PROJECT ALLIANCING – APPLYING ADVANCED CONFLICT MANAGEMENT SYSTEMS TO COMPLEX INFRASTRUCTURE PROJECTS

Greg Rooney

INTRODUCTION

The 21st century can be defined as the global century. Industry, commerce and politics have now substantially moved away from national and regional perspectives to one where global influences and pressures dominate. The clearest example of this is the world economy which has quickly moved from a sustained period of global expansion at an exponential rate to a sudden global economic contraction. The world has quickly moved from fierce competition between nations for scarce resources and skilled labour to a deep contraction requiring the artificial stimulation of economies through massive expenditure particularly on infrastructure projects.

The common imperative for both the expansionary and contractionary cycles is the ability of governments to be able to fast track projects and have them completed without delays and cost overruns. Added to this mix are the impending effects of climate change which will necessitate governments having in place project delivery systems that allow pre-emptive construction projects to be established quickly and completed expeditiously.

However the traditional Western project delivery models are not necessarily designed for these 21st-century pressures. They are designed for a 20th-century world where competition and the use of economic and political power have been the prevailing cultures driving politics, industry and commerce. This is nowhere more prevalent than in the construction industry where governments, corporate owners and investment banks have sought to exercise that power by seeking to transfer all project risks and obligations onto contractors and suppliers.

This power based corporate culture has been the product of the belief in the principle that competition policy was the best driver of growth and development. The vehicle used to exercise this power in construction projects is the elongated competitive tender process with a fixed black letter risk transferring contract enforced by the threat of litigation.

But in reality this presumption of totally transferring the risk onto contracting parties who lack any control over the scope of the project or outside prevailing factors is illusionary. This is attested by the high incidents of costs blow outs, time delays, the high volume of litigation and the creation of untrusting interpersonal relationships between the participants.

These risks transferring project delivery systems contain an inbuilt fatal flaw in that they lack any collaborative relationship based structures that can help parties adapt to the inevitable variations that are required to deal with unforeseen or unexpected events. There is a belief that any problems that arise can be resolved by simply relying on the terms of the black letter contract and the threat of litigation or bankruptcy.

These traditional western models of project delivery are based on 20th-century thinking. For the West the 20th century was the age of competition. It was the age of political, economic and military power used as a means of trying to achieving a particular dominance. It was often expressed in terms of competition. Competition between left and right; east and west; north and south; management and labour; centralism and separatism; fundamentalism and secularism and shareholders and consumers just to name a few. It was assumed that the world would benefit from the success of winners and the failure of losers. It was the embodiment of the principle of survival of the fittest. It was assumed, especially in commercial transactions, that unfettered competition produced the best outcomes.

However these assumptions are being challenged by global influences that now impact on the all nations. It is slowly beginning to become self evident that losers play as significant a role in the effects of outcomes as do winners. There is often a degree of impotence that comes with winning especially when the win has come with a corresponding loss to others. Losers can develop a sense of “nothing to lose” power. Many

so-called winners (the powerful) are surprised at the resilience and stubbornness of losers (the weak) particularly as demonstrated in drawn out litigious battles in the courts and military battles between governments and minorities/separatists. Northern Ireland, Israel, Chechnya, the Balkans, Spain, Burma, Sri Lanka, Colombia, the Horn of Africa and Tibet are some recent examples.

One notable exception is South Africa where the Afrikaans and non-white South Africans collaborated to find a way out of conflict that was every bit as entrenched, volatile and destructive as the examples referred to above. It took two leaders, Mandela and De Klerk to adopt the principles and challenges of collaboration over violent competition to bring this change. Their collaborative action eliminated the so-called "losers" from the equation. It brought the non-white South Africans, who were the "losers", out of that lost situation. By removing the win/ lose scenario it opened the door to what is in effect a joint-venture between all South Africans to, as a nation, either win together or lose together . While it does not, of itself, guarantee success in developing this joint-venture in nationhood it does eliminate the structural impotency that the Afrikaners had to work with by being the 'winners" while still living with and amongst the "losers".

While the 20th century can be called the age of competition the 21st century might well be called the age of collaboration. We now live in such a complex world of interconnecting relationships that any significant project contains a high level of complexity and uncertainty. The concept of assigning responsibility for all risks on to one party and attempting by black letter law contracts to isolate that risk from the instigating parties creates a contractual and relationship imbalance. It has the potential to create the unstable state of winners and losers.

Project Alliancing is a project delivery system that is well suited to this new paradigm. It is a system that, in effect, eliminates the "loser" position. All parties enter into a written agreement in which all agree to either succeed together or fail together. The win lose scenario that is an inevitable part of the standard black letter commercial contract is expressly eliminated. What makes this process unique is that the corporate or government owner fully enters into this joint-venture as an active party and takes a share of the risks on a pro rata basis. It requires corporate and government owners to dispense with the notion that they are somehow not part of the project delivery system and that they can sit back without involvement simply using the threat of litigation and so-called watertight binding contracts to protect their position.

Project Allianceing is built on aligning the power of good interpersonal relationships with a process that contractually mandates maximising outcomes through the adoption of a high performance integrated team approach with open and honest communication, no hidden agendas, where all risks and rewards are shared on an equitable basis by all parties and where conflict is resolved immediately within the alliance framework. The complexities of large-scale projects require this integrated team approach drawing out the best of professions working as a unit with the government or corporate owner to overcome complex problems and unforeseen events.

The primary focus of the project allianceing approach falls on people and relationships. This goes well beyond improvements in inter-personal areas, such as communication, co-operation and group processes. The whole structure of the alliance is built around an alignment of goals and risks where team selection and team work is deemed more important than competitive behaviours. This occurs at all points along the supply chain, from the concept planners, through project developers to the project constructors.

Some authorities suggest that an improvement in the project delivery environment of up to 30% is possible just through improved relationships (McLennan). The results are challenging the presumed benefits of competitive behaviours and the adversarial approach to resolving disputes.

This emphasis on relationships to underpin the project delivery system has relevance to both large and small projects and can have special relevance to developing countries where the predominant social and commercial culture is based on relationships and kinship.

This paper looks at the successful rise of Project Alliancing in the Oil and Gas and Construction Industries in Australia over the last decade and how the lessons can be applied to the economic imperatives of the 21st century global environment

THE BIRTH OF PROJECT ALLIANCING -THE ANDREW PROJECT

Project Alliancing drew its origins from the Andrew Project undertaken in the early 1990's by British Petroleum (BP) in the North Sea. BP was looking at a possible exploration site that had many difficulties and the prospects for success were at best marginal. The cost of constructing a traditional order well in the North Sea at the time was £450 million. The Andrew site would not have been economically viable at that price. BP had to find a way of tapping this oil supply that was cost-effective. It realised that it could not use the same commercial approach it had used for the more viable sites. It had to be a process that was sufficiently attractive to induce high quality contractors to want to take part in this risky project.

The first step was the realisation that it had to abandon the traditional competitive tender process and the resulting standard commercial contract in which all the risks associated with the performance would fall on the contractors. BP started by selecting eight quality alliance partners with BP taking a leadership role. The selection process was critical as BP realised technology alone would not be sufficient to achieve the outstanding results needed to make the project viable.

It was agreed by all parties that the key ingredient for success had to rest totally on the quality and robustness of relationships built up during the scoping stage going right through to construction and completion. The team had to be united in their task to bring the project in on time and within the financial constraints. Petty disputes, rivalries and blaming had to be eliminated. This was achieved by the agreement to equitably share all risks between the parties including BP and guaranteeing all parties would receive 100% of their project outgoings and agreed profit. In addition the alliance built in rewards for bettering key performance indicators and penalties for falling below a benchmarked standard.

A key ingredient was the contractual requirement that no party including BP could commence litigation against another party for mistake or negligence. This in effect bound the relationship in law and created an alignment between the core collaborative principles and the written legal documents. A legal entity was created where all eight parties either succeeded together or failed together,. The option of some parties winning and some parties losing was contractually eliminated. This was the glue that bound the parties together.

The result for BP was the satisfactory completion of the project with savings in development capital costs of between 20%-30% on a project worth over AUD$600m. (Gallagher and Hutchinson, 2001). The project came in at 40% below what was the standard £450 million cost for similar sites (Winch, 2002) These savings were achieved in part by all parties agreeing that the structure had to build onshore rather than at sea as was the usual approach. This allowed the structure to be completed within the short weather window and to allow the weight to be reduced by 300 tonnes. Substantial savings were also created by a leaner management team that did not have to manage and scrutinise the contract or the usual game of playing suppliers off against each other. Approximately £9 million was saved by the team generating opportunities and improvement suggestions. The motto of the project team became; "Have fun - work smart".

The most remarkable feature of this approach was the removal of competitive price tendering as a criterion for selection. It was felt that a selection process based solely on the traditional competitive tendering approach would not have worked. The parties had to be selected on their personality alone focusing on their ability to work in a no blame collaborative team.

The lessons drawn from BP's experiences with the Andrew Project have been applied to a significant number of major infrastructure projects in Australia and have formed the basis of what is now known as Project Alliancing and Relationship Contracting.

OVERVIEW

There are three main elements that provide the foundations for a successful Project Alliance. The first is a willingness of all parties, including the government or corporate owner, to have a true understanding of the principles and philosophy of Project Allianceing. It is sometimes the case that corporate owners would like the benefits of entering into a Project Alliance but still want to behave as if they have the right to not be

responsible for the risks and losses. It is better not to enter into a project Alliance if there is a misunderstanding of the principles and a lack of willingness to abide by them.

This leads to the second element. Team selection is at the heart of project allianceing. There are many highly qualified and experienced individuals capable of performing at a high standard who are not able to work in an integrated no blame culture with no hidden agendas. While they have many admirable qualities, when things go wrong they will tend to fall back on their own devices and to resolve problems and conflict in their own way separate from the team. When things go the way they want them to go they are collaborative. When things do not they revert to being the boss. It is essential that this type of person is eliminated during the selection process.

The third element is the presence of an Alliance facilitator/mediator to guide the parties during the course of the project. The facilitator mediator's role is not to resolve disputes between the parties although on occasions they might assist in that regard. The true role is to mediate between the parties and project allianceing philosophy. When parties stray from the philosophy and fall back on their old competitive ways then it is the facilitator mediator's role to bring them back to the guiding principles. They are like a football coach who encourages the players to work together as a team while advising them on the principles of the game The facilitator mediator is there to keep all parties working collaboratively, resolving all conflict between themselves, focusing on bettering their key performance indicators and pushing the parties to look for savings and innovations.

Project allianceing is still a relatively new approach to project delivery. Many of the players in the construction industry have spent decades working in the traditional competitive and adversarial environment. It is often difficult for them to make the cultural change to a more collaborative approach. They can often make the changes intellectually but strike problems when faced with day-to-day issues. It is for this reason that parties will generally need guidance as they progress through the project.

There are currently are a number of individuals and organisations who offer their support for project alliances. They are often referred to by different names including: alliance support, alliance coach, high-performance coach, team development consultant, relationship manager, relationship adviser and cultural adviser/manager. Some use a behavioural science model concentrating on workshops. The alternative approach is to be imbedded with the alliance team and assist in dealing with issues that arise relating to the alliance philosophy and its implementation. One of the problems at this early stage in the evolution of project alliances is that governments and corporate owners are often not clear on what they want and therefore cast their net widely for assistance.

Often clients will choose behavioural scientists to run workshops on teambuilding and conflict resolution. While these workshops are beneficial in teambuilding and bonding their benefits often do not last beyond the session. Often when parties return to the workplace and are faced with real conflict those lessons are abandoned in favour of positional stand-offs. It is in this situation that the alliance facilitator mediator can work with the parties to guide them to return to the no blame integrated team culture philosophy.

The best way to learn this collaborative approach is to actually experience it first hand. Freud made the point that you really only know and understand what has happened in an event after you experience it. Learning or evolving arises out of experiencing the experience (Rooney, 2007). Once parties have had the experience of working through a project allianceing project they are often better placed to fully understand and accept the culture of a collaborative no blame environment. While teambuilding and conflict resolution type workshops can be beneficial they cannot replicate the real experience of working through real difficulties and working to overcome them using alliance principles.

There have been attempts in the past to introduce relationship building and teamwork strategies into commercial contracts in a process called "Partnering". However the black letter contracts that underpin Partnering still rest on the traditional win/lose contract such as the Australian Standards AS 2124 contract. The partnering approach would often work well until there was a dispute. If the dispute resulted in a breakdown in the relationship then the parties could, and often would, revert to blaming and to reliance on the standard win/lose contract for a resolution. The problem with partnering agreements is that there is a fundamental misalignment between the relationship building and teamwork aims and the competitive

win/lose drivers inherent in the standard commercial contract. The Project Alliancing process eliminates this misalignment.

THE PROJECT ALLIANCEING PROCESS

THE TENDER STAGE

There are a number of steps in the formation of a project alliance. The first is at the tender stage where the potential contractors are required, often in no more than 40 pages, to nominate how they will manage their relationships with all other parties involved in the project (Queensland Motorways, 2000). The tender documents make no mention of money nor do they seek a competitive priced tender bid. Parties are required, in their documentation, to demonstrate the quality of their personnel and how they propose to work in a high performance team culture.

Usually the three best tenders are chosen for initial interviews. These interviews are often conducted in a workshop format where the interviewees work with the client to examine the project and discuss options for achieving breakthrough performances and stretch goals. This gives the client an opportunity to get a sense of each group and to determine which would be the best fit for the project. The group that is chosen becomes the preferred alliance partner and enters into an interim project allianceing agreement.

The exclusion of money from the initial stage of the project alliancing process is deliberate. The aim is to remove the need to undercut rival bidders on price in order to win the tender. These bids do not reflect the true costs of the project and set up an artificial and inherently false and unstable commercial relationship. Once the tender is won then the focus tends to move to re-examining the contract in the search for variations. This embeds an adversarial culture and creates a misalignment of interests between the owner and contractors. The effect of this misalignment is highlighted by the fact that many projects using the traditional competitive tender process overrun the winning tendered price by an average of between 17% and 30% (McLennan, 2000)

The competitive tender approach, whilst appearing very simple, can lead to a number of unintended negative consequences. Firstly, no contractor can accurately guess the final cost of the project especially when you add in the number of variables that exist in the life of these projects. This uncertainty is compounded if the owner uses a standard pro-forma commercial contract, which seeks to transfer all the risk of not meeting the tendered costs onto the contractors. This is a recipe for encouraging the competitive tendering process to continue well into the project delivery phase. The successful tender will, from day one, look to find ways to recoup moneys from the owner for items they allege were not included in the original agreement. This situation is not conducive to establishing a stable commercial relationship and has the potential to introduce even more uncertainty into the project.

The added expense for the owner of engaging in these project allianceing pre-contract processes can be more than offset by not having to rectify defects that might otherwise have come up once the project has commenced. It is much easier to rectify a problem in the planning stage than when the structure is half built. A number of project alliances have been able to produce outcomes that exceed a 20% reduction in the target cost estimate (McLennan, 2000).

THE INTERIM PROJECT ALLIANCING PERIOD

Once the preferred alliance partner is selected the parties enter into an interim project alliance period in which all parties work to scope the project and assess the *real total cost* of the project. All variables, including the weather, have to be factored into the total cost, as once the figure is set it generally cannot be changed. Once a final costing is settled then each party will be guaranteed full 100% payment of its component of those costs. In addition, the parties will receive an amount for their profit, based on a pre-agreed percentage of the total cost. The parties are then bound to bring the project in at that cost with additional rewards for coming in under the amount and penalties for exceeding it.

The work done by all parties during the interim alliance period is crucial to the success of the project alliance. From the owner's perspective it brings some commercial reality into the costing process. This interim project alliance period is a very challenging part of the process as it tests the capacity of the parties

to engage in robust debate, to resolve differences and to develop a sense of collective responsibility for the project. This is the true relationship building phase. If things fall apart at this stage then any party can withdraw.

It is during this interim stage that the true work on relationship building takes place. These relationships build over time and are the key to producing a high-performance culture capable of achieving stretched goals. This is the key element behind the success of many Project Alliances. It is for this reason Project Alliances are at times referred to as Relationship Contracting particularly in the building and construction industry.

One of the main tasks undertaken in Interim Project Alliance Period is for all parties to agree to set standard benchmarks for performance in various categories. The term that is used is "business as usual" and is roughly defined as what would be considered as the normal industry standard for completing that category of work. However, in project alliancing "business as usual" is nothing more than a benchmark. Parties are chosen primarily because they have demonstrated an ability to perform to a standard that is better than "business as usual". The project alliancing approach is based on selecting people who want to work at a level above what is considered a standard performance. They are people who can work within a team framework and are able to identify and deliver what is often referred to as 'stretched' goals.

Some of these key performance areas include bringing the project in under the agreed cost, doing this by a certain date, causing minimal environmental damage, deaths or injury, creating good public relations, overcoming difficult site conditions and anything else that is important to the owners. These are referred to as stretched goals or key performance indicators (KPI's). All parties agree on these KPI's and agree that *all* will receive an extra reward if they better them or *all* will lose some of their profit if they do not.

What makes this process unique is that the owner will accept half of the risk of meeting or not meeting the KPI's. The owner will take 50% of this risk with the remaining 50% being shared on a pro-rata basis by the contractors, designers and sub-contractors. This division aims at achieving an equitable sharing of the risks and rewards. It also reduces the opportunity of any one party to gain an advantage by threatening litigation against another party. It supports the principle that parties either all win together or all lose together.

At the completion of the interim project alliance period the parties will sign the formal project alliance agreement. The result is the creation of a virtual company incorporating the owner and all the project participants. From that time onwards all decisions by the group have to be unanimous with no abstentions. Everyone is forced to focus on the project and to try to better the KPI's. There is no point for individual parties competing with each other because the contract provides that all parties either win or lose together. The black letter contract that is signed by all parties at the end of the interim period has a more organic quality as a result of the participatory processes of its creation. There is a true alignment between the relationship imperatives and the written contract that underpins the project.

Project alliancing is based on an agreement that the risks will be borne by the party best able to manage those risks. This is a risk embracing strategy. Risks can be better managed if they are identified and embraced..

It also removes the financial pressure placed on contractors by being forced to artificially undercut their profits in order to win a competitive tender. This is a problem not unique to our times.

> *"In recent years a considerable number of projects have not been finished, nor will they be finished. This disorder, Sir, is caused by the depressed prices frequently obtained for your works:…these cut prices are illusionary, especially as a contractor who is working at a loss is like a drowning man who clutches at straw. In the case of the contractor this means he does not pay his suppliers, cheats everyone he can, underpays his men, getting the worst, not only using the most inferior materials, but quibbling over everything and always begging forgiveness over this and that. Abandon [this type of competitive tendering] Re-establish good faith, give the estimation of the work and not refuse a reasonable payment to a*

contractor who will fulfil his obligations. That will always be the best transaction you will be able to find."

Marshal Vauban (1633 – 1707), Chief of Fortifications for Louis XIV (Construction Queensland, 2001)

THE CORE PRINCIPLES OF PROJECT ALLIANCES

The following are examples of the core principles incorporated into most project alliances and relationship contracts:

- a change in culture from a 'master-servant' to a peer relationship.
- all risks and rewards are shared on an agreed equitable basis- sharing the pain and the gain.
- outcomes where all parties either win or lose.
- a collective responsibility for the project.
- all parties have an equal say and all decisions must be ones that are the best for the project.
- a 'no-blame' integrated team culture.
- full access to the resources, skills and expertise of all parties.
- a philosophy of delivering optimum commercial benefits and outstanding outcomes to all parties.
- a high performance culture with encouragement for innovative thinking.
- open and honest communication with no hidden agendas.
- support rather than blame and the honouring of all commitments made.
- an express commitment to resolve all issues within the alliance without recourse to litigation except in the case of wilful default.
- all transactions to be fully open book.
- unconditional and visible support from the top level of the participating organisations.

(Ross, 2000)

DISPUTE RESOLUTION CLAUSES

A unique aspect of project alliances is that there is no specific alternate dispute resolution clause written into the project alliance contract. This is not a rejection of the need for dispute resolution. It is instead an acknowledgement that it is an integral part of the normal day-to-day management of the project. It is so fundamental to the contract that it does not need to be placed in a separate clause. It is something that should not be capable of being severed from the rest of the contract. The project alliance agreement is structured in such a way that it is not possible to deal with conflict in any way other than by facing it and resolving it immediately.

The following is an example of a clause limiting the right of parties to an alliance to make a civil claim against each other.

"A failure by any alliance participant to perform any obligation or to discharge any duty under or arising out of this agreement will not give rise to any enforceable obligation at law or in equity whatsoever save and except to the extent that the failure also constitutes wilful default"

WILFUL DEFAULT is defined as:

"An intentional act or omission by an Alliance Participant carried out with utter disregard for the harmful consequences for another Alliance Participant, but does not include any error of judgment mistake act or omission made in good faith whether negligent or not by an Alliance Participant."

(Ross, 2000)

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This is a key element of the Project Aliancing approach. It contractually removes the winners and losers option that is at the heart of traditional commercial contracts. It forces all parties to adopt a collective approach to resolving problems caused by mistakes, negligence or acts of God. Any losses are shared with

no opportunity for recovery through litigation. Recovery can only be achieved by collectively working to make up the losses through innovation.

A PRACTICAL EXAMPLE

The state of Queensland has recently been in severe drought with water levels in the major dams in the southeast corner of the state at record lows. At the beginning of 2007 the water levels servicing the southeast corner were below 20%. The Queensland Government was faced with the real possibility that the capital of Brisbane could run out of water. The government, for political reasons, had to be seen to be taking urgent action. They devised a plan to create a water grid to shift water through pipelines linking the major regional dams with the city as well as constructing two new dams. To complicate matters many of the states coal-fired power stations required vast amounts of water for cooling purposes so a second set of pipes were required to recycle used water back to the power stations.

The situation was so urgent that the government had to act immediately. There was intense political pressure on the government to demonstrate that they were taking immediate action. The government announced that work was to commence immediately on the water grid. However the only way that construction could start within a reasonable time, without any preparatory planning or design, costings or site testing was to adopt the Project Alliancing project delivery system. The Queensland Water Commission through its subsidiary Queensland Water Infrastructure quickly selected a number of parties using the project allianceing model. It issued dozens of individual project alliances for water pipelines, recycle upgrading, waste water treatment plants and for the construction of two dams.

It was accepted, even by Queensland's Treasury and Department of Finance officials, that there was no time for the traditional method of scoping the work, preparing formal documentation and submitting them to a formal competitive tender process. One of the clear advantages of project allianceing is that a well formed Project Alliance can be put together within a period of two months. Once established it is then able to begin the task of scoping the works, undertaking the planning and designing and make an estimate of the anticipated cost of the project.

To complicate matters the work was so urgent that the contractors had to start building at one end of the grid before the planning and design work had been completed at the other end. As a consequence it has been difficult to maintain an accurate budget estimate as the cost has evolved as the project moved forward. For example it is hard to estimate the cost of constructing a water pipe over a river when the site conditions have not been ascertained. This is further complicated by the lack of a decision as to whether the pipe will go over, under or around the river. As a consequence the initial estimates of costs calculated before the completion of the investigations and planning stages increased by $2.4 billion. However, even Treasury and Finance officials begrudgingly accept that there was no reasonable alternative to using the Project Alliance process in the crisis situation the government was faced with.

With the effects of climate change becoming more apparent governments will be forced to utilise the project allianceing model when similar urgent pre-emptive constructions are required.

RELATIONSHIP CONTRACTING

Relationship contracting is a variation of the project allianceing model. The term project allianceing is usually applied to fresh (greenfield) projects. However the principles of project allianceing have been applied to existing commercial agreements for infrastructure projects that have failed. In situations where a commercial relationship breaks down the parties are often left with a choice of either seeking a compromise or pursuing litigation. The risk assessment includes not only assessing the chances of success in the courts but also whether the likely result is going to advance the commercial objective that the original agreement sought to achieve. There is also an effect on ongoing relationships with members of the same industrial or commercial group that you might in future have to work with on other projects.

Relationship contracting is an alternate approach. Put simply, it requires all parties to agree to place their existing contractual agreement, together with all rights and obligations that flow from it, into the top drawer

and shut it. The parties then enter into a without prejudice renegotiation of their commercial relationship using the principles of project alliancing. These negotiations take place in the shadow of the existing contract with all parties free at any time to take the existing agreement out of the drawer and pursue their rights.

The advantage of this approach is that it shifts the focus away from defending a particular version of the black letter agreement and back onto the ultimate goal of all parties profiting from the successful completion of the project. It is directing the focus away from the past and onto the future.

The parties will then enter into the interim project allianceing period and work to reset the contract along project allianceing lines. Once this new relationship based agreement is accepted then the parties can agree to reopen the top drawer and novate the old agreement or, if they choose, leave the agreement in the drawer and proceed in the shadow of the old agreement.

This process was used successfully by the Queensland Department of Main Roads in turning around the then failing one billion dollar Gold Coast Motorway Project. A number of the six major sections contracted out to various groups were so badly mired in adversarial stalemate that it was decided that the relationship contracting approach was the only way forward. The Department of Main Roads fixed a date on which existing contracts would end. All parties were paid up to that date.

On the following day the parties start afresh focusing on completing the project using the principles of project alliancing. The climate of blame and counter-blame ended immediately. All parties were so relieved to be out of a no-win situation that they embraced the core principles of Project Alliancing. The relief was harnessed into a new collective drive to complete the works within agreed costing and time limits. This was achieved. The 1,500 claims made against the contract prior to the change to relationship contracting were subsequently resolved out of court using the "Senior Executive Appraisal" model of in-house conflict resolution.

The term "Relationship Contracting" was adopted by Queensland Main Roads for the Pacific Motorway project as a way of distinguishing it from a pure Project Alliance used in a new project. The Australian Constructors Association used the term to describe what is essentially Project Alliancing in their 1999 publication titled "Relationship Contracting- Optimising Project Outcomes."

Greg Rooney is a practising mediator and arbitrator in Australia. His professional background is in law.
gregrooney@bigpond.com

AUSTRALIAN PROJECT ALLIANCES 1994-2008

1994-96 Wandoo B Oil Platform WA $377m -
$13m under budget – completed 7.5 months less than industry standard. Winner of two national awards.

1994-97 East Spar Project WA $250m–
Winner of Aust. Institute of Engineers highest award

1996-99 Hot Briquetted Iron WA (BHP) –
Three separate fabrication/ construction alliances

1997-00 Northside Storage Tunnel Project (Sydney Water) $465m-
The project was fast tracked with cost over runs and unpredicted construction problems limited by cost saving initiatives. A number of design enhancements were made during the course of the project.

1998-01 National Museum of Australia ACT $155m–
World first Project Alliance for a Building Construction Project. Achieved target opening date within tight time and budget constraints

1999-02 Woodman Point Wastewater Treatment Plant Amplification WA $140m

1999 Clean Fuels Project Qld $350m

1998-1999 Penola West Project SA $6m –
Completed ahead of schedule despite numerous externally imposed delays – 13% cost overrun

1999-00 Pelican Point Project SA $22m –
Completed months earlier than worlds best practice. 6% under budget

1999 Norman River Bridge QLD $5m -
Completed weeks earlier than tight target date - under budget

2000 Inner Northern Busway Sect 1 QLD $70m –
Alliance terminated due to outside budget and political factors however alliance performed well and responded to external factors without suffering undue commercial loss.

2000 Pacific Motorway QLD $1 billion – Package 4. A distressed project was converted in mid-stream, to a Project Alliance to overcome severe scheduling difficulties and regular scope changes. The Alliance completed work to the value of $62 M ahead of the target schedule and near to the target cost. 1,500 claims against the distressed contract were resolved without litigation by means of a senior executive appraisal process based on the goodwill created by the alliance.

2000-02 Awoonga Dam Rising Project $150m-

2001 Department of Defence, Project DJIMINDI Alliance -
The Anti- Submarine Warfare Lightweight Torpedo project

2001 Department of Defence, ANZAC Ship Generation Alliance > $1 billion–
An alliance to deliver change to ANZAC Class ships to improve capacity of missile systems.

2000 Port of Brisbane Motorway Qld $100m–
Completed 6 months ahead of schedule plus adding an extra overpass while still coming in aprox 10% under its construction budget. It achieved excellent performance on a number of non financial objects related to the environment, the community, quality and traffic. No disputes to resolve nor claims for variation.

2001-04 Sydney Water, Sewer Fix Pumping Station Program $358m–
Completed upgrading of 250 pumping stations. Overall savings rate of 15% against target cost estimates, a saving of almost $30m plus $3m worth of program savings in the form of station improvements.

2003 Burnett River Dam Alliance $150m –
Half way through the Burnett Water Dam project, the foreign parent company of the construction alliance partner went bankrupt. An alliance partner met construction obligations and the project continued without loss of production days. This was made possible due to the strength of the alliance contracts.

2003 North Queensland Gas Pipeline $140m –
Pure alliancing model helped deliver the project on time, under budget, with stakeholder satisfaction, and no disputation.

2008 Tugan Bypass - Qld Main Roads,$540m
competitive alliance completed 6 months in advance on budget

2002-08

- Inner Northern Busway Qld $35m,
- Brisbane Water Enviro Alliance $140m,
- Wivenhoe Dam Spillage Upgrade Qld $70m,
- Burnett River Dam Alliance Qld $150m,
- Lawrence Hargrave Drive Alliance NSW $45m,
- Travailyn Upgrade Project Tas $35m,
- Roe Highway Stage 7 WA $70m,
- Northern Gateway Alliance NZ $200m,
- New Perth Bunbury Highway WA $370m
- Great Eastern Highway Alliance WA $30m
- Grafton Gully Free/Flow Alliance NZ $100m
- Ipswich Motorway Upgrade (Dinmore to Goodna section) Qld $1.4billion

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