



International Cost Engineering Council

3rd World Congress

ICEC Melbourne 2002, 14-18 April 2002

**Environmental & Economic Sustainability -
Cost Engineering Down Under**

Project Alliancing - Creating the Possibilities

John Gallagher, Phillips Fox Lawyers

Index

1.	Introduction.....	1
2.	When should I use a Project Alliance to deliver a project?.....	1
3.	Selecting Project Alliance Participants.....	3
4.	Principles and Features.....	4
5.	Risk - Transfer or Embrace.....	6
6.	The Commercial Framework	7
7.	The Target Out-turn Cost.....	9
8.	Outcomes.....	10
	Annexure 1 Creating Successful Collaboration - Select the Right Partner	
	Annexure 2 Additional reference and guidance materials.	
	Annexure 3 John Gallagher Curriculum Vitae	

“Project Alliancing - Creating the Possibilities”

1. Introduction

A Project Alliance, to describe it most simply, is a project/program ('project') delivery strategy in the same way that project management or design and construct contracting are a form of project delivery strategies. A Project Alliance goes beyond simply 'transferring' the greatest proportion of a project's risks for the lowest price.

However, a Project Alliance needs to be distinguished from other forms of relational or relationship contracting including partnering, strategic alliances, teaming, outsourcing or management contracts. To do so some commentators refer to “pure” Project Alliances.

A “pure” Project Alliance can be defined as:

“an integrated high performance team, sharing all project risks, selected on a best for project basis, incentivised to achieve outstanding performance in pre-aligned project objectives with uncompromising commitments to trust, collaboration, innovation and mutual support in order to achieve breakthrough results.”

The unique feature of a Project Alliance is the synergy created between the selection of the preferred participants, the core alliance principles, the commercial framework and the structure of the Project Alliance which drive the pursuit and delivery of outstanding results. In short:

- participants are selected on capability. Price is not part of the selection process;
- the participants intentionally seek alignment of sponsor's and contractor's objectives;
- all project risks are shared with all participants jointly responsible to deliver all aspects of the project;
- there is a single integrated high performance project team selected on a 'best for project' basis;
- there is no fault, no blame and no dispute amongst participants;
- all decisions are made unanimously; and
- a commercial framework is created that drives 'best for project' decisions that are consistent with, and create an environment of outstanding performance in, project objectives delivering outstanding rewards to all participants.

2. When should I use a Project Alliance to deliver a project?

The choice of any given procurement approach to deliver a project should only be made after a detailed and carefully considered risk analysis which considers all of the objectives, opportunities and risks involved in successfully delivering the project. Project Alliancing is best suited to those projects where the traditional 'risk transfer' strategy is not appropriate. In many projects outcomes can be enhanced, and the project optimised, by 'embracing'

project risk through collaborative and co-operative contracting against the traditional 'blind faith' transfer or shifting of risks to others.

Project Alliances have been used in Australia¹ to deliver a large number of projects and programs, in a diverse range of industries including:

- *Oil and Gas* - Wandoo B oil Platform, East Spar Project
- *Engineering* - BHP Hot Briquette Iron Plant
- *Transport* - Pacific Motorway Package #3, Port of Brisbane Motorway, Sydenham Rail Electrification Project,
- *Water* - Northside Storage Tunnel, Woodman Point Wastewater Treatment Plant, Awoonga Dam, Sydney Water Pump Station Upgrade Program
- *Construction* - Acton Peninsula Alliance - National Museum of Australia
- *Defence* - Project Djimindi, ANZAC Ship Alliance

Although it is not possible to list here all of the projects or 'types' of projects that may be suitable for Project Alliancing, Project Alliancing is suited to projects involving:

- elements of the 'unknown', particularly in terms of the technology, processes and methodologies to achieve defined objectives;
- a high degree of complexity, either in design, construction, technology or development, that cannot be satisfactorily or sufficiently scoped or specified at the commencement of the project;
- a project where radical or rapidly developing or expanding technology may influence time, cost or capability objectives;
- overtly optimistic, if not impossible, timeframes which require flexibility in innovation and approach as external influences, including economic, political or stakeholder considerations, dictate timeframes that do not permit the project to be sufficiently scoped or specified prior to the commencement of the project;
- a desire to efficiently engineer value by performing build ability, construct ability and operational studies into the very earliest possible stages of the definition, design, development or documentation. To this extent it is well recognised that up to 65% of the cost of the project is determined during the definition and initiation phases of a project where less than 5% of the project cost is expended;
- the necessity for innovation and step-change developments in design, technologies and construction methodologies to reduce the capital cost of a

¹ Project Alliancing is being utilised in New Zealand by Transit NZ to deliver the Grafton Gully to Central Motorway Junction project as part of their Full Delivery for Early Completion Program.

project to enable a product, commodity or service to be delivered at an economical cost, or simply, within budget, to enable a project to be viable;

- where stakeholder or external project interests or influences have the capacity, if left unattended, to broadly impact the project objectives, but where concentrated and focused in a co-operative team lead to breakthrough outcomes; and
- where the experience and expertise needed to deliver a project are spread either throughout a sponsor's or participant's organisations, or across the world, and there is a need to harness that expertise into one team throughout the project.

A Project Alliance will deliver the flexibility to allow conflicting objectives to be closely aligned in a commercial framework to produce optimal project outcomes.

3. Selecting Project Alliance Participants²

Many project sponsors will argue that they have developed strategies and contractual relationships which seek to align their, and their contractor's, objectives. Unfortunately, many of the "selection", "tender" or "expression" processes utilised by sponsors to identify participants for these strategies and contractual relationships restrict or constrain the sponsor in identifying and selecting the "best" or "best fit" team participants.

A successful Project Alliance relationship requires a combination of:

- clearly defined objectives;
- a well integrated team;
- well developed project management skills;
- a solid commercial framework; and
- an uncompromising commitment to the aligned alliance principles.

However, in our experience³ the most fundamental success factor is the selection of the right participants.

The aim of any Project Alliance selection process should be:

- the selection of the right alliance participants to give the combined team the greatest opportunity to meet and exceed the project objectives; and

² This section relies heavily on a paper prepared by Andrew Hutchison, Managing Associate, JMJ Associates (Alliance Facilitators on most of the major public sector Alliances in Australia), entitled "Creating Successful Collaboration - Select the Right Partner", a copy of which is attached as Annexure 1 to this paper. The selection process outlined in JMJ's paper has been endorsed by the Australian National Audit Office, in report No. 34 of 1999-2000, as "substantially complying" with the Commonwealth Government's Procurement Guidelines.

³ Both the author and JMJ Associates

- to create momentum in the project as a major step in building and nurturing a strong single culture and leadership team.

The selection process must be rigorous and valid. The principles of any selection process must include:

- rigorous evaluation of the proposed project teams and individuals to establish an aligned view amongst the project sponsor's selection team on the proponent which is the best team for the project;
- conducting contractual and commercial conversations consistent with building long term relationships and not 'business as usual negotiations';
- building momentum on the project during the selection process so that when the alliance agreement is agreed, the project team is excited about, and aligned on, the project objectives and can immediately start on delivering the project;
- satisfying the highest standards of probity and public scrutiny;
- arriving at a commercial outcome which satisfies and is regarded as a win for all parties and the best value for money; and
- maintaining competition throughout while not being restricted to a selection based upon the lowest price.

4. Principles and Features

Principles

The alliance participants, initially as part of the selection process, then finally at the risk/reward workshop, discuss, create and align upon the core alliance principles that will assist them to deliver the aligned project objectives. These principles will be daily applied, and reapplied, to evaluate and validate each decision taken by the alliance participants in delivering the project.

Whilst the core alliance principles are unique to each Alliance, there appears to be, from my experience, a consistent commitment to:

- equity - reward being commensurate with performance with no win/lose outcomes;
- best for project - no compromise in either decision making, or the alliance participant's dealings with each other;
- integration - one high performance team with one culture;
- open honest communication;
- collective responsibility and accountability for all project outcomes;
- trust, integrity and respect;

- continually striving for innovation to achieve breakthrough results through stretch targets; and
- mutual support in an environment of no fault - no blame with no dispute.

Features

It is the alignment on, and commitment to, these principles that influence and create the behaviours of the participants and their relationships with each other, to the project and its risks. In addition, they shape the features and structure of the Project Alliance and subsequently the Alliance Agreement.

The features that characterise a pure Project Alliance are:

- All project delivery and performance obligations are collective. The Alliance Participants collectively enjoy all of the benefits and burdens involved in all of the risks in delivering the project.
- There is a single fully integrated high performance team with each position in the team selected on a best for project basis regardless of individual corporate identity. The team is structured to incorporate:
 - Alliance Leadership Team ('ALT') to provide leadership and guidance and support to the alliance project management team. Each Alliance Participant has equal participation on the ALT through a senior representative who has little day to day involvement in the project regardless of their corporate identity or role.
 - The Alliance Management Team ('AMT'), led by the Project Manager, or Project Director to manage the day to day issues involved in delivering the project.
- Unanimous decision making - every decision of the ALT is unanimous. If one of the Alliance Participants cannot support a decision or solution, that decision or solution cannot be accepted by the ALT and another solution must be found.
- No fault, no blame, no dispute - the Alliance Agreement clearly incorporates the Alliance Participant's commitment to an environment of no fault, no blame and no dispute. The Alliance Agreement does not provide for any dispute resolution mechanism with all disputes or differences of opinion being unanimously aligned upon by the ALT.
- The commercial framework of direct costs, corporate overhead, normal profit and gainshare is consistent with and supports the alliance principles and is intentionally structured to incentives the Alliance Participants to pursue and achieve breakthrough results and prevent any possibility of a win/lose result.

Transparency and an audited open book approach to the processes of the Alliance, including all elements of the commercial structure.

5. Risk - Transfer or Embrace

The delivery of any project involves risk and uncertainty. At the definition stage of a project these risks and uncertainties are "owned", and must be managed by, the sponsor. The success of a project will be dictated by the success, or otherwise, of the management of these risks throughout the project.

In many projects, insufficient resources are devoted at the early stages of a project to first identify and then define the most appropriate mitigation or management of these risks to ensure the successful delivery of a project. Often a project sponsor will select a delivery method or contractual framework and then seek to fit a project's risk profile into that framework. Take this recent statement from a project sponsor as an example:

"The task is to review the approach to ensure that we have selected the most appropriate project delivery model (currently AS4300⁴ modified) and identify the most appropriate risk allocation issues to offer possible solutions."

Not only does this example blur the concepts of project delivery and contractual terms but the selection of both had been done before any risk identification or modelling had been carried out. It is only after a thorough analysis is carried out to identify the risks inherent in a project and how they can best be managed and mitigated should the selection of a preferred delivery model be undertaken.

Risk transfer

Traditionally, the strategy that has been adopted by many sponsors to "manage" project risk has been to transfer or shunt much of the responsibility for project risk to other parties, either contractors and/or designers. In an attempt to define this risk shunting approach many sponsors respond that:

"a party to a contract should accept those risks where the occurrence, or impact of that occurrence of that risk is within the party's control⁵."

Whilst the philosophy or theory underpinning this approach may be sound its application is often inappropriate. At times this approach is used by sponsors to transfer risks that are beyond another party's control often within a strict inflexible legal or commercial structure. The effect of this combination is typically high levels of claimsmanship and disputation as one party, or another, perceives it is in their own commercial best interest to allow a risk or uncertainty to run its course rather than manage it proactively.

Risk embrace

An alternative to this risk shunting approach is the "risk embrace" approach best typified by the Project Alliance. In this approach the participants embrace all project risks. They

⁴ This is a reference to Australian Standard AS4300-1995 General Conditions of Contract for design and construct published by Standards Australia.

⁵ Commonly referred to as the Abrahamson Principle by reference to the American construction lawyer Mr Max Abrahamson.

proactively manage, are responsible for and share all the benefits and burdens of these risks.

By embracing all project risks within the Project Alliance the participants provide themselves with a flexibility to manage, minimise or remove a risk on a "best for project" basis consistent with all Alliance principles.

All aspects of the Project Alliance accommodate and cultivate the flexibility allowing for proactive management of these risks.

- The aligned project objectives and commitments to the Alliance principles provide a "best for project" context to guide the management of risks as they arise.
- The principles of No-fault, No-blame, No-dispute and unanimous decision making, together with trust, integrity and honest communication in an environment of mutual support removes any need to lay blame.
- The commercial framework, incorporating predetermined outcomes in the event of the occurrence of a risk removes any need for individuals within the Alliance to identify how the occurrence of a risk may impact their own participant organisation.

Whilst the individual components of these characteristics may be present in other delivery systems, their interaction is unique to Project Alliancing.

6. The Commercial Framework

The key principle underpinning Project Alliancing is the equitable sharing of risk and rewards amongst all Alliance Participants. The commercial framework must drive best for project behaviours to achieve outstanding performance. If this framework is ill conceived, inappropriate, too complex or simply does not incentivise the Participants to seek outstanding performance then ultimately, the Alliance may be an Alliance in name only.

The commercial framework of a Project Alliance typically consists of:

- Direct Costs
- Corporate Overhead
- Normal Profit and
- Gainshare.

Direct Costs

The Project sponsor agrees with the Alliance Participants that no matter what events or circumstances or degree of difficulty are encountered in completing the Works to be performed by the Project Alliance, the Alliance Participants will be paid all direct costs on the principles that:

- all costs fairly attributable to, or incurred, in completing the Works to be performed by the Alliance shall be direct costs; and

- no Alliance Participant shall derive any unreasonable profit or advantage from the utilisation of their resources in completing the Works to be performed by the Alliance;
- to the extent possible - be cash neutral;
- all direct costs are transparent and fully audited.

Corporate Overhead

Corporate overhead is aligned upon as part of the risk/reward workshop. The process for the alignment on corporate overhead is not a 'negotiation', it is a step in building the Alliance and must be consistent with the broader principles underpinning the Alliance.

It is the role of the Probity Adviser to audit and validate the corporate overhead rate aligned upon by the Participants to ensure that it is the 'right' rate. In the event that the Alliance Participants cannot support the aligned upon corporate overhead rate after receiving the Probity Adviser's report, the ALT will then need to again align upon a corporate overhead that all Alliance Participants can support.

Normal Profit

The guiding principle for aligning on normal profit is that if the Alliance Participants fail to achieve outstanding performance, i.e., completing the Project for the aligned "target out-turn cost" and achieving only "business as usual" performance in the aligned Project Objectives the sponsor will be "disappointed". In keeping with this principle, in this situation, the Alliance Participants should receive a profit which is less than an optimum profit that they may achieve in an open market by a traditional procurement strategy.

The use of the phrase 'Normal' is used to identify the level of profit the Alliance Participants will receive if "all" that is achieved is business as usual performance. Accordingly, it is characterised as 'Normal' by reference to the Alliance Participant's ability to achieve outstanding performance.

It is the Normal Profit for the preferred proponents that the project sponsor has selected. In this respect, it is important to note:

- the preferred proponents have been specifically selected as they are 'best in class' and not for any other reason;
- it is to be expected that those organisations that are best in class may earn profits that are greater than a perceived industry mean or median; and
- if the sponsor wants best in class performance it should be committed to paying best in class profit.

If the project sponsors cannot support paying best in class profit, together with creating an opportunity to earn outstanding profits through outstanding performance, their approach to Project Alliancing is inconsistent.

Gainshare

It is the gainshare regime - supported by direct costs, corporate overhead and normal profit - that provide the key commercial drivers for outstanding performance.

- gainshare should be linked to the objectives that 'add value' either objectively or subjectively to the Project and/or the project sponsor. At the risk/reward workshop the alliance participants will align on the Project Objectives elements of which will then be incorporated into the gainshare regime.
- gainshare outcomes should be either win/win or lose/lose, there should be no opportunity for a win/lose outcome.
- the individual elements of the gainshare regime should be linked to provide no incentive to sacrifice performance in one objective to secure reward in another; and
- the gainshare regime should be clear, concise and easy to understand and apply, but not easy.
- there should be complete transparency in all gainshare arrangements.

Typically, gainshare regimes involve objective (e.g. time and cost) and subjective performance objectives. There is essentially no limit on the type of subjective performance objectives that can be developed. Examples have included design integrity, quality, environment, community, stakeholder relations, indigenous employment, safety, Australian Industry Involvement, operator acceptance, media and public relations. They can also include maximising capability, technology deployment on development but broadly are only limited by the participant's imagination and the structures necessary to accurately and efficiently capture the value created.

7. The Target Out-turn Cost

The Alliance Agreement does not contain a contract sum. In a traditional contract there is only one certainty regarding the contract sum: it is simply the starting point for the contract and generally has no connection with the final cost to the sponsor of delivering the project, the 'out-turn cost'.

In a traditional contract a contractor's only way to maximise its profits is to drive its own costs down, typically through quality or scope reduction, while driving its revenues and therefore the sponsor's costs up.

In a Project Alliance, the Participants are driven to achieve outstanding profits by delivering outstanding performance in terms of the aligned project objectives, only one of which is cost. The Alliance Participants are not motivated to increase project costs as this will decrease, not increase, their profit outcomes.

Immediately after the risk/reward regime is aligned upon, the Alliance Participants begin to collate the information necessary to calculate the total costs of delivering the project. This process is aimed at calculating, to the highest degree of accuracy possible, given the level of completeness of documentation available, a target, typically referred to as either a Project Target Cost or a Target Out-turn Cost ('TOC') which is then used as the origin point from which the participants gainshare/painshare regime will operate.

All Alliance Participants are involved in calculating the TOC, but it is essential for probity and validity to have the TOC independently validated. It is important that the TOC, and the process used to develop the TOC, can withstand external scrutiny and examination.

The intention of the TOC is to calculate and capture all of the costs that will be incurred by the Alliance Participants in delivering the project. It is not a tender figure nor is it a contract sum. It is an estimate of what it will cost the Participants to deliver the project to completion, including the cost of meeting the inherent project risks, some of which will inevitably occur. The TOC will include:

- the direct costs of:
 - all preliminaries for the project for all Alliance Participants;
 - all trade, subcontractor and supplier costs to provide all plant, labour, materials and equipment to complete the project; and
 - all consultants who are not Alliance Participants;
- all Alliance Participants' overheads and normal profit;
- appropriate contingencies to meet project risks. The identity and size of contingency items in the TOC generate lively debate but:
 - contingencies are needed to deal with known and unknown risks that will, or may, occur but which may not be competitively insured;
 - the contingencies must be valid and defensible; and
 - all Alliance Participants will participate in calculating the TOC and unanimously aligning upon all contingency items. There is no opportunity for one Participant to unilaterally inflate or include an unnecessary contingency or unnecessarily spend a contingency.

The TOC does not typically include an item for gainshare as this must be earned by outstanding performance and is not a cost to deliver the project. However, the issue of the funding of gainshare funds, particularly gainshare not linked to costs or revenues, need to be carefully considered to ensure a meaningful gainshare regime is created.

8. Outcomes

The attraction of any delivery strategy is the outcomes it generates. Set out below is a schedule of the outcomes on the majority of pure project alliances in Australia available to the author. In addition details of a number of pure project alliances developed by BP in Europe and the Americas have been provided.

Australian Project Alliance Outcomes⁶

Year(s)	Project Alliance / Sponsor	Participants	Comments
'94 -'96	Wandoo B oil platform WA - \$377 million Ampolex (Mobil)	Leighton Contractors Dawson Brown & Root JV Keppel Corporation Ove Arup Pty Limited	Winner of 1997 engineering excellence award Winner of 1998 Australian Construction Award \$13m < budget, 26.5 mths vs. norm of 34 mths
'94 - '97	East Spar Project WA (oil & gas) WMC Resources Ltd	Kvaerner Oil & Gas Clough Engineering	Winner of the IEAust's highest national engineering excellence award - the Sir William Hudson Award
'96 - '99	Hot Briquetted Iron (HBI) WA (iron ore) BHP	Various	3 separate fabrication / construction alliances.
'97 - '00	Northside Storage Tunnel Project NSW - \$450m Sydney Water	Transfield Tunneling Connell Wagner Montgomery Watson Kilpatrick Green (sub-alliance)	Time Completed on time despite ~ 9 month delay on critical work arising from external forces. Cost 5.8% cost overrun versus agreed target. Safety Scored at 'outstanding' (but suffered one fatal accident) Environ. Measured as Best Practice Comm. Measured as Best Practice
'98	National Museum Acton Peninsula ACT - Building Commonwealth Government	Ashton Raggatt McDougall, Robert Peck von Hartel Trethowan, Bovis Lend Lease, Tyco International, Honeywell Ltd, Anway and Company	Time completed 9 March 2001 - 3 days early Cost 1.5% above TOC, but within appropriation Industrial No time lost for industrial action Quality and Design Integrity rated as "very high quality" and "remarkable" Winner of various Architectural, Project Management, engineering and electrical contracting awards for 2001.
'99	Woodman Point Wastewater Treatment Plant Amplification WA ~\$120m WA Water Corporation	Clough Engineering Kinhill Group	Scheduled for completion by end of March 2002
'98 - '00	Clean Fuels Project Qld - \$450m (oil & gas) BP / BOC / Lend Lease / Origin Energy / ATCO Power Australia	Stork ICM Kvaerner Processing Australia Fluor Daniel Canada JMW Consultants	Project completed in late 2000 - very successful in all respects. Winner of the ACA 2001 Construction Achievement Award. Refer article by Wilson. Time finished on 18 October 2000 compared to sanctioned target of 1 January 2001 - 2.5 months early Cost Actual cost = sanctioned / target cost (which was \$80m < original budget) Safety LTIFR = 1.39; MTIFR = 7.76; AIFR = 9.07. Outcomes much better than industry averages Quality Exceeded world class benchmarks Environ. 0 incidents IR 0 incidents; 0 lost time
'98 - '99	Penola West project SA - \$4m (electricity)	Kilpatrick Green Burns and Rose Worley	Completed October 1999 well ahead of schedule despite numerous externally imposed delays.

⁶ This schedule incorporates parts of a paper prepared by Project Controls International Pty Ltd, given at the Defence Partnering & Alliances Conference, Canberra, 22 November 2001.

"Project Alliancing - Creating the Possibilities"

	transmission) ETSA - ElectraNet SA		time Finished on 15 October 1999 compared to target of 31 October 1999 - 2 weeks early Cost Safety Env./Com. On budget LTIFR = 0; MTIFR = 0 (20,000 hrs) Score of 7 out of 10
'99 - '00	Pelican Point Project SA ~ \$22m (electricity transmission) ETSA - ElectraNet SA	Kilpatrick Green Burns and Roe Worley	Outstanding outcomes all round:- Time Finished on 14 June 2000 compared to stretch target of 1 July 2000 - 2 weeks early but months ahead of world best practice Cost Safety Quality Env./Com. 10% underrun 1 minor LTI Score 9 out of 10 10 out of 10
'99 - '99	Norman River Bridge ~\$5m QLD Department of Main Roads	Barclay Mowlen Construction	Completion on 22 November 1999 - weeks earlier than the already tight target date prior to the 99-00 wet season, on budget and with outstanding support from the community
'00 - '00	Pacific Motorway Package #3 QLD ~\$60m (road infrastructure) QLD Department of Main Roads	Thiess Contractors SMEC Australia	Converted balance of 'distressed' traditional schedule of rates contract to alliance in a bid to reach Practical Completion by October 2000 - 3 months earlier than the previously forecast trend. Time Finished on 2 October 2000 - 5 days earlier than scheduled opening day despite many setbacks along the way (many months earlier than previous trend) Cost ~5% underrun
00-09	Project Djimindi Lightweight Torpedo Project	Eurotorp Thales Underwater Systems Pty Ltd	Definition Phase 1 complete, Phase 2 commenced 7 July 2001
'00 - '02	Awoonga Dam Raising Project Qld ~\$100m Gladstone Area Water Board	SunWater PPK Consultants Thiess Contractors	Alliance not yet complete but trending approximately: Time: 6 months early - despite 3 month delay to commencement awaiting approvals Cost: 10% underrun
'00 - '01	Sydenham Electrification Project VIC ~\$34m Victorian Department of Infrastructure	National Express Group Thiess Pty Ltd	Scheduled to be completed late January 2002 - Cost trending towards 10% under-run

Some International Project Alliance Outcomes⁷

Project	'Business as Usual' Estimate	Sanction Cost	Final Actual Cost
Refinery Revamp	Not Known	US\$295m	US\$269
Offshore Oil Platform	£450m	£373m	£290m
Offshore Oil Platform	£900m	£900m	£700m
Polyethylene Plant	US\$175m	US\$149m	US\$133m
Offshore Pipeline	£348m	£319m	£242m
Gas Terminal	£123m	£119m	£92m

What these schedules demonstrate is that Project Alliances:

- typically enjoy significant capital cost savings, not only against sanctioned costs, but also against stretch target and target outturn costs;
- are predominantly delivered before the schedule, and often stretch, target dates;
- report outstanding safety and/or lost time through injury statistics beyond industry benchmarks;
- have exemplary industrial relations records;
- score industry "best practice" levels of performance in terms of quality, design, environmental and community stakeholder issues; and
- regularly receive national and international industry awards for their performance.

Whilst the outcomes are apparent, the reasons for their achievement are not.

During my presentation at the ICEC Third World Congress, I will review the outcomes on 3 Project Alliances identifying the key factors and distinguishing features that have delivered outstanding performance on these Projects.

This review, whilst interactive and more analogous to a panel session than a presentation, will be followed by the distribution of the outcome data for these Projects.

John Gallagher

Annexure 1⁸ - JMJ Associates - "Creating Successful Collaboration – Select the Right Partner"

Creating Successful Collaboration – Select the Right Partner

Andrew Hutchinson

JMJ Associates, Suite 501, 991 Whitehorse Road, Box Hill VIC 3128, Australia, Phone (61-3) 9596 0233

To fulfill the client's intent with "collaborative" contracts requires a combination of success factors such as good commercial framework, clearly defined objectives, sound project management and well integrated team. Notwithstanding these factors, the authors' experience proves that the most fundamental success factor is selecting the right contractor.

There are many capital projects where a client develops a contract and delivery strategy which seeks to align the contractors with the client's key objectives. But many of the selection processes end up constraining the client's team in selecting the best fit team. Pre-selection processes typically mean that it is difficult to justify choosing a contractor on anything other than lowest or near lowest cost. JMJ Associates have developed a selection process which maintains the competitive component throughout and identifies the best fit consultant/contractor team for meeting the project objectives.

This paper presents a leading edge consultant/contractor selection process which is applicable equally to major capital projects and outsourcing of operations. Recently, it has been used successfully on three major and high profile public sector projects in Australia. It has proven to cut across the "well rehearsed sales conversations" which typify normal competitive selection processes and instead provide a full understanding of what it will be like to work with one another. The process includes a well developed model for selection criteria, call for proposals and a combination of interviews and workshops. Once a preferred selection is made, the process includes an innovative Commercial Risk / Reward workshop which completes the development of legal and commercial framework in an aligned and cooperative workshop environment, typically taking only two days.

The selection process has proven to build momentum in the project and make a major start in building and nurturing a strong aligned culture and leadership team. Once the contract is awarded the project launched powerfully and set up for success. Then the hard work of sustaining an integrated team with a culture of high performance that produces breakthrough results begins.

Challenge of Selecting the Right Partner

Many organisations, particularly Government ones, have a challenge selecting the right partner for more collaborative intended projects. As an example, some government sector clients have a pre-selection process, which evaluates a contractor's ability to compete for various levels of project complexity or size. These selection processes are rigorous and valid. The challenge is, that once pre-selection has occurred there is little discretion as to selecting the contractor for a given contract other than price. Most client teams, recognise that there is a significant difference between the "A" team and the "B" team, the collaborative and the adversarial. And yet their hands are tied, even to the extent that they do not interview or meet with the respective team during the actual tender evaluation.

This is a specific example. There are many counter productive approaches to selection, whether for lump sum or more innovative collaborative contracts. The challenges of selecting the "right project team" in these examples typically include :

- Knowing what constitutes the "right project team"

⁸ This article is reprinted with the kind permission of Andrew Hutchinson, Managing Associate, JMJ Associates.

- Only meeting / dealing with the "sales" team and not the actual individuals who will be at the heart of the project outcome
- Getting the "B" team and not the "A" team
- An "ends justify the means" approach where the contractual and competitive nature of interactions can be typified by role playing, not disclosing all issues and information, win/lose, dissatisfaction and loss of relationship
- The wide ranging and often competing individual perspectives of the client's selection team (panel)
- Corporate / previous project history covertly and overtly detracting from an authentic evaluation of the actual proposed team and individuals.
- The wide ranging, history based and often competing perspectives and interests of the sponsors, who don't participate in the selection process and are nevertheless the final approval authority
- The 2 to 3 month lull in activity once the contract is signed, as the project team is brought up to speed with the project's objectives and "culture", and the various team members "size" each other up.

An Integrated Approach to Selection

The principles of this Selection Process are :

- To *rigorously* evaluate proposed project teams and individuals to establish an *aligned* view amongst the selection team and sponsors on which team is the *best team* for the project
- To conduct contractual and commercial conversations consistent with building long term relationships and not "business as usual negotiations"
- To build *momentum* on the project during the selection process so that when the contract is agreed, the project team is already excited about and aligned with the project objectives and can get started immediately on the real work in hand
- To satisfy all corporate standards of good governance, due process and protecting shareholder interests and in the case of Government organisation, meet the highest standards of probity and public scrutiny
- To arrive at a commercial outcome which satisfies and is regarded as a "win" for *all* parties and "best value"
- To maintain competition throughout but not be tied to selection based on lowest price

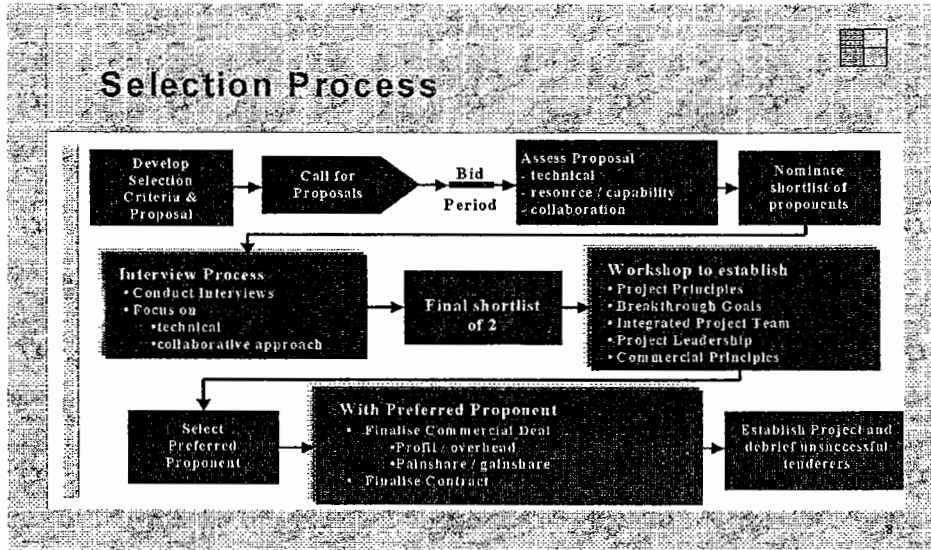
JMJ Associates developed this selection process and have applied it to a range of projects. Recently it has been applied it to three major Government Alliances in Australia. These projects are :

- Northside Storage Tunnel Project – Sydney Water Corporation (c. \$400m)
- National Museum of Australia (the Acton Peninsula Alliance) – Federal Government Department of Communications, Information Technology and the Arts, Canberra (c. \$140m)
- Woodman Point Wastewater Treatment Plant Upgrade – Western Australia's Water Corporation (c. \$140m)
- Awoonga Dam Project – Gladstone Area Water Board

- Lyell McEwin Hospital Project – Adelaide

Key Steps in the Process

The diagram below illustrates the key steps.



The process steps themselves may be familiar. The unique nature of the process is the content of each step. In this paper we present only the general intent and overview of the main elements of the process.

Selection Criteria and Evaluation Guidelines

The selection criteria are the basis of the whole process (no surprise there). The key nature of this process is the rigour and structure with which they are developed in line with the core project objectives. This creates clarity on what is important. Typical criteria may include :

- Ability to complete the full scope of works
- Ability to minimise capital cost whilst enhancing quality
- Ability to provide the necessary resources (competence and availability) to reduce schedule
- Ability to complete the project with no injuries nor environmental incidents
- Ability to work in a collaborative environment
- Ability to achieve outstanding results in ## (e.g. community relations, start-up, NPV improvement, etc)

Once the criteria are established, guidelines are developed to identify what the bidders need to demonstrate to achieve different levels of scoring for the respective criteria. Superficially this may seem an obvious task. The depth of the step is in recognising that it is not just technical competence that determines a team's ability to meet these criteria, but as importantly, their ability to demonstrate it at the interviews and workshops. It represents a shift from corporate and impersonal to team and individual competence and behaviour.

By way of example, a team could say they are able to be innovative and in the proposal illustrate their process for brainstorming and developing innovation. However, at the interview, the team can be evaluated in whether they reflect a genuine affinity to being innovative, or the process is vested in only one individual.

A further attribute is that the criteria guidelines are designed to be consistently applicable from proposal (which is corporate and impersonal) to the workshops (where in depth understanding and appreciation of individual team members is developed). This means that scoring from previous steps is recognised and only new observations and facts can alter the score with each subsequent step.

Call for Proposals

It is our experience that a well crafted call for proposals document can lead to more rigorous response by bidders (as opposed to boilerplate). This in turn leads to more effective proposal evaluation. In particular the intention is to be clear on what is important to the client, so that the bidders can explain how they will apply their technical competence and experience in meeting the project objectives and selection criteria.

Evaluation

After the proposal review there is an evaluation workshop. The purpose of this workshop is to develop an aligned view of the scores for each bidder at that stage and which bidder(s) should progress to the next stage. Achieving an aligned view by often competing interests of the participants should not be underestimated. The benefit of achieving alignment (as distinct from agreement) is that it results in a rigorous discussion of each attribute and differentiating factor in the bidder's proposal and the aligned on score has substantiated logic and documented facts and observations to back up the score. The alignment conversations also produce questions and topics which need to be pursued during the interviews and workshops. Similar evaluation sessions are held after the interviews and selection workshops, where their participation in the interview or workshop is evaluated and changes to the previous score aligned on.

Interviews

The interviews are specifically designed to cut across the sales presentations which typically dominate these occasions. In fact, it is required that only the nominated project team and corporate sponsor attend. No presentations are required. Rather the interviews consist of a series of informal conversations that allow the selection panel and proponents to discuss technical issues, client requirements and objectives, gain an impression of the teams' compatibility and a sense of whether the combined team are capable of meeting the project objectives.

The preparation of the client selection team is critical. It is important for the team to learn how to observe and understand the behaviours of the bidders to determine if they are genuinely committed to the project and collaborative approach. This preparation also includes how NOT to lead the bidders into the answers given in the previous interviews or the answers the selection team want to hear to justify their expectations of how the project should be executed.

One aspect of the selection process is to provide an opportunity for the bidder to evaluate how seriously the client intends to take on "collaboration". The experience of many, particularly in so called "partnering" contracts is that the "words are great but the contract and dollars aren't". It is counterproductive in going to the effort of undertaking a selection process of this nature if the selection team present themselves in such a way as to undermine the project objectives and not "walk the talk".

Selection Workshops

Following the interviews, the objective is to shortlist the number of bidders to two. Each of these two bidders are then invited to separate two day workshops with the client team. Like the interviews, these workshops cut across sales and marketing conversations and seek to experience working with the bidding team on the practicalities of setting up the project, such that the client gets a clear and fully disclosed understanding of the implications of selecting either of the bidders. These workshops bring forward many of the conversations which would otherwise take place after partner selection and project kick-off. These workshops are typically residential and include a social function on the first night.

The outcome is that the client team has a full understanding of what it will be like to work with both teams, and be able to evaluate which one provides the biggest opportunity to meet or exceed the project objectives.

One challenge is for the team to participate authentically at the same time as not leading the bidders to the clients solutions / answers. This again, requires considerable preparation and "training". The authors' experience is that participation is fundamental in appreciating what it will be like to work with each other. Over participation is preferable than holding back in order not to lead.

The authors' experience has also demonstrated each time this process has been undertaken, that the losing bidder gains significant value from the process, and it is not regarded as a wasted opportunity.

Risk / Reward Workshop

This workshop is where the "rubber hits the road". Up until this point, the collaborative intent often lives as concept. It is during these two days, that the commercial reality of collaboration is created. After the selection workshops the client selects a "preferred bidder" and invites them to the Risk / Reward workshop. The losing bidder, is notified, but can be invited back, should a deal not be forthcoming with the preferred bidder.

The objective of the workshop is to create the commercial framework for the relationship. The first step involves the creation of a collaborative environment. In this context, the outcomes of the workshop include :

- Selection of preferred proponent
- Relationships created for the benefit of the project

- Significant issues discussed and resolved, such as contract terms, profit and incentives

These workshops cannot be overstated in their impact. The list above looks simple, and yet to achieve agreement on these for a contract value typically in the hundreds of millions of dollars, is an extraordinary experience. The authors experience is that the cooperative approach of the clients' lawyer and facilitator is critical in the success of these workshops. The intent is a commercially rigorous process in a collaborative atmosphere. For most this is a first experience of such a combination.

Mid-way through day 2 of one of these workshop, one Senior Manager from a Contractor said "It seems like we are dragging, but then I look what we've accomplished in 1½ days and think "Christ we've done 2 months of work here, and it's been fun." "

Summary

On the three major Public Sector Projects in Australia where this selection process has been used, each project encountered a significant challenge and upset during the early months of the projects. In each case, the client and consultant/contractor team members have stated that the way in which the team came together to deal with these upsets was based on the strength of relationships, mutual understanding and alignment that was created during the selection process.

The authors' assert that this selection process leads to selecting the best consultant/contractor team and to a long term positive impact on the integrity of the project team and their ability to exceed the project objectives. We assert that few other approaches to selection achieve or even set out to achieve these two outcomes.

Annexure 2 - Additional reference and guidance material

- 1 The Commonwealth Auditor-General Audit Report No 34 1999/2000 Performance Audit, '*Construction of the National Museum of Australia and Australian Institute of Aboriginal & Torres Straight Islander Studies, Australian National Audit Office*'.
- 2 *Contract Management Better Practice Guide*, February 2001, Australian National Audit Office.
- 3 *Project Alliances in the Construction Industry*, New South Wales Department of Public Works & Services, 8 September 1998.
- 4 *No Business As Usual - An Extraordinary North Sea Result*, Terry Knot, The British Petroleum Company plc, 1996, Botanic House London, ISBN 0 86165 202 9.
- 5 *Relationship-Based Procurement Strategies for the 21st Century*, Professor Derek H T Walker (RMIT University Melbourne), Keith Hampton and Renaye Peters (Queensland University of Technology, Brisbane) [www.ausinfo.gov.au/general/gen/hottobuy.htm]



John Gallagher, Phillips Fox

Telephone (direct): +61 3 9274 5357

email: john.gallagher@phillipsfox.com

BSc (Architecture) Sydney University
Building Certificate, Sydney TAFE
Master of Project Management, University of NSW
Diploma in Law - Solicitors Admissions Board, University of Sydney
Advanced Professional Certificate in Arbitration - Australian Institute of Mediators & Arbitrators Australia and the University of Adelaide

John specialises in project documentation, project alliancing, risk allocation and management (particularly in the interaction of infrastructure delivery and financing documentation) and construction advice.

John has recently conducted private client workshops and seminars in *Partnerships Victoria* and Project Alliancing for Victorian Departments of Treasury, Infrastructure and State and Regional Development, Queensland Department of State Development and New Zealand Departments of Audit and Health.

Prior to entering law, John worked for approximately 10 years in the construction industry in a variety of project management and contract management roles. John's areas of expertise include:

- Project alliancing
- Risk allocation and management
- Construction and Infrastructure contracts
- Project finance documents

Recent major projects include:

- Department of Defence Project Djiminidi-lightweight torpedo project, ACT
- Acton Peninsula Alliance - National Museum of Australia, ACT
- \$300 million Eureka Tower, Victoria
- \$500 million QV Redevelopment, Victoria
- \$107 million Awoonga Dam, Queensland
- \$5.45 billion Hirma Project Definition Alliance, India
- \$1.8billion Melbourne City Link - claims advice and dispute resolution; and
- Drafting project and contracts manual for a major Australian design and construct contractor with yearly project turnover \$1 billion.