



# ICA submission to The Productivity Commission Inquiry into Public Infrastructure: Provision, Funding, Financing and Costs

## 1. Overview

This submission focuses on the excessive cost of constructing Australian public infrastructure, arguing the following:

- The cost of major Australian infrastructure construction is considerably higher than it should be, potentially in the order of 20–30 per cent. This affects both private and public infrastructure.
- Cost escalations have been severe over the last 5–6 years.
- The most significant ‘fixable’ factor in the cost blowout has been poor and deteriorating labour productivity organized through a ‘cartel’, combined with the more recent development of a duopoly dominating the upper end of the infrastructure construction market—particularly public sector infrastructure.

This situation presents as a major ‘home grown’ threat to the current and future economic development of Australia. If infrastructure cannot be built at reasonable and affordable cost, significant economic damage occurs.

Most commentary on the poor performance of the construction industry focuses on construction unions as the cause of problems. Such commentary is a diversion from the real problem, which is systems and behaviours that limit and frequently destroy competition in the sector. It’s this destruction of competition that is the true cause of excessive costs.

Australian governments, federal and state, are in a position to address this threat.

- Australian governments’ infrastructure spending constitutes some 40 per cent of all infrastructure work across Australia. As the ‘client/s’, Australian governments can and should demand considerably higher value for money on the infrastructure work that they commission.
- To achieve this, Australian governments are in a position to act by:
  - Applying a code of conduct for public infrastructure construction that aims to break up the cartel by ensuring that labour utilisation arrangements do not operate to favour anti-competitive outcomes.
  - Reforming government infrastructure procurement processes and contracts to ensure that a wide variety of construction businesses of different sizes can

and do tender for, and win, government work. By necessity this would mean breaking up large infrastructure construction jobs into multiple smaller contracts in many instances, as well as reviewing ‘prequalification’ requirements and the activities of workcover agencies.

It has long been recognized that where anti-competitive arrangements consisting of cartels, monopolies/duopolies and other similar ‘opolies’ operate in a market, that the costs to the end consumer always increase markedly. However, competition encourages innovation and continuous improvement. It’s innovation and productivity in construction that will produce better value for the infrastructure dollar.

Independent Contractors Australia’s motivating interest in this issue is the rights of independent contractors and subcontractors in commercial construction. In whatever way infrastructure construction is organized, it is ultimately the ‘subbies’ and sole contractors (independent contractors) who are the people who do the work ‘on the ground’ building infrastructure. But it is they who suffer most directly as a result of the existing anti-competitive, cartel/duopoly situation. They don’t suffer alone, because the end consumer of such anti-competitive construction is the Australian public who, through their taxes and/or charges, pay much more than they should for their infrastructure. If an effective competitive market for infrastructure construction can be enabled, it will be the independent contractors and subcontractors who will deliver much of the productivity gains that will reduce construction costs.

## **2. Evidence of costs excesses in construction**

There is little doubt that the cost of commercial construction in Australia is higher than it should be. There is, of course, debate over just how much higher the cost is. Further, there are many people, particularly in the construction industry, who find the additional costs acceptable and unavoidable. In fact, many in the construction sector obtain a financial benefit from higher costs.

One of the better benchmarks for assessing commercial construction costs is by comparing them with single dwelling residential construction costs. On all assessments, commercial construction is considerably more expensive than single dwelling residential construction. There is no reason that this should be the case.

### **2.1 Econtech Analysis**

The differential between commercial and residential construction costs has been consistently tracked by the economic analysts at Econtech since about 2003. Their most recent report for Master Builders Australia (in 2013) shows the cost penalties for commercial building compared with domestic residential building for completing the same tasks in the same year.

[http://www.independenteconomics.com.au/information/Reports/BCI%20productivity\\_2013\\_final.pdf](http://www.independenteconomics.com.au/information/Reports/BCI%20productivity_2013_final.pdf)

Econtech reports show that there was an improvement from

- 2004 where commercial construction was 19 per cent more expensive than residential, but improved through to
- 2011 where commercial construction was 12.4 per cent more expensive than residential. But has deteriorated again in

- 2013 where commercial construction was 13.2 per cent more expensive than residential.

There can be many reasons for cost differentials, however given that labour typically makes up 50 per cent of commercial construction costs (William Harnish, CEO Master Builders Australia <http://archive.hrnicholls.com.au/archives/vol24/vol24-5.php>) the effectiveness of labour utilization is the biggest factor affecting cost.

Econtech's analysis uses the Rawlinson's authoritative quantity surveyor data to create the cross-sector comparisons. However, case studies can supply a more detailed understanding of cost comparisons. Some analysis suggests that cost differentials could be, or are, considerably higher than those identified by Econtech.

## **2.2 Case study A: Commonwealth Games Village**

A report by the Institute of Public Affairs (2008) [http://www.ipa.org.au/library/publication/1228695356\\_document\\_wilcoxgamesvillage2.pdf](http://www.ipa.org.au/library/publication/1228695356_document_wilcoxgamesvillage2.pdf) on the construction of the athletes village for the 2006 Melbourne Commonwealth Games cites as evidence Victorian government contracts which reveal a 34 per cent cost increase because the village was built using commercial (union controlled) construction arrangements instead of standard residential construction arrangements.

The IPA report states:

... contractual arrangements put in place by the Government of Victoria inflated the cost of the Commonwealth Games Village construction by 34 per cent as a result of industrial arrangements with construction unions. In other words, if the Games Village had been built using normal housing contractors, the evidence indicates that the cost of the Games Village would have been 34 per cent less than the actual cost paid for by the taxpayers of Victoria. The extra cost was around \$50 million on the \$144 million project.

The case study was significant because it directly compared residential with commercial construction arrangements. The athletes village was designed as a normal residential housing development. After the Games, the village was sold as private residential accommodation.

The Games Village was constructed in a period where, according to the Econtech analysis, the cost differential between commercial and residential construction was reducing. Yet the Games Village cost 'explosion' was around double that of the Econtech analysis for 2006.

The Games Village situation suggests that infrastructure costs under commercial construction were exorbitantly higher than they should have been, at least in 2006.

## **2.3 Case Study B: East-Link v City-Link roads and other projects**

The Institute of Public Affairs also undertook a study [http://www.ipa.org.au/library/PHILLIPS\\_IRBuildingVIC.pdf](http://www.ipa.org.au/library/PHILLIPS_IRBuildingVIC.pdf) comparing the construction of the Melbourne East Link road project with the City Link project a few years earlier. Both the City-Link and East Link jobs had similar project costs and both were constructed by subsidiaries of Leighton Holdings, but with different labour arrangements. The IPA paper (2006) estimated savings on the East Link job of \$295 million when compared with City Link—an 11.8 per cent difference. ConnetEast's 2008 report to Unit Holders

(see attachment A) showed that the project was completed five months early and on budget.

This case study compares a large commercial infrastructure project with a similar infrastructure project and demonstrates that better labour arrangements on infrastructure construction can deliver significantly better value for money. Or put the other way, bad labour arrangements on public infrastructure projects cost Australian taxpayers very large sums of money.

For example, the IPA report also identifies \$304 million of wasted taxpayer money on just six Victorian government infrastructure projects. The total cost for the six projects exceeded \$1.2 billion. All were well over budget. The cost excesses were in the order of 25 per cent plus of the total spend. The IPA identifies dysfunctional labour arrangements as the principal cause for the cost blowouts.

The IPA case studies were all conducted in the period around 2004, a period when commercial construction costs were at their peak differential when compared with residential construction costs according to Econtech.

Econtech data suggest that the situation improved after 2004, but started to deteriorate again around 2012–13.

This appearance of deterioration now has such a weight of evidence behind it that it is of major concern. On the evidence below, the cost of commercial construction has re-escalated to such an alarming degree that the very viability of infrastructure development, both private and public, is at risk.

#### **2.4 Case study C: The Victorian Desalination Plant**

The Victorian Desalination Plant in Wonthaggi was budgeted as a \$3.5 billion construction job. Eventually completed in 2012, it ran twelve months behind schedule and massively over budget. Leighton Holdings, through its subsidiary Thiess, incurred a loss on the construction job approaching \$1 billion. Final construction costs are hinted at by the Victorian Treasury <http://www.dtf.vic.gov.au/Infrastructure-Delivery/Public-private-partnerships/Projects/Victorian-Desalination-Plant> who placed a ‘value’ on the project of \$5.7 billion. This suggests a construction cost blowout of \$2.2 billion or 62 per cent.

By comparison, the Kwinana Desalination Plant in Perth was completed in 2006. With roughly 30–50 per cent of the output of the Wonthaggi plant, it cost \$387 million to build. (This did not include an 85 km pipeline as was the case at Wonthaggi.) On this comparison the Victorian plant should perhaps have (speculatively) cost in the order of \$2 billion.

Assuming this to be the case, if repeated on other public infrastructure construction jobs, the extraordinary blowout in construction costs on the Victorian desalination plant has the capacity to break the back of Australian governments’ budgets.

Indications are that these infrastructure construction cost blowouts have spread across Australia. This was predicted by commentators, for example Robert Gottlieb, in *Business Spectator*

(a) <http://www.businessspectator.com.au/article/2011/4/12/resources-and-energy/time-leighton-leadership-purge>

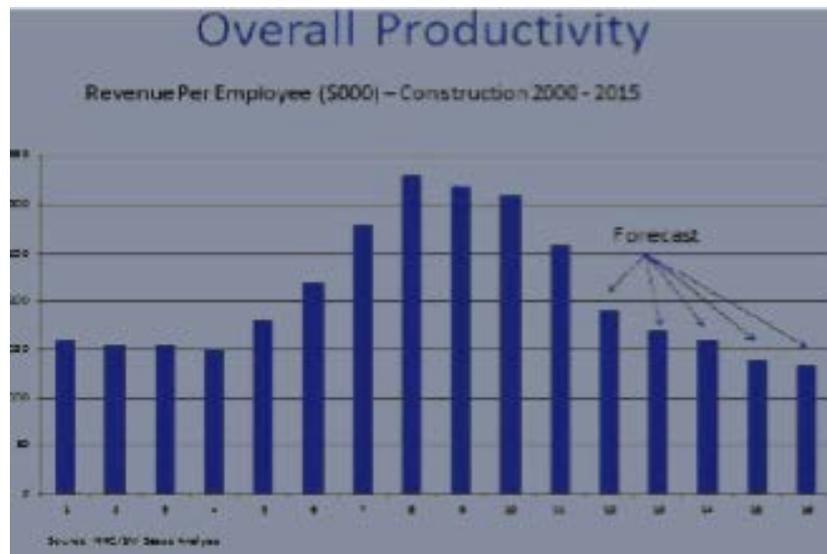
(b) <http://www.businessspectator.com.au/article/2013/3/25/construction-and-engineering/states-align-bust-building-unions>

(c) <http://www.businessspectator.com.au/article/2012/7/5/resources-and-energy/abcc-construction-chaos>

who has provided some of the best analysis available.

## 2.5 Confirming the cost blowouts: Recent Labour Productivity Trends

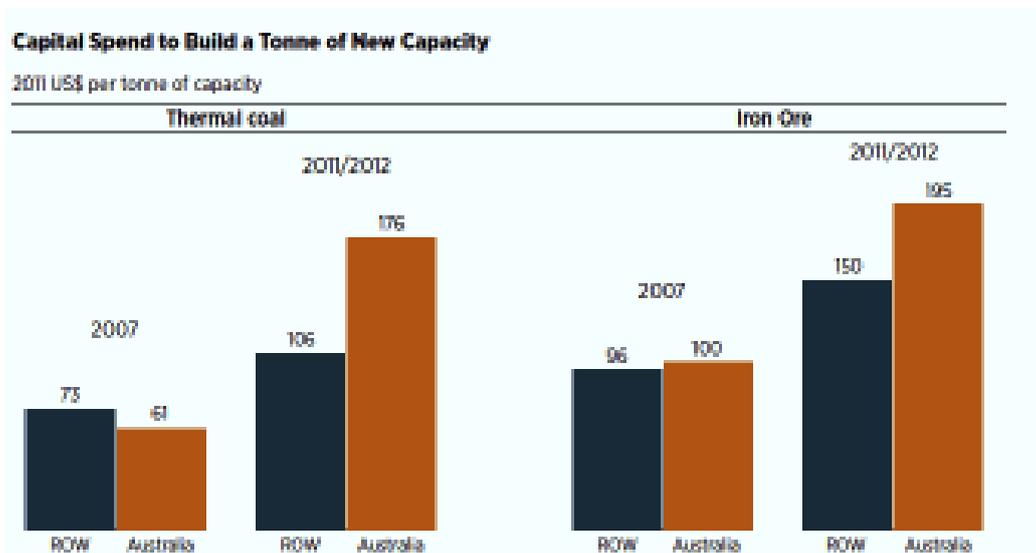
The spread of the cost blowout problems and its major cause are revealed in data from the construction sector. Labour productivity figures show a marked decline in performance from around 2007 and are projected to worsen.



On some measures based on 2011 unpublished industry analysis, Australian infrastructure requires twice the labour value per unit built compared to the USA; and a factor of .4 compared to UK. In other words, if we take the same bridge and say that its labour cost in the USA is \$100, then in Australia it would be \$200.

## 2.6 Resources construction sector

The labour productivity decline in construction closely parallels the construction cost blowouts evidenced in the resources sector and shows a disturbing trend.



Source: Minerals Council of Australia, September 2012.

In the Pilbara, cost blowouts in resource development projects have averaged 45 per cent in the five years to 2012. (unpublished data)

<b>Iron Ore</b>	<b>Budget \$US m</b>	<b>Variation</b>
Hope Downs 4	1600	+31%
Dampier Port	321	+17%
Pilbara Infra	3100	+32%
Brockman 4	1200	+17%
Marandoo	933	+18%
Extension Hill	2000	+25%
Aquila JV	4000	+45%
Cape Preston	3000	+100%
Solomon&Western	3200	+18%
Southdown	1700	+47%
<b>Average</b>		<b>+45%</b>

Writing in *Business Spectator* <http://www.businessspectator.com.au/article/2013/4/12/resources-and-energy/browse-blow-delivers-awkward-epiphany> in April 2013, Stephen Bartholomeusz stated:

There is real concern within the sector about the extraordinary levels of cost escalation that have been occurring within what are already mega-projects with massive budgets. Chevron, for instance, announced last year that what had been budgeted as a \$US37 billion Gorgon LNG project was now estimated to cost \$US52 billion.

Bartholomeusz’s comment came as Woodside Petroleum cancelled plans for its proposed Browse LNG onshore processing plant at James Price Point in Western Australia, citing the blowout in project construction costs as the reason. Woodside is now exploring plans to process gas from the field on a factory-ship built outside Australia. That is, for Woodside to develop its Browse gas field it cannot undertake the processing plant construction on Australian soil.

## **2.7 Summary**

Australian commercial construction costs—particularly for major infrastructure—were arguably 20 per cent higher (and possibly up to 35 per cent higher) than they should have been in the early 2000s. There appeared to be improvement in comparative costs through to the mid-2000s. However, in the early 2010s comparative costs have again blown out so much that the viability of public and private infrastructure development in Australia is under grave threat.

In fact, the indicators strongly suggest that, in the resource sector at least, the resource development ‘boom’ of just a few years ago has hit a brick wall of construction costs. Australia has become incapable of developing new projects at a cost that makes them commercially viable in the international market.

In planning infrastructure work in Australia, the private and government sectors must accept that, under current conditions, the threat of 30 per cent plus budget blowouts is real and likely on any project. These excessive costs threaten the very viability of Australian government budgets and have already curbed private-sector infrastructure

investment. This situation deserves to be rated as an Australian ‘emergency’ which poses a massive home-grown threat to our economic future.

Australian governments must put together packages of legislative, commercial and contractual measures to bring down the cost of infrastructure development to affordable levels that enable Australia to be internationally competitive. Australian governments’ position as the buyers of some 40 per cent of infrastructure development gives them a unique opportunity to use their market position to ensure that construction costs are contained within reasonable limits.

### **3. Understanding the reason for the dangerous cost excesses: Restricted competition in the construction market**

This submission focuses on restrictive labour (industrial relations) arrangements as being the most important cause of the infrastructure construction cost excesses noted earlier. However, although the labour arrangements can be seen as symptomatic of the problem, they are not the problem itself.

The real problem is that a cartel arrangement exists between large construction firms and construction unions that facilitates the suppression of smaller and/or alternative construction firms. This eliminates or restricts a truly competitive market for infrastructure construction from existing. It is the lack of competition in construction organized through the cartel that is the real cause of the cost excesses.

The cartel operates at a highly sophisticated level. Its activities are masked by the industrial relations system, laws and practices. In fact, the firms and their association representatives involved in the cartel like to portray themselves as hapless ‘victims’ of a system that forces them to use unacceptable and anti-competitive labour arrangements which create inflated costs. In reality, the firms commercially benefit from the anti-competitive arrangements. Indeed, their business models are built around the anti-competitive labour arrangements.

#### **3.1 How the anti-competitive system works**

When it comes to major construction work, the industry talks about 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> tier contractors.

- 1<sup>st</sup> tier contractors bid for the largest construction projects, packaging the them in such a way that they control the contract chain/s through jobs to manage and deliver the outcomes. They employ large numbers of direct labour on civil engineering projects, and in commercial building they engage large numbers of specialist sub-contractors. They are mostly multi-million or billion dollar companies and most frequently listed corporations.
- In the commercial building sector, 2<sup>nd</sup> tier contractors are usually specialist firms that deliver parts of the structure as subcontractors. They may specialize in steel fixing and formwork, electrical and plumbing, and the finishing trades (tiling, painting) as examples. They are often large firms but can also be quite small.

They often directly employ construction workers but will also subcontract work further down the chain.

- 3<sup>rd</sup> tier contractors are mostly the people who actually do much of the physical work in commercial building. They are normally small businesses employing fewer than 20 people and are frequently micro-businesses of just one or two people.

Overseeing all of this are the EPCMs. These are Engineer, Procure, Construction Management firms who design and manage entire projects. It is the EPCM who engages the 1<sup>st</sup> tier contractors. Often the EPCM does no actual site work at all, are usually involved in IR strategies. They include such companies as Fluor, SKM, Bechtel and GHD.

The anti-competitive system has two major dynamics:

**a)** Major infrastructure construction projects, say, those over \$100 million, attract the interest of the 1<sup>st</sup> tier contractors. It is these larger projects where the cartel operates at its most sophisticated level and where it is most effective at driving up costs and prices thus securing higher profit and market share.

These projects are characterized by high levels of direct labour. For example, projects such as EastLink or the Wonthaggi Desalination Plant are predominately constructed by employees of the head contractor.

Where direct labour is utilized, it is very much in the interests of the 1<sup>st</sup> tier contractors to ensure that, where possible, competitors to and competition within the bidding processes are limited. This is achieved through the industrial relations system in a cartel co-operative process with construction unions.

**b)** Where subcontractors are utilized, the cartel operates to limit competition as in (a) above. But, further, the head contractor's profit is enhanced by pushing down the prices paid to the 2<sup>nd</sup> and 3<sup>rd</sup> tier contractors and forcing the subcontractors to wear risk and carry losses.

To people not directly involved in the construction industry, industrial relations disputes in the sector appear to be a battle between employers and employees. Media coverage of mass demonstrations, violent pickets and clashes with police outside construction sites reinforce this impression. These events however are more akin to 'circus acts' that create diversions from the true commercial process in play.

The reality is that industrial action in the construction sector is highly targeted. Some employers/businesses are put under industrial relations pressure while others are not!

The unions' objective is to push all contractors on to the same industrial agreements for any particular job and, where feasible, across the industry. This eliminates the apparent cost of labour (50 per cent of construction costs) as a competitive element in any pricing of and tendering for construction work. There is a good reason why the standard industry industrial agreements are known as 'pattern' agreements.

On the surface, it would seem logical that companies would resist enforced standardization of labour arrangements, as they would want to obtain competitive advantage to win work. This is how a proper competitive environment would work and at the same time provide the best chance for value for money for clients, particularly governments. This, however, is not how it happens in construction.

What occurs is that a secretive cartel process exists in which unions, larger contractors, employer groups and often corrupt tendering processes operate to favour the commercial interests of the large contractors. Secret payoffs to union officials by construction companies are common, if not almost standard practice, in many instances. The process is sanctified and made 'legal' through industrial relations laws, institutions and practices. Outside of this 'protection' the practices would be illegal, even criminal.

### 3.1.1 Here's a specific example:

In New South Wales several years ago a particular trade sector was undergoing a sector-wide negotiation with the industry union over a pattern industrial relations agreement that would apply to the entire sector. The sector consisted of two large dominant contractors, several medium-sized contractors and hundreds of small and micro contractors.

The particular industry association had about 70 per cent of contractors across the industry as its members and was leading the negotiations with the union over the industrial agreement. The case was being heard before the NSW Industrial Relations Commission. Most of the smaller contractors were not party to the existing industry-wide industrial agreement but instead operated on the relevant award. There were substantial cost differences between the award and the existing industrial agreement.

The industry association was conducting meetings with its members to obtain agreement from them on its negotiating position with the union and before the IRC. Most members didn't want a new agreement but there was considerable dissent and differences of view.

What was not known at the time but became apparent many months later, was that the largest contractor, who had just won the tender for the biggest project then on offer in NSW, was in collusion with the industry union. It worked like this. The children of the CEO of the largest contractor went to the same exclusive, private school as the children of the state secretary of the union. The CEO and the union state secretary played golf together every second Saturday afternoon.

It further became clear that the union secretary had used his influence with NSW government agencies to clear some regulatory hurdles for the contractor related to the tendering process for the large project. The union secretary had also been in contact with the company awarding the project, and the company's bankers, advising that the particular contractor was the union's preferred tenderer. Further, if the project was awarded to someone else, the union would cause trouble on the job, delaying it considerably and increasing costs.

In addition, the CEO of the major contractor had signed up with the union on the union's new enterprise agreement which involved much higher costs. This was the

same agreement the union wanted for the entire sector. But the CEO now faced a major dilemma, as the new enterprise agreement applied across his entire business, not simply on the major project he had secured. For all his other work and other potential tenders, his costings were significantly in excess of all other competitors in the sector. He had an urgent, vested commercial interest in seeing the entire sector placed on the industrial agreement he was now using.

The CEO colluded directly with the union secretary to push the industry negotiations in the direction of securing the new higher costing industrial agreement. Through the convoluted, quasi-legalistic processes of negotiations in the IRC, the union and the company CEO prevailed and the new industrial agreement was secured and endorsed by the IRC.

The relationship between the union secretary and the CEO was only discovered many months after the new industrial agreement was applied across the sector.

There was never any evidence of secret payoffs by the CEO directly to the union secretary, but it was not surprising that there was speculation that this had occurred. However, the contractor made very large contributions to the union's 'Christmas' fund, and to its workers 'memorial' fund. Further, the industrial agreement required all companies in the industry to have their employees covered under the union-run 'workers life insurance' business and to fund the union-run 'safety training' business. The union secretary was the trustee of the Christmas and memorial funds and chairman of the union's insurance and training businesses.

Some years after this event, the union secretary was accused by rivals in the union of controlling secret slush funds. He subsequently retired from the union and is now a Commissioner with the Federal Fair Work Authority.

The real story described above is repeated thousands of times every year in varying forms across the construction sector. It is common practice. And it can range from something as simple as a union-free subcontractor being forced off a worksite, to complex negotiation processes as in the story above. Yes, the process involves industrial relations issues. Yes union thuggery and intimidation are elements in the process. But the real outcome is the destruction of competition. Few, if any, commentators or observers seems to understand this.

The most important and comprehensive review of the construction sector was the Cole Commission review. Cole provided a comprehensive understanding of the operations of the construction sector and explained it succinctly as follows:

Cole Commission: From Final Report 2003 Vol 1 Summary

13 Third, there needs to be an attitudinal change of participants regarding management of building and construction projects. It is the function of head contractors and major subcontractors to manage their businesses and to assume control of the processes necessary to achieve productive and successful outcomes for the benefit, not only of their companies and employees, but also for the industry and the Australian economy as a whole. Head contractors, to a significant extent, and in critical areas have surrendered management control to the unions. It is the function of unions to represent, advance and protect the interests of their members in a variety of ways. It is not a function of unions to manage or control the operation of building and construction projects. The

benefits to the industry and the Australian economy from improved productivity flowing from this cultural change are very significant.

23 The unwillingness and incapacity of head contractors to respond to unlawful industrial conduct causing them loss is due, principally, to two structural factors. The first relates to their desire to be long-term participants in the industry. To be so, having regard to the competitive nature of the industry and the low profit outcomes, requires them not only to address the short-term focus on profitability of a given project, but to consider the long-term relationship with union participants. They know that unless there is significant acceptance of union demands, there will be continuous industrial disruption on other current and future projects. Clients, including governments, who are major participants in the industry, will not select contractors who are unable to deliver projects on time and within budget. The prospect of industrial disruption is a disqualifying feature for the obtaining of future work, and thus being a long time participant in the industry. This is well understood both by the contractors, and by the unions. It places enormous power in the hands of unions. It encourages unions to use that power to obtain otherwise unattainable outcomes. The threat of the use of power is as effective as its exercise. Each of the unions and the contractors know this and factors this circumstance into their relationships.

Cole's description states the standard view. That is, that

- Unions behave unlawfully
- Construction companies should not cave in to union intimidation because it is in their commercial interest and in the national interest not to do so.

However, Commissioner Cole's analysis misses the key points being made in this submission, namely that:

- Construction companies are not motivated by the national interest. Their interest lies in securing work and locking in margins to make profit.
- Construction companies will and do collude with unions to make life difficult for their actual or potential competitors, thus limiting competition.
- Major construction corporations have a vested interest in preventing small contractors and other construction companies from having a price or productivity advantage in the utilization of labour. By eliminating the labour issue as a competitive item, the major contractors are able to dominate the sector by using their natural advantages of size, scope, technological development and access to finance to lock in their market dominance.

The real outcome of the industrial relations processes in commercial construction is the limitation of competition to favour the major players.

### 3.1.2 Here are some more examples

*\* The role of banks as enforcers of anti-competitive behaviour:*

An aged-care developer in Queensland could not obtain funding from his bank for a new development. The bank instructed him that funding would only be granted if he used a specified builder approved by the bank. The builder operated using union agreements and processes. The developer would not use the bank's builder because on past experience such union arrangements inflated the cost of the development.

Presumably, the bank insisted on the union builder on the grounds that that particular builder would not suffer delays on the job. What the bank misses is the fact that the inflated cost of the union agreements has to be built into the budget.

This adversely affects both the cost-benefit analysis as well as the viability of the project.

Through this process the bank has become a player in the cartel operation between the builder and the union. Whether unwittingly or not, the bank has become an enforcer of the union-builder cartel arrangement.

*\* Employer associations as enforcers of anti-competitive behaviour: the Western Australian Chamber of Commerce and Industry:*

Employer associations are frequently active in the union-builders cartel arrangements. Although they complain publicly about union agreements, they are most often actively working with unions with the aim of ensuring that such agreements apply across the sector. That is, the employer associations are active players in the limitation of competition in the construction sector. One of the most brazen examples of this is the Western Australian Chamber of Commerce and Industry (WACCI).

What has been happening for some years is that the WACCI has had agreements with the major resource companies operating in Western Australia. When proposing construction of a new resource project, the resource companies appoint the WACCI as the industrial relations overseer for the project. With this authority the WACCI inform all tenderers for construction work that they must comply with the WACCI industrial relations agreements. These agreements are effectively union-style pattern agreements, highly restrictive in nature. In effect prospective tenderers are required to bid in accordance with a preordained set of rates and employment utilisation arrangements.

By imposing these agreements on interested construction companies, the use and price of labour is eliminated as a competitive element in the tendering process. This suits the interests of the larger and established construction firms because it prevents smaller construction firms or potential new entrants from offering services that may be more competitive. This restricts competition, giving the established construction firms significant advantage in the tendering processes. The outcome is that the established construction firms dominate the resource sector construction market. Further, banks and financiers will not give smaller resource companies finance unless they use these WACCI agreements in construction. Perth is a small city and everyone knows everyone. It's a tightly controlled situation.

Needless to say, each new project industrial agreement includes an increase in cost and a decrease in productivity compared to the previous agreement. For example the Victorian desalination plant set a new, higher benchmark for costs that rolled out across Australia. This is why the rate of cost inflation in the resources construction sector is unsustainable.

We allege that this has been the dominant factor in the massive cost blowouts in the resource development sector in Western Australia. The outcome has been a major curtailment, indeed the destruction, of the resource boom potential of Western Australia. This cannot be blamed on unions or the industrial relations

system as such. They are players in the process. However, it has been the WACCI, in concert with the major resources houses and EPCM contractors that has led to a significant curtailment of competition in construction in WA.

The resultant constraint upon competition is the primary reason for the cost blowouts that have led to resource projects being cancelled.

As irrational as it may seem, the fact is that the constriction of the resource development boom is a direct outcome of home-grown bad managerial ineptitude and an absence of strategic thinking.

Here are two typical WACCI agreements imposed on construction companies tendering for work.

- Wheatstone Agreement <http://www.independentcontractors.net.au/Downloads/Construction/wheatstone-information.pdf>
- BHP Billiton Iron Ore Projects <http://www.independentcontractors.net.au/Downloads/Construction/BHP-information.pdf>

In 2001 we predicted and warned about the cost blowouts killing the resources development boom. [http://www.independentcontractors.net.au/\\_bpost\\_6550/IR\\_backpedals\\_over\\_the\\_boom](http://www.independentcontractors.net.au/_bpost_6550/IR_backpedals_over_the_boom) It's sad to see that our predictions and warnings have proven to be accurate.

This situation is not limited to WA. Major construction projects for coal mining and materials handling infrastructure in Queensland and NSW experience a similar 'pattern' approach to construction labour agreements. Although the process is less overt than in WA, the result is the same.

- *The role of Workcover authorities in the anti-competitive system*  
Workcover authorities in each state play a major role in checking for unsafe practices in the construction sector. However, a level of corruption exists within the authorities such that they routinely act as enforcers of union wishes. What happens is that if a union cannot bend an employer easily to its will, the union complains to a local Workcover authority enforcement officer. Many Workcover authority personnel are ex-union officials and/or have close links with unions. A Workcover inspector will turn up at a worksite and find safety 'concerns' spread widely across the site that would not ordinarily be considered safety issues.

Take this example: One small contractor who supplied product to a construction site did not have union members or a union EBA. The union turned up on site with five 'heavies', illegally entered the site and proceeded to 'shirt front' the dozen-or-so employees about joining the union. All the employees rejected the union's demands. The union heavies confronted the owner of the business, insisting he have a union agreement—which he refused. After calling the police the union officials left.

The following day the local Workcover inspector arrived. He was familiar with the business having been active with the business owner on improving work safety standards over several years. The inspector had been at the site two weeks earlier and found no problems. On this unannounced visit he 'discovered' numerous safety issues and ordered work to stop. The inspector made it quite clear to the owner that

he reluctantly had to take this action. Further, that any ‘safety’ issues would disappear if the owner entered a union agreement.

- The issue of ‘prequalification’

Government construction procurement agencies have a ‘pre-qualification’ process for contractors wishing to tender for work. If a construction business is not pre-qualified, it cannot tender for work. Pre-qualification requirements include demonstration of technical and financial capacity, demonstrated safety systems and standards in place and the capacity to complete projects. On the latter—the completion of projects issue—governments routinely consider industrial relations arrangements. If union agreements are not in place, government procurement agencies are less inclined to award pre-qualified status. In effect, government procurement agencies have created major barriers to entry for potentially new construction players to the industry.

What the foregoing examples demonstrate is that it is not simply the unions’ and the major contractors’ actions alone that enable the anti-competitive cartel to operate. Instead, the cartel’s activities themselves have become so widely accepted within management behaviour and government institutions that the cartel has become institutionalised.

### **3.2 Cost is not what it seems**

When most people hear about union negotiations over industrial agreements, it is assumed that the negotiations are over pay rates. But this is probably only a quarter of the cost story. The real cost issues are associated with the ‘conditions’ side of agreements. Typically, ‘conditions’ in industrial agreements go to issues beyond worker pay rates to issues directly affecting the management of jobs. These include, for example, management having to obtain union approval about

- rosters and roster changes and work schedules,
- delivery schedules,
- which subcontractors can be used,
- the employment of union nominated safety officers,
- industry and job wide shut down days (rostered days off),
- the forced requirement of businesses to employ union shop stewards and union ‘safety officers’,
- industry-wide close-downs through fixed long weekend ‘leisure’ breaks. During Easter, for example, this can result in an industry close-down for ten days.
- and much more.

In comparison to these issues, the pay rate to workers as such is a comparatively small cost item in any construction project. What matters in terms of cost is the productive output of labour. It’s necessary to understand this difference between worker pay and productivity. This is dependent on managerial expertise.

Industrial agreements in construction are specifically designed to limit the ability of managers to manage the workforce and deploy work schedules in a way that maximizes productivity. It is this poor productivity that is the major contributor to the cost explosion in infrastructure construction. The erosion of managerial prerogative is the efficiency killer that is institutionalized through the industrial relations system. The IR system has to be seen as broader than simply unions, industrial relations laws and

industrial relations commissions. It includes behavioural processes within management and within employer associations that condone the limitation of management capacity.

The extent of the problem has been exposed most recently by the industrial relations commentator Grace Collier. She has provided a number of case studies in various industry sectors. Collier dissects the details of industrial relations arrangements that suppress managerial capacity, thereby creating poor performance.

- On Qantas <http://www.theaustralian.com.au/opinion/columnists/workplace-apartheid-clips-wings/story-fnkdybpm-1226804170465>
- Australian Industry Group and manufacturing <http://www.theaustralian.com.au/opinion/ai-group-has-its-role-in-manufacturing-the-decline/story-e6frg6zo-1226794410750>
- Corporate welfare subsidising bad management <http://www.theaustralian.com.au/opinion/columnists/the-blight-that-is-excessive-bargaining/story-fnkdybpm-1226792146765>
- Tooheys funding a union business <http://www.theaustralian.com.au/opinion/columnists/business-must-build-some-ir-backbone/story-fnkdybpm-1226787721474>
- Holden <http://www.theaustralian.com.au/opinion/columnists/enterprise-bargaining-with-union-sealed-fate/story-fnkdybpm-1226781040913>

The Institute of Public Affairs created an index around which this could be measured. Known as the Capacity to Manage Index, <http://www.ipa.org.au/publications/index/type/8> it applied a measurement tool to industrial relations agreements across six industry sectors. The 2003 report on the construction sector showed a significant negative rating across the sector as a whole, although there were some companies that were not badly affected. But in the main, industrial agreements in construction severely limited the ability of managers in businesses to manage their operations. This has implications for competition.

The most influential anti-competitive ‘condition’ in industrial agreements is the one that stipulates that, when subcontracting work, a contractor must require any subcontractors to use the same industrial agreement that the contractor has with the union. It is this clause in industrial agreements, more than any other, which locks in the collusive, cartel arrangements. It means that the union, in conjunction with (mainly) 1<sup>st</sup> tier and EPCM contractors, through their control of large construction projects, can limit or eliminate the productivity at which potential competitors are able to operate.

In construction, every sub-contractor is a potential competitor to major contractors. If subcontractors are too successful, too productive and too profitable, they often start to think that they can bid directly for larger projects. As discussed earlier, a prime motivation of major contractors is to limit the competitive field in which they operate. This is particularly the case in a relatively small economy such as Australia’s.

Through collusive activity with unions, major contractors can and do impose controls over the price and operational productive capacity of potential competitors. As discussed above, the process involves:

- Major contractors entering industrial agreements with unions.
- Unions, in conjunction with industry associations and major contractors imposing those agreements as a standard across a sector.

- Industrial relations laws (Fair Work Act, etc.) sanctifying the agreements through quasi-courts (Fair Work Australia) giving the anti-competitive arrangements legal protection and a measure of moral sanction.
- Unions supporting major contractors when bidding for construction work, particularly government infrastructure, by letting it be known that particular major contractors have union support guaranteeing that the project will be delivered on time and on budget. This applies particularly for financing and government approvals processes.

This general overview holds true as the dominant commercial dynamic across construction in Australia. There are always aberrations, of course!

- Sometimes, smaller contractors do manage to defy the system and operate successfully without union control. They can become quite big and bring to the market a measure of competition to the major contractors. These contractors tend to be privately/family-owned and operate in defined market segments of their choice. Grocon in Victoria and Meriton Apartments in New South Wales are perhaps two examples.
- Unions can be unreliable and major contractors can sometimes be burnt by unions not delivering on their agreements or worse. Thiess (a Leighton Holdings subsidiary) and a principal contractor on the Victorian desalination plant, is probably an example. Thiess made a highly union-friendly deal through the Victorian Trades Hall Council that arguably played to the internal politics of the Labor government at the time, to enable Thiess to win the tender. However, during construction of the plant the unions ‘played up’ big time and were a principal reason for Leighton suffering the losses that it incurred.

But even given such aberrations, the analysis of anti-competitive, collusive behaviour affecting major construction tendering and work is the best account that explains the large cost blowouts in infrastructure construction. It is the restrictions on the capacity to manage that have the greatest impact on price because they crush productivity. Yet these restrictions are institutionalized and supported by the major construction firms because it is in their self-interest to have this occur.

#### A cover for criminal behaviour

The collusive behaviour that exists would arguably be considered criminal behaviour in other commercial contexts. That is, if competitive business operators, either directly or through intermediaries met for the specific purpose of fixing prices between them, those parties would be subject to criminal sanction.

However, under industrial relations arrangements, industry associations and unions act as intermediaries for that very purpose—that is, to fix (labour) prices and arrangements. In construction this results in putting a floor under at least 50 per cent of construction costs thereby creating standardization of pricing which in turn heavily limits competition. Further, unions act to enforce these arrangements across all potential competitors where they can. The process is given legal sanction and protection through industrial relations law.

### **3.3 Two dominant 1<sup>st</sup> tier contractors operating nationally**

Over the last few years competition in the construction sector has diminished significantly. Specifically, two major players have emerged who dominate the top end of the market—particularly that part of the market for major government infrastructure.

What has happened is that major players in the industry have been acquired or ‘swallowed up’ by the biggest players, thereby diminishing the competitive environment. There is now a situation where Lend Lease and Leighton Holdings have such a level of dominance that competition is restricted.

a) Leighton Holdings operates through its wholly owned subsidiaries

- Thiess
- Leighton Contractors
- John Holland

These subsidiaries have acquired a number of other contractors.

- Leighton Contractors has majority shareholding in Broad Construction;
- John Holland acquired Transfield Construction, Fletcher Construction and the construction business of Macmahon;
- Thiess owns a significant proportion of Sedgman;
- Leighton Holdings owns a majority shareholding in Devine.

b) Lend Lease operates through its wholly owned subsidiaries

- Bovis Lend Lease
- Abigroup
- Balderstone

As mentioned earlier, there are some smaller 1<sup>st</sup> tier players, but they operate in relatively narrow markets

- Grocon: Operating mostly in Victoria with some activity in NSW and Queensland.
- BGC: Operating mostly in Western Australia with some activity in NSW and Queensland.
- Meriton Apartments: Operating mostly in NSW

And there are several 2<sup>nd</sup> tier contractors who work on smaller civil engineering projects:

Laing O’Rourke	Hansen Yunchen	Watpac
Hazelbros	BMD	Winslow
Fulton Hogan	McConnell Dowell	ProBuild

The following 2<sup>nd</sup> tier contractors work mostly on commercial construction.

Cockram	Adco	Built	Kane
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But the dominance of Leighton and Lend Lease has reduced competition in the construction supplier market.

A former feature of Leighton’s and Lend Lease’s structures had been that their wholly owned subsidiaries operated independently and in competition with each other in tendering for and winning work. Whether this structure ever constituted genuine competition is unknown. What we do know is that actual competition no longer exists.

In 2012–13 both Leighton Holdings and Lend Lease eliminated the independence of their divisions and introduced central control over all tendering.

In a memo issued on 9 March 2012, Leighton Holdings advised its divisions that tenders would be centrally coordinated.

And a Lend Lease email ‘Broadcast’ 17 June 2013 from David Saxelby, CEO Lend Lease Construction & Infrastructure, advised of a new central control for tendering by its subsidiary companies:

The question is, do these two dominant players now control such a high percentage of the construction market that it could be said that a worrisome anti-competitive situation exists? The answer is that, particularly for major government infrastructure work, the operations of the duopoly constitute a significant limitation on a healthy competitive market.

The reasoning is as follows:

Based on Australian Bureau of Statistics, <http://www.abs.gov.au/ausstats/abs@.nsf/mf/8755.0> engineering Australian construction work undertaken for the quarter ending September 2013 was in the order of \$32 billion—say, \$120 billion per annum.

Based on the following information

Leighton’s Australian engineering construction is, say, worth \$12 billion

Lend Lease’s Australian engineering construction is, say, worth \$3 billion

Leighton: <http://www.asx.com.au/asxpdf/20130327/pdf/42dxxp76qkhtkh.pdf>

“The Leighton Group reported a solid profit result for the 12 months to 31 December 2012. Revenue for the period totalled \$23.1 billion with \$19.1 billion generated from the Australia/Pacific region and \$4.0 billion from the Group’s international operations. The major revenue-generating sectors for the Group during the year were infrastructure \$11.9 billion, resources \$9.1 billion and property \$1.5 billion. Our Operating Companies provided a range of services to these sectors including construction worth \$14.3 billion, contract mining worth \$5.4 billion and operations and maintenance worth \$2.3 billion. In the resources sector, in addition to contract mining we undertook substantial construction work in the oil and gas sector, primarily for several major liquefied natural gas projects currently underway and a small amount of commodities construction.”

Lend Lease Construction: <http://www.asx.com.au/asxpdf/20130823/pdf/42hvv5j54ypdtl.pdf>

	JUNE 2012	JUNE 2012	JUNE 2012	JUNE 2012	JUNE 2012
	ASm	ASm	ASm	ASm	ASm
<b>Australia</b>					
Development	1,107.0	528.1	276.4	72.5	26%
Construction	6,441.7	6,616.8	225.6	358.3	17%
Investment Management	98.6	253.0	53.4	62.8	5%
Infrastructure Development	87.4	13.4	58.9	7.6	5%
<b>Total Australia</b>	<b>7,734.7</b>	<b>7,411.3</b>	<b>614.3</b>	<b>501.2</b>	<b>65%</b>

So the two corporations have \$15 billion out of a \$120 billion market—or 12.5 per cent. However, these big corporations are primarily focused at the top end of the market—state government-funded infrastructure in particular. Assuming that major (that is, greater than \$200 million) state government engineering infrastructure projects form one-fifth of the \$120 billion (that is, \$24 billion); and that Leighton Holdings and Lend Lease receive 80 per cent of their revenue in that sector, then the outcome is a combined revenue of \$12 billion in a market of \$24 billion—in other words, 50 per cent of major government infrastructure.

This analysis is probably soft, in that if one looks at who wins the bids, it is primarily Lend Lease and Leighton who do so. There is perhaps an appearance of there being more players in this major segment of the market, but in fact most players are subsidiaries of Leighton or Lend Lease.

Further, it is arguable that the market power of Leighton and Lend Lease is even greater because the state government procurement agencies and their consultants find it much easier dealing with the big end of town (“no-one gets fired for buying IBM!”) than in fostering smaller players or new entrants.

#### **4. Solutions: Australian governments have a right to demand value for money and to use their commercial power to ensure a fully competitive market**

The ‘battle’ to clean up the Australian construction sector has been going on for perhaps three to four decades, even more. It reached it’s peak following the Cole Commission and the introduction of the Australian Building and Construction Commission in 2005.

Throughout this period construction unions have been portrayed as the ‘evil’ ones. Employers have been treated as ‘victims’ of bad union behaviour. The emphasis on ‘fixing’ the problem has been to focus on applying the rule of law to union behaviour, mainly through prosecuting illegal union activity. This focus on unions is and remains highly relevant. Construction unions have a long, documented, proven history of violent intimidation to enforce their will on construction contractors, subcontractors and independent contractors.

However, this single focus masks the real process in play. This submission argues that in fact there is willing, intentional, collusive behaviour between unions and major construction firms. Further that the union violence and intimidation is used to help frame an anti-competitive market favouring major construction firms. Through industrial relations laws, institutions and practices this collusive behaviour is made legal. Much of what occurs in the relationships between unions and major construction firms would, in other contexts, be considered criminal manipulation of a market. This includes obvious criminal activity such as secret commissions, bribery and so on.

This assertion is clearly supported by the EastLink Project (refer to IPA case study). This project was delivered below budget and early because the contractor unilaterally decided to reclaim the managerial prerogatives that had been conceded by major contractors to the unions in Victoria over the previous 25 years

The cover-up that occurs through industrial relations settings is so developed, long-standing, institutionalised and sophisticated that fixing the situation through legislative means and enforcement alone is unlikely to produce a lasting or fundamental solution.

It is true that during its operational period (2005–2012) the Australian Building and Construction Commission proved to be highly effective at reducing union violence and intimidation. Construction unions were prosecuted and fined for illegal and violent

behaviour. Construction firms, particularly smaller ones, who were subjected to union intimidation and violence were able to contact the ABCC and have the situation investigated. Days lost due to strikes in the construction sector plummeted during the ABCC period and productivity went up.

However

- When construction unions were fined, they ‘passed the hat’ around to construction contractors who paid up, thereby covering the unions’ losses. This occurred to the extent of millions of dollars.
- ABCC prosecutions occurred after intimidation had happened and when the commercial damage to the construction firms had already occurred. Most smaller firms subject to intimidation could not afford to litigate to recover damages.

The ABCC needs to be reinstated. But reinstatement alone is not enough. ABCC reinstatement should be seen as part of a package of measures to bring strong competition into the commercial construction sector. The following additional measures are recommended.

#### **4.1 Make payments in any form from construction companies to unions illegal and criminal**

Through their managers, construction firms regularly make payments to construction unions or union-controlled funds such as Incolink. All such payments should be illegal unless directly required under legislation. Payments made as a result of an industrial agreement should not be allowed and should specifically be illegal. The provision of services such as life or income insurance or training through entities directly or indirectly associated with unions or their officers should be outlawed. The sanction for such payments should be brought to bear against the construction firms and the individual managers who authorise, are a party to and/or make the payments, as well as against unions and union officials who receive the payments. Such sanctions should be criminal in nature. Company executives, managers and owners, and union officials should know that they face the prospect of jail if they are involved in such payments.

Illegal payments should include

- Direct cash of any kind or ‘in kind’ payments, including the provision of holidays, travel, accommodation, cheap housing, ‘personal’ services or any other.
- Contributions to union funds, such as ‘Christmas’, union BBQ, training, long service leave (controlled by unions fully or in part) redundancy and so on.
- Contributions to undisclosed ‘slush’ funds of any nature.
- Commissions—either secret or disclosed.

All such contributions should be seen through the prism of corruption and treated as bribery payments.

Many of these sorts of payments are currently sanctioned through FWA endorsement of industrial relations agreements. The ‘normal’ solution, therefore, would be to amend industrial relations laws to prevent such payments. This is one approach but it is not enough. The only way to permanently stop such payments is to make the payer

(construction firms and their managers/executives) personally criminally liable for making such payments. With this in place they will stop quickly.

#### **4.2 Government codes of practice applying to government construction projects**

The most important tool governments have to ensure that industrial agreements do not act to limit competition is the use of their commercial position in the procurement market.

Codes of practice for government construction procurement have been around for some thirty years, but have not been fully used in the way that they should. Even under the ABCC, the codes of practice for construction were significantly underused.

Governments have a right as the purchaser/consumer of infrastructure projects to demand and control not only the type and quality of the end product to be constructed but also to demand oversight of the construction processes in a way that will give government the best value for money. This right to set parameters over construction processes should extend to industrial relations arrangements. The important thing is to ensure that a code of practice is applied at the point of tendering so that companies will factor the code requirements into their management and budgeting configurations. Further, that companies winning work have the code written in as part of their contractual terms.

The Victorian government designed and applied an effective code in 2012. <http://www.dtf.vic.gov.au/Infrastructure-Delivery/Construction-code-compliance> The validity of the code was challenged in the Federal Court in late 2012 by the construction union, the CFMEU. The CFMEU alleged that the Victorian code breached the *Fair Work Act*. A single judge ruled in favour of the CFMEU.

Here is the ‘logic’ of the CFMEU’s position.

- The Victorian government was tendering for work. No contract existed between the Victorian government and anyone.
- The Victorian government required tenderers to comply with certain things in the putting of tenders.
- The CFMEU was not a party to any contract or likely to be a party to any contract with the Victorian government. The Victorian government would not have an employment relationship with anyone doing any work on the job.
- However the CFMEU argued that, as a party with no contractual connection to the government, damage would be done to unidentifiable employees (who did not exist) in a contractual situation that did not exist.

The CFMEU’s ‘argument’ demonstrates the stupidity of the industrial relations environment. The players in industrial relations believe that their quasi-legal paradigm overrides the fundamental principles of contract law that are the bedrock of a market economy; namely, that obligations only exist between parties where a contract exists.

In effect, the CFMEU’s legal application could allegedly be taken as an attempt to protect the commercial position of Lend Lease. There’s no suggestion that Lend Lease was involved in this respect. However it was instructive that it appears that Lend Lease did not lodge objections to the court over the CFMEU’s applications.

The Victorian government appealed the decision of the single judge and achieved a ruling <http://www.independentcontractors.net.au/Downloads/Construction/13170063-CDOC-Judgment-191213.pdf> in its favour on 19 December 2013. The Full Bench of the Federal Court said of the single judge's decision (in part) that "...conclusions of this kind appear to ... reflect value judgments rather than legal conclusions."

With this Full Bench ruling the Victorian construction code can be applied to its fullest extent. Similar codes have been developed and implemented during 2013 in New South Wales and Queensland and the Federal Government is proposing a national code along similar lines.

If these construction codes are fully applied to public infrastructure construction, Australian governments, state and federal, will arm themselves with a strong capacity to break up the construction cartel. By ensuring that labour utilisation arrangements do not operate to favour anti-competitive outcomes, more competitors and competition should emerge based around higher levels of productivity. It is productive increases through competition that have the best chance of driving down infrastructure construction costs.

Again, however, this will not be enough.

#### **4.3 Government should reassert control of its construction procurement practices**

As a matter of principle, governments should not be the actual deliverer of commercial services. Ideally, they should contract out service delivery to the private sector. What governments should be is experts at contract management to ensure that the best value for money is achieved in the delivery of services. Construction procurement should be the prime example of where government is most expert at contract management. Through good contract management, government is better able to target a spread of work across all different sized construction players in order to encourage as broad a competitive market as possible.

However, over the last few decades, Australian governments have stripped themselves of much of their core contract management capability in construction procurement, thereby weakening their ability to affect a competitive environment.

This has happened for several reasons but the most dominant factor is as follows.

Some decades ago, major infrastructure construction was tendered out in smaller project lots. For example, when the Hume Highway was upgraded and duplicated between Melbourne and Wodonga, each bridge that was to be built was separately tendered. This meant that a wide range of smaller-to-midsized construction firms could raise finance, tender for and win work. This helped to ensure that a relatively large number of construction firms operated in the market.

If the Hume Highway upgrade were to be undertaken today, the entire project would invariably be tendered as one large project. There has been a shift in government thinking about how it manages and tenders large infrastructure projects. This has been driven by the concept and application of public/private partnerships. The experience of PPPs is that some have been successful and some spectacular failures. But what is clear is that this approach has had the following consequence for the construction market.

- Government funding for infrastructure is now narrowly organised through a comparatively small number of merchant and other banks and financial institutions. Government has become largely dependent on these institutions and deny itself the capacity to raise funds from a broader range of smaller potential providers. This reduces competition in the fund-raising market, probably creating higher costs for government.
- A much smaller number of much bigger construction firms have emerged in the market. Medium and even smaller players have been eliminated and/or swallowed up by big players (as chronicled above in the case of Lend Lease and Leighton). Government has now made itself dependent on these large players and is therefore vulnerable both to manipulation and (potentially) price gouging.
- Much of governments' capacity to contract-manage construction projects has been removed. Governments have restricted their contract management to relationships with large firms at a high level. Governments' capacity to contract manage and assess value for money at more detailed levels of construction of infrastructure has been heavily stripped out.

To address this situation Australian governments should, wherever possible, break up large infrastructure construction projects into smaller job lots. That is, have multi-billion dollar projects broken up into several project lots in the hundreds of millions of dollars (and, for example, have \$500m projects broken into \$100m job lots, and so on).

This would not exclude undertaking some projects as large single projects. However, this should not be the default assumption. Currently a presumption exists that infrastructure construction should be tendered as large project packages. At the very least, all large projects should be approached with a view to breaking them up into smaller job lots. There should be contestability comparing single project tendering to 'broken up' tendering.

In taking this approach government will need to reclaim its contract management capability. This could be done either within the public sector structure or by outsourcing it to the private sector or a combination of both. For state governments, re-creating that capability may prove more difficult as large infrastructure projects aren't undertaken all that frequently. Through a cooperative federalist approach, however, there may be an opportunity for the federal government to re-create lost or surrendered capability which it could provide to state governments on a commercial basis as required.

This requires far more knowledge of world-class construction procurement methodologies; and a far greater understanding and awareness of the major contractors' business model. Construction procurement should be centralised, and the various commercial barriers that are given effect through pre-qualification processes and completion guarantees should be radically redesigned to not only discourage, but encourage new and smaller entrants into the market.