

Management and Professional Studies

Assignment 06: Contract and Procurement

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Assignment 06

Assumptions

- The client, the Irish Music Rights Organisation, needs a quality building which will have minimal maintenance costs / issues.
- I have been nominated as the lead consultant and it is my role to advice on the method of procurement and contract.

Report

Before consideration to the form of contract can be made it is advisable to form a contract profile to highlight the client's requirements and priorities. This contract profile is created by rating the client's priorities and then presenting the information in a circular graphical form.



Left: This image is taken from *Which Contract?*¹ and highlights the contract profile method. In the case of my building the quality indicator needs to be more of a priority.



Right: This image is a digitally altered version of the above image showing the 'client's' priorities for this buildings procurement. Emphasis has been placed on quality of deign and cost in preference to time.

¹ Clamp, H. and Cox, S. *Which Contract?* RIBA Publications. Page 19.

With the above in mind it is now necessary to decide which method of procurement is suitable for the building. This second step makes it easier to select the correct form of contract for the work required. There are three methods for procurement used in the UK and the choice of which method to use is influenced by these three factors:

Factor	Details
1 Design	'Design' covers a range of issues from the form of the building to the need for specialist input for a specific part of the building.
2 Co-ordination	'Co-ordination' covers responsibility for workmanship, goods, materials, working methods, programming, ordering and supervision.
3 Price	'Price' comes into effect if it is desirable for a lump sum cost basis.

The three methods of procurement are:

Procurement	Details
Traditional	<p>Using this method of procurement it is accepted that the design work is separate from construction, consultants are appointed to deal with design and cost control and the contractor will simply be responsible for carrying out the works.</p> <p>The Architect is responsible for the workmanship and materials used in the construction process. The contractor is awarded the job on competitive tender or by negotiation.</p> <p>All drawings and information must be prepared before tenders are invited. The contractor has no design responsibilities and must be able to assess the work on the information provided. The construction cost is based on a lump sum payments with all consultants fees being based on this construction cost, it is notoriously difficult to accurately estimate building costs using this method of procurement.</p> <p>The employer appoints all consultants and maintains quality and design. The contractor is dependent on the Architect issuing information on time, if this does not happen claims will be made against the contract.</p>
Design and Build	Using this method of procurement the contractor has a much greater responsibility for the design of the building.

This responsibility could be for total conception and design through to materials and finishes, or for design development or production information of a scheme supplied by the employer's consultants.

The contractor can be appointed by either a competitive tender or a negotiated tender. This type of contract is usually arranged with one lead contractor but this lead contractor can appoint sub contractors if necessary.

In this form of procurement the employer has one point of contact in terms of design and responsibility. However, the employer lacks control over detailed design issues.

Responsibility for completion on time or the production of information is squarely in the contractor's court and there can be no claims against the contract for delays due to lack of information. It is necessary to check the contractor carries sufficient professional indemnity insurance.

Management

In this method of procurement the employer appoints independent consultants to deal with managing the contract and design.

The management contractor is responsible for executing the works in small packages. Thus, the management contractor will appoint necessary works contractors to do part of the building works.

This type of procurement is split into two forms of management, management and construction contracting.

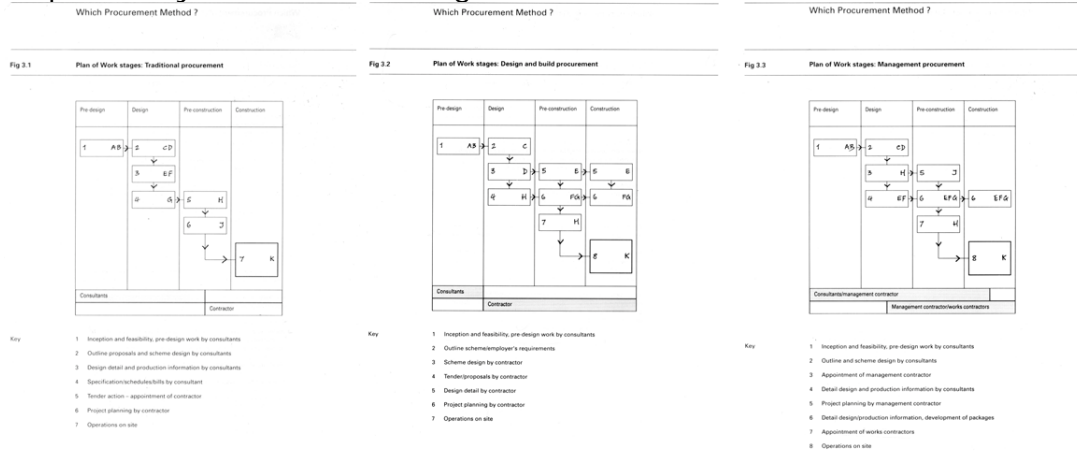
In 'management contracting' works contractors are contractually responsible to the management contractor. This is supposed to generate greater flexibility, speed and efficiency.

In 'construction management' the management contractor acts as an agent for the employer. The works contractors are directly responsible to the employer which diminished the management contractor's contractual risk.

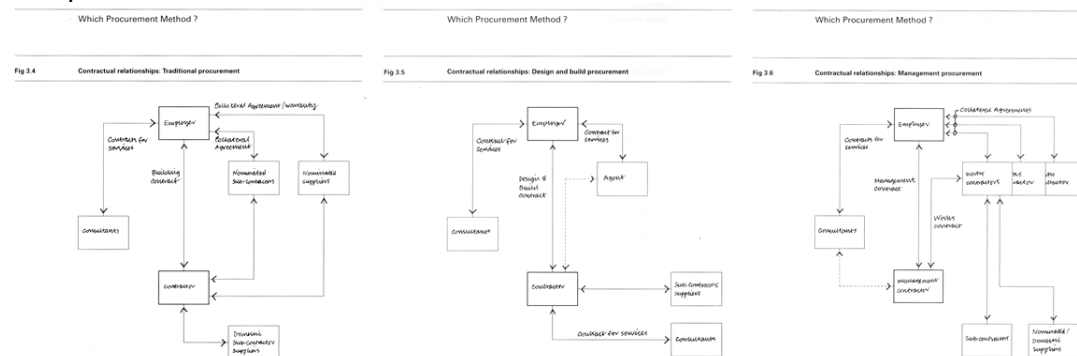
This type of contract is best suited to very large and complex projects with the management contractor being appointed early in the process. The employer has flexibility in the design process when concerned with constructional methods.

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Below: This diagram shows the RIBA work stages and with whom responsibility for each work stage lies.

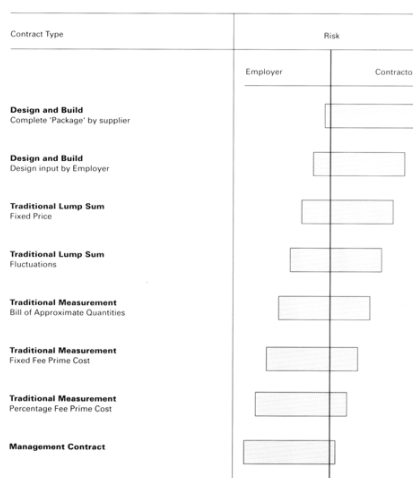


Below: This diagram shows the relationship between employer, contractors and professional consultant's.



Which Procurement Method ? 3

Fig 3.7 Speculative Risk



Left: This diagram shows the comparative risk taken by the employer and contractor on comparative contracts.

The traditional lump sum and measured contracts are the equal risk contracts to employ.

The design and build contracts place the greatest proportion of the risk with the contractor.

The management contracts place the greatest proportion of the risk with the employer.

Conclusions No.1:

It is very easy to eliminate the Management form of contract from the potential list of appropriate forms of contract to use. My building is small at 1,310 sq metres in size and fairly simple thus the management contracts, which are appropriate for large and complex projects, can be eliminated. The first stage elimination includes the following forms of contract:

Form of Contract	Why?
JCT Standard Form of Management Contract	For large projects
JCT Works Contract (WKS1, WKS2, WKS3)	For large projects
Any type of modified contract	Increased risk

The above reasoning leaves me with a choice between a traditional or design and build procurement method and their related forms of contract.

Comparison of Traditional and Design and Build Procurement:

	Traditional	Design and Build
Speed	Not fast procurement as design and construction are separate. All of the drawing information packages must be complete by tender.	Fast procurement with pre-tender times relating to detail in employers requirements. Construction time reduced as design and construction proceed in parallel.
Complexity	Simple; although problems arise from the employer requiring the use of particular sub contractors.	One contractual arrangement with the responsibility for design and construction with one organisation.
Quality	Employer demands a certain standard and the contractor is wholly responsible for achieving this quality.	Employer has no control over the quality on site. Contractor might have limited expertise and employer has no choice in specialist sub contractors.
Flexibility	Employer has control over design and variations.	None once the contract has been signed. Substitutions and detail development will be to the contractor's advantage. Financial penalties will be incurred should the employer specifically request changes.
Certainty	Cost certainty and time requirements are set before works begin. Clear	The cost and completion date is guaranteed.

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	responsibility and cost monitoring at all stages.	
Competition	Competition is possible. Negotiated tendered reduce competition.	Difficult to compare proposals. Difficult to evaluate competitiveness. No benefit to the employer should the contractor seek greater competitiveness from specialist sub contractors.
Responsibility	Clear division of design and construction responsibility. Confusion might occur when there is design input from the contractor or specialist sub contractor.	If employers requirements are detailed it can reduce the responsibility of the main contractor for design or performance. Employer's agent has a limited role during construction.
Risk	Fair and even risk between both employer and contractor.	Risk lies wholly with contractor.
Summary	Benefits in cost and quality at the expense of time.	Benefits in cost and time at the expense of quality.

Conclusions No.2:

Since the building has been designed as the national headquarters of the Irish Music Rights Organisation emphasis will be placed on quality of design and employers requirements. Since they already own offices time is less of an issue, it is more important that new building suits their complex needs. Although it is important to note their previous Architect had their scheme cancelled due to escalating costs.

Given this, I would recommend a traditional procurement method as it gives the employer greater quality and has excellent cost control before commencement on site. I can now eliminate design and build contracts which include the following forms of contract:

Form of Contract	Why?
JCT Standard Form With Contractor's Design	Design and Build
JCT Standard Form With Quantities	Design and Build
British Property Federation System	Unfamiliar, more risk
Any type of modified contract	Increased risk

Traditional Procurement Method Contracts:

There are three types of contract for this procurement method;

- Lump sum contracts: where the contract sum is agreed before construction commences and is written into the contract;
- Measurement contracts: where the contract sum is only finalised on completion and payment is made based on final measurements at an agreed cost per unit;
- Cost reimbursement contracts: where the contract is agreed based on the cost of labour, plant and materials with an additional fee for overheads and profit.

Lump Sum Contracts:

The contractor carries out a defined scope of works based on drawings and a bill of quantities or a set of drawings without a bill of quantities. Any quantities which can not be measured are resolved as provisional sums or by specifying an approximate quantity. There are limitations of the employer variations after the design process has been completed. This should not be an issue as design and construction are separated.

Limited fluctuations can occur to cover tax changes and a varying cost of labour or materials can affect the final lump sum value. The risk of such contracts is equally shared between the contractor and the employer.

This type of contract would be suitable for my client as a set of drawings and a bill of quantities will be achievable for a competitive tender.

Measurement Contracts:

In this form of contract the scope of work undertaken can not, for unknown reasons, be quantified or accurately measured. An estimate value is taken from the drawings and an approximate bill of quantities. The final work is then 're-measured' and the lump sum is finalised. The risk of such contracts is equally shared between the contractor and employer.

This type of contract would be unsuitable for my client as a detailed bill of quantities would not be available.

Cost Reimbursement Contracts:

In this contract the contractor's overheads, management costs are covered and an additional fee is calculated relating to the cost of these works. This fee is based on a percentage of the final cost, a fixed value, a fluctuating value or a fee based on a target final cost.

This type of contract will push the contractor to achieve various cost targets and still meet the quality requirement. All of the variations, save the percentage fee, prompt the contractor to be as efficient as possible on site. The risk of such contracts is equally shared between the contractor and employer.

This contract is unsuitable as it requires goodwill between the employer and contractor to achieve the best results and is not widely used and familiarity will be low. Although in principle this is the best choice I would not recommend this type of contract for the above reason.

Final Conclusions:

Given the above descriptions and details I would recommend the client chose an accepted standard form using the traditional lump sum procurement method.

There are two varieties of lump sum contracts available and these are;

- Joint Contracts Tribunal 98 (JCT 98) contract and
- The General Conditions of Government Contracts for Building and Civil Engineering Works (GC/Works/1)

Of the two contracts listed above the JCT98 contract is the most widely accepted form of contract used in the building industry. The JCT 98 has a long history in case law which can be helpful in adjudication. This form of contract has been approved by a tribunal of professionals and works contractors which means this contract is held to be fair and just in regards to all parties by the building industry.

Given the above discussion the JCT 98 would be the traditional procurement method contract of choice. This type of contract will give the employer the chance to alter the design and compare relative costs of different approaches before inviting competitive tenders for the scope of works. The quality can be maintained on site and the contractor is responsible for producing this quality. The Architect is responsible for issuing information to the contractor promptly to facilitate construction to the published programme. However, there is a risk of claims being made against the contract if information is not issued promptly.