

# ECI: Two-Stage Contracts

## Client and Contractor Considerations

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# Sessions – Outline

- **Introduction / refresher**
- **Session 1**
  - Pre-Tender / Tender Phase
  - Workshop Example 1
- **Session 2**
  - Stage 1
  - Workshop Example 2
- **Session 3**
  - Stage 2
  - Workshop Example 3



# Introduction

- Historically major infrastructure projects have been plagued by costly disputes
- Traditional methods have not always worked well
- Problems caused by:
  - inadequate definition of scope
  - buildability of design
  - inappropriate risk allocation
  - inadequate contract management



# Refresher

- What is ECI?
- Why use ECI?
- How does it work?
- Comparison
- Value for money



# Refresher

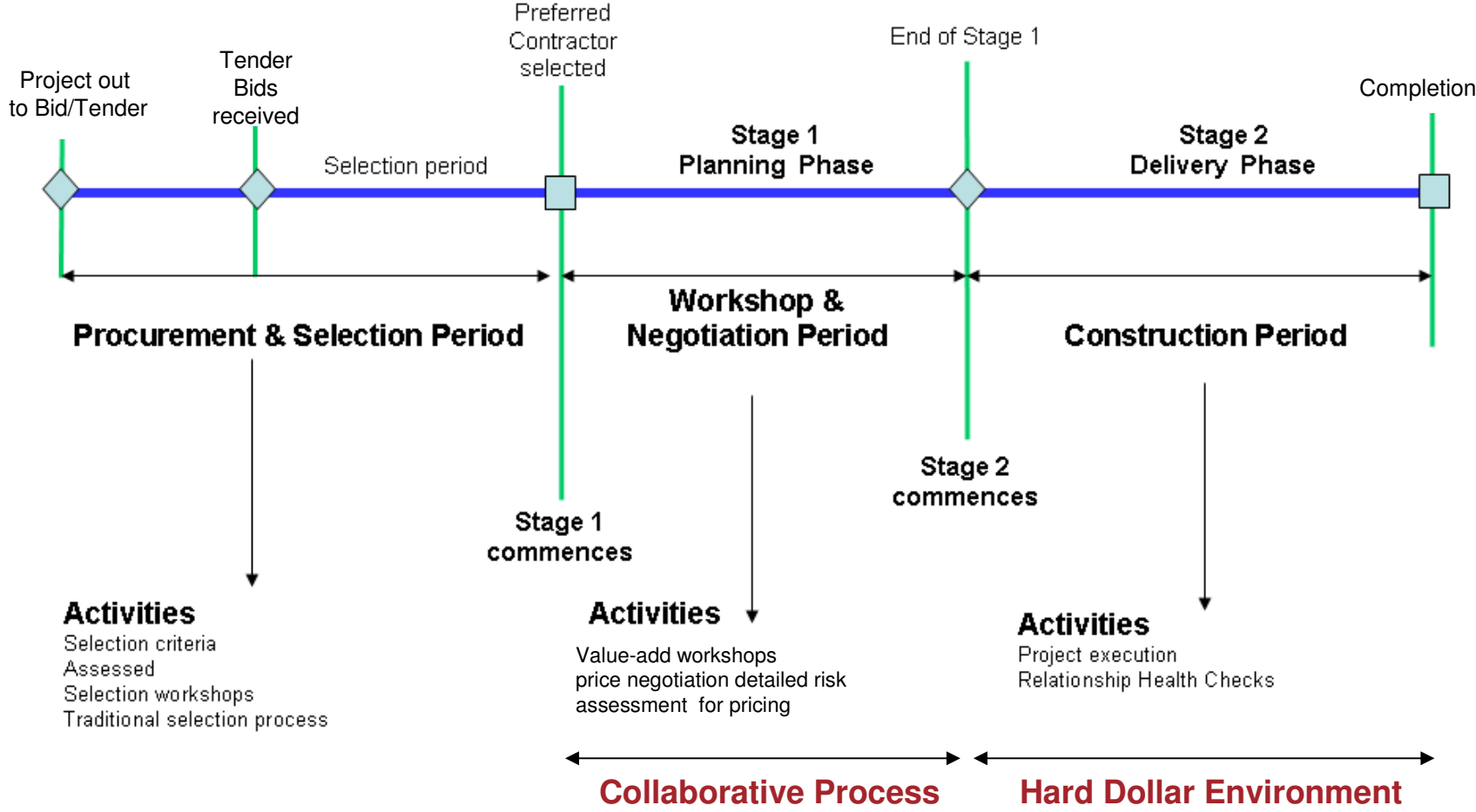
## What is ECI?

- An accurate name
- Two staged approach
- Covers a spectrum
- Relationship based
- Not a new concept:
  - alliancing
  - managing contractor



# Refresher

## What is ECI? (cont)



# Refresher

## Why use ECI?

	<b>Competitive Alliance</b>	<b>Early Contractor Involvement</b>	<b>Traditional</b>
Stage 1: Design Development	Risk Embrace	Risk Embrace	Risk Transfer
Stage 2: Detail Design & Construction	Risk Embrace	Risk Transfer	Risk Transfer

**Risk Embrace:** If there is a need for joint ownership of risk and decision making, significant stakeholder interaction, scope uncertainty, functionality and construction interface issues.

**Risk Transfer:** If there is little need for joint ownership of risk and decision making, limited stakeholder interaction, the scope and functionality are well defined and risks can be quantified.





# Refresher

## How does it work? Pre-tender

- Owner prepares tender brief:
  - input from consultants
  - level of information will vary
- Short tender period



# Refresher

## How does it work? Tender

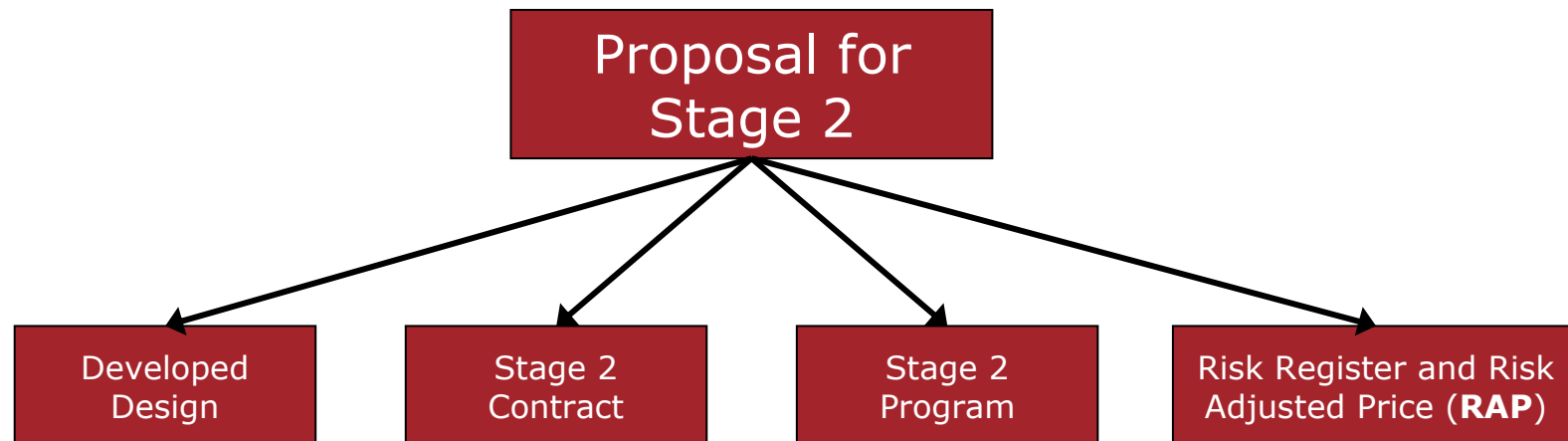
- Tender responses include:
  - rates for personnel/plant
  - indicative lump sums
  - benchmark projects
  - key personnel
  - understanding of key issues
- Interview process



# Refresher

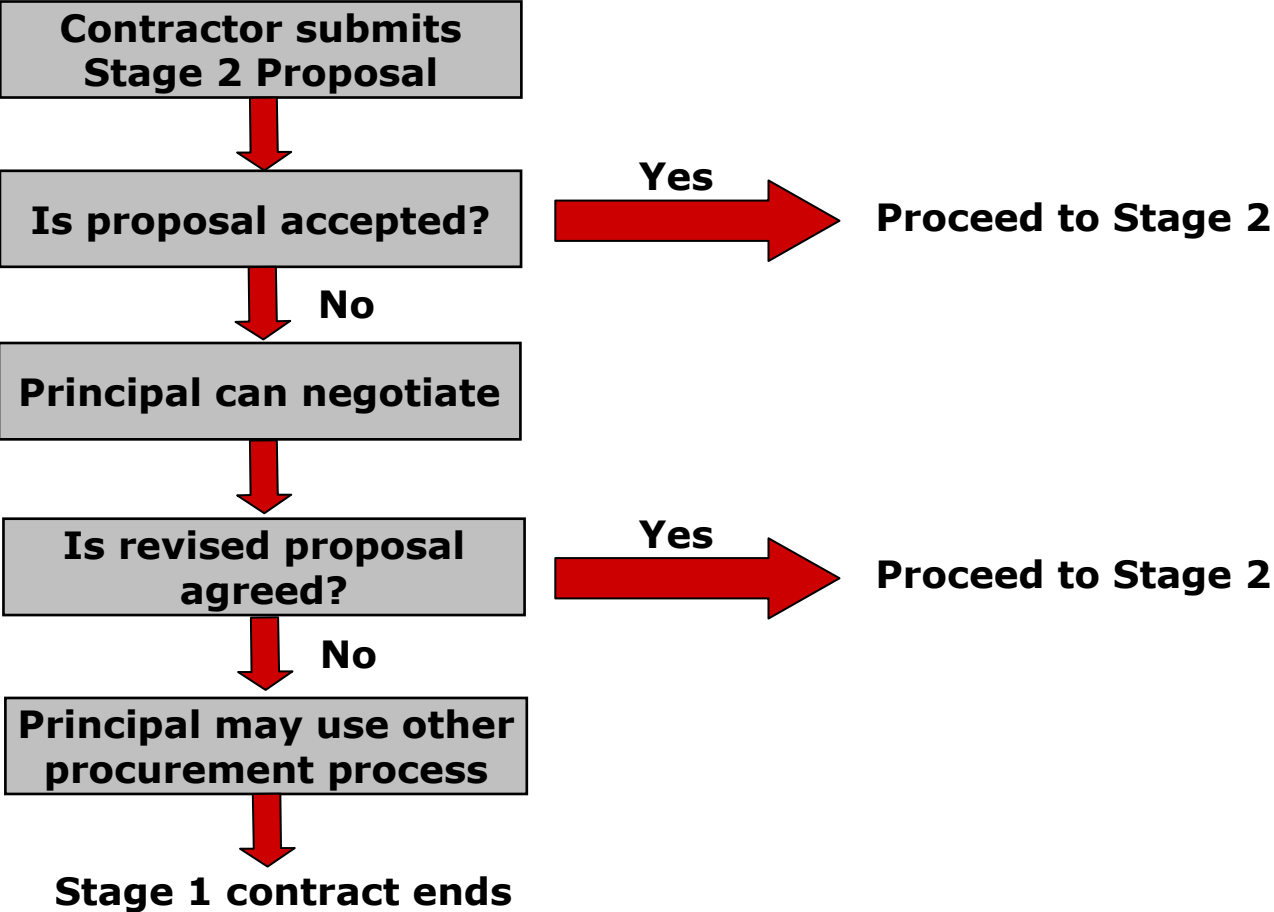
## How does it work? Stage 1

- Similar to interim alliance agreement
- Stage 1 Contract sets structure for interactive process to develop proposal for Stage 2
- Usually paid on reimbursable basis (perhaps capped)



# Refresher

## How does it work? Stage 2 proposal



# Refresher

## How does it work? Stage 2

- Completion of detailed design
- Construction of project
- Payment terms:
  - reimbursable with gainshare / painshare
  - lump sum
  - schedule of rates
  - incentive schemes



# Refresher Comparison

	Traditional D&C	2 Stage ECI	
		D&C	Alliance
<b>Tender Basis</b>	Competitive	Benchmarked	Benchmarked
<b>Tender documents</b>	High	Low	Low
<b>Risk</b>	Allocated	Negotiated and allocated	Shared (no blame)
<b>Final cost</b>	Certain (subject to claims)	More certain (subject to claims)	Targets
<b>Client resourcing (Stage 1)</b>	Low	High	High
<b>Client resourcing (Stage 2)</b>	Low	Low	High
<b>Client design input</b>	Limited	Varies	High
<b>Design innovation</b>	Limited	Varies	High



# Refresher

## ECI – the players

	Pre-Tender	Tender	Stage 1	Stage 2
<b>Owner</b>	√	√	√	√
<b>Owner’s consultants</b>	√	√	maybe	maybe
<b>Probity Auditor</b>		√	√	maybe
<b>Contractor</b>		√	√	√
<b>Contractor’s consultants</b>		√	√	√
<b>Relationship facilitator</b>		√	√	√
<b>Independent Estimator</b>			√	maybe
<b>Financial Auditor</b>			√	maybe
<b>Project Manager</b>			√	√
<b>Dispute Resolution Teams</b>			√	√



# Refresher

## The benefits

- Reduced pre-tender costs
- Shortened delivery times
- Team approach
- Innovation
- Integration of construction methods
- Sustainability
- Early procurement
- Fewer variations





# Refresher

## The pitfalls

- Senior resources
- Too early?
- Too many cooks?
- Higher prices?
- Uncertainty?



# Session 1 – Pre-Tender / Tender Phase

- When to use ECI
- One or two agreements?
- Single or double ECI?
- What sort of Stage 2 contract?
- Satisfying probity



# Session 1 – Pre-Tender / Tender Phase

## When to use an ECI contract

- Generally, consider:
  - type and size of project
  - type of Principal / expertise available
  - project objectives
  - the time available
  - the inherent risks of the project
- Mould contract to fit the needs of the project (not vice versa)
- Getting the structure right won't guarantee success, but it will help avoid disputes and time or cost blow-outs



# Session 1 – Pre-Tender / Tender Phase

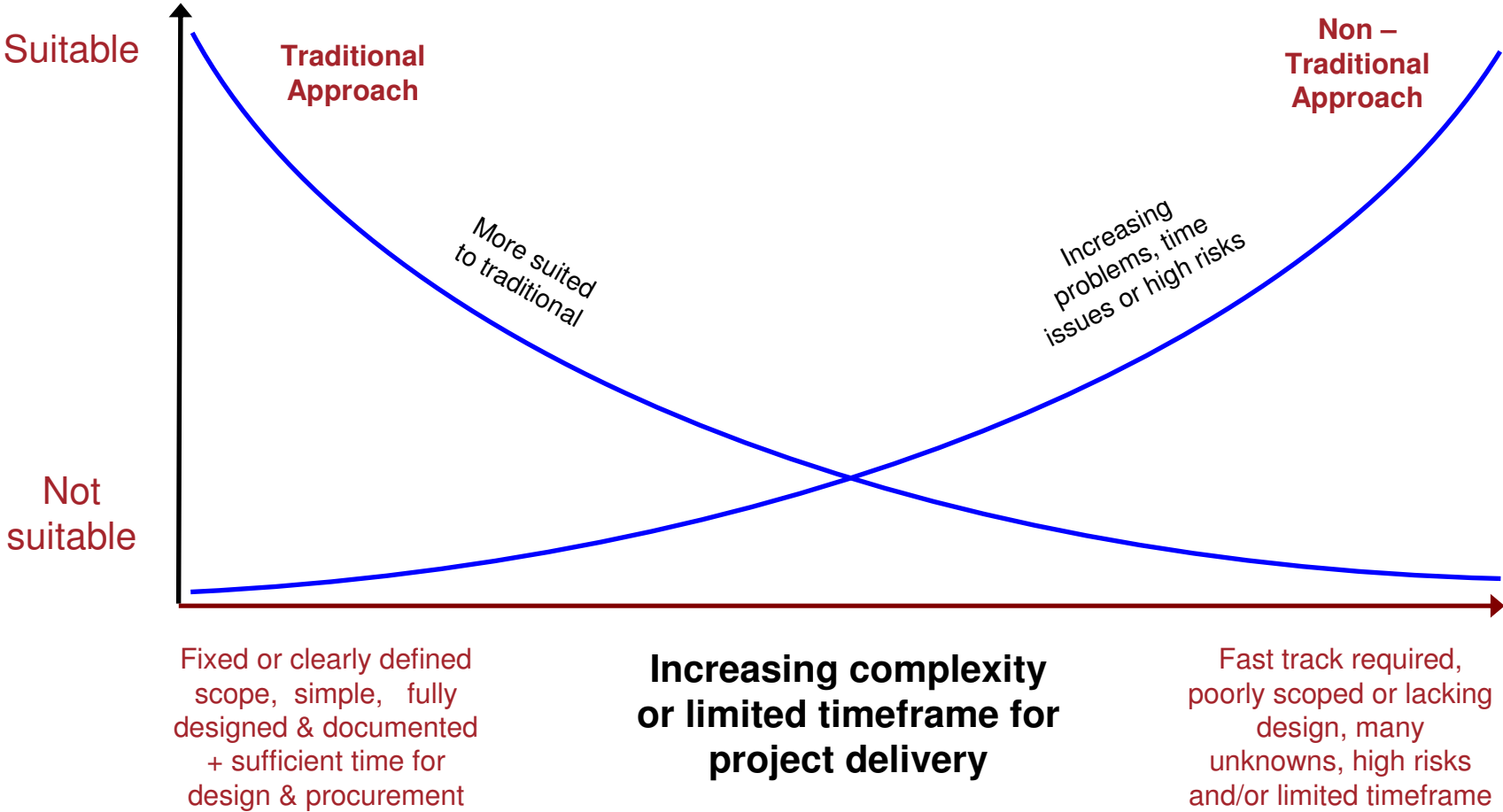
## When to use an ECI contract (cont)

- Particularly useful where:
  - need to fast-track the project
  - design is complex
  - many unknowns
  - significant risks exist in relation to the project



# Session 1 – Pre-Tender / Tender Phase

## When to use an ECI contract (cont)



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## Session 1 – Pre-Tender / Tender Phase

### One or two agreements?

- Should Stage 1 and Stage 2 contracts be integrated into a single agreement?
- No, in most cases where:
  - a competitive Stage 1 process is used
  - Stage 2 contract is not 'fixed'
  - need to commence process quickly



# Session 1 – Pre-Tender / Tender Phase

## Which Stage 2 contract?

- The Stage 2 contract can be almost any form
  - construct only (consider how design is procured)
  - design & construct
  - guaranteed maximum price (GMP)
  - alliance



# Session 1 – Pre-Tender / Tender Phase

## Tendering process and satisfying probity

- Maximising competition
  - payment for Stage 1 and Stage 2
    - productivity rates
    - benchmarking
    - open book / independent estimator
  - financial auditor
  - probity auditor





# Workshop Example 1



## **Session 2 – Stage 1**

### **Client considerations – important legal issues**

- Value for money
- Probity
- Maintaining flexibility in Stage 1 process
- Other contract issues



# Session 2 – Stage 1

## Client considerations – important legal issues

### Value for Money

- Most government agencies:
  - must use their best endeavours to ensure competitive local industry is provided with a 'full, fair and reasonable opportunity' to supply
  - use a wide definition of value for money, which includes consideration of advancing government priorities (eg more jobs, work for local industry and valuing the environment)
- Arguably introduces ambiguity - what exactly is value?



## Session 2 – Stage 1

### Client considerations – important legal issues

#### Probity

- According to IPA, a Probity Officer:
  - is to ensure fair treatment of all bidders and demonstrate that value is being delivered
  - is to retain perspective and focus on achieving a fair outcome rather than stifling competitive commercial processes
- Whilst focusing on achieving a fair outcome, it is also important that processes used to do this do not inhibit the outcome altogether



## **Session 2 – Stage 1**

### **Client considerations – important legal issues**

#### Maintaining flexibility in Stage 1 process

- The Stage 1 process should be flexible, and provide absolute discretion to Principal at the end of the process as to whether to proceed to Stage 2
- Need to be careful from a legal perspective



# Session 2 – Stage 1

## Client considerations – important legal issues

### Other contract issues to consider

- Ownership of intellectual property
- Liability of contractor if Stage 2 proposal is not successful
- Cap on fees for Stage 1 process
- Maintaining continuity and key personnel into Stage 2



## Session 2 – Stage 1

### Client considerations – Stage 2 contract price

- How this is achieved will depend on whether a single or double ECI is used
- Single ECI will use 'benchmarking' with a Principal appointed quantity surveyor
- Double ECI will rely upon competitive tension between each ECI team



## Session 2 – Stage 1

### Client considerations – reducing ‘contingency’

- Single or double ECI process can allow Principal to reduce ‘contingency fees’ by:
  - Contractors obtaining better understanding of the project
  - negotiation of risks / contingencies
  - Principal ‘buying back’ risk
  - setting up ‘risk pools’ in Stage 2 contract





## Session 2 – Stage 1

### Client considerations – negotiation

- Negotiation is usually required to:
  - confirm or to obtain better value for money
  - achieve a full understanding between the parties
  - establish or refine the statement of requirements and/or the performance regime
  - clarify issues or objections to contract provisions
  - explore any complex or one-off issues



## Session 2 – Stage 1

### Client considerations – negotiation (cont)

- Variety of negotiating styles
- There is no one right approach
- Approach used will depend on:
  - the resources available
  - the skills and experience of the personnel involved
  - what issues are to be negotiated
  - the timeframe involved



## Session 2 – Stage 1

### Client considerations – negotiation (cont)

- Understand which risks are most important:
  - risk assessment process
  - who can best control the risk?
- Know the law – if the contract is silent, who bears the risk?
- Know market practice – who normally bears the risk?
- Can the risk be mitigated outside the contract?
- Importance of preparation and strategy



## Session 2 – Stage 1

### Client considerations – negotiation (cont)

#### Tips and traps

- Don't start without knowing what is to be negotiated
- Deal with 'non-negotiable' issues up front
- Try to have a viable alternative to what is being offered
- Try and have time on your side
- Not everything needs to be negotiated and included in the contract
- Be careful about what you say (or don't say) in negotiations



## Session 2 – Stage 1

### Contractor considerations

- Design and documentation
  - Developed interactively with Principal / designers
  - Must be sufficiently developed to price Stage 2 as a lump sum with 'defendable' contingency
  - Use risk documentation to detail contingencies



## Session 2 – Stage 1

### Contractor considerations (cont)

- Identify contractual and project risks early using a risk register that:
  - identifies all likely and possible material risks
  - estimates the maximum financial impact if the risk occurs
  - estimates the probability of each identified risk occurring
  - includes a detailed 'management strategy' to manage each identified risk
  - estimates the cost to implement each management strategy, and to the extent that there is a separate cost contingency included price for the management strategy, what contingency has been provided



## Session 2 – Stage 1

### Contractor considerations (cont)

- How to deal with risk and contingency
  - Risk register (and a risk apportionment management plan) should be used as the basis for negotiating risk and contingency
  - In a competitive environment, care must be used not to 'double up' contingency at different levels of price make-up



## Session 2 – Stage 1

### Contractor considerations (cont)

- Developing a realistic schedule and budget
  - Schedule and budget are interrelated
  - Monte Carlo analysis is commonly used to evaluate acceptable probability positions (ie P50 vs P90)
  - The Principal must understand what realistic (and acceptable) risk positions can be assumed by the Contractor





# Workshop Example 2



## Session 3 – Stage 2

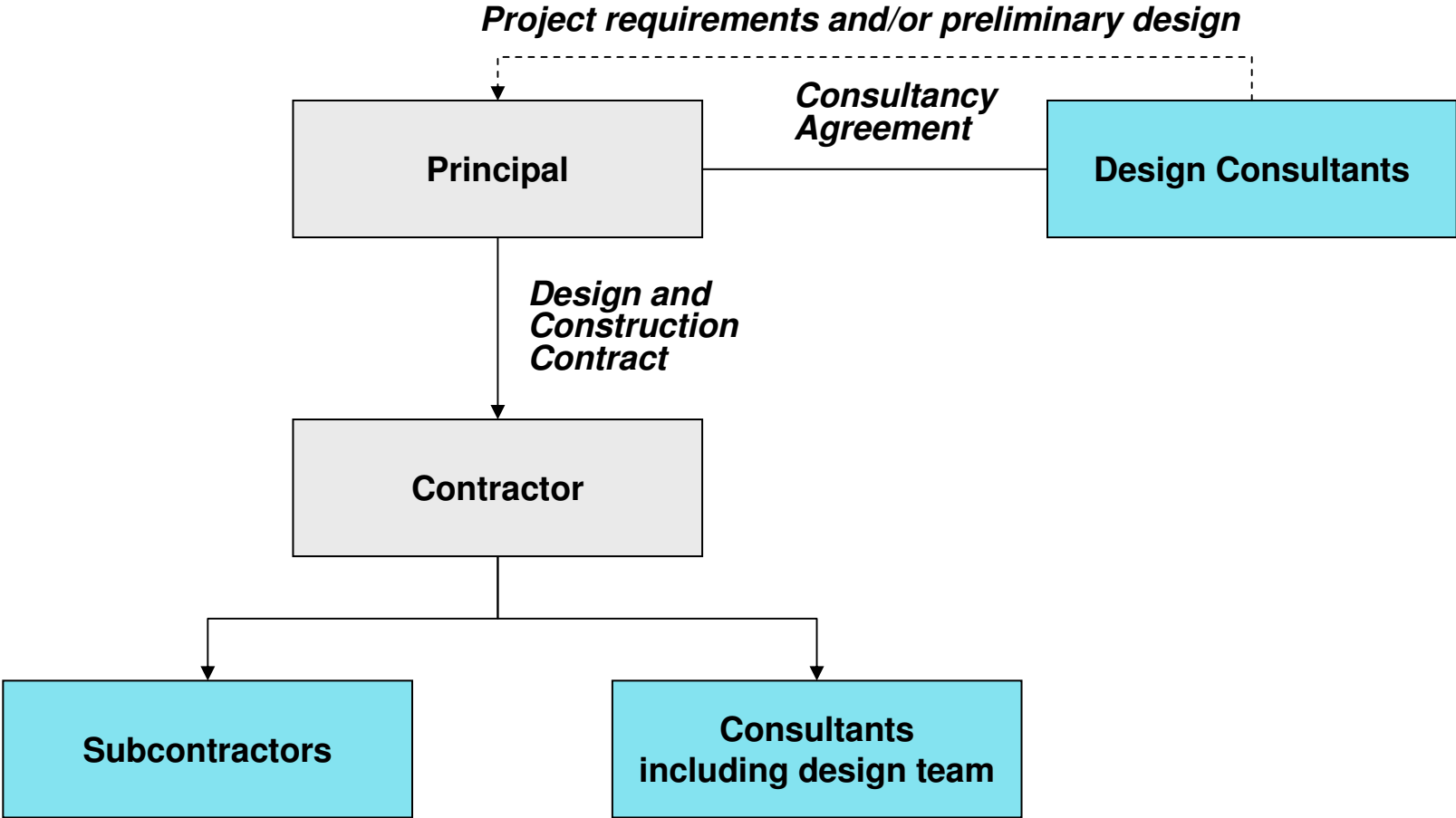
### Client considerations

- Important legal issues to consider
    - relevant legal issues will depend on what type of Stage 2 contract is used
      - D&C
      - GMP
      - Alliance
- (also perhaps construct only)



# Session 3 – Stage 2

## Client considerations – D&C



## Session 3 – Stage 2

### Client considerations – D&C (cont)

- Design risks assumed by the Contractor (warranties, cost, time, co-ordination of design and construct)
- Contractor undertakes to design and construct the project to meet the requirements of the Principal's design brief
- Design and construction phases can overlap



## Session 3 – Stage 2

### Client considerations – D&C (cont)

- Some issues:
  - Principal's design brief
  - Principal's design input: how does this impact on warranties?



## Session 3 – Stage 2

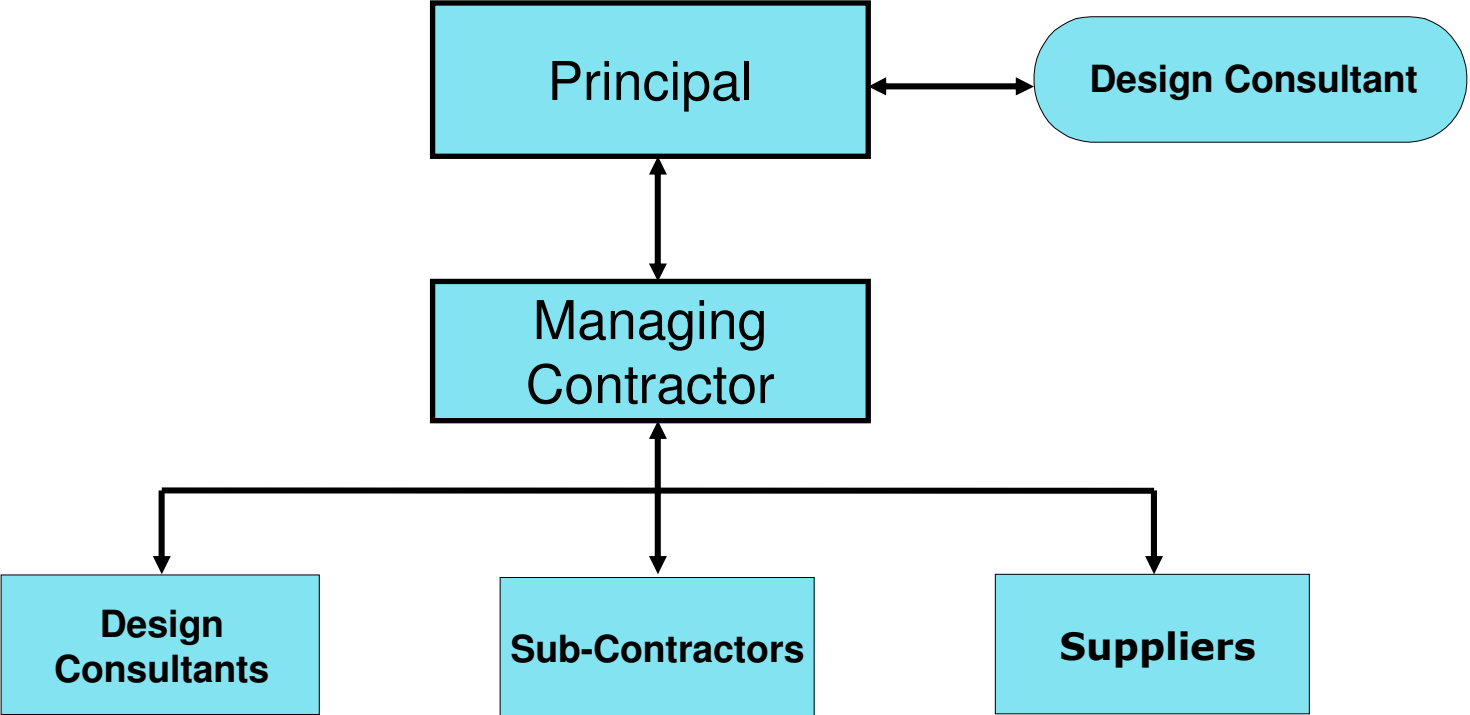
### Client considerations – D&C varied

- Risk pooling – can use for any risk:
  - latent conditions
  - compliance with statutory requirements
  - changes in scope
  - cultural heritage discoveries
  - native title
  - examination and testing
  - delay and disruption costs
  - rise and fall



# Session 3 – Stage 2

## Client considerations – GMP



## Session 3 – Stage 2

### Client considerations – GMP (cont)

- Contractor guarantees that the work will be performed for no more than GMP (subject to variations / delay costs / latent conditions)
- Contract sum = actual costs of trade contractors plus margin
- If costs less, parties share savings
- If costs more, Contractor liable for overrun
- Scope for tension between the parties
- Disputes arise over variations to scope of work and delays





## **Session 3 – Stage 2**

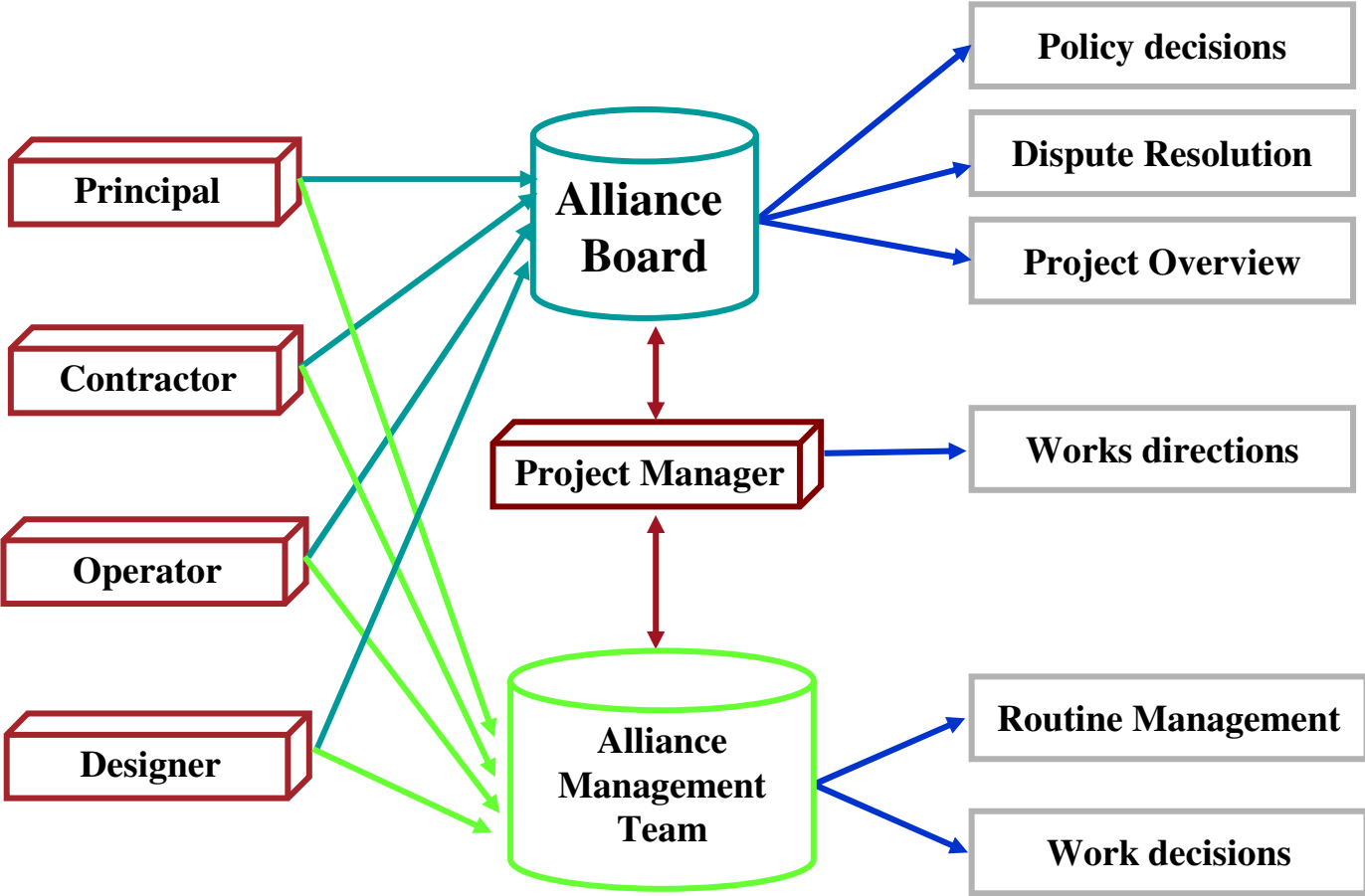
### **Client considerations – GMP (cont)**

- Principal needs to keep overview of tendering
- Gives the Principal a share of savings associated with design development and contract implementation



# Session 3 – Stage 2

## Client considerations – Alliance



## Session 3 – Stage 2

### Client considerations – Alliance (cont)

'Pure' alliance concepts

- Non-adversarial
- Best-for-project focus - joint responsibility for achievement of project goals
- Sharing of risks - joint assumption of risk by all participants (subject to loss of profit and corporate overhead)
- No-blame culture (the 'leap of faith') - parties work together to fix problems as they arise rather than apportioning blame
- Objective is 'win-win' or 'lose-lose'



## Session 3 – Stage 2

### Client considerations – Alliance (cont)

- Usual features:
  - Simple agreements in plain language
  - Not prescriptive or comprehensive
  - Owner surrenders 'control' to the alliance
  - Little or no risk allocation
  - Strong commitment to good faith, transparency and 'best for project' decisions



## Session 3 – Stage 2

### Client considerations – Alliance (cont)

- Risk:
  - Joint acceptance of project risks by all parties
  - Cap on risk sharing undertaken by non-owner parties
  - Non-owner parties share in some risks which are usually borne by the owner and in each other's risks



## Session 3 – Stage 2

### Client considerations

- How can you maximise relational contracting on a hard dollar contract?
  - develop strong relationships during Stage 1
  - use incentivised payment mechanisms for Stage 2 to strengthen the common goals in the project
  - development of KPA's and KPI's during Stage 1
  - include an alternative dispute regime, such as a disputes review board



## Session 3 – Stage 2

### Client considerations (cont)

- Optimising a governance framework for Stage 2
  - use 'Project Leadership Team' and 'Project Management Team' across both Stage 1 and Stage 2 contracts
  - genuine commitment needed by senior executives of both parties
  - need to establish relationship early and meet regularly
  - use PLT and PMT to undertake meaningful roles in each contract



## Session 3 – Stage 2

### Client considerations (cont)

- For D&C or GMP Stage 2 contracts:
  - Contractor should take full responsibility for design produced during Stage 1
  - usually about 25%-35% design to be completed
  - essential to provide sufficient resources to Stage 1 to maximise benefits
  - Stage 2 contract still requires usual administration





# Workshop Example 3

