Abstract: Capital works procurement and its regulatory policy environment within a country can be complex entities. For example, by virtue of Australia’s governmental division between the Commonwealth, states and local jurisdictions and the associated procurement networks and responsibilities at each level, the tendering process is often convoluted. There are four inter-related key themes identified in the literature in relation to procurement disharmony, including decentralisation, risk & risk mitigation, free trade & competition, and tendering costs. This paper defines and discusses these key areas of conflict that adversely impact upon the business environments of industry through a literature review, policy analysis and consultation with capital works procurement stakeholders.

The aim of this national study is to identify policy differences between jurisdictions in Australia, and ascertain whether those differences are a barrier to productivity and innovation. This research forms an element of a broader investigation with an aim of developing efficient, effective and nationally harmonised procurement systems.

Keywords: capital works, procurement policy reform

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1. Background

This research has been conducted by the University of Newcastle, Australia, as part of the Cooperative Research Centre for Construction Innovation (CRC-CI). The impact of policy harmony on the construction industry business environment and its effects on the ability for organisations to be productive and innovative was identified as a key area for investigation that had been lacking in Australian construction research. This was based upon numerous industry studies over the last decade that have identified the property and construction industry as one of the most over-regulated industries in Australia. The studies also showed
that the construction industry displayed a disharmonised policy and regulatory framework (Bell, 1996; PM, 1997; Productivity Commission, 2004).

For the purposes of this study, procurement is focussed on Capital Works Project Procurement, which refers to the organisational strategy within which a building or civil infrastructure project will be realised, acquired or obtained and the ensuing contractual relationships between government client and major parties. The key themes distilled from a literature review and anecdotal industry evidence outlined in this paper coupled with a corresponding policy analysis have been the basis for formulating a research methodology to survey and interview relevant government and industry stakeholders. This paper discusses the theoretical issues surrounding procurement policy harmony and suggests a framework for a procurement policy investigation in Australia in the context of international studies.

During the foundational stages of this project it was necessary to consult with representatives from the procurement industry to determine key areas of concern. As a CRC-CI partner and a large multinational industry representative, John Holland Group (JHG) was well placed to inform researchers of the difficulties and successes in working with procurement policy across federal, state and local jurisdictions. With JHG’s collaboration and a pilot survey of seven senior executives of the company it was identified that they experience procurement policy differences between state jurisdictions, between state and the Federal systems, and even within a state. It was also identified that particular methods of project procurement and their interpretation by government employees differed, particularly design-and-construct and public-private partnership strategies. The impacts upon the business efficiency of the firms included increased time to complete tenders and ensure compliance, wasted time as similar tender documentation needed to be restructured, innovative tenders were misunderstood, and tendering costs were higher due to retraining of staff and time overruns.

This pilot material provided a useful context to understand the background to the literature review outlined in this paper and the policy document analysis that has been completed as part of the study; together these three activities assist in the direction of the study design and validated the rationale and significance of the investigation.

2. Key Themes of Policy Harmony – A Literature Review

A literature review of construction management and economics literature has indicated that potential barriers to (or catalysts for) innovation and their attribution to policy and procedures can be distilled to four key themes – decentralisation (Egan, 1998; Latham, 1994; Kelman, 1990), risk & risk mitigation (Sharp & Tinsley, 2005; Williamson, 2004; Jaggar et al, 1991), free trade & competition (Arrowsmith, 1995; Uttley & Hartley, 1994), and tendering costs (Kumaraswamy et al, 2005; Wood, 2006; English & Guthrie, 2003). Each of these is now discussed.

2.1 Decentralisation and devolution of responsibility

The UK construction industry has been subject to a century of periodically intense scrutiny with a view to improving policies and procedures, and fostering innovation. Two more recent investigative reports, Constructing the Team (Latham, 1994) and Rethinking Construction (Egan, 1998), are habitually cited in literature regarding any facet of construction industry reform. A key concern (reiterated in subsequent literature) is the effect of decentralization.
Previously a monolithic procurement client (Latham, 1994) with centralized purchasing institutions, the UK government has devolved responsibility to subordinate public authorities with the aim of increasing flexibility and competition.

Analysis of the current procurement authority environment in Australia similarly has to deal with decentralization and its effects; already the sheer number of policy documents between states and the commonwealth is overwhelming – analysis and industry anecdotes reveal further ‘tailoring’ by individual procurement bodies of the non-prescriptive guidelines that creates barriers to innovation. Where ‘government has ceased to be a single procurer… the untying of Departments from [a central procurement agency] has resulted in the emergence of a wide range of procurement techniques’ (Latham, 1994). The greater the number of procurement bodies, the greater the requirement for individualised policies; inherently, more methods means more conflict and confusion, and greater avenue for exploitation. Additionally, a popular perception exists that managerial success can be measured in terms of the change a manager enforces during their tenure. Procurement policy is perhaps an easy target for ‘streamlining’ or tailoring to improve the efficiency of a particular government entity for the appearance of such change, to the detriment of policy harmony.

Decentralization can also lead to the diminution of in-house professional skills (Latham, 1994). The devolution of responsibility from a central government core to individual entities creates a corresponding dilution of skill sets and experience; the effects on in-house skills, education and the iterative learning process are pronounced. Breaking apart central procurement bodies necessarily involves fragmentation of corporate knowledge; unless rigorous training regimes are established for passing on accumulated knowledge and practices, dilution of core skill sets is likely to result. This can have positive implications, especially when ingrained practices are root cause of stifled innovation, efficiency or burdensome red-tape. The negative results are more obvious and immediate, however; increased stress as unfamiliar employment responsibilities are forced on workers (and its flow on effects), fractured methodologies, perpetual reinvention of the wheel and so on. The loss of in-house skills leaves clients variously vulnerable to exploitation or so cautious as to necessarily inhibit innovation. High staff turnover within individual Public Sector bodies, and the cyclically shifting political agenda are further cause for concern. Already an industry that suffers from instability due to the unique nature of every project and fragmented stakeholder environment, decentralization and the consequent proliferation of varied procurement practices further removes foundational standards. The benefits primarily reaped through standardization and experience are difficult to achieve in project procurement when policies are multivalent and competitive tendering discourages familiarity. Put simply, standardization ‘can provide much greater predictability about what is performed, by whom, how and when’ (Egan, 1998).

The criticism of decentralization, however, does not constitute a call for the reintroduction of a central procurement body. The ‘delegation of authority within the public sector to those best placed to assess local needs’ (Latham, 1994) is well supported. What is identified, however, is a need for more robust monitoring and standardization of practices, and adequate education and training for those with whom the new procurement responsibilities are divested.

The Egan Report builds on the research and results of the Latham Report with an aim to make the UK construction industry as a whole demonstrate the internationally renowned excellence evidenced by elite but non-indicative construction sectors. Low profit margins,
lack of investment in research and development, and a flagging training regime are cited as prime barriers to construction innovation (Egan, 1998). In discussing drivers for change, committed leadership is seen as a primary progenitor for innovative change (Egan, 1998). Considering the devolution of procurement responsibility to managers not intrinsically motivated toward procurement innovation (ie beyond the terms of their usual employment, interest or skill set), the ability for the procurement environment to foster committed leadership is, at times, questionable. What intrinsic motivation is there for a manager within the health department, with a background and interest in healthcare provision, for example, to grapple with the nuances of procurement policy across different jurisdictions? Whilst a singular example, it is argued that long-lasting committed leadership requires some intrinsic motivation toward the project itself.

The transition from rigid rule-based procurement methodology to a value-based system that enables the exercise of discretion in procurement spending and the consequent benefits for innovation and value-for-money have been well documented in United States procurement reforms and practice (Kelman, 1991). However, ‘Procurement reform sought to reduce rules, hierarchy and specialization, not to eliminate them… Rules can help produce good decisions that can help an organization do its substantive job better. If an organization has learned that certain approaches to dealing with recurring situations work, it can use rules to codify and transmit such information’ (Kelman, 2005).

2.2 Risk + Risk Mitigation
Risk is an inherent component of the procurement tendering process. The allocation of risk can be cause for great tension amongst client and tenderer. At the very least, innovation or the intention to innovate can be seen as too great a risk for a tenderer in a competitive environment. The cost of innovation in terms of risk can be manifold. Firstly, it might generally entail greater cost to the client initially, thus provoking an unfavourable response during the competitive tender process (where ‘best value’ is a subjective term, price is more tangible). The high costs of tendering (Dalrymple et al, 2006) conceivably limit the willingness to risk innovation itself through fear of not winning the elusive contract. Secondly, the innovative tenderer is also more likely to be experienced in government procurement processes and therefore be savvy in risk allocation; this could be seen as detrimental in a competitive environment, where other tenderers are more naïve in the acceptance of risk. Thirdly, innovation as an unknown quantity is an inherently risky business, especially for the client. Fear of the unknown, and the very real and high cost of failure in the construction environment must increase the tendency to accept tried and tested methodologies. In the politically competitive public sector, conservative procurement practices are likely to be the mainstay for fear of retribution. There seems to be an obvious but poorly addressed need to develop trust in partnerships rather than bargaining for individual gain (Jaggar, et al, 2001). Critical to this development is the notion of information opacity as distinct from transparency; whilst the latter is needed for the evolution of trust, the former still predominates.

Acknowledgement of these attributes surrounding risk and innovation (in conjunction with many other issues) has seen the evolution of Public/Private Partnerships (PPP), Private Finance Initiatives (PFI) and Privately Financed Projects (PFP). Despite overt intentions to share risk in a fairer and transparent manner, policies on risk allocation in PPP vary between jurisdictions. The state of Victoria has been the leader in fostering PPP relationships and consequently developing policy for PPP instigation and management. Other states and
territories have absorbed Victoria’s advances into their own policies, and 2003 saw the inaugural National PPP Forum with aims to ‘deliver better coordination, information sharing and support among Australian governments in relation to PPP projects’ (Sharp & Tinsley, 2005). In spite of

...various technical and terminology differences, there is a tendency towards homogeneity. Such a homogeneous approach has benefits to both the public and private sectors by way of increased certainty and lower transaction costs. (Sharp & Tinsley, 2005)

If there is an acknowledged tendency and advance toward uniformity, and differences in risk allocation are minor or technical (in a legal sense), the question must be asked why there is any difference at all. For example, Why not use Victoria’s acknowledged experience and skill as a basis for standardization and replication of PPP policy across jurisdictions, at least at the state level? The requirement for additional in-house or ad hoc addendums indicates the difficulty of formulating encompassing policy guidelines without being so general as to be superfluous, and also the potential for multitudinous additions to policy on a department by department, state by state manner that would further confuse an already convoluted regulatory environment. Preliminary information obtained from industry partners for this project suggests that PPPs are currently a root cause of regulatory disharmony between jurisdictions, due either to differences in methodology selection, implementation, management, experience or outlay costs.

Partnering, or project alliancing, is raised as a positive step forward in procurement conduct (Egan, 1998). A diversion from traditional procurement methods, partnering involves the selection of a small and dedicated professional team (client, designers, contractors, construction managers) who agree on design, risk management and dispute resolution issues and share profits and losses evenly. Contractual obligations are minimized, if no not abolished entirely. For its acclaimed successes, however, partnering is a difficult procurement option to instate and maintain, and generally requires a culture shift amongst participants used to the adversarial nature of the construction environment (Egan, 1998). At present, Australian procurement policy does not mandate methodologies for construction, and leaves the choice (within broad guidelines) with the procurer. Considering the difficulties of implementing partnering and (despite its potential rewards) a consequent tendency to avoid additional complexity, impetus to ingrain partnering or project alliancing as an appropriate alternative methodology may be aided by policy intervention. Whilst the promotion of PPP/PFI and Project alliancing signals ‘the current preoccupation… with non-legislative solutions to the problem of opportunism through the development of more trusting relations between participants’ (Williamson et al, 2004, p63), perhaps there is scope for legislative solutions to improve exposure to a valuable alternative procurement methodology.

As a generalized extension of partnering as discussed here, long-term relationships in procurement are heralded as a boon to innovation and improvement. Unfortunately, they are also rare (Egan, 1998, p29). Benefits of long term relationships seem obvious, yet the already discussed fragmentary nature of the construction industry does not promote longevity. Importantly for this review, however, the present policy environment also seems to mitigate against the long term relationship; lack of standardization, niche procurement practices brought about through decentralization and an overarching emphasis on competition creates a culture of short term thinking.
2.3 Free trade + competition

Uttley & Hartley (1994) discuss procurement policy in the fluid and volatile regulatory environment leading up to the establishment of a European Union (EU) single European market. Problems are identified with governments of individual states historically looking after the interests of state players at the expense of free and diverse trade. Similarities can be seen within the Australian context; replacing the ‘Single European Market’ with ‘Commonwealth of Australia’, and ‘European States’ with ‘Australian States and Territories’ is a beneficial analytical tool. English and Guthrie (2003) enunciate a similar sentiment in discussing privately financed projects (PFPs), whereby ‘in Australia it is not possible to talk about one initiative in the singular tense. Because of our federal system, we essentially have seven different PFP initiatives’ (English & Guthrie, 2003). New South Wales state procurement policy, for example, still has industry preference schemes to benefit country NSW suppliers, and Australia-New Zealand partnerships that place a substantial (20%) price loading on non-ANZ applications when tenders are being refereed (NSW Government Procurement Policy, 2004). Other states have similar policies that promote the use of local resources in the tender evaluation process. States such as Western Australia (Government of Western Australia, 2002) and South Australia (Government of South Australia: State Procurement Board, 2005) use a similar 20% loading on foreign resources in tenders, while Queensland Procurement Policy states the need for evaluation of contribution to advancement of government priorities (Queensland Department of Public Works, 2004). This signals a conflict between Commonwealth and State policy guidelines, and could cause corresponding confusion amongst tenderers. More importantly it is potentially at odds with various free trade agreements imposed by the Commonwealth and purportedly adopted by the states and territories, and finds resonance with problems raised in the literature discussing EU formation tribulations, where the aim of ‘public procurement policy in the EU was to dispel discrimination and government protectionism in public procurement, viewed as one of the major barriers to the achievement of the Internal Market’ (Erridge et al, 1998).

Arrowsmith (1995) raises pertinent research questions for considering Australia’s approach to procurement in relation to notions of free trade. Using ‘reforms’ in European Community procurement policy as case studies, beneficial comparators are found for evaluating procurement policy at different government levels and its implications on ‘free trade’ between states and territories. Important issues regarding policy as an instrument for social change are raised at a more philosophical or theoretical level, issues that have not really been considered in Australian-focused literature reviewed to date. The belief that free trade in procurement is the way forward are counteracted with examples where a more restrictive procurement policy is better placed to shape and monitor social policy (anti-discrimination for example), national industrial and technological objectives and state aid. Review of Australian policy with respect to these issues may lead to further research avenues regarding the (at present) seemingly unquestioned nature and theoretical makeup of procurement policy that affect the construction industry, in addition to the more practical and tangible barriers to innovation.

In an open market, policies which are merely protectionist are obviously unacceptable, but the EC rules also appear unsympathetic to the use of procurement to promote other goals, even those which the Community accepts sometimes require a compromise of free competition through, for example, the provision of state aid. (Arrowsmith, 1995)
The underlying competitive foundations of free trade provide a neat segue into a discussion of competition and competitive tendering in capital works procurement. Whilst ‘best value’ may have replaced compulsory competitive tendering as procurement weapon of choice, the belief that competition is the best driver for advancement is still a fundamental component of procurement policy. Egan argues that ‘the repeated selection of new teams… inhibits learning, innovation and the development of skilled and experienced teams’ (Egan, 1998, p19). Continuity is vital in developing product identity, enhancing production methods, refining quality and exceeding customer expectations (Egan, 1998, p20). Added to the fray is the somewhat liberally interpreted notion of ‘best value’ in procurement. As the foundational clause of procurement nationally, the subjective nature of best value (despite its advances from initial CCT where cost was the only consideration) spawns extensive guidelines, methodology and balances in order to make the process more transparent and less vulnerable to exploitation. As the Hon Peter Slipper suggested in 2003, we ‘probably need to elaborate on the concept of ‘value for money’, because it can mean different things to different people’. When value for money is the stated core principle of the Commonwealth Procurement Guidelines, this admitted subjectivity in assessment seems at face value to inherently undermine aims of objectivity in the procurement process.

*The tender process is vulnerable to manipulation by all parties. It is protected to some extent by the general legislation against gross misdemeanours such as fraud, and by more special legislation against anti-competitive behaviour such as collusion. The Code currently falls outside the legislative framework, rather offering suggestions of appropriate individual behaviour – leaving the “invisible hand” of market competition to provide the long-term economic solution. (Williamson, et al, 2004, p66)*

### 2.4 Cost of tendering

It is noted that the following discussion is presented as it relates more to procurement policy by governments as clients and their ethical responsibilities in their role as initiators of projects. The literature and discussion does not to any extent highlight disharmony identified in relation to tendering costs – it only highlights that this is a problem in general – which of course is not entirely new but needs to be considered as context for our study.

Kumaraswamy et al (2004) highlight a discrepancy between demands for dramatic increases in productivity (Australia, Hong Kong, Singapore and the UK are raised as key examples) and a desire for increased levels of innovation. Whilst the former is a boon to construction industry economic prospects, the increased demands and time pressures have a stifling affect on innovation – ‘dominant industry pressures to “get it right the first time” and to do this fast, direct participants towards already tried and tested procurement and operational routes’ (Kumaraswamy et al, 2004). Where increased demand could (and often does) promote innovation in the form of competition, niche finding and increased consumer discernment, the exemplified results in the construction industry run contrary to the beneficial potential.

These ‘dominant industry pressures’ may have a parallel in terms of procurement policy. Conforming to policy requirements (and the varied requirements between levels of government) could be seen to be a stifling pressure – those with the procedures established to easily conform to policy in a specific area or state have an advantage in tendering; unless propensity toward innovation is evidenced from within the ‘conformist’ companies the ‘tried
and tested’ will be the likely route (especially in risk averse environs). Additionally, even new and innovative companies may need to curb their own tendencies toward innovation as they, at least initially, mimic the ‘tried and tested’ to be competitive.

Expensive and lengthy tendering processes with no guarantee of remuneration for effort expended, coupled with increasing time pressures and demands, can lead to a culture of ‘doing things as they’ve always been done’. Innovation has the potential to increase the risk of tender failure for its high levels of inscrutability (fear of the unknown). For capital works procurement, it has been ‘suggested the costs of abortive tendering be borne more directly by the client, being the major recipient of the benefits accruing’ (Williamson et al, 2004). Whilst a whole research topic in itself, client reimbursement for unsuccessful tendering costs may increase the viability for smaller, more flexible and innovative contractors to offer tenders infeasible in circumstances that generally favour larger, institutional, established and more conservative players. ‘Cost’ must also be considered in non-fiscal terms – limiting innovation can be a demonstrated cost of the tendering process. Conforming to policy requirements and the varied requirements between levels of government could be a stifling pressure – those with the procedures established to easily conform to policy in a specific area or state have an advantage in tendering; unless propensity toward innovation is evidenced from within the ‘conformist’ companies, the ‘tried and tested’ will be the likely route, especially in risk averse environs.

Additionally, innovative tenders have the potential to be implicitly non-conforming tenders (Wood, 2006). Thus innovation is either stifled, or tenderers are required to submit alternative tenders alongside conforming tenders, thus adding to tendering cost. Prospects for a two- or multi-staged tendering process demanding innovation have been raised (Wood, 2006). Initial calls for expressions of interest by innovators (EOII) concerning a broadly defined project can be used to refine requirements, reassess priorities and promote innovative practices. Once initial stages of filtering innovations versus requirements are completed, a refined tender request can be forwarded to shortlisted or prequalified tenderers for second-stage tendering incorporating identified and desirable innovative practices. This can also have the effect of 'levelling the playing field' (English & Guthrie, 2003) and allowing a more objective comparison of tenders based on a more quantifiable base standard of innovation and cost. A potential downside, however, is the loss of competitive edge by the avant garde innovator, whose first-stage innovations are then taken as the basis for further stages of competitive tender (ie the 'secret' is broadcast). Such divulgence requires benevolence potentially lacking in a culture of competition and adversarial relationships. Whilst basic standards of innovation may be increased, the best innovations may not surface at all in a two-stage process for fear of losing competitive ground in future projects.

3. Conceptualisation

The transition from rigid rule-based procurement methodology to a value-based system that enables the exercise of discretion in procurement spending requires clarity in definition and interpretation, and transparency and communication of those interpretations. Rules can help produce good decisions that can help an organization to do its substantive job better. If an organization has learned that certain approaches to dealing with recurring situations work, it can use rules to ‘codify and transmit such information’ (Kelman, 2005). This project has the potential to identify areas in Australian procurement policy where the ability to exercise discretion under a value-based system conflicts with a lack of expertise, education or clear
and binding guidance. Ongoing monitoring and evaluation of a balance or synthesis between regulation and discretionary freedom are required to achieve policy harmony.

Figure 1 ‘Problem Conceptualisation of Harmony in Procurement Policy’ summarises the key issues identified to date. It also maps out the next stage of our work which is to confirm the problems in relation to differences between various jurisdictions through a national survey. We aim to find, according to industry and government practitioners, what the causes for policy disharmony and harmony are, and what constitute the key impediments to or catalysts for harmony in relation to procurement policy.

The areas of concern identified in the literature review, policy analysis and anecdotal evidence suggest the following key areas are worthy of investigation;

1. Devolution and decentralisation: skills, training, philosophy, interpretation;
2. Risk: tender evaluation criteria, value for money, project procurement strategy interpretations, rules vs. situational decision making;
3. Cost of tendering: tender documentation, length of tendering; and

4. Conclusion

Although there is considerable literature on procurement policy, the review has highlighted a lack of an analysis on the impacts to the construction industry business environment of the decision-making behavioural differences between government jurisdictions, specifically
targeting procurement policy, process and practice. Ongoing research into discrepancies between procurement policies at various levels of jurisdiction has highlighted potential areas for conflict, divided into pre- and post-tender categories. In the pre-tender stage, Public Private Partnerships (PPPs), purchasing thresholds, tender evaluation, ‘value for money’, supporting documentation requirements and tendering timelines are key areas for potential conflict. During post-tender stages, contract management, claims and dispute resolution are identified as critical areas. The resolution or harmonisation of these areas may enhance prospects for construction innovation. What is needed now, however, is an understanding of the current regulatory environment as understood by government and industry stakeholders conducting daily business in the capital works procurement arena. It is anticipated that this real-world analysis will aid in the consolidation of constructs arising from the anecdotal evidence, literature and policy analysis.

The costs of procurement inefficiencies to the construction industry and government clients are high. Tendering evaluation, contractor selection, procurement methodology selection and construction management in capital works projects inherently involve huge financial commitments; even small gains in procurement efficiency have a large effect on involved parties. In addition to fiscal benefits, it is hoped that the streamlining of procurement policy and procedure will provide the required impetus to achieve innovative results in capital works procurement.

References


