Relational Procurement Options - Alliance and Early Contractor Involvement Contracts

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1 Purpose
This guide has been developed to provide information on the use of alliance contracts.

2 Document management
This guidance was issued by the Queensland Government Chief Procurement Officer on July 2008.

Current version: V1.0 (issued July 2008)

3 Who should use this guide
All Queensland Government officers involved in selecting and advising upon procurement options should read this guide.

4 How is this guide to be used?
This guide should be read in conjunction with the State Procurement Policy and the department’s “Agency Procurement Procedures”.

There are also specific procurement policy frameworks, option selection guides, and alliencing guides currently used by the Queensland Government. These include:

- Queensland Government Department of Public Works ‘Procurement Selection and Generic Contracts’ administered by the Department of Public Works.
- Department of Main Roads Project Delivery System Volume One.
- Queensland Government’s Project Assurance and Value for Money Frameworks;

Since alliance contracts typically involve projects valued at $30 million and over, or that are of regional or strategic significance, consideration must be given to the Local Industry Policy administered by the Department of Tourism, Regional Development and Industry. The following selection of Better Purchasing Guides may also provide useful information:

- Advancing Government Priorities through Purchasing
- Corporate Procurement Planning
- Developing and Managing Arrangements with Suppliers
- Evaluating Offers in Purchasing
- Probity and Accountability in Purchasing
- Developing Specifications in Purchasing
- Planning for Significant Purchases
- Analysing Supply Markets in Purchasing

1 "Agency Procurement Procedures" are agency specific procedures that set out how agencies are to undertake their purchasing activities in compliance with the State Procurement Policy. These procedures are also known as “local instructions” or “local purchasing instructions”.

2 These Frameworks require procuring agencies to consider whether major infrastructure projects (i.e. with a whole-of-life net present value of $100 million or greater) have the potential to be delivered by way of a Public Private Partnership.
5 Procurement objectives and value for money

The objectives of the State Procurement Policy are to:

• **advance Government priorities** - These priorities define the Government’s commitment to advance, through its procurement, certain social, economic, and environmental objectives.

• **achieve value for money** - The concept of value for money is not restricted to price alone. The value for money assessment must include consideration of:
  
  a. contribution to the advancement of Government priorities;
  
  b. non-cost factors such as fitness for purpose, quality, service and support; and
  
  c. cost related factors including whole-of-life costs and transaction costs associated with acquisition, use, holding, maintenance, and disposal.

• **ensure probity and accountability for outcomes** - A department/agency must conduct its procurement activities with the utmost probity. Some relevant probity and accountability requirements are set out in legislation.

Officers must therefore select procurement options best able to deliver value for money and ensure probity and accountability for outcomes.

Value for money principles are provided in the *Queensland Government Better Procurement Guide, Value for Money.* Value for money demands that government procurement achieves the best return and performance for the money being spent. The following value for money principles reflected in the State Procurement Policy, are of particular relevance when selecting procurement options:

• Whole of life cycle costs. Procurement agencies must capture the costs of auditing, management of variations, tendering costs and relationship management for each procurement option

• Non-cost factors. Procurement agencies must consider non-cost factors such as reduced contractual disputes and claims, fostering innovation and meeting community expectations

• Advancing government priorities. Procurement agencies must consider broader government objectives such as developing local industry.

Value for money also needs to be considered the in the context of affordability, and this will include whether the project is aligned with the procuring agency's objectives, whether the procuring agency has considered sufficiently alternative means of delivering the policy objectives that might be more cost effective, and whether the procuring agency has the resources available within its budget to fund projects using alliance-based contracts.

These elements are of significant relevance to alliance contracts as these procurement options deliver substantial non-cost benefits and incorporate hidden costs and benefits that are typically not considered in conventional contract delivery methods. This guide subsequently explores the relative costs and benefits of alliance contract procurement options to provide procurement officers with a robust and repeatable framework in selecting procurement options best able to deliver value for money and achieve government objectives.

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3 QLD Government, Department of Public Works Jul 2000, 2
5.1 Contract remuneration system

In addition to the form of contract used, procurement agencies are required to select the payment method for each contract. Remuneration may involve fixed price/lump-sum, schedule of rates arrangements or a combination of the two with capped costs such as guaranteed maximum price contracts. The remuneration model used for each contract will fundamentally alter the risk profile of each procurement option.

For example, a construct only contract with minimal risk, using mature technology is likely to be best delivered using a fixed price or lump-sum payment option. By comparison, a construction contract with high geotechnical risks or a developmental project with software intensive elements may benefit from a schedule of rates payment option. A mixture of the two remuneration methods may also offer advantages. For example, a project may involve schedule or rates for design activities with a lump sum payment applying to construction elements. Also, a guaranteed maximum price may be applied to a schedule of rates contract to cap government's liability for payment.

5.2 Partnering

Independent of the form of contract and remuneration system selected, procurement agencies may adopt partnering principles for that contract. ECI contracts for example embed partnering principles within the contract itself. Partnering is a process applied outside the contract to align the goals and objectives of the parties to the contract and to facilitate good communication, teamwork, and joint problem solving. Partnering can be used in conjunction with traditional and non-traditional procurement options.

Partnering can lead to substantial benefits in project delivery though partnering demands commitment from all participants and introduces some costs that need to be considered in project business cases. For example, business cases must consider the costs of workshops and meetings if partnering is pursued.

6 Conventional procurement

Alliance contracts incorporate unique characteristics when compared to the conventional procurement options used by Queensland Government agencies. To illustrate the unique costs and benefits of alliance contracts, it is useful to review the characteristics of these conventional procurement options. This includes summarising the main forms of conventional contracts, the available remuneration systems, and the use of partnering principles.
6.1 Conventional procurement options

Conventional procurement options include traditional and non-traditional options. That is, the *form of contract* used for procurement. Though not exhaustive, the following list provides an overview of the commonly used conventional procurement options available to procurement agencies.

- **Traditional**: Construct only contracts; and
- **Non-traditional**:
  - i. Design and Construct (D&C),
  - ii. Design Construct and Maintain,
  - iii. Managing Contractor,
  - iv. Early Contractor Involvement, (ECI), and
  - v. Spiral development or rapid prototypes (for software programs).

Other than for spiral development, these conventional procurement options are best suited for projects where construction or implementation risks can be allocated to contractors. Conventional procurement options are also best suited where robust project documentation is available and design risks are not high. Nevertheless, conventional procurement options can be modified to cater for higher risk projects with the incorporation of relational contract principles, as is the case with the Department of Public Works two stage, Negotiated Guaranteed Construction Sum Managing Contractor contract and the Department of Main Roads Early Contractor Involvement (ECI) Contract. Procurement agencies can find further information on the relative merits of conventional delivery options from:

- a. Queensland Government Department of Public Works Capital Works Management Guideline, ‘Procurement Selection and Generic Contracts’; and
- b. Queensland Government, Department of Main Roads Project Delivery System Volume 1.

6.2 The relational contract spectrum – alliances and conventional procurement options

Historically, conventional contracts have proven to be unsuitable for the effective delivery of projects with very high risk and complexity. For example, very high risk projects include those that involve a large amount of geotechnical risk, are software intensive or involve systems with

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7 Queensland Government Department of Public Works Capital Works Management Guideline ‘Procurement Selection and Generic Contracts’
Department of Main Roads Project Delivery System Volume One 16-32
uncertain configurations. Furthermore, a trend also exists for increased adversarial behaviours with conventional contracts. This had led to the emergence of relationship contracting.

Relationship contracting is founded on the principle that there is mutual benefit to the client and the contractor to deliver the project at the lowest cost. When costs increase, both the contractor and the client are worse off. When costs decrease, both client and contractor benefit. Principles of relationship contracting include:

- A focus on project outcomes
- Innovative contractual arrangements
- Success of projects measured against key performance indices
- An emphasis on openness and communication between participants
- An equitable risk/reward balance that aligns the commercial interests of the parties
- Access to and contribution by the best resources of each participant with an emphasis on working together efficiently

Alliance contracts embrace these principles of relationship contracting. This is demonstrated in Figure 1 where alliance contracts occupy the centre of the relationship management spectrum.

Figure 1: Relationship Management – Procurement Option Spectrum

With this emphasis on relationship management, alliances contracts consequently drive collaborative behaviours and increase cooperation with the sharing of project risks. Nevertheless, these benefits will only occur where both parties are committed to the relationship. The two stage Managing Contractor or ECI Contracts with guaranteed maximum prices are novel adaptations of conventional contracts used to promote early involvement of contractors in a project and capture many of the benefits of alliancing. These later forms of contract are discussed in Section 8.

7 Alliances

Alliances appear in many forms and the alliance model can be adapted to cater for the unique risk management strategies of government. The following section provides a definition of alliance contracts and an overview of the commonly used alliance models.

7.1 Alliance contracts defined

Alliances are relatively new forms of contracting, first employed in Queensland in 1999. Despite their relatively recent appearance here, over $5 billion has been expended already on alliances in the State, predominantly on high risk civil construction and infrastructure projects.

Alliances are normally reserved for higher risk projects, especially where residual risk during the construction or implementation phases cannot be quantified or allocated to industry.

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9 Rail upgrades in particular typically involve substantial configuration management uncertainty which precludes the adoption of conventional fixed price contracts.
10 Adapted from Roger Quick, "Queensland ECI Contract" ICLR [2007].
Alliances are collaborative arrangements where parties jointly work together to deliver the outcomes of a project. They are characterised by risk sharing and a no-disputes/no-blame regime. Since alliances are typically used for high risk projects with high levels of uncertainty, alliances are rarely used for building construction.

A typical definition of an alliance is as follows:

An alliance is an agreement between two or more entities, which undertake to work cooperatively, on the basis of a sharing of project risk and reward, for achieving agreed outcomes based on principles of good faith and trust and an open-book approach towards costs.13

The common features of an alliance are:

a. Risk is shared between customer and supplier,

b. The alliance contract typically contains a ‘no-disputes clause’ with no liability between participants (except for wilful default),

c. The customer and supplier share common goals for project success,

d. All transactions are of an ‘open book format’,14 and

e. All participants win, or all participants lose, depending on the outcomes actually achieved (incentivised cost reimbursement).15

The mechanism by which alliance remuneration operates is a key feature of alliancing. Most alliances adopt a three limb reimbursement model.16 Limb one comprises project direct costs and project specific overheads. Alliance non-owners are guaranteed reimbursement of limb one independent of alliance performance. Limb two costs comprise normal profit and corporate overheads. Limb three comprises an agreed share of pain or gain contingent upon alliance performance against cost and non-cost pre-agreed targets. Both the limb two and limb three components are at risk.

### 7.2 Alliance classification

There are no fixed formats of an alliance contract. Nevertheless there are ‘classes’ of alliances to cater for the unique needs of projects and the specific risk management strategies of government. There are two methods by which alliance tenderers are selected. The first and most common method is the single TOC (Target Outturn Cost) alliance.17 The second method is the two TOC alliance, also referred to as the Multiple TOC alliance or Competitive TOC alliance.18

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12 Only in exceptional cases will alliances be suitable for building construction. See g Acton Peninsula National Museum Alliance at Australian National Audit Office, ‘Construction of the National Museum of Australia and the Australian Institute of Aboriginal and Torres Strait Islander Studies, Audit Report’ (2000)


15 Typically, cost overruns and underruns are shared on a 50/50 basis between alliance participants.


17 See esp., Ross, above n2, 1.

18 Sometimes referred to as the ‘Multiple TOC alliance’. 
These selection methods only describe how alliance tenderers are selected and do not provide any description on how the alliance operates after contract signature. Post contract signature, alliances may be classed as either pure or hybrid.

7.3 Single TOC alliances

Most alliances involve the selection of tenderers via a single TOC process. In single TOC alliances, tender selection is primarily based on non-price criteria. Nevertheless, price competition is used for the selection of suppliers and sub-contractors in the TOC development. The cost of preparing an agreed TOC is borne by the alliance owner.

Single TOC alliances facilitate faster tender selections and encourage maximum industry participation in requests for tender when compared to two TOC alliances that have two parties competing in TOC development. Single TOC alliances also are more likely to align alliance owner and non-owner goals after contract signature since the target cost is developed collaboratively.

7.4 Two TOC alliances

A desire to place greater emphasis on price competition in alliance tender selections has created a class of alliance dubbed the ‘Two TOC (Target Outturn Cost) Alliance’ sometimes referred to as a competitive alliance or multiple TOC. Whereas the single TOC alliance requires selection of alliance partners based primarily on non-price selection criteria and high level value for money criteria, the two TOC alliance introduces direct price competition into the selection process. Typically, the alliance owner funds the design activities of short-listed tenderers to develop concept designs for the project. This enables tenderers to submit bids for the project target cost and schedule. As the alliance owner funds the design activities in a two TOC alliance, all foreground intellectual property associated with the design is transferred to the alliance owner, including designs from losing tenderers.

The reliance on direct price competition eliminates several of the value for money concerns of single TOC alliances albeit at the expense of reduced collaboration. The two TOC alliance also introduces large sunk costs to the alliance owner, as the design effort of the losing tenderer requires reimbursement from government. The two TOC alliance also requires a much higher owner resource in developing TOCs than the single TOC alliance.

7.5 Pure alliances

Pure alliances are the most common form of alliance contract. The pure alliance adopts unanimous decision making processes (with no deadlock breaking mechanisms) retains no process for distribution of liability between alliance partners (except for wilful default), and

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21 Foreground Intellectual Property is Intellectual Property created under or otherwise in connection with a contract.
22 Practically, many alliances that purport to be pure contain some form of deadlock breaking mechanism. In addition, the alliance owner’s (government’s) ability to ‘terminate for convenience’ is a pseudo-deadlock breaking mechanism.
requires all project risks to be shared. All pure alliances involve a single TOC selection process. Pure alliances promote greater collaboration than other alliance models. This is because pure alliances align the goals of all participants during the alliance itself.

Though the pure alliance is the most common form of alliance used in Queensland,23 alliance owners have pursued deviations from the pure alliance to cater for some of its shortcomings. Common variations include retention of liability, the use of deadlock breaking mechanisms and allocating risks rather than sharing risks. The adoption of one or several of the above principles results in the use of hybrid alliances.

7.6 Hybrid alliances

Though there is no settled terminology for alliances that deviate from pure alliance principles, common titles include, ‘impure’ or ‘hybrid’ alliances.24 These hybrid alliances typically deviate from pure alliance principles by:

a. adopting deadlock breaking mechanisms using binding arbitration, swingman (final offer arbitration) clauses or other non-consensual methods;25

b. capping the total project costs for government, that is, adjusting alliance ‘painshare’ arrangements to limit the alliance owners liability to a fixed amount;

c. allocating specific project risks to one party rather than sharing all project risks;

d. creation of an ‘alliance contractor’ responsible for delivering project outcomes (with little or no input from the alliance owner);26 and

e. excluding negligence from the alliance no-disputes clause or the cost of rework due to errors by non-owner participants.

A hybrid alliance with any of the features listed above may adopt tender selection along single TOC or two TOC models.

7.7 Program alliances

Though not a form of alliance itself, a program alliance is an option available to procurement agencies. A program alliance involves sub-dividing an agency’s forward program of work into discrete parts. Each of which is treated as a separate project. In a program alliance, a single tenderer is selected to deliver every project within the whole program. The selection process for the alliance program participants uses similar non-price selection criteria to the pure alliance.

For the first project in the alliance program, the alliance develops target costs in the same manner as they would in a single TOC alliance. After completion of this first project in the alliance program, the second project uses the actual outturn cost of the first project as the target costs for the second stage and so on for further projects. This effectively *bootstraps or validates* the

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23 There have been 48 alliances initiated in Queensland with a total value exceeding $5billion. The majority of these alliances have been pure alliances

24 Forrest, above n4, 6.


26 B. Cowan and J. Davis 'Development of the 'Competitive TOC' Alliance - A Client Initiative’ (2005)
alliance target costs and key performance indices between projects. In this arrangement, after the first alliance project is complete, the alliance owner is provided with better demonstration of value for money than they would have in a single TOC alliance. That is, subsequent alliance projects in the program provide greater certainty that the target cost is set fairly. A case study of the Barkly Highway program alliance demonstrates the effectiveness of this approach.  

8 Two stage managing contractor/early contractor involvement

One of the critical concerns for Government, when considering the use of alliances is the large amount of resources demanded of the public sector. Successful alliances require the public sector involvement in the alliance leadership teams and management teams throughout the life of the alliance.

Two stage managing contractor or Early Contractor Involvement (ECI) Contracts are a reaction to the need for government to place a considerable number of resources in alliance teams as well as to better understand and equitably allocate risks during construction.

A two stage approach to project delivery offers substantial benefits when compared to other procurement options for the following reasons:

a. During the first stage, contractors are provided ample time and resources to design and document the project and identify project risks. This process is similar to an interim Project Alliance Agreement which is the preliminary stage of the alliance where the project scope is defined and where the target cost and schedule is defined. This results in a more robust identification of risk and a realistic project schedule and price to be defined.

b. During the second stage, construction can commence with negotiated risks. This allows for the establishment of a guaranteed maximum price or guaranteed construction sum for the project. This also avoids the likely variations and excessive project ‘contingency’ fees that are normally associated with other procurement options.

Though these two stage contracts adopt greater relational contracting principles and more equitable risk allocation than most other procurement options contracts they do not embrace the risk sharing, no disputes and no liability framework of the alliance contract. To this end, these two stage contracts are unsuitable for projects where risk in the construction phase remains high.

30 Victorian Government, above 47
9 Tendering processes for alliances

Consistent with State Procurement Policy, tendering requires procurement agencies to select contractors best able to deliver value for money and ensure fairness in the tender selection process. Alliance contracts involve tendering processes that are different to conventional contracts, particularly with the emphasis on non-price selection criteria. Nonetheless, alliance contract tender selection processes still achieve the objectives of the State Procurement Policy in the absence of direct price competition.

9.1 Single TOC alliance tender selection process

Single TOC alliance tender selections typically involve two stages, namely:

a. Request for proposal. Development of the alliance delivery model and invitation of submissions from proponents, and

b. Evaluation and Selection. Selection of non-owner participants on a competitive basis, typically through the use of workshops, interviews with proposed leadership teams and presentations.31

Procurement agencies may tailor the selection process to cater for the capabilities of industry and expected interest of prospective tenderers. Selective or limited tender arrangements for single TOC alliancing may be appropriate in certain circumstances depending on the results of the Plan for Significant Procurement.32

Since single TOC alliances require selection of tenderers based primarily on non-price selection criteria, there is little price competition available to discriminate tenderers and as a result, thought needs to be given to a valid proxy for price tension. A further consequence of this approach is that procurement agencies will only gain visibility of a firm project schedule and target costs after tender selection. Where procurement agencies adopt robust and accurate project estimation techniques, this issue will be less of a concern.33 Nevertheless, alliances may lead to a situation where the alliance develops project costs and schedules that are inconsistent with the original project business case. This may demand a cancellation of the project, a change in project scope or a review of the project business case to gain additional funding. Single TOC alliances typically allow for termination of convenience in these circumstances.

Alternately, an Interim Project Alliance Agreement (IPAA) may be entered into after tender selection to conduct preliminary design activities and develop target costs and schedules for the project. When agreement is made on project target costs, schedules and other performance indices, a project alliance agreement may be entered into.

32 Queensland State Procurement Policy 3.2.2.
9.2 Two TOC alliance selection process

The two TOC Alliance selection process is similar to the single TOC alliance but selects two participants. Then the selection of the best alliance participant is primarily based on price competition. The alliance owner issues a request for proposal, similar to that of the single TOC alliance, from which two tenderers are selected. The two selected tenderers are funded by the alliance owner to develop preliminary designs for delivering the project. These preliminary designs are delivered with attendant target costs and schedules. At the completion of this preliminary design phase, the alliance owner selects the most suitable tenderer, based primarily on the competitively developed target cost.34

Though the two TOC alliance tender selection process takes considerably more time to complete than a single TOC alliance, the two TOC alliance may deliver more in the form of a preliminary design, project target cost and schedule. To this end, the two TOC alliance may not incur any delays to the actual delivery of a project when compared to a single TOC alliance. This is because the two TOC alliance team commences the alliance with a pre-developed target cost and schedule as well as a preliminary design. By comparison, in a single TOC alliance, the alliance participants must develop target costs and schedules after tender selection.

10 Alliancing – benefits and disadvantages

10.1 Benefits of alliancing

The collaborative nature of the alliances, coupled with risk sharing and a regime of ‘no disputes’ introduces substantial benefits when compared to conventional contracting options. The main benefits of alliancing include:

a. Creation of a commercial framework which aligns the interests of all parties;
b. Improved risk management especially with uncertain project requirements and environments;
c. Earlier involvement in preliminary design activities providing greater visibility of project costs and improved decision making outcomes;
d. Reductions in resources needed to administer contracts, especially contract change proposals;
e. Improved project performance and innovation; and
f. Greater transparency in project prices.35

Other less tangible benefits that also may warrant consideration include providing improved working conditions for staff,36 and maximising industry participation in tender evaluations.37

34 For example one Competitive TOC alliance used a weight of 85% against price.
10.2 Disadvantages of alliancing

Despite the potential benefits afforded by alliances and the reported successful track record in the use of such contracts by Queensland Government agencies, there are a number of disadvantages in the use of these contracting mechanisms compared to conventional contracts. Some of these include:

a. fewer legal remedies should the project go awry;
b. acceptance by a Principal of risks that may be broader than the risks normally associated with a conventional contract;
c. less emphasis on price competition (for single TOC alliances);
d. the need for greater involvement of management resources in the alliance;
e. no cap on the project schedule or cost for government;
f. an increased risk of opportunistic behaviour;\(^{38}\)
g. increased risk of decision making deadlocks;
h. potential for very large lead time to establish the alliance (especially for procurement agencies that do not regularly use alliancing),
i. relatively high tendering costs for government, and\(^ {39}\)
j. potential for a mismatch in negotiating skills between the private sector and government participants, placing the government at a disadvantage.

Other claimed disadvantages of alliancing include the perceived problems of gaining cost effective insurance,\(^ {40}\) additional costs associated with auditors and independent estimators\(^ {41}\), and challenges associated with conducting tender evaluations against mainly qualitative criteria.

Procurement agencies may mitigate some of these disadvantages by deviating from the pure alliance framework either by introducing price competition into the alliance with two TOC alliances or the use of hybrid alliances. For example a two TOC alliance will reduce independent estimator costs but greatly increase tendering costs and dilutes some of the advantages of alliance principles, such as maximising collaboration.

\(^{38}\) This disadvantage is subject to debate. For example, the open book reporting characteristics of the alliance and financial audits discourages opportunistic behaviour. Nonetheless the Queensland Department of Public Works identifies profit margins of alliances being six percent higher than with other procurement options. This disparity in profit margins may be a result of opportunistic behaviour with non-owner participants inflating the TOC. Alternately these high margins may be a result of the fact that alliances are typically applied to high risk projects with larger ‘design’ elements and in industries that are less competitive than those where other procurement options are more suitable. Furthermore, the higher reported profits may also be a result of the alliance philosophy of non-owner participants applying high performing ‘A-teams’ to the alliance.
\(^{39}\) Victorian government above n 3, 18.
\(^{41}\) Cowan & Davis,
Procurement agencies are required to assess all costs and benefits of procurement options when assessing the most suitable means to advance government priorities. This includes assessing costs and benefits in light of market conditions and the general procurement environment.

11 Procurement environment

The changing environment can alter the relative costs and benefits of one procurement option in comparison to another. Of importance when selecting procurement options is the depth of competition and skills available to perform the work, the availability of cost effective insurance and the operation of applicable legislation.

The level of competition is of significant importance when selecting procurement options, as any procurement strategy or delivery model that departs from a price competitive route, such as alliancing or exclusive partnering, should only be agreed following a thorough analysis of the benefits afforded and when they can be clearly demonstrated. In circumstances where the Construction and Engineering or Information Technology market is experiencing a period of increasing demand and reducing supply, an emphasis on the consideration of procurement options that are attractive to industry with minimised tendering costs may be warranted. Compared to ‘hard dollar’ contracts, alliance contracts are attractive to industry as such procurement options can minimise industry tendering costs and allow industry to offer innovative solutions. Furthermore, alliance contracts avoid the transfer of inappropriate risks to industry and the imposition of unilateral penalties such as liquidated damages.

Where supply is limited, especially in rural areas, there are increased risks of no bids being received to requests for tender. Procurement agencies must therefore consider the likelihood of receiving competitive responses to tenders when selecting procurement options.

In some circumstances, the responses from requests for tender may require a revision in the preferred procurement delivery method. For example, if procurement agencies receive only one bid for a competitive fixed price design and construct tender evaluation, then that procurement agency may wish to adopt alliancing arrangements to ensure transparency of costs and improved delivery of value for money. However, in doing so procuring agencies need to ensure alliance-based contracts are not used solely as a means to attract industry participation.

11.1 Insurance

Insurance is also a consideration for selecting procurement options. Historically, where a contractual relationship incorporated a ‘no-disputes’ clause, conventional insurance products were ineffective. Recent developments in the insurance industry have led to the development of ‘first party’ principal arranged insurance products. These products provide alliances and other ‘no-blame’ contractual relationships with cost effective insurance cover for major projects. The continuation of such insurance products will be contingent on the insurance market. Procurement

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agencies are to consider insurance costs as part of the assessment process when selecting procurement options.

11.2 Legislation

Federal and state legislation applies to all procurement options. Alliances, however, may introduce tensions with free trade agreements that prohibit discrimination between domestic and overseas suppliers. Particular consideration should be made to the Australia – United States Free Trade Agreement, Article 15.7, Tendering rules’ and Article 15.9 ‘Treatment of Tenders and award of Contract’ and Queensland Government, ‘Australia-United States Free Trade Agreement (AUSFTA) Implications for Queensland Government procurement’. Consideration of the Australia New Zealand Government Procurement Agreement (ANZGPA) is also required.

Alliances focus on non-price selection criteria during tender evaluation and have a substantial emphasis on past performance of tenderers. Procurement agencies must ensure alliance tender evaluations comply with the procurement regime mandated (for construction contracts above the threshold for covered procurement outside of the health, education, training, child safety and the arts portfolios) in the Australia – United States Free Trade Agreement. Advice from probity advisors and legal professionals should be sought to ensure compliance with relevant free trade agreements when selecting procurement options.

12 Alliance procurement method selection

The selection of procurement options for delivering outcomes for Queensland Government demands processes that are transparent, reproducible, and repeatable. Plans for significant procurement must incorporate all relevant information for procurement agencies to select the most suitable procurement option. The following guidance is provided to assist procurement officers with scenarios where alliancing is best used.

12.1 When alliancing is suitable

Where several of the following features are present in a proposed project, alliancing is most likely to provide best value for money:

a. improved and extraordinary outcomes are sought under extraordinary circumstances, through the extra relationship facilitation and motivation possible through an alliance, including with project location and/or complexities that are exceptionally challenging;

49  Reproducibility. Evaluation of the same tender against the same criteria by a different evaluation team will yield the same decisions.
50  Repeatability - repeated evaluation of the same tender against the same criteria by the same evaluation team will yield the same decisions. See eg NSW Government, Tendering Guidelines, version 1 (2005), 26.
b. Risks are unknown and cannot be adequately allocated to any one party thus requiring the sharing of risks on a project;

c. Where budgets and schedules are limited and an extraordinary effort is required to achieve the outcomes expected;\(^{51}\)

d. Where the project scope is unclear or uncertain, and is very difficult to properly define in the time available with significant/many unknown factors involved;

e. Where there are various diverse key stakeholder interests to be brought together early and these key stakeholder interfaces and relationships are complex; and

f. Where community interests are complex and require a special approach.

### 12.2 When alliancing is not suitable

The following circumstances provide an indication of where alliancing is unsuitable\(^{52}\):

a. the personnel involved (from the agency and other stakeholders, consultants and contractors) are not experienced at working together and unwilling or unable to adopt the attitudes and corporate cultures necessary to work as a team;

b. the agency is not prepared to invest the resources required to participate in a relationship contract and accept a risk sharing arrangement;

c. the project is relatively small, and the additional tendering and implementation costs are disproportionate with the cost of the work and the likely benefits;

d. the agency judges that the budget and financial risks to both it and the state are too great to enter into a commercial arrangement where project costs or schedules are uncapped; or

e. more conventional contracts will achieve the outcomes required, since the project is not complex, risks are well understood or there is little room for improving outcomes or issues can be resolved without contractor involvement early in the design process. Most building projects involve low to medium risk/uncertainty where conventional delivery methods are more suitable and typical cost overruns have been very low.\(^{53}\)

There is no defined project value for when alliancing should or should not be used. Typically, alliances are applied for projects in excess of $30 million, so that the costs of alliance

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\(^{51}\) Alliances increase the likelihood of project success, thus they are suited to projects with limited budgets and schedules: NSW Government procurement Methodology Selection (2005) 18; contra Victorian Government above 17, which identifies the fact that there is no cap on the project budget as risk of alliancing.

\(^{52}\) Adapted From NSW Government, 'Procurement Methodology Guidelines For Construction' version 1 (2005), 18

\(^{53}\) A 2007 RAND study compares rail, roads and defence projects (with cost overruns of 44, 20, & 40% respectively) whereas civil construction experienced negligible overruns. Rand Corporation, 'Is Weapon system Growth Increasing?' (2007)
administration can be amortised over the value of the project.\(^5^4\) Appendix 1 provides a guide indicating when alliancing is appropriate. Individual procurement agencies are to develop local procurement selection procedures for alliance selection guides.

13 Case studies and examples

The following case studies and examples provide useful insight into the successful application of alliances.

13.1 Southern Regional Water Pipeline

Alliancing is ideally suited to projects where major changes in project scope are anticipated. An example where the benefits of alliancing proved to deliver value for money and advancement of government priorities is with the Queensland Southern Regional Water Pipeline Alliance. This alliance was a fast track project originally involving six councils as the alliance owner. The project aimed to construct a 100km water pipeline between the Ipswich and Gold Coast region. Substantial risks associated with the project involved land acquisition for the pipeline and environmental approvals. Substantial uncertainty existed for the proposed location of the pipeline and the project was also subject to a change in scope with the transfer of water potentially being in a ‘duplex configuration’ rather than one way flow as originally intended. This project captured many of the reasons why alliancing should be used, namely:

a. Uncertain project scope,
b. Complex stakeholder interfaces,
c. The need for aggressive schedules (time critical), and
d. Inability to transfer risk to contractors.

Conventional delivery mechanisms would be unlikely to deliver value for money in such circumstances; hence, alliancing was a logical choice of procurement option.

13.2 Barkly Highway Program Alliance

The Barkly Highway links the city of Mt Isa with the township of Camooweal on the Northern Territory border. This road required substantial rehabilitation. Construction of the refurbished road involved substantial risks, namely:

- Weather. The Barkly Highway is subject to extremes of weather. During the wet season it is impractical to conduct construction work as the road itself is prone to flooding and working in high rainfall is both hazardous and unproductive. The commencement and cessation of the wet season is unpredictable. The wet season also provides an

\(^{5^4}\)See e.g. J. Ross, Introduction to Project Alliancing. (2003), 15. Contra, NSW Government, ‘Procurement Methodology Guidelines for Construction’ version 1 (2005), Form B, 1 recommends alliancing for projects in excess of $50million. QLD government has used alliances below $30 million on seven occasions (three of these were as part of an program alliance).
imperative to complete the work during a single annual cycle before commencement of the next wet season.

- **Cultural Significance.** The Barkly Highway alliances operated in an area of substantial cultural significance. The Highway crosses land subject to native title claims from both the Kalkadoon and Indjilandji-Dithanoi groups. In addition, the highway follows the original track employed by indigenous groups and the surrounding area contains an abundance of artefacts as used by the traditional landowners. The presence of areas of cultural significance placed considerable constraints on the work methods available for road construction as well as introducing considerable schedule risk, as the construction team could not foresee where exactly areas of cultural significance will appear during construction.

- **Remote Construction.** The two stretches of Barkly Highway constructed under the Split Rock Inca Alliance are located more than 150 km away from the township of Mt Isa. This introduced considerable constraints on the materials available and the cost effectiveness of procuring local supplies. The remote nature of the project also provided risks associated with the availability of labour, both in terms of labour skills and quantity.

The Queensland Department of Main Roads (DMR) awarded three alliance contracts for the upgrade of the Barkly Highway to a single alliance team. All of these three alliances shared the extreme risks of adverse weather, operating in an area of cultural significance and working in remote locations.

Alliancing was appropriate in these circumstances as transfer of risk to the contractor was inappropriate and a fixed price contract would result in excessive ‘contingency costs’ loaded into the lump sum price. Nevertheless, improved demonstration of value for money resulted by using the actual outturn costs of the first alliance as the target costs for subsequent alliances. This resulted in a continual improvement for subsequent alliances with significant stretch targets incorporated into the Target Outturn Costs. Bundling of projects into a ‘program alliance’, is suited in these circumstances as the subsequent alliances involve the same risks, technologies, and geographic circumstances.

### 13.3 Examples where alliancing should not be used

The following examples provide an indication of where alliancing should not be used.

a. Alliancing should not be used as a means to cater for shortfalls in project documentation/specification development competencies. Where project scope can be clearly defined and project risk is manageable then the use of alliancing is unlikely to be appropriate. Procurement agencies should not adopt alliancing simply because they do not have the resources to develop appropriate project documentation.

b. Alliancing should not be used to mitigate schedule pressures resulting from poor planning. Since alliances typically enable delivery of projects with aggressive schedules, there may be a temptation for procurement agencies to delay decision-making or deviate from best practice project management principles based on the fact that alliancing is a risk reduction technique for resultant schedule demands. Alliancing should never be considered a project management tool for dealing with self-imposed schedule constraints.

c. Alliancing should not be used solely as a means to attract industry participation. That is, industry attractiveness may be a factor in procurement option selection but not the only factor. For example if the construction and engineering market increases the risk of no bid situations,
procurement agencies should not select alliancing simply based on the fact that such procurement options are attractive to industry.

d. Alliancing should not include vendor products. Alliancing demands the full alignment of goals of both the alliance owner and non-owner participants. Where a vendor is a party to an alliance with that vendor’s product an integral part of the alliance project then there is substantial risk of a conflict of interest and subsequent failure of the alliance. Vendors may be party to an alliance but the cost, schedule, and performance elements of vendor products must not be included within the scope of the alliance. For example, a vendor of waste water treatment products may be party to an alliance and the scope of their work under the alliance may include systems integration, design, and test. Any products or equipment supplied by the vendor, however, should be managed as a contract outside of the alliance.

**13.4 ECI and managing contractor applications - Skilled Stadium Robina (Gold Coast)**

In some circumstances, procurement agencies may face a situation where a project demands early contractor involvement but alliancing may not be suitable. An example of such a project is the Skilled Park stadium at Robina. This project consisted of a 25,000 seat football stadium that had a critical completion date (the start of the 2008 rugby league season), a whole range of planning and design issues, and the need to incorporate into the project the construction of a transport hub that connected into the nearby railway station.

This project involved a Managing Contractor (MC) style of contract since the project required an early start on site and where the MC was required to co-ordinate the consultants to develop and complete the design within the available budget. Enabling the MC to commence work early and progress the design work to match the construction sequencing ensured that time efficiencies were achieved. Time and cost risks were allocated to the MC who was best placed to manage them and deliver the facility by the critical end date. Involving key trades as early as possible provided invaluable input and cost efficiencies into the design and constructability of the final structure. Alternative contract forms would not have allowed for the completion of the project to the timeframes and available budget as successfully as the collaborative effort of the client/designer/constructor made possible by the MC style of contract. The construction risks involved in project meant that an alliance would also have been unsuitable.

For this project, the Guaranteed Construction Sum (GCS), also commonly referred to as the GMP (guaranteed maximum price), was not exceeded and the savings realised between this cap and the actual cost of construction (total trade costs) were distributed between the client and the MC. The project was also completed on time.

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55 See esp., JP2070 Project Djimindi alliance failures ‘$600 million lightweight torpedo, four to eight years late’ Courier Mail 4 Jan 08.
14 Development of a Plan for Significant Procurement

A plan for significant procurement must consider the broader requirements of the Queensland Treasury Project Assurance framework and the specific guidance of the Queensland Treasury Business Case Development guidance material. In particular the Queensland Treasury Business Case Development Guidance material provides the following:

The preferred procurement strategy will require tailoring to the individual project depending on requirements associated with the nature of the project and purchasing objectives, the nature of demand and supply market characteristics. Considerations should also include the desired nature of the relationship with the supplier, risk management strategies, supplier development, broader market management strategies, and the type of contract to be entered into.

In the context of alliance contracts, business cases must consider:

- Uncertainty and innovation in the options available
- Complexity of the project
- Scale of the project
- Length of, and timeframes for, implementation
- Priorities of the business benefits to be achieved
- Possibilities of change in client or supplier organisations
- Availability of contract management and other expertise
- Ability of the market to respond.

Where several procurement options are likely to satisfy project requirements, procurement agencies are to develop cost probability curves for each procurement option. These cost probability curves must consider all life cycle costs and incorporate risk adjusted expenses and benefits in ‘expected value’ terms.

Selection of the most appropriate procurement option on a cost probabilities basis will normally demand selection of the procurement option with the lowest expected cost. In some circumstances, procurement agencies may adopt ‘minimax’ decision making and select procurement options that are less likely to result in cost overruns. In such circumstances, this

58 Ibid, 27.
60 Queensland Treasury, ‘Cost benefit analysis’
61 Decision making requires the selection of the option that minimises the maximum possible losses.
may preclude the use of alliancing since there is no guaranteed maximum price. If ‘minimax’
decision making is selected, this must be clearly articulated in the preliminary evaluations stage.62

15 Conclusion

Alliancing offers substantial benefits in the delivery of high-risk projects where the cost of alliance
administration can be amortised over the value of the project. Alliancing should only be pursued
where procurement agencies are satisfied that the government team has the requisite resources
to support the alliance relationship and can demonstrate the collaborative behaviours necessary
for alliance success. Nevertheless, where alliances are used, business cases must clearly justify
the relative merits of selecting an alliance-based procurement model over other forms of
procurement.

16 References

Australian Constructors Association. Relationship Contracting - Optimising Project

Jim Ross, Introduction to Project Alliancing (on Engineering & Construction Projects),
(April 2003).

http://www.construction.nsw.gov.au


Queensland Government Department of Public Works Capital Works Management
Guideline 'Procurement Selection and Generic Contracts'

Queensland Government, Department of Main Roads 'Project Delivery System'

Queensland Treasury, ‘Project Assurance Framework’

Queensland Treasury, ‘Business Case Development Guidance Material’

Victorian Government Department of Treasury and Finance, 'Project Alliancing
Practitioner's guide (April 2006);

62 Preliminary Evaluation Stage http://www.treasury.qld.gov.au/office/knowledge/docs/project-assurance-
framework/preliminary-evaluation-guidance-material.pdf
### 17 Definitions

<table>
<thead>
<tr>
<th>TERM OR ABBREVIATION</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Alliance</strong></td>
<td>A commercial arrangement involving close collaboration, sharing of risks and rewards and a framework that discourages disputes.</td>
</tr>
<tr>
<td><strong>Alliance Owner</strong></td>
<td>The alliance customer analogous to the principal of a project. Government will be the alliance owner for most alliances</td>
</tr>
<tr>
<td><strong>Two TOC alliance</strong></td>
<td>An alliance where tenderers are selected primarily on the basis of price competition. Typically two tenderers are funded by the alliance owner to develop a design, target cost and schedule for a project. The outcome of this funded activity is used for the selection of the preferred tenderer after which an alliance is entered into for the delivery of the project.</td>
</tr>
<tr>
<td><strong>Early Contractor Involvement (ECI)</strong></td>
<td>Early Contractor Involvement contracts are relational contracts that foster the involvement of contractors in the preliminary stages of a contract. ECI contracts include the Queensland Department of Main Roads two stage ECI contract and the Queensland Department of Public Works two stage, negotiated guaranteed construction sum managing contractor contract</td>
</tr>
<tr>
<td><strong>Hybrid alliance</strong></td>
<td>An alliance model that deviates from pure alliance principles by either: incorporating deadlock breaking mechanisms into the alliance, retaining liability between alliance participants or allocating specific risks to alliance participants.</td>
</tr>
<tr>
<td><strong>Minimax decision-making</strong></td>
<td>Minimax decision-making requires the selection of the option that minimises the maximum possible losses.</td>
</tr>
<tr>
<td><strong>Non-owner alliance participant</strong></td>
<td>The commercial participants to an alliance. Non-owner participants are analogous to ‘contractors’.</td>
</tr>
<tr>
<td><strong>Open tendering</strong></td>
<td>A procurement method where all interested suppliers may submit a tender</td>
</tr>
<tr>
<td><strong>Pure Alliance</strong></td>
<td>A pure alliance is an alliance that adopts tenderer selection on a non-price basis, has no deadlock breaking mechanisms, shares all project risks and retains no liability between alliance participants. All pure alliances are single TOC alliances.</td>
</tr>
<tr>
<td><strong>Selective tendering</strong></td>
<td>A procurement method where the procuring entity determines the suppliers that it will invite to submit tenders</td>
</tr>
<tr>
<td><strong>Single TOC alliance</strong></td>
<td>An alliance where tenderers are selected primarily on no price basis. The target cost and schedule are developed after tender selection.</td>
</tr>
</tbody>
</table>
Appendix 1: Decision matrix - alliance selection guidance

The following provides an indication where alliancing may be suitable. Procurement agencies are to ensure procurement option selection guides consider all the advantages and disadvantages of alliances listed below.

<table>
<thead>
<tr>
<th>QUESTION</th>
<th>ALLIANCE SELECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the project value in excess of $30m</td>
<td>Score 3 for Yes, 0 for No</td>
</tr>
<tr>
<td>Can project risks be equitably assigned to contractors?</td>
<td>Score 0 for Yes, 3 for No</td>
</tr>
<tr>
<td>Are complex community and stakeholder issues expected?</td>
<td>Score 1 for Yes, 0 for No</td>
</tr>
<tr>
<td>Are there significant schedule constraints?</td>
<td>Score 1 for Yes, 0 for No</td>
</tr>
<tr>
<td>Does the procurement agency have the requisite resources to support an alliance board and provide input into the alliance?</td>
<td>Score 2 for Yes, 0 for No</td>
</tr>
<tr>
<td>Is there a requirement for flexibility in project delivery? eg. Potential for substantial change in project scope.</td>
<td>Score 3 for Yes, 0 for No</td>
</tr>
<tr>
<td>Is there a sufficient number of industry participants available to provide competitive responses to requests for tender?</td>
<td>Score 0 for Yes, 1 for No</td>
</tr>
<tr>
<td>Is the alliance owner capable of embarking in relational style contracts?</td>
<td>Score 2 for Yes, 0 for No</td>
</tr>
<tr>
<td>Are alliance participants vendors of equipment that is integral to the delivery of the project?</td>
<td>Score 0 for Yes, 1 for No</td>
</tr>
<tr>
<td>Is the project subject to high environmental or cultural risks?</td>
<td>Score 1 for Yes, 0 for No</td>
</tr>
<tr>
<td>Can high risk elements of the project be separated from the main project?</td>
<td>Score 0 for Yes, 1 for No</td>
</tr>
<tr>
<td>Is the procurement agency willing to accept a commercial arrangement with uncapped costs and schedules?</td>
<td>Score 1 for Yes, 0 for No</td>
</tr>
</tbody>
</table>

**Total**

Score 0-7 not suitable for alliancing  
Score 8-14 consider using alliancing  
Score 15-20 alliancing is highly suitable
Acknowledgments

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Of course, notwithstanding the above, any errors of fact or interpretation remain the responsibility of QGCPO.