

Procurement Consultative Roundtable

Department of Finance Canberra

29 July 2019

Engaging with Risk – Procuring to Outcomes:

Using innovative approaches to deliver value for money through outcomes-based procurement

By Innes Willox, Chief Executive of Ai Group

Introduction

Outcomes-based procurement has attracted significant attention over recent years both internationally and across the Australian federation.

It has, for instance been incorporated into Queensland's Procurement Policy which now requires Queensland government agencies to pursue opportunities to develop innovative supply solutions, either through innovation in the procurement activity itself or by fostering innovative solutions by suppliers. Other similar initiatives have been adopted in other jurisdictions.

In brief, the reasoning is that by adopting less prescriptive, outcomes-based approaches where appropriate, suppliers can propose innovative solutions that may otherwise be excluded from conventional procurement processes.

To this end, outcomes-based procurement seeks innovation from the market by focusing on the agency outcome required rather than defining *how* the outcome should be achieved.

Outcomes-based procurement may not be suitable for all public-sector procurement and, where it is appropriate, how outcomes-based procurement can best be operationalised can vary considerably across different types of procurement.

If I can pre-empt my main point: a factor essential to the success of outcomes-based procurement is deep engagement between industry and government agencies. This should occur not only at the level of this type of high-level group but, more importantly, much closer to the coal face where solutions can be built around the features of actual exchange and the specifics of different sorts of risks and outcomes.

A brief detour

Before taking this further I would like to step back for a minute and bring into the discussion an insight from organisational or transaction cost economics about different modes of contracting. I find this is useful for thinking about some of the features of outcomes-based procurement and some issues surrounding when it is appropriate.

There is a spectrum of contracting modes. It ranges from, at one extreme, the purely market mode under which transactions are discrete and governed largely by the market. For government agencies, there is any number of examples – the procurement of the odds and ends required for functions

such as this – the coffee, biscuits and sandwiches, the pens, maybe the printing. With no pun intended these are bread and butter transactions with little risk of information asymmetries and with outcomes - though not perfectly known in advance – containing little risk of departures from expectations. In reality, purely market governance is supplemented by a range of conventions and laws that mitigate the risks that do surround these sorts of exchange.

Further along this spectrum lies what is sometimes called secondary contracting where market governance is supplemented by formal contracts and somewhat more pronounced relationships between suppliers and purchasers. Typically, transactions adopting these modes may be more complex, there may be greater risks involved for purchasers and there may be more substantial commitments required of suppliers.

Contracts will often govern repeat or sequential transactions over longer timeframes. Through secondary transacting, risks are identified and mitigants are incorporated into the written contract. In a sense the future is brought into the present and accommodated in the contract itself.

In the private sector, there is a plethora of relational modes of exchange. They can range from adaptive long-term contracts between parties that are formally at arm's length, through to joint ventures and at the extreme full vertical integration.

Traditionally, government procurement – at least once complexity goes beyond a certain point - has been dominated by secondary contracting where fuller specification of outcomes is seen as better and exchange is expected to conform to the detailed requirements set out in contracts.

In contrast, outcomes-based procurement lies well and truly in the relational category. While the outcomes may be known, the unknown unknowns include the way these outcomes will be achieved.

Of course, as with private sector relational contracting, the adaptive features of relational contracting will usually sit alongside the sorts of tight specifications that more fully characterise secondary contracting.

Two case studies

Having made this conceptual detour, I would like to come back to more real-world activities and talk about two exercises that Ai Group is involved with to develop approaches to more complex procurement arrangements.

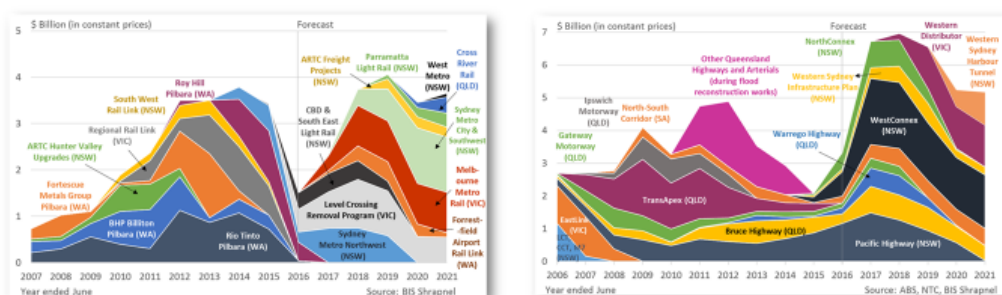
The first of these is about a very promising alliance that has been forged between Victorian and New South Wales agencies and the Australian Constructors Association with which Ai Group is very closely affiliated.

The second reflects the procurement work Ai Group's Defence Council has been engaged in with the Department of Defence among others.

In both cases, I am really only providing a high-level introduction to the work involved in these areas. My hope is that we can identify other areas of similar work and that at future meetings we can dive more deeply into these areas.

Construction

1 – The Pipeline



A significant pipeline of current and future government infrastructure projects in NSW, Victoria and other States is driving the need for new approaches in procurement and project execution to ensure the industry remains sustainable and able to effectively and efficiently respond to the community's infrastructure needs.

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2 – The Projects

This study	Total	Successful Projects Average	Challenged Projects Average	Overall Performance Gap (\$M)	Private Sector Gap (\$M)	Public Sector Gap (\$M)
# Projects	44	23	21	-	21	23
Budget (\$M)	43,809	1,074	910	-	-	-
Budget overrun (\$M)	6,021	83	196	3,629	-	-
Budget overrun (%)	13.74%	8.4%	27.4%	19%	19.1%	20.2%
Schedule overrun (%)	-	(.3)%	20.3%	20.6%	27.9%	27.6%

This is the most comprehensive set of survey data on Australian mega-projects completed to date. The survey covered 44 mega-projects (> \$1 billion each) worth nearly \$44 billion.

- The emergence of 'mega projects' has resulted in increased complexity and high risk project portfolios.
- There is a very low success rate (measured by achieving budget, schedule and economic business case) for complex megaprojects both globally (less than 15%) and in Australia (40 – 50%).
- To successfully deliver on the current pipeline, a new approach to project structure and risk is required.

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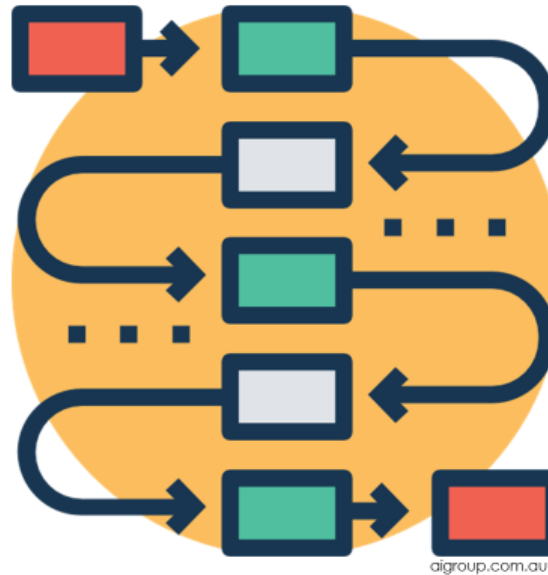
There is a very low success rate (measured by achieving budget, schedule and economic business case) for complex megaprojects.

This is not confined to Australia. The global success rate is less than 15% while Australia's is noticeably better than that – between 40% and 50%), we should clearly be aiming much higher than that.

To successfully deliver on the current pipeline, a new approach to project structure and risk is required.

3 – The Procurement Process

- Over the next 10 years, an unprecedented level of public investment across transport and social infrastructure will place significant pressure on government and industry to respond without driving up costs and stretching out delivery timeframes.
- Existing procurement methods are costly both in time and resources and may not deliver the best for project outcomes.



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Job Family	Project Management <i>Particularly tender phase</i>	Engineering	Support Services	Frontline Supervision	Operators	Civil Sector	Trades Workers	Rail Sector
Job Function	Project Director	Project/Site Engineer <i>On-site</i> Mid-career for off-site Signalling, traction and power-supply	Commercial	General Superintendent	Truck Driver	Pipe Layer	Electrical / Mechanical Electrical, Ventilation, Heating, Aircon	Rail Electrical Traction/power supply Utilities relocation
	Operations Manager	Design Design managers, qualified engineering design consultants, architects	Human Resources	Superintendent	Tunnelling Machine Operator	Tunnel Constructor	Carpenter / Joiner	Track
	Construction Manager	Spatial Systems (Surveyors) <i>On-site</i>	Environment & Sustainability	General Foremen	Piling Machine Operator	Scaffolder	Boilermaker	Safety
	Project Manager	Quality	Safety & Wellbeing	Supervisor/Foremen	Plant Operator – Earth Moving / Load shifting	General Labourer	Plasterer	EY specifies structural and pre-cast concrete
	Senior Project Engineer	Planning Planning, scheduling, cost estimation, risk management	Community & Stakeholder Relations	Leading Hand	Crane Crew	Structures Concrete Steel Fixer Form Worker	Fitter	EY additionally identifies service relocation and utility network resources, not covered in our industry job family framework
	Drafting Technician				Road Construction Concrete Steel Fixer Form Worker	Plumber		
						Tiler		
						Floor Technology Vinyl Layer		

Legend: ■ Shortage identified for job family ■ Shortage identified for job function ■ Shortage identified for job sub function

Such a large program of work increases pressures on capability and capacity in both the private and public sectors.

Accommodating a pipeline of this magnitude at a time when skill shortages are already acute in some areas and are growing more acute requires new thinking, processes and partnerships to deliver successfully.

Innovative Solutions - a Partnership Approach



Through government and industry working together to define the major challenges in procurement and project delivery as early as possible:

- better project outcomes can be identified and achieved,
- value for money and innovative solutions can be supported,
- issues can be resolved before they impact success, and
- risks to governments' infrastructure investments can be avoided.

Innovative solutions are being sought through a partnership approach that has brought government and industry together to define the major challenges in procurement and project delivery as early as possible:

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The Construction Industry Leadership Forum

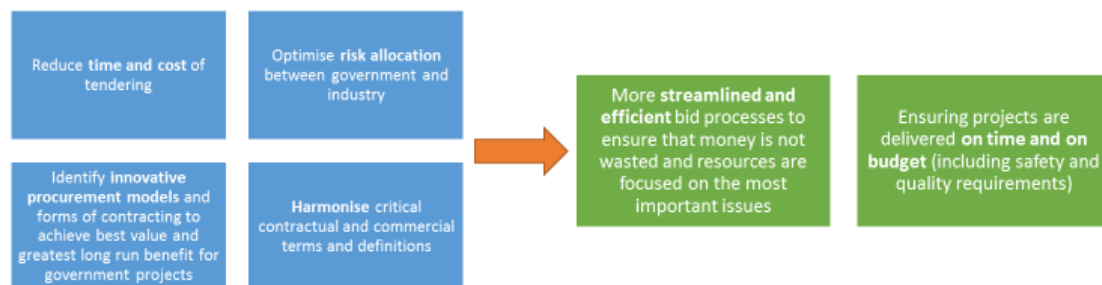


- A joint forum of leaders from industry and the Victorian and NSW public sectors established to drive improved collaboration and action around procurement and delivery of major government infrastructure projects.
- Has broad support from chief executives within the key agencies in the NSW and Victorian governments responsible for the delivery of the pipelines for each state.
- Has representation at CEO level from the largest infrastructure contractors operating in Australia.
- Key work areas:
 - Commercial
 - Capability & Capacity

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- Its key work areas are Commercial and Capability & Capacity

Value for Money and the Case for Change

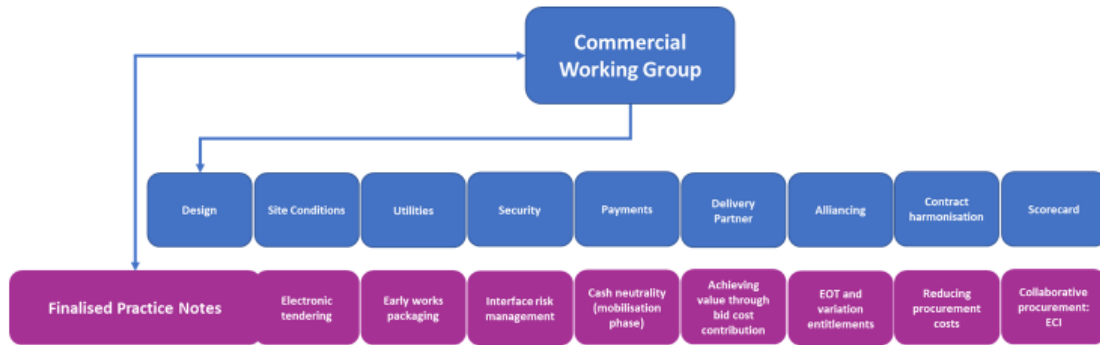


Working in partnership to tackle the big issues and applying solutions consistently will result in better value for money outcomes and support a sustainable construction industry.

It aims to:

- Reduce the time and cost of tendering
- Optimise risk allocation
- Identify innovative procurement models and forms of contracting to achieve best value and greatest long-run benefit
- Harmonise contractual and commercial terms;
- And maintain a sustainable construction industry

Innovative Solutions – Dealing with Risk



Identification of key risk areas and collaboratively identifying principles and options for addressing the risks.

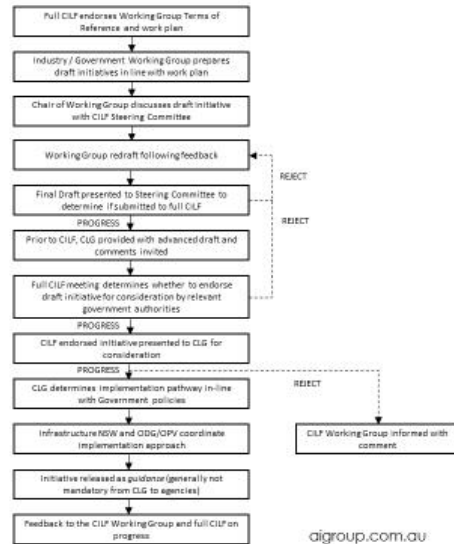


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Not unsurprisingly, the Construction Industry Leadership Forum is putting in a lot of work identifying key risk areas and collaboratively identifying principles and options for addressing these risks.

Implementing Solutions



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Through its work program it is building much greater shared understanding of the outcomes being sought, the risks involved and how these can be mitigated.

Defence

The second area of work that Ai Group is involved in and that I would like to touch on in these comments comes from our Defence Council which is a collective of private-sector businesses involved in the defence industry.

Ai Group's Defence Council includes the vast majority of the primes, many of the tier two and three defence suppliers and we are currently bringing together smaller businesses through an alliance between ourselves and other associations (AIDN and DTC).

We have been working closely with Defence to lift procurement performance both for Defence and for the industry.

Defence Procurement and Risk

- Defence projects in Australia are typically of a higher level in scale and complexity than projects in other sectors.
- Most organisations may have one or two complex projects underway at one time, while Defence will have numerous nationally significant and highly complex projects at one time.
- The central role of technology and requirement for military superiority pose significant challenges and increase risks.
- Defence has suffered reputational damage from previous 'failed' projects such as the Super SeaSprite Helicopter program.

There is a number of features of the defence industry that give it unique characteristics. They include that:

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Managing Risk in Defence Procurement

- Defence has put in place significant risk management processes, including a stronger internal contestability function and staged approval processes.
- Other key factors in risk management, particularly from an industry perspective:
 - Early consultation with industry on the requirements to determine 'the art of the possible' and industry capacity.
 - Ensure cost and schedule estimates are realistic and achievable.
 - Identify and put in place risk management particularly for capabilities requiring high levels of developmental activity and integration
 - Work in close partnership with industry to develop the capability – underpinned by the new 'Engagement and Negotiation Principles'.

A lot of work is going into improving defence procurement

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Concluding Comments

- The large pipeline of work is compounding issues arising from risk allocation and skills shortages.
- A new approach to procurement and collaboration is necessary to ensure deliverability and minimise project overruns.
- The states are alive to these issues and are working with industry to address key concerns.
- Ongoing collaboration and engagement between governments and industry is necessary to reform the procurement process, drive value for money outcomes and secure the ongoing sustainability and viability of industry and its supply chain.
- There has never been a better **opportunity** to change the game.