

SELECTION OF CONTRACT FORMS

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TYPES OF CONTRACT

Traditional Method

Design and built

Management Contract

Construction management

TRADITIONAL METHOD

Employer appoints consultant team to design for the works

Calling for tender

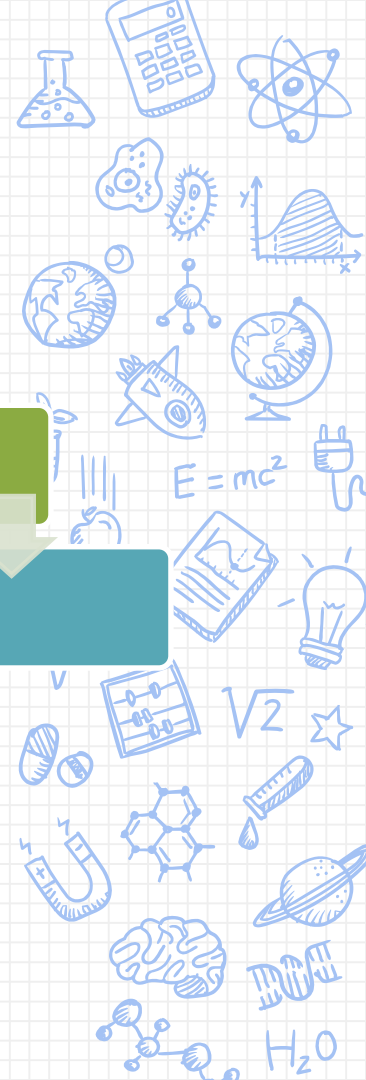
Contractor appointed and construction works be carried out

Three types of contract
under traditional method

Lump sum contracts

Measurement contracts

Cost reimbursement
contracts



1. LUMP SUM CONTRACTS

- ✗ Contractor undertake to complete a defined amount of work for an agreed sum (=fixed sum) based on BQ / drawing and specification / both.
- ✗ Appropriate to use where scope and schedule of the project are defined sufficiently.



- ✗ Drawing is important.
It forms the basis to come out the price.
- ✗ More risk on contractor.



2. MEASUREMENT CONTRACTS

- ✗ Also called 're-measurement contracts'
- ✗ At tender stage, works are based on approximate BQ but design substantially completed.
- ✗ Drawing is just a reference. (not complete)
BQ is important. (basis for contractor to fill up the price)
- ✗ The actual work done at site to be remeasured upon completion.

Approximate Quantity	Remeasured Quantity

- ✗ Contract sum is provisional. The employer has to accept the risk involved in starting work with no accurate idea of the total cost,
- ✗ Appropriate to use this contract when there is not enough time to come out with detail drawings or where the quantity of work is very uncertain.
- ✗ Example: civil work

3. COST REIMBURSEMENT CONTRACTS



- ✗ Also called 'cost plus' contract.
- ✗ Construction can start earlier without clearly defined project scope since all costs will be reimbursed and profit is guaranteed.
- ✗ To avoid disputes, the owner and contractor should specify early on in the process what is a reimbursable expense to the contractor (for his general conditions such as employees on the project, insurance, etc.)

3. COST REIMBURSEMENT CONTRACTS

	Advantages	Disadvantages
Client	Result in better quality projects because contractor do not have to cut corners as they know that they will be paid for all of the expenses plus profit.	Limited certainty as what the final cost will be. High risk to client.
		Minimum efficiency of contractor.
Contractor	Contractor's risk is minimized.	Unable to get advantage on favourable market price.

3. COST REIMBURSEMENT CONTRACTS

COST + PERCENTAGE FEE

- X A specific type of contract where the contractor is paid for the normal **cost** for a project plus an agreed-upon **percentage** of the estimated cost as profits.
- X The contractor may no incentive to complete the job quickly or cheaply – the longer he takes or the more he spends, the larger his profit.

COST + FIXED FEE

- X A specific type of contract where the contractor is paid for the normal **cost** for a project, plus an additional **fixed** fee for their services.
- X If the scope of the contract changes, the fee may be adjusted.

COST + FLUCTUATING FEE

- X **Cost** for a project plus **fluctuating fee** depending whether the final cost is above or below the original 'target cost'.
- X Examples:
Final cost not exceeding 50 million contract sum – value A
Final cost exceed 50 million contract sum – value B

DESIGN AND BUILT

- ✗ A contractor is appointed by the client at the outset to design and build the proposed project.
- ✗ The contractor will then appoint his own consultant team to come up with the design.
- ✗ There are 2 methods which are single entity method and competitive method.



- ✗ A contractor is appointed to design and build without any competition.
- ✗ The client would not know whether he is getting the best deal.
- ✗ Normally applicable to less complex building.

- ✗ Client may appoint his own consultant team as his advisor and outline design is prepared by his consultant team. A few contractor are then invited to submit their final design, cost and completion time based on the outline design.
- ✗ Client would be able to select the best deal out of several submissions.

- ✗ The contractor is solely responsible for failure in the design/construction.
- ✗ The client has only one person to deal with, the contractor.
- ✗ The client is aware of his total financial commitment from the outset.
- ✗ Close cooperation between contractor's design and construction teams.

Disadvantages

- ✗ Variation from the original design are discouraged by the contractor because variation can be very expensive.
- ✗ The client has no means of knowing whether he is getting value for money unless he employs his own advisers, which adds to his costs.



- ✗ The characteristic of management contract is that the management contractor undertakes to carry out the construction works through works contractors.
- ✗ Each of the works contractors will sign a contract with the Management Contractor.
- ✗ Management Contractor's role is to manage the construction work on daily basis.
- ✗ The Management Contractor will be reimbursed all cost incurred by him plus a management fee from the employer.

- ✗ Work can begin on site as soon as the first one or two works packages have been designed.
- ✗ The Management Contractor's knowledge and management expertise are available to assist the design team at a very early stage.

Disadvantages

- ✗ Uncertainty as to the final cost of the project until the last works contract has been signed.
- ✗ The number of variations and the amount of re-measurement required may be greater as compared with traditional contract.



- ✗ It is a professional consultant service to the client.
- ✗ The client has to pay an agreed fee for the service.
- ✗ The design and construction portion are provided by other parties.
- ✗ The construction manager is responsible for the organization and planning of the construction work. The construction work itself is carried out by a number of trade contractors.
- ✗ Each trade contractor enters into a direct contract with the client.

Advantages

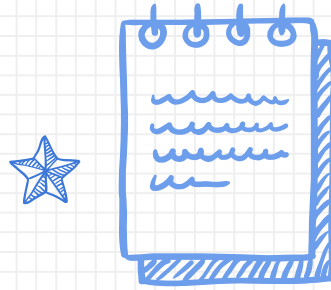
- ✗ The construction work is more closely managed by the construction manager.
- ✗ Contract is signed between the client and each of the trade contractor hence providing the client with direct access to the trade contractors.



Disadvantages

- ✗ The client has to deal with a number of trade contractors instead of only one main contractor.
- ✗ The client's financial commitment is uncertain until the last of the works contracts has been signed.





MATTERS INFLUENCING CHOICE OF CONTRACT FORM

- ✗ Is the design of the building complex and have high engineering content.
- ✗ For example, the lump-sum type of contract, is popular for the reason that the total cost of the project is known in advance.
- ✗ If the project is too complicated, it is not possible to accurately determine the nature and quantity of the work prior to the start of site activities, then that type of contract is not suitable.

- ✗ Can be in single entity (a contractor is selected to handle the project include design and build, without competitor) or
- ✗ Competitive (outline design of the project is prepared and every company that compliance is welcome to submit their final design and cost, the most satisfied tender will be chosen).
- ✗ Single entity and competitive project require different form of contracts.

- ✗ The bigger or more experienced clients have their own preferred protocols which involves specific choice of contract form.
- ✗ For example, the client prefers competitive to be able to compare and choose the most suitable tender.
- ✗ The choice of contract form would therefore depend on the client's experience.

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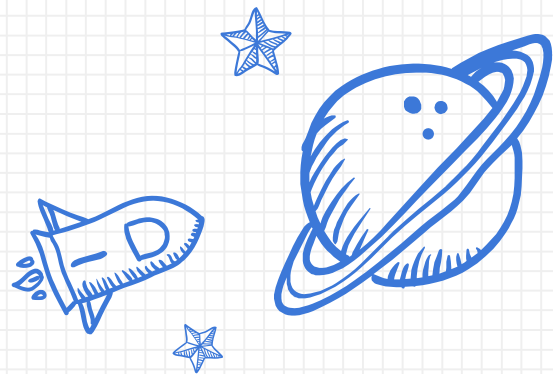
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- ✗ Different types of project will affect the choice of contract form.
- ✗ For example, the project can be build a new building, extension of building, renovation works, industrial building and more.
- ✗ Different projects have different requirements therefore required different type of contract form.

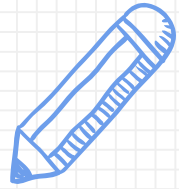
Allocation of risk

- ✗ All sorts of risks arising from both the internal and external environment of a project or organization and affecting the project performance,
- ✗ in terms of successful delivery of project on of time, within budget and of the specified performance.
- ✗ Important to know how much risk is shared in the project and how much risk is allocated to the contractor and client.





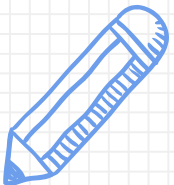
QUESTIONS



Q1. In the event, when variation change or any dispute arises, what is the most important document under lump sum contract?



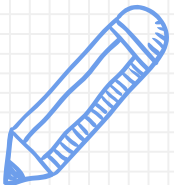
Drawing. Drawing is the basis.
It is the main reference to
check whether got any
discrepancy between tender
drawing and construction
drawing.



Q2. What is the
differences between
lump sum contracts and
measurement
contracts?



Lump sum contracts	Measurement contracts
Complete drawing (<u>Drawing important</u>)	Incomplete drawing
BQ is just a guide	BQ is the basis for contractor to fill up the price (<u>BQ important</u>)
Fixed contract sum, unless got changes on drawings	Contract sum is provisional (=subject to change)

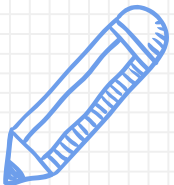


**Q3. Management
Contract and
Construction
Management are very
similar. What is the
major difference
between them?**



For Management Contract, client only deal with management contractor. For Construction Management, client has to deal with a few trade contractors.

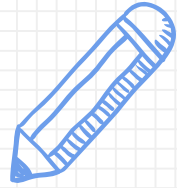
For Management Contract, client sign contract with the main contractor. For Construcion Management, client does not direct sign contract with the main contractor but with each of the trade contractors.



Q4. What is the difference
of Design and Build
compare with Management
Contract and Construction
Management?



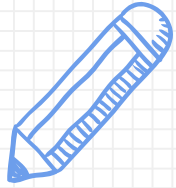
The client's financial commitment is already known when the Design and Build Contractor sign the contract with the employer. Whereas in Management Contract and Construction Management, the client would not know the final cost of the project until the last works contract has been signed.



Q5. What are the factors that causing lump-sum type of contract unable be used?



If it is not possible to accurately determine the nature and quantity of the work prior to the start of site activities, then lump-sum type of contract is not suitable.



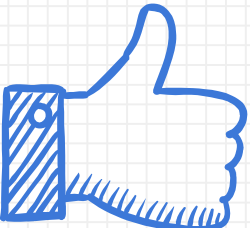
Q6.

**How final costs
influence type of
contract form?**



If total cost is fixed = lump
sum contract.

If total cost is uncertain
= measurement contract



THANKS!