3.1 Introduction

This Unit briefly introduces the main features of the traditional procurement route as a widely used route that provides a good basis for examining the legal relationship of Employer and Contractor that underpins the majority of construction projects in the UK.

The learning outcomes of this Unit are:

- to understand the structure of the traditional procurement route;
- to appreciate the influence of the sequential nature of the traditional procurement route on its benefits and disadvantages; and
- to understand how different payment methods can be added to the traditional procurement route.

3.2 The ‘Traditional’ procurement route

In traditional procurement, consultants are appointed for design and cost control and a main contractor is selected later to carry out the work. A typical project organisation for this method is shown below, illustrating main contractual links and communication routes between the parties involved.

Activity 3.1

What do you consider to be the key issue in achieving successful project procurement by the traditional path?

*Time management: 10 minutes max.*

The Traditional procurement route is characterised by the client’s employment of an Architect as its principal agent. The client appoints a team of consultants (comprising an Architect, Engineer, Surveyor, and so on) to prepare the contract documents (Figure 3.1). These include a design, consisting of specifications and drawings, and tender documentation to allow the selection of a Contractor.
Employer

Contractor

(Listed)
Subcontractors

Consultants

Suppliers

Architect

Subcontractors

Administrative responsibility on behalf of client

Contractual relationship

Advantages
- Competitive fairness
- Relatively low tender preparation costs
- Satisfactory public accountability
- Procedures well known
- Changes reasonably easily arranged and valued

Disadvantages
- Slow to start on site (no concurrent working)
- Open to abuse when design incomplete (resulting in less certainty)
- Contractor not involved in design or planning (poor buildability)
- Potential for adversarial relationships
- Design risk rests with the client

Figure 3.1: Typical project structure under the traditional procurement route

The traditional procurement route is sequential. This makes it simple, be time-consuming to implement. Once the design is complete, a Quantity Surveyor measures the drawings to compile a bill of quantities. This process from initial employment of the Architect to the completed tender documentation can take between one and five years, depending on project complexity.

A selection of Contractors are then invited to tender (i.e. submit a price) for completing the work. To calculate a tender price, the Contractor would receive the drawings, specifications and bills of quantities. The client would expect the Contractor to provide a firm price within four to six weeks. After reviewing their tenders, the client then contracts
with the most suitable Contractor (usually with the lowest price) who will be appointed to complete the construction only.

The Traditional procurement route historically dominated the UK for the past 150 years following the emergence of the general contracting firm and the establishment of independent client consultants offering professional services (e.g. Quantity Surveyors, Architects, etc.).

The traditional procurement route is characterised by:

- The need for the design to be largely complete before appointing the Contractor. This prevents the Contractor’s design expertise (which is often significant) from being incorporated into the design, which can result in poor buildability.

- Reliance on competitive tendering to appoint the Contractor requesting the lowest price to construct the completed design, although negotiation is possible.

- Client control over the design process via its appointed consultants. The Contractor does not normally assume any design responsibility.

- Reasonable cost certainty

- The need for the client to appoint an independent Contract Administrator (usually an Architect or project manager) to administer the standard forms of contract used to structure traditional procurement. A further consultant (usually a Quantity Surveyor) is appointed by the client to oversee valuation and payments during construction.

Should the Contractor reveal a competitive advantage flowing from the construction method when preparing their bid price during tendering, the client would demand that this information be shared with other Contractors so that tendering is on an equal footing. The traditional procurement route therefore provides little incentive for the Contractor to suggest design improvements and stimulates a “lowest bid wins” culture. Contractors can resort to relying on variations and claims as a source of profit when competing on price alone.

This procurement route requires a fully detailed design prior to tendering. All client and user decisions must be made prior tendering, although provisional sums can be used for small parts of the design that are incomplete. The contract is let on the basis of completed detailed design for a lump-sum, firm price based on a fixed period. Because design and construction are separated and sequential in this procurement route, the overall project duration tends to be quite long.

The Contract Sum (i.e. the price submitted by the winning tenderer) can only be altered by variations to the completed design or by any unforeseen necessary works that arise. Thus, cost certainty is ensured at the beginning of the works, provided that all client decisions are made, the works are fully designed and surveys or investigations have been completed and prove to be accurate. The responsibility, and therefore the risk, for the performance of the design team remains with the client. The Contractor, meanwhile, is responsible for the building works.

Traditional procurement has operated in Britain, the Commonwealth and other parts of the world reasonably satisfactorily. It is understood by most clients and they know their
financial commitment when they accept the Contractor’s tender. The Architect has considerable freedom to conceive and develop the design without excessive time or economic pressures, provided the cost ceiling is not exceeded and the client’s requirements are satisfied.

The project cost can be estimated, planned and monitored by the Quantity Surveyor from inception stage through to completion of the project. This method makes it possible for the Architect to introduce Consulting Engineers, Landscape Architects, Services Engineers and other specialists to advise on design sub-systems of the project. The Architect can also consult specialist Contractors who he believes to be appropriate for the project. Or, who manufacture and/or install components for sub-systems required by the design solution at design stage, with a view to subsequently listing them as one of three or more ‘Listed’ Subcontractors.

The long time required to procure a building using the Traditional route increases project costs, because the client incurs financing charges on the sum he has invested in land purchase, interim payments to the Contractor and other members of the building team.

The separation of the design and construction processes tends to foster a “them and us” attitude between the designers and Contractors. This reduces the team spirit that experience has shown to be vital for the satisfactory conclusion of a building project. Lines of communication between the parties tend to be tenuous and the interests of all may suffer as a consequence. The Traditional system has proved to be unsatisfactory for some large and complex projects requiring advanced management systems, structures and skills.

3.2.1 Variations of the traditional procurement route

There are three main variations of the Traditional procurement route:

Traditional sequential:
Contractors bid on completed design and cost documents. If the design has been fully developed, thought out and frozen, then Traditional procurement provides a reasonable degree of cost certainty at the tender stage. However, if the design has not been fully resolved prior to tender (which can happen when time is tight), the consequent design changes (variations) during construction usually cause costs to rise.

Traditional accelerated:
A Contractor is appointed earlier on the basis of partial information, by negotiation or in competition.

Traditional with remeasurement:
A re-measurement contract uses bills of approximate quantities. The accepted tender is not a lump sum. The quantities used to prepare the tender will be re-measured on completion. The advantage of this approach is the ability to tender earlier, when the design is substantially, rather than fully, complete. The disadvantage of this approach is the loss of cost certainty, as the cost risk between the finally measured and tendered approximate quantities rests with the client.
3.3 Traditional procurement route payment options

The traditional procurement route can be implemented using several different methods used to organise payment from the Employer to the Contractor. The appropriateness of an available payment method to a particular project is determined by the Employer’s desire to trade-off cost certainty with the Contractor’s flexibility. A further influence is the Employer’s willingness to pay and wait for a fully developed design solution before tendering the work. The Employer may be willing to forego the cost certainty of a fixed, lump sum tender price, for example, in return for a quicker project in which the Contractor has greater influence over design development.

The three main payment method options are summarised below.

3.3.1 Lump sum contracts

A “lump sum” contract fully completes the design so that the Contract Sum can be accurately determined before construction work is started. The tender price selected from competing tenderers becomes the Contract Sum. In principle, if the Employer requires no Variations during the work, no unexpected circumstances arise, and no party breaches the contract, then that initial Contract Sum will be the exact, total amount paid by the Employer to the Contractor to construct the Works. This is the payment method examined in the following Units.

The Contractor undertakes a defined amount of work in return for an agreed sum. Contracts ‘with quantities’ are priced on the basis of drawings and a firm bill of quantities. The JCT SBC/Q 2011 form used to illustrate the content of a “typical” construction contract throughout this Course is a good example of the standard form of construction contract that would be used to implement this payment method on the traditional procurement route. It is the most common payment method used within traditional procurement.

3.3.2 Measurement contracts

“Measurement contracts” do not finalise the Contract Sum until after completion, however the method of determining the Contract Sum (i.e. re-measuring the Works) is agreed between the Employer and the Contractor before the works start.

This type of contract can arise because the work which the Contractor undertakes cannot for good reason be measured accurately before tenders are invited. Design will be reasonably complete and an accurate picture of the quality required will be available to the tenderer. Probably the contract of this type with least risk to the Employer is that based on drawings and approximate quantities. Measurement contracts can also be based on drawings and a schedule of rates or prices. A variant of this is the measured term contract under which individual works can be initiated by instructions as part of a programme of work, and priced according to rates related to the categories of work likely to form part of the programme.

Contracts using this payment method tend to rely on bills of quantities with approximate quantities to determine the Contract Sum. The JCT SBC/AQ 2011 form is a good example of the standard form of construction contract that would be used to implement this payment method on the traditional procurement route.
3.3.3 Cost reimbursement contracts

Cost reimbursement contracts determine the Contract Sum by calculation using the Contractor’s actual labour, plant and materials costs, to which a previously agreed percentage addition is made to the costs to cover the Contractor’s overheads and profit.

Sometimes referred to as a ‘cost-plus’ or a ‘prime cost’ contract; the amount or fee added to cover overheads and profit can be a fixed sum, a percentage, or on some other reimbursement basis. Where the full extent of the work is not known or cannot be designed pre-tender, this is a relatively high risk option for the client and only generally acceptable where the circumstances preclude other alternatives or where a partnering ethos is established.

Contracts ‘without quantities’ are priced on the basis of drawings and another document – usually a specification or work schedules. Alternatively, the tenders may submit a schedule of their rates and required profit margin. This will be applied to the actual quantities of different types of work completed to calculate the payment to the Contractor as the quantities cannot be predicted (or it is inappropriate to attempt to predict them) at the time of appointing the Contractor.

The JCT SBC/XQ 2011 form is a good example of the standard form of construction contract that would be used to implement this payment method on the traditional procurement route.

Activity 3.2

In your opinion what is the role of a contract?

*Time management: 5 minutes max.*