INTRODUCTION

I am delighted to be part of this event to celebrate the 20th birthday of IPART. IPART has made a major contribution to NSW, and Australia, by its professionalism and approach on a wide range of issues.

I would like to celebrate a particular aspect of IPART’s history – IPART’s involvement in the transformation of the infrastructure landscape in Australia. I do not intend to look at the specific role that IPART played but rather I want to compare and contrast where we were 25 years ago (taking 1987 as a reference point) and where we are today. IPART, with a number of other bodies, including of course the Australian Competition and Consumer Commission (ACCC), has been an important player in this transformation.

The infrastructure landscape in Australia today is unrecognisable from 25 years ago. Today I will highlight the enormous changes that have occurred, and then discuss some opportunities and challenges with the immediate reform agenda.

WATER

Twenty-five years ago our water was often trapped in low value uses as trading in the Murray Darling Basin was limited. Environmental problems in our river systems and wetlands were building and state governments were still handing out new water extraction licences. Now we have the world’s most sophisticated large scale rural water trading system, and we are making headway in restoring environmental balance.

Reforms in the 1990s and early 2000s capped extractions, clarified property rights and allowed inter-state water trading. The Water Act 2007 added to these reforms by giving the ACCC powers to remove barriers to trade and giving environmental agencies funding to buy water entitlements from irrigators and deliver water saving infrastructure projects.

Before the Water Act was introduced water trading was limited by barriers to trade imposed by irrigation infrastructure operators and state governments.

Irrigation infrastructure operators run the pipes and channels which supply water to the majority of irrigators in the Murray Darling Basin. They have incentives to prevent trade in order to preserve their customer and revenue base, and the ability to deter
trade by imposing high termination fees\textsuperscript{1}. In New South Wales and South Australia the infrastructure operators hold water rights on behalf of the irrigators they service. In these circumstances trade is only possible if infrastructure operators co-operate in transferring water rights to their irrigators or to water buyers.

The water market rules and water charge (termination fee) rules developed and enforced by the ACCC address the barriers imposed by irrigation infrastructure operators\textsuperscript{2}. Since the rules were introduced:

- Trade in water entitlements\textsuperscript{3} more than doubled between 2007/8 and 2009/10 and remains high. Trade turnover peaked in 2009/10 at $3 billion.
- Termination fees fell on average by around one third to no more than 10 times annual access fees.
- Irrigation infrastructure operators improved trade processing times.
- There has been significant transformation\textsuperscript{4} and termination activity.

These reforms are making it easier for water to move to its highest value use, especially in the face of highly variable water availability, such as in the recent drought. For example, during 2007-2009 rice growers in the Murrumbidgee were able to sell their water allocation for around $400 to $500 per megalitre, compared to a gross margin for rice of $150 to $260 per megalitre. With water prices now significantly lower, rice growers can buy additional allocations to expand production.

On the environmental front the buyback and infrastructure projects have already secured over 50 percent of the water recommended by the Murray Darling Basin Authority in its Basin Plan.

\textbf{Opportunities and Challenges}

While considerable progress has been achieved over the past 25 years the water reform process is only part complete.

The Murray Darling Basin Authority is in the process of completing its Basin Plan which will set targets for the Government’s buyback and infrastructure program, but the package is not in place yet. Understandably the recommendations have proved contentious with both farming and environmental interest groups. Yet without agreed water extraction targets we risk undermining the environmental reforms that drove the package in the first place.

The Basin Plan includes new Trading Rules which will address some residual barriers to trade. The rules are based on ACCC recommendations and have been subject to extensive consultation.

At the moment some state government rules can and do restrict trade. In Victoria, for example, the state government caps trade in any one year to 4 percent of total water on licence. The cap has been reached in a number of districts and has limited inter-

\textsuperscript{1} Termination fees are fees levied by irrigation infrastructure operators when an irrigator terminates his or her water delivery rights. The fees are usually expressed as a multiple of the irrigators annual access fees.

\textsuperscript{2} Water market rules require irrigation infrastructure operators to ‘transform’ an irrigator’s water rights into a water entitlement in the irrigator’s name. Once the irrigator holds the water right directly, he or she is free to trade the right without the irrigation infrastructure operator’s co-operation. Water charge (termination fee) rules cap termination fees at 10 times annual access fees.

\textsuperscript{3} Water entitlements are ongoing water rights. This is distinct from water allocations which are rights to water over a defined, usually 12 month, period. There are separate markets for trade in water allocations.

\textsuperscript{4} Transformation occurs when an irrigators water rights are transferred from the irrigation infrastructure operator’s water entitlement to a separate entitlement in the irrigator’s name.
state trade and water buy-back purchases. The proposed Trading rules will prohibit such restrictions.

The trading rules also address restrictions on who can buy water. In Queensland, for example, in many cases water can only be purchased by farmers.

Even if the trading rules are implemented, however, there is still considerable scope to further develop trade in water rights:

- Barriers to trade between urban and rural users could be reassessed
- Trade could be extended to systems that have limited connectivity, especially in the north of the Basin, and trade in groundwater could be further expanded
- Trade could be extended in areas outside the Murray Darling Basin.

Prices levied by the largest bulk water and irrigation infrastructure operators in the Murray Darling Basin are regulated. One regulatory challenge is how to factor in the significant contributions by state governments to the operators’ costs. Another is how best to deal with the revenue volatility faced by operators as rainfall and water delivered fluctuate from year to year. I welcome IPART’s current Review of Rural Water Charging Systems which will address both issues.

So far my comments have focused on rural water. Of course urban water represents its own reform challenges. Over the last 25 years we have made important progress by introducing volumetric water use charges and independent oversight of the charges levied by government owned water utilities. At the same time state governments have implemented some costly water supply options in an attempt to drought proof major urban areas.

Removing barriers to rural- urban trade could open up new water supply sources. More generally, the creation of bulk water supply markets has the potential to meet growing demand more cost-effectively in the future. Investigating and where feasible pursuing these options should not wait until the next drought or beyond.

**ELECTRICITY**

A key series of reforms in which IPART was intimately involved were the changes to the energy sector. With the National Competition Policy reforms we have seen the creation of an electricity market, with the old electricity commissions of the past broken up into discrete elements of the supply chain. This has meant that Australia’s electricity sector has been transformed into one of the world’s more competitive and efficient energy markets.

The impact of these reforms on Australia’s economic performance was considerable, with access to relatively cheap and reliable energy playing an important role in our productivity and economic.

With the competitive market for generation, and the NEM facilitating the exchange of excess capacity between states, efficiency gains were achieved leading to increased utilisation and improved performance of generation assets. To date, the market has been successful in delivering the kind of generation investment required, when it is required and where it is required.

However, there are now significant challenges to the way the industry has to operate.
Opportunities and challenges

While there have been obvious successes from the reforms of the past, the current experience of consumers is causing understandable concern. Based on ABS data, prices have grown by an average of around 50% in real terms in NEM capital cities over the last 5 years. For many consumers the price increases have been even larger than this; IPART’s regulated tariffs, for example, have increased by around 80% in real terms over this period. High electricity prices have, I believe, driven much of the cost of living debate we are currently having in Australia. And IPART has done excellent work to show the effects of higher electricity prices on low income earners.

Networks are the parts of the supply chain that most clearly need our attention.

At the highest level, reform of the current National Electricity Rules is needed to ensure that network prices reflect efficient costs. The issues that the AER faces with regulation under the current framework have been well documented by IPART in its annual pricing reports for a number of years now. For its part, the AER has put forward a rule change proposal aimed at providing a more effective framework for efficient investment.

Similarly, we need to ensure that consumers are only paying for network reliability standards that they value and for which they are prepared to pay. The continued importance of IPART was highlighted by the fact that when you raised this issue, it led to an independent review of the current standards. Consumers may well be better off if the reliability standards across NSW were relaxed a little. This further underscores the importance of maintaining economic regulators with the capacity and independence to raise these crucial issues with policy makers.

Another issue that the industry needs to address is rising peak demand. Although energy demand is falling, the peaks have been steadily rising, which drives the need for network investment. There are no easy solutions, but I see two key debates that need to be resolved.

The first is whether market solutions driven by pricing signals are the only method to resolving this issue. Market based solutions require consumers to respond to pricing signals and shift their demand to reduce pressures at peak times or to adopt alternatives such as small scale generation. This would require adoption of smart-meters and retail peak pricing. It requires retailers to offer contracts that expose customers to price signals. Or should we also be looking at more direct control approaches, such as load management, to assist customers to reduce load at peak times?

The second related issue I see is the role that regulated monopolies should be playing in driving innovation in demand side management. While the network businesses do not currently have a clear incentive to solve this issue, they do control much of the critical infrastructure and information required to implement any solution. It is clear that they have a role in identifying and enabling efficient demand side management. The difficult issue is whether network businesses should begin to provide demand management services to customers in competition with retailers or other third party service providers in contestable markets.

It is also important to discuss the need for privatisation. We still have key network businesses in Government hands in Tasmania, Queensland, New South Wales and Western Australia. Good regulatory policy is important, but regulation is not a
substitute for good governance. The incentives of Government shareholders are unavoidably mixed and complicated by multiple and disparate objectives. It is difficult to know what the outcomes would have been had the businesses been in private hands in recent years, but perhaps clearer more commercially disciplined governance and internal expenditure review processes would have assisted in preventing some of the recent significant price increases.

The generation sector has not contributed to the higher prices faced by consumers, but it now faces some of the greatest challenges.

The risks of policy uncertainty on investment are significant. The energy industry is where much of the uncertainty surrounding the future of the carbon price is playing out. Industry participants are continually facing investment decisions—whether to shut down units, invest in replacing parts and, of course, bigger decisions about building new power stations. The uncertainty around climate change policy creates significant risk particularly in terms of type of investment and timing.

Also, we have seen how ad-hoc policy development, by state and federal governments, can have unintended consequences and contribute to cost and price increases. The plethora of Commonwealth and State subsidies for solar panels provide an example of how ill-considered policy making by different levels of Government can lead to large and unnecessary costs for all consumers, and uncertainty for business.

Finally, in generation, we need to ensure that that the market structure around the NEM continues to encourage vigorous competition. As I've recently highlighted, the impact of the generation industry and its structure plays a critical role in setting prices at peak times. For example, and taking a New South Wales example, Macquarie Generation, with over 4800MW of capacity is the largest generator and has significant market power. The NSW Government finds itself in a position where it can influence levels of competition in NSW by restructuring Macquarie into separate portfolios and, generally, by selling its generators to many owners to achieve a competitive market structure, and lowering future electricity prices through successful privatisation.

There are, of course, many other issues that need to be addressed such as whether we continue to need retail price controls in most states.

COMMUNICATIONS

In 1987 Telecom and OTC had just been corporatised (Telstra was still in the future) and Michael Duffy made the first official mobile call using an analogue phone (on a half kilogram ‘brick’ as they were then called). Today the coverage of mobile networks has expanded to reach the vast majority of the population, there are more mobile devices than people, most houses have internet access and convergence is the new challenge.

In the 1980s there was one government owned and run domestic provider supplying voice services over its copper network. As the sector was opened up to competition in the 1990s there was investment in new infrastructure – for example, Optus and Vodafone invested in digital mobile networks.

New players entered the retail market and resold Telstra’s voice services. Increased retail competition started driving down the price of phone calls (particularly interstate
and overseas calls). Other companies then began investing in their own equipment to start providing broadband services to consumers using Telstra’s copper network. Lower access prices for regulated inputs increased competition and encouraged innovation, faster speeds and more competitive retail pricing.

Perhaps the greatest success has been in relation to mobile services, where the relatively lower cost of network rollout (compared to fixed line networks) has led to greater infrastructure competition. The functionality of mobile phones and internet connections have improved significantly. The availability of services has also increased, through both the expansion of mobile networks and the capacity of these networks for broadband connectivity. The competition between network operators and the high levels of demand from consumers has created incentives for them to expand coverage, upgrade to more capable networks, and more generally increase the availability of services. Better still, competition has emerged without the need for much regulatory intervention – this is certainly a preferred option for the ACCC.

**Opportunities and challenges**

In February, the ACCC accepted the Telstra’s structural separation undertaking and migration plan that put in place arrangements for the migration of its services from its fixed line access networks to the NBN. The key element of this was the arrangements for equivalent and effective access by its competitors to Telstra’s wholesale services. The industry is looking to Telstra and, of course, the ACCC to ensure these arrangements work in ways that promote competition. These new arrangements are a key focus area for the ACCC.

A second challenge is getting access settings right for the NBN monopoly infrastructure. This is crucial to ensuring robust competition between existing larger players, such as Telstra and Optus, and newer ISPs, such as iiNet and TPG, and new business players from those outside the sector. A key issue will be ensuring there are strong incentives for the NBN to continue meeting customers massively increasing data needs, and at reasonable cost.

The industry is changing in important other ways. With the growth in bundling and the ability to sell supplementary services, there has been jostling within the broader communications sector for the primary relationship with the customer. This scenario is playing out between a wide range of companies, including network owners, service providers, content providers, content rights owners, device manufactures and online companies. Each player will be trying to erect various entry barriers which, while possibly driving wider innovation, must not become significant barriers to wider competition.

The ACCC is part of the action in the sector and while there is a dedicated Communications Group within the economic regulatory area of the ACCC, all the different parts of the organisation – mergers, authorisations, compliance, consumer protection are involved - with different degrees of closeness, in the developments in these dynamic and complex markets.

**TRANSPORT**

Going back twenty-five years in the transport industry provides us with another stark contrast with where we are today.
In 1987, the rail industry still bore the legacy of early colonial days when rail systems were designed primarily for cities to connect to their hinterlands. For the most part, railways were vertically integrated, state-owned enterprises that regulated themselves.

In 1987, if you wanted to get your freight from Melbourne to Brisbane you were faced with three state–owned rail freight companies with monopoly rights in Victoria, NSW and Queensland. It was unclear who you talk to, and the idea of discussing performance indicators such as delivery times and service would have been laughable.

The key breakthrough was the agreement to form one east coast freight company, National Rail, in the early 1990s. This was then sold and today we have a number of privately owned rail freight companies, strong competition in freight forwarding, with lower prices and the ability to achieve service performance guarantees, particularly as delivery times have been greatly reduced.

In road in 1987 we had different state rules for truck charging and operation. Truck user charges were often based on a lowest common denominator approach, and did not remotely reflect road damage. Trucks faced different mass limits and many other operating rules and, indeed, they often could not travel interstate as the different state rules could not be met.

Considerable progress has been made. The National Road Transport Commission was formed in the early 1990s to set uniform truck charges, and truck charges are much more set to recover road costs in total and by vehicle class. Many rules governing truck operation have been harmonised.

**Opportunities and challenges**

The transport sector still faces a number of significant challenges.

First, the journey to single national heavy vehicle regulation needs to be completed. The hope is that by next year we will move from harmonisation of truck rules to standardisation, so that we have one single regulator and piece of legislation covering, for example, mass limits and vehicle combinations. We can, for example, still see parts of trucks on state borders as one truck combination is legal in one state but not another.

Second, there is also much to complete on road charging. By the end of this year officials will report to COAG on direct truck pricing. For example, can we place devices in trucks to link user charges to mass, distance and particular roads travelled?

There is also the challenge of linking the revenue raised from truck user chargers to what will or should be spent on roads, and where. The process is currently not forward looking.

Possibly the biggest challenge, however, lies in urban transport. There are two related issues.

First, can we try demand management to reduce the ever rising costs of urban traffic congestion? The issue of what could be called utilisation charging is contentious but, I would argue, so increasingly is the issue of increasing traffic gridlock.

Closely related to this is the issue of how we pay for the urban transport infrastructure of the future. For example, the losses incurred on public infrastructure
are now so large that some state treasuries are understandably resistant to expanding the public transport network. Ever more money cannot be the answer. Some combination of appropriate relative pricing between urban transport modes and significantly increased efficiency should be part of the mix.

Let me finally turn to ports, where the challenge will be to provide sufficient capacity for the continuing large increase in demand. Governments are increasingly looking to the private sector to play their part in such investments. It is important that opportunities to maintain or even increase competition and contestability are not lost in this process.

The ACCC in considering the forthcoming privatisation of the NSW ports. In doing so, it will look closely at bidders (including bidders taking a minority interest as part of a consortium bid), to ensure that any change in control does not result in a substantial lessening of competition as a result of:

- a common interest in port facilities, or
- vertical links in the supply chain into and out of the ports, such as stevedores ownership of ports.

GENERAL ACCESS – PART IIIA

Prior to the introduction of the National Access Regime in 1995, disputes involving access to services essential for competition could be pursued under section 46 of the then Trade Practices Act (now the Competition and Consumer Act). Section 46 prohibits the misuse of market power, including where that power is used to deter or prevent a person from competing in related markets.

However, as section 46 cases were brought before the Australian courts through the 1980s, it became apparent that there were problems with importing the concept of access to essential facilities into the jurisprudence of Australian competition law. Even if the court found that a business with market power had improperly refused to supply a service or product, the proceedings of a court seemed hardly the place to determine what a reasonable price should be for the sale of that product or service.

The essential facilities question was included in the broad ranging inquiry into National Competition Policy in the early 1990s. The resulting Hilmer Report recommended a new generic legal regime that provided for access to such facilities across the economy. The benefits of this regime were that access to essential infrastructure would promote efficiency in the operation of that infrastructure, but much more importantly facilitate competition in markets that depend on supply from that infrastructure.

This of course led to Part IIIA of the Competition and Consumer Act. In looking at how the Regime has performed to deliver those efficiency and productivity benefits, the report card is mixed.

In many instances Part IIIA has facilitated competitive outcomes. There have been around 25 declaration applications made since 1995, many of which have concluded with the parties reaching a commercial agreement. The good news is that the ACCC has only once had to arbitrate and make a determination on an access dispute under Part IIIA. There is a clear preference for access seekers and infrastructure providers
to settle disputes commercially, rather than have the ACCC involved arbitrating an outcome under Part IIIA.

Importantly Part IIIA provides a general framework for access that governments can draw on when they need to deal with an access problem. And governments have indeed used the Part IIIA framework.

For example, access to wheat ports was identified as an important element of the reforms that included ending AWB’s monopoly on the export of wheat in bulk. Operators of port facilities who also exported wheat where required to provide access undertakings to the ACCC under Part IIIA. These undertakings provided the terms and conditions (other than price) on which the vertically integrated port operators provided access to their wheat exporting competitors.

The reforms resulted in over twenty traders entering the market for export wheat. The arrangements have promoted the efficient allocation of terminal capacity, and prevented the bulk handlers from discriminating against other wheat exporters. The Government has recently decided that, if by 2014 port operators are subject to a voluntary code of conduct that meets the needs of both growers and exporters, the requirement to have access undertakings with the ACCC will be removed. It is important to stress that this voluntary code will need to meet the needs of those exporters that need access to the bottleneck facilities before the requirement is removed.

On the other side of the ledger, Part IIIA is associated with very lengthy and expensive review processes, stretching over years of deliberation. Such delays create uncertainty and increased costs for the parties involved, and at a broader level they undermine the credibility and effectiveness of the Regime as whole. Commercial decisions should not be held up for years and years by these types deliberations.

In one of those extended cases – seven years I think is the last count for an application for declaration of rail lines in the Pilbara – the High Court is due to make a ruling later this year. This should help to resolve some uncertainty that has crept into one of the declaration criteria in Part IIIA. That is, what does it mean for it to be “uneconomical for anyone to develop another facility” to provide the service sought to be declared?

**Opportunities and challenges**

So much of Australia’s recent wealth has been produced by the mining boom. Issues about rail paths and port links to some of these wealth-creating mining areas are daily news. These are massive developments, and getting the right regulatory access oversight in place is a key challenge to increasing the competitiveness of the mining industry. Access arrangements for rail in the Galilee Basin will be an interesting test case.

In December this year, the PC will conduct a review into the National Access Regime, including Part IIIA. The review will be an opportunity to examine how the Regime can assist in Australia’s quest to increase national productivity given that one objective of Part IIIA is the efficient use of, operation of, and investment in infrastructure, thereby promoting effective competition in upstream and downstream markets.
One line of inquiry is whether the legal and administrative procedures in Part IIIA are as effective as they could be. As my earlier comments indicate, I take the view that there is some scope for streamlining.

There is also the question of whether Part IIIA should be entrenched as the only way of dealing with access. Part IIIA is an important regime and incorporates sound economic principles, but it has never been the case that all access issues are dealt with exclusively via Part IIIA. Industry specific access regimes and more targeted responses – such as with wheat ports – have also been employed in many contexts, often very successfully. This raises key questions: should Part IIIA be amended, in order to make it more agile and more effective to deal with particular market circumstances? Or should Part IIIA remain largely unchanged, but continue to serve as the foundation for more nuanced and targeted approaches taken on a case by case basis?

CONCLUSION
Productivity is marking a welcome return to Australia’s national debate.

Concerns over productivity largely drove the early 1990s National Competition Policy (NCP) debate which I was closely involved with. A key rationale for the introduction of the NCP was to reform and restructure areas of infrastructure and introduce competition in associated upstream and downstream markets.

Two broad comments can be made.

First, many of the infrastructure reforms I have described today contributed greatly to Australia’s past productively success. And some of the remaining challenges I have described, left unaddressed, could be harming our current levels of productivity. A good example of the latter may be the massive new electricity network infrastructure spends in some states, particularly NSW in recent years, which in part were driven by the higher reliability standards set 5-7 years ago and permitted by the then changed regulatory framework.

Second, those who say Australia has now completed all the easy reforms and only the hard ones lie ahead was clearly not part of the microeconomic reform debate of 25 years ago. The reforms I have summarised were extremely difficult, both technically and politically.

Uninformed comments that say all the easy reforms have been done should not be used to avoid the challenging but highly rewarding microeconomic reforms that we need to confront today.

Thank you for your time today.