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# Problematic issues associated with project partnering — the contractor perspective

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#### Abstract

The use of project partnering is becoming more frequent in Australian Government construction projects because of the potential benefits that can be achieved from the effective implementation of the project partnering arrangement. Despite this, project partnering is not always successful. The aim of this paper is to identify the problematic issues associated with project partnering based on contractors' perceptions. Fifteen problematic issues were identified from six contractors involved in unsuccessful project partnering relationships. The results indicate that the unwillingness of the client to fully commit to the partnering agreement was the main reason for ineffective project partnering. There is a need for the public clients to adapt more flexible administrative procedures in order to improve contractors' willingness to commit to project partnering arrangements. © 2002 Elsevier Science Ltd and IPMA. All rights reserved.

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#### 1. Introduction

Traditional construction contracting has always been characterised by adversarial attitudes between client and contractor, often resulting in loss of productivity and increases in costs. The escalation of adversarial attitudes has been closely linked to the competitive nature of the construction industry (CI) inducing an environment of conflicting objectives, which has been typified, by scepticism, suspicion and contempt [1]. This impediment to procurement efficiency has provoked a rethink of the ways a construction project may be procured. The concept of partnering overhauls the ethics of traditional contracting with the attendant paradigm shift towards co-operative and caring environments [2]. Kumaraswamy and Matthews [3] suggested that a "win-win" situation could be attained by all stakeholders involved in the partnering process.

In Australia, the public clients such as the New South Wales (NSW) Government were the forerunners in

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adopting partnering following the recommendations of the Gyles [4] report. As highlighted in NSW Public Works [5], partnering could be adopted to improve the efficiency of construction projects. Many public sector construction contracts in Australia have incorporated the concept of project partnering, i.e. a one-off partnering relationship instead of a strategic alliance.

The research conducted on project partnering to date (e.g. [6–8]) has portrayed an abundance of benefits from the correct implementation of project partnering. In general, it has been found that with a cultural shift in attitudes and a trust and acceptance of stakeholders, project partnering can be successful and bring benefits to the stakeholders involved in the project partnering process.

However, partnering may not always achieve its original goals. Two notable pieces of literature in partnering [8,9] suggested that the public sector procedures often work against open relationships and thus can jeopardise the project objectives originally established. According to Patching [8], conflict and failure could be increased by a fundamental deviation in goals, especially in relation to accountability, thus hindering all cooperation that may have been attained by the partnering process.

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Despite the requirements of partnering charters (e.g. [5]) to identify and assess any past problems in the stakeholders' relationship, there has been no study into the issues that have led to the failure in public sector construction contracts using project partnering arrangements. More specifically, very little research has been conducted to examine the perceptions of head contractors (a major stakeholder in the project partnering process) on the problematic issues of project partnering.

This paper examines the main contractors' perceptions regarding the problematic issues of the project partnering relationship in public sector construction contracts in Australian. Six contractors who had experienced unsuccessful project partnering relationships with a major public client in Australia<sup>1</sup> (hereinafter called "the client") were interviewed. The results of analysis highlight 15 key problematic issues pertinent to project partnering. The recognition of these problematic issues would assist public clients to review their current project partnering process.

#### 2. Key elements of successful partnering

Several studies (e.g. [2,7,10]) have identified the criteria that are fundamental to successful partnering. These criteria include commitment, equity, trust, preparation, mutual goals/objectives, partnering tools and procedures, inclusion of appropriate parties, continuous joint evaluation, and timely responsiveness.

#### 2.1. Commitment

Stakeholders must commit to the partnering charter and must never consider partnering an option unless full commitment is evident. Without the commitment required under the partnering philosophy it is likely that the direction of the project will suffer leading to claims, disputation, and litigation [2].

#### 2.2. Trust

Embarking on a project endeavour involves a major shift in attitude from seeking to maximising individual gains to the continuous search for solutions that benefit all participants. Such relationships begin with respect for other stakeholders, which sees the emergence of trust and teamwork.

#### 2.3. Preparation and training

The participants in the project partnering arrangement must understand what partnering is, and truly

believe that the current contracting process can be improved by a new way of conducting business in the construction industry.

#### 2.4. Understanding

It is important that the participants in the partnering arrangement develop an accepting attitude that includes determining each other's expectations, attitudes, and limitations. They must all become accepting in differences in opinions [11].

#### 2.5. Equity

All stakeholders' interests are considered in creating mutual goals, and there is a commitment to satisfy each stakeholder's requirements to ensure project satisfaction and success. This is attained by continuously searching for solutions that meet stakeholder expectations.

#### 2.6. Development of mutual goals

A set of mutual goals must be developed to satisfy each stakeholder's requirements for a mutually successful project. The mutual goals may include early completion, meeting financial budget, reliable flow of information, no litigation, and other specific goals in regard to the nature of the project.

#### 2.7. Inclusion of appropriate parties

For the partnering process to succeed, everyone who can influence the performance of the project must be involved. Major subcontractors and contract administration personnel should be included to ensure the full benefits of influence in the project partnering process [7].

#### 2.8. Continuous joint evaluation

It is paramount to the success of the project partnering process that in-process reviews are conducted on a regular basis to ensure that project goals and objectives are on track, and to measure accomplishments. The stakeholders must develop a specific evaluation process that suits the nature of the project [12].

#### 2.9. Use of project partnering tools and procedures

Stakeholders should utilise the relevant partnering tools to maintain focus and direction. These tools may include the charter, statement of goals and objectives, mission statement, problem identification and resolution process, conflict escalation procedure, ADR approach, and evaluation methodology.

<sup>&</sup>lt;sup>1</sup> The name of the organisation has not been revealed for anonymity

#### 2.10. Leadership

Stakeholders' strength and enthusiasm will provide an example and will aid in the success of the project partnering process. "Partnering champions" is the term given to those who have gone beyond acceptance to a level of true commitment and leadership, who will in turn actively promote the ultimate working relationship. Strong leadership is a essential component in supporting the functionality of partnering [9].

#### 2.11. Improvement of communication

Better communication includes anything that may help individuals or teams relate more efficiently to each other [11]. Sharing information in an open, honest, accurate, and timely manner along with a helpful, open attitude with a respect and trust in others will be the key to good communication.

#### 2.12. Empowerment of stakeholders

Stakeholders must be empowered with the requisite decision making authority for efficient problem solving. Higher management should empower their partnering representative with enough authority to make the appropriate decisions for the project [13].

#### 2.13. Evaluation methodology

It is essential that problems in the process are recognised and rectified at the earliest possible stage. Constant measure and evaluation of the level of success will ensure attainment of such goals. An effective measure system ultimately determines the current health of their relationship [12].

#### 2.14. Willingness to accept mistakes

It is paramount for stakeholders to be accepting of others' mistakes, as stakeholders can learn from each other's mistakes and improve efficiency in future relationships.

#### 3. Research method

A structured interview approach was adopted to elicit the details of problematic issues identified by head contractors and to satisfy the requirements of confidentiality set by the public clients. To provide a basis for the structured interview, a list of potential problematic issues was drawn up basing on recent research studies on public and private partnering arrangements [7]. Despite some problematic issues identified in the CIIA study might be relevant to the private sector only,

all issues were included in this study to avoid any unjustified exclusions. The questions design focused on establishing the fact (what happened), causes (why happened), and actions (how to minimise the effects), and the aim was to ensure that the interviewees were not driven by the problematic issues (refer to Appendix A, Section 2).

The suitability of potential respondents was based on: (1) the existence of relevant experience in a project partnered project for the client; and (2) the involvement in a specific project partnered project, where original project expectations were not achieved. The potential respondents were initially identified from the approved contractor list of the client and drawn from three major states of Australia, namely New South Wales, Victoria and Queensland. A list of 23 organisations that were involved in project partnered projects with the client and failed to meet the original project objectives was drawn up. Telephone interviews revealed that the nine project failures (39%) were due to unsuccessful project partnering relationships (i.e. unsuccessful sample). Of which, three declined to take part in this study. As a result, six contractors (26% overall; or 67% of unsuccessful sample) were invited for the structured interview. Table 1 summarises the contractor and projects details, respectively.

A facsimile was sent to each selected participant in advance describing the agenda for the interview and the aims of this study. At the commencement of the interview participants were briefed on the interview's requirements, particularly in terms of being honest about their individual opinions and attitudes.

#### 4. Problematic issues in project partnering

A cross-case analysis on all projects was carried out to determine what were the problematic issues and how did these problematic issues contributed to the failure of project partnering arrangement in government construction projects. A total of 15 problematic issues were identified, and these issues can be broadly classified into four main categories. The perceptions of contractors on each problematic issue are summarised as follows.

#### 4.1. All stakeholders specific

### 4.1.1. Lack of continuous open and honest communication (Table 2)

The failure to achieve open and honest communication was due to the adoption of a "win-lose" attitude of stakeholders (Projects 1–6). This problematic issue was also a result of a lack of partnering experience with the client, and thus induced less contractor commitment in the partnering relationships (Projects 1–5). A failure to implement appropriate training and guidance measures

in Projects 4 and 5 intensified the level of influence this problematic issue had on the attainment of project goals. Lendrum [11] suggested that a lack of open and honest communication may lead to a degradation in the stakeholders' ability to efficiently resolve any problems.

# 4.1.2. Stakeholders not developing a "win-win" attitude (Table 3)

According to all interviewees, a "win-lose" attitude was mainly attributed to the client's unwillingness to be completely committed to the project partnering relationship, particularly with regard to a lack of client compromise and a conflicting organisational culture (cf. [8]) This could result in a lack of contractor's faith in their client's ability to effectively facilitate the project partnering process, which ultimately induced their lack of commitment. Contractor C argued that if the facilitator of the process were not committed to their arrangement, it would be difficult for other stakeholders to commit themselves to the partnering process. This

predicament eventually led to the win-lose scenario as occurred in Project 1.

# 4.1.3. Stake holders are not committed to the partnering arrangement (Table 4)

Some stakeholders were not committed to project partnering for the full duration of the projects, leading to the eventual break down of the partnering arrangements. There was a perception of a lack of top level management support for the project partnering arrangement from the client, when the client was perceived to be so committed to their financial control and individual goals, that the project partnering relationship became less a priority. According to the interviewees, the attitude adopted by the client contributed to reduced commitment to the partnering arrangement on the part of the contractors. Larson [14] suggested that every stakeholder must be committed to project partnering and must be willing to support all other stakeholders.

Table 1 Details of projects analysed

	Project 1	Project 2	Project 3	Project 4	Project 5	Project 6
Contractor	A	В	C	D	E	F
Contract sum (AUS\$)	< 20 million	>20 million	> 20 million	> 20 million	> 20 million	< 20 million
Contract type	Design and construct	Lump sum	Design, novate and construct	Lump sum	Lump sum	Lump sum
Tendering approach	Competitive	Competitive	Competitive	Competitive	Competitive	Competitive
Stakeholders of	Client and	Client and	Client, contractor,	Client, contractor,	Client, contractor,	Client, contractor,
partnering agreement	contractor	contractor	design consultants and project	design consultants and project	design consultants and project	design consultants and project
			manager	manager	manager	manager
Experience of project partnering with the client	First time	First time	First time	First time	First time	Yes
Experience of project partnering with other clients	None	None	With other private clients	None	With other public clients and private clients	With other public clients
Party initiating the partnering process	Client	Client	Client	Client	Client	Client

Table 2
Reasons for failure pertinent to lack of continuous open and honest communication

Project	Causes/reasons for failure
1	Lack of commitment on behalf of the client due to the "win–lose" attitudinal approach to relationship  Lack of experience of the contractor affected the partnering relationship, and thus no direction was provided by the client to improve the status of relationship
2	Owing to a tight financial situation, the contractor became uncommitted to openly communicating their financial grievances, in fear of damaging their already minimal profit margin
3	Stakeholders had little faith in one another's ability
4	Honesty in stakeholder intentions did not develop Contractor felt that they had been excluded from the decision-making process of a number of critical issues
5	The financial pressure from the client left the contractor with a "win-lose", self-sustainable attitude
6	Lack of commitment conveyed by both the client and contractor damaged the stakeholder's line of communication

### 4.1.4. Lack of intimacy in the partnering relationship (Table 5)

A close working relationship was not attained in Projects 2, 4 and 5 due to the contractors' lack of confidence in the client's ability to appropriately manage the project. The failure to form a close working relationship was influenced by the occurrence of other problematic issues, and because the client did not convey to the contractor the individual importance of the project, and their role in it. Respondents perceived that it was normally difficult to develop an intimate relationship with government departments because of the large number of client representatives involved.

#### *4.1.5. Issues are allowed to slide and escalate (Table 6)*

According to Contractors B, C and D, this problematic issue originated from the stakeholders' "winlose" financially driven attitude, and the lack of commitment to the implementation of the procedures of partnering especially with regard to the continuous evaluation of the partnering relationship. The majority

of respondents indicated that many problematic issues that did arise in the project partnering relationships were not rectified at their lowest possible level, and therefore were left to further escalate. The project failure did not escalate in Project 5, as the problems were addressed at their highest level throughout the duration of the project.

### 4.1.6. Some partners are unwilling to compromise (Table 7)

All contractors perceived that the client did not recognise the requirement for compromise and the 'team approach'. This problematic issue was more influential on the financially burdened projects (e.g. Projects 1–5). The client's unwillingness to compromise its financially detrimental administrative procedures for the benefit of increasing contractor's commitment was perceived as a lack of commitment to project partnering in their projects. When stakeholders are unwilling to determine team solutions to problems that arise, and compromise their status in the relationship, it can lead

Table 3
Reasons for failure pertinent to stakeholders not deriving a "win-win" attitude

Project	Causes/reasons for failure
1	The contractor felt that the client was undertaking the project partnering arrangement because "it looked good on paper" The lack of commitment and the instinctively suspicious relationship between the client and contractor led to adversarial "win–lose" attitude
2	It was due to a transformation of priorities from placing emphasis on project partnering to the financial control of contractor's budget
3	During the construction phase, low priority was given to alteration of the aversive nature of relationship, which in turn induced stakeholders to take an individualistic approach
4	A "win–lose" attitude manifested by mistrust at the later stage of the project Both the client and contractor were not committed to the alternative methods of partnership in comparison to the tried and true traditional adversative attitudes
5	Participants adopted a self protection mode due to the pressures placed on the budget
6	It was determined that a "win-win" attitude was not achieved, and therefore resulted in the fact that stakeholders were not willing to implement the procedural requirements of project partnering

Table 4
Reasons for failure pertinent to stakeholders are not committed to the partnering arrangement

Project	Causes/reasons for failure
1	The contractor was not familiar with the project partnering process and lack of efficient staff training The client was unwilling to improve the relationship and ensure all its procedures were implemented correctly Lack of financial support from stakeholders exacerbated the problem
2	There was a lack of top level management support to the extent that project partnering was a lesser priority than the client's individual goals  The contractor's scepticism also affect their commitment to project partnering
3	It was originated from a lack of trust in other parties' motives, which made it difficult for stakeholders to form the relationship required for successful partnering
4	There was a lack of commitment from the client who was in a leadership role as the facilitator of the arrangement
6	There was a lack commitment to project partnering ethos and procedures  The contractor was not properly educated in the possible benefits which could be achieved using project partnering

to stakeholders' mistrust in one another, and to a lack of commitment to the partnering arrangement [1].

#### 4.2. Client specific

### 4.2.1. Lack of empowerment in the client's controlling bodies (Table 8)

The majority of contractors (except Contractor F) believed that there was a lack of empowerment on the

part of the client's representatives. This had a negative effect on the efficiency of the problem resolution process. This inefficiency in quick resolution of problems had a damaging effect on the budgets of the contractors in question, which further hampered their level of commitment to the project partnering process. The most common response with regard to the origin of this problematic issue was that the client was unwilling to break their traditional "chain of command" organisational

Table 5
Reasons for failure pertinent to lack of intimacy in the partnering relationship

Project	Causes/reasons for failure
2	The client's representatives did not always attend project meetings in person, and instead sent messengers to convey their priorities
4	The client had a large number of representatives, which induced a lack of personal attention to the individual contractor, particularly with regards to attendance to the project partnering meetings
6	It was due to the poor attitude of the client's representatives

Table 6
Reasons for failure pertinent to issues are allowed to slide and escalate

Project	Causes/reasons for failure
2	There was a lack of regular monitoring of the problematic issues
3	Problem escalation was attributed to the stakeholder's "win-lose" financially driven attitude, and the lack of commitment to the required partnering attitude
4	That was a result of poor level of continuous evaluation of project, which did not include the implementation of an efficient problem resolution process

Table 7
Reasons for failure pertinent to some partners are unwilling to compromise

Project	Causes/reasons for failure
1	Lack of continuous evaluation and reiteration of the partnering relationship
	Lack of commitment meant that team solutions converted to individual solutions, which caused further escalation in the lack of compromise
2	Stakeholders had difficulty coming into terms with the team approach
3	Heavy bureaucratic requirements placed on contractor impeded the flexibility required for compromise
4	Disintegration of the problem resolution process resulted in a lack of evaluation of team solution, which converted to an individualistic approach
5	The problem originated from client's lack of willingness to assist or compromise when the contractor encountered heavy financial burdens
6	The contractor felt that the client was unwilling to compromise their dominance, which contradicts the environment required for effective partnering

Table 8
Reasons for failure pertinent to lack of empowerment in the client's controlling bodies

Project	Causes/reasons for failure
1	It was caused by a lack of commitment on the client's behalf to solve problems efficiently, and to form trust in each others' abilities to improve the situation of individual partners
2	The client's representatives could not make a decision, and always had to consult higher management, reflecting an impossibility of all decisions being made at their lowest possible level
3	The client's higher management were unwilling to empower their stakeholder representatives to ensure problems could be solved at the lowest possible level causing overly long decision process
4	The client was unwilling to break their traditional chain of command organisational culture
5	The senior management did not provide their junior colleagues greater empowerment to make decisions and trust their judgement, which led to a lengthy decision process

structure, thus not allowing their junior counterparts greater authority to make appropriate decisions to solve problems at their lowest possible level.

# 4.2.2. Dealing with large bureaucratic organiszations (Table 9)

All the respondents agreed that dealing with large bureaucratic organisations did impede the project partnering arrangement in terms of their ability to form open and honest working relationships. According to the respondents, this was attributed to the amount of administrative requirements, and the less flexible approach of the client, which directly effected the contractors' faith in their client, and in the project partnering relationship. This generated the financially detrimental administrative requirements imposed on the head contractors in Projects 1–6.

# 4.2.3. Controlling body's lack of technical knowledge (Table 10)

Contractors A and F suggested that their client's lack of technical knowledge negatively affected their respect for the client, and consequently, confidence in their ability to solve mutual problems efficiently and at their lowest possible level. In Projects 1 and 6, the client's representatives lacked the technical experience of construction works in order to make decisions. The representatives had to refer frequently to their design consultants for answers, which resulted in a slow decision-making process. The lack of technical knowledge may impede the understanding and efficiency of the problem resolution process.

#### 4.3. Contractor specific

# 4.3.1. Commercial pressures compromising the partnering attitude (Table 11)

In all the projects examined, particularly in the financially strained Project 5, commercial pressures influenced contractor's commitment to the project partnering process. This attitude could originate from the client's implementation of the competitive tendering approach, which in turn puts pressure on the margins of the contractor. Financial flexibility is required to ensure continuous prioritisation of the project partnering arrangement over individual financial concerns. In Projects 5 and 6, commercial pressures were exacerbated by the client's heavy administrative requirements, which were identified as common place in projects with this client. When the client was unwilling to compromise their redundant project control measures to benefit the contractor's financial situation, it further damaged the project partnering relationship in all cases.

# 4.3.2. Lack of training and guidance in the project partnering arrangement (Table 12)

Only Contractors A and F found that the lack of training and guidance influenced the attainment of project goals. In Projects 1 and 6, the problem was not attributed to a lack of training procedures (with all projects analysed having at least one education seminar for the head contractor), but because inappropriate information was given. This information did not allow the contractor to fully appreciate the requirements for success in project partnering in the specific project. In

Table 9
Reasons for failure pertinent to dealing with large bureaucratic organisations

Project	Causes/reasons for failure
1	The administrative costs experienced put pressure on the contractor's financial situation, and the contractor therefore changed their priorities to profit protection
	The client was unwilling to compromise and forgo their strict rules to aid in contractor's profit predicament
2	The bureaucratic requirements had negative effects to the contractor's budget
	The client was unwilling to forgo their unnecessary "red tape" to benefit the contract, which ultimately led to mistrust between
	stakeholders in the relationship
3	The client was overly strict in their procurement requirements
	The client was unwilling to compromise any of their administrative requirements for the benefits of project partnering
j	The client was publicly liable and inherently less flexible in their administrative procedures
5	The problem originated from the government department's organisational culture in being constantly liable to the public
	The "red tape" required full consent for everything which wasted time and resources in resolving even the most mediocre problem

Table 10 Reasons for failure pertinent to controlling body's lack of technical knowledge

Project	Causes/reasons for failure
1 6	A majority of the client's representatives were unskilled in the technical construction details, which inhibited the problem solving process Problems were constantly referred to the design consultants who were not part of the project partnering relationship The client's representative was originally trained as project managers for any acquisition field, and did not specialised in the construction area

Project 1, the client's representatives did not provide guidance for the contractor's learning process in ensuring that the requirements were implemented correctly. This further affected the client's lack of commitment to the project partnering relationship.

#### 4.4. Project specific

# 4.4.1. Use of a competitive tendering arrangement inhibits flexibility (Table 13)

The use of a competitive tendering arrangement was described as the origin for many preceding problematic issues including the level of commitment of stakeholders for the project partnering arrangement (cf. [8]). In Project 4, since the profit margin was very low, cost control during the project was difficult with regard to defending the margin. The contractor would systematically change

their priorities from the project partnering arrangement to a "win-lose" profit protection attitude.

# 4.4.2. Problems with drawings and specifications (Table 14)

In Projects 1, 2 and 5, the problem was attributed to the technical and confidential nature of the specifications in public project, and the inclusion of an inefficient problem resolution process (itself attributed to a lack of stakeholder commitment) led to the design problems (cf. [7]). These factors, in addition to the exclusion of design consultants in the project partnering arrangement, led to further escalation of problems, particularly in Projects 1 and 2. The respondents proposed that the inclusion of the contractor earlier in the design stage could better prepare their understanding of the design and its construction.

Table 11
Reasons for failure pertinent to commercial pressures compromising the partnering attitude

Project	Causes/reasons for failure
1	Contractor was seen to have a negative influence on the partnering attitude
2	It was due to a fear in a decrease in the contractor's profit margin as a result of the narrow profit margin
3	The pressure was influenced by the lack of client empathy for the contractor's financial burdens, which left them further disgruntled with their client
4	A tight financial situation was experienced by the contractor because of the additional costs required by a public client, which was not initially built into contractor's tender price
5	Contractor has misconceived that the project partnering environment for project control could protect their profit margin  The client's excessive and costly administrative procedures throughout the project exerted commercial pressure to the contractor
6	This was attributed to the administration of the client's bureaucratic requirements in unnecessarily project control measures

Table 12
Reasons for failure pertinent to lack of training and guidance in the project partnering arrangement

Project	Causes/reasons for failure
1	The lack of guidance was a result of the client's unwillingness to show leadership in their follow up support and partnering concept reiteration
6	The training did not cover appropriate information  There was a lack of guidance on the benefits that can be procured from the efficient implementation of project partnering

Table 13
Reasons for failure pertinent to use of a competitive tendering arrangement inhibits flexibility

Causes/reasons for failure	
The complacency with regard to the requirements of project partnering that ensures a competitive "us versus them" did not leading to the contractor protection on their profit margin	
The commercial pressure of competitive tendering shifted the contractor's priority from a working project partnering relationship to profit protection	
The client was unwilling to accept the requirements of project partnering to ensure the contractor has ample financial flexibility to effectively undertake project partnering	
The problem was attributed to the lower tender price to win the contract	
The contractor's cash flow was affected due to the lower tender price submitted and the strict requirements of the client	
The client was unwilling to procure an environment that has the financial flexibility to support project partnering, through a tender accepted based on reputation and quality rather than price	
Competitive tendering placed the client in the dominant position which is in stark contrast to the partnering requirement of an open and equal working relationship	

# 4.4.3. Key subcontractors not included in the partnering process (Table 15)

Contractors A and E were of the view that key subcontractors should have been included in the project partnering process. They argued that the inclusion of key subcontractors could have induced a greater perspective for the stakeholders, and they should have at least been included in the initial workshop. Contractor E, who experienced heavy financial burdens in their project, suggested that the inclusion of subcontractor in the process could help ensuring a contractor to achieve the pre-determined profit. The exclusion of subcontractors from the partnering arrangement could induce a decrease in the stakeholder's commitment [7].

# 4.4.4. Partnering is not suitable for a particular project (Table 16)

All contractors felt that the project partnering process was not suited for their projects. This attitude was attributed to the lack of commitment by stakeholders, and project restrictions analysed in the research. In many cases (Projects 1, 2, 4 and 5), the lack of compromise displayed by the client, negatively affected contractor's financial control in the project, which lead to project partnering failure. This reinforces the point that the use of the project partnering process must be based on its likely chances of achieving success.

#### 5. Discussions

Most problematic issues experienced in project partnering with the government construction procurement involve the failure of stakeholders to develop the required attitudes to make project partnering effective. This is strongly influenced by the client, who was perceived by all the respondents as not having the level of commitment or leadership required to draw the full commitment of contractors to the project partnering arrangement, throughout the entire duration of the projects.

Table 14
Reasons for failure pertinent to problems with drawings and specification

Project	Causes/reasons for failure
1	The over bearing amount of "red tape" meant that conflicting problems in the plans and specification were not solved at the earliest possible stage
	The client was unwilling to compromise its administrative procedures for the good of the project
2	Problems occurred in conflicting specification because of the intracate details required by the client
5	The project was affected by a lack of flexibility in the design specifications and client's unwillingness to change the construction materials
	There were excessive administrative procedures written in to the design requirements which inherently left the contractor frustrated in the project partnering relationship

Table 15
Reasons for failure pertinent to key subcontractors not thoroughly included in the partnering process

Project	Causes/reasons for failure
1	Lack of subcontractor's involvement in project partnering was due to the project size, but this was an issue that influence contractor's commitment
5	It was considered that subcontractor's inclusion in at least the initial workshop could have been given a greater perspective on the problems experienced by the contractor

Table 16
Reasons for failure pertinent to partnering is not suitable for a particular project

Project	Causes/reasons for failure	
1	The contractor was not eased into the project partnering arrangement to ensure they understood its concept fully, and they we instantly forced into the relationship	
2	The client was unwilling to forgo its strict rules for the requirements of project partnering demonstrated that project partnering was not ideal	
3	The problem was due to the constrictive circumstances of the relationship with the client	
4	The contractor was unwilling to commit to the environment of project partnering	
5	There was a lack of comprising and committed environment that is essential for the success of project partnering	
6	Smaller projects do not provide the time frame required to form an appropriate working relationship under the project partnering  The stakeholders had an unsupported attitude to project partnering	

This indicated that the public clients were not providing the support required for effective implementation of the project partnering arrangement. As the clients are in the position of the head facilitator of the partnering arrangement, they must take a leadership role, and ensure that they are fully committed and prepared to compromise in the project partnering arrangement. Full commitment includes the correct facilitation procedure, and it must be ensured that the client is implementing partnering for the right reasons. This includes not adopting project partnering if the circumstances with regard to stakeholder attitude do not allow for its success. On the other hand, contractor's commitment can be improved if there was an open and honest communication between the stakeholders, adequate training and guidelines, and efficient problem resolution process built in to the project partnering process.

It was also evident from all projects that the financial procedures adopted by the clients were detrimental to the commitment of stakeholders to the project partnering arrangement, particularly in Project 5. The majority of these issues originated from the inclusion of a competitive tendering arrangement. This encouraged head contractors to submit tender bids with low margins at the facilitation stage of the project to ensure they can compete with other bidding contractors. Consequent pressures on the margins altered the priorities of the head contractor from the project partnering arrangement to profit protection.

All the respondents expressed disillusionment in regard to the client's lack of compromise to give the project partnering relationship its greatest chance for success. According to them, the client was unwilling to forgo their "unnecessary administrative requirements" to ease the contractors' tight financial situations. This obviously led to scepticism of the project partnering arrangement to achieve mutual benefits reduced the commitment of the head contractor to the client-facili-

tated project partnering arrangement. This problematic issue was identified by all contractors to be a result of an inflexible and dominating organisational culture, which is sensitive to public scrutiny.

A lack of intimacy in relationship between the client and contractor could also have a negative influence on the effectiveness of project partnering. The client failed to eradicate the traditional "win-lose" attitude, which contradicts the concept of effective project partnering. This could be a problem for large bureaucratic public clients, as the number of representatives they have may prevent them from paying too much attention to individual contractor. The case studies exemplified that the stakeholders would take an individualistic approach if an aversive relationship were developed and not resolved swiftly.

#### 6. Recommendations

To ensure that the goals of future public sector projects to be attained, it is necessary to address the problematic issues of project partnering. The respondents have proposed that some measures to address the problematic issues during the facilitation, implementation and evaluation stages of project partnering (Table 17) are that the client should:

- 1. fully commit to the process and develop the required attitudes for project partnering especially as they are the facilitator and leader of the arrangement;
- 2. ensure all stakeholders have a complete understanding of the requirements of project partnering and other key attitudinal qualities through adequate stakeholder training;
- 3. be willing to develop personal relations with the head contractor to ensure stakeholders know the individual importance of the project and their role in it;

Table 17
Proposed means to avoid the problematic issues

Approach to address the problematic issues	Stage of adoption
Full commitment to the process and attitude of project partnering	Facilitation, implementation and evaluation
Ensure all stakeholders have a complete understanding of the requirements of project partnering	Facilitation, implementation and evaluation
Willing to show personal relations with the head contractor	Facilitation, implementation and evaluation
Encourage a mutual acceptance of the implementation of project partnering	Facilitation
Compromise their regulations and organisational structure	Facilitation, implementation and evaluation
Implement a less restrictive tendering arrangement	Facilitation
Empower their representatives to make effective decisions	Facilitation, implementation and evaluation
Include the design consultants in the arrangement	Facilitation and implementation
Provide comprehensive training and guidance	Facilitation, implementation and evaluation
Facilitate and implement a form of monitoring team goals	Facilitation, implementation and evaluation
Facilitate and implement a rigid problem resolution process	Facilitation, implementation and evaluation
Employ an independent facilitator throughout the entire project	Facilitation, implementation and evaluation

- 4. encourage a mutual acceptance of the implementation of project partnering to ensure complete stakeholder commitment;
- 5. be flexible with their regulations and organisational structure for the benefit of the project partnering relationship and the overall efficiency of the project;
- 6. implement a less restrictive tendering arrangement with the selection of the head contractor based on previous performance rather than just price;
- 7. empower their representatives to make effective decisions at the lowest possible level in the least possible time;
- 8. include the design consultants in the arrangement to improve the relationship with the head contractor and to ensure an efficient resolution of technical specification issues:
- 9. provide comprehensive training and guidance during the project partnering process, particularly with inexperienced head contractors;
- 10. facilitate and implement a form of monitoring team goals;
- 11. facilitate and implement a clear problem resolution process and ensure that stakeholders are willing to follow its requirements to jointly solve problems that arise; and
- 12. employ an independent facilitator throughout the entire project, especially where any or all stakeholders lack experience in project partnering.

#### 7. Conclusions

This paper examined the problematic issues associated with project partnering in the Australian government construction sector from the head contractor's perspective. It was identified that the majority of problematic issues experienced in project partnering arrangements in this sector was related to the commitment provided to the attitudinal change and procedural implementation required in efficient project partnering. All respondents reported that the clients were unwilling to unconditionally commit themselves to the project partnering arrangement, thus negatively affecting the reciprocated commitment of the individual contractors.

The results from the six projects sampled (Projects 1–6) indicate that a majority of problematic issues originated from the stakeholders' failure to develop the attitudinal pre-requisites for the project partnering arrangement. The pre-requisite of project partnering is closely associated to the willingness a stakeholder to be flexible with his requirements for the benefit of other stakeholder and the project.

The public clients must ensure that they are willing to ease their unnecessarily restrictive regulations and administrative procedures to improve the contractor's financial position. Unnecessary administrative requirements, or a lack of flexibility in design modification that do not achieve many benefits for the client (except in compliance to the bureaucratic system) puts the contractor off side in the project partnering relationship. On the other hand, the public clients should ensure that contractors have adequate level of understanding of project partnering concept and what is required for its successful implementation than simply awarding a contract based on tender price alone.

There should be an efficient monitoring of team goals throughout the project to ensure that stakeholders' commitment is strong, and if not, procedures should be implemented to improve the situation. A preparedness to address problems quickly and at the lowest level will promote effective project partnering.

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#### Appendix. Protocol for structured interview

Section 1 — general characteristics

- 1) Brief description of project (type, size, time).
- 2) Form of contract?
  - a) Do you feel that the contract inhibited the project partnering arrangement? If so, please explain.
- 3) Who were the major stakeholders?
- 4) What other private contractors or consultants were included in the partnering process?
- 5) Had your organisation worked with any other partnering stakeholders previously?
  - a) How did this affect the relationship?
- 6) Was there any form of measuring and monitoring of team goals?
- 7) Was there understanding between partners of each other's goals, problems, beliefs and weaknesses?
  - a) Did this influence the direction of the project partnering process?
- 8) Were you forced to partner by the Department of Defence, or were you influential in the decision to partner?
- 9) Were you committed to the process or was it just a bureaucratic requirement of the client?

#### Section 2 — problematic issues of failure

- 1) Was a continuity of open and honest communication achieved?
  - a) If not, why was this the case?
- 2) Do you feel that all stakeholders had derived a win-win attitude?
  - a) Did you find any of the participants were hard-lined in a traditional win-lose environment?
  - b) If so, what contributed to this?
  - c) How could it have been minimised?
- 3) Did commercial pressure (especially financial pressures) influence the partnering arrangement?
  - a) If so, why was this allowed to occur?
  - b) What steps, if any, were taken to minimise this issue?
- 4) Do you feel that the use of partnering on this particular project was ideal, or do you think that it could have been more carefully selected for its suitability?
- 5) Were sub-contractors thoroughly included in the project partnering process?
  - a) If not, why were they not included?
  - b) Do you think they should have been included?
- 6) Did you find that some partners were not willing to compromise design team solutions?
  - a) If not, why?
- 7) Do you feel that any partner was not totally committed to the partnering arrangement and charter (especially the top-level management of the client)?
  - a) Did this affect the ethos of the team?
  - b) If so, why were they not committed?
  - c) Was this attempted being rectified?
  - d) Could this have been minimised?
- 8) Did you find that their design problems (conflicting/ambiguous plans and specifications) from the design consultant during construction?
  - a) What cause this problem?
- 9) Did you experience technological communication problems due to incompatible operating systems and software?
  - a) Were these issues addressed early in the project?
- 10) What training or guidance did the client provide at project commencement?
  - a) How thorough was it?
  - b) Did internal or external guidance continue throughout the duration of the project?
  - c) Was training adequate for your purposes?

- 11) Do you feel that dealing with a large bureaucratic organisation impedes the partnering arrangement?
- 12) Was a competitive tendering arrangement used for the selection of the contractor?
  - a) Is so, do you feel that the competitive tendering arrangement at the commencement of the project inhibited flexibility or led to suspicion in the partnering relationship? Please explain.
  - b) Do you think the initiation of an untraditional contract with a less competitive tendering arrangement could have improved the chances for partnering success?
    - i) If so, why?
- 13) Did you find that there was a lack of empowerment of the client's controlling bodies?
  - a) If so, do you think decisions could have been made more efficiently if the client's representatives had more authority?
- 14) Did you find that the controlling bodies lacked the technical knowledge to understand the construction problems faced?
  - a) Do you think this affected the problem solving process?
- 15) Did you feel that there was a lack of intimacy in the project partnering relationship with the client?
- a) If so, did this affect the relationship and its problems-solving capacity?

#### Section 3 — final comments

- 1. Do you rate project partnering as a potentially successful concept if implemented correctly?
- 2. What do you see as the most critical component(s) to the success of the process?
- 3. Do you see a future for project partnering in the procurement of public client's facilities? If so, what major issues must be addressed if this is to prove successful?

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