Project Alliances In The Construction Industry

- Anthony Abrahams and Alan Cullen,
KPMG Legal.

1. DEVELOPMENT OF ALLIANCING

The Australian construction industry has, over time, utilised a number of innovative variations to "*traditional*" contract arrangements. Recourse has been had, for example, to structures like design and construct, partnering and project management. All of these systems have their merits, but none, including partnering, has attempted systematically to create a radically different, non-conflictual relationship between project participants.

As a result of dissatisfaction with traditional project delivery strategies, the oil and gas industry began to use "*project alliances*" in the development of energy reserves in the North Sea. British Petroleum came to the conclusion that a change in corporate attitudes and practices was essential for the profitable development of new projects.

In Australia during the mid 1990's, project alliances were adopted for three major projects in Western Australia, namely:

- the *Wandoo* oil alliance contract for Ampolex ($480m);
- the *East Spar* gas field alliance contract for Western Mining Corporation ($250m); and
- the *Port Hedland* iron ore alliance contract for BHP ($700m),

and a major project in South Australia - the Roxby Downs metal ore alliance contract for Western Mining Corporation ($400m).

In 1997, the NSW Rail Access Corporation awarded project alliance contracts for the maintenance of rail infrastructure (originally, 15 contracts valued in total at $600m were prepared, but only 3 have been awarded). In 1998, Sydney Water Corporation awarded an alliance contract for the Northside Storage Tunnel project ($375m), the Commonwealth is using an alliance contract for the construction of the National Museum and Institute for Aboriginal and Torres Strait Islander Studies on the Acton Peninsula in the ACT ($95m) and the Western Australian Water Corporation has adopted an alliance process for a new waste water treatment plant ($140m) at Woodman Point, south of Perth.

2. FUNDAMENTAL CHARACTERISTICS

2.1 Definition of a Project Alliance

A *project alliance* may be defined as an agreement between two or more entities which undertake to work cooperatively, on the basis of a sharing of project risk and reward, for the purpose of achieving agreed outcomes based on principles of good faith and trust and an open-book approach towards costs.

2.2 Requirements of a Project Alliance

Some of the fundamental requirements of a project alliance are:

- a commitment to common objectives and outcomes;
- a sharing of information, knowledge and skills;
- a co-operative fulfilment of obligations;
- mutual trust and respect;
- a willingness to share losses and profits;
- achieving gains through innovation;
- open book accounting;
- a non-adversarial culture; and
- an efficient use of expertise.

2.3 Successful Alliancing

The key to successful alliancing very much depends on:

(a) the quality of the individuals;
(b) the commercial drivers; and
(c) the spirit within the alliance.

The Individuals - best person for the job

The first task should be to establish a team made up of the best individuals available for each project task. These individuals can come from the work force of any of the participants or from outside the alliance. The degree of commitment, integration, motivation, skill, teamwork and trust brought to the alliance by these individuals will determine the level of success of the alliance.

In order to give these essential "*team*" characteristics the best chance of developing and generally to form an efficient alliance, the alliance management will need to relocate the selected individuals in separate premises - in effect to cut them off from their usual employer - and to mould them into a new group for the duration of the project.

The Commercial Drivers - sharing of risks and rewards

The participants will normally agree to share "*risks*" ("*losses*") and "*rewards*" ("*profits*"), measured by reference to key performance indicators (KPI's). The most important KPI - certainly the one which is invariably present - is the "*target cost*", representing the total estimated cost of bringing the project to completion. The target cost is established collaboratively by all the participants in the alliance through an "*open book*" assessment of each participant's anticipated costs. This assessment will probably include an analysis of each participant's historical costs of completing similar or comparable projects.

As with any other KPI's agreed between the participants, the target cost plays a dual role of being a measure for performance and a creator of incentive. It (together with any other agreed KPI's) is the yardstick by which the performance of the alliance is measured, thus determining whether the alliance participants will or will not share the rewards of meeting or exceeding the project's goals.

The process of establishing the target cost is thorough-going and depends upon the full co-operation of each participant in order to obtain a genuinely transparent record of that participant's normal project costs. Unless it represents a fair estimate of the cost of realising the project, the assessment of the performance of the alliance - by comparison with the target cost - will be distorted.

As a general rule, clients agree to pay all the direct costs of the other participants, regardless of whether or not the project has been completed in accordance with, or below, or in excess of, the target cost. To that extent, therefore, the risk of the alliance participants is underwritten by the client. Clients will normally also agree to pay for pre-determined corporate overheads where the target cost of the project is not exceeded. These overheads will be reduced or not paid if the target cost is exceeded, in accordance with a pre-determined risk/reward curve.

Again, where the project is completed in line with or for less than the target cost, clients may also agree to make a further payment based on a pre-determined corporate profit element. The corporate profit may reduce or increase as a function of the degree to which exceptional results are or are not achieved, in accordance with the risk/reward curve agreed between the participants.

As already stated, other KPI's may be factored into the risk/reward calculation to determine whether the alliance has achieved exceptional results or not. Some alliances have included, in the risk/reward regime, an assessment of performance in areas such as:

- time of delivery;
- safety;
- the environment;
- industrial relations;
- community relations.

The inclusion of several KPI's may require inclusion of a weighting factor, in the risk/reward formula used to assess payment to the participants. Thus the importance to the alliance of each KPI will be reflected in the weighting attributed to it in the formula.

The alliance contract should provide very limited grounds for adjustment of the commercial drivers, risk/reward regimes and the payment provisions. Grounds for increasing the target cost and granting extensions of time should be quite limited, as the essence of a project alliance should be:

(i) co-operation for the mutual benefit of the participants; and
(ii) a focus on performance, not on reasons for non-performance.

The Spirit within the Alliance - commitment to the alliance

The agreement must be read in a spirit of trust and an attitude of "*what is best for the alliance is best for my organisation*". If the contract is read pedantically, then the alliance will be in trouble. The parties may well find themselves in the typical position of an adversarial relationship. Certainly, the contract provisions will set down the alliance principles and the parties may further have recourse to signing a "*charter*", declaring, as it were, their intention to behave in accordance with the alliance spirit. In the final analysis, however, the day to day behaviour and attitudes of the participants will determine whether they are genuine alliance material or not.

2.4 Selection based on "soft dollar" criteria

One of the more radical principles of project alliancing is the selection of participants on the basis of factors other than price. The client chooses the entities it regards as most able to deliver value for money by considering such matters as:

- technical experience and expertise;
- whether the entity would be flexible, co-operative and trustworthy;
- project alliance experience;
- current commitments;
- financial and management resources;
- industrial relations and safety record;
- claims and disputation record;
- quality and time record;
- relationships with subcontractors and suppliers;
- environmental management;
- insurance claims;
- risk management.

3. DIVERSITY OF ALLIANCE MODELS

3.1 Differing structures

Although the general principles of a project alliance are common - indeed essential - to all alliances, individual alliances may differ substantially with respect to the method of their establishment, their structure or their operation. Factors such as the degree of development of design, the size and type of project, the culture of the participants and the commercial drivers of a project may all influence final choices.

3.2 Single phase or two-phase model

One example, amongst many, of the variety of approach to the establishment of an alliance, concerns the choice of a single phase or a two-phase model for the alliance. In the single phase model, prior to establishing any agreement, the client may require the parties to develop and agree upon key performance indicators, a target cost, a risk reward regime and other terms of the alliance agreement.

As a variation on this, the client may wish to establish an interim contact with the preferred alliance team in order to make up a basic conceptual design or to agree as to the previously mentioned elements (key performance indicators, target cost, etc.). If all of the alliance participants agree on those items, then the same alliance team would move to the second phase, being the realisation of the project. With a two phase model, the client may invite certain parties - not usually those later selected for the alliance - to form a preliminary group for the purpose of confirming the feasibility of moving forward to the second (alliance) phase. The initial phase may involve the carrying out of an investigation of the project and perhaps the preparation of a schematic design.

Other factors which may influence aspects of the alliance are:

- the size and type of project;
- the culture of the participating organisations;
- the corporate objectives; and
- the commercial drivers for the alliance.

4. PROBITY AND PUBLIC SECTOR PROJECTS

4.1 Value for money

In relation to government projects, there has been a pronounced increase in recent years in the use of probity auditors to provide assurance that due process has been followed and procurement activities have been carried out in a legal and ethical manner. The issue of "*value for money*" is central to the probity concerns of government i.e. assessed against a number of criteria, does a given project provide a composite of benefits which, when assessed against cost, may be said to represent value for money? This question has been argued to be particularly relevant to alliancing due to the fact that assessment of tenders is not based on the "*hard dollar*" issue of the price tendered by each bidder (at the time of selection of the winning group in an alliance project, the target cost of the project normally will still need to be determined, together perhaps with other KPI's applicable to the project and the risk/reward formulae).

However, it is submitted that the central characteristics of project alliancing do, in fact, provide a significant assurance of value of money. Project alliancing is based on the philosophy of no disputes and a containment of variations within the estimated target cost of the work. The co-operative approach to cost control, along with the requirement of designating the best person for each task, may be strongly argued to give a more effective guarantee of value for money than "*traditional*" projects with their propensity for conflict and claims and general price blowouts.

4.2 Probity auditors

In government contracts, a probity auditor is appointed by the client from the inception of the project to:

(a) ensure that the tender evaluation process is fair and equitable;

(b) to provide guidance to the client as to how unforeseen issues could be resolved; and

(c) to monitor communication during the period between submission of tenders and signing the project alliance agreement.

The probity auditor is an independent observer and, therefore, is not involved in the decision-making process relating to expressions of interest or the evaluation of tenders. He or she can nevertheless comment on whether the client has put in place a procurement process which helps to achieve value for money.

5. PROCUREMENT PROCESS

5.1 Substantial Difference

The procurement process in alliancing varies substantially from that applying in a project tendered for on a traditional basis. The process normally followed is detailed and thorough.

5.2 The tendering process

Success of the project begins with the development of an effective method of sorting the participants. One of the first issues confronting the client is that of the formation of potential alliance groups. The client can either:

(a) invite prospective participants to form themselves into groups and then submit a joint proposal; or

(b) invite prospective participants to make individual proposals.

This second method of inviting participants, although an option available to clients, would not usually be adopted by clients because they generally prefer the participants to align themselves into teams rather than the clients having to spend time and resources on bringing prospective participants together into groups.

The client would normally elect to reduce the number of bidding groups down to a manageable maximum, based on the written subsmissions of the tenderers. Once this has been done, the client should arrange a site visit and a briefing session for all remaining groups. At that stage, the facilitator (see below) should ensure that the site visit and the briefing session are properly managed and that the individuals involved in those exercises have begun to focus on the characteristics of a project alliance, such as teamwork, a commitment to common aims, co-operation and a willingness to share knowledge, risks and rewards.

The client's project manager and specialist advisers (e.g. environmental, financial, legal and management) would be involved in the briefing session.

The various groups (for example, there were 8 in the case of Sydney Water Corporation's Northside Storage Tunnel contract) do not bid on price. They bid on so-called "*soft dollar*" factors such as their expertise, safety record, current commitments and ability to work co-operatively within the framework of an alliance agreement. These evaluation criteria are used to satisfy the client that the preferred alliance team understands and is committed to the basic requirements of an alliance.

Having carried out the initial cull, the next step for the client may involve the holding of separate sessions, generally of a duration of half a day, with each of the chosen groups. Each group would make a presentation to the client, concluding with a question-and-answer component, so as further to reduce the number of groups.

After the completion of the half day session, the client will select a reduced number of groups. One of these groups will be selected by the client to enter into a project alliance agreement. If the client and the preferred alliance team are unable to reach agreement, the client would then enter into detailed negotiations with the second ranking alliance group and so on.

The evaluation process would usually involve steps designed to allow the client to get to know and understand the differences between the groups. In addition to initial assessments, shortlisting, detailed interviews and the like, this has frequently involved workshops. These are conducted by the client with the remaining teams. The workshops provide the client with an opportunity to gauge the suitability of the contending teams successfully to work in an alliance environment.

5.3 Agreement on commercial details

Once the preferred team has been selected, the client and that team set about agreeing on the finer details of the project alliance agreement such as:

- the key performance indicators (KPI's);
- the risk/reward curves (profiles only, not with monetary amounts);
- direct cost criteria;
- the target cost (if the client requires).

Although the target cost was established after the alliance agreement was signed in the case of Wandoo and East Spar (for example), clients may want to reach agreement on the target cost before the contract is entered into.

For the Woodman Point project, the client intends to enter into an interim agreement with the preferred proponent in order to establish a target cost, risk/reward curves and a management structure.

Where the target cost and other commercial drivers are determined before the alliance agreement is signed (with or without an interim or separate agreement), the matter of the cost expended on such activities should be considered. The target cost, for example, could take up to 3 months for the parties to reach agreement. Considerable cost could be spent on this activity alone. If the client does not proceed any further with that particular team, there could be some dispute about the unsuccessful team being reimbursed for the cost of preparing the target cost estimate.

5.4 The facilitator

Alliancing requires a substantial and dramatic change in the way consultants and contractors are selected to carry out work and the manner in which clients, consultants and contractors relate to each other during the course of a contract.

Facilitators have been shown to be valuable contributors to the selection of the appropriate alliance team and to provide stimulus to the necessary cultural change to be embraced by the alliance participants. A facilitator will normally be appointed at the outset of the project to assist the client during the selection of the alliance team, by the utilisation of techniques to determine which consultants and contractors are best suited for the alliance. Once the alliance team is chosen, the facilitator then sets about imparting the alliance culture to the personnel chosen by the participants to be involved in the project.

The facilitator may be invited to assist and work with the board and the project management team in:

- building best practice behaviours, vision and an implementation plan;
- developing the objective of achieving extraordinary results;
- building an environment of enthusiasm; and
- developing a unique alliance identity for the project so that the results and rewards are in the foreground and individual participant's interests are in the background.

6. ALLIANCE DOCUMENTATION

6.1 Issues

The alliance agreement may consist of:

(a) one document covering all participants; or

(b) one central document establishing those requirements of the alliance which are applicable to all participants plus individual agreements setting out the requirements applicable respectively to each of the individual participants.

In either case, the document applicable to all participants will:

- deal with the structure of the alliance;
- set out the alliance objectives and principals;
- provide for the functioning and management of the alliance;
- set out the role of the facilitator;
- establish the parameters of the key performance indicators, including target cost and the risk/reward regimes; and
- determine the limitations on the liability of the participants to each other and to the alliance.

Other matters that should be covered in the alliance documentation include:

- each participant's obligations (as contractor, consultant and client);
- work to be performed and expected outcomes;
- indemnity and insurance;
- variations;
- payment;
- termination;
- confidentiality and intellectual property;
- key performance indicators;
- direct costs corporate overheads & profit;
- risk/reward;
- no disputes.

The issue of "*no disputes*" is an inherent feature of an alliance contract. The whole basis of a successful relationship is the adoption of a culture of "*no blame - no disputes*". The parties agree not to sue each other or to use arbitration as a means of settling any differences of opinion. Only in the event of "*wilful default*" does a participant have an express legal cause of action against another participant under the terms of the agreement.

A clear definition of the scope of work is essential so that the participants arrive at a realistic and accurate estimate of the target cost. Every effort must be made to absorb the effects of a variation without increasing the target cost or delaying the completion of the project.

Normally, the board will decide whether a variation is outside the general scope of the work in accordance with predetermined criteria.

6.2 Alliance management

A project alliance generally operates on the basis that the alliance is a separate entity to the organisations that are parties to the alliance agreement.

Accordingly, the parties will invariably include in their documentation the establishment of a management structure that provides for the business aspects of the contract to be conducted as if a company is managing their affairs.

Typically, an alliance board would make all the key decisions and a project manager would ensure that those decisions were carried out in a timely manner. The project manager will lead a project management team which will be responsible for the day to day design, construction and other obligations.

7. WHEN TO USE ALLIANCING

A project alliance may be more effective than alternative arrangements:

- in projects involving a considerable proportion of complex work;
- in significant design and construct projects; and
- in high profile projects where improved outcomes may be generated through alliancing.

Again, an alliance may be the better approach in a significant project where certain constraints are of particular importance in relation to that project, such as:

- time;
- budget;
- environment;
- community;
- location.

Because of its non-adversarial culture, the co-operative behaviour of participants and the requirement that risk be shared, an alliance has the advantage of ensuring that potential claims and disputes arising out of such constraints are worked out amongst the participants without giving rise to major conflict.

An alliance will not work for all projects. In particular, it will not be appropriate if:

(a) the clients, consultants and contractors cannot work as a team;

(b) the project is of a relatively small size such that the tender selection costs are out of proportion to the cost of the work; or

(c) the project is not complex or there is little room for improving on outcomes.

Again, if the design component is well advanced or is complete prior to the alliance contract being formed, then there is much less opportunity for the other alliance participants to contribute to buildability and innovation in order to bring about savings in time and money.

8. CONCLUSIONS

If the participants have the right attitude for an alliance contract and the alliance is properly structured and managed, then exceptional savings in cost and time should be achievable.

The bottom line for clients is "*value for money*". Project alliancing itself does not guarantee value for money for all projects, so it is most important that clients, consultants and contractors give careful consideration to the sort of projects that would be suitable for an alliance.

It would be difficult to justify the delivery of a small project, for example, by way of alliancing because of the disproportionate upfront costs involved in selecting an alliance team. At the same time, a large project may be so simple and straight forward (for example, one hundred kilometres of uncomplicated roadwork) that there would not be the scope for innovation and clever work processes to warrant an alliance.

It is also of fundamental importance to the success of the alliance that all the essential elements are present. Taking a bet both ways - using some elements of alliancing in an essentially traditional framework - may well mean that the worst of both worlds are at work.

It is generally considered that project alliancing is more suited to large and complex projects where the cost and time blowouts in the event of difficulties or disagreement are potentially very substantial and where the nature of the project, by its very nature, will harness the enthusiasm of participants.

Factors which are essential for the success of an alliance contract include:

(a) a strong commitment to the alliance from the chief executive of each participant;
(b) an appropriate alliance structure;
(c) the best people for the project;
(d) strong management during the course of the project;
(e) excellent facilitation;
(f) reasonable commercial incentives;
(g) adequate authority delegated to the participants' representatives;
(h) challenging objectives; and
(i) the development and maintenance of an appropriate alliance culture.

At the very least, project alliancing should ensure that co-operation is valued and disputes are avoided. At its best, an alliance contract will produce exceptional savings in time and money and should guarantee quality. ❑