Innovative Project Delivery Models

Alliance Contracting for Highways in Australia

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What is Alliance?

- Alliancing is an approach aimed at creating mutually beneficial relationships between all parties involved so as to produce outstanding outcomes.

- The Owner and Non-Owner Partnership (NOP) objectives are aligned to:
  - Maximise performance
  - Proactively manage risk
  - Reduce cost
  - Achieve outstanding results with regards to the owner’s key project objectives

- Key – the commercial framework supports the alliance behaviors

- Alliance projects are different to partnerships, joint ventures, cost-plus contracts, performance incentives
Traditional Contract Models v. Alliance Risk Sharing Approach

Traditional Approach
- Risks Allocated to Individual Parties

Alliance Approach
- Collective Sharing of All Risks/Benefits

Creative Risk Benefits / Equitable and Pre-Agreed Sharing
Why Alliance Contracting?

- More and more projects are being delivered in an environment of uncertainty, where:
  - The scope of the project is unclear
  - Political pressures are impacting on the project
  - The community and other stakeholder interest must be met
  - Technological changes are impacting on the project – innovation is required
  - Unclear or changing government requirements must be met
  - Overly optimistic timeframes
  - Resources are constrained
Alliance Snapshot (the fundamentals)

- Quality based selection process – no price

Commercial Framework
- ‘Direct Cost’ paid (no risk)
- Corporate Overhead and Profit at Risk
- Painshare / Gainshare & Key Result Areas
- No dispute / no sue (new P.I.)

- Integrated owner / team structure (no barriers, full accountability)

- Integrated team derives target costs and scope (with independent check)

- ‘Best for Project’ (not for participant) decision making

- Hybrids: program, dual TOC, thin client, services, etc.
History - The Start in Australia

Marginal and complex projects – response to business case pressure

– North Sea
– East Spar
– Wandoo 3
– North Side Storage Tunnel
# AECOM Highway Alliances in Australia

<table>
<thead>
<tr>
<th>AECOM Alliance Projects</th>
<th>Value $ M</th>
<th>Start Dates</th>
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<td>Woodlawn Bioreactor Alliance (NSW)</td>
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<td>Lawrence Hargrave Drive Alliance (NSW)</td>
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<td>Roe Highway Stage 7 Alliance (WA)</td>
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<td>Windsor Road Alliance (NSW)</td>
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<td>Kempsey Bypass Alliance</td>
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Lawrence Hargrave Drive Alliance

- Budget
- No Scope
- No Approvals
- First RTA Alliance
- Outstanding KRAs – independent review
A Major Issue – Safety

- The highest risk of falling rocks and debris of any road in the State of New South Wales
- Road closed in mid-2003 – independent expert found the road posed an “intolerable risk to public safety”
An Elegant Solution

The Sea Cliff Bridge

- 1km roadway
- 665m bridge
- Two lanes
- 3.5m walkway
- USD40M cost
A Major Technical Challenge

- Very difficult road geometry
- Complex foundation conditions
- Difficult construction access
- 100-year design life in a marine environment
Lawrence Hargrave Drive - Celebrated by the Community

Re-opened by the Premier of New South Wales – 11/12/2005
Governance

Alliance Leadership Team
Owner, Designer, Constructor
(unanimous decisions, no recourse)

Alliance Manager
(selected ‘Best for Project’)

Alliance Management Team
(owner, designer, constructor)

Wider Project Team
(owner, designer, constructor)
Selection Processes & Owner Integration

Selection Options:

- Owner selects constructor & designer team (most common, sometimes 2 teams up to Target out-turn cost)
- Owner selects constructor, then both select designer
- Owner selects designer and then constructor
- Owner selects constructor(s) and designer(s) separately and puts together
Gainshare / Painshare

No CAP is placed the NOPs’ gainshare

Target Cost

Increasing underrun

NOPs’ share of GAIN

NOPs’ share of GAIN

Increasing overrun

A CAP is placed on the NOPs’ painshare

Owner share of GAIN

Owner share of GAIN

Owner share of Pain

Owner share of Pain
Key Result Area (KRAs) measured by key Performance Indicators (KPIs)

- The KRAs and KPIs add “personality” to the alliance
- The contractor’s and designer’s risk:reward outcomes are linked to aspects of the project they can influence
  - (eg. Safety, Quality, Environmental Performance, Team Culture)
- Targets are set so that the team needs to perform to an exceptional level to earn good rewards
- It is important that the KPIs are easy to understand and administer
Alliance Culture – Early Relationship Building

Culture

Symbols  Systems  Behaviours
Alliance Culture

Our Vision

The Alliance is committed to delivering value through a signature busway that invigorates the area and meets people’s needs now and into the future.

Our community of talented people are on board to deliver a quality outcome we’ll all be proud of through:

Passion
we love what we do

Innovation
we seek new and better ways

Respect
we respect each other and honour our commitments

Courage
we meet challenges head-on

Share knowledge
we communicate and share skills, experience and insights

Enjoy and grow
we have fun and grow through ‘the ride’

Eastern Busway
Buranda to Main Avenue
Summary Alliance Delivery ‘Value-Adds’

- Best suited to projects with **complex relationships** – e.g. multiple owners
- **Owner shares savings** when market improves
- Owner participants **continuously involved** in decision-making
- **Greater control** over long term maintenance / whole of life costs
- Can effectively address **stakeholder / community issues**
- Encourages **good design**
- Delivers **owner procurement priorities**
- Creates way to encourage **different thinking**
- Moves **beyond financial focus** only
- Emphasises **holistic approach** and **sustainability**
Inner Northern Busway Alliance – An Owner’s View

“When the project first started we (the team) identified three key areas where we wanted to excel and those areas were stakeholder relationships, community relationships and workmanship. I am pleased to say that my expectations in these areas have been significantly exceeded. The teams’ commitment, dedication, drive and passion to go beyond and deliver an outstanding result – always looking for ways to do things better was an experience that I had not witnessed to this extent before on a project. The end result on this project is something that I am extremely proud of and everyone on the project also deserves to be very proud. It is hard to keep the smile off my face when someone asks me about the project – it was just that good”

Shane Doran, Executive Director Major Projects, Queensland Transport (client)
Clear Expectations for Project Delivery

- Fundamentals
- Commercials
- Key Result Areas
- Monitoring / earned value

“Allotment = KIS²”

“Not everything that be counted, counts. And not everything that counts can be counted”

Albert Einstein
Thank You