

PROCUREMENT PROCESSES

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1. **Introduction**

In this assignment I will be reviewing the 3 most commonly used procurement methods, their advantages and disadvantages. I will also be reviewing both the NEC & JCT contracts and identifying the types of both contract. To summarise, I will give me opinion on what method I believe is most suited to the job given.

2. **What are the procurement processes?**

- a. **Traditional** - The traditional procurement method involves separating design and construction. The client first hires consultants to design the project in detail, after which a contractor is hired on a single-stage competitive basis to build it.

The contractor's duty includes workmanship, materials, and work completed by suppliers and subcontractors. They are not in charge of the design, though certain traditional contracts may allow the contractor to design certain aspects of the work. Traditional procurement is often carried out using a lump sum contract. A single 'lump sum' price for all the works is agreed upon before the works begin, and then stage payments are made as the works progress.

Advantages

- i. Well-established and frequently applied method
- ii. A clear separation of duties and responsibilities between the client, designers, and contractors
- iii. Greater control over design decisions and workmanship quality.
- iv. Competitive pricing as numerous contractors submit tenders.
- v. Easy to manage for simple tasks with limited scope.
- vi. Reduced risk for the client because any design defects are recognized and corrected before construction starts.

Disadvantages

- i. The progressive approach can be time-consuming, and there is little room for innovation and creativity as the design is finalized before building begins.
- ii. Potential for disputes and conflicts among the customer, designers, and contractors.
- iii. Changes in orders and variances may lead to greater overall expenses.
- iv. Limited communication between contractors and designers might lead to lost chances for value engineering and cost savings.

- b. Design and Build** - The Design and Build (D&B) procurement route is a project completion technique in which a single contractor handles both design and construction.

This technique focuses on project management, resulting in faster completion and greater cost certainty. It is the most widely used procurement method in the UK, accounting for more than half of all projects. While D&B provides a single point of responsibility, it may limit client control over design elements. It is suitable for projects that prioritize speed, efficiency, and cost management, but it may not be appropriate for those that require highly customized design input.

Advantages

- i. The contractor will be responsible for both design and construction. So the client's responsibilities and risks are reduced.
- ii. Initial sketches allow for the commencement of work immediately.
- iii. The contractor will ensure that the project is delivered without exceeding the budget (or modifying the agreed-upon quality).
- iv. The client can rely on the contractor's competence to create the final design.

Disadvantages

- i. Design finalisation will be a difficult task unless the contractor fully knows the client's expectations.
- ii. Any modifications to the original agreed-upon design might be difficult and costly; the contractor may request a cost increase.
- iii. Because all contractors are proposing diverse designs, the client may have difficulty evaluating design ideas.
- iv. The contractor will give design proposals that are straightforward to build (rather than focusing on the aesthetic look of the design and cost of construction).

- c. **Management Contracting** - Management procurement is a way of completing a project through a series of smaller works or subcontracts that the main contractor manages. The contractor does not really perform the physical job but is compensated for managing the project through the numerous work packages.

The employer begins by appointing consultants and a contract administrator to create drawings, project specifications, and cost estimates. The employer maintains control over design throughout the project via their expert team. Typically, job packages are awarded through a competitive tender process. It is beneficial for the suggested contractor to be involved as soon as feasible since they will bring knowledge in terms of buildability and work package programming.

Availability

- i. Client risk is small, and the number of consultants required is minimal when compared to the project size.
- ii. Contractors will be involved in the early stages of the project. And management contractors will provide their views and assistance to mitigate project risks.
- iii. Management contracts requesting ideas and feedback on material and design will enable design flexibility.
- iv. Most significantly, if one management contractor fails, others can give their best work, and the project will continue.

Disadvantages

- i. Contractors might purposely increase project costs by providing expensive inputs such as high-end materials and specifications.
- ii. Price competition will be low because the client has appointed multiple management contractors.
- iii. Clients must rely on the success of the management contractors and will have no control over the project's progress.

3. What is a NEC contract?

- a. An NEC construction contract is a modern, flexible contract established by the Institution of Civil Engineers that is widely used in the UK and around the world. NEC (New Engineering Contract) encourages transparency, collaboration, and proactive project management. Its language is plain and uncomplicated, with the goal of reducing misunderstandings and arguments.



Figure 1_(Metroun, 2021)

The NEC4 Engineering and Construction Contract (ECC) is the most generally used version, which is appropriate for a wide range of projects. NEC contracts promote early detection of problems, collaborative risk management, and regular communication. They support a variety of procurement pathways and contract choices, making them flexible to varying project sizes, complexities, and delivery strategies.

I am currently on site in Pembroke, using an NEC contract for a scheme worth £22,000,000.00.

b. Types Of NEC?

NEC4 Engineering and Construction Contract (ECC) – For major construction projects; the most commonly used form.

NEC4 Engineering and Construction Short Contract (ECSC) – For simpler, lower-risk projects.

NEC4 Professional Service Contract (PSC) – For appointing consultants, like architects or engineers.

NEC4 Term Service Contract (TSC) – For ongoing maintenance or facilities management over a set term.

NEC4 Framework Contract (FC) – For long-term collaborative relationships covering multiple projects.

NEC4 Supply Contract (SC) – For procuring goods and equipment.

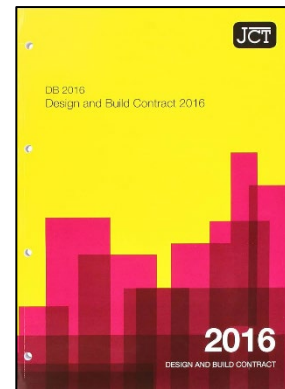
NEC4 Design, Build and Operate Contract (DBO) – For projects where a single contractor designs, builds, and operates a facility.

4. **What is a JCT contract?**

- a. A JCT construction contract is a standard form contract issued by the Joint Contracts Tribunal (JCT) in the United Kingdom and widely used in the construction sector. It specifies the rights, responsibilities, and obligations of the parties involved—typically the employer (client) and the contractor. JCT contracts include payment conditions, project timelines, variations, dispute resolution, and risk allocation.

They provide a clear legal framework for properly managing building projects and reducing the possibility of disputes. Various versions are available to meet different project types and procurement methods, such as traditional, design and build, and minor tasks.

The JCT contract is the most common form of contract throughout the United Kingdom.



b. **Types Of JCT?**

JCT Standard Building Contract (SBC) – For large, complex projects with detailed design provided by the client.

JCT Design and Build Contract (DB) – The contractor is responsible for both design and construction.

JCT Intermediate Building Contract (IC) – For mid-sized projects with fairly detailed design.

JCT Minor Works Building Contract (MW) – For smaller, simpler projects.

JCT Homeowner Contracts – For domestic clients hiring contractors for home improvements.

JCT Construction Management and Management Building Contracts – For specialist procurement routes where the client retains more control.

5. **My Opinion**

The Design and Build procurement method is ideal for constructing a 25-unit apartment building. This process which includes a single contract between the customer and the contractor for both design and construction services, provides numerous advantages in terms of project timing, cost certainty, risk management, and overall effectiveness. One of the key benefits of Design and Build is the consolidation of design and construction tasks under a single organization. This integration significantly reduces the possibility of disagreement between the design team and the contractor because both disciplines collaborate from the start. Such alignment enables improved communication, clearer accountability, and a more integrated project delivery process.

When looking at a medium-sized residential development, a 25-unit apartment building, time efficiency is crucial. Design and Build enables the overlapping of design and construction phases, allowing for the start of site work and procurement operations while the design is still being finished. Concurrent scheduling can result in significant time savings when compared to typical procurement procedures, where building cannot begin until the design is completed. Furthermore, early contractor involvement ensures that buildability factors are addressed during the design stage, reducing the risk of costly design revisions or construction delays later in the project's lifecycle.

Another key benefit of design and build is improved cost control. Once the employer's requirements are well defined, the contractor often delivers a fixed price for the project, giving the customer greater cost certainty from the start. This is especially useful in residential developments, where budget limits are prevalent and financial predictability is critical for obtaining funding or achieving targeted returns on investment. Furthermore, the Design and Build model's single point of responsibility streamlines the client's role, lowering administrative burdens and allowing for more rapid decision-making.

From a risk management point of view, Design and Build assigns a major percentage of design and construction risk to the contractor. This shift of responsibilities can lead to more proactive problem-solving because the contractor is incentivized to complete the project efficiently and within the agreed-upon scope, cost, and time constraints. The lower likelihood of disagreements also adds to a more collaborative and productive working atmosphere, which can improve the project's quality and conclusion.

In terms of value engineering, the Design and Build approach enables contractors to suggest cost-effective alternatives to specified materials or systems while maintaining quality and performance. This versatility is especially useful in residential buildings, where striking a balance between cost-effectiveness, aesthetic value, and tenant comfort is critical. Furthermore, having a single entity in charge of the entire

project increases the possibility of delivering an overall final result that is consistent with the client's initial vision and functional needs.

To summarize, the Design and Build procurement technique is strongly recommended for the construction of a 25-unit apartment building due to its emphasis on integration, speed, cost certainty, and risk reduction. The concept encourages a more efficient and collaborative approach to project delivery, resulting in better alignment between design intent and construction execution. These benefits make Design and Build ideal for residential buildings when timeliness, price, and quality are essential success criteria. This procurement process offers a practical and effective alternative for delivering high-quality housing complexes on schedule and within budget by encouraging early contractor involvement, decreasing the possibility of disputes, and providing a clear line of accountability.

Text 6 (Buildings, 2022)

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