.**

- **For example**, financial investment in the project, project definition, design, performance specification, subcontractor selection, subcontractors' defaults, site productivity, delays, mistakes, and insurances.

## ➤ **Determine effective payment terms.**

- **For example**, for development, design, demolition, construction, fabrication, implementation, management, and other services

# Contract Strategy and Type

- Contracts are usually classified in terms of strategy (procurement methodology or organizational choice)—for example, traditional, design and build, turnkey, and management contracts—or by type (allocation of risk and payment terms)—for example, lump-sum, remeasurement, and target cost contracts. Contract strategy and type should be planned concurrently.

- The following are examples of contracts classified in terms of strategy.

## □ **Design Combined with Production**

➤ **Design and build contracts.** FIDIC Conditions of Contract for Plant and Design-Build. Standard Form of Building Contract with Contractor's Design.

- Form of Design-Build Agreement and General Conditions Between Owner and Design- Builder (Where the Basis of Payment is a Lump Sum Based on an Owner's Program Including Schematic Design Documents).

➤ **Turnkey contracts.** FIDIC Conditions of Contract for EPC (Engineering, Procurement and Construction)/Turnkey Projects

## ❑ **Design Separate from Production.**

Two alternative organizational structures exist where design is separate from production:

### ➤ **Sequential contracts**

- **Conventional or traditional contracts.**

### ➤ **Parallel contracts**

- **Management contracting.**

- **Construction management.**

# Types of Contracts

- Different types of contracts can be used in different situations
  - **Fixed price or lump sum** contracts: involve a fixed total price for a well-defined product or service
  - **Cost reimbursable** contracts: involve payment to the seller for direct and indirect costs
  - **Time and material** contracts: hybrid of both fixed price and cost reimbursable contracts, often used by consultants
  - **Unit price** contracts: require the buyer to pay the seller a predetermined amount per unit of service
- A single contract can actually include all four of these categories, if it makes sense for that particular procurement

## Point of Total Assumption

- The **Point of Total Assumption (PTA)** is the cost at which the contractor assumes total responsibility for each additional dollar of contract cost
- Contractors do not want to reach the point of total assumption because it hurts them financially, so they have an incentive to prevent cost overruns
- The PTA is calculated with the following formula:  
**$$PTA = (\text{ceiling price} - \text{target price}) / \text{government share} + \text{target cost}$$**

## Cost Reimbursable Contracts

- **Cost plus incentive fee (CPIF):** the buyer pays the supplier for allowable performance costs plus a predetermined fee and an incentive bonus
- **Cost plus fixed fee (CPFF):** the buyer pays the supplier for allowable performance costs plus a fixed fee payment usually based on a percentage of estimated costs
- **Cost plus percentage of costs (CPPC):** the buyer pays the supplier for allowable performance costs plus a predetermined percentage based on total costs

# Roles, Relationships, and Responsibilities

## ■ Roles

- A contract defines the roles of the two parties: the purchaser and the supplier. Additionally, the contract apportions roles: for example, project management, design execution and integrity, production supervision, and dispute determination.
- **The Role of the Parties to the Contract.** Generally, the purchaser will be involved in the following:
  - Defining exactly what services are to be provided
  - Setting service levels
  - Providing relevant and timely information to the project manager and supplier
  - Informing the project manager of under-performance

# Roles, Relationships, and Responsibilities

- The degree of empowerment of a supplier is dependent upon the procurement approach adopted and the terms of the contract.  
**Generally, the supplier will be responsible for the following:**
- Deciding how to provide the service
- Delivering the service to specification
- Deciding priorities to achieve the service
- Meeting purchaser requirements within the contract terms and budget
- Monitoring the service delivery performance
- Development and implementation of agreed procedures
- Providing information as required by the contract

- **Relationships**
- **Rules and Procedures.** The establishment, from the outset, of transparent procedures will enhance contract management while reducing the disruption that problems may generate.
- While some will relate to the routine contract management activities, others will operate when needed.
- Effective implementation of a project will be reliant upon the relationships between the parties, not necessarily on the contract or role definition. Further, it is crucial that these relationships be established at the outset, continually reviewed, and actively managed. Relationships need to be balanced between, on the one hand, flexibility and openness, and on the other, professionalism and businesslike behavior.

## Roles, Relationships, and Responsibilities

- Ideally, the allocation of risk between the parties should be based upon the following:
- **Managerial principals.** A satisfactory completion of a project is more likely to be achieved through effective planning and supervision rather than requiring guarantees and imposing rights to damages for default.
- **Commercial principles:** A risk should be borne by the party best able, economically, to control, manage, or insure against its consequences.
- **Legal principles:** Unfair contract terms, for example, penalties may not be enforceable

# Time, Payment, and Change Provisions

## ➤ Time Issues

- **Commencement.** Contracts include a date for commencement of the project, usually determined by the purchaser or by negotiation between the parties. The commencement date should be set so that it enables the supplier to mobilize resources. Further, contracts should determine what happens in the event of the purchaser failing to provide access to a site or make available plant, service, or any other resources required under the contract, as such failure could frustrate the contract.
- **Schedule.** Generally, contracts include statements regarding the progress of the project

# Time, Payment, and Change Provisions

- **Suspension.** Contracts can include provisions that enable the purchaser to suspend the project.
- **Completion.** Usually, purchasers specify a completion date or alternatively the number of calendar or working days authorized for executing the work. Failure to complete a project within this stipulated time limit can be grounds for a significant dispute between the parties.

# Time, Payment, and Change Provisions

## ➤ Payment Provisions

- **Fixed-Price Terms of Payment.**
- **Advance Payments**
- **Milestone and Planned Progress Payments**
- **Payment Based upon Agreed Rates**

# Time, Payment, and Change Provisions

- **Contract Price Adjustment/Price Fluctuations/Variation of Price.**
- Contracts can include terms for reimbursing suppliers for escalation of their costs as a result of inflation.
- **for example**, a clause that allows a contractor to raise prices in line with a pre-agreed index.
- Such terms have the potential advantage that suppliers have to attempt to forecast inflation rates, which may result in the submission of higher prices; however, a disadvantage for purchasers is that they generate uncertainty over the final project cost.

# Remedies for Breach of Contract

- Contracts need to incorporate provisions to manage the consequences of default by either party.

- **Performance Indicators (PI)**

The contract should contain appropriate and achievable performance indicators. While it is essential to include the general principles of performance indicators within the bid documentation, the actual indicators are often determined during the contract negotiation stage with the preferred supplier—that is, before the contract price is agreed and the contract signed.

## ■ Liquidated Damages

- Where it is possible to derive a preestimate of the loss to be suffered under certain circumstances, it is generally prudent to incorporate liquidated damages into the contract. Liquidated damages, however, should be a bona fide preestimate of the loss in the given situation.

## ■ Termination

- Under certain circumstances a contract may need to be terminated. As this action results in a lose-lose situation, it is generally only used as a last resort, due, usually, to the unacceptable performance of the supplier. However, other exceptional circumstances include a change in government machinery, a change of policy, or a change in user needs.

# Dispute Resolution

- Problems can arise when implementing contracts regardless of the relationship between the parties and the type of project. In addition to those mentioned earlier, problems can arise as a result of one or both of the parties having conflicting objectives; failing to anticipate significant risks or variations; failing to consult; making erroneous assumptions; and, at a basic level, making a mistake.
- A major role of the project manager and, therefore, contract management is predicting potential difficulties in implementing the project to prevent problems turning into disputes.

## Conclusions

- **A contract**, should be designed to be the basis for successful project management: being right in principle (contract strategy) and right in detail (contract terms).
- **To summarize**, a good contract stipulates what, where, and when something is to be provided; identifies the supplier and purchaser; defines various roles, relationships, and responsibilities; sets standards; deals with issues of time, payment, and change; provides remedies for breach of contract; covers the issues of bonds, guarantees, and insurances; and contains mechanisms for the submission of claims and the resolution of disputes. Further, effective contracts require flexibility, clarity, and simplicity, and should stimulate good management.

- **Planning the Contract**

- Select suppliers that will best serve the interests of the project.
- Understand how a contract is formed and how it can be discharged.
- Choose the terms of a contract logically, taking into account the nature of the work, its certainty, its urgency, and the competence, objectives, and motivation of all parties.
- Consider how the contract will impact on other contracts and projects and plan the coordination of the work carried out under the contract in relation to existing facilities and systems.
- Plan, before starting, how the contract will terminate.

## Best Practices

- Envisage what can go wrong, utilize risk management, and allocate risks to best motivate their control.
- Define the obligations and rights of each party.
- Specify only what can be tested.
- Agree criteria for the assessment of satisfactory performance.
- Determine and incorporate effective payment terms.
- Ultimately, say what you mean and be clear about what you want.
- Control the contract through the appointment of a single manager, who has the authority to decide how to avoid problems and has experience of the potential conflicts of interest that can arise.
- Determine what power the suppliers' manager really has over resources.

- Scrutinize the contract and examine the obligations and rights of all parties.
- Recognize that, in the course of most contracts, objectives and priorities vary.
- Control variations and derive appropriate advantage from potential variations.
- Keep records and notes of reasons for decisions. Use routine headings.
- Distinguish between legal rights and project/commercial interests.
- Finally, realize that a contract should be a means to an end.

## Summary of Learning Objectives

- 
- 1. Understand the meaning of contract management.**
  - 2. Describe the types of contracts.**
  - 3. Explaining the contracts parties.**
  - 4. Describe the contract terms and conditions.**
  - 5. Discuss the different remedies for breach of contract.**

## Essential Reference

- Morris, P. W., & Pinto, J. K. (Eds.). (2007). The Wiley guide to project technology, supply chain, and procurement management (Vol. 4). John Wiley & Sons.
- Schwalbe, K. (2015). Information technology project management. Cengage Learning.
- Baily, P., Farmer, D., Crocker, B., Jessop, D., & Jones, D. (2008). *Procurement principles and management*. Pearson Education.
- Supply Chain Council



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# Thank You

