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CHOICE OF CONSTRUCTION
PROCUREMENT METHODS AND
CONTRACTUAL ARRANGEMENTS.
CONTRACT PRACTICE & PROCEDURES (M5X01878)

ADAM MEYRICK (1706760)

UNIVERSITY OF WALES TRINITY SAINT DAVID (UWTSD)

Project & Construction Management



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1.0 Introduction

1.0.1 Procurement

Procurement is the process of finding, agreeing terms, acquiring goods, services, or works from potential businesses. The selected route should depend on the type of project at hand. The 2 most popular procurement routes are design & build and traditional. The basic parameters that should be assessed when choosing a procurement route are given below:



Figure 1: Time, cost, quality project management triangle (Madurai, 2018)

1.0.2 Tendering

The process of tendering follows the selection of the procurement route. Generally, an advert will be advertised to contractors giving notice that the contract is being tendered. There are two types of traditional tender commonly used in the construction industry, 'open' and 'selective' tenders. Open tendering allows anyone to submit a tender to supply the goods or services, offering an equal opportunity to prospecting contractors.

All tenders are then received and carefully examined by the client and in-house team and chosen. The main problem with this type of tender is that it can be a long process considering each submission. In addition, companies that are inexperienced and close to liquidation are free to apply.



The selective tendering process only allows contractors registered on a pre-selected list to take part in the process. These can be specialist contracts for complex projects or possibly a good quality contractor that the client has good experience working with before. This tendering process takes significantly less time to consider each application and means the construction process can start earlier.

1.0.3 Contract Forms

After the tendering stage, a contract creation must follow, there are 2 main contract forms that could be adopted;

“Formed in 1931, the Joint Contracts Tribunal, also known as the JCT, has produced standard forms of contract for construction, guidance notes and other standard documentation for use in the construction industry. JCT was formed by the Royal Institution of British Architects (RIBA) who are 1 of the 7 organisations that can who approve and authorise publications.” (JCT, 2014)

“The NEC (New Engineering Contract) form is also a viable alternative UK contract, it is suited to construction contracts requiring collaboration between the contractor and client. It is also clear and simple, written in plain English without legal terminology, meaning it is easy to adopt and administrate” **(NEC, 2018)** NEC produces a diverse range of definitive end-to-end project management contracts that empower users to deliver projects:

- On time,
- On budget,
- To the highest standards.

1.1 Scenario 1

The information given in the scenario lacks detail and indicates that the design is not yet completed. It is known that the project is government funded and that the building is for specialist facilities and therefore must be designed as such. In addition, there is little indication of price, time frame or quality.

1.1.1 Procurement & Tendering Selection

Given the information obtained it would be recommended that the procurement route should be **Design and Build (D&B)**. The design and build method of procurement is when the main contractor is appointed to design and construct the works.

This procurement method means that the client doesn't have to worry about completing a design. It is one of the three procurement routes preferred by the government to construct publicly-funded projects, as it allows a fully integrated working from project start to finish. This is useful in constructing specialist public facilities. It also gives a single point of responsibility to the client for delivering the project.

For design and build projects there are two types of tendering, 'Single-stage' or 'Two-stage';

- Single-stage tendering is used when all the information necessary for the project are known to calculate a realistic price when tendering starts.
- *“Two-stage tendering is a method of procurement where the employer seeks to appoint a contractor at an initial stage of the project based on an outline scope of work” (Rawlinson, 2006)*



For this project the **two-stage tendering process** would be preferable because there is not enough information to send out a single-stage tender. Also, the two-stage tender would allow a contractor that specialises in constructing hospital buildings to be integrated at the start of the project for enhanced design multiplicity.

1.1.2 JCT Contract Selection

The contract type preferred would be a **JCT Design and Build (DB)** which will help ensure good buildability, cost control and speed. In terms of cost, D&B allows the client to have some cost control as the contractor agrees to take on responsibility for their design and construction for a pre-agreed price.

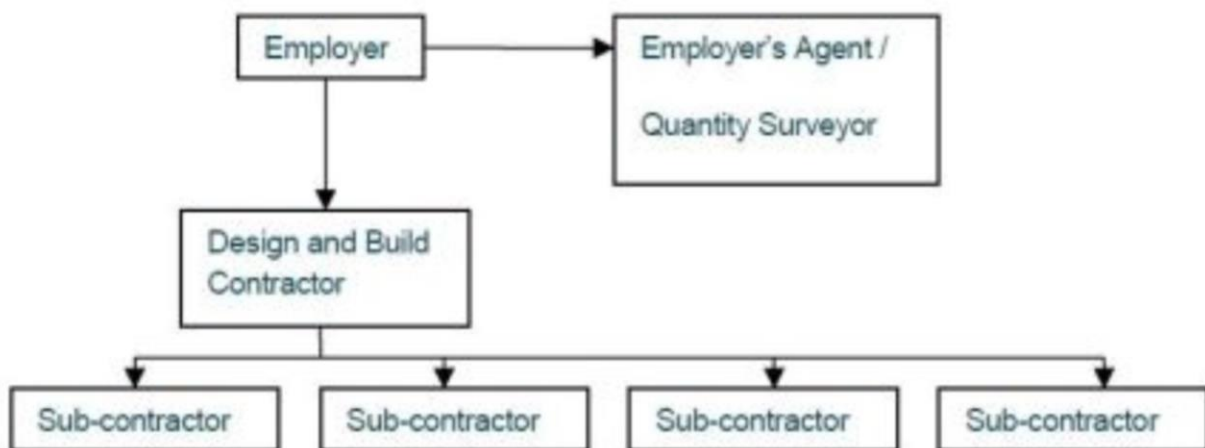


Figure 2: *Design & Build Hierarchy Diagram (Savage, 2015)*

1.1.3 NEC Alternative

Alternatively, an **NEC4 Design and Build Contract (DBO)** can be implemented which would allow the client to procure a more integrated whole-life delivery solution. "It reflects the increasing demand for contracts extending into the operational phase. This contract also combines the responsibilities for design, construction, operation and/or maintenance, which can be procured from a single supplier. This contract is generally more precise and accessible with the use of everyday use of everyday English, but terminology is sometimes different to JCT (e.g. "compensation events")." (*Klein, 2016*) The agreement also emphasizes greater on pro-active risk management.

1.2 Scenario 2

The information given in the scenario firmly indicates that a design proposal has already been produced by Tesco's own in house team. It is indicated that the site is already purchased, and construction can start immediately. In addition to this, a firm completion date is set, to allow the store to be open and earning money by September 2019.

1.2.1 Procurement & Tendering Selection

The recommended procurement route for this scenario is **Design Bid Build (DBB)** which follows the traditional procurement route. "The 'traditional' procurement route (sometimes referred to as design-bid-build) is a single-stage, fully designed project where the design is developed in detail



by a consultant team working for the client and a contractor is then appointed under a lump-sum construction contract which includes penalties for late completion.” (Procurement Route, 2018) This route protects the client as the risk of late completion lies with the contractor.

The tendering route for this project should be “**selective**” because the proposed completion date is so soon. In addition, Tesco would certainly have its own set of preferred contractors.

1.2.2 JCT Contract Selection

The contract that would be acclaimed for this project would be **JCT Construction Management (CM)**. This contract is designed to allow the project to start as soon as possible.

“The construction manager is appointed by the employer to oversee the completion of the works. This involves issuing instructions, preparing certifications, administering contract conditions, and so on. The construction manager is generally appointed early in the design process so that their experience can be used to improve the cost and buildability of proposals as they develop, as well as to advise on packaging, and the selection of trade contractors. Appointing a construction manager enables some trade packages to be tendered earlier than others, and sometimes, even before the design is completed.” (JCT Construction Management Contract, 2018)

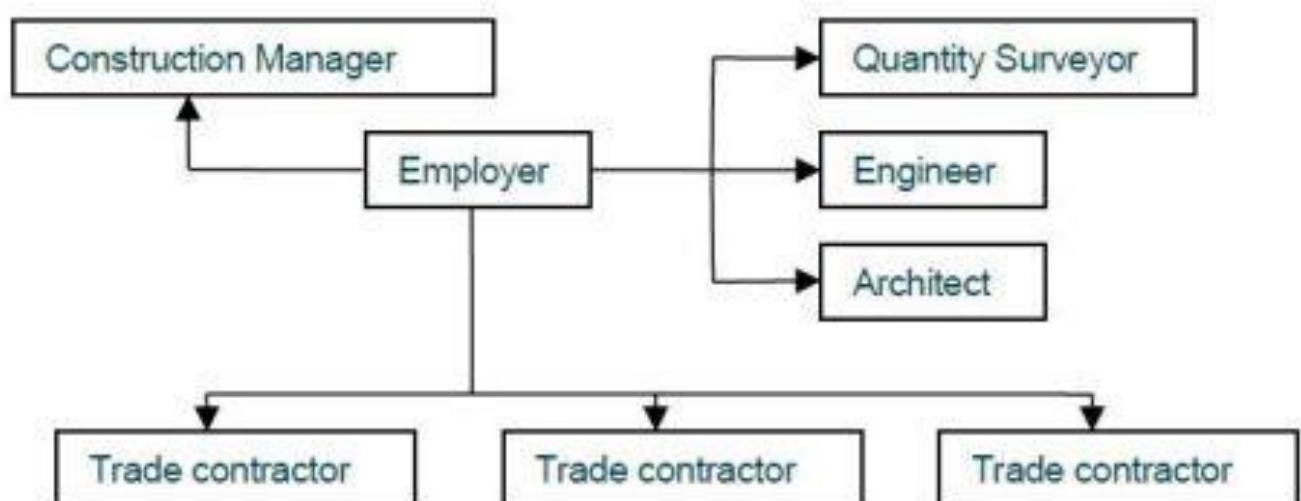


Figure 3: Construction Management Hierarchy Diagram (Savage, 2015)

1.3 Scenario 3

The given scenario sets out a clear cost limit for the project as well as a standard for excellent quality to be met. Funding for the project is readily available meaning the project is ready for immediate commencement. Since the client has already set a budget, it can be assumed that they have already produced design and one which is like other hotels in their chain. There are no parameters for project completion time set.

1.3.1 Procurement & Tendering Selection

Intended for this project should be a **traditional procurement route** since a design has already been produced by the client and their in-house team. All that is needed is to find a contractor to construct the project. When selecting a contractor, the ‘**selective**’ **tendering method** should be



followed. This would be sensible because it allows the client to work with established companies that have possibly worked on similar projects for the client.

The applications from the tender will then be carefully considered by the client and in-house team. The lowest bidder for the job mustn't always be chosen because it is those contractors that will replace materials with cheaper ones and cut corners during construction which will amalgamate to a loss of overall quality.

1.3.2 JCT Contract Selection

This project necessitates the need for a **JCT Management Building Contract (MB)**

"Management contracting when the works are constructed by several different works contractors who are contracted to a management contractor. The management contractor is generally appointed by the employer early in the design process so that their experience can be used to improve the cost and buildability of proposals as they develop, as well as to advise on packaging the works." (**JCT Management Building Contract, 2017**)

This method means that the design can be carried out and completed alongside site activity, this can allow for greater flexibility and more control over design and cost on the part of the employer.

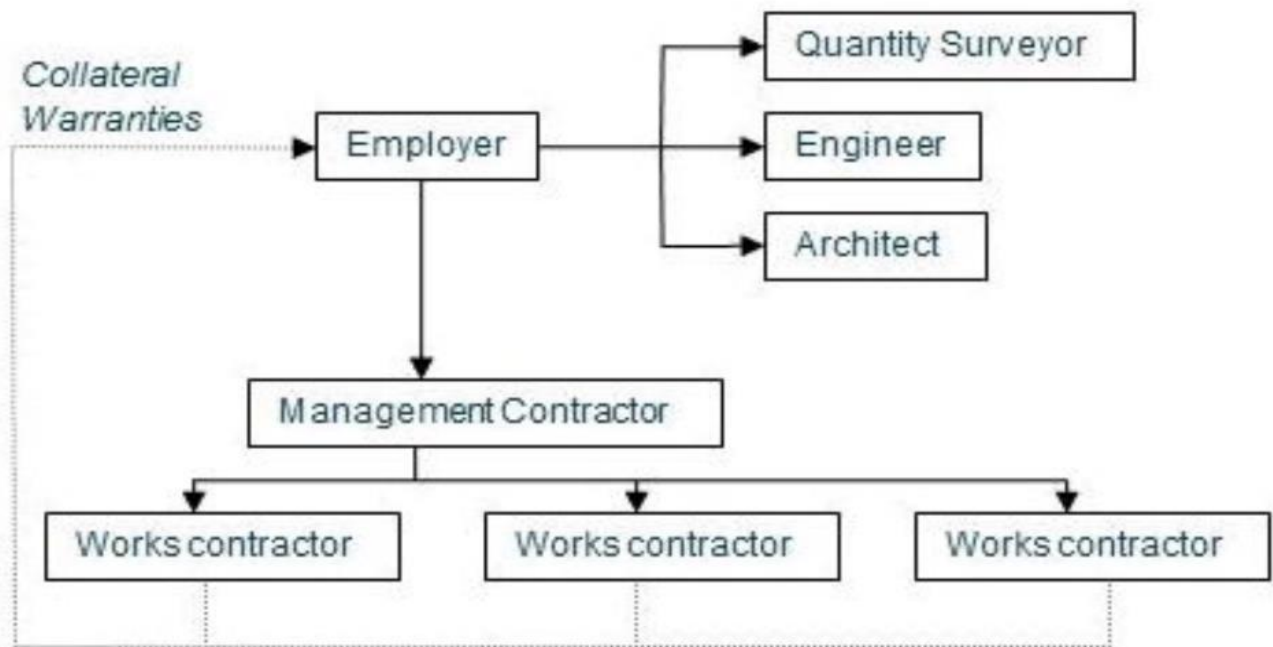


Figure 4: Management Contracting Hierarchy Diagram (**Savage, 2015**)

1.4 Scenario 4

The final scenario defines that the extent of the works required are small and straight forward. It also given an indication that a design for the refurbishment work have already been completed. The shorter the development lasts, the less money the theatre loses so timing is key.

1.4.1 Procurement & Tendering Selection

Intended for this project, management should acclaim that a **traditional procurement** route is employed, this is because the design has already been completed. A contractor will then be appointed to construct the works outlined. An **'open'** tendering method must be adopted because



the client wouldn't have worked with other construction companies previously. This method also gives the clients flexibility in selecting the most cost-effective application; as tenders received will have competitive prices.

1.4.2 JCT Contract Selection

The contract recommended for this project would be the **JCT Minor Works Contract (MW)** This is widely used for relatively straight-forward construction projects that cost less than £500,000. This project shouldn't cost more than £100,000 dependant on the theatres size and current condition. Projects characteristics:

- The project should last no more than 12 months,
- The client is responsible for procuring the design, including drawings.

Alternatively, a **Minor Works Building Contract with contractor's design (MWD)** contract could also implemented alternatively should the clients design lack specific parts of the works.



References

JCT. 2014. URL: < <https://www.jctltd.co.uk> >. Accessed: 26th November 2018.

JCT Construction Management Contract. 2018. URL: < https://www.designingbuildings.co.uk/wiki/JCT_Construction_management_contract >. Accessed: 26th November 2018.

JCT Management Building Contract. 2017. URL: < https://www.designingbuildings.co.uk/wiki/JCT_Management_Building_Contract >. Accessed: 24th November 2018.

KLEIN, P. R. **JCT vs NEC Advantages & Disadvantages.** 2016. URL: < <https://cif.ie/wp-content/uploads/2015/01/RudiKleinpresentationoninternationalformsofcontract.pdf> >. Accessed: 14th January 2019.

MADURAI, V. **Time, Cost, Quality** 2018.

NEC. How NEC Contracts Work. 2018. URL: < <https://www.neccontract.com/About-NEC/How-NEC-Contracts-Works> >. Accessed: 14th January 2019.

Procurement Route. 2018. URL: < https://www.designingbuildings.co.uk/wiki/Procurement_route >. Accessed: 23rd November 2018.

RAWLINSON, S. **Two-Stage Tendering.** 2006. URL: < <https://www.building.co.uk/data/procurement-two-stage-tendering/3067103.article> >. Accessed: 23rd November 2018.

SAVAGE, D. **JCT Contract Diagrams** 2015.

WILL HUGHES, R. C., JOHN MURDOCH. **Construction Contracts: Law and Management.** Fifth Edition. Routledge, 2015. 435 ISBN 978-0-415-65705-1.

