









# **Industry Comment**

December 2011

# AAA: FOCUS ON STATE OF ALLIANCING AND 2011 HIGHLIGHTS

This paper was prepared by the Alliancing Association of Australasia Ltd (AAA), a not-for- profit, independent, cross-sector initiative connecting the infrastructure industry to create better projects. Visit www.alliancingassociation.org - Collaboration in the Business World

Collaborative contracting is alive and well, adapting to meet the changing policy landscape while continuing to tackle project complexity through relationship skill and enhanced productivity.

Public sector agency representatives are actively applying and developing the principles of collaborative contracting and shared their perspectives with local and overseas peers at the Alliancing Association of Australasia's (AAA's) 2011 national convention in Brisbane in October 2011. Alliancing practitioners related their experiences over the past twelve months in applying alliancing to meet the challenges of delivering difficult infrastructure projects, including in disaster-torn communities in Christchurch and Queensland.

Many are procuring projects through a mix of competitive and non-competitive selection processes in response to the new National Alliancing Contracting framework introduced this year by the Minister of Transport and Infrastructure, the Hon Anthony Albenese. While some felt that the new guidelines are impeding traditional alliances, particularly in relation to the challenge of sharing information and collaborating with stakeholders within probity frameworks, others acknowledged the change has boosted other forms of collaborative contracting.

Following are some of the themes that emerged during 2011 around collaborative contracting and learnings which can assist private infrastructure development, particularly in challenging areas such as power, mining and energy, where huge economic opportunity will be influenced by how human resource shortages, cost and time risks are addressed.

# **DISASTER RECOVERY THROUGH COLLABORATION**

# Stronger Christchurch

Rebuilding earthquake-torn Christchurch while tremors continue to shake the city's infrastructure and resolve has tested the mettle of one of the industry's most experienced alliancing practitioners. Since April 2011, Alchimie's Andrew Hutchinson has been part of the alliance formed to plan and deliver reconstruction of the shattered city for an estimated cost of NZ\$2 billion.

Mr Hutchinson spoke movingly at the AAA event in October 2011 about the challenge faced. Three major earthquake events struck Christchurch in September 2010, February and June 2011, along with more than 8,100 quakes or aftershocks, with more than 30 of these recording a factor of more than five on the Richter Scale. The events have left approximately 15,000 of the city's 300,000 residents unemployed and 180 people died in the February event, which also resulted in massive liquefaction and building destruction.









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"The veneer of civilisation is very thin," Mr Hutchinson said. "Large cavities in the earth swallowed cars and destroyed or distorted buildings and anything else on or near the surface. An entire 'red' zone of the city including 5,000 homes will not be rebuilt but redeveloped as public space, with a further 10,000 homes being evaluated for future earthquake risk."

Mr Hutchinson is part of the Stronger Christchurch Infrastructure Rebuild Team (SCIRT), which was set up through an interim alliance agreement in May 2011 that was formalised on 22 September 2011.

"An alliance was the only way to manage this unprecedented, long-term program, which involves a spend rate of more than \$30m per month for five years as we rebuild horizontal infrastructure including sewers, water supply, stormwater drainage, wastewater systems and parks. The vertical rebuild will start next year as well and will require a workforce of 20 – 30,000 people, so a whole of industry perspective is necessary," Mr Hutchinson said.

SCIRT is one of the largest and most complex civil engineering projects ever undertaken in New Zealand. As well as the five constructors, the alliance comprises Christchurch City Council, the Canterbury Earthquake Recovery Authority (CERA) and the New Zealand Transport Agency (NZTA) with the ultimate client being the people of Christchurch. Design consultancies are part of the integrated team and delivery teams including contractors are operating as sub-alliances.

Mr Hutchinson said the alliance objectives focus on raising the bar in safety across industry and providing the best long-term value for money possible, with a 'best for community' mindset. The alliance has strategic (economic) level performance measures, as well as effectiveness (tactical) and the more common efficiency (operational) measures. Work is allocated based on performance and the limb two (normal profit and corporate overheads) of the commercial model goes to the total gain/pain-share pool that will be determined by whole of programme performance.<sup>1</sup>

The alliance builds on the success experienced by NZTA elsewhere in New Zealand, where opportunities for innovation, reduced start-up times and on-time completion of projects have been realised. In 2010, NZTA won the Australasian Alliance Project award sponsored by the AAA for its Manukau Harbour Crossing (MHX) Alliance, one of a number of successful alliances delivering complex projects for the transport agency.

## Queensland transport network reconstruction program

Restoration of flood and cyclone damaged roads in Queensland is being delivered through a collaborative framework as part of the largest reconstruction effort in the state's history.

Queensland Department of Transport and Main Roads (TMR's) Chief Operations Officer Emma Thomas said the agency is tackling its largest program ever with \$4 - \$5 billion of reconstruction works required to fix 9,170km of damaged roads, 100 traffic signals systems, 30 bridges and culverts as well as other transport infrastructure such as ports and rail.

<sup>&</sup>lt;sup>1</sup> Limb one comprises project direct costs and project specific overheads. Alliance non-owners are guaranteed reimbursement of limb one independent of alliance performance. Limb two costs comprise normal profit and corporate overheads. Limb three comprises an agreed share of pain or gain contingent upon alliance performance against cost and non-cost pre-agreed targets. Both the limb two and limb three components are at risk.









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Emma Thomas is working with TMR's Trevor Los to focus on the road task, drawing on collaborative principles to help reconstruct as much of the damaged transport network as quickly as possible. Mr Los, who is the agency's Executive Director (Procurement), said TMR's collaborative approach with industry to scope, price and deliver critical works is driven by the desire to ensure private sector partners are incentivised to think, act and operate as an extension of the Main Roads office.

"Queensland's road network received more damage than any other state government asset during the flood and cyclone events of 2010-11 and this requires considerable expansion of regional program delivery resources," Mr Los said.

The agency's Transport Network Reconstruction Program (TNRP) was established based on collaborative arrangements designed to supplement TMR resources and ensure consultants take on TMR behaviours and responsibilities and be responsible for their performance.

Mr Los said industry capacity was stretched in regional areas and consultants and contractors in the South East Queensland corner, where industry capacity was available, were not familiar with roads delivery in regional Queensland.

"Our existing contract agreements were therefore not appropriate so we developed a new contract for design consultancies, the Collaborative Regional Program Agreement (CRPA). It draws heavily from alliance style contracts but replaces the construction function with procurement and contract administration," Mr Los.

"Collaborative commitments included in the agreement include avoiding disputation by immediately dealing with differences of opinion and conflicts and by being fair, reasonable and honest."

Mr Los said collaborative principles also underpin the works contract, the Performance Incentivised Cost Reimbursable contract (PICR), which enables delivery teams to effectively tackle reconstruction challenges despite low levels of design / quantity accuracy and the threat of wet weather.

"Some of these projects may require challenging work schedules including wet season works and may entail changes to design and quantities. The collaborative model ensures the contractor is not excessively loaded with risks beyond his control and provides us with flexibility to vary the works as design evolves," Mr Los said.

#### **ALLIANCING LEARNINGS**

#### Skills development

The importance of developing people in alliancing was a key topic this year, particularly as increasing price competition is seen to be diluting the effort put into developing people and teams. While it was agreed that yes, collaborative contracting is delivering effective solutions to difficult projects today in most cases, there are views that in some cases it could be better.









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Agency representatives agreed that while resource intensive, alliances have driven internal improvements inside client organisations and this experience has provided a rationale for giving increased consideration to skills development both within and outside alliances. A recent research study commissioned by the AAA echoes this sentiment. It found complex projects with a high degree of ambiguity and unknown risk require highly skilled project managers accustomed to finessing 'wicked' problems. Titled "Profiling Professional Excellence in Alliance Management", the independent study found that business as usual ("BAU") skills are not enough to navigate significant unknowns and that 'soft skills' are the defining difference as one moves up the alliance manager ladder.

The study recommended on-the-job training be combined with other tools such as mentoring, practice group involvement and training opportunities. Tools available from the AAA include training programs and a new *Collaborative Project Manager* web centre focusing specifically on the needs and development of alliance and collaborative delivery managers. Watch for it in February 2012.

# **Higher performance standards**

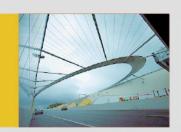
Alliancing has also reframed what constitutes business as usual and has created expectations of higher standards of quality. Technical, safety, stakeholder, environment and quality achievements have been driven by key result area incentives in these non-cost areas, while cost and time achievements are demonstrated consistently on good alliances.

For example, finalists in the 2011 AAA award program all finished on time and under budget, while achieving client objectives. This included Western Australia's Wellington Dam Alliance, initiated to upgrade aging but critical infrastructure. It developed a solution that cost significantly less than the lowest construct only price received through an initial competitive non-alliance tendering process almost 18 months before, yet raised the asset's safety levels beyond expectations. And in New South Wales, the Roads and Maritime Services' (formerly RTA) General Manager for project delivery Peter Letts said alliances have consistently achieved a higher grade of road surfacing quality, which is leading to a new "BAU" standard at the agency.

### Value for Money (doomed if you do well, doomed if you don't!)

Value for money perceptions can be influenced by how cost savings are handled and how non-cost outcomes are reported. A back-to-basics perspective is that value is framed by the client, based on the criteria in the business case and based on a cost that is agreed. This was supported by comment that if alliances beat the cost and establish beneficial outcomes, then that is value for money – "if we beat it by a long shot, then it should be seen as big value for money".

However it was acknowledged that treatment of windfall margins and profits can be difficult. For example, when a single Total Outturn Cost (TOC) does have a cost underrun within 5% of the TOC, then savings are generally accepted as good performance. If cost savings are more than that, then people start to question whether the alliance delivered real value and whether the TOC was "soft". Until that issue of perceptions and doubt is resolved, it was suggested that the competitive alliance selection process will likely continue to be perceived as the answer by central agencies. Other suggestions raised included the need for better benchmarking data and better initial cost estimates from agencies, resetting the TOC during delivery or capping the margin.









# **COMPETITIVE ALLIANCING: TOWARDS A NEW COLLABORATIVE "BAU"**

Overall positive views of competitive alliances are that they are increasing in number and acceptance by all sides. Some good outcomes are being reported by agencies, including very different designs being developed by contenders through the process. It was noted that non-owner participants have driven the intensity of the process to ensure solutions are cost-effective and appropriate to the benefits sought by agencies. One agency noted that, "We have seen very positive outcomes, competition seems to lead to better solutions, but also puts more pressure on the owner."

Pressure on the owner can include the need for clients to limit conflicting information internally and bring everyone inside the agency and its project stakeholders along for the journey – particularly where internal silos can block effective collaboration and innovation. It also means adequately resourcing competing teams with embedded individuals. This is particularly important to address concerns with the potential constraints that probity can impose on truly open and collaborative conversations important to building trust in bid teams and achieving relevant solutions. In one recent case, probity did not drive the process and the client had three people embedded across the teams, allowing true, frank conversations.

### **NEW OPPORTUNITIES**

## Healthy appreciation for collaboration

Uptake of collaborative arrangements in the health sector is growing in Western Australia. While they have different business drivers and cultures and a core business that is not in contracting, hospitals have taken heed of alliancing's 'no dispute' track record and the cost and non-cost benefits of relationship contracting. Western Australia's \$2b Fiona Stanley Hospital, the largest building infrastructure project ever undertaken in the state, is being delivered under a 'managing contractor' arrangement very similar to the Early Contractor Involvement (ECI) model. A guaranteed maximum price is established which provides cost certainty and cost savings during construction are incentivised. This model has been the basis for the Albany Regional Hospital redevelopment, the new \$1.17b children's hospital in Perth and the St John of God Health Care expansion of its Murdoch facility, where an ECI approach is being used to reduce the risk of disrupting service in an operational hospital.

#### Mining new horizons

The resource sector is facing huge opportunity and challenges including a skills shortage, which is driving new thinking in some sectors of the mining industry, including uptake of collaborative contracts. Up and coming, entrepreneurial iron ore miners in Western Australia are in the early stages of a program alliance and mobilisation of an ECI in response to the constraints presented by the mining boom. Their drivers are primarily to secure people, ensure timely infrastructure delivery and to provide greater certainty in the face of rising costs.

Western Australia pioneered collaborative contracting with the Wandoo Offshore Oil Platform Alliance in 1994 and these latest developments are again showing the way for others facing similar challenges. This includes Queensland's resources sector where the promise of a major boom in coal and coal seam gas is encouraging contractors to source skilled workers in readiness. Early engagement with contractors would certainly be a strategy to retain these resources and bring forward conversations to better define the solution and assess risks impacting cost-effective and timely delivery of first coal and first gas. Opportunities also exist for EPCM contract managers to adopt relationship contracting with their own suppliers for enhanced outcomes and this is a space the AAA looks forward to actively engaging in over the next 12 months. The upcoming AAA Western Australia Convention will explore these themes and more in June 2012.