Procurement Routes
An Overview
Curtin University of Technology
Overview of Principal Routes

- Traditional / conventional design led
- Design and construct
- Management (Fee)
Traditional

- **Client appoints consultants to:**
  - Administer contract - certify payment
  - Develop a design based on an agreed budget

- **Client appoints contractor direct to:**
  - Organise works programme
  - Establish the site and carry out the work

- **Key issues:**
  - Separation of contractor from design
  - Client reliant on design team for quality of tender documents
Traditional - *Tendering*

- **Single stage**
  - Tenders are usually based on complete design

- **Two stage**
  - Tenders based on partially developed consultant design
  - Contractor assists with final development of design and tender documents
  - First stage tenderer may tender/ negotiate second (construction) stage
Traditional - *Variants*

- **Contractor design portion**
  - Client consultant team completes the design for majority of the works
  - Contractor completes the design balance of the works
  - Used where specialist design input required
When is Traditional Suitable?

- **Suitable for:**
  - All clients, including inexperienced clients
  - A developing brief
  - Complex projects
  - Quality design development
  - Cost certainty

- **Less suitable for:**
  - Fast track (Overlapping of design and construction)
Design & Construct

- Client appoints Consultants to:
  - Prepare outline design and employer’s requirements
Design & Construct

• **Client appoints *contractor* to:**
  – Complete design and construct the works

• **Key Issues:**
  – Tendering is more expensive and riskier exercise for the contractor than with traditional approach
  – Client has a single point of contact
  – Changes made by client during design stage can be expensive
When is Design & Construct Suitable?

**Suitable for:**
- All clients, including inexperienced ones and those who do not want a close involvement
- Cost certainty

**Not suitable for:**
- Projects where client wishes substantial input to detailed design
- Projects with significant potential for change
Design & Construct - Variants

• **Develop and Construct**
  – Client completes part of the design
  – Contractor finishes the design and the construction
  – Contractor may re-employ the original designers to complete the design

• **Package Deal**
  – Contractor provides an off-the-shelf building
  – Building type often modular so that its size can be adjusted
Design & Construct - Variants

• **Single stage**
  – Contractor's tenders are usually based on an outline design and Employers Requirements

• **Two stage**
  – Tenders based on a partially developed design
  – Contractor assists with further development of design
  – First stage tenderer has the opportunity to negotiate the second stage.
Design & Construct - Variants

- **Two Stage with Guaranteed Maximum Price**
  - Contractor's tenders based on a partially developed consultant's design (Stage 1 tender)
  - Preliminary and on costs agreed
  - Contractor assists with further development of design
  - Defined elements are negotiated and prices agreed.
  - Contractor assess risk associated with design development of remaining undefined elements and GMP negotiated
Management Fee

• **Client appoints consultants:**
  – Develop design with contractor

• **Client appoints contractor:**
  – Paid a fee for managing the construction works
  – Develops a programme for construction, design and tender documents in appropriate works packages
  – Manages work package contractors
Management Fee

• **Key Issues:**
  – Contractor brings practical buildability advice during design
  – Contractor is reckoned to be more client orientated - more professional - leading to a less adversarial relationship but depends on the contractor's team
  – Construction work is carried out by Work Package Contractors
  – Design and the start on site often overlaps
  – Less price certainty
Management Fee - Variants

• Management contracting
  – Management Contractor contracts with Work Package Contractors
  – Contractor manages the Works Package Contractors and arranges for their payment

• Construction management
  – Client contracts directly with Work Package Contractors
  – Contractor manages the Work Package Contractors
  – Client arranges for their payment
Management Fee - Variants

Construction Management
- Client
  - Design Organisation
    - Work Package Contractors
  - Construction Manager

Management Contracting
- Client
  - Design Organisation
  - Management Contractor
  - Work Package Contractors
When is Management Suitable?

**Suitable for:**
- Experienced clients
- Fast track projects
- Complex buildings
- Developing brief and constructability advice

**Less suitable for:**
- Inexperienced clients
- Cost certainty before starting construction
- Client wanting to pass on risk to contractor
## Speculative Risk

### Contract Type

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Employer</th>
<th>Contractor</th>
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</thead>
<tbody>
<tr>
<td>DESIGN &amp; BUILD Complete ‘Package’ by supplier</td>
<td></td>
<td></td>
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<tr>
<td>DESIGN &amp; BUILD Design input by Employer</td>
<td></td>
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<tr>
<td>TRADITIONAL - LUMP SUM Fixed Price</td>
<td></td>
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<tr>
<td>TRADITIONAL - LUMP SUM Fluctuations</td>
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<tr>
<td>TRADITIONAL - MEASUREMENT Bill of Approximate Quantities</td>
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<tr>
<td>TRADITIONAL - MEASUREMENT Fixed Fee Prime Cost</td>
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<tr>
<td>TRADITIONAL - MEASUREMENT Percentage Fee Prime Cost</td>
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<tr>
<td>MANAGEMENT CONTRACT</td>
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Criteria

- Certainty, risk, complexity, competition
- Time, cost, quality
- Value for money
- Market factors: cost of capital, interest rates, inflation, skills capacity
# Procurement Comparison

## Comparison of Procurement Methods

<table>
<thead>
<tr>
<th>Speed</th>
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<td></td>
<td>Not the fastest of methods Desirable to have all information at a tender stage Consider two stage or negotiated tendering</td>
<td>Relatively fast method Pre-tender time largely depends on the amount of detail in the Employer’s requirements Construction time reduced because design and construction proceed in parallel</td>
<td>Early start on site is possible long before tenders have even been invited for some of the works packages</td>
</tr>
<tr>
<td>Complexity</td>
<td>Basically straightforward, but complications can arise if Employer requires that certain sub-contractors are used</td>
<td>An efficient single contractual arrangement integrating design and early construction expertise within one accountable organisation</td>
<td>Design and construction skills integrated at an early stage Complex management operation requiring sophisticated techniques</td>
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## Comparison of Procurement Methods

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<td><strong>Certainty</strong></td>
<td>Certainty in cost and time before commitment to build Clear accountability and cost monitoring at all stages</td>
<td>There is a guaranteed cost and completion date</td>
<td>Employer is committed to start building on a cost plan, project drawings and specification only</td>
</tr>
<tr>
<td><strong>Competition</strong></td>
<td>Competitive tenders are possible for all item Negotiated tenders reduce competitive element</td>
<td>Difficult for the Employer to compare proposals which include for both price and design. May be difficult to evaluate for competitiveness No benefit passes to Employer if Contractor seeks greater competitiveness for specialist work and materials</td>
<td>Management Contractor is appointed because of management expertise rather than because his fee is competitive However, competition can be retained for the works packages</td>
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Balancing of Criteria

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<td>Benefits in <strong>COST &amp; QUALITY</strong> but at the expense of <strong>TIME</strong></td>
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Key Issues

• **Balance of Priorities**
  – Budget
  – Programme
  – Design

• **Constraints**
  – Compliance with regulations and standing orders
  – Approach to risk transfer
  – Incentivisation

• **Potential for Change**