



NZ TRANSPORT AGENCY  
WAKA KOTAHI

# Contract Awareness

## The NZTA Perspective

Colin Mackay

# Procurement Model vs Contract Form

- NZTA uses a number of supplier selection (procurement) models - with differing focus on price
- Thereafter it is the contract form (delivery model) that influences the behaviours, performance and relationship
- NZTA uses a number of Contract Forms
- Selecting the correct Contract form is critical to the outcomes
- The focus of this presentation is on Contract Forms rather than supplier models.

# But Ahead of the Contract Form is the Relationship

- NZTA believes in strong supplier relationships
- It commits significant time and cost to establishing and maintaining these
- They are important if we are to have a sustainable supplier market
- NZ is a small country with a limited supplier market and must be able to work together.

# What we want from the supplier relationship

- Accountability but fairness
- Collaboration and cooperation
- Buy into our values eg good customer care
- Commitment to achieving best whole of life outcomes
- Value for money solutions and innovation
- Early cost certainty and no surprises
- Joint responsibility for building our credibility
- Shared risk with risk allocated to the best party able to manage it.

# How we build strong relationships

- Regular national liaison industry groups (ACENZ, NZCF, RNZ – separately and collectively through Industry Liaison Group)
- Regular regional meetings with individual suppliers
- National relationship managers for all significant suppliers
- Industry representation on business improvement projects (eg Headway)



# Critical Relationship Values

- NZTA treat Consultants fairly
- NZTA and its supervising consultant (the Engineer) treat contractors fairly – even if it costs more
- Suppliers must be able to win work at fair (realistic) prices
- Our supplier market must be sustainable ie Consultants and Contractors must be able to make a fair profit
- Suppliers must accept accountability for their performance.

# The general conditions of contract

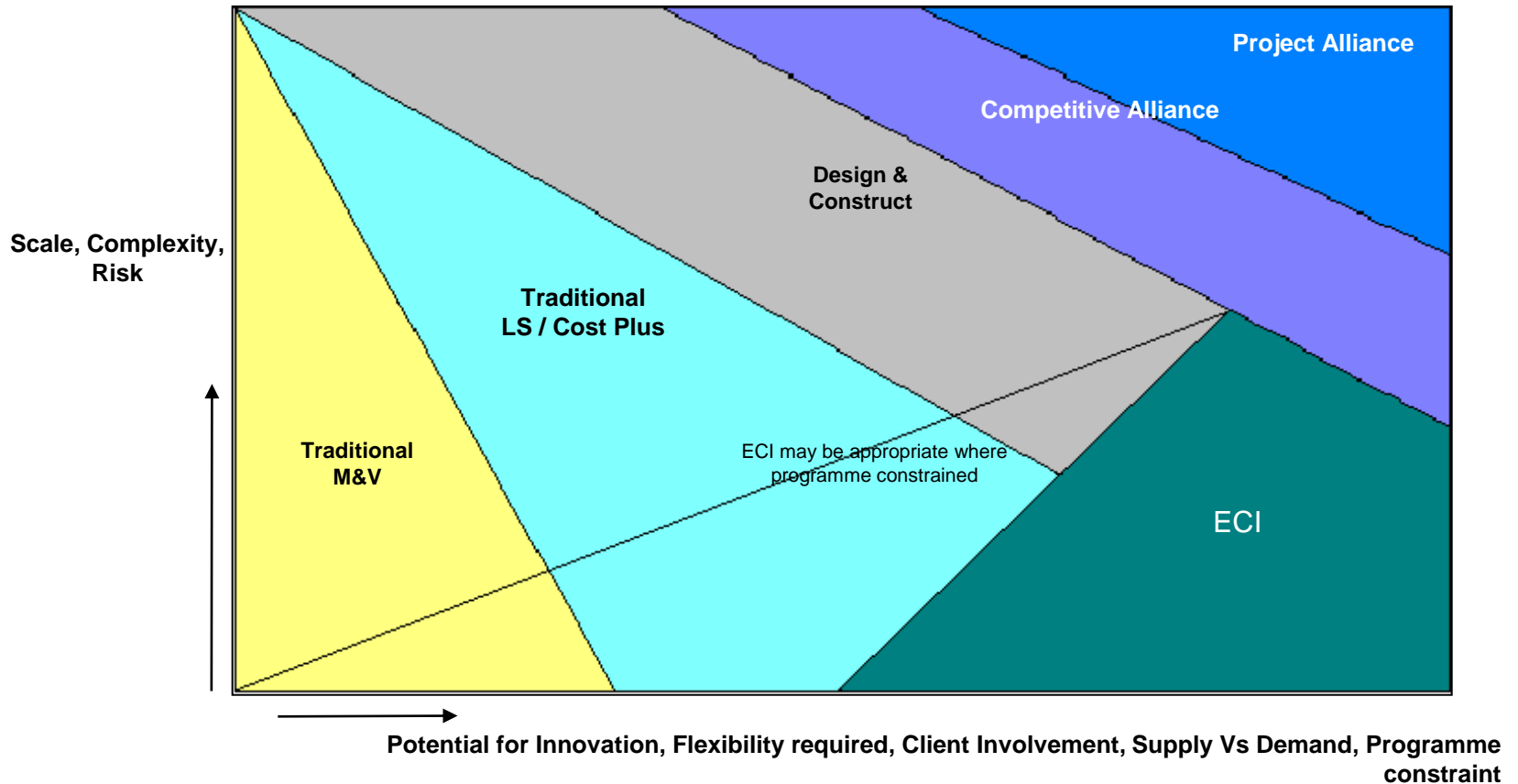
- NZS 3910 – sometimes said to not encourage collaboration when compared with NEC for example
- NZTA are a signatory to NZS 3910 and continue to support it
- NZTA believes that with strong relationships and values, NZS 3910 does deliver good outcomes through strong collaboration.

# Value for Money vs Lowest Cost

- NZTA wants to achieve whole of life value for money solutions
- Sometimes this can be obtained using lowest price tendering but generally this will not be the case
- Value for money outcomes are influenced by the delivery model (contract form) selected (Traditional, D&C, ECI, Alliances).



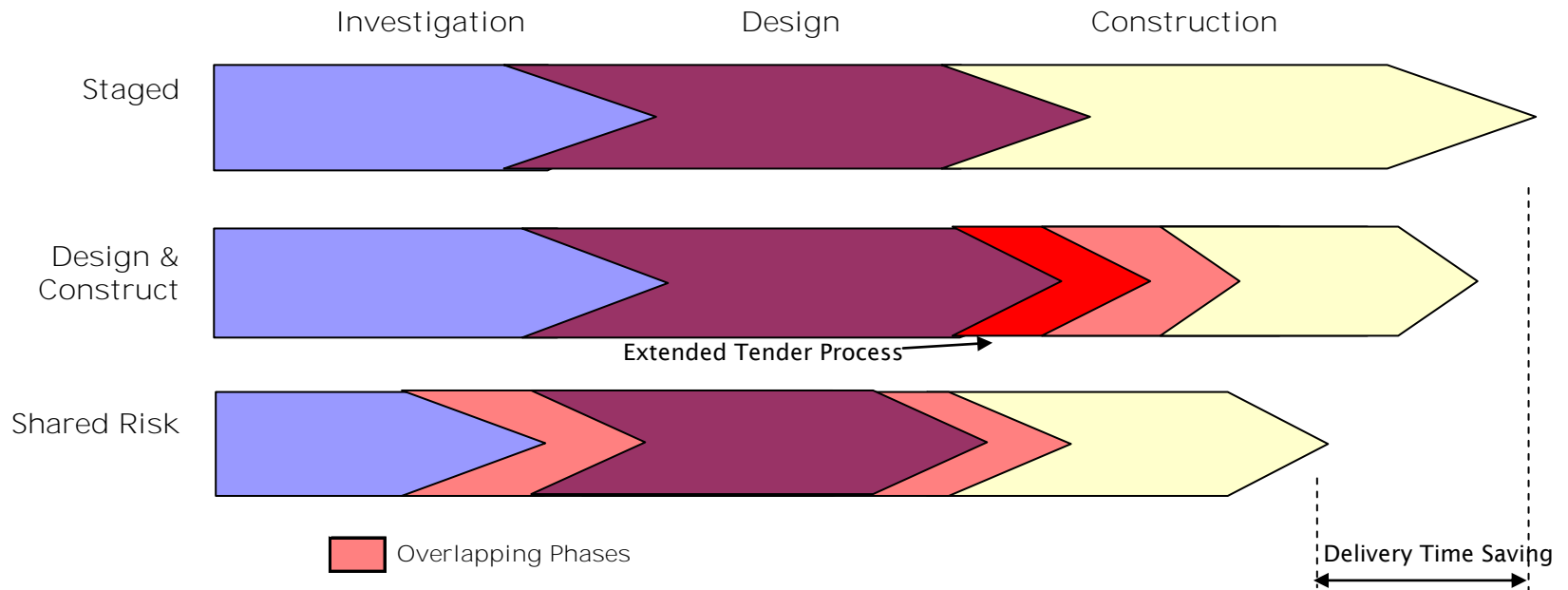
# Delivery Model - selection



# Delivery Model - selection

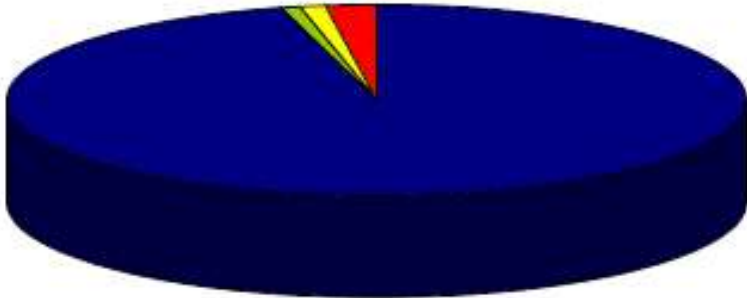
Delivery Model Selection Matrix Manukau Harbour Crossing													
			Model Rating (out of 5)										
<p>Scale ↑</p> <p>Complexity, Risk, Potential for innovation, Flexibility required, Client involvement, Suppliers market Programme constraint →</p>			Rating	Weighting	Comment	Traditional M&V	Traditional LS	Traditional Cost Plus	D&C	ECI (LS)	ECI (Prog)	Competitive Alliance	Project Alliance
1	Scale	Est-1100M	5%	Expected Project Estimate Over E250M	1	2	1	5	1	1	5	5	
					0.06	0.1	0.06	0.25	0.06	0.06	0.25	0.25	
2	Complexity / Scope for innovation	Moderate	5%	Complex interchanges and bridge duplication	3	2.5	3	3	3	3.6	3	3	
					0.15	0.125	0.15	0.15	0.15	0.18	0.15	0.15	
3	Programme constraint	Constrained	20%	Tight delivery timeframe - completion required by mid 2011	2	1	2	3	4	6	4	4	
					0.4	0.2	0.4	0.6	0.8	1.2	0.8	0.8	
4	Market conditions	Moderate	15%	Current tight market conditions. Likely to ease over the construction period	3	3	4	3	2.5	3	3	3	
					0.45	0.45	0.6	0.45	0.375	0.45	0.45	0.45	
5	Risk	High	10%	Some significant technical issues	1	3	3	4	4	4	5	5	
					0.1	0.3	0.3	0.4	0.4	0.4	0.5	0.5	
6	Stakeholders	Many	5%	Numerous stakeholder and consenting issues	2	2	3	2	4	4	5	5	
					0.1	0.1	0.15	0.1	0.2	0.2	0.25	0.25	
7	Client involvement, control, capability and availability	Moderate	5%	Some resource issues, but desire reasonable level of client involvement and skill development	3	3	3	3	3	2.5	3	3	
					0.15	0.15	0.15	0.15	0.15	0.125	0.15	0.15	
8	Focus on non-cost success	High	10%	Highly visible infrastructure. Major investment. Diverse group of end users	2	3	3	3	4	4	5	5	
					0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.5	
9	Tangible demonstration of value for money	High	15%	Significant political pressures on the demonstration of value for money	4	4	2	5	2	2	4	1	
					0.6	0.6	0.3	0.75	0.3	0.3	0.6	0.15	
10	Flexibility to deal with change	High	10%	Incomplete statutory processes likely to necessitate scheme re-scoping	3	1	5	1	6	5	4	5	
					0.3	0.1	0.5	0.1	0.5	0.5	0.4	0.5	
	OVERALL RATING TOTAL				2.60	2.41	2.76	3.25	3.31	3.60	4.05	3.70	
	OVERALL RANK		100%		7	8	6	5	4	3	1	2	

# Delivery Model - programme

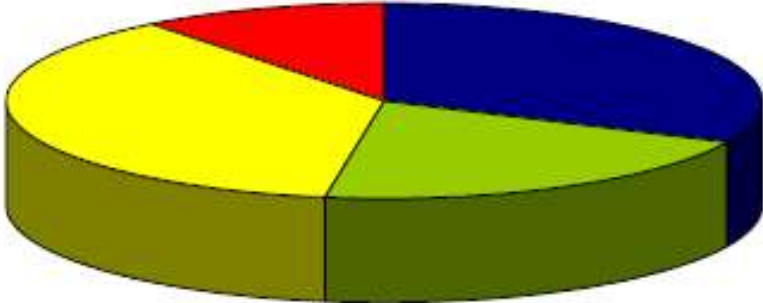


# Delivery Model Options - NZTA

Delivery Model (By Number)

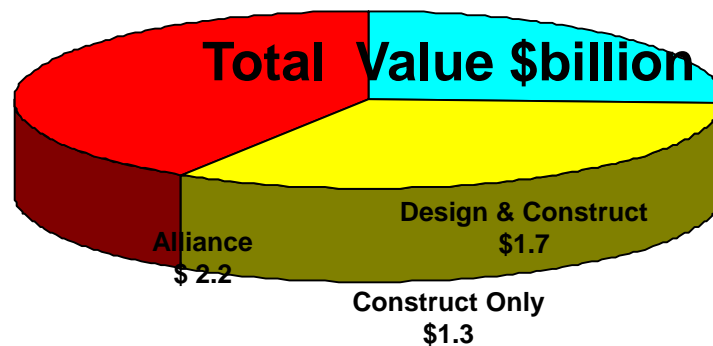
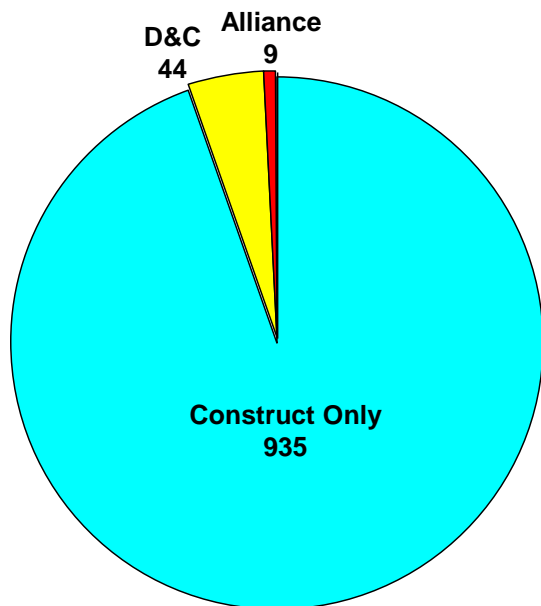


Delivery Model (By Value)



# Delivery Model Options – VicRoads Australia

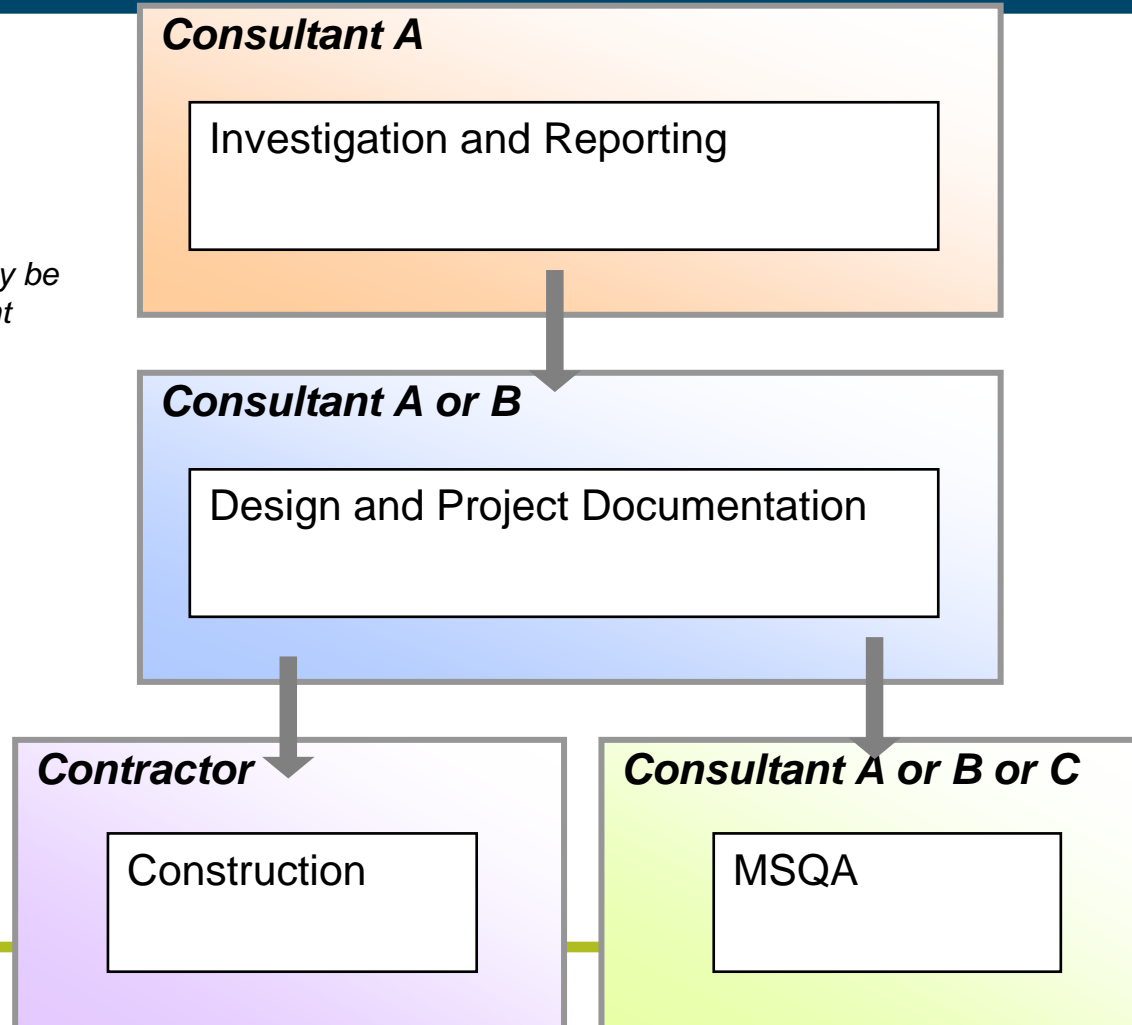
## No. Projects



Over the last 10 years

# Traditional Model

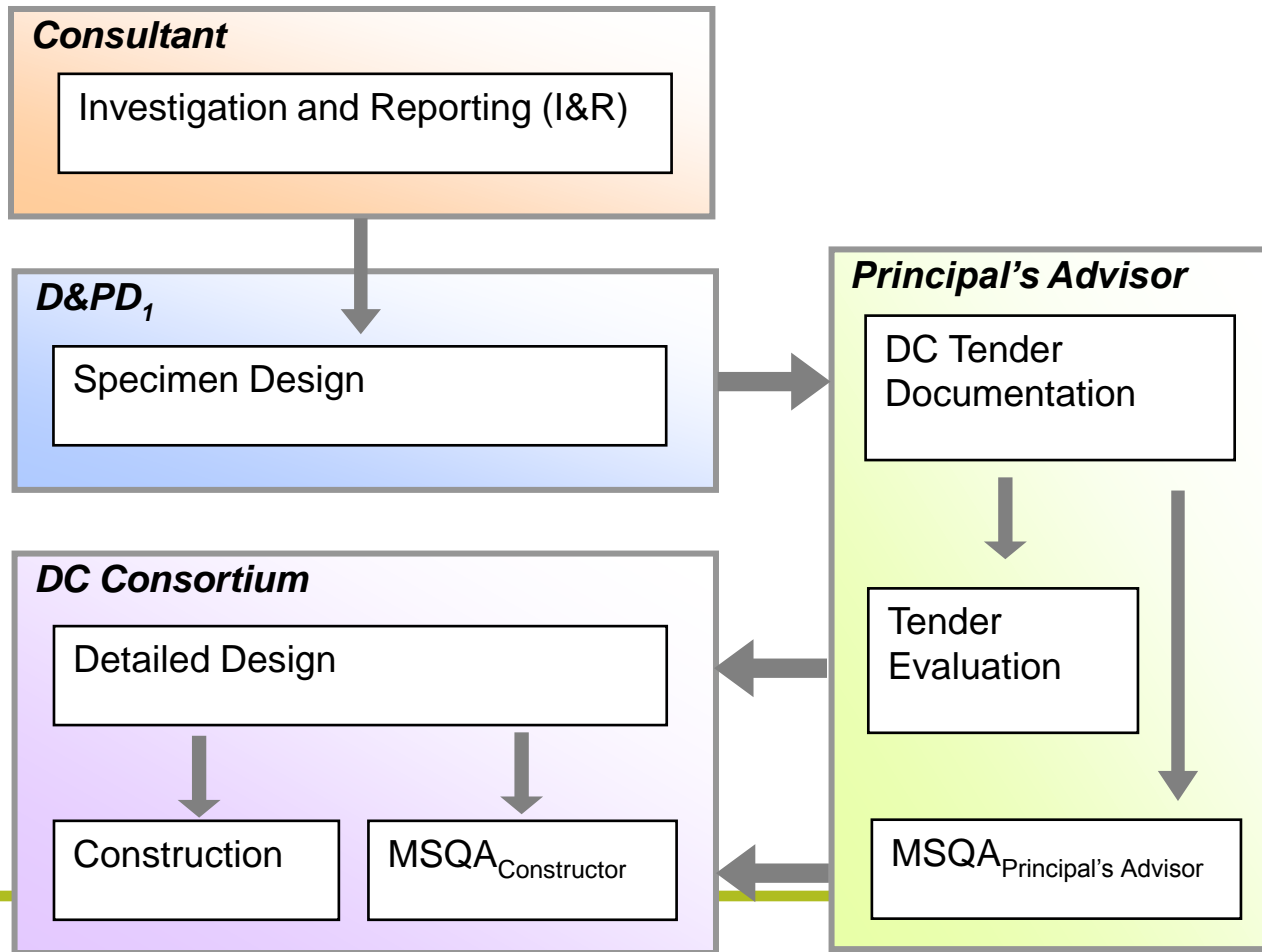
*Note: All phases may be delivered by different suppliers.*



# Traditional Model Characteristics

- strong competitive bidding
- simple tender process (inexpensive and short duration) encourages market entry
- few incentives to optimise design although alternatives are encouraged
- client retains risk despite limited ability to manage
- least cost and time certainty (LS vs M&V)
- co-ordination of participants costly to the owner
- increased probability of disputes (win : lose)
- limited constructor and designer collaboration

# Design and Construct Model





# Design and Construct Model – Characteristics

- Encourages more innovation and optimal design solutions
- Transfer of manageable risk to the Contractor (in particular Design Risk)
- Eliminates the traditionally adversarial relationship between designer and constructor
- Higher level of early cost certainty
- Onerous on sectors design and estimating resource
- Lengthy tender process and a high cost of participation
- Can result in an earlier construction start.

# Early Contractor Involvement Model

- Initial evaluation using “best team” approach (no price tension)
- Single investigate, design and construct consortia (ideally!)
- Negotiated three separable portion model
  - SP1 Investigation Phase
  - SP2 Specimen Design Phase
  - SP3 Detailed Design and Construction Phase
    - Lump sum price based on agreed and defined risk allocation
    - Can terminate at any phase (particularly if a price cannot be agreed).

# Early Contractor Involvement Model – Characteristics

- Transfer of manageable risk to the Contractor (in particular Design Risk)
- Eliminates the traditionally adversarial relationship between designer and constructor
- Higher level of early cost certainty
- Can result in an earlier construction start
- Easy initial tender process (no price component)
- Complex later price negotiations
- Potentially encourages over conservative design rather than optimised design
- Increased programme agility.

# Alliance Model

An Alliance is a contract model in which the owner(s), contractor(s) and consultant(s) work as an integrated team and their commercial interests are aligned with actual project outcomes

Initial evaluation using “best team” approach (pure alliance) or a combination of best team/price approach (competitive alliance).

# Alliance Model Characteristics

- Collective risk sharing (good risk management)
  - Strong ability to attract resources
  - Fast selection process (for pure alliances)
  - Not onerous on sector estimating and design resources (for pure alliances)
  - Provides flexibility to react to unforeseen conditions quickly
  - Open book environment
  - Provides incentives for value engineered solutions
  - Strong potential for innovation
  - Incentive to consider whole of life cost
  - Encourages collaborative behaviour over entire portfolio.
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# Discussions/Questions

