

CRC for Construction Innovation (2006) *Ethical behaviour in the construction procurement process.* CRC for Construction Innovation, Brisbane.

The Participants of the CRC for Construction Innovation have delegated authority to the CEO of the CRC to give Participants permission to publish material created by the CRC for Construction Innovation. This delegation is contained in Clause 30 of the Agreement for the Establishment and Operation of the Cooperative Research Centre for Construction Innovation. The CEO of the CRC for Construction Innovation gives permission to the Queensland University of Technology to publish the papers/publications provided in the collection in QUT ePrints provided that the publications are published in full. Icon.Net Pty Ltd retains copyright to the publications. Any other usage is prohibited without the express permission of the CEO of the CRC. The CRC warrants that Icon.Net Pty Ltd holds copyright to all papers/reports/publications produced by the CRC for Construction Innovation.



# Final Report: Ethical Behaviour in the Construction Procurement Process

## Research Project No: 2002-062-A

The research described in this report was carried out by:

Project Leader

Researchers

John Oliver

Kerry London Phoebe Everingham

Project Affiliates

Jeff Horsley Gerry Shutt Roger Frith Don Allan Debbie Smit Paul Smith Marcus Jefferies Jamie Mackee Judith McCann

Research Program: A Business and Industry Development

Project: 2002-062-A Ethical Construction Procurement

Date: February 2006

Leaders in Construction and Property Research

## **Distribution List**

Cooperative Research Centre for Construction Innovation

Authors

Associate Professor Kerry London

Phoebe Everingham

## Disclaimer

The Client makes use of this Report or any information provided by the Cooperative Research Centre for **Construction Innovation** in relation to the Consultancy Services at its own risk. Construction Innovation will not be responsible for the results of any actions taken by the Client or third parties on the basis of the information in this Report or other information provided by Construction Innovation nor for any errors or omissions that may be contained in this Report. Construction Innovation expressly disclaims any liability or responsibility to any person in respect of any thing done or omitted to be done by any person in reliance on this Report or any information provided.

© 2006 Icon.Net Pty Ltd

To the extent permitted by law, all rights are reserved and no part of this publication covered by copyright may be reproduced or copied in any form or by any means except with the written permission of Icon.Net Pty Ltd.

Please direct all enquiries to: Chief Executive Officer Cooperative Research Centre for Construction Innovation 9<sup>th</sup> Floor, L Block, QUT, 2 George St Brisbane Qld 4000 AUSTRALIA T: 61 7 3864 1393 F: 61 7 3864 9151 E: <u>enquiries@construction-innovation.info</u> W: <u>www.construction-innovation.info</u>

List of Figures	3	ii
List of Tables		ii
PREFACE		1
EXECUTIVE	SUMMARY	2
1.	INTRODUCTION	4
2.	LITERATURE REVIEW	5
2.1	Definition of Ethics	5
2.2	Ethics in Business	6
2.3	Ethics - theory and practice: normative vs. positive approaches	7
2.4	Codes of ethics and problems in practice	.10
2.4.1	Overview of Codes of practice	.11
2.4.2	Problems in practice	.11
2.4.3	Implementation	.12
2.5	Conclusion	.13
3.	METHODOLOGY	15
3.1	Open Space technology	.15
3.2	Thematic Analysis	.17
4.	RESULTS/DISCUSSION	19
4.1	Stage 1 Thematic Analysis	.19
4.1.1	Culture/risk	.24
4.1.2	The tender process	.25
4.1.3	Documentation	.26
4.1.4	Client/government	.27
4.2	Solutions documented by the note takers	.29
4.2.1	Culture/risk	.31
4.2.2	Tender process/cost –	.31
4.2.3	Documentation	.32
4.2.4	Client/government	.33
5.	CONCLUSION	35
5.1	that's business: ethical behaviour in procurement	.36
5.2	Code Mapping	.36
5.3	Code Implementation Evaluation	.36
5.4	Client Ethical Behaviour Study:	.36
5.5	Procurement Strategies	.36
5.6	Alternative Tendering Criteria & Process Demonstration Project:	.36
5.7	Tender Documentation Principles:	.36
5.8	Business Relationships	.36
6.	REFERENCES	37

## List of Figures

Figure 2.3 Box 3 Business Ethics Definition	6
Figure 2.4 Box 4 Construction Industry Ethical Mismatches	7
Figure 2.5 Box 5 That's Business	7
Figure 2.6 Box 6 Cascading Unethical Behaviour in the Construction industry	8
Figure 2. 7 Box 7 Aim of current Codes of Practice	11
Figure 2.9 Box 9 Ethical Decision Making: Integration Policy/Code/Reward/Punishment/Culture	13

## List of Tables

Table 3.1 Themes developed by participants	18
Table 4.1 Themes developed by participants	19
Table 4.2   Cross theme linkages	21
Table 4.3 Descriptive table of comments	23
Table 4.4 Culture/Risk theme and subthemes	24
Table 4.5 Tender process/cost theme and subthemes       1	26
Table 4.6 Documentation theme and subthemes	27
Table 4.7 Client and government theme and subthemes	28
Table 4.8 Industry Participant Solutions (Notes from note takers – solutions)	30
Figure 5.1 Study Recommendations	36

## PREFACE

The research project is an academic and industry collaboration combining the following partners: Queensland University of Technology, the state of Queensland through Queensland Department of Public Works, John Holland Pty Ltd, Building Commission, Rider Hunt Sydney Pty Ltd and the University of Newcastle. The report provides a discussion of ethics and a brief review of the literature. It reviews the data collected from four workshops regarding ethics in the Australian construction industry; in particular ethical behaviour in the procurement process. Themes were then identified arising from the workshops and were discussed in the light of the literature. Finally it concludes with several recommendations. It is worth noting that this report is constrained by the fact that the authors took no part in the original research. Thus it is a post-analysis and as such is shaped by a reading of the material that may overlook some of the nuances that may have been revealed by participation in the design of the research as well as in the collection of the data.

The original CRC project Ethical Construction Procurement Project noted that improvement in the productivity and ethical standards of the building and construction industry would impact upon the procurement process. Originally the research set out to focus on the design of a set of ethical procurement guidelines for uptake and implementation by major procurers, including government clients, and contractors in the construction and building industry. It was argued by the original Project Team that in order to ensure acceptance by participants in the industry, the industry must inform the development of the guidelines by providing input. The argument of "top down" versus "bottom up" is actually generally well supported by the literature. To achieve this the Ethical Construction Procurement Project was designed to elicit a pilot set of procurement guidelines derived from an initial workshop that gauged the industry's perception of ethics in the procurement process and literature reviews of Australian and international procurement codes of practice. However, the initial aim of the project; to construct a national procurement code for the building and construction industry, was abandoned early in the life of the project. Realisation that there were numerous codes already in existence caused the researchers to re-orient the project towards an examination of the procurement process focusing on the ethical concerns of the industry. Thus four workshops were held in Sydney, Brisbane, Melbourne and Sydney with to elicit these responses.

This report and the post – analysis of this data was completed by a new research team including Phoebe Everingham and Kerry London as a result of unforeseen staffing changes at the University of Newcastle. The Project Leader originally on the project left the employment of the University of Newcastle just prior to data analysis. A preliminary summary of the workshops had been completed however; the industry partners felt that a revisit of the data was worthwhile as many of them had attended the workshops and felt that the summary had not yet done justice to the insights offered by the industry.

John Oliver then took over the Project Leadership and Associate Professor Kerry London took over the research direction of the analysis and ultimately the compilation and writing of the final report. Phoebe Everingham (one of University of Newcastle medallists in 2004) is also to be acknowledged for a fine effort in a challenging circumstance.

## **EXECUTIVE SUMMARY**

In construction, inter-organisational relationships are of the highest importance. Ethical practice and behaviour is a means for improving inter-organisational relationships by providing a clear understanding of the rights and obligations of all parties, improving productivity, affecting long-term business dealings, and influencing quality, time and costs. Therefore, the ability to build sustainable relationships grounded in ethical practice is important to the construction industry. Establishing ethical standards at the beginning of the procurement process provides an ethical platform for the project life cycle and the relationship between procurers and contractors. Therefore it is important to determine what the ethical issues are in the Australian construction industry from members of the industry themselves; including clients. This "bottom up" approach is not a particularly new concept. Ever since the Gyles Royal Commission in 1992 there has been a considerable effort by government agencies to develop policies to improve the ethical behaviour of the industry. This has seen a raft of policies that are concerned with code of conduct and it appears that there has tended to be a focus on the tendering process and the contractors behaviour in particular. Perhaps what is more surprising given this extraordinary effort then is the perceived lack of uptake of the codes and the perception by many (rightly or wrongly) that the ethical behaviour of the industry has not largely improved. It is difficult to say without further research as to why the implementation of the policy has not taken place with greater success given the enthusiasm from government and parts of the industry for the topic – perhaps this study and in particular the voice of the industry as represented by the workshops begins to provide some insights towards this problem. Understanding the underlying causes of certain behaviours is central to improving ethical behaviour in the industry. Section 2 Literature review revealed the complexities of managing ethics in business and identifies a tension between the theory and practice of ethics. It also highlighted the differences in perceptions of what constitutes ethical behaviour; the importance of individual and situational factors including the impact of ethical philosophies, decision ideologies and organisational factors; the importance of social, political and economic considerations; and the possibility of a mismatch between personal values and business practice. The building and construction industry and the government in Australia are concerned with ethical practice. To that end significant attention has been directed to the development of codes of ethics as the tool to develop an ethical culture within the industry. This practice, however, is at odds with the literature, which suggests that codes of ethics are not in themselves effective in achieving an ethical culture and that it is the management of the implementation at all levels in the construction supply chain which is critical. Such management would reflect an understanding of ethical decision making from a situational perspective and would include integrating policy. code, reward, punishment and culture – thus blending normative and positive approaches to improving ethical behaviour in the industry. Although some studies mention the role of the client in regard to the ethical decision making process, there have been no studies that specifically look at the role of clients and government in relation to unethical practice in the construction industry. While the role of client and government was certainly an issue for the participants, there is little literature that confirms their concerns. This reason alone highlights the importance of this qualitative study which was designed to gain a better understanding of ethical issues affecting the industry from the practitioners' perspective. Four workshops were held in Sydney, Brisbane, Canberra and Melbourne with participants from all tiers of the industry. In total there were 43 participants who attended these workshops. This research report is a post-analysis of the workshops. The methodology is explained in Section 3 Methodology. The data analysis revealed the following four major themes arising from the industry participant's discussion:

- culture/risk,
- tender process/cost,
- documentation and

• client/government

These themes are discussed in more detail and the various nuances or subthemes are discussed in more detail in Section 4 Results and Discussion. This research reveals the complexities of ethical issues within the procurement process in the Australian construction industry. It highlights the differences in perceptions of what constitutes ethical behaviour; the importance of individual and situational factors and the importance of social, political and economic considerations. The Australian construction industry and the government are concerned about ethical practice. To that end significant attention has been directed to the development of codes of ethics as the tool to develop an ethical culture within the industry. hence the original project aim - to construct a national procurement code for the building and construction industry. Realisation that there were numerous codes and that they were not necessarily working in practice caused the previous researchers to re-orient the project towards an examination of the procurement process focussing on ethical concerns. This report has engaged in a post-analysis of that data. The comments of the industry involved in the research workshops reveal concern about the unethical behaviour evident within the industry. Whilst low profitability; lack of transparency in the tender process and the costs of tendering; and poor quality of documentation featured strongly amongst the list of concerns the more significant concerns related to the culture of the industry particularly in relation to the impact on subcontractors and client/government behaviour and practices. Given that the disparate nature of the industry makes it difficult to monitor behaviour on an individual level it seems that codes of practice are the most feasible way to attempt to change behaviour. Of themselves they cannot change practices, but further research may improve their effectiveness. Based upon the interpretation of the data, in particular results found in Section 4.1 Stage 1 Thematic Analysis and 4.2 Solutions documented by the note takers, and an analysis of these results in relation to current theory and current practices towards improvement of ethical behaviour the following seven recommendations and associated strategies towards achieving them are made:

- 5.1 that's business ethical behaviour in procurement
- 5.2 Code Mapping
- 5.3 Code Implementation Evaluation
- 5.4 Client Ethical Behaviour Study
- 5.5 Procurement Strategies
- 5.6 Alternative Tendering Criteria and Process
- 5.7 Tender Documentation Guideline
- 5.8 Business Relationships

These recommendations are explained further in the Section 5 Conclusions. This study is limited because of the size of the workshops and the number of participants. It is also limited in that industry participants who attend such workshops may be predisposed to certain ethical behaviour and there was a lack of data about the participant's background. However, having said that it provides a good basis for providing insights into the problems of improving industry wide ethical behaviour; this particular report which only focused on data analysis of the workshops should be ultimately seen as a scoping study to trigger ideas for future investigations, development of other information for the industry or evaluations of existing programs and initiatives. This study does not evaluate existing Codes, Guidelines or Standards in operation in Australia. – the study only responds to the industry participants who attended the workshops and their main concerns. This is of course a limitation to the study. If an industry participant raised current documents then it was highlighted. If we think about industry behaviour surrounding ethics we might say it is "organised" through policy, process and practice. Given this the study is limited to thoughts about current practice (i.e. behaviours).

## 1. INTRODUCTION

The construction industry is characterised by the operation of numerous small operators who subcontract for the available work. This structure has produced

- an adversarial culture
- under-capitalization
- low margins, with little or no investment in research and development of new processes or use of new technologies
- short-term focus, relationships and planning
- fragmented approach, second only to agriculture (APCC, 1997: 2).

According to the Australian Procurement and Construction Council (APCC), which developed a code of ethics in collaboration with the Department of Labour Advisory Committee (DOLAC), these characteristics ultimately 'compromised efficiency and encouraged the pursuit of self-interest' (APCC, 1997, 2). The nature of the industry would not appear to facilitate ethical practice, however little is known of what helps and hinders ethical conduct in the construction industry. This research report explores the perspectives of key stakeholders and participants directly involved in the design and construction industry as to what they consider contribute to or negates ethical behaviour. Those problems highlighted above are a given currently and the structure will not change unduly in the future. Therefore it is of interest to perhaps work within this structure and move beyond constantly blaming it for all the perceived ills of the industry.

The focus of previous research into ethics has been on developing codes of conduct for the industry. This research report goes further in addressing the question of why codes that are developed are difficult to implement. It looks at the complexity of ethical issues and the obstacles preventing the practice of codes and ethics in actual industry settings. Workshops conducted uncovered some of the complexity of practices that operate in the industry from the practitioners' perspective.

This report includes the following four sections:

Section 2: Literature Review - Selected literature review on ethics related publications in construction management and economics discipline and in business ethics

Section 3: Methodology - Discussion on methodology including justification and description of data collection and analysis techniques

Section 4: Results/Discussion - Discussion on results and their interpretation

Section 5: Conclusions - Conclusions in the form of recommendations

## 2. LITERATURE REVIEW

There are four sections in the literature review. Section 2.1 *Definition of Ethics*, is certainly not meant to be exhaustive but provides an introduction to the term *ethics*, in particular by providing a context through tracing the origin of ethics from its roots in religion to ethics as a branch of philosophy. Section 2.2 *Ethics in Business*, is specifically about ethics in business and its relationship with personal ethics. Section 2.3 *Ethics: theory and practice – normative vs. positive approaches* highlights the complexity of the theory and practice of ethics; i.e. a discussion on the blend of what we ought to do with what we actually do, ultimately it is the understanding of the mismatch which is particularly important to the construction industry regulators and policy makers. Section 2.4 *Codes of ethics and problems in* practice takes the discussion on normative vs. positive approaches a little deeper and explores codes of ethics and problems with implementation.

## 2.1 Definition of Ethics

Ethics is the branch of philosophy that investigates morality and the ways of thinking that guide human behaviour. It evolved initially from religion by thinkers in the Judeo – Christian tradition. Ethics involves examining moral standards of society and asking how these standards apply to our lives and whether these standards are reasonable or unreasonable. Thus ethics examines the moral standards of society, assesses their reasonableness or not, and evaluates the impact of these standards upon the lives of individuals. Implicit in this is the notion of the common good, which is one of the factors that determine whether an act is right or wrong (Ross cited in Vee & Skitmore, 2003) In particular for the construction industry, this idea of reasonable standards of conduct is important for all participants operating at all tiers of projects to remember because if we create project scenarios that are likely to trigger unethical behaviour then it is unreasonable to demand high levels of ethical behaviour. Also in the construction industry and indeed in many of our business scenarios there are two main levels to consider in relation to the topic of ethics including; personal and group, and within the ethics of groups it is often considered in terms of professional and corporate/organisational ethics. This theme is considered in more detail later on, but firstly the following abstract definitions of ethics are established;

Richard T. De George (1990) defines ethics in general as being

Figure 2.1 Box 1 Ethics Definition

'a **systematic** attempt to **make sense** of our individual and social **moral experience**, in such a way as to determine the **rules** that **ought** to **govern** human **conduct**...'

There are three basic concerns of ethics. They involve the meaning and justification about the rightness or wrongness of acts, in particular the:

Figure 2.2 Box 2 Basic Concepts of Ethics

*intention* – the virtue or vice of the motives which prompt them; and/or

*means-* the praiseworthiness or blameworthiness of the acts themselves and the

ends- the goodness or badness of the consequences (Ray et al, 1999).

While ethics is concerned with human conduct in general, construction researchers such as Ray et al (1999) identify ethical issues in the industry as falling into two categories. These are

- 'personal ethics' and
- 'professional ethics'.

Personal ethics describes ethics as generally constituting a system of moral principles by which human actions and proposals may be judged good or bad or right or wrong; the rules of conduct recognised in respect of a particular class of actions and the moral principals of the individual. Professional ethics refers to the behaviour expected of an individual in an industry or a particular group within the industry that is bound by a set of principles, attitudes or types of character dispositions that control the way the profession is practiced (Vee and Skitmore, 2003). To clarify the term 'professional', Ray et al (1999) define professional as 'a group of people organised to serve a body of specialised knowledge in the interests of society'. Professional ethics involves assessing each decision in practice not only in regard to individual moral concerns but also in terms of professional norms. According to Fan et al (2001) this notion of 'professional ethics is linked with more practical concepts and expectations from the public such as competence and responsibility. The themes of responsibility towards the public and the responsibility towards the client by the industry are discussed; however the responsibility of the client to the industry and also of the industry towards each other is not considered. The studies by Vee and Skitmore (2003) and Christabel and Vincent (2002) were specifically on consultant professionals; including architects, project managers, quantity surveyors and construction managers. This has been the generally accepted interpretation of professional ethics.

For the purpose of the research in our particular study we are tending to take a much wider view of the term 'professional ethics' and suggest it is concerned with the normative definition of professionalism in the construction industry. We define 'profession' as including all tiers of the industry itself as well as the client and government. This means that client and government also have a responsibility to behave in a professionally ethical manner in matters dealing with the industry.

There was not a great deal of literature on professional ethics in the construction research literature; therefore, a wider search revealed much more literature to draw from in what is known as the business ethics research field. Of course perhaps professional ethics is subsumed by business ethics or is an added dimension of ethical conduct for professionals – all participants in the industry because they are in business are involved with business ethics and those who identify with a particular professional boundary. As the industry is a mixture of what we commonly refer to as trades and professions as well as client and government this may raise some further questions about the ethical behaviours of all sub groupings.

## 2.2 Ethics in Business

This research project is concerned with the application of 'professional ethics' and/or 'business ethics'; more specifically the application of ethics in the building and construction industry. Because of the dearth of research into ethics in the construction industry, the focus of the literature was expanded to look at ethics in business more broadly. Ethical behaviour in business is defined as being

Figure 2.3 Box 3 Business Ethics Definition

**'legal** behaviour and a collection of moral principles or **a set of values** being **shared** not only with the **business community**, but also within **society** as a whole' (Ray et al, 1999).

If we reflect upon the construction industry as being a business community which includes all of those involved in doing business this would also include all clients including public sector agencies who act as clients as indeed they are integral to the business community through their large transactions. For the remainder of this report clients are included in any reference to 'business community' As a starting point this definition serves us well in this study as we are beginning to question and unpack this idea of ethical behaviour in the construction industry. In particular it allows us to start to ask such questions as:

## Is it the **set of values** that are not shared that causes **conflict?** If so **whose** set of values are we working towards?

Corporate activity has significant consequences for society, yet some researchers have argued that business and ethics don't mix (De George, 1990). This is a view that is now being challenged, with recent research (De George, 1990; Vee & Skitmore, 2003) arguing that business does serve society, meets collective and individual needs and the needs of the environment. Contrary to the idea that '*business and ethics do not mix*', business is in fact subject to moral rules since it involves social conduct. It prescribes what people do and it is concerned with values (personal and professional), as well as practice (Fan, et.al, 2001). Further to this for example, the popular phrase "That's business" is a phrase that we are all fairly familiar with and encapsulates in practice what people often use as an explanation for a behaviour that is regarded by many as unethical and this phrase is their justification and explanation.

Figure 2.5 Box 5 That's Business

.... that's business....

Managing ethical behaviour requires an understanding of the individual and situational factors that influence the ethical behaviour of employees (Stead, teal., 1990). While professional ethics is necessary for managing ethical behaviour in business, the ethical conduct of the industry is still dependent on the personal ethics of the employees. Business ethics will not change unethical business practices unless those engaged in the practices wish to change them. A business can only be as ethical as the people who own, manage and work for it. Yet its organisation and practices can be more or less conducive to ethical activity which can be reinforced or impeded by the larger systems of which it is part. Business ethics can help people approach moral problems in business more systematically; however in themselves they will not make an individual 'moral'. In this sense, business ethics is true of ethics in general. Ethics presupposes that those who study it are already moral beings and that they wish to be more informed moral beings. Business ethics can produce arguments showing that a particular practice is immoral, but only those in a position to implement the changes will be able to bring about the changes (De George 1990).

In researching ethics in the construction industry it is therefore necessary to take these complexities into account and identify the ways in which personal and business ethics are interrelated.

## 2.3 Ethics - theory and practice: normative vs. positive approaches

Business ethics involves two tasks: the normative task of defining abstract standards of behaviour and the practical task of applying these standards to business conduct. When we look at the academic literature this can translate quite neatly into two theoretical approaches; the normative vs. the positive approach. The *normative approach* is concerned with developing models of expected behaviour and seeking out exemplars in the real world that validate the model and the *positive approach* is about describing real world practice whereby prescriptions of the ideal are suspended until we understand more intimately the characteristics of real world behaviour. Normative ethics and positive ethics can in some ways be considered in relation to the theory and practice of ethics and how they are combined; i.e. *what we ought to do and what we actually do*. Business ethics does not involve moral questions exclusively; rather it is a mixture of moral and practical concepts. The normative definition of professional ethics is tied up with practical concepts and expectations from the public, such as competence and responsibility. The general normative rules of duty of care and conduct are also specific to particular professions (De George 1990).

Although business ethics is concerned with professional values as well as how these play out in practice, it is not always easy to combine the two in reality. The tension between theory and practice is highlighted in the way in which business ethics is actually practised by individuals within organisations and the variations between specific businesses. An example of the disparity between ethical theory and practice is Allen and Davis' (1993) study of business consultants in the USA. They concluded that it is important that consultants are familiar with the field within which they are consulting if they are to determine whether an action is ethical. Choices made by consultants are influenced by their values and ideals, which may or may not coincide with professional norms. Moreover, economic and political considerations may override commitment to ethical values and responsible behaviour, particularly in those situations where the individual is placed under pressure, or exposed to a set of opportunistic circumstances.

Acknowledgement of this conflict between theory and practice helps to explain why consultants who maintain high personal and professional values in theory can disintegrate in practice, for example, when actual ethical dilemmas are faced in the marketplace (Allen and Davis, 1993). Indeed professionals have complained that codes of practice, which will be further discussed in Section 2.4 *Codes of ethics and problems in practice*, do not address specific problems faced by business consultants in their functional activities. Balancing ethical considerations with conflicts of interest means that consultants who do not behave in accordance with the accepted standards or codes may possibly jeopardise a consultancy (Allen and Davis, 1993; Fan et.al., 2001).

Construction contractors and subcontractors also struggle with the dilemma of reconciling ethical theory and practices. For example Figure 2.6 is taken from another empirical study by May et al, (2001) conducted in Queensland based upon 7 interviews with main contractors and 6 interviews with subcontractors and reveals the dilemma that some subcontractors face when they are involved in bid cutting or bid shopping. "The majority of subcontractors regarded the practice of (main contractors) lowering subcontract prices prior to the main contract bid as unethical." (May et al, 2001).

Figure 2.6 Box 6 Cascading Unethical Behaviour in the Construction industry

... one subcontractor commented that 'where a contractor uses the lowest price regardless of if the SC is capable of doing the job, and then discounts this price further, which is what is happening, then yes I consider this to e unethical.' A similar viewpoint was expressed for the practice of lowering subcontract prices after the award of the main contract. However, even though SCs considered this practice to be unethical, they still went along with it with comments such as "if you don't **negotiate** then you don't have much chance of **getting a job**" and "it was **unethical**, but through **common usage** it is the **standard procedure**, just as **SCs must now screw their suppliers**, etc. ... (May et al 2001, 254-255).

This clearly highlights the cascading effect of ethical behaviour that constitutes the construction industry real world practices. The quote reveals a number of interlinked concepts; the *business imperative* of winning jobs, *reconciled* with the knowledge and *explicit recognition* that it is unethical behaviour and the *justification* that it is common practice and therefore somehow acceptable behaviour. The statement by this contractor's and subcontractors refers to bid-shopping. Although they acknowledge that it is unethical they justify their practice in order to win the job. This clearly ties the relationship of the contractor's ethical behaviour to upstream clients. It also begins to reveal that clients have a significant role in the industry as they can set the environment for ethical or unethical behaviour through the actual contractors and then the actual contractual terms. We are often loosely discussing the concept of the construction supply chain without stepping back and really thinking about what these interdependencies mean in practice.

There are a number of ways to interpret the practice of bid cutting and these were provided by May et al (2001) who explored the economic, legal, ethical and management perspective. The sample was quite small but it provided extremely useful insights into the practices of main contractors and subcontractors in the industry. The practice of bid cutting was found to be extensive. This is supported by London's (2005) study which modelled procurement behaviour throughout the entire supply chain. Her study was much more exhaustive (involving some 90 firms and over 1500 actual contractual relationships). The aim of the London (2005) study was not exclusively about bid shopping (it was aimed at developing a positive model of procurement practices from an industrial organisation economic perspective) but it certainly supported the findings of May et al (2001) and determined that this process of negotiation was endemic of the industry's behaviour.

Such themes that were explored in that study include:

- Subcontractors quote late in the process in order to limit the main contractors opportunity to shop for lower prices
- Main contractors usually use the lowest prices
- Main contractors rarely solely rely on a subcontractor's quote to compile a bid
- Subcontractors try to take measures to counteract bid cutting through price inflation
- The majority of subcontractors felt that they were free to withdraw their quoted prices before the main contract bid because the main contractor would not be disadvantaged by withdrawal at this time

These findings should be seen in the light of the fact that they were only obtained from a total of 13 participants in the industry and the study did not describe anything about these firms, their size, the type of work they did and what other market forces were operating at the time. In contrast London's study was more exhaustive and both challenged and supported some of these findings. Indeed the practice of "negotiation" does take place but it is a much more complex process than has been described. Indeed it really has served to indicate that this whole period of tendering – which is not simply the act of submitting the price is worthy of much more investigation. It is a unique, dynamic and highly intangible period in the process of relating each tier's procurement practices together to try to see where the relationships between successive markets were. There are so many issues to deal with but ultimately the negotiation process is influenced by a range of issues not the least of which includes the following:

- the buyers detailed understanding of how the seller market operates and the decision criteria for supplier selection (generally price coupled with another criteria),
- how much power the buyer has over the seller market
- how much power the seller has over the buyer market (countervailing power)

Perhaps most central to this present study and discussion on ethics is that the practice of bid cutting is a normal practice. When does it then become unethical for buyers to attract the best deals?

This cascading effect of procurement practices and ethical behaviour has not really seriously considered the role of clients. Although some studies (Skitmore, 2003 and Ho et al, 2001) mention the role of the client in regard to the ethical decision making process, there have been no studies that specifically look at the role of clients including the government client in relation to unethical practice in the construction industry. While the role of clients, including government clients and government as a regulatory and policy making body was certainly an issue for the participants, there is little literature that confirms their concerns.

If this is the case, that clients have a key role in setting the scene for ethical behaviour during a project, then perhaps a closer examination is required on codes of practice for the professional category of client. This needs careful thinking about as clients come in many forms and for that matter with many differing levels of engagement in relation to the 'construction experience'. For many years clients have been considered as those that are highly involved in the industry and are experienced clients and then those that are not as experienced (Green, 1999) – perhaps what we could call the amateur client. In the Section 2.1 Definition of Ethics, Figure 2.6 Box 2 Basic Concerns of ethics, we were introduced to the concept of intention – the virtue of vice of the motives which prompt them. Experienced clients are often more knowledgeable about the role that they play in influencing ethical behaviour on a project and have many policies, procedures and practices in place to manage their individuals within their organisation. Then there are those experienced clients who have this knowledge but have a different view of their role with respect to creating business environments that are conducive to ethical behaviour on their projects. Finally there is the unknowledgeable client group or the amateur client who does not really know what they don't know in terms of their powerful influence on the entire construction supply chain and that their decisions upstream can create a flow on of unethical behaviour on a project.

Ignorance of the nuances of the way in which the industry operates and a transferral of their knowledge from another business environment brings with it a set of values and attitudes that may mismatch or that simply with the best of intentions still creates a situation that is not conducive to ethical business practices. Typically clients who have a repetitive building program are considered knowledgeable. However, there is the client who does not work regularly and therefore knows little of the impact that their procurement strategy may have on the industry. There is the private sector client who may fall between the two spectrums of knowledgeable and acknowledgeable. However, it is noted that developer clients and repetitive building program government sector clients are more knowledgeable about the workings of the industry and perhaps have an understanding of their influence but it does not automatically equate to more ethical behaviour or sensitivity towards their role in ethics. It does mean however that they are good client groups to target when exploring their role in creating ethical environments as they have greater impact on the industry. The public sector client, whether experienced or not, occupies a fairly unique space because they have a dual role of business client and also a responsibility to the wider public.

This conflict between theory and practice indicates that ethics is not merely a simple set of rules. It seems that ethics involves a complex struggle of conflicting patterns of value which are not simple choices between right and wrong; it is highly situational. Rather they are complex judgements between the economic performance and the social performance of an organisation (Ray et al 1997). Ray et al (1997) argue that ethical decisions regarding business are in fact even more complex than this. For example, in the construction contracting business, decisions are made with regard to economic, technical, human and social interconnections under severe time constraints without full information about market forces and long-term consequences. There is a conflict of interest between society, the organisation's culture and objectives and the decision maker as both a professional and an individual with a multitude of interests and loyalties (Ray et al, 1999).

## 2.4 Codes of ethics and problems in practice

Further to the discussion in the previous Section 2.3 *Ethics-theory and practice: normative vs. positive approaches*, which explored the complexities of ethics in relation to theory and practice, this section reveals the tension between the theory and practice in relation to codes of ethics. The propensity to develop codes of practice is a 'normative' approach to ethical practice. Although codes may seem to work in theory, they don't necessarily work in practice and perhaps this is one of the perennial dilemmas of the industry – with the very best of intentions the code of practice still remains much an ideal with very little embeddeness in industry practices.

## 2.4.1 Overview of Codes of practice

Codes of practice are designed to deal with ethical problems in business. In the Australian construction industry, codes of tendering have been written in order to deal with ethical problems such as withdrawal, bid cutting, cover pricing, compensation of tendering costs and collusion.

All jurisdictions in Australia – with the exception of the Australian Capital Territory, which has adopted the National Code of Practice – have their own codes of practice in relation to the building and construction industry. In adopting this 'normative' approach governments have sought to develop and encourage ethical behaviour. In his final report for the *Royal Commission into the Building and Construction Industry* Commissioner Cole argued that governments, as major clients, can facilitate change 'by insisting on best practice on public sector construction sites. Codes of practice can play an important role' (RC, 2003c: (11) 7)

In addition to these government codes industry and professional bodies such as the Australian Institute of Building, the Master Builders Association and the Australian Institute of Quantity Surveyors, state Board of Architects and Royal Australian Institute of Architects have developed their own codes of conduct or ethics.

Figure 2. 7 Box 7 Aim of current Codes of Practice

The codes are designed to delegate responsibility to both competing tenderers and the principal (client, owner) to achieve a balance between what is right and what is common-sense for each individual project. They are applicable both generally, to many of the traditional forms of contracting (e.g. lump sum or design and build), and specifically, to projects of a less standard nature (e.g. restoration work) or where risks involved are difficult to determine or delegate (Ray et.al., 1999: 146).

It is also noted that the Australian Standard AS 4102 – Code of Tendering is extensively referred to in the industry.

## 2.4.2 Problems in practice

Questions about the effectiveness of codes are now emerging through studies about codes in business generally, (Allen and Davis, 1993) as well as in the construction industry (Ray et al 1999; Ho et al, 2004). In some ways it is only through the development of the codes and then the passage of time that allows researchers to begin to make these evaluative studies.

In relation to corporate ethical behaviour and the study by Allen and Davis (1993) on business ethics by all types of consultants in the US most of this work on how organisations influence ethical behaviour is devoted to the development of corporate codes of ethics. Whilst there has been a proliferation of these codes, there has not been a significant improvement in business ethics. Although the codes are regulative, the effectiveness of ethical codes in actually regulating conduct has been criticised for only providing a written framework. The codes themselves cannot create ethical integrity in a person. In itself, a code cannot solve an ethical situation. It can only act as a broad reminder of the principals that individuals are expected to follow (Allen and Davis, 1993).

Specifically for example, in their study of 207 business consultants from a variety of industries in the US, Allen and Davis (1993) found that the effectiveness of corporate codes of ethics may not be lived out in reality. Codifying the ethical values of the profession or organisation may not be enough to deal with the ethical ambivalence created and maintained through reward systems. Studying ethics is a dynamic phenomenon. Standards change and what is 'good' or 'bad' and morally acceptable will always be *situationally* determined. Of course this is a challengeable premise – surely there are some absolutes as to what is "right" and what is "wrong"? This will always be somewhat of a *messy* construct but the general

trend in the literature is that we need to begin to understand more about the *messiness* and how to address the situational aspect to ethical behaviour.

Studies dealing with the broader issue of implementing business ethics demonstrate the importance of considering the broader context in which ethical codes are to be applied. For example, Allen and Davis (1993), in their study of consulting practitioners, show how people who work in business are moral individuals with conflicting value systems as well as members of their particular profession. This means that economic and political value orientations may take precedence over a commitment to ethical values and responsible behaviour, particularly if the individual is pressured, or given a set of opportunistic circumstances. The choice a consultant makes, for example, as to the importance of profitability compared to client fidelity, involves the values and ideals of that particular individual.

Other research has identified that it is not just about defining values and attitudes but it is about the importance of communication in diffusing the codes of practice to the particular business culture. Clark and Leonard (1998), for example, stress the importance of communication in regard to codes, particularly in relation to management's communication of an ethical culture. They argue that it:

Figure 2.8 Box 8 Diffusion of Codes of Practice

"...is not so much that organizations should have corporate codes of ethics, but the emphasis should be placed on how the codes are *communicated*, *enforced*, and *used*, as a basis for *strengthening* the *culture* of the organization. If this is the case, then it is not the codes themselves that are important, but how the *management of the business reacts to ethical decisions as a whole*. Thus codes are just one way of communicating an ethical culture to employees... "(1998, 7).

This is much more powerful way of seeing the interrelationship between normative and positive approaches to addressing ethical behaviour – this is can immediately be seen to be relevant to the construction industry. The codes are only one method of the way in which various industry associations and government agencies can be used to strengthen the ethical business culture of the all the participants to the industry. It has been found in studies on business ethics (Clark et al 1998; Cressey and Moore 1983), that corporate codes of ethics are not influential in determining a person's ethical decision making behaviour. Most businesses now have codes of ethics, yet they are not necessarily working in practice. Benson (cited in Clark et al 1998) argues that although codes are generally more favourable towards creating a more ethical corporate environment, organisations must realise that there are several areas these codes cannot address effectively.

## 2.4.3 Implementation

In view of the tension between theory and practice, Fan et al (2001), in their study of the construction industry in Hong Kong, argue for 'ethical decision making models' which incorporate concepts of professional ethics into codes of practice. These models should include consideration of political, social and legal values that are peculiar to the construction/surveying profession. Codification of ethics may not be sufficient to counteract the rewards that flow from unethical actions. Since practitioners are moral individuals with at times conflicting value systems, it might be more useful to focus on individual values and professional ethics and indeed, Allen and Davis (1993) concluded that

Figure 2.9 Box 9 Ethical Decision Making: Integration Policy/Code/Reward/Punishment/Culture

'unless ethical codes and policies are consistently reinforced with a significant reward and punishment structure and truly integrated into the business culture, these mechanisms would be of limited value in actually regulating unethical conduct' (Allen and Davis, 1993, 6).

Successful application of a code requires both knowledge of the code and willingness to comply with the principles espoused in the code. Codes, whilst important, are not strong enough to alter behaviour by themselves. In combination with other tools, however, they can raise the consciousness of employees to 'their own personal ethical influence on the organization' (cited in Clark & Leonard, 1998, 8). Implementation, then, is important in managing ethical behaviour.

Further support for the need to focus on implementation in relation to corporate codes of ethics is found in a case study of the construction industry in Hong Kong conducted by Ho et al (2004). They argue codes must be integrated with implementation processes so that the codes become 'living documents'. Using Schwartz's 'corporate code of ethics phased development model' which has five stages:

- objectives,
- creation
- content
- implementation and
- administration,

- they established that most research ignored implementation, the stage that is integral to the translation of codes into practice. Whilst the Hong Kong company under study had a formal and documented method for implementing its code of ethics at senior level, it did not extend to the project level. In fact senior management did not have the information or knowledge to enable them to implement the code at project level. Consequently communication of the code to the site workers was left to the discretion of the individual construction or project manager, which meant 'different project managers adopted different methods to communicate the code to their project teams'. This failure was attributed to two factors – the *laissez-faire* approach adopted by the executive and senior management in the development and communication of the code, and the belief that the consequences of unethical practice by senior management would be more costly than the practices of staff from lower levels, a belief that contradicted reality.

By way of contrast the company's safety management system was communicated to all levels of staff. Its implementation was resourced, monitored and evaluated, an approach that suggests that the company valued the safety code. Moreover, it is worth noting that development of the code of ethics, unlike the safety code, rested in the hands of senior management. Successful implementation of codes of ethics, however, requires input and/or representation from across the organisation (Wells and Spinks, 1996). It requires a common understanding of ethical and professional values (Vee & Skitmore, 2003). Whilst this lesson apparently informed the development and implementation of the safety code it did not extend to the code of ethics.

## 2.5 Conclusion

This brief literature review reveals the complexities of managing ethics in business and identifies a tension between the theory and practice of ethics. It also highlights the differences in perceptions of what constitutes ethical behaviour; the importance of individual and situational factors including the impact of ethical philosophies, decision ideologies and organisational factors; the importance of social, political and economic considerations; and the possibility of a clash between personal values and commercial practice. The building and

construction industry and the government in Australia are concerned about ethical practice. To that end significant attention has been directed to the development of codes of ethics as the tool to develop an ethical culture within the industry. This practice, however, is at odds with the literature, which suggests that codes of ethics are not in themselves effective in achieving an ethical culture, that it is the management of the implementation at all levels in the construction supply chain which is critical. Such management would reflect an understanding of ethical decision making from a situational perspective and would include integrating policy, code, reward, punishment and culture – thus blending normative and positive approaches to improving ethical behaviour in the industry.

## 3. METHODOLOGY

This part of the report includes the following sections; Section 3.1 *Open Space Technology*, which describes the principals of the method for data collection that the previous researchers on this project had chosen and then Section 3.2 *Thematic Analysis* which describes the method undertaken to analyse the data collected from the workshops.

It is noted that the discussion on Open Space Technology is provided as a context for the previous researchers intentions and it is a post explanation of what we believe that they understood by this technique. There are limitations to this method and a number of premises need to be taken on board to accept this methodology and these are noted at the end of the discussion of Section 3.1. One of the greatest flaws in the methodology is that it is merely a technique for collecting data and is largely silent on data analysis and therefore it has inherent problems.

## 3.1 Open Space technology

The method used for the workshops was based on a technique which is termed, Open Space Technology (<u>http://www.peace.ca/ost.htm</u>) which was developed in the late 1980s by Harrison Owen. It seems that this meeting methodology is now used around the world as an effective process for facilitating change in organisational settings. 'Open technology workshop' as it is often referred to as well, is designed to be as objective as possible as well as creating the conditions for an interactive process which allows leadership to surface naturally. It is designed to be more of a bottom up rather than top down approach to workshopping and brainstorming. The aim is to move individuals away from their 'organisational culture' into a more organic networked community.

The typical venue for an 'open technology workshop' is a large conference room with session rooms or adjacent areas. At the beginning of the workshop everyone sits in a large circle where the broad purpose of the workshop is stated. Anyone who has any ideas relating to this broad topic are invited to take a sheet of paper and write along the top what they think the most important issue is for them. Participants then break off into smaller session groups and those who wrote up discussion issues then become the leaders of that discussion group; that is they get the discussion started and try to make sure everyone has an opportunity to speak. 'Open Space technology' operates on four principals and one law. The four principals and the one law are:

Whoever comes are the right people: This is to reinforce to participants that they have the wisdom to achieve solutions

Whatever happens is the only thing that could have: This keeps participant's attention on the best possible effort for the present

Whenever it starts is the right time: This reminds participants that creativity cannot be controlled

When it's over, its over: This encourages participants to continue their discussion so long as there is energy for it.

Figure 3.1 Box 10 Principals and Laws of Open Space Technology

The one law is called the **law of mobility** which means that people can enter or leave an open space session as they choose. If the session that a participant is attending does not meet their individual needs for either contributing or learning they are free to go to another one. Building on these 'open space technology' principles, the participants in this study were asked to do four tasks:

**Task 1:** They were broken off into small groups and a discussion was generated by the participants – they were encouraged to talk freely and openly about anything they found important. No academic in the room could drive any conversation topic. To ensure that absolutely no one was leading the discussion in any way the note takers shifted tables regularly to ensure that discussions were self-determined by the participants. The participants were encouraged to move around to different tables at their own will if they were not interested or had nothing else to contribute to the discussion and move on to another topic of discussion. They were to take their own notes on important points on post-it-notes

**Task 2:** The group as a whole then had to classify the issues they found to be the most important from the smaller discussion tables. They did this with butcher paper and classified the topics they found most important into headings for the butcher paper.

**Task 3:** Participants then had to classify their own data from their post-it-notes and stick them on the butcher's paper under what heading was most appropriate.

**Task 4**: Finally they had to determine as a group what the most important issues were and anything they thought needed further discussing.

The 'sticky wall' workshop method was used for participants classifying their own data on post-it-notes. Like the 'open space technology' workshop, the 'sticky wall' method is designed to encourage a more grassroots decision making methodology. It helps the group align ideas and build on each other's thinking without being influenced by the facilitator or note takers.

Using the 'open space technology' meant that everyone had ample opportunity to speak which was recorded by the note takers. The 'sticky wall' method involved participants writing down their own important issues meant that everyone got a say. In many ways this data was stronger than what was taken by the note takers; the data was coming directly from participants themselves without being interpreted first by the note takers.

The facilitator was chosen for her objective position and had no prior knowledge of the project to ensure she would not 'lead' the discussion in any way. The only requirement of the facilitator in 'open space' is that, at the end of the session to make sure that the session leader brings back to a central point a summary of session ideas.

The 'Chatham House rule' was enforced, meaning that no 'names' of people or organisations were allowed to be used during the discussion. This encourages people to talk freely. To ensure that this rule would be abided by, there was no tape recording allowed. Thus if people did name names, the note takers could exclude that information. This method also encouraged people to talk more freely as anonymity could be guaranteed with respect to data analysis as they were not being recorded. However this is challengeable as transcripts can be taken from the recording, names changed and tapes destroyed. In fact by not tape recording the data during the workshops, the data is less 'objective' and more likely to be interpreted by the researchers when analysing it. This certainly turned out to be a limitation for the researchers when conducting their post – analysis of the data. There emerged marked differences between the notes taken by the researchers and there were substantial degrees of interpretation of the discussion that ensued – it seems that there were differences in understanding on the open space technology philosophy.

It should be noted that the lack of normative standards in data collection, particularly from the note takers will inevitably lead to highly individualised methods and subjective interpretations of value and importance. For this reason given that we have done this analysis with little

guidance more attention has been paid to the post-it notes as they are directly representative of participant's contributions rather than the value laden interpretations from the note takers.

Regardless of these limitations one of the most promising aspects to this study is that the bottom up approach supports the problems that have been identified in the literature – that is the need for those developing the codified documents of ethical practice to suspend their desire to drive discussion and that other industry participants could lead discussion without recriminations – similar to the philosophical conclusions of the Hong Kong study where the OHS code was successful as opposed to the ethics code because of the different parts of the organisations' involvement in implementation.

One of the difficulties with this technique is that it is a business oriented technique for change management and perhaps lacks a thinking through of the implications that a research study has in terms of data collection related to data analysis. Indeed there was no report identified in the literature that discussed what you actually do after you complete the open space technology workshop. This brings the discussion in this part of the report to the problem of data analysis.

Towards this end four workshops were held in Brisbane, Sydney, Melbourne and Canberra in late 2004 All up there were 43 participants across all workshops. In Brisbane there were 17 participants which included clients, contractors, state government engineers, architects and a quantity surveyor. In Sydney there were 6 participants, including an engineer, state government employees, trade union employees, an architect and a quantity surveyor. There were 11 participants in Canberra including lawyers, Commonwealth government and Territory government employees, contractors and an academic. In Melbourne there were 9 participants including a consultant, members from a statutory authority, local and state government employees, a lawyer and an architect. However it must be noted that due to inadequate documentation it is not entirely certain that this is exactly the correct number of participants; however this summary gives an indication of the number and type of participants. There were no overarching questions posed by the facilitator. Participants were told the project title 'Ethical procurement in the construction industry' and they were free to talk about any issues they felt were important.

The post-analysis of the data also meant that the post-it notes from the butcher's paper had no context for us to locate the comments. This could be interpreted as positive in the sense that open space technology is designed to be as objective as possible; however it also means that the real meanings or various nuances of certain comments were impossible to determine.

## 3.2 Thematic Analysis

As discussed previously the open space technology workshop was used to collect the data, however; as this method offers no way to analyse the data, a thematic analysis was used. A thematic analysis (Denzin and Lincoln, 1994) involves identifying data that relates to preconceived but broad classifications or constructs. However in this case, the themes were developed from the data itself and were not preconceived and this has taken place in two stages. This is not particularly problematic as this type of grounded approach where the constructs emerge from the data is well established in the research methodology literature on qualitative studies and in particular is appropriate in grounded theory methods. In the first stage, participants in the workshops identified their own themes. These were codified in a table that allowed for comparisons to be made between cities:

#### Table 3.1 Themes developed by participants

City 1	City 2	City 3	City 4

Then the researcher collapsed the codes into the major themes that emerged according to their frequency and patterns of use and another column was added to the table, with the participants' codes allocated to themes. Some of the participant codes were entered into more than one theme.

#### Table 3.2 Cross theme linkages

Themes	City 1	City 2	City 3	City 4

A second stage of analysis was then conducted whereby a descriptive table of comments (Table 4.3 Descriptive Comments) was also developed by inserting apt illustrations of the themes from the post it notes made by participants. These quotations were further divided into sub-themes within the major theme and this involved a deeper discussion of the main themes that were identified in the first stage of analysis.

A third stage of analysis was then considered whereby a further table (Table 4.4 Note Takers Solutions) was developed which organised the notes from the note takers who were observing the discussion and taking notes. This table was done separately to distinguish between the data that allowed the research subjects own voice (perspectives) to emerge and that of the note-takers, which was their interpretation of the workshop discussion. The note-takers had already categorised the discussion, and their categorisation provided another major theme.

## 4. **RESULTS/DISCUSSION**

The results and discussion has three sections, Section 4.1 *Stage 1 Thematic Analysis*; which identifies the participant themes from which arose four main themes developed by the researcher that emerged from all of the workshops. These themes arose from the frequency of which they were discussed by the participants. The first part is an overview of the four main themes that came out of the workshops and discussion of each theme. Section 4.2 *Stage 2 Thematic Analysis* takes each theme and discusses in depth those themes and provides examples from the workshops and also identifies across each city what the nuances were in relation to each of these themes (that is sub themes). Section 4.3 *Stage 3 Analysis: Note takers Solutions*, is focused on the solutions that were discussed by participants taken from the data of note takers. The solutions correlate with the four themes in the first section; that is there are solutions for each theme. All of the comments made by participants and the solutions noted by the note takers are included in the appendix.

## 4.1 Stage 1 Thematic Analysis

Table 4.1 Themes Developed by Participants indicates the themes that were developed by the participants in each city. The themes were written on the butchers paper and the participants stuck the post-it notes under the most appropriate heading or rather what we have termed the participant theme. They are listed as they arose in the documentation and they have not been reordered.

Brisbane	Sydney	Melbourne	Canberra
Subcontractors –	culture	culture	Technical skills
bid shopping			
Perception/potential for collusion by major contractors	Low profitability	Tender process and cost of tendering	Whole of life
Tender process and cost of tendering	Tender process – evaluating and cost of tendering	Poor or inadequate documentation	documentation
culture	Tender costs	Commercial evaluation	Risk allocation
Poor or inadequate documentation	Procurement method	Education training/experience	Contractors perspective
Actions of clients and governments	Construction procurements	relationships	Design procurement
contracts	Design procurement	time	contracts
Quality of documentation	Control of electronic documentation	Risk/risk transfer	Knowledge management
Non priced criteria/ transparency	Eligibility prequalification to tender	technology	planning
The commercial side of the construction industry drives bad behaviour	Poor or inadequate documentation	Long term outcomes	relationships
profit	Construction process	Tender price vs. profitability	process
	Actions of clients and governments	remuneration	Assessment methodologies
	Risk allocation	Delivery methods	Actions of clients and governments
		Actions of clients and government	

Table 4.1 Themes developed by participants
--

Table 4.2 Cross theme linkages below shows the cross theme linkages that were made by the researcher. Each participant theme (refer to Table 4.2) was coded according to the themes developed by the researcher. Sometimes a participant theme correlated with more than one of the researchers themes. For example, in Brisbane, 'Bid shopping' correlated with Culture/risk and Tender process/cost.

#### Table 4.2 Cross theme linkages

Themes	Brisbane	Sydney	Melbourne	Canberra
Culture/risk	Culture	Culture	Culture	
	Potential for collusion by major contractors			
	Bid shopping			
		Low profitability	Tender price vs. profitability remuneration	
		Construction procurements Procurement method	Delivery methods	
		Construction process		
		Risk allocation	Risk	Risk allocation
		Tender process – evaluating and cost of tendering		Assessment methodologies
			Relationships	
			Education/training experience	Technical skills
				Whole of life
				Planning
Tender process/cost	Tender process and cost of tendering	Tender process evaluating& cost of tendering	Tender process and cost of tendering Commercial evaluation	Assessment methodologies
	Bid shopping			Bidding
	Culture			
	Potential for collusion by major contractors			Contractors perspective
		Low profitability	Tender price vs. profitability	
	Poor or inadequate documentation			Design procurement
		Eligibility/prequalification to tender		
		Construction procurements, process	Delivery methods	Process
				Technical skills
		Risk allocation		Risk allocation
			Relationships	Relationships
			Time	Planning

				Knowledge management
Documentation	Poor or inadequate documentation	Control of electronic documentation	Poor or inadequate documentation	Documentation
				Knowledge management
		Construction procurements	Delivery methods	
		Construction process	Tender process and cost of tendering	
			Time	
Client/governm	Actions of clients and government	actions of clients and government	Actions of clients and government	Actions of client and government
ent	culture		Commercial evaluation	Assessment methodologies
				Process
			Relationships	Contractors perspective
			Tender price vs. profitability	
				Whole of life
		procurement method		
			Education training/experience	
		design procurement		Design procurement
				Documentation
		tender costs		
		risk allocation	Risk	Risk allocation

#### Table 4.3 Descriptive table of comments

The descriptive table of comments shows some of the comments made by the participants at the workshops. These comments were taken from the post-it notes and grouped in to the four themes developed by the researcher. For a full list of comments from the post-it notes see appendix.

Themes	Brisbane	Sydney	Melbourne	Canberra
Culture/Risk	<ul> <li>Profit</li> <li>industry driven by profit (low margins/high turnovers)</li> <li>The commercial side of the construction industry drives bad behaviour</li> <li>A majority of unethical behaviours could be traced to 'must maximise profit' take way that fear culture with a better system and unethical behaviour is likely to diminish.</li> <li>Risk</li> <li>Building industry cycle i.e. boom or bust</li> <li>Unfair allocation of risk down the supply chain</li> <li>Need a culture change to a win: win outcome</li> </ul>	Profit 'Unfair competition exists in market place due to no rules; driven by bottom line' Contractors buying jobs – to remain in business until something else comes along Risk Everybody tries to push risk onto others down the chain Unfair competition exists in market place due to no rules driven by bottom line Very marked differences between top and bottom on just about everything	Profit Contractors "buy" jobs by underquoting the tender price and then make claims BUT this is a product of "lowest-price" mentality' Place higher emphasis on project quality and outcomes rather than cost Risk Harder to do projects due to legal complexities and transfer of risk Construction management – risk transfer to client until last package is let – no price certainty	Profit Value for money more than price Focus on cost saving short term – long term life cycle cost Risk Set appropriate risk allocation to reflect value for money Risk should be allocated where it can best be managed Appropriate risk allocation – to those best able to manage
Tender process/cost	Profit Lowest price tendering mentality The cost of the bid – how many failures before you stop Contract Means of ensuring that comments/ verbal offers made during the negotiation period are contractually binding Contracts in the main do not include- worker entitlements and other aspects of entitlements and compliant costs to subcontractors	Profit Bid shopping Construct only tendering is low margin as contractor has no opportunity to add value and hence win job by means other than 'buying' it. Selection of lowest price drives procurement strategies Contract Current contractual framework is adversarial Non return of promised tender by builder	Profit Under bidding on price and bid shopping Costs to consultants and builders to tender very expensive and difficult to recoup – millions of dollars lost on national projects. Place higher emphasis on project quality and outcomes rather than cost Contract Fragmentation creates too many contractual relationships = potential for conflict and poor practice Generally consultant fees slashed – effort and service not appreciated PPP's- large bid costs incurred by the proponents of \$1M+ some cases. Can't be sustainable PPP's are costly to developers, builders, financiers and building consultants and do not necessarily produce the best outcomes	Profit Tendering is a big cost Acceptances of non – con tenders Misconception that value has to be always more than price Contract Inappropriate skills being used in tender formation and assessment Need to get technical specialisations correct for contract to work Incentivised contracting – is good in principal
Documentation	Insuffucient funds for consultants to produce good documentation Incomplete or insufficient documentation for pricing Large volume/number of notices to tenderers Inadequate contract documentation – subcontractors suffer Poor estimating	Contracts in the main do not include worker entitlements and other aspects of entitlements and compliant costs to subcontractors regulatory framework fragmented no consensus on what is the role of + ambition of a regulator	Time constraints in the production of documentation, leads to poor documentation and which transfers to increased costs where contractors carry the risk Post contract and post project reviews improve next set of documents Clear project brief required Documentation needs to be prepared early and tailored as project strategies and structure developed	Poor design/ documentation Documentation reliance to be correct if lowest price to be accepted Spend time to get documents right – will save time and cost later Documentation needs to have regard to the risk and complexity It all comes back to the quality of the documents
Actions of clients/government	Communication problems/Expectations Client brief unclear Clients not construction educated Client type, client budget too low/ value for money? Client brief unclear. Clients not construction educated. Client expectations different to delivery of industry. Some expectations too high Profit There is a spiral downward leading to unethical behaviour – client selects low bid -consultant merely provides what he pays for- follows commercial instincts to survive – this leads to poor documentation -poor documentation allows low bid contractors to raise claims sometimes on an unethical basis. Also clients use unethical arguments to cover for their situations.	Communication problems/Expectations Many clients don't know what they want Inappropriate risk allocation when buyer is State, characterising other government agencies as 3 <sup>rd</sup> parties – competing agency priorities unachievable time bars Profit government agencies extracting significant commercial benefit in return for granting consents or access Client responsibility for safety practice at point of letting tender Inappropriate risk allocation: conditions of limitation that void relief for risks agreed to be borne by the buyer	Communication problems/Expectations Clients want (predictable) certainty of outcomes – industry performs poorly on this Client should obtain independent expert evaluation of project costs to help choose best tender Clients don't want to referee disputes by other contracting parties Profit Clients should demand/prefer 'fair' tender price not lowest price Principal should accept the risk for issues they are in best position to manage Risk burden should be shared by clients and head contractors, not passed down the line	Government policy: risk averse Client dictates assessment criteria Control of government interface with worker consistency Unclear guidelines in support of policy

#### 4.1.1 Culture/risk

All of the tables show that culture was a prevalent participant theme in all four cities. Although Canberra didn't specifically list 'culture' as a theme, themes such as *risk, relationships, tender price vs. profitability, risk allocation and whole of life* point to the high risk culture of the industry. *Risk and risk allocation* was listed as a theme in all cities except Brisbane, however the themes *potential for collusion by major contractors* and *bid shopping* clearly highlight the culture of risk within the construction industry as these indicate strategies to mitigate risk.

Themes	Brisbane	Sydney	Melbourne	Canberra
Culture/risk	Culture	Culture	Culture	
	Potential for collusion by major contractors			
	Bid shopping			
		Low profitability	Tender price vs. profitability	
			remuneration	
		Construction procurements	Delivery methods	
		Procurement method		
		Construction process		
		Risk allocation	Risk	Risk allocation
		Tender process – evaluating and cost of tendering		Assessment methodologies
			Relationships	
			Education/training experience	Technical skills
				Whole of life
				Planning

Table 4.4 Culture/Risk theme and subthemes

An integral part of the culture of the construction industry is the management of risk. How a particular business in the industry manages risk impacts upon ethical practices. For example, unethical practices such as collusion by major contractors and bid shopping can occur as a way of transferring the risk associated with loss of profit, resulting in shifting risk along the supply chain. Profit, then, is a major motive guiding conduct.

Everybody tries to push risk onto others down the chain' (Sydney)

All businesses in each location are governed by profit. This was the overriding consideration in the decisions that were taken in the workplace and in their dealings generally. Workshop participants highlighted the importance of factors such as low profitability, and 'lowest' cost mentality, which resulted in self-interest, a willingness to transfer risk, adversarial relations, a focus on short term costs and savings, and an unwillingness to report unethical behaviour, a pattern also reported by Stead et al (1990) and Cole (2003). These behaviours are a consequence of an entrenched culture that to a large extent is driven by the need to maximise profit which in turn is exacerbated by a 'lowest' cost mentality. It encourages a climate of self-interest and opportunism. The disparate nature of the industry, which is largely composed of multiple subcontracting organisations, complicates efforts to address that behaviour. In particular it creates difficulties in relation to the management and communication of ethical behaviour to the industry and its stakeholders.

A majority of unethical behaviours could be traced to 'must maximise profit' take way that fear culture with a better system and unethical behaviour is likely to diminish (Brisbane workshop)

#### 4.1.2 The tender process

#### *'Lowest price tendering mentality* (Brisbane)

Linked to the culture of profit and risk within the industry is the tender process. Table 4.5 highlights the connection of the high risk culture of the industry and the tender process. Tender costs emerged as a participant theme in all cities except Canberra. The costs of tendering refers to how much resources firms need to expend to prepare information to accurately compile an appropriate bid that will cover their costs to do their work and then ensure a profit margin. The level of documentation is generally considered to be a key component of the ability to be able to develop these accurate bids. The other important point is that firms don't win all project tenders and therefore many respondents believe those costs need to be recouped somewhere and somehow. Although Canberra didn't have tender costs as a theme, themes such as *risk allocation, bidding contractors perspective* and *assessment methodologies* all point to cost as a major concern. Themes such as *time* and *documentation* also emerged which workshop participants have identified as having an effect on the costs involved in the tender process and the considerations of risk that they may bear during construction.

PPP's – large bid costs incurred by the proponents \$1M + some cases. Can't be sustainable (Melbourne)

PPPs are costly to developers, builders, financiers and building consultants and do not necessarily produce the best outcomes (Melbourne)

Perhaps what is most important to note here is that over the years the cost of tendering has changed dramatically. Different procurement strategies have greatly impacted upon the actual cost to develop tenders and what activities are now part of the tenderers regime. The integration of design into many of the tendering processes shifts the burden of the cost of tendering to new participants. The cost of tendering still refers to the resources firms need to expend to prepare information but it is the information burden and the associated cost to develop that information that has shifted from the client to the industry. This information is not only information to describe the building but information to describe the process (i.e. the legal and contractual information required in public private partnerships to describe the agreement of risk transferral).

Table 4.5 Tender process/cost theme and subthem	ies
---	-----

Theme	Brisbane	Sydney	Melbourne	Canberra
Tender process/cost	Tender process and cost of tendering	Tender process & cost of tendering	Tender process and cost of tendering	
		evaluating	Commercial evaluation	Assessment methodologies
	Bid shopping			Bidding
	Culture			
	Potential for collusion by major contractors			Contractors perspective
		Low profitability	Tender price vs. profitability	
	Poor or inadequate documentation			Design procurement
		Eligibility/prequalification to tender		
		Construction procurements	Delivery methods	Process
		Construction process		
				Technical skills
		Risk allocation		Risk allocation
			Relationships	Relationships
			Time	Planning
				Knowledge management

The high risk culture of the industry may lead to unethical practices in the tender process. Part of this problem relates to the highly competitive culture within the industry, which creates a climate of secrecy; the lowest cost mentality and low profitability of the industry. This leads to pushing bids down at the expense of the quality of the project and unwillingness to compensate those organisations that miss out on a tender for the costs of submitting a tender. These concerns reflect Ray et al's (1997) research into the ethics of tendering in the Australian construction industry. Several respondents commented that 'although business ethics are desirable, tendering ultimately involves making hard commercial decisions, especially in recessionary times' (Ray et al 1990, 150). Does this mean that tendering and a competitive market can not exist without unethical practices?

Another respondent complained that subcontractors flood the market with lowered accepted industry rates by not paying industry awards and insurances and do the work for an unrealistic price. This behaviour encourages large builders to try to cut 15% from their quotes. Does this then mean that the pressure to win projects at times is so great on some large builders that they are virtually powerless to behave ethically and not take these quotes against their intuition, experience and better judgement?

Costs to consultants and builders to tender are very expensive and difficult to recoup – millions of dollars lost on national projects. (Melbourne)

#### 4.1.3 Documentation

Documentation was a participant theme in all four cities. The short-term mentality of the industry affects the way in which documentation is handled. Time allocated to documentation was an

important issue. Many respondents felt that spending more time on documentation would be better in the long term:

Spend time to get documents right – will save time and cost later (Canberra).

Documentation was also seen as a way in which to manage risk in the tender process. Some respondents felt that the cost of risk should be included in the documentation to make it visible and clients liable.

The general opinion of workshop participants was that full documentation is preferable but there is a tendency to provide less documentation for a project. In particular clients and governments have been criticised for letting design and construct contracts whilst expecting a job of the same standard as full documentation. Whilst these types of contracts are not in themselves unethical they do raise concerns in relation to their use. This is further complicated by the use of legal jargon particularly when subcontractors either do not have the time or skill to understand the contracts.

Different levels of detail in documents and the associated different levels then of risk taken by each party should be represented in the pricing structures for projects. It is not reasonable for clients; including both private and public sector clients, to have the same level of expectations across different procurement strategies. The combination of documentation detail, market forces and risk allocation are difficult concepts for experienced clients to deal with let alone the inexperienced client. The impact of industry cycles and poor documentation and the response by the industry in a competitive tendering situation contributes to the cascading poor unethical behaviour. Perhaps what is changing in the industry and is of ethical concern is that changing procurement strategies impact upon the level of documentation. The argument that poor or inadequate documentation is a problem for the industry is not a particularly new theme. The fact that it is linked to the ethical behaviour of participants is perhaps a somewhat new argument. The role that documentation plays in risk transferral in more and more complex buildings and more complex procurement strategies where the initial definition of projects through detailed documentation is delayed and/or transferred to the tenderers and their design teams is related to the whole question of ethical behaviour by all participants and what are the reasonable expectations of conduct.

Table 4.6 Documentation theme and subthemes

Themes	Brisbane	Sydney	Melbourne	Canberra
Documentation	Poor or inadequate documentation	Control of electronic documentation	Poor or inadequate documentation	Documentation Knowledge management
		Construction procurements	Delivery methods	
		Construction process	Tender process and cost of tendering	
			Time	

#### 4.1.4 Client/government

Client and government were of main concern in the workshops and were listed in all four cities as a participant theme. Many of the respondents perceived that the actions of clients contributed to the high risk culture of the industry and thus foster environments for unethical behaviour due to their demands for lowest price: Clients should demand/prefer 'fair' tender price not lowest price (Melbourne).

It seems that communication problems and expectations from clients was also a problem. Clients were often not clear about their expectations, largely due to the fact they are not construction educated:

Client type, client budget too low/ value for money? Client brief unclear. Clients not construction educated. Client expectations different to delivery of industry. Some expectations too high (Brisbane).

Table 4.7 Client and government theme and subthemes

Theme	Brisbane	Sydney	Melbourne	Canberra
Client government	Actions of clients and government culture	actions of clients and government	Actions of clients and government Commercial evaluation	Actions of client and government Assessment methodologies Process
			Relationships	Contractors perspective
			Tender price vs. profitability	
				Whole of life
		procurement method		
			Education training/experience	
		design procurement		Design procurement
				Documentation
		tender costs		
		risk allocation	Risk	Risk allocation

The participants' concern with the ethical practice of clients, including the government, is supported by Vee and Skitmore's (2003) research which pointed to the emergence of clients and government as contenders in the unethical practice stakes. The behaviour under question in their research included the use of biased tendering evaluation systems, re-tendering, and shopping for prices after the close of tenders. In particular:

"Respondents were also critical of the manner in which the government and bureaucratic organisations conducted business. They were especially critical of the tendering policies and the predatory nature of the state bodies in the local market undercutting the market by providing services that do not reflect the true production cost and making it difficult for private business to compete" (Vee & Skitmore, 2003: 124).

It should be noted that perhaps the tendering policies of state bodies are changing, therefore the point in the box above may not be as significant, as government agencies are expected to be more and more commercial. This practice is somewhat at odds with the view that governments are responsible for setting the highest ethical standards and that indeed government agencies perceive of themselves. This of course revisits the idea of intention raised in the definition section of the literature review. It is suspected that it is not the intention of government to behave in a perceived unethical manner nor is it the intention of government to behave in a manner that would create the environment for unethical behaviour to be triggered – however it is at least the perception of the participants in the workshop that this is occurring. Government is charged with developing and monitoring those standards, but they appear to have moved away from upholding ethical standards 'to a form of economic rationalism

that is virtually devoid of any ethical considerations at all' (Vee & Skitmore, 2003, 126). Vee and Skitmore's research resonates with some comments made in the workshops:

Government agencies extracting significant commercial benefit in return for granting consents or access (Sydney)

Government policy: risk averse (Canberra)

The criticisms directed by participants towards the government as a client suggests the need for further research to establish the influence of government upon ethical practice. It is especially necessary because the establishment of standards is generally the responsibility of government.

It needs to be highlighted that clients and government were grouped together by the industry participants and perhaps in some cases this does not really reflect what was being expressed. Albeit there was a clear discussion on government as being critical in the creation of ethical environments; however "government" is quite a broad category and some degree of caution should be taken. In another respect the workshop participants did suggest that clients who are not construction educated posed a significant problem.

## 4.2 Solutions documented by the note takers

Table 4.8 indicates some of the solutions that were discussed by participants at the workshops, recorded by the notetakers (see appendix for a full list of comments). The solutions are now discussed across the four major themes of

- culture/risk,
- tender process/cost,
- documentation and
- client/government.

#### Table 4.8 Industry Participant Solutions (Notes from note takers – solutions)

Themes	Brisbane	Sydney	Melbourne	Can
Culture/Risk Tender process cost	A catalyst for cultural change is needed The parties/stakeholders need to understand the benefit of cultural change before it occurs Trust occurs over a process of time and building relationships Ethical behaviour comes from a culture of trust and trust– worthiness Balance between open/honest/trust + prescriptive contract Prescriptive tendering methods are used at present in	The building of relationships and alliances within the industry is resulting in improvements. This is occurring with private developers – whereby documentation is reduced to one page A competition pool of tenderers must still be maintained. Practices that should be avoided include the 'mates club' or the exclusion of a tenderer because of union affiliation.	Centralised decision- making panels used by "Company A" egg. Bring project managers together to share information, review project reports, discuss problems encountered and how these were addressed, etc. Provides a valuable learning experience and supports information exchange/open communication and improved decision making. Company also realised that past problems were often not public knowledge (even within the same organisation) eg. One division/ department didn't know that another division/department had previous problems with contractor X We cannot have tender prices from someone outside the industry. The	Manda Comm import parties
	processes to achieve an ethical outcome. A better procurement method would be one that ensures that all the parties made a reasonable profit	<ul> <li>developed?</li> <li>There should be a set of criteria/rules for profit margins, for example, the services provided, experiences, level of safety etc.</li> <li>There needs to be more regulation about tenders, they need to be made more public, so everyone knows how the tender is constructed.</li> <li>There should be increased transparency throughout the procurement process</li> <li>Increased openness in tender bids</li> <li>Increased transparency may highlight the differences between the top and the bottom tiers of the industry</li> </ul>	<ul> <li>tendering process requires a medium price (which might not be the lowest price) and the standard of deviation from the medium price has to be explained.</li> <li>Probity/ethics important but in Australia we have very poor systems to reward performance eg Hong Kong system – percent bonus for good performance used.</li> <li>Some organisations use registers for tenders of 'X dollars or more' (i.e. different companies set different limits on when a register must be relied upon e.g. contracts over \$1 mil or \$2 mil, etc)Ensures, for example, oh&amp;s and environment considerations appropriately dealt with via prequal and registration. Very important procedure to protect principal and staff – fulfils principal and staff – fulfils principal and staff from litigation.</li> <li>In PPP projects, there is usually a problem of sustainability because a design has to be developed in such a short time and this is a huge challenge because it is a very difficult and costly process too. In Europe, clients acknowledge the risk and develop with a lot of money a desirable tender model</li> <li>Weighting</li> <li>the issue of weightings/non price indicators. Want to be able to use these whilst at the same time providing a high level of protection for the principal when they select a bid which is not the lowest priced.</li> <li>Industry buy in regarding the use of median price with a weighting for innovation.</li> </ul>	object The tv criteria One n to the from a obser of proj that th that e Weigh DITR outcor e.g. pr measu Risk ti weigh in any prior to
Documentation	Will the documentation of good ethical standards and government regulation influence things? (one person said no, one said that it was not sustainable)		For me, the best solution remains to be full documentation with early brief and references, and the more complete it is, the better it is. Budgets are not generous most of the time, and if there is not enough time for documentation, you cannot get the right pricing for a vague documentation. We need more time for documentation. Best documentation for the tender ultimately leads to the best tender	There contai Better quality produc
Client/government	Some clients openly advertise their criteria for instance, in the UK school system they advertise either low cost education versus better education		Government has a pre-qual system. Implementation at the gov level	I would toward price of There of it be Code of The in the int The cod too dif or gov

#### anberra

indating risk management plan at all levels with transparency mmunication between agencies and contractors is very portant. Risk plans are not communication among contracting rties at different levels. government is trying to change from subjective tendering to ective tendering. two envelope system submissions are very detailed, where eria and price are assessed differently. ne method might be to award the contract to the tender closest the median bid price. Another might be to only invite tenders m a pre-qualified list of contractors. However it has been served that non-price pre-qualification criteria such as quality project team are often hard to police/enforce. Can you be sure t the "A" team described in the tender will, in fact be the one eventually works on your project? eighting TR uses project assessment criteria that are weighted towards tcomes rather than inputs. Weighting can behind the scene price, project team skills, and experience can all be asured and weighted. sk threshold evaluation on price, and marginal utility on ighted price are two further processes that can be used. But any case tenderers must be aware of what the weightings are or to tendering.

ere is a need for quality documentation. But what should this ntain?

etter and more comprehensive up-front documentation leads to ality outcomes and reduces tender evaluation costs as a byoduct.

rould like to see the funding bodies put a fixed percentage wards the design allowance, as there is a sliding scale of the ce of design.

ere should be a total separation of the design phase, instead it being an element of the overall budget.

de of practice

e industry may encounter agreement in code's principals but e interpretation of these principals will differ.

e construction industry does not want another guide/code. It is o difficult to make a code applicable for each company, project government department.

## 4.2.1 Culture/risk

Solutions were offered that focused on changing the high risk culture. A cultural change is needed within the industry to promote ethical behaviour through decreasing risk and focus on short-term profit. Participants feel that cultural change is possible through better communication, within their own businesses and other businesses, in order to build trusting relationships.

*Ethical behaviour comes from a culture of trust and trust – worthiness (Brisbane)* 

#### Solution 1: Communication within businesses

Communication is important for knowledge sharing and learning, creating a more efficient business

Centralised decision- making panels used by "Company A" eg. Bring project managers together to share information, review project reports, discuss problems encountered and how these were addressed, etc. Provides a valuable learning experience and supports information exchange/open communication and improved decision making. Company also realised that past problems were often not public knowledge (even within the same organisation) eg. One division/department didn't know that another division/department had previous problems with contractor X (Melbourne)

#### **Solution 2: Creating Business Alliances**

Creating alliances with other businesses within the supply chain is a method that is being used and advocated by some participants:

The building of relationships and alliances within the industry is resulting in improvements. This is occurring with private developers – whereby documentation is reduced to one page. A competition pool of tenderers must still be maintained. Practices that should be avoided include the 'mates club' or the exclusion of a tenderer because of union affiliation (Sydney)

## 4.2.2 Tender process/cost –

Various solutions were offered for the "problems" that are presented during the tendering process addressing low profitability through transparent profit margin, similarly a risk vs. utility weighted price and then bid regulation and transparency.

#### **Solution 3: Profit Margin Rules**

Many felt that there should be a formal set of criteria in the procurement method so that all parties involved would make a reasonable profit:

There should be a set of criteria/rules for profit margins, for example, the services provided, experiences, level of safety etc (Sydney)

# Solution 4: Regulated transparent bids

Tenders need to be regulated. This can happen through: increased transparency throughout the procurement process and increased openness in tender bids

Increased transparency may highlight the differences between the top and the bottom tiers of the industry (Sydney)

# Solution 5: Risk vs. Utility Weighted Price

One way to ensure less risk in the tender process is weighting costs in the tender process:

Risk threshold evaluation on price, and marginal utility on weighted price are two further processes that can be used. But in any case tenderers must be aware of what the weightings are prior to tendering (Canberra)

# 4.2.3 Documentation

Good documentation was important for many participants as a way to minimise risks in the tender process and it seemed that this is where a solution would arise; however the solutions offered were sketchy. It's difficult to get the right price for a tender without complete documentation. If more time and money could be spent on proper documentation, it would improve the long-term profit or alternatively a clearer understanding of what should be expected from the industry in terms of the risk that they should take on in relation to each procurement strategy.

Clearly poor documentation quality can unintentionally produce inappropriate or unethical behaviour. It appears that there is substantial concern in this area from the industry participants. Poor documentation perhaps has three aspects to it; poor documentation can lead to unethical behaviour by others; poor documentation in itself is also unethical and unethical behaviour leading to poor documentation leading to further unethical behaviour. This last point suggests that there may be a need for the development of a set of documentation principles; that is, they must be a sound basis for the development of a tender price, must sufficiently explain what is required to be built (or designed) etc.

In many ways poor documentation can stem from the procurement strategy – different procurement strategies can unintentionally from the outset can produce an unrealistic expectation of the industry and lead to inappropriate behaviour as participants seek to minimise their risk.

# Solution 6: Improved Planning in relation to Tender Documentation

Budgets are not generous most of the time, and if there is not enough time for documentation, you cannot get the right pricing for a vague documentation. We need more time for documentation (Melbourne)

Better and more comprehensive up-front documentation leads to quality outcomes and reduces tender evaluation costs as a by-product (Canberra)

In PPP projects there is usually a problem of sustainability because a design has to be developed in such a short time and this is a huge challenge because it is a very difficult and costly process too. In Europe, clients acknowledge the risk and develop with a lot of money and desirable tender model (Melbourne)

# Solution 7: Tender Documentation Guideline Some expectations too high (Brisbane) Inadequate Documentation (Brisbane) Incomplete or insufficient documentation for pricing (Brisbane) Brief delivered by client – client varies this guality of brief to consultant or contractor varies (Brisbane) Large volume/number of notices to tenderers (Brisbane) Poor documentation allows low bid contractors to raise claims, sometimes on an unethical basis (Brisbane) Inadequate contract documentation – subcontractors suffer (Brisbane) Actions of clients and government (Brisbane) Client brief unclear (Brisbane) Design Procurement Consultant team tendering (Sydney) Time constraints in the production of documentation, leads to poor documentation and which transfers to increased costs where contractors carry the risk (Melbourne) Documentation for tender extent (Sydney) Many clients don't know what they want (Sydney) Design and construct competition tendering (Sydney) Control of electronic Documentation (Sydney)

# 4.2.4 Client/government

Some participants felt that the government should be more responsible for the implementation of ethical practices.

# Solution 8: Improve client Education

Consistency of –policy – tender documents within a region/organisation

I would like to see the funding bodies put a fixed percentage towards the design allowance, as there is a sliding scale of the price of design) (ACT)

Clients not construction educated (Brisbane)

Client expectations different to delivery of industry

Client - how much responsibility has the client to be well-informed (Sydney)

# Solution 9: Code Implementation Strategy

There was much debate about Codes as a solution with just as many comments that this is the solution as opposed to it not being the solution. Perhaps the solution is greater national harmonisation of the codes (not necessarily streamlining but an understanding of what they all are, where they differ

Is there a possibility of a uniformed code?

The construction industry does not want another guide/code. It is too difficult to make a code applicable for each company, project or government department (Canberra)

The industry may encounter agreement in code's principals but the interpretation of these principals will differ

Doesn't a code already exist in principle?

Belief that an emphasis on principles rather than legislation would make a good code. However this belief in principles will not change the problem of every party's different interpretation of the code. For instance the application of these principles vary

There is a belief that suggests the construction industry should abandon the idea of a National code of Practice

The construction industry does not want another guide/code. It is too difficult to make a code applicable for each company, project or government department

There is too much subjectivity in procurement to produce an effective code

The Commonwealth Government encourages decentralised guidelines

A Uniform code for ethics could be proposed but politically it may be difficult to implement.

The variance in project size and difference work practices of the agencies will also affect adoption of a uniform code

Jurisdiction difference in legislation and interpretation could make it difficult to adopt a uniform code.

It is significant to note that there was much discussion in the workshops referring to current Codes, Guidelines or Standards. There was general agreement that another code was not the answer.

It is important to note that there may be differences in opinion in relation to the effectiveness of the current material that is used in the industry. This group of industry players did not seem to think that the current regime was very effective.

This raises some points to consider:

- Is the current regime effective?
- From whose perspective is it effective or not effective?
- How aware is the industry of the various codes/guidelines/standards?
- Differences across jurisdictions may make it difficult to adopt a national code but is a national code the answer?
- How different are the various documents? Does the difference really affect behaviour?
- How much do codes really influence behaviour? Are there other strategies that will assist ethical behaviour?

It is difficult to control ethical behaviour of an industry or professionals however not impossible. When codes are breached there needs to be some form of penalty or action at least so that the behaviour is recognised as unacceptable by not only the participant(s) involved but that the message is diffused to the industry at large. It can be one major source of failure of codes or practices, that is, the lack of "teeth in the tiger". Punitive measures are not the only mechanism for improving ethical behaviour.

# 5. CONCLUSION

This research report reveals the complexities of ethical issues within the procurement process in the Australian construction industry. It highlights the differences in perceptions of what constitutes ethical behaviour; the importance of individual and situational factors and the importance of social, political and economic considerations. The Australian construction industry and the government are concerned about ethical practice. To that end significant attention has been directed to the development of codes of ethics as the tool to develop an ethical culture within the industry, hence the original project aim – to construct a national procurement code for the building and construction industry. Realisation that there were numerous codes and that they were not necessarily working in practice caused the previous researchers to re-orient the project towards an examination of the procurement process focussing on ethical concerns. This report has engaged in a post-analysis of that data.

The comments reveal concern about the unethical behaviour evident within the industry. Whilst low profitability; lack of transparency in the tender process and the costs of tendering; and poor quality of documentation featured strongly amongst the list of concerns the more significant concerns related to the culture of the industry particularly in relation to the impact on subcontractors and client/government behaviour and practices. Given that the disparate nature of the industry makes it difficult to monitor behaviour on an individual level it seems that codes of practice are the most feasible way to attempt to change behaviour. Of themselves they cannot change practices, but further research may improve their effectiveness.

The following table summarises various recommendations based reflecting both the previous sections; 4.1 Stage 1 Thematic Analysis and 4.2 Solutions documented by the note takers.

There are a variety of strategies of taking these recommendations forward and the following table 5.1 summarises these.

#### Figure 5.1 Study Recommendations

RECOMMENDATIONS	STRATEGIES						
	Industry brochure	Seminar	Industry booklet	Online short modules	Workshops	Focussed Investigation	Research Study
5.1 that's business: ethical behaviour in procurement	•		•	•	•		
Create series of industry notes directly from this report – industry focussed and simple language – extract mostly boxed information in this report							
5.2 Code Mapping	•			•		•	
Map all existing codes, standards & guidelines – produce easy to read industry focussed Matrix chart							
Identify commonalities and differences to provide a harmonized theme.							
5.3 Code Implementation Evaluation	•					•	•
Evaluate implementation of existing codes of practice/ethics to determine effectiveness.							
Compare with other successful industry codes (Industrial Relations)							
5.4 Client Ethical Behaviour Study:	•	•					•
Identify impact of client behaviours (both non government, non technical and technical government clients)							
5.5 Procurement Strategies		•				•	
Develop a protocol which traces relationship between selection of project procurement strategies & impact on industry behaviour and outlines good practice/principles for clients							
5.6 Alternative Tendering Criteria and Process Demonstration Project: Standard Profit Margins		•				•	•
Investigate and showcase the feasibility of constructing a national standard of 'costings' through a demonstration project to stabilise profit margins and thereby remove the incentive to engage in cost cutting exercises. This could begin to address standard profit margins and risk vs. utility bids and provide transparency down the supply chain to others who pass their tenders upstream							
5.7 Tender Documentation Principles:	•	•				•	
Develop and document tendering documentation principles for each type of procurement strategy related to impact upon various levels in the supply chain. Document aimed at improving client awareness of impact of their behaviour on the industry and improving their behaviour.							
5.8 Business Relationships	•	•				•	
Showcase business alliance relationships which have existed between companies for numerous years that are exemplars of characteristics of ethical behaviour and also for support of ethical behaviour – not short term project based alliances							

Note: Difference between **seminar and workshop** – seminar is a presentation of material and workshop is presentation of material with added level of interaction and support material. Difference between **Focussed Investigation and Research Study** – an investigation is a desktop literature based survey of existing material aimed at compilation of existing material or an individual case study whereby you conduct a small number of individual or group interviews. The theory usually associated with a longer term research study is suspended as it has been done previously whereas a Research study is concerned with creating new knowledge and is longer and conforms to standard academic research conventions. As a concluding remark it is interesting to note that there have not been many studies worldwide that have dealt with ethics in the construction industry. There does not seem to be any studies that have dealt with the particular issues that arose in this study.

# 6. **REFERENCES**

Allen, J. & Davis, D. (1993) Assessing some determinant effects of ethical consulting behaviour: The case of personal and professional values in *Journal of Business Ethics*, 12 (6): 449-459

Australian Procurement and Construction Council Inc and Department of labour Advisory committee, 1997, National Code of Practice for the Construction Industry, http://www.apcc.gov.au/docs/finalreport/VO1Summery\_PressFinal.pdf

Centre for Business Ethics, (1986) Are Corporations Institutionalizing Ethics in *Journal of Business Ethics*, 5 (2): 85-91

Christabel, M.F, H. and Vincent, C.W, N, (2003) Quantity surveyor's background and training, and their ethical concepts, conceptions and interests considerations in *Construction Management and Economics*, 21, 43-67

Clark, M.A. & Leonard, S.L., (1998) Can corporate codes of ethics influence behaviour? in *Journal of Business Ethics*, 17 (6) Part 2: 619-631

Cole, R., 2003c, *Final Report of the Royal Commission into the Building and Construction Industry: Reform – Achieving cultural change*, Vol 11, Commonwealth of Australia, Canberra

De George, Richard T. (1990) Business Ethics, Macmillan Publishing Company, USA.

Denzin, N.K and Lincoln, Y.S (eds) (1994) *Handbook of Qualitative Research*, Sage Publications, Thousand Oaks.

Fan, L., Ho, C. & Vincent, NG. (2001) A study of quantity surveyors' ethical behaviour in *Construction Management and Economics*, 19:19-36

Ho, M.F., Drew, D., McGeorge, D. & Loosemore, M. (2004) Implementing corporate ethics management and its comparison with the safety management system: a case study in Hong Kong in *Construction Management and Economics*, 22: 595-606

Hyman, M.R., (1990) Ethical codes are not enough in Business Horizons, 33 (2): 15-23

London,K. (2005) Construction Supply Chain Procurement Modelling, unpublished PhD thesis, University of Melbourne.

May, D., Wilson, O. & Skitmore, M., (2001) Bid cutting: an empirical study of practices in South-East Queensland in *Engineering, Construction and Architectural Management*, 8 (4): 250-256

Ray, R.S., Hornibrook, J., Skitmore, M. & Zarkada-Fraser, A., (1999) Ethics in tendering: a survey of Australian opinion and practice in *Construction Management and Economics*, 17:139-153

Stead, W.E., Worrell, D.L. & Stead, J.G., (1990), An Integrative Model for Understanding and Managing Ethical Behavior in Business Organizations in *Journal of Business Ethics*, 9 (3): 233-242

Vee, C., & Skitmore, M., (2003) Professional ethics in the construction industry in *Engineering, Construction and Architectural Management*, 10 (2): 117-127

Wells, B. & Spinks, N., (1996) Ethics must be communicated from the top down! in *Career Development International*, 1 (7): 28-30

Open Space Technology workshop <a href="http://www.peace.ca/ost.htm">http://www.peace.ca/ost.htm</a>

# Appendix A - COMMENTS FROM POST-IT NOTES

### SYDNEY

Culture

lawyers ratcheting up risks from last transaction; "burying" risk in legal drafting; win/lose legal point driven negotiation as opposed to advising on law and precedent and providing legal drafting

Everybody tries to push risk onto others down the chain

Unfair competition exists in market place due to no rules; driven by bottom line

Low profitability

Builders driven by short term objectives and risk avoidance

Tender process-evaluating and cost of tendering

Contractors buying jobs - to remain in business until something else comes along

Bid shopping

Avoid underbidding of project

Very marked differences between top and bottom on just about everything

Contracts considered by the bottom line i.e.-the CHEAPEST usually the nastiest

Firms in same corporate group competing

With two envelope system how to cope with cross over (cost vs. qualitative assessments)

Lowest price tendering mentality

Good articulation from brief

Transparency

Lots of paperwork but little information on reasons for selection

Expertise offered in bid-marketing rather than real participants; A team, B team

Independent' technical advisors giving un-commercial 'expert' advice

Contractors buying jobs - to remain in business until something else comes along

Bid shopping

Means of ensuring that comments/ verbal offers made during the negotiation period are contractually binding

Methods of negotiating with tenderers or the preferred tenderer after tenders have closed

Tender costs

Council or semi govt instrumental contributions in tender bids

Inappropriate risk allocation – lawyers racheting up risks from last transaction – burying risks in legal drafting – win/lose legal point driven negotiation as opposed to advising on law and precedent and providing legal drafting

The cost of the bid – how many failures before you stop

Contracts/tenders should include STATUTORY and industrial obligations of subcontractors

Contracts in the main do not include- worker entitlements and other aspects of entitlements and compliant costs to subcontractors

**Procurement Method** 

New procurement methods. Ethics in changing the rules without case 'law'

Study costs + contracts

Inappropriate commercial Behaviour- bid bonds that can be accessed for failure to achieve financial close (rather than breach of tender condition) – bid bonds applied to all costs associated with a project (rather than costs arising from breach)

Everybody tries to push risk onto others down the chain

Clients driven by short term objectives

Construction procurements

Pre Qualification - mates club

Procurement driven by cost

Tender and procurement regulators

Limited pool of choice in selected areas

Subcontractor procurement process double tendering

Documentation for tender extent

Unfair competition exists in market place due to no rules driven by bottom line

Design Procurement

Consultant team tendering

Architectural design competition

Many clients don't know what they want

Client – how much responsibility has the client to be well-informed

Design and construct competition tendering

Control of electronic Documentation

Retaining ownership and control of documents electronically issued

Electronic data in tender process

Eligibility Prequalification to tender

Maintaining an adequate competition pool (even if some participants not up to standard)

Weighing past experiences v new entrants

SUB letting contracts by a principal contractor to secondary contractor

Disclosure issues in tender calls

Contractors discriminated against, due to having Union ENTERPRISE AGREEMENTS

Poor or inadequate documentation

Contracts in the main do not include worker entitlements and other aspects of entitlements and compliant costs to subcontractors

Regulatory framework fragmented

No consensus on what is the role of +ambition of a regulator

Construction process

Apprentices and young graduates need to be introduced ti the industry current practice

Security of payment processes

Redundancy, superannuation, entitlements

Use of statutory declarations and confirmation of payment to subbies and entitlement

The variations game

Back charging

Collusive tendering

Security of payments

Problems dealing with non-English speaking people on the site

Means of knowing/ determining that tradesmen/ sub- contractors are legally permitted to be working

Actions of clients and governments

Many clients don't know what they want

Inappropriate risk allocation when buyer is State, characterising other government agencies as 3<sup>rd</sup> parties – competing agency priorities

Government agencies extracting significant commercial benefit in return for granting consents or access

Client responsibility for safety practice at point of letting tender

**Risk allocation** 

Inappropriate risk allocation – change in law – should be state risk where government agency is buyer

-change in law - should be buyers risk where respondent cannot change price or product

-change in law – should be neutral where both parties are affected and can choose response

Fit for purpose – should be identified in contract

Fit for purpose – obligation should not change over time unless respondent can choose response (price or product)

Inappropriate risk allocation: conditions of limitation that void relief for risks agreed to be borne by the buyer

-unachievable time bars

Inappropriate risk allocation

Inappropriate risk allocation: - consequences for buyers behaviour to respondents

-liability for defects caused by buyer

-warranties unaffected by variations instructed by buyer

Risk sharing by contracting parties

Contract conditions and risk sharing

Inappropriate risk allocation where buyer is state, characterising other government agencies as  $3^{rd}$  parties

-competing agency priorities

-panning approved conditions

Risk allocation between parties

Builders driven by short term objectives and risk avoidance

# BRISBANE

Regulation and corporate governance

Regulation/Legislation

Governance

Bad behaviour cannot be corrected by policy constraint and regulation

Rigorous policy requirements/regulations

Subcontractors – bid shopping

Bid shopping

Payment treatment of subcontractors- subcontractors are likely to act in collusion as defence against this

Problem of 'subbies' being screwed by main contractors-possible solution 'bid deposit concept' by subbies – American model

Perception / potential for collusion by major contractors

Conflict of interest by large construction companies

Perception – industry driven by profit (low margins/high turnovers)

Collusion - ownership at multinational level. Especially 2 stages of tendering

The commercial side of the construction industry drives bad behaviour

Ethical procurement is the goal of most major construction companies – adversarial contracts are disliked universally by contractors and clients

Profitability or more correctly lack of profit is the greatest determiner of contracting behaviour.

Building industry cycle i.e. boom or bust

Tender process and cost of tendering

Conditions of contract that promote collaborative delivery process between client and contractor

A different contractual framework is required for purchasing service (and construction of complete projects) to that used for purchasing commodities therefore need a new framework

Current contractual framework is adversarial

Construct only tendering is low margin as contractor has no opportunity to add value and hence win job by means other than 'buying' it.

Culture

Lowest" bid acceptance

Low margin/high turnover

Adversarial Brisbane workshop

Selection criteria of lowest price drives procurement strategies

High degree of self-interest – no long term relationships between client and supplier

# low profitability

Profitability or more correctly lack of profit is the greatest determiner of contracting behaviour Awarding to lowest tender know of potential underpricing and associated problems Need a culture change to a win: win outcome Balance between open/honest/trust + prescriptive contract Selection of lowest price drives procurement strategies Adversarial framework leads to unethical behaviour Trust and trustworthiness are not evident in the construction industry at all levels High degree of self interest – no long term relationship between client and supplier We as an industry drive bad behaviour by our own practices Poor or inadequate Documentation Incomplete or insufficient documentation for pricing Large volume/number of notices to tenderers Inadequate contract documentation – subcontractors suffer Poor estimating

Poor documentation allows low bid contractors to raise claims, sometimes on an unethical basis

Actions of clients and government

Client brief unclear

Brief delivered by client - client varies this quality of brief to consultant or contractor varies

Clients not construction educated

Client expectations different to delivery of industry

Some expectations too high

Ethic starts from the client

Is Government (who is 'supposed' to be ethical) an ethical procurer?

Client after lowest cost

Client turning 'blind eye' to P Cont unethical behaviour to subcontractor

Unfair allocation of risk down the supply chain

Insufficient concern of subcontractor

Client type, client budget too low/ value for money? Client brief unclear. Clients not construction educated. Client expectations different to delivery of industry. Some expectations too high.

Profit

Construct only tendering is low margin as contractor had no opportunity to add value and hence win job by means other than "buying" it

Non return of promised tender by builder

A majority of unethical behaviours could be traced to 'must maximise profit' take way that fear culture with a better system and unethical behaviour is likely to diminish

Quality of documentation

Contract documentation - clarity - disputes

Insufficient funds for consultants to produce good documentation

There is a spiral downward leading to unethical behaviour – client selects low bid -consultant merely provides what he pays for-follows commercial instincts to survive – this leads to poor documentation -poor documentation allows low bid contractors to raise claims sometimes on an unethical basis. Also clients use unethical arguments to cover for their situations

Poor quality documentation is one driver of unethical behaviour

Non-priced criteria/transparency

Criteria – price (emphasis)

Design

Low price

# MELBOURNE

Culture/risk/profitability

Principal should accept the risk for issues they are in best position to manage

Risk burden should be shared by clients and head contractors, not passed down the line'

Lowest tenderer means very little margin hence problem down the track

Contractors "buy" jobs by underquoting the tender price and then make claims <u>BUT</u> this is a product of "lowest-price" mentality

Financiers drive the deals

Low profitability

Fragmentation creates too many contractual relationships and therefore potential for conflict and poor practice

Tender process and costs of tendering

Contractor lose \$ in doing tenders and recoup if they win

Under bidding on price and bid shopping

Registered tenderers combined with restriction to 5 max per tender

Costs to consultants and builders to tender very expensive and difficult to recoup – millions of dollars lost on national projects

Place higher emphasis on project quality and outcomes rather than cost

Centralised contractor/consultant review panel

Process is one thing, but people have to understand the reasons for the process and use it

Process of pre-qualification is a disincentive for smaller contractors/consultants

Use of fulls DOC'S + BQS = consistent basis of pricing and assessment

Consider nominating the price and seeking value added from the tenderers

Poor systems to reward good performers

Should consider tender process where the decision is based on closest to mean and quality of plan/innovation etc

Generally consultant fees slashed - effort and service not appreciated

Post contract review and migration

Decisions to award contracts made publicly eg open council meetings

Are tender negotiations i.e.- driving price down acceptable

Ideal process- a) exp of interest and shortlist b) pay the shortlist to tender

Documentation

Poor or inadequate Documentation

Documentation – more time should be given to the proper documentation of projects' (minimises variations long term)

Time constraints in the production of documentation, leads to poor documentation and which transfers to increased costs where contractors carry the risk

Provision of badly co-ordinated docs

Procurement plans signed off by delegate prior to calling tenders

Post contract and post project reviews improve next set of documents

Clear project brief required

Documentation needs to be prepared early and tailored as project strategies and structure developed

Documentation - more time should be given to the proper documentation of projects/ minimises variations long term

Commercial Evaluation – ESD

Need to take longer term view with regard to project cost and commercial evaluation

Post contract review: How is it thorough if all issues of delivery are not reported on during the course of the contract

ESD Assessment should consider long-term recurrent benefits not just capex

Weighting other than price are subjective

Cost of compliance with government ESD goals

**Education Training Experience** 

Training for project measurement

Better understanding from clients of timing/document requirements

Experience has left government and main players to come back as consultants

No 'passing the baton' from consultants to junior industry participants

PRACTICAL EXPERIENCE is lacking in junior industry participants

Relationships/clients

Fair and reasonable cost estimates

Fragmentation creates too many contractual relationships = potential for conflict and poor practice

Clients don't want to referee disputes by other contracting parties

Relationships can be impacted by 'reporting' and tender evaluation

Lack of understanding in project sponsors of relationships

Time

Spend more time developing project brief + save time and costs on project completion

Programmes/tender should be realistic

Time constraints in the production of documentation, leads to poor documentation which transfers to increased costs where contractors carry the risk

Time and technology – expectations unrealistic – pressures on program/response times

Risk –risk transfer – clients

Principal should accept the risk for issues they are in best position to manage

Construction management – trades provide a large amount of preliminary hems – leading to duplication of provision – where ordinarily a main contractor would provide for the benefit of all trades = increased costs

Risk burden should be shared by clients and head contractors, not passed down the line

Harder to do projects due to legal complexities and transfer of risk

Construction management – risk transfer to client until last package is let – no price certainty

Project Personnel offered (bid) do not appear on project

Who should wear the design risk?

Clients want (predictable) certainty of outcomes - industry performs poorly on this

Information /transparency can be ammunition + give use to 'reliance'

Transferring risks down the chain that are uninsurable

Technology

Changes in technology have affected program, deliverables, and coordination

Long term outcomes

Tendering - clients

Tender processes do not encourage innovation and sustainable outcomes

Tender Price vs. Profitability

Lowest tenderer means very little margin hence problems down the track

Median tender prices – incentive to be creative rather than low

Client should obtain independent expert evaluation of project costs to help choose best tender

Under bidding on price and bid shopping

Value for money and just about price

Contractors 'buy' jobs by underquoting the tender price and then make claims BUT this is a product of 'lowest price' mentality

Best price inevitably leads to subcontractors taking labour cost short cuts and compromising material quality

Concept of total cost to principal including tender price +cost to administration

Clients should demand/prefer 'fair' tender price not lowest price

Contractors lose dollars in doing tenders and recoup if they win

Political/media pressure to accept lowest price not best value for dollars

Remuneration

Remuneration in building industry inconsistent... the trained architect /engineer receives less than the crane/lift driver

Experienced staff should be retained and remunerated – represents a good risk for employers and clients

Quality of construction +value in procurement process

**Delivery methods** 

Best form of procurement – full documentation with – bills of Quantities and to obtain – lump sum contract

Construction management - price uncertainty - increased costs

PPP's – large bid costs incurred by the proponents \$1m + some cases. Can't be sustainable

P.P.P's are costly to developers, builders, financiers and building consultants and do not necessarily produce the best outcomes

Political/media pressure to accept lowest price, not best value for \$

#### CANBERRA

Technical skills - government

Inappropriate skills being used in tender formation and assessment

Process is outcome

Risk management "Poor technical skilling' only now seeing licences in industry CPRM under RMIA

Whole of life

Thought into design upfront helps. Pay attention to what you want before setting evaluation criteria

Value for money more than price

Documentation

Poor design/ documentation

Documentation reliance to be correct if lowest price to be accepted

Government centralisation versus decentralisation of procurement

Spend time to get documents right - will save time and cost later

Consistency of -policy - tender documents within a region/organisation

Disclosure of RM plan to contractor - joint RM planing

Documentation needs to have regard to the risk and complexity

It all comes back to the quality of the documents

**Risk allocation** 

Risk does allow for some failure in the process. Government policy: Risk adverse

Allocation of risk to private?? Low margins// high risk

Bank guarantees for project management fee based projects

Joint risk management- planning for a project

Common jurisdiction? Insurances?

Set appropriate risk allocation to reflect value for money

Insurance and its application to projects

Contractor performance

Lowest cost is not necessarily best value

Risk is a measure of cost

Bank guarantees - insurance bonds?

Security of payments

PPP- risk matrix – issue pass all risk to contractor

Risk should be allocated where it can best be managed

Appropriate risk allocation - to those best able to manage

Free trade agreement

Risk adverse

Bidding/tender process

Cost of re evaluation of offers \$

Non conforming bids – acceptance of non-conforming bids can distort perception of final costs i.e. – low bids gain acceptance over conforming bids due to the robustness of break-up cost etc

Selection of conforming first before reviewing alternative offers

Acceptances of non - con tenders

Evaluation criteria get them right - what really is a mandatory criterion?

Misconception that value has to be always more than price

Schedule of proposed tender dates for construction projects

Tendering is a big cost

Contractor's perspective

Time to assess tenders

Consistency in pre-qualification with state governments

Bank guarantees

Feedback from tendering agencies after tender let

Head contractor vs. sub contractor

Design procurement

Short tenure of government - impacts on -design - building life-cycle/ use/cost

Design time + criteria for project

Competitors for significant private and public sites?

Contracts

Consultancies – different to construction tendering Horses for courses

Use of Incentives

# Consistency in procurement

Free trade agreement

Lack of corporate knowledge across agency /public service – so don't benefit from lessons learned – reinvent wheel in drafting docs

Need to get technical specialisations correct for contract to work

Value for money vs. lowest price

Use of panels vs. open tenders

Alternative tenders?

Pre-Qualification...

Relational contracting and alternative approaches

Incentivised contracting- is good in principle - reward and penalty

Knowledge management (corporate)

Post occupation Evaluations

Knowledge throughout

Pre-qualification of suppliers

Involvement of the APCC to the process

Need to capture lessons learned - presently they are lost

Is a national protocol possible?

Performance databases

Planning

Poor business case development 'we'll know what we want when we see it'

Poor forward planning of capital works delivery

Evaluation takes too long – there is a big cost to tendering

Spend time up front to get specification right – speed up evaluation

Poor procurement pre planning

Relationships

Relationship contracting

Realistic + accurate feedback to tenderers

Market forces

Relationships - principal - contractors very important - partnering

# Process

QA not 'bedded' down

Another standard /code/guide will not add value

Unclear guidelines in support of policy

Prequalification panel contract standing offers and the US FTA

Outcome v process - or both

Control of government interface with worker consistency

Transparency

Assessment methodologies

Assessment method tailored to project. – lowest \$ conforming tender IS appropriate in some instances

Evaluation criteria substantive compliance

Criteria – weighted – issue re correct weightings

Budgets / client \$\$

Preferred tender

Principals based - recognise chief exec ability to interpret

We often overcomplicate assessment methodologies

Subjective assessment is still too prevalent

Alternative tenders

Cost - lowest cost often not value for money

Client dictates assessment criteria

Recognise value for money helps avoid adversarial relationships

Tender selection criteria Generic and/or project specific – which works best

Focus on cost saving short term - long term life cycle cost

# **Appendix B - SOLUTIONS FROM NOTETAKERS**

### MELBOURNE

For me, the best solution remains to be full documentation with early brief and references, and the more complete it is, the better it is

In Qs profession for example, the bills of quantities need extreme details that requires time and research and more often than not we are constrained by time too. So clients need to understand this

...Beforehand, the fee was a selection of standards, but nowadays this concept is gone

Previously there was more appreciation of bidding for government projects. The best bidding was still based on genuine documentation

Now, time constraints cause too much rush for documentation ad to prepare a genuine bid

We operate as a family with a strong network of alliances to coordinate the work, for example we have a strong alliance with DNG Contract. There is a mutual understanding that everyone should give an equal amount of effort. This is underlined in the negotiated fee. So the group knows about the quality of services you can provide and is ready to pay it

In PPP projects, there is usually a problem of sustainability because a design has to be developed in such a short time and this is a huge challenge because it is a very difficult and costly process too. In Europe, clients acknowledge the risk and develop with a lot of money a desirable tender model

Education and training for effective action

Want acceptable tendering processes, one that does not involve a lot of inflated price. We cannot have tender prices from someone outside the industry. The tendering process requires a medium price (which might not be the lowest price) and the standard of deviation from the medium price has to be explained

Budgets are not generous most of the time, and if there is not enough time for documentation, you cannot get the right pricing for a vague documentation. We need more time for documentation

The tender process has to be revised in educational institutions such as TAFE and Universities

..We have to change the culture and revise the margins

We need influence at a very high level because this seems to be a problem where nobody has a solution. Commercial vs Evaluation stand as a contradiction to each other

Not enough monitoring and documentation – common failure in process

Centralised decision- making panels used by "Company A" eg. Bring project managers together to share information, review project reports, discuss problems encountered and how these were addressed, etc. Provides a valuable learning experience and supports information exchange/open communication and improved decision making. Company also realised that past problems were often not public knowledge (even within the same organisation) eg. One

division/ department didn't know that another division/department had previous problems with contractor X

Probity/ethics important but in Australia we have very poor systems to reward performance eg Hong Kong system – percent bonus for good performance used

..Focus should be on transparent and objective policies and procedures and substance rather than form – probity auditor won't save an organisation if their probity plan and processes are poor

Post contract reviews/end of contract reviews – learning experience/opportunity – is a great mechanism but perhaps not used to full effect/ not always done

Education – role and importance – learn by doing, with supervision – handing on the baton – experience/mentoring – all seen as lacking in the industry at present and very important for improvements in performance/ productivity across the industry as a whole

Register of tenderers useful, but keeping it populated can be problematic

Some organisations use registers for tenders of 'X dollars or more' (i.e. different companies set different limits on when a register must be relied upon e.g. contracts over \$1 mil or \$2 mil, etc). Where contractors need to pre-qualify for large and/or particularly contentious (eg politically sensitive) projects. Ensures, for example, oh&s and environment considerations appropriately dealt with via pre-qual and registration. Very important procedure to protect principal and staff – fulfils principal and staff – fulfil principal's legal obligations and protects principal and individual staff from litigation

CSR register seen as useful tool – provides record of adverse reports, suspensions, etc. However, lodging such reports usually ruins relationship between principal and contractor 9also legal ramifications may arise from use – which results in some material never making its way on the register). On occasion used positively/productively eg principal and contractor work through issues, such as areas of weakness identified, in order to seek improvements/fix problem etc

Use of disclosure forms for register members becoming more common. Forms ask them identify Workplace infringements, deaths on site, penalties under environmental obligations etc. Gives principal the option of only selecting contractors who have had previous problems subject to appropriate checks and balances/punitive measures e.g. make them hire a full time health and safety officer to oversee the project; an appropriately qualified and experiences surveillance officer, etc. serves as a penalty for poor performance in the past and protects principal

Government has a pre-qual system

Best informed tenderers – won't get you the lowest price, but gets u the fairest price

Best documentation for the tender ultimately leads to the best tender

Learning from previous contracts/experience important for improving process

Contractors need to know what their tendering for and how the principal wants it delivered eg. Industrial relation OH&S etc adhering to set requirements

Communication – prospective bidders need to be as well informed as possible particularly for large, unique/specialised projects

Legal – involving legal staff at the project conception/inception stage could improve tender process and outcome. Can often play a value adding role e.g. assisting in selection of the

optimal procurement method for the project. Suggested not called in early enough e.g. project team assembled at initial stage then legal staff come in later to document the deal, draft contract etc

Structure things to achieve what you want, price often not principals primary concern so need to structure tender accordingly to get outcome you want (noted as being easier said then done eg. Weightings subject to challenges)

Strategic/long term contracts e.g. 8 year Kensington contract, becoming more common place, opens up very different challenges, contracts/projects becoming longer and larger

Suggestions for improvements/next steps

Industry buy in regarding the use of median price with a weighting for innovation

Model code of tendering seen as being a useful tool to engender improvements

Develop best practice guidelines with a focus on documentation

Review tendering process studies which consider the issue of weightings/non price indicators. Want to be able to use these whilst at the same time providing a high level of protection for the principal when they select a bid which is not the lowest priced

Address education and training deficiencies – noted as being particularly problematic with project managers

Encourage more use of mentoring – there is no substitute for experience in the construction industry

Address costs of tendering i.e. the high cost involved in preparation

Suggested outcomes

Implementation at the gov level

An acceptable tendering process, one that does not involve recommending the lowest price. It should be given that mistakes and short term periods to tender occur

An acceptable tendering process should be implemented by a party independent to the construction industry

Recommendation of median priced bids with a weighting for innovation

Consider the transit N.Z case

Government wants a tight legal process that deals with weightings to ensure they are protected from legal disputes

There should be weightings for poor performance in tender evaluations

The city of Melbourne has a procurement plan to ensure bid weightings can be judged. In this process lowest price bids are not always accepted

The cost of tendering needs to be addressed. Companies spend their yearly budgets for tendering very quickly and are unable to tender on other projects. Companies can't afford to tender especially considering the risks involved

A government department is considering paying tenderers for their bids and owning the intellectual property of the bid

Weightings are advantageous but are limited

### CANBERRA

One method might be to award the contract to the tender closest to the median bid price. Another might be to only invite tenders from a pre-qualified list of contractors. However it has been observed that non-price pre-qualification criteria such as quality of project team are often hard to police/enforce. Can you be sure that the "A" team described in the tender will, in fact be the one that eventually works on your project?

DITR uses project assessment criteria that are weighted towards outcomes rather than inputs. Weighting can behind the scene e.g. price, project team skills, and experience can all be measured and weighted

Risk threshold evaluation on price, and marginal utility on weighted price are two further processes that can be used. But in any case tenderers must be aware of what the weightings are prior to tendering

It is possible for all stakeholders to share the risks and rewards, and the National Museum is an example, where an alliance contract was used. It was very successful and high profile. There was plenty of money available for the project and this resulted in an unusual degree of flexibility, with a \$15m bottom threshold. However this was the exception rather than the rule and this raises an interesting point: do governments and education understand the real world scenario? New graduates can be faced with tender situations and be ill-prepared for the realities of the commercial environment

There is a need for quality documentation. But what should this contain?

Better and more comprehensive up-front documentation leads to quality outcomes and reduces tender evaluation costs as a by-product

There is a lack of linkage between those charged with "bringing-in" a project and those who actually operate the facility

An appropriate percentage of the project budget should be devoted to the design phase

Code of practice

Is there a possibility of a uniformed code?

The industry may encounter agreement in code's principals but the interpretation of these principals will differ

Doesn't a code already exist in principle?

Belief that an emphasis on principles rather than legislation would make a good code. However this belief in principles will not change the problem of every party's different interpretation of the code. For instance the application of these principles vary

There is a belief that suggests the construction industry should abandon the idea of a National code of Practice

The construction industry does not want another guide/code. It is too difficult to make a code applicable for each company, project or government department

There is too much subjectivity in procurement to produce an effective code

The Commonwealth Government encourages decentralised guidelines

A Uniform code for ethics could be proposed but politically it may be difficult to implement.

The variance in project size and difference work practices of the agencies will also affect adoption of a uniform code

Jurisdiction difference in legislation and interpretation could make it difficult to adopt a uniform code.

Risk profile of project across states and territories may not be the same

Centralised agencies will have long established experience knowledge database (Commonwealth defence agency works that way)

NSW has moved towards a decentralised administration model

NT and WA adopts a centralised modes

Insurance

Some projects have a 'blanket insurance' that covers the project up to a certain amount of projects are assessed on a project by project basis

Is there a need for central government insurance, not just project specific insurance/ this question cannot be considered at the moment. Although these issues should be referred to the insurance industry

#### Tendering

The government is trying to change from subjective tendering to objective tendering

The two envelope system submissions are very detailed, where criteria and price are assessed differently

Risk management

Mandating risk management plan at all levels with transparency

Communication between agencies and contractors is very important. Risk plans are not communication among contracting parties at different levels

Suggested Outcomes for the project

A process outcome rather than a tangible outcome

Ensure this project's research is disseminated to the industry properly for instance publishing material so the industry is aware

I would like to see the funding bodies put a fixed percentage towards the design allowance, as there is a sliding scale of the price of design

There should be a total separation of the design phase, instead of it being an element of the overall budget

The government should come up with a mechanism that works for them and the industry

Consider knowledge management, where everyone learns about the best-learnt practices and principles

### SYDNEY

Tender

Perhaps a qualitative set of criteria should be developed?

There should be a set of criteria/rules for profit margins, for example, the services provided, experiences, level of safety etc.

There needs to be more regulation about tenders, they need to be made more public, so everyone knows how the tender is constructed.

Procurement

There should be increased transparency throughout the procurement process

Increased openness in tender bids

Increased transparency may highlight the differences between the top and the bottom tiers of the industry

If transparency is increased potential tenderers would see the risk they could be exposed to

Increased regulatory framework – increases transparency, reduces risk but does it add to cost?

### Relationships

The building of relationships and alliances within the industry is resulting in improvements.

This is occurring with private developers – whereby documentation is reduced to one page

A competition pool of tenderers must still be maintained.

Practices that should be avoided include the 'mates club' or the exclusion of a tenderer because of union affiliation.

#### BRISBANE

A catalyst for cultural change is needed

The parties/stakeholders need to understand the benefit of cultural change before it occurs

Trust occurs over a process of time and building relationships

Ethical behaviour comes from a culture of trust and trust - worthiness

There is a place for a good ethical code of tendering but government needs to advocate this

Shouldn't alliancing improve mixed participation?

There will be a shift away from lowest price, for instance the developments in the UK

Will the documentation of good ethical standards and government regulation influence things? 9one person said no, one said that it was not sustainable)

Building projects are services that are purchased, they are not a commodity purchase, and a different framework is needed for purchasing a building project

Alliances provide for a win-win situation and the alignment of commercial interests

Alliances align the commercial interests of the parties

There should be research into the fundamentals of the procurement process not the documentation of it

Alliancing builds in clients long - term interests and costs

Alliancing reduces the adversarial attitude and improves transparency

Some clients openly advertise their criteria for instance, in the UK school system they advertise either low cost education versus better education

In alliancing you have the ability to stipulate your own requirements, for instance bonuses or extras

Alliancing emphasises the long-term cost

The public won't accept all projects to be alliance based

Alliances are low risk

Alliancing is a new way of delivering a business outcome, with less emphasis on delivering a building

Alliancing overcomes the problem of clients who may not know how to operate a building or facility

What about a full relationship based contract, one that is not totally based on alliancing

A better procurement method would be one that ensures that all the parties made a reasonable profit

Strategic alliance can assist in overcoming maintenance problems

Prescriptive tendering methods are used at present in processes to achieve an ethical outcome

Culture

Need cultural change (adversarial)

Cultural change required

What is the catalyst for change? (there will need to be a major benefit for change to occur)

Balance between open/honest/trust + prescriptive contract

Contracts

Find balance between open/honest/trustworthy framework + prescriptive contract

Move towards 'relationship - based' procurement strategies

## Author Biographies

Dr Kerry London is an Associate Professor in the School of Architecture and Built Environment at the University of Newcastle. She graduated from the University of Newcastle with a Bachelor of Architecture in 1989. She has worked in the property and construction industry since graduating. She has lectured in architecture and construction management programs since 1997. She conducted her PhD at the University of Melbourne and the title was "Construction Supply Chain Procurement Modelling'. She won the national Chartered Institute of Building Research prize in 2005. Dr London returned to University of Newcastle in mid 2002 as a Senior lecturer in the architecture program. She now teaches the undergraduate Honours Research program to a combined interdisciplinary cohort of architecture and construction management and design students. She currently employs a multi disciplinary research team of eight staff. She supervises postgraduate students in both architecture and construction management and economics and business.



Cooperative Research Centre for Construction Innovation 9th Floor, L Block QUT Gardens Point 2 George Street BRISBANE QLD 4001 AUSTRALIA Tel: +61 7 3138 9291 Fax: +61 7 3138 9151 Email: enquiries@construction-innovation.info Web: www.construction-innovation.info

 Established and supported under the Australian
 Government's Cooperative
 Research Centres Program



