Last weeks........

• Unit 1 - Construction project participants

• Unit 2 – Professional ethics
Dictionary Definition - ‘The obtaining of goods and services’

In construction context, procurement means obtaining the whole spectrum of goods, material, plant and services in order to design, build and commission a building that delivers the best possible value for money for the client over its lifetime.
What is the procurement process?

‘...a strategy to satisfy clients’ development and/or operational needs with respect to the provision of constructed facilities for a discrete life cycle’

International Commission on Building (CIB)
Types of procurement route

An arbitrary, but helpful, classification...

(1) “Historical” procurement routes:
   - Traditional
   - Design and build
   - Management contracting
   - Construction management

(2) “Integrated” procurement routes
   - Private Public Partnerships / Private Finance Initiative
   - Prime contracting
   - Framework agreements

(3) “Collaborative” routes:
   - Broadly considered as “partnering” which seek to build trust and collaboration among the project team
Types of procurement routes

(1) Traditional procurement route

(2) Non-traditional procurement routes

- Design and build
- Management contracting
- Construction management
- The Private Finance Initiative
- Partnering
Selecting the right procurement route

• Selection of the right procurement route is critical

• The procurement route determines:
  ➢ which organisations will be involved in the project
  ➢ how organisations will work with each other
  ➢ what contracts are to be used
  ➢ the responsibilities of each organisation
  ➢ the distribution of risks between the client and construction industry members
Procurement routes

Procurement routes can be categorised in several ways:

• By the amount of risk taken by each of the parties

• By the level information available at the time of construction contracts are let

• On the basis of the way in which the contractor is reimbursed

• By the way in which the interaction between the design and construction is maintained
Risks and procurement

• Risks should be allocated to the organisation best able to manage them

• Risk is associated with responsibility
  ➢ If an organisation wants to control something it will have to accept responsibility (and, therefore, risk) for it

• The procurement route defines where risks lie
• The contract provides the legal mechanism for assigning risks
Unit 3: The “traditional” procurement route
What we are going to learn today?

- Main features of the traditional procurement route
- The structure of the traditional procurement route
- Advantages and disadvantages of traditional procurement route
- Different payment methods within the traditional procurement route
The traditional procurement route (Design-Bid-Build)

Key features:

• The design is fully complete before construction commences

• Follows the sequential RIBA Plan of Work

• Tender documentation based upon drawings, specification and Bills of Quantities, Approximate Quantities or Without Quantities

• A selected number of contractors tender a price to complete the described Works
The traditional procurement route (Design-Bid-Build)

Key features:

• The cheapest contractor is usually appointed with whom the employer establishes a **CONTRACT**
• All design and contractual information is packaged into the Contract Documents
• Cost relatively certain in advance
• Separation of responsibility for (and management of) design and production
The traditional procurement route

Sequence of activities:

<table>
<thead>
<tr>
<th>Brief</th>
<th>Design</th>
<th>Competition (tendering)</th>
<th>Construction</th>
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Sequence (not to scale)
The project process: key phases

RIBA Plan of Work, 1998
The traditional project process

The RIBA Plan of Work, 2007:

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<th>Preparation</th>
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<td>Tender Documentation</td>
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The traditional project process

The RIBA Plan of Work, 2007:

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**Fully designed project single stage tender**

Select advisors  
Select / confirm consultants  
Planning
How can we describe the traditional project process as per the RIBA Plan of Work 2013?

A discussion on this will be carried out at the tutorial class.
JCT 2011 – Procurement model
The traditional procurement route

Advantages:

- Competitive fairness
- Relatively low tender preparation/tendering costs
- Satisfactory public accountability
- Procedures are well known
- Full competition
- Changes to the design are reasonably easy to implement and value
- Full control over design quality
The traditional procurement route

Disadvantages:

• Slow to start on site and long project duration (no concurrent working)

• Open to abuse and vulnerable to claims (additional time & money) when design incomplete (resulting in less certainty)

• Contractor not involved in planning or design (poor buildability)

• Fragmented nature leads to adversarial relationships, poor communication between participants, possible conflict & confrontation

• Design risk rests with the client
Traditional procurement route

Suitable for:

• Inexperienced and/or occasional construction clients
• Projects with no critical time requirements
• But not suitable for some large and complex requiring advanced management systems, structures and skills
Steps to successful procurement (OGC)

- **Decision to build**

  - **Step 1**: Verification of need
    - Outputs: Statement of business needs
      - Priorities, objectives, stakeholders and constraints
  
  - **Step 2**: Assessment of options
    - Outputs: Business case
      - Encompassing all business requirements
  
  - **Step 3**: Develop Procurement Strategy
    - Outputs: Strategic brief
      - In client’s terminology
  
  - **Step 4**: Implement Procurement Strategy
    - Outputs: Selection of the team
  
  - **Step 5**: Project Delivery
    - Outputs: Delivery of business solution
      - By focussed team and client
  
  - **Step 6**: Post Project Review
    - Outputs: Capture learning
      - Confirm benefits and inform future projects
Traditional procurement route

• The traditional route (and the allocation of risks between the client and the contractor) is typified by JCT SBC/Q 2011

• Recap:
  - Widely used and well known
  - Sequential process – no concurrency
  - Design is completed before the contractor is appointed
  - Client retains all design risk
  - Takes a long time
  - Provides reasonable cost certainty
  - Should require the least variations on site
Variations of the traditional procurement route

1. Traditional sequential

   Contractors bid on completed design and cost documents

2. Traditional accelerated

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

3. Traditional with re-measurement

   A re-measurement contract uses bills of approximate quantities. The accepted tender sum is not a lump sum. The quantities used to prepare the tender will be re-measured on completion
Payment options in traditional procurement route

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 Contractor undertakes a defined amount of work in return for an agreed sum. (Relevant standard form of contract is ‘The JCT SBC/Q 2011’)

2. Measurement contracts
   Contract Sum is not finalised until after completion, however the method of determining the Contract Sum (i.e. remeasuring the Works) is agreed between the Employer and the Contractor before the works start. (Relevant standard form of contract is ‘The JCT SBC/AQ 2011’)

3. Cost reimbursement contracts
   Contract Sum is determined by calculation the Contractor’s actual labour, plant and materials costs, to which a previously agreed percentage addition is made to cover the Contractor’s overheads and profit. (Relevant standard form of contract is ‘The JCT SBC/XQ 2011’
Remember to read the full Unit notes and Appendices, and complete your independent study