ACORE Canberra



6th October 2005 Ed Willett. Commissioner

During the 1990s, concerns that Australia's economic performance was lagging prompted the nation to embark on an ambitious micro-economic reform program known as National Competition Policy (NCP).

The financial reforms of the 1980s to free up the Australian economy had done much to halt the slide in our economic standing but the early 90s recession had shown that still more needed to be done to make Australia truly competitive.

In response, Australian governments agreed to examine a national approach to microeconomic reform in order to improve Australia's economic performance. After an independent review, known commonly as the Hilmer review, Australian governments agreed in 1995 to the NCP reform package.

The reforms they initiated in response to this agreement were very far reaching.

National Competition Policy opened up to competition formerly closed off areas of the economy such as state run electricity generation and transmission, gas pipelines, airports and rail links.

It did this through the extension of the Trade Practices Act to almost the entire economy and the removal of structural and legislative impediments so as to facilitate more competition in the non-traded goods sector.

Competition was not pursued for its own sake, but rather effective competition was recognised as a means of enhancing community welfare by promoting a more efficient use of resources, thus providing greater returns to producers and higher real wages. Of particular note, the reform program recognised that infrastructure monopolies posed particular competition and regulatory challenges and that simply privatising or deregulating these monopolies would, on its own, do little to promote competition. Thus, the reforms brought with them new responsibilities for the ACCC.

So, the Commission was given the task of overseeing aspects of the deregulated government monopolies where it was deemed that competition could only be achieved through government intervention.

Most independent observers agree the reforms have been a resounding success and have, not by co-incidence, coincided with the longest run of sustained growth in our history.

Indeed, the most recent OECD economic survey of Australia singled out National Competition Policy reforms as playing a central role in Australia's economic success story and declared that in "the last decade of the 20th century Australia became a model for other OECD countries".

Our own Productivity Commission estimates the reforms lifted the economy above its long term growth path by around 2.5 per cent of GDP or \$20 billion in the 1990s².

In recent months though, Australia has been engaged in a further debate questioning not so much the worth of these reforms, but the means by which they were achieved – namely, the government regulation that oversaw the process and claims that this has now led to an infrastructure crisis.

I'll talk later about how these claims are somewhat overblown, but also about the problems that do exist, the lessons we have learned from infrastructure regulation to date and what we believe can be done to further improve regulation of essential national infrastructure.

But I want to start by talking about the history of National Competition Policy, and focus on three specific areas – telecommunications, gas and electricity.

History of ACCC regulation

Hilmer began from the proposition that competition policy across all Australian industries should desirably be administered by a single body. In particular the review concluded there were sufficient common features between access issues in the key network industries to administer them through a common body.

As Hilmer said "as well as the administrative savings involved, there are undoubted advantages in ensuring regulators take an economy wide perspective and have sufficient distance from particular industries to form objective views on often difficult issues".

This was the role given to the Australian Competition and Consumer Commission – to oversee aspects of the deregulated government monopolies where it was deemed that competition could only be achieved through government intervention, but to do this in a way the promoted both the interests of consumers and infrastructure owners.

According to the Hilmer review the intended objectives of NCP were:

- The creation of an economy wide competition law
- Competitive neutrality between government and private enterprises
- Removal of regulatory restrictions to competition

² Review of National Competition Policy Reforms Productivity Commission Inquiry Report No. 33. February 2005. Page XVII

¹ OECD Economic Survey of Australia 2004 Policy Brief January 2005. Page 2

- Structural reform of public monopolies
- Access to essential facilities
- Prices oversight to constrain monopoly pricing

Monopolies which are subject to public regulation are typically very capital intensive and require significant investments in long-term, fixed capital structures. Investors are sensitive to the prices charged, particularly once the investments are sunk and keen to ensure the government does not bow to political pressure to redistribute their profits back to influential interest groups.

Without credible assurances that rules for price setting will provide a reasonable opportunity for suppliers to not only recover their investment and costs, but provide an appropriate return on the investment, it will be both more difficult and more costly for the monopoly entity to attract capital. This runs the risk that investment decisions may be distorted.

Consumers on the other hand have a different concern – the fear that allowing one service provider to dominate a particular market will lead to their exploitation through excessive prices and poor service.

New entrants seeking to enter the opened-up contestable parts of the supply chain by accessing the incumbent's facilities, such as occurs in say rail, electricity or telecommunications, also need to be protected from unreasonable restrictions on access to a network to create an environment for competition to thrive.

So, the task of ACCC regulation is to reasonably ensure that:

- investors in monopoly infrastructure earn an adequate return over the life of the investment and will not have their profits redistributed once their investments have been sunk
- consumers are protected by either competition, where viable, or regulation, where it is not
- competition in contestable areas is promoted; and
- the regulated entity can and will adapt well to changing economic and technological conditions.

Telecommunications under NCP

Historically, Australia's telecommunications industry was dominated by a single government owned national carrier with a legislative monopoly – the Post office, and its successors Telecom and Telstra.

The telecommunications sector in Australia has been subject to gradual deregulation since the late-1980s, with significant changes made in 1991 with the introduction of a regulated duopoly in fixed line telephony and a triopoly in

mobiles, and in 1997 with the establishment of full competition and revisions to the regulatory framework.

Since the opening up of the telecommunications market to full competition in July 1997, new investment in telecommunications infrastructure has totalled more than \$24 billion, and in 2003-04 alone more than \$2.5 billion was invested. Investment in mobile network infrastructure accounted for almost half of this amount (44 per cent), followed by local access networks (35 per cent), transmission networks (14 per cent), xDSL services (6 per cent), and ISDN services (2 per cent).

The expansion of infrastructure has brought significant benefits to consumers. There has been a general downward trend in the prices of most call services with the price of an average basket of telecommunications services falling by 20.1 per cent in real terms between 1997–98 and 2002–03. And in the year since the ACCC intervened in the ADSL pricing case, broadband take-up has exceeded 1 million – a massive 120 per cent increase in just 12 months.

Importantly, the explosion in broadband customers has been shared by both Telstra and its wholesale competitors.

Broadband take up has now reached the point where it is becoming increasingly viable for access seekers to roll-out their own DSL infrastructure into a larger number of Telstra's exchanges.

These outcomes highlight the benefits that are possible through infrastructure-based competition. Whereas the initial benefits of the current telecommunications regulatory regime were almost entirely due to competitors entering at the retail level and making use of regulated interconnection to drive down retail costs, the more competitive, innovative areas are those in which competitors have built their own networks, rather than just reselling space on Telstra lines.

But though our stocktake of infrastructure investment reveals good results in telecommunications, some critics still argue that investment and innovation in Australia's telecommunications network, including extensive broadband deployment, is hindered by regulation.

Not surprisingly, the ACCC takes a different view.

The overriding issue in this industry is the dominance of the telecommunications sector by just one player - Telstra - by virtue of it being the sole provider of the ubiquitous local access network connecting virtually every home and business in the country. This monopoly means that even in the more competitive markets, those seeking to compete with Telstra continue to rely on Telstra for some form of access to its network.

The Government's proposed model for operational separation of Telstra recognises that Telstra is in the unique position, through its monopoly over the local access network, of being able to stifle innovation by frustrating its competitors' investment plans.

For this reason, the ACCC welcomes changes which should increase transparency and equivalence in the way Telstra provides key access services to its own downstream operations relative to those of its competitors.

And despite the scepticism of some commentators, the Government's program is not designed to undermine Telstra's value, but rather to ensure that its fixed network monopoly (which Telstra itself concedes should still be subject to regulation) is operating in a transparent way. Telstra should have nothing to fear from this, as such transparency should provide it with a much more certain starting point for verifying that Telstra is competing on a fair basis.

The issue of the moment in this area is ULL pricing. The Commission believes that pricing of access to the unswitched copper twisted pair connection from the exchange to just about every Australian home should be based on our best estimates of the cost of that infrastructure, recognising that these costs will vary throughout the country. This approach has two important benefits:

- First, it facilitates investment in competitor Digital Subscriber Line
 (DSL) services over copper where this competitive investment is viable
- Second, and no less important, it recognises and facilitates the
 possibility of investment in emerging alternative technologies (such as
 wireless services) on non-metropolitan areas where coper-based
 services are inevitably high cost, lower quality and less efficient.

The current push by Telstra to average ULL pricing is, in the Commission's view, an attempt to deter investment in DSL infrastructure where it imposes a competitive threat, while at the same time, also deterring investment in better technologies for regional services.

Telstra should fear the threat of competition and respond to it. But it should not be allowed to defeat this threat by government lobbying. The quality of its responses to emerging competition should, alone, determine Telstra's prospects and value to shareholders.

Gas and electricity under NCP

The gains from National Competition policy reforms in the energy sector have been even more convincing.

Prior to NCP the gas industry, for example, was state based with supply to demand centres typically met by a single basin through a single set of pipelines publicly owned by various states and vertically integrated (across transmission, distribution and retail).

Further, ownership of supply sources was highly concentrated.

Governments therefore agreed to reforms to:

• Remove legislative restrictions upon the interstate trade of gas

- Place gas utilities on a commercial footing through corporatisation
- Vertically separate transmission and distribution businesses and 'ringfence' these businesses from the other activities of private gas utilities
- Implement a uniform national access regime for transmission pipelines
- an agreement to franchising principles that include an obligation to introduce full contestability of retail customers

As a result of these reforms tariffs for pipelines covered by regulation are typically lower than pre-regulation tariffs. Research carried out for the ACCC suggests that without regulation, prices would be significantly higher, and GDP lower, if all controls were removed.

But this has not come at the cost of investment. The Pipeline Industry Association is one of fiercest critics of ACCC regulation, but even its own figures show 14,000 km in new transmission pipelines have been laid in Australia since 1997. This amounts to a doubling in the length of transmission pipelines to 28,000 km in just seven years.

Capital expenditure on new pipelines has increased substantially with major new pipelines to have been constructed recent years including:

- Eastern Gas Pipeline: Longford (Vic) to Sydney
- Tasmanian Gas Pipeline: Longford (Vic) to Tasmania
- Roma to Brisbane Pipeline looping
- SEA Gas Pipeline: Port Campbell (Vic) to Adelaide
- North Queensland Gas Pipeline: Moranbah to Townsville
- Telfer Gas Pipeline: Port Hedland to Telfer (WA)

In addition, two new pipelines currently under advanced stages of planning and development are.

- Central Ranges Pipeline: Dubbo to Tamworth
- PNG Gas Pipeline: Papua New Guinea to South East Queensland (including a lateral to Gove in the Northern Territory)

The proposed PNG pipeline, with expected capacity of around 200PJ a year, will be one of the largest pipelines that Australia has seen in recent times. On completion, it may even satisfy most of the additional demand for gas and probably result in no new major pipeline developments to service the eastern Australian gas markets, for some considerable time.

Electricity is a very similar story.

Historically, the electricity industry was state-based and publicly owned. Each state was largely self-sufficient in terms of generation. There was excess generation capacity in each of the states with interconnection limited to Australia's two largest states, New South Wales and Victoria. The infrastructure for generating, transporting and retailing electricity was vertically integrated.

As a result, governments agreed to:

- placing utilities on a commercial footing through corporatisation
- vertically separating generation, transmission, distribution and retail businesses, and 'ring-fencing' these businesses from other activities
- allowing for customer choice of supplier through full retail contestability (FRC)
- implementing a system of third party access to transmission and distribution infrastructure on fair and reasonable terms
- establishing a wholesale electricity trading market known as the 'National Energy Market'

Overall electricity prices have declined in real terms since the creation of the National Energy Market and once again, this has not come at the expense of investment.

Since responsibility for transmission regulation in the National Electricity Market began being progressively transferred to the ACCC in 1999, our decisions have accommodated over \$4.5 billion in transmission investment.

Just this year the ACCC paved the way for \$1.4 billion in new investment in electricity transmission in NSW and the ACT alone over the next five years with its final revenue cap decisions for TransGrid and EnergyAustralia.

It was no surprise therefore that in response to the 2002 Parer Review, the Ministerial Council on Energy agreed that significant benefits had arisen as a result of the opening up of energy markets including:

- Considerable integration of the wholesale electricity markets in Victoria, New South Wales, Queensland, the ACT and South Australia.
- Substantial investment in new electricity generation and gas production, and in particular in electricity and gas transmission interconnection between states in eastern and south eastern Australia.
- Vigorous electricity retail competition in the medium and large business sector and accelerating competition in the newly opened household and small business markets in NSW and Victoria.
- High levels of supply security, and improvements in network reliability.

So how does one square results like these with the more pessimistic view coming particularly from certain sectors of business? For example, according to CEDA:

"There is a serious backlog in infrastructure investment, in water, energy and land transport, estimated conservatively at \$25 billion, which requires immediate attention. Institutional structures – those of Commonwealth, State and Local governments – which have served Australia well in decades past now appear unable, and ill-equipped, to grapple with the nation's present infrastructure planning and delivery challenge."

Or this, from the Business Council of Australia report from March

³ "Infrastructure: Getting on with the Job". Committee for Economic Development of Australia April 2005. Page 5,

"the current state of Australia's most fundamental infrastructure – supporting all elements of the transport network, energy and water supplies, and the basic facilities to support growing and spreading urban communities – is in urgent need of reform, repair and expansion. We are at the crossroads in terms of infrastructure development as a result of poor institutional arrangements and policy choices."

While there appears to be a divergence of views it is possible to reconcile, at least in part, the views expressed in these latter reports as saying that however well we have done in the past we need to do better if we are to be able to meet Australian infrastructure needs.

Streamlining and improving regulation

According to critics, the great achievements of NCP were achieved in spite of, not because of, the regulation that went with the opening up of the economy, and if this regulation were freed up or removed, so the argument goes, growth would be even greater still.

Supporters of this argument point to an alleged infrastructure crisis due, it is claimed, to regulators stifling development of essential infrastructure such as ports and gas and electricity lines.

In May this year two reports prepared for two very different governments in response to the alleged crisis - one a state Labor government and the other a Commonwealth coalition government - both effectively put and end to this argument when they both reached the same conclusion: there is no infrastructure crisis in Australia.

"There is no infrastructure crisis in Australia" was in fact the very first sentence of the Victorian report, and it went on to say that "The quality of the nation's infrastructure has helped underpin Australia's strong economic performance over the last decade and provides us with an advantage in competing for footloose investment projects in the region."

However, the two reports, along with another 3 commissioned by industry did find that improvements could be made to regulatory arrangements and practices in certain sectors to promote investment in essential national infrastructure in the long term interest of the nation.

The Prime Minister's Economic Infrastructure Taskforce concluded:

The greatest impediment to the development of infrastructure
necessary for Australia to realise its export potential is the way in which
the current economic regulatory framework is structured and

⁵ "Investing in Australia's economic infrastructure" Report to the government of Victoria prepared by the Allen consulting group, May 2005. Page 4

⁴ "Infrastructure action plan for future prosperity" Business Council of Australia March 2003 Page 3

administered. It is adversarial, cumbersome, complicated, time consuming, inefficient and subject to gaming by participants. There are too many regulators and regulatory issues are slowing down investment in infrastructure used by export industries.⁶

This is where, in the opinion of the ACCC, we get to the nub of the problem.

Everyone wants quick decisions by regulators, but not everyone is happy to accept the umpire's verdict, and thus many projects get mired in judicial challenge, appeals, court verdicts and tribunals.

Even the threat of judicial challenge, seldom far below the surface in these matters and regularly above it, is enough to slow decision making as regulators become overly cautious in the face of threats of litigation.

Take Sydney Airport for example, and the process still underway to decide whether or not to declare airside services.

That first began with application to the National Competition Council in August 2002, there was draft report in June 2003 and final report in November, a ruling by the minister in January 2004, and then the whole thing goes on review to the Competition Tribunal and we still don't have a ruling on that.

Assuming the Tribunal does declare the airport, there is then a negotiating process which could take six months to a year, and if there's no agreement the ACCC arbitrates, and anyone unhappy with our ruling can have that reviewed by the Tribunal. Oh, and every one of these steps is open to appeal in the Federal Court.

By my count it will be six or seven years to complete this process, by which time, say, Boeing has announced plans to design some new aircraft to compete with the new Airbus A380 and the whole process has to start again.

And this is not an isolated incident. In the Pilbara there is still no clear ruling on whether rail track services are covered by the Trade Practices Act and whether rival miners can have access to the services, eight years after the issue first arose.

In addition to the adversarial, cumbersome, complicated, time consuming and inefficient process, there is the plethora of regulators.

In the ACCC's submission to the taskforce, we pointed out that while the competition policy reforms of the mid 1990s were intended to establish a national approach to competition issues across jurisdictions and markets, the reality is there has been a proliferation of different access regimes at the State and Territory level.

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⁶ Australia's Export Infrastructure" report to the Prime Minister by Australia's Export Infrastructure Taskforce. Page 2

There are currently 22 State-based regimes in operation covering rail, ports, gas and electricity and 11 Federal, State and Territory economic regulators:

- Australian Competition and Consumer Commission (ACCC)
- Australian Energy Regulator (AER)
- Essential Services Commission of South Australia (ESCOSA)
- Essential Services Commission, Victoria (ESCVic)
- The ACT Independent Competition and Regulatory Commission (ICRC)
- Independent Pricing and Regulatory Tribunal of NSW (IPART)
- Queensland Competition Authority (QCA)
- Economic Regulation Authority of Western Australia (ERA)
- Northern Territory Utilities Commission
- Office of the Tasmanian Energy Regulator (OTTER)
- Tasmanian Government Prices Oversight Commission (GPOC)

As the Prime Minister's Taskforce report noted:

The complexity of rail regulation was detailed by Patrick Corporation. It advised the taskforce that an operator of interstate trains may, potentially, have to deal with:

- 7 rail safety regulators with nine different pieces of legislation;
- 3 transport accident investigators;
- 15 pieces of legislation covering occupational health and safety of rail operations;
- 6 access regulators; and
- 75 pieces of legislation with powers over environmental management.⁷

A major step towards cutting through this maze was commenced in July this year with the creation of the Australian Energy Regulator - a one-stop shop for gas and electricity regulation.

The key principle behind the establishment of the Australian Energy Regulator was that the choice between gas and electricity should be determined by market disciplines and not regulation.

Different approaches to regulating utilities across industries distort investment decisions and create unnecessary costs and barriers for utilities operating in more than one industry.

A single consistent and independent regulator will reduce regulatory costs to business and barriers to entry and allow both gas and electricity to develop in a way that encourages competition within, and between the two, to the benefit of industry, consumers, and ultimately the nation.

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⁷ "Australia's Export Infrastructure" Page 49

The Australian Energy Regulator provides a very good example of what can be done to speed up the process of regulation in Australia by clearing away the multiple layers of regulation and multiple levels of appeal.

In short we need to go back to the spirit of Hilmer and have a national approach to nationally significant infrastructure. While state regimes might have been useful for the transition phase, it is now time that we move to a national approach.

As a first step, for facilities of 'national significance', all access decisions should be made by the Commonwealth Minister replacing the concept of an 'effective State or Territory access regime', as currently provided under Part 111A of the Trade Practices Act. While there would still be scope for state regimes in some circumstances, this change would ensure that facilities of 'national significance' were not exempted from coverage under the national regime.

Secondly, we should remove the requirement for re-hearing of decisions. Currently, the Minister's decision to declare a service or certify an access regime, as well as the arbitrator's decision on terms and conditions, is subject to re-hearing in the Australian Competition Tribunal.

This is not to suggest that regulators should not be accountable, or that errors or unreasonableness should not be subject to review. But rather than rely on review processes, we should ensure that the original decision-making body has the expertise to generate confidence in its decisions. There will always be arguments and challenges by vested interests, but the reality in a relatively small country such as Australia is that there is too little relevant infrastructure expertise available to divide it amongst a range of administrative bodies. The AER provides a good model in this respect.

I want to conclude on some other lessons that, in my view, have been learnt in the ten or so years of infrastructure regulation in Australia, and ways that I believe these lessons may be addressed.

Promoting Competition

One of the new challenges in infrastructure reform for the ACCC and other bodies (like the NCC) has been analysing the needs of a newly emerging competitive environment, as opposed to the traditional role of the Commission of analysing the prospects of lessening of competition.

In some respects, these two analyses are the mirror images of each other, but in important ways they are quite different. In particular:

- Assessing the promotion of competition does not have ready made benchmarks for application of the usual with and without test – the new competitive objective has to be constructed or forecast
- Recognising that promoting competition is about the environment for competition and incentives for entry, rather than whether entry will actually occur, complicates the assessment process.

We have seen how difficult these challenges have been in both gas and electricity.

In gas we have seen some positive developments in exploration activity and new entry in gas production. I mentioned earlier the doubling of pipeline construction over the past decade.

In addition, gas consumption has grown at an accelerating rate since the mid-1990s, averaging four per cent since 1995, while gas has increased as a proportion of Australia's energy mix from 12 per cent in 1980/81 to 20 percent in 2000. The augmentation of coal fired energy with natural gas is also, of course, a big plus for the environment.

With access to pipelines available we are seeing a number of new developments in the Otway Basin, coal seam methane developments in New South Wales and Queensland and other new fields coming on stream, such as Yolla and Patricia/Baleen. It is also encouraging to see a number of new explorers have taken acreage in the Cooper Basin and major exploration programs foreshadowed or underway in the Gippsland Basin.

But developments down-stream in some areas has not been so impressive. One example in the Sydney region which still appears to be dominated by AGL and the general view is that the current competitive environment is deficient. (See, for example, assessments of the NCC and the Minister in the recent Moomba to Sydney pipeline coverage matter).

As you may be aware, the ACCC appealed the Australian Competition Tribunal's decision on the Moomba to Sydney Pipeline Access Arrangement and we are currently awaiting the result of that appeal.

The MSP was the 3rd in a series of appeals over the Gas Code upheld by the Tribunal, and we took the case to the Federal Court to one way or another clear up the confusion and get some certainty back into the Gas Code.

Crucially, though, the Tribunal rejected arguments that the Moomba pipeline competes with the Eastern Gas Pipeline.

That pipeline delivers gas into Sydney at some 50 per cent more than the price on offer from APT's Moomba pipeline, which I would have thought pulled the rug out from under those who argue that there is genuine competition between pipelines into Sydney and therefore no need for regulation. This lack of competition between the two pipelines is consistent with the expert opinions provided to the NCC by Ordover and Lehr to assist its consideration of the MSP coverage revocation application.

It will be interesting to see what all these developments mean for the development of competition in gas markets in and around Sydney. But I do fear that currently, the environment for competition in this region is less encouraging than it is, for example, in and around Melbourne, Adelaide and Brisbane.

In electricity wholesale matters, the Commission has had cause to analyse the prospects of a lessening of competition in Victoria and deficient competition in NSW.

The ACCC has, for example, recently expressed some concerns about trends toward re-aggregation in the National Electricity Market, and in particular, a risk that relying on Section 50 of the Trade Practices Act alone may fail to prevent the creation and exacerbation of market power problems in electricity generation. Such market power problems would cause serious detriment to electricity consumers, both industry and households. Any such market power problems in electricity generation would also be likely to suppress investment in electricity generation.

In the last five years, the ACCC has considered 60 applications for informal merger clearances, involving all elements of the electricity supply chain. A large amount of these applications have been horizontal and related to generator – generator mergers.

It is widely acknowledged that generators, at times, have the incentive and ability to withhold capacity from the spot market in order to cause high spot prices.

Generators can exercise market power by 'withholding' generation capacity at peak periods and spiking prices. It only takes a few such events to have a large impact on overall prices.

Certain proposals for vertical re-integration also raise competition concerns, particularly those involving a merger of networks with contestable elements of the electricity industry.

The recent acquisition of TXU by SP Energy, which concerned all four key aspects of the electricity supply chain, is an example.

It is the ACCC's view that there is a strong incentive for an integrated firm holding a monopoly in the provision of a network service in the electricity industry to discriminate in favour of the vertically integrated firm's own operations and against competitors in upstream and downstream markets.

Another concern is the ability to exploit market power in respect of the region which presently has the largest generation entities, NSW, where the market is dominated by three entities that control over 95 percent of the market.

The Parer Report recommended that the NSW Government should further disaggregate its assets. In deciding the way forward for the energy sector in NSW the analysis of Parer should not be forgotten.

Light handed regulation and higher powered incentives

Some critics have argued that the original Hilmer objective of light-handed infrastructure regulation – reflected on the negotiate/arbitrate model – has been lost. I do not think that this is true – the negotiate/arbitrate model still

underpins infrastructure regulation in Australia. But I do accept that the "pure" model has been conditioned to date. I will conclude this presentation with some brief comments on the extent and need for the conditionality.

First, one lesson from the experience to date in Australia is that the "purer" form of the negotiate/arbitrate model is more appropriate to preserve competition in dependent markets where a culture of access to essential infrastructure and competition in dependent markets has already developed. Where that culture and competition needs to be promoted and developed, more intrusive regulatory arrangements are necessary, as we currently see in the telecommunications and energy sectors discussed earlier. Thus, the negotiate/arbitrate model should be seen as an objective of the achievement of successful reform and effective competition, rather than as a means to promote and achieve that competition.

Second, experience has shown that even the purer form of negotiate/arbitrate needs come conditionality from the model proposed by Hilmer. This has been reflected in the recommendations of the Productivity Commission in its review of Part IIIA and consequent amending legislation. These changes are designed to ensure more certainty for the negotiation process subsequent to declaration by providing guidance on the likely outcomes of any arbitration.

In the telecommunications specific provisions of Part XIC, this guidance is provided by pricing principles or even indicative prices as demonstrated in the Commission's declaration of mobile terminating services last year. This approach and the Commission's power to provide indicative principles as part of a declaration decision was recently endorsed by the Federal Court in response to a judicial review application by Vodafone.

Third, the interpretation of "light-handed" regulation by some critics appears to involve a regulatory approach that involves little or no intrusion on existing infrastructure conduct. This involves some strange and counterproductive logic. If there is no need or benefit from changing existing practices, then why regulate at all? Perhaps this issue can be reconciled by forming the view that what some interests call light-handed regulation is, in truth, a design for ineffective regulation.

Finally, it may surprise some people to learn that regulators in Australia, led by the Australian Competition and Consumer Commission through the Utility Regulators Forum are constantly thinking of ways to develop higher powered incentives in infrastructure regulation.

Higher power incentives involve approaches which seek to maximise opportunities for increased efficiency, even if this also means greater opportunities for monopoly profits.

Simplistically, this reflects, in part, the difference between price-cap and rateof-return type regulation, although, as we now know the difference between these two approaches is more of a continuum than an absolute. Less intrusive regulation, such as by moving to a purer negotiate/arbitrate model, inevitably involves higher powered incentives. But other approaches can also have this effect. For example, the URF has conducted a great deal of work on using total factor productivity and benchmarking analyses to calculate the X Factor in CPI – X price regulation. This work is not fully developed and would not be easy to apply. But it does provide an indication of how regulatory processes can be improved and how regulators in Australia are working to make those improvements.