



Australian Government



AUSTRALIA's

Export Infrastructure

*Report to the Prime Minister
by the Exports and Infrastructure Taskforce*

MAY 2005



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**Export
Infrastructure**

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ISBN 1 920925 37 6

Exports and Infrastructure Taskforce 2005, *Australia's Export Infrastructure*, Report to the Prime Minister, Canberra, May.

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Australian Government
Infrastructure Taskforce

20 May 2005

The Hon John Howard MP
Prime Minister
Parliament House
CANBERRA ACT 2600

Dear Prime Minister

It is our pleasure to present you with our report on physical and regulatory bottlenecks that may impede the full realisation of Australia's export opportunities.

Yours sincerely

Handwritten signature of Brian Fisher in black ink.

Brian Fisher
Chairman

Handwritten signature of Max Moore-Wilton AC in black ink.

Max Moore-Wilton AC
Member

Handwritten signature of Henry Ergas in black ink.

Henry Ergas
Member

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Summary



THE Exports and Infrastructure Taskforce (the taskforce) was established by the Prime Minister on 18 March 2005 to identify any bottlenecks, of a physical or regulatory kind, in the operation of Australia's infrastructure that may impede the full realisation of Australia's export opportunities.

Given the limited time available to the taskforce, we have focused on the issues that we consider to be most critical and are here proposing broad principles for action.

Areas of concern

The taskforce was convened at a time when there was considerable media attention on infrastructure, especially the queuing of ships at some of our coal ports, and suggestions that Australia's infrastructure is facing a crisis.

There is no doubt that some parts of the nation's export infrastructure face immediate capacity constraints. An unexpected spike in world demand for coal has led to a focus on problems that have been known for some time. Localised bottlenecks have emerged as strong demand has run into tight and inflexible supply. The costs that it imposed, and the publicity it has generated, have resulted in changes that should help resolve the problem.

The fact that these problems are localised suggests that to describe them as a major crisis at present is an exaggeration. But the difficulties involved in their resolution point to underlying weaknesses that must be addressed if the problems are not to become more widespread. Without action to remove impediments to efficient investment in infrastructure, Australia's export potential over the next five to ten years risks being compromised.

Impediments to infrastructure investment as a result of the regulatory framework

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 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.

There is a stark contrast here. Where Australia's logistics chains are vertically integrated and are subject to much less economic regulation, the response to increased global demand has been timely, effective and efficient. In contrast, in those parts of the economy where economic regulation sits between investors in export related infrastructure and users, lengthy delays have been widespread, as infrastructure owners, users and regulators focus more on shifting slices of the pie than on ensuring that the pie expands to meet competing demands.

The original objective of national competition policy was for the Commonwealth, states and territories to cooperate 'to ensure that universal and uniformly applied rules of market conduct apply to all market participants' (*Competition Policy Reform Bill 1995*, second reading speech, 30 June 1995). This has not happened. Australia has at least nine different economic regulators applying differing legislation and placing their own interpretations upon that legislation. Each of these regulators has substantial discretionary powers — powers that would normally be thought of as going to matters of policy, rather than as naturally being part of the regulatory function. The fragmentation of regulation, the extent of the powers vested in regulators and the scope for inconsistency in the exercise of those powers create uncertainty for businesses investing in infrastructure, increasing the level of risk to which otherwise efficient investments are exposed.

Governments should consider whether the multiplicity of regulators and the fragmentation of the regulatory system is in Australia's long run interest. More specifically, governments should examine the scope for establishing a single national regulator or in other ways reducing the number of regulators affecting our export related infrastructure.

The manner in which regulators have approached their task has compounded the difficulties. A quest for 'first best' solutions, combined with a focus on removing monopoly rents, has distracted from what should be the regulatory task: which is not to determine whether what has been proposed by way of access conditions is optimal, but whether it is reasonable. The search for optimality and precision in regulatory decision making has not only made

the regulatory process less predictable than it should be, but has also added greatly to regulatory delay, hindering investment in infrastructure used by export industries.

Australia's exporters operate in highly competitive global markets. They are reliant on infrastructure investment that is undertaken in a timely way, not a time frame dictated by regulatory processes. Waiting two or three years for regulatory decisions is as unacceptable as it is unnecessary.

An alternative regulatory framework for infrastructure used by export industries

There are real issues about whether infrastructure that is mainly used for exports should be regulated. Australia gains when those industries and the infrastructure on which they rely are operated efficiently, but ordinary commercial pressures, and the intense competition in global markets, should provide all the disciplines that those industries need. Inserted into this picture, regulators are prone to focus on the distribution of the gains from exports among the various participants in the export chain, rather than on improving the manner in which that chain works. In doing so, they risk merely adding cost and delay to disputes that would otherwise find a commercial resolution.

There is a need to rationalise our regulatory regimes, with consideration being given to the practicality and desirability of a single national regulator. However, perhaps even more important than the structure of regulation is improving the efficiency of our regulatory processes.

In our view, there should be a presumption that issues associated with export oriented infrastructure will be resolved by commercial negotiation between the infrastructure provider and users. We accept that this will often be imperfect, at times significantly so, but it is still likely to be preferable to the intrusive regulation that has become widespread. We therefore believe that some further tightening is desirable of the hurdles that need to be met before regulatory solutions are imposed on export oriented infrastructure.

Where those hurdles are met, and regulation is imposed, the initial presumption should be for light handed regulation (that is, price monitoring). Only where light handed regulation has demonstrably failed should more intrusive regulatory approaches be applied.

In cases where more heavy handed regulation is warranted, the framework for *infrastructure used for exports* needs to be reformed based on the following principles:

1. Processes should be streamlined and more certainty placed on the time involved in each stage. Time limits should be placed on all regulators and parties to the regulatory process.
2. The relevant test applied by regulators should be simplified and based on whether what has been proposed by the infrastructure owner is reasonable in the commercial circumstances and in the light of the statutory objectives. This test — under which a regulator could not reject a proposed access arrangement that fell within a reasonable range, merely because it preferred another point in that range — should be applied universally and uniformly, as envisaged under the national competition policy reforms. Simplifying the regulatory test to one that merely considers whether the infrastructure provider’s proposal is reasonable in the commercial circumstances and falls within a reasonable range should reduce the complexity of the regulator’s task and result in a more timely process.
3. There should be opportunities for merits review of any regulatory decisions that involve the terms and conditions of access. However, that review should be limited to only those issues in dispute and use only the information that was before the decision maker at the time the decision was made (subject to the requirement that the parties have had the opportunity to respond to any arguments put by the regulator that they have not previously had the chance to respond to). A time limit should also apply to this process.

The best way in which this may be achieved is a matter for the federal, state and territory governments to agree.

Our preferred approach would be to first require the parties to try and reach a commercial agreement. If this cannot be done, the matter would be referred to the relevant regulator. The regulator would have six months to reach a decision. If a decision cannot be reached, or the regulator and the interested parties cannot agree on the content of a reasonable commercial outcome, there would be a right to appeal directly to the Australian Competition Tribunal. The Tribunal would be required to select among the final proposals put by the regulator and the parties. The Tribunal would have six months in which to reach a decision. This process would limit the regulatory timeframe to twelve months.

In some instances the national interest may require that the Australian Government be in a position to intervene when a six months period has expired and the situation is at an impasse, with no acceptable regulatory outcome in sight. One possibility would be for the federal Minister to have the power to ‘declare’ the service — without reference to the National Competition Council and without the right of appeal — and refer the matter

to the Australian Competition and Consumer Commission for arbitration. The ACCC would have a maximum of six months for its arbitration process and a limited merits review of the ACCC's decision would be permitted (again with a six month time limit).

Likely future bottlenecks

In the absence of decisive policy action, significant infrastructure bottlenecks constraining Australia's exports are likely to develop over the next five to ten years. The areas of principal concern are port channels, road and rail access to major ports and rail track. In addition, there will be a need for new water supply infrastructure, electricity generation plants and gas pipelines.

These concerns are widely recognised. The issue is how to ensure a timely and effective response. During the course of the taskforce's inquiries there was a strong, clear and consistent call from industry for the Australian Government to take a leadership role in facilitating efficient investment in infrastructure, especially key transport infrastructure, and in the reform of regulatory processes.

The reforms we have outlined above are one important element in responding to these calls. However, they may take some time to fully implement and there are steps that the Government could take in the shorter term. While a full list of our recommendations can be found in chapter 7, there are five initiatives we believe should be a matter of priority.

First, we believe that the Government should immediately require those regulatory agencies that are within its direct jurisdiction to make their decisions in a manner consistent with preset, clearly defined, timeframes.

Second, there are existing Government programmes that could be amended to address some of the infrastructure areas where bottlenecks are emerging. In particular, we would urge expansion of the AusLink programme to encompass ports of national significance. As part of this, AusLink should be used to expedite joint planning processes, especially with respect to the port/rail/road interface.

Third, there is scope to encourage participants in logistics chains to coordinate their operations more effectively. The Hunter Valley Coal Chain Logistics Team provides an example of the gains that this can secure. The Department of Transport and Regional Services should be asked to assist in the formation and operation of such groups and to report on any statutory impediments to their operation (such as those that may arise under the Trade Practices Act).

Fourth and related, the Government, where it has powers to do so, should direct regulatory agencies that are within its control and are regulating export orientated infrastructure to consider, in reaching regulatory decisions relevant to logistics chains, the implications of those decisions for the chain as a whole.

Finally, throughout our consultations, the lack of consistent information about Australia's infrastructure was raised as an area of concern by industry and policy makers alike. We see merit in the Government asking the Productivity Commission to carry out an infrastructure audit along the lines of that carried out in New Zealand. This would be repeated every five years, and would help inform ongoing policy initiatives in this area.

Going forward

Infrastructure assets are by their nature long lived and involve lumpy investment. Just as there will be periods when assets that have been built ahead of demand are underutilised, so will there be periods of rapid growth in demand that strain the supply/demand balance. That a lengthy period of domestic economic growth, combined with a sharp increase in export demand, has placed pressure on capacity should not in and of itself be a cause for concern.

What is concerning, however, are the difficulties that have been encountered in responding to those pressures by investors in some parts of our infrastructure. If our problem in earlier years was at times profligate investment by government owned monopolies, the risk today is that efficient, commercial investment will be delayed or even deterred by inappropriate policy settings. Simpler, more transparent, predictable and accountable regulation is of key importance in this respect.



AUSTRALIA's export performance and the adequacy of infrastructure have emerged as key discussion issues in recent months. The Reserve Bank of Australia, in its quarterly statement on monetary policy in February 2005, suggested that supply bottlenecks have held back export growth, particularly in the mining sector. National and local media coverage of the issues has been extensive, especially on coal exports through Dalrymple Bay.

Several prominent reports covering these and broader infrastructure issues have also been released recently — including those by the Business Council of Australia (2005), the Committee for Economic Development of Australia (2005), and the OECD (2005).

Some have suggested that there are temporary and isolated bottlenecks in some sectors. Others have suggested that there is a widespread 'infrastructure crisis' in the Australian economy.

The taskforce

On 18 March 2005 the Prime Minister announced the formation of a taskforce to identify any bottlenecks, of a physical or regulatory kind, in the operation of Australia's infrastructure that may impede the full realisation of Australia's export opportunities. The taskforce was given until 20 May 2005 to report to the Prime Minister.

In view of the timeframe, the taskforce limited itself to the issues that we consider to be most critical and directly associated with exporting, and are proposing broad principles for action.

Consultation process

The taskforce released a discussion paper on 8 April 2005 to elicit responses from interested parties and focus input on issues within its remit. A series

of meetings with key interest groups and affected parties — including Australian and state government agencies, industry bodies, and small and large companies covering the production and export logistics chain — was conducted throughout April and early May.

The limited time available meant that the taskforce was not able to meet all interested parties. However, interested parties were invited to make written submissions and the taskforce received 71 written submissions. Public submissions can be obtained from www.infrastructure.gov.au/submissions. The submissions raised a range of issues associated with physical and regulatory impediments to exports. The taskforce has tried to address the issues raised at a broad policy level. However, it was not possible in the time available to individually address each of the detailed issues raised, and the taskforce has forwarded specific issues to the relevant agencies, where appropriate, for consideration.

A list of organisations that the taskforce met with is provided in appendix A, while the organisations from which submissions were received are listed in appendix B.

Structure of this report

Chapter 2 contains a brief overview of Australia's exports and key export related infrastructure. In chapter 3, an economic framework for considering exports and infrastructure issues is presented, including the role of public policy. A summary of the key physical infrastructure issues raised with the taskforce is provided in chapter 4. Issues related to the current regulatory framework, including concerns raised with the taskforce and suggested reforms to the framework, are considered in chapter 5. Chapter 6 contains a summary of environmental, planning and other regulatory issues raised with the taskforce. In chapter 7, the taskforce has provided recommendations for consideration in the short and longer term.

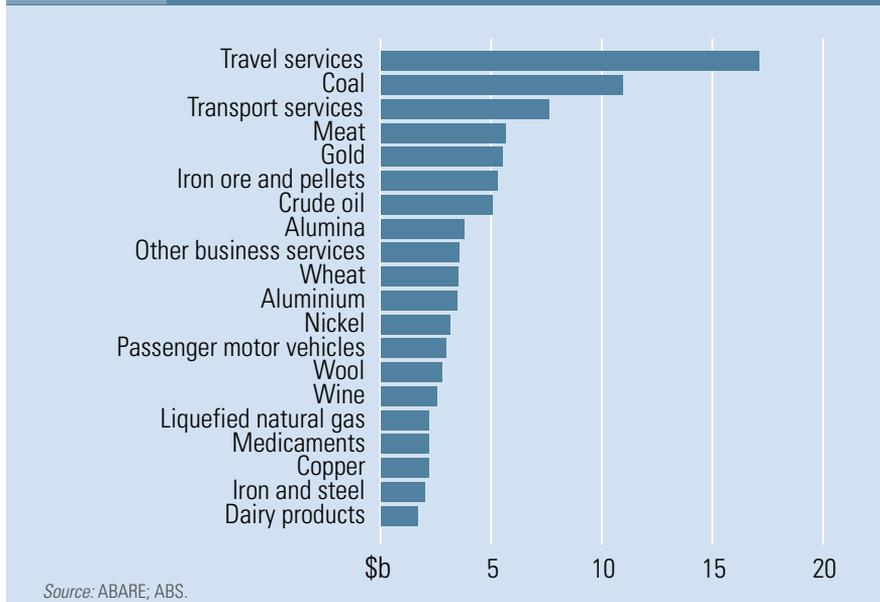
Australian exports and infrastructure



AUSTRALIAN exports of goods and services in 2003-04 totalled \$143.4 billion. Of this, approximately 36 per cent were mineral resources, 24 per cent services, 20 per cent rural exports and 20 per cent other merchandise exports.

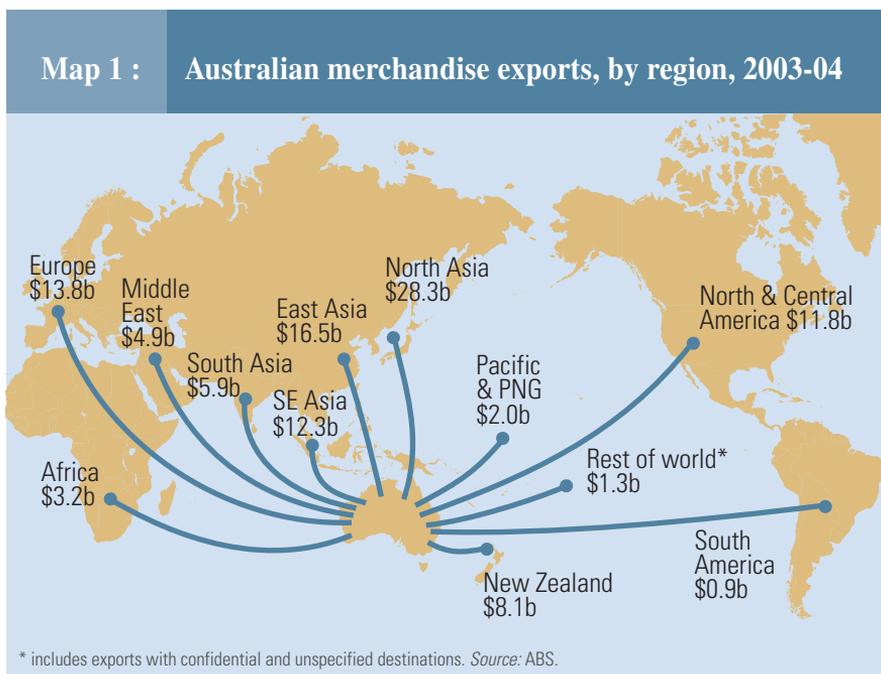
The top twenty exports, in value terms, cover a variety of resource, commodity and service industries. While travel was Australia's leading export in 2003-04, coal exports are likely to overtake travel in 2004-05 as a result of recent high coal prices. Strong prices are also expected to result in iron ore becoming Australia's third largest export in 2004-05. Other resource industries, such as gold, crude oil and alumina, and agricultural exports, such as meat and wheat, are also important (figure 1).

Fig 1 : Value of Australian exports, 2003-04



Where do Australia's exports go?

Nearly 60 per cent of Australia's merchandise exports in value terms go to Asia, with Japan alone accounting for 18 per cent of exports. Europe (13 per cent), North America (10 per cent) and New Zealand and the Pacific (9 per cent) are also important export destinations (map 1). Disaggregated country data on services trade are not available.



Recent export trends

Recent growth in Australia's export volumes has varied considerably between sectors. Rural exports have grown reasonably strongly over the past ten years (by 5.3 per cent a year), as have resource and other merchandise exports (4.4 per cent and 5.5 per cent respectively). Services exports have remained relatively flat over this period (figures 2 and 3).

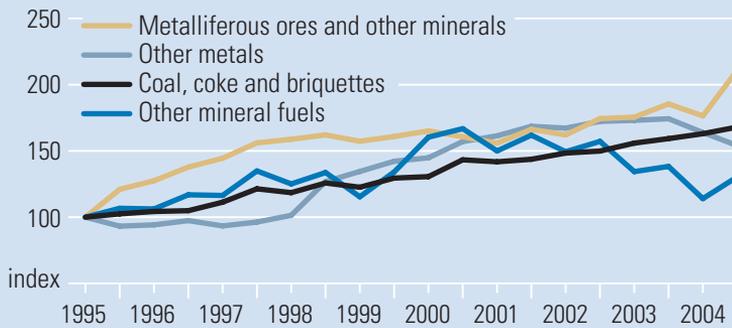
Coal and iron ore exports have grown more rapidly than forecast in recent years, placing greater pressure on existing infrastructure. Coal exports increased from 175 million tonnes in 1999-2000 to 218 million tonnes in 2003-04, an average annual growth rate of 5.6 per cent. Similarly, iron ore exports increased from 150 million tonnes to 195 million tonnes over the same period, an average annual growth rate of 6.8 per cent.

Fig 2 : Australian exports, by sector chain volume measures



Source: ABARE; ABS.

Fig 3 : Australian resource exports chain volume measures



Source: ABARE; ABS.

Export outlook for key commodities

The outlook for Australian commodity exports in the medium term remains strong. Iron ore is expected to overtake coal this year as Australia’s largest commodity export, in volume terms, growing at 9 per cent a year to reach 330 million tonnes in 2009-10, supported by strong growth in steel demand in China and other Asian markets (table 1). Coal exports are also forecast to grow by 5 per cent a year to reach 287 million tonnes in 2009-10, driven by growth in coal fired power generation and blast furnace steel production in the region. Australian exports of wheat, crude oil and alumina are also forecast to rise strongly, although they are considerably lower in volume terms.

Table 1 : Outlook for Australia's key commodity exports

	2003 -04	2004 -05	2005 -06	2006 -07	2007 -08	2008 -09	2009 -10	Annual growth
	Mt	%						
Coal	218.4	229.9	244.4	259.8	270.6	282.0	287.0	4.7
Iron ore and pellets	194.8	231.4	255.3	281.9	305.9	318.8	330.9	9.2
Wheat	15.1	17.7	16.2	16.5	17.7	18.3	19.6	4.5
Crude oil	15.0	14.7	20.1	23.2	23.1	21.4	20.5	5.3
Alumina	13.6	14.0	14.8	15.5	16.9	18.5	19.5	6.2
Woodchips	10.6	9.0	10.8	11.0	11.2	11.4	11.6	1.5
Salt	10.3	10.6	10.8	11.0	12.2	13.7	14.0	5.2
Liquefied natural gas	7.9	10.8	12.4	13.5	15.2	19.2	21.3	18.0
Barley	5.3	5.7	4.2	4.3	4.4	4.5	4.6	-2.5
Sugar	3.9	4.0	4.1	4.1	4.1	4.2	4.2	1.2

Source: ABARE.

Map 2 : AusLink road and rail network and major export ports



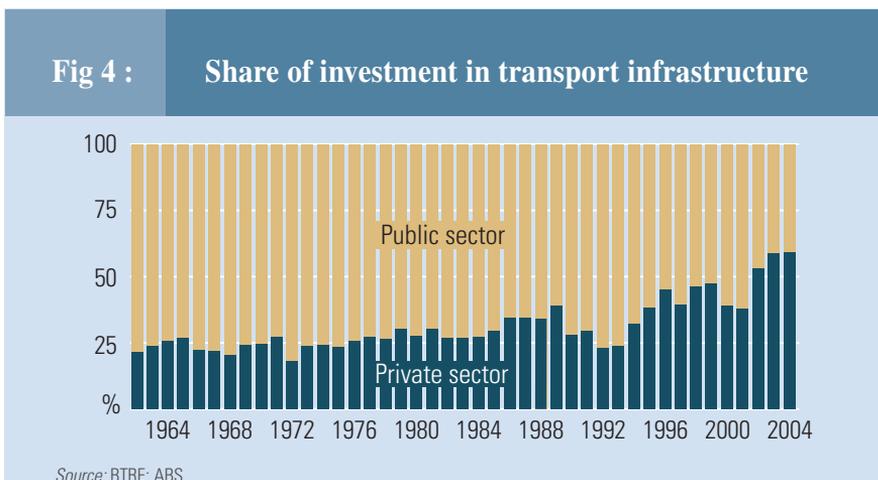
What is Australia's export oriented infrastructure?

Australia's physical export oriented infrastructure includes roads, rail, ports and airports. While not considered directly by the taskforce, infrastructure also includes facilities that provide inputs into production process such as electricity, gas and water.

Exports make extensive use of the nation's transport infrastructure (map 2). More than 99 per cent of Australia's exports by weight (79 per cent by value) leave Australia by sea. Bulk mineral exports reach their departure seaport almost exclusively by rail. Grain exports have traditionally been freighted using regional rail lines to ports, but road transport is increasing. Most manufactured exports are produced in or near metropolitan areas and reach the port by road. Air freight exports, comprising some manufactures and high value metals and minerals such as gold and diamonds, are also shipped to capital city airports largely by road. Detailed data on the interaction between exports and infrastructure are not available.

Who provides Australia's export oriented infrastructure?

Responsibility for the planning, funding and provision of infrastructure in Australia is shared between the three levels of government and the private sector. The role of the private sector has increased significantly over the past twenty years (figure 4). The direct government role as provider and operator of infrastructure dominated in Australia until at least the 1980s. Since then, many ports, railways and major airports have been corporatised and privatised to inject competition into markets that use 'essential' infrastructure facilities. Economic regulation of infrastructure providers has increased and access by third parties to essential infrastructure, whether publicly or privately owned, is subject to Part IIIA of the Trade Practices Act.



Exports, infrastructure and regulatory policy

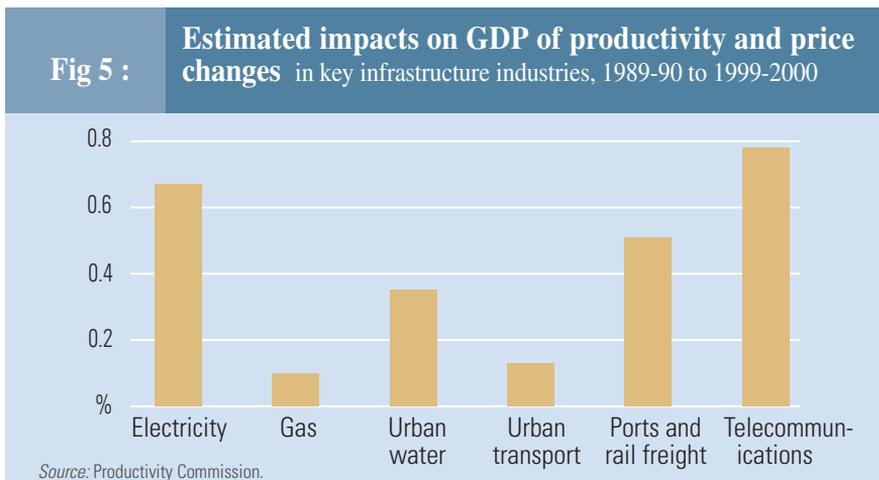


EXPORTS contribute around a fifth of Australia's gross domestic product (GDP). This share of GDP has been broadly increasing since the early 1980s with the progressive removal of trade barriers and reductions in transport and communication costs. The efficiency of Australia's infrastructure is important for our export industries. However, ensuring the efficient deployment and operation of infrastructure involves a broad range of economic challenges that are discussed in this chapter.

Infrastructure and productivity

The increasing openness of the Australian economy has brought with it many benefits but also challenges, including the need to increase the competitiveness of Australia's export industries. In turn, this has focused attention on the productivity of the non traded sector of the economy, including infrastructure. The increasing openness of the economy and the need to lift productivity levels were key drivers of many of the micro-economic reforms of the 1980s and 1990s. For infrastructure industries this generally meant the introduction of competition into areas traditionally serviced by public monopolies.

The outcomes from the microeconomic reform programme have been impressive across a wide cross section of the economy. The Productivity Commission found that Australia's productivity performance during the 1990s was strong by international standards, with only two OECD countries recording higher rates of improvement in multifactor productivity. In addition, the Productivity Commission has estimated that productivity and price changes in infrastructure industries have contributed positively to GDP. Figure 5 shows the key contributors to the estimated 2.5 per cent increase in Australia's GDP compared with a 'no change' base case over the ten year period to 1999-2000.



The microeconomic reform programme has also more closely aligned prices with costs, leading to falls in prices for port services, rail freight, telecommunications and electricity, while prices of urban transport and country passenger rail services have risen (Productivity Commission 2005). These changes in price structures and levels have contributed to efficiency, by helping to ensure that resources are consumed by those, and only by those, who value them at more than their opportunity cost.

However, the need to lift productivity is ongoing. It is important that any infrastructure bottlenecks be removed as this will lift productivity and Australia's potential economic growth rate. While removing bottlenecks will not guarantee increases in actual exports, it provides the potential for increases if demand conditions allow them.

Exports and the current account deficit

One misconception that the taskforce encountered in its consultations was an assumption that removal of bottlenecks would reduce Australia's current account deficit. While the deficit is most commonly discussed from a trade perspective, it is best understood within a saving/investment framework. The current account deficit is the sum of net lending (saving less investment) by governments, corporations and households in Australia.

Most recently governments and corporations have been saving more than they have been investing. However, this has been more than offset by households that have been net borrowers, investing more than they have been saving. The fact that investment is in excess of saving is not in itself a problem. In the absence of distorting policies it may simply reflect consumers' assessment of the value of current investment and consumption

opportunities relative to future investment and consumption opportunities. What is important is that the catalyst for the current account deficit to fall from its current levels will be an increase in saving relative to investment within the economy, not a simple change in exports (see 2005-06 Budget paper no. 3; Industry Commission 1995; and Forsyth 1990 for further discussion).

That removal of bottlenecks will not reduce the current account deficit does not diminish its value or importance. For a given savings/investment balance, increasing Australia's productivity will allow higher, sustainable living standards. Removing bottlenecks to exports is equivalent to improving the terms of trade, and eases inflationary constraints on our continued economic growth.

Nature of infrastructure

Given that an underperforming export sector constrained by infrastructure problems reduces the potential economic growth of the economy, it is worth exploring the nature of infrastructure and the accompanying role of governments within the economy.

Infrastructure can be thought of as the traditional transport modes of rail, road, air and ports, or facilities that provide inputs into the production process such as electricity, gas and water. Equally, though, infrastructure can refer to the financial system that facilitates and supports trade or the education and training system that produces skilled labour. Infrastructure by its nature raises a number of complex public policy questions because:

- while a shortage of infrastructure may restrict what the economy can produce, an oversupply of infrastructure is an inefficient use of scarce resources;
- installing new infrastructure often involves long lead times;
- infrastructure can generally only be provided in large units and usually involves high fixed costs, that once engaged are sunk;
- investments in infrastructure assets are usually very long lived and may be 'stranded' if they are overtaken by technological changes or market events;
- many infrastructure assets have multiple users and it can be difficult to ensure that all users' quantity, quality and price expectations are met; and
- the productivity of infrastructure assets is significantly affected by the extent to which investment in the infrastructure itself is consistent and coordinated with investment decisions being made by users.

The lumpy nature of infrastructure assets means that their owners are unlikely to respond, whether by provision of additional capacity or initial establishment, as fast as required by demand conditions. In economic terms, supply is relatively inelastic (in the sense that quantity is not very responsive to price). The nature of infrastructure therefore lends itself to bottlenecks that cannot be avoided without incurring significant economic cost.

Thus, although it may be desirable to have some redundancy in infrastructure assets, these assets' high fixed costs mean that the insurance obtained through building redundant capacity may be very costly. For example, while having some additional electricity generating capacity to cover unexpected outages may be prudent, having enough spare capacity to cover a failure of half the generators in a state would usually be a wasteful way of protecting the community from a very low probability event. Equally, given the sunk nature of many infrastructure investments, it would be undesirable for investment to proceed as soon as signs eventuated of an increase in demand — rather, prudence requires that investors wait to see whether the increase persists and warrants the costs and risks of capacity expansion. Some lag in the response to changes in the supply/demand balance is therefore both inevitable and desirable.

Competition and coordination

Difficulties in the response of infrastructure providers to changes in demand can also arise from the need to ensure coordination of investment decisions between the infrastructure owner and the users of that asset. Coordination may not readily occur if the transaction costs it entails are high — for example, when the common infrastructure is used by large numbers of firms with divergent interests. Even when the number of users is relatively small, the task of efficiently coordinating investments in infrastructure services may pose substantial challenges.

Some of these challenges relate to the need for physical coordination of investment. For example, a port provider may expand capacity consistent with an expansion of the mines it services, but this will be an incomplete solution if the rail line running to the port remains constrained. Poor information flows between infrastructure owners, and between owners and users, can contribute to bottlenecks if it leads to a situation where interdependent infrastructure is not expanding in a coordinated manner. The difficulties associated with physical coordination of complementary investments are, however, greatly complicated by disputes over the division of the gains from those investments.

Historically, vertical integration between infrastructure providers and the activities that most rely on their services has been a way of avoiding these

complications. In some cases, this has taken the form of direct ownership of infrastructure assets by their sole or major user; in others, ownership has been through what amounts to buyers' joint ventures. But where vertical integration is impossible, or for wider policy reasons judged undesirable, coordination issues — be it for complementary or for substitutive investments — are likely to arise.

Difficulties in organising all the parties required for complementary investments to occur, and in securing agreement as to the sharing of the costs of needed capacity expansion, can paralyse the capacity expansion process — perpetuating bottlenecks that all parties would be better off resolving.

Role of government — achieving well functioning markets

While infrastructure provision means that some bottlenecks are essentially unavoidable, others can be addressed more directly by public policy. More generally, public policy has a central role to play in determining the efficiency with which infrastructure assets are deployed and operated.

Australian economic policy operates on the understanding that well functioning markets will deliver the best outcomes for the Australian people. History has shown that decentralised market processes, whatever their occasional flaws, are far superior to any form of centralised planning or direction in providing for the best use of resources and in creating the incentives for devising better ways of meeting consumers' needs.

Well functioning markets are ones where:

- competition is fostered;
- property rights are protected;
- side effects on third parties are curtailed;
- information flows smoothly; and
- market participants can be trusted to live up to their promises. (McMillan 2003)

Well functioning markets are not perfectly competitive markets — market failure will always exist and cannot be completely removed by regulation. However, well functioning markets do not necessarily arise spontaneously and government will have a role from time to time to achieve good outcomes, including through the provision of regulation and, in some cases, the direct provision of goods and services.

The government role: provision

Historically, Australian governments played a direct role in supplying infrastructure services as monopoly service providers. While this role may have been understandable in the initial stages of nation building, the rationale for direct government provision has waned significantly.

To begin with, it has become clear that governments often do a poor job of managing commercial assets and enterprises. This is not to suggest that private provision is perfect — it plainly is not — but it avoids many of the inefficiencies that have beset government owned enterprises in Australia and overseas.

At the same time, the need for governments to bear the burden of infrastructure investments has diminished. Globally integrated capital markets are fully capable of financing even the largest infrastructure projects.

Last but not least, with governments moving to introduce competition into regulated markets, continued government ownership creates scope for conflicts of interest and introduces added sovereign risk.

Given these factors, the trend in Australia and overseas has been to rely more heavily on infrastructure that is privately financed and operated. A shift to private provision does not mean, however, that the government role in infrastructure has disappeared. Some infrastructure still lends itself to public provision because of its public good characteristics. Public goods are products or services where it is difficult to exclude someone from its consumption and where one person's consumption does not limit others from consuming the good. While examples of pure public goods are difficult to find (defence forces are often cited), many infrastructure assets have some public good characteristics. The most obvious example is local roads. Without government provision, local roads would be underinvested in from society's perspective. Beyond this the role for government in airports, ports, major roads, rail, electricity, gas and water infrastructure becomes more complex. While these can have some public good characteristics, the main involvement for government will come from the positive externalities that may flow from their provision. Uncertainty over the boundary between public and private provision is likely to be a disincentive to infrastructure investment by the private sector and may therefore contribute to bottlenecks.

The government role: regulation

By their nature, significant infrastructure projects often involve substantial externalities — that is, effects on third parties are not entirely reflected through the price system. Building new ports or materially expanding existing ports, for example, often raises environmental issues. Projects

such as these are therefore quite properly the subject of environmental and planning scrutiny.

It is also in the nature of infrastructure assets that their owners may have a degree of market power. While governments previously relied on public ownership to protect consumers from market power, the shift to private provision of infrastructure assets has been accompanied by a move to reliance on explicit regulation, administered by independent regulatory agencies, as the primary means of preventing market power from being abused. In Australia, the implementation of access regimes has been a central element in the move to explicit regulation (see appendix C for an overview of Australia's access regimes).

Regulation and its limits

It is important to be realistic about what regulation can and cannot achieve. The information available to regulators is necessarily highly imperfect, so regulators cannot hope to mimic the outcomes that would be secured by fully efficient markets. In fact, the search for fully efficient outcomes is likely to merely add delay, cost and uncertainty to the regulatory process. As a result, any feasible system of regulation is likely to be characterised by a level of 'government failure'. Reflecting this, regulation should be used cautiously, and the costs of regulation taken fully into account in decisions about whether and how to regulate.

In addition to the need for caution in the application of regulation, the manner in which assets are regulated is also of great importance. One way to achieve a better balance in this respect is to try to match the extent and nature of regulation to the market power held by the infrastructure owner and the likelihood that market power would be misused. Hence, an infrastructure owner with very significant market power may face a heavy handed regulatory framework that controls the price of access or total revenue, whereas an owner with less market power may face a more light handed approach such as provided by ex post price monitoring.

Regulation and investment

Even when attention is paid to carefully selecting the form of regulation, there is an inherent tension between regulation and efficient investment. In practice, regulators inevitably have a degree of discretion and that discretion creates risks that investors in infrastructure need to take into account. Even firms that are monopolists in the supply of a particular service must compete in the global market for infrastructure finance. As a result, if efficient capacity expansion is to proceed, investors must reasonably expect a return that is sufficient to recover the opportunity cost of capital.

Asymmetries in regulation can undermine the confidence that this requires. In some regulatory contexts, regulation ends up capping the ‘upside’ investors in regulated infrastructure can hope for, while not limiting the ‘downside’ to which they are exposed. This means that even what seems like a ‘fair’ rate of return is insufficient to induce investment that society values at more than its cost.

Regulation can also undermine capacity expansion by distorting the price signals confronting investors in regulated assets. Regulators may be reluctant, for example, to allow price to rise in line with congestion, as this seems to confer ‘windfall profits’ on the asset owner. However, holding prices down as capacity constraints approach aggravates the problem: it allows demand to keep rising, and hence imposes the need for some more quantitative form of rationing; and it reduces the attractiveness to the asset owner of capacity expansion. This kind of regulation makes it more, rather than less, likely that bottlenecks will arise and persist.

Regulation can contribute to the persistence of bottlenecks if it complicates the interaction between infrastructure owners and the users of the services they provide. Capacity expansion, especially on a substantial scale, will inevitably benefit several users, as well as creating incremental profits for the facility owner. Disputes about how these costs and benefits are to be shared are probably inevitable. But they can be prolonged and in some cases made even more intractable than they need to be by the injection of an additional participant — a regulator that each party can seek to influence and use to its own advantage. This is not to suggest that regulators should be blamed for the defects of regulatory regimes. Just as regulators sometimes pursue agendas of their own, so too do regulated firms seek to ‘game’ the regulatory system. However, the more discretionary the regulatory system is, the greater the scope is for this type of gaming.

Physical infrastructure

key issues raised with the taskforce



THE major physical infrastructure issues discussed with the taskforce in consultations and submissions are outlined in this chapter. First, issues surrounding the question of the best ways of coordinating activities between the different levels of government are discussed. This is followed by a consideration of the issues raised on the capacity of ports and railways. Brief comments are then made about the coordination of logistics chains and the needs of specialist exports.

Infrastructure coordination and planning

A consistent theme through the consultations and in submissions was the need for greater coordination between the three levels of government and the private sector to ensure the provision of appropriate infrastructure on a timely basis.

The Business Council of Australia noted that:

Shortfalls in the capacity of Australia's infrastructure flow from the convoluted institutional arrangements and poor policy choices — not from the demands of higher economic growth or a scarcity of resources or funding.

The AusLink White Paper observes that:

Australia cannot afford poor and uncoordinated infrastructure decisions that impose high costs on the community, the economy and the environment. The existing planning and decision making framework is short term, ad hoc and fragmented across transport modes and jurisdictional boundaries. The development and implementation of a national vision for critical land transport links is vital.

Lack of proper planning and timely investment in infrastructure can have a direct impact on Australian exporters. For example, in relation to the

postponement of a decision on the channel deepening in Port Phillip Bay, Shipping Australia has announced that its members ‘cannot continue to invest in services calling into Melbourne’. This could result in the use of smaller, less cost efficient ships on the Australian trade.

Although users of infrastructure recognised the key role of state and local government, they still expect the Australian Government to take a leading role in coordination of infrastructure development. The view that this task is best undertaken at the national level is also supported by the OECD in its Survey of Australia (2005), which notes that ‘economic efficiency is most likely to be achieved if the analysis is undertaken at a national level, and decisions coordinated across levels of government’.

A related issue is that of data. The taskforce noted the lack of consistent, consolidated data about the nature and condition of Australia’s infrastructure. Given this lack of data, the taskforce had to rely to a large extent on ad hoc reports and anecdotal evidence of the condition and adequacy of infrastructure and associated regulatory arrangements.

The taskforce considers that:

- the long term planning of land transport infrastructure being developed jointly between the Australian Government and the states and territories under AusLink (see box 1) should be developed as quickly as possible in order to establish a known and agreed planning framework. The establishment of an agreed framework will give governments and the private sector the certainty to make the necessary infrastructure investments needed to avoid future possible export bottlenecks; and
- to assist the policy process, as well as to inform the market, a national audit of Australia’s physical infrastructure along the lines developed in New Zealand should be carried out.

Funding issues

Responsibility for the planning, funding and provision of infrastructure in Australia is divided between the public and private sectors. As a result of microeconomic reforms, the private sector is increasingly playing a more significant role in the funding and provision of infrastructure.

Although submissions to the taskforce included a number of calls for increased funding of infrastructure by governments, there was also recognition within parts of the private sector of the key role that the private sector must play in financing infrastructure in the future.

Xstrata Coal stated in relation to the current constraints on coal exports:

There is no need for government investment support as capacity restrictions do not result from a difficulty in obtaining private sector funding. The coal industry and/or the private sector is quite capable of raising the funds required for properly underwritten projects so long as the regulatory and investment rules are clear.

However, the private sector needs an agreed, stable and predictable planning and regulatory framework if it is to make the substantial sunk investments required to meet Australia's infrastructure needs.

Box 1 :

AusLink – an integrated approach to transport infrastructure planning and investment

In June 2004 the Australian Government released the AusLink White Paper — *AusLink: Building our National Transport Future* — which sets out its approach to planning, funding and developing national land transport infrastructure. AusLink establishes a coordinated planning and investment framework with the states and territories.

Its two key initiatives are:

1. An expanded national land transport network — the AusLink National Network — which extends the sphere of national interest from the former national highway system to focus on the transport links (road, rail and intermodal) to major capital city ports and airports and to many important regional ports. It does not, however, include ports — the final link in the export chain.
2. Establishment of a long term multimodal planning framework — the National Land Transport Plan — which is a blueprint for investment in the National Network.

Cooperative arrangements with the states and territories are being established via bilateral agreements between the Australian Government and each jurisdiction.

The AusLink White Paper contains the Government's first five-year National Plan. The next National Plan will draw heavily on the outcomes from long term (say, twenty years) corridor strategies developed cooperatively by the Australian and state governments. The development of an initial set of four pilot corridor strategies is currently under way.

Corridor strategies lend themselves to more holistic, inclusive and co-operative examination of transport connections both between the major

Port issues

A number of current and potential port issues were raised with the taskforce. These included deepening of channels, the adequacy of landside connections to ports and the need to consider the transport logistics chain as a whole rather than to examine links in the chain separately.

Port channel depth and capacity

The size of both bulk and container ships servicing Australian ports is increasing, with a growing preference from shippers to minimise the number

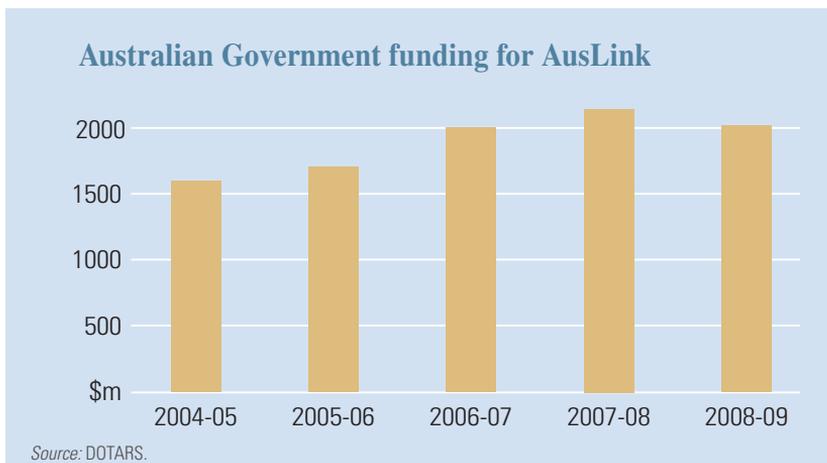
Box 1 : *continued*

AusLink – an integrated approach to transport infrastructure planning and investment

generators of economic activity and across modal and jurisdictional boundaries. These strategies include initiatives aimed at ensuring better management and more efficient regulatory solutions.

A comprehensive set of transport infrastructure planning guidelines for infrastructure investment decision making in Australia and a National Transport Data Framework to assist the corridor studies have already been endorsed by Transport Ministers. These are intended to ensure a strategic and evidence based approach to national infrastructure investment. Their implementation should provide an objective and consistent basis for identifying national transport infrastructure needs.

The Australian Government total funding for AusLink is \$9.5 billion over five years, with the following expenditure profile:



of ports visited by their ships. While this is consistent with global trends, it places pressure on existing channel depths, as a number of Australia's major ports are now not able to accept fully laden ships of the highest tonnages, effectively constraining one end of the export chain. For example, the Port of Melbourne Corporation estimates that 30 per cent of container ships visiting Melbourne cannot be loaded to full capacity because of channel depth restrictions.

This is not a new issue for port authorities. Ships have been growing in size since colonial times and port authorities have had to deepen ports at regular intervals or face the prospect of being bypassed by shippers. The responsibility, and cost, of improving port channels resides with the relevant port authorities.

Channel depth issues were identified in the ports of Melbourne, Newcastle, Gladstone, Adelaide, Fremantle and Dalrymple Bay. The port authorities and state governments are aware of the issue and have plans, at various stages of development, to deepen the channels. For example, dredging work at Port Adelaide to increase channel depth to 14.2 metres is expected to be completed this year (Flinders Port 2005).

The number of places where ships can pass each other in long channels may also become an important constraint. In some ports in Australia channels are many kilometres long and managing ship movements becomes an additional complexity. This issue will become more important in the future at ports such as Gladstone where both exports and imports of bulk cargo take place.

The taskforce notes that the lack of channel development in one port can have impacts on other ports. For example, if a vessel needs to call at several Australian ports on the one voyage then the size of the vessel that can be used is constrained by the shallowest channel. Developments at Melbourne are important in this regard. As the busiest container port in Australia it is highly likely that ships used on the Australian container trades will be limited to Melbourne's requirements.

Tightening environmental requirements are making the approval of dredging of the deeper channels more difficult and more time consuming to obtain. In the case of Melbourne, the state government supports channel improvement but has recently initiated a further, supplementary environmental assessment. This creates a risk of further, significant delay, as well as additional costs. In turn, such a delay would have flow on effects on other Australian ports, as even those ports that were willing to expand their channel depths on a more timely basis would find that ships capable of exploiting the deeper channels would not be making use of their facilities. The overall result may be that ports individually and collectively will delay investments that, from the perspective of Australia as a whole, are well worthwhile.

Similarly, the logistics chain for the export of a product is only as strong as its weakest link. The past approach has been for the logistics chain to be developed piecemeal with each link developed by separate agencies or even different levels of government. The AusLink programme sets out an approach to planning, funding and developing national land transport infrastructure that establishes a coordinated framework. It does not make sense to the taskforce to leave off the final link — the ports — from that planning process.

It appears to the taskforce that there are strong interdependencies between the different export ports and other elements of the export transport chain. This creates, in the view of the taskforce, a strong case for coordination of port development between the major ports on a national basis and as a part of the overall logistics chain. To this end, the taskforce considers that the existing AusLink programme should be extended to include ports of national significance and their associated shipping channels.

Port capacity

Bulk ports

The taskforce found capacity constraints at most of Australia's bulk ports for coal and iron ore. The constraints generally occur in the ship loading facilities although there can also be shipping channel constraints. The current capacity constraints have arisen from the unexpected increase in demand for the commodities handled at those ports (see box 2). The taskforce has been advised that similar capacity problems are being encountered around the world at bulk export ports, though this fact alone provides no cause for complacency.

One manifestation of the rapid increase in demand has been the development of long queues of ships at some of these ports. Some queueing is a normal part of the operation of ports. It was suggested to the taskforce that the queues have, somewhat paradoxically, been exacerbated by the shortage of shipping as miners are prepared to pay demurrage on ships rather than miss a possible loading opportunity.

In the short term, some coal loader operators have responded to the long queues by establishing schemes for allocating terminal loading capacity (for example, Port Waratah Coal Services). These management schemes, which have required the approval of the ACCC, attempt to reduce queues and associated demurrage costs. While these capacity allocation schemes can play a useful short term role, there is a risk that they will reduce the incentive to increase port capacity. As a result, they should only be accepted as an interim solution, other than in those rare instances where capacity expansion is not feasible (in which event some price based form of allocation

of scarce capacity may be more desirable than a reliance on quotas and other forms of quantitative rationing).

For coal, the taskforce was advised that capacity constraints also exist in the supply chain to the port as well as in the capacity of the mines. In some instances these are caused by inefficient use of existing infrastructure, while in other instances there are physical problems that are to some extent being addressed. For example, the Hunter Valley Coal Chain Logistics Team has been able to achieve a 20 per cent increase in throughput (from 69 to 84 million tonnes a year), without any significant capital investment by taking a systemic approach to planning the movement of coal from the mine to the port.

The owners of coal loaders at Newcastle, Gladstone, Dalrymple Bay and Abbot Point are all responding to the increased demand for coal and have plans in place to expand their capacities. For example, Port Waratah Coal Services, the operator of the coal loader at Newcastle, will expand its capacity by 15 per cent from 89 to 102 million tonnes a year, the maximum allowed under its development approval. The New South Wales Government

Box 2 :

Unexpected rise in coal and iron ore demand

World prices for coal and iron ore have increased strongly in the past year, supported by increased demand for both commodities and limited additional supply availability. For Japanese financial year 2005-06 (April–March), the benchmark contract price for hard coking coal increased by 114 per cent from the previous year, while iron ore contract prices increased by 67 per cent. This price rise diverges significantly from the downward trend in real prices since the 1980s:

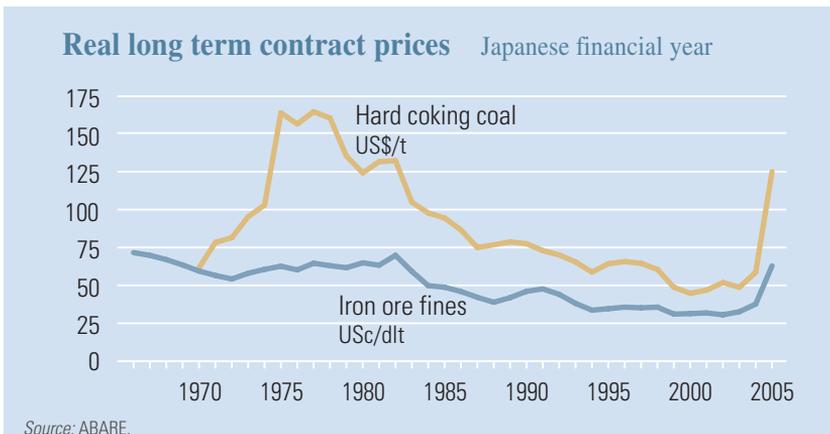


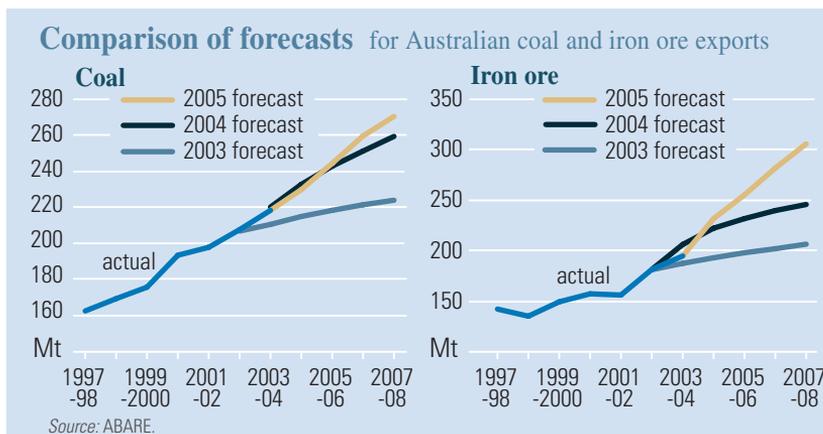
Table 2 : Current and expected annual coal port capacity

Terminal	Nameplate capacity Mtpa	Capacity after expansion Mtpa	Expected expansion completion date
Abbot Point	15.0	50.0	Planning under way
Brisbane	5.0	–	–
Dalrymple Bay	54.5	60.0 75.0	August 2006 Planning under way
Gladstone	40.0	85.0	March 2007
Hay Point	34.0	40.0	June 2006
Newcastle	89.0	102.0	end 2007
Port Kembla	16.0	–	3rd loader Tenders called

Source: DITR (2005); Queensland Government.

Box 2 : Unexpected rise in coal and iron ore demand
continued

The rate of growth in world demand for coal and iron ore has been more rapid than forecast, leaving little time for planning and realising export infrastructure expansions. The current ABARE forecast for Australian coal exports in 2005-06 is around 245 million tonnes, 26 million tonnes higher than forecasts for 2005-06 released in 2003. Similarly, Australian iron ore exports are currently forecast to be around 255 million tonnes in 2005-06, 57 million tonnes higher than forecasts released in 2003.



has called tenders to develop land on Kooragang Island as a third loader. The successful tenderer is expected to be known by the end of 2005. See table 2 for a summary of coal port expansion plans.

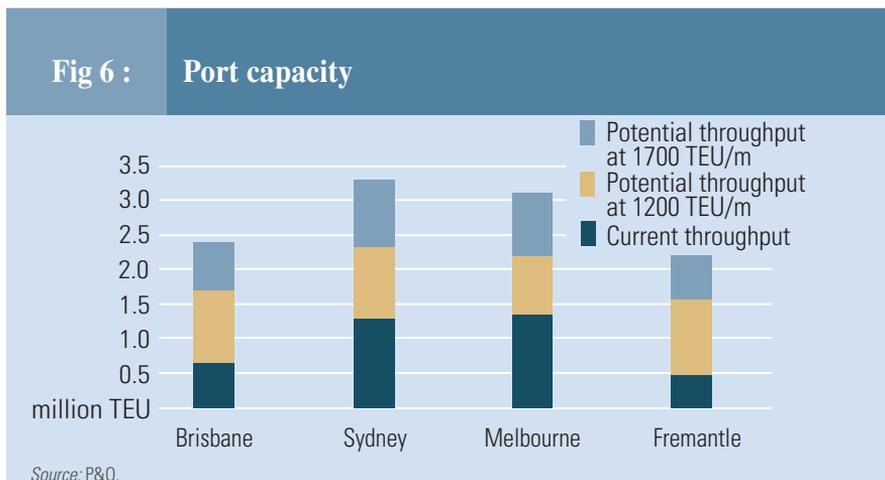
This additional capacity will take two to three years to come on stream because of the long lead times to construct the infrastructure. This highlights a major problem with the current regime. Given the delays in the regulatory and other planning processes, it could be five to six years from the time that an increase in demand occurs to when new infrastructure projects are completed. The result will be reduced export sales and possible market share over that extended period.

Even though capacity issues at the coal ports are now being addressed to some extent, it is worth noting the contrast with the iron ore ports. While these ports too have had capacity problems, there is every sign that, first, there have been few difficulties in efficiently allocating scarce capacity and, second, a coordinated response has been rapidly deployed that will result in integrated expansion of mine, rail and port.

Container ports

The major container ports in Australia are Melbourne, Sydney, Brisbane and Fremantle.

The movement of containers at Australian ports is dominated by the two stevedores, Patrick and P&O. Both companies have been expanding capacity, in line with increased throughput. This has been through a combination of extra infrastructure and improved productivity (for example, from technological improvements such as driverless container stackers). Information available to the taskforce indicates that container port infrastructure is currently adequate (figure 6) and is likely to remain so



for the next five to ten years. It should be noted, however, that rail and road access to a number of these ports is not adequate.

The trucking industry brought to the attention of the taskforce the difficulties being experienced with container delivery and collection arrangements at a number of ports. Their concern is that the stevedores maximise their operations at the expense of trucking operations rather than taking a more holistic approach.

Landside connections to ports

Many submissions asserted that Australia's major ports, not only those in the capital cities, suffer from landside congestion. The congestion is the result of the development of the cities around the port and the delayed development of the road and rail connections.

The Australian Trucking Association considers port links as a key road deficiency in Australia at present.

The taskforce has formed the view that road and rail connections to ports are major issues for the Port of Melbourne, Port Botany and to a lesser extent the Ports of Brisbane, Fremantle and Adelaide. It is also an issue in some regional ports such as Portland with the expected expansion in woodchip exports.

The taskforce notes that the Australian Government has recognised the importance of developing good road and rail links to ports through AusLink. Under AusLink there is a focus on joint planning (with the relevant state and territory governments) as well as the provision of federal funds (\$360 million) to improve port access. Transport links to ports traverse some of the most densely populated areas of Australia and the resulting infrastructure costs are extremely high. Particular bottlenecks identified to the taskforce included the poor road access to Port Botany, the Bunbury Street rail tunnel providing access to Dynon and the Port of Melbourne, and the congested road and rail access to the Ports of Brisbane and Adelaide.

The taskforce considers that detailed analysis is required to determine whether some of these landside connections to major metropolitan ports will become major constraints to growth over the next ten years.

Rail issues

A number of current or potential rail issues were raised with the taskforce, including capacity constraints on some lines and operational conflicts between freight and passenger trains. Many related to general rail infrastructure that are not causing bottlenecks for exports but rather

intercapital freight. However, three rail issues are of direct relevance to the taskforce. These are links through urban areas to major metropolitan ports, coal rail lines and grain lines.

The first of these, issues with rail connections to ports, has been discussed above and the main areas of concern have been identified for action under AusLink.

Coal lines

Rail capacity concerns have been expressed about coal lines in the Hunter Valley and in the Queensland coal fields.

In relation to the Hunter Valley, the taskforce notes the work undertaken by the Hunter Valley Coal Chain Logistics Team, Pacific National and Australian Rail Track Corporation in particular, to increase effective operating capacity through improved coordination and operational practices. Combined with the ARTC investment programme of \$270 million and further rolling stock investment by Pacific National and Queensland Rail, rail capacity is expected to expand to about 102 million tonnes a year by July 2006. This is in line with the announced terminal expansion by Port Waratah Coal Services. ARTC has also given an undertaking to expand rail infrastructure capacity in line with mine and port expansions.

If coal is sourced from the Gunnedah Basin it will require more substantial investments, including possible duplication of the line north west of Muswellbrook and a possible new tunnel through the Liverpool Ranges. A substantial expansion may also be needed to remove the growing conflict between coal trains and wheat trains in the upper Hunter.

In relation to Queensland, the taskforce was advised that current rail capacity is not a constraint on the logistics chain. However, as coal output has the potential to increase by a further 80 million tonnes a year by 2010 there will be substantial pressure placed on the rail system. Additional rail capacity may be required in several locations, with the most likely bottleneck being the need for triplication of the line down Black Mountain on the way to Dalrymple Bay. As the existing easement is not conducive to simple triplication there will have to be either extensive disruption to rail operations while the current route is expanded, or a new line built on a new route.

The coal industry identified a number of gaps or 'missing links' in the rail network in Queensland. These included the link from North Goonyella to Newlands and a link to service the Surat coal basin north of Toowoomba. Queensland Rail and the Queensland Government are now examining the feasibility of these lines with a view to their development in the medium term.

Grain lines

Concern was expressed over the state of grain lines as the export of Australia's grain crop is almost totally dependent on rail.

The branch lines that service the wheat growing areas were largely laid out in the 1920s or earlier and in recent years have been poorly maintained. The grain industry and train operators expressed concern about the condition of the lines and their long term viability, especially after November 2007 when the current contractual obligation on Pacific National to service these lines in New South Wales ceases.

Pacific National noted that:

The central issue is that grain on rail lacks the necessary policy framework and commercial incentives to achieve effective co-ordination between rail operators, track owners and the key participants in marketing, storage and handling including ports. With road an effective competitor for rail, especially over shorter distances, distortions in road pricing add to the challenges facing the industry.

The possible cessation of some grain rail services could place a substantial burden on the road systems in grain growing areas. Although the shift from rail to road of itself will not necessarily restrict exports, it raises a number of regional, transport, pricing and economic issues that are beyond the terms of reference of the taskforce.

The taskforce notes that the regional road and rail connections to ports, including the movement of grain, is currently subject to review by the House of Representatives, Transport and Regional Services Committee.

Other rail

A number of other rail issues were raised with the taskforce including the issue of road/rail pricing and the need for upgrading rail on the north-south corridor on the east coast.

The taskforce recognises the importance of achieving a road/rail pricing regime that can underpin efficient future investment in transport infrastructure. This is a complex issue that is not strictly within the core issues that the taskforce has examined. That said, if progress is not made in addressing competitive neutrality problems between road and rail, the distortions to infrastructure investment will become ever more widespread, as pricing that is out of line with costs leads to capacity expansion choices that poorly reflect the underlying economics.

On the condition of rail in south east Australia, the taskforce notes that the Australian Government has committed some \$1.8 billion for rail over the first five years of AusLink, most of which will be spent in south east Australia, and has announced a study to examine the east coast rail corridor.

The taskforce notes that the complex ownership and management structures in the rail industry result in coordination issues to the detriment of rail in competition with road. These complex arrangements are further complicated by a maze of regulatory regimes. Chapter 6 deals with these regulatory issues.

Logistics chain coordination

One of the success stories noted by the taskforce during the course of its consultations were the results of teams established to improve logistics chain operations. These included the Hunter Valley Coal Chain Logistics Team (HVCCLT) and the Meat Cold Chain.

The export of coal in the Hunter Valley requires the coordination of thirty mines, above and below rail operations, coal loaders and ships. This is a difficult logistics task. When demand for coal is well below the capacity of the coal logistics chain it is not critical that coordination of all elements of the chain is achieved to a high degree. However, when spare capacity in the system is used up there are strong commercial imperatives for all participants in the coal chain to work together to maximise throughput. The HVCCLT estimates that it has lifted the export capacity of the Hunter Valley coal industry from 69 million tonnes a year in 2002 to 84 million tonnes a year in 2005, without any substantial infrastructure upgrading.

In the case of the Meat Cold Chain, there is a need to ensure that meat is constantly monitored from the abattoir right to the overseas customer. The meat industry has developed the monitoring system to ensure that meat has been properly refrigerated and has been moved as quickly as possible.

Facilitating logistics chains

While the details of each logistics chain will be unique, the examples cited above demonstrate the benefits that improved coordination and cooperation can achieve.

The taskforce notes the concerns expressed by some parties that coordination of logistics chains may be seen to be anticompetitive and are at potential risk of action under the Trade Practices Act. However, authorisation of such arrangements is possible under the Trade Practices Act if:

the proposed conduct ... would result, or be likely to result, in a benefit to the public and that that benefit would outweigh the detriment to the public constituted by any lessening of competition that would result, or be likely to result. (s90, TPA)

The taskforce sees merit in improved coordination and cooperation between members of logistics chains if it can improve effective capacity and efficiency, thereby potentially negating the need for some additional investment in infrastructure. The taskforce suggests that the Department of Transport and Regional Services facilitate the establishment of such groups for logistics chains of national importance either directly or via relevant industry organisations.

Specialist exports

In submissions and during consultations, the difficulties faced by small, specialist exporters (for example, horticulture, live or frozen seafood and flowers) were raised. These producers export relatively small quantities of high value, time sensitive goods, mostly by air, and require extremely good coordination between all elements of the logistics chain to successfully compete on world markets.

The taskforce notes their concerns, but is of the view that their problems largely stem from the coordination failures of their logistics chain rather than any infrastructure deficiency. The taskforce has identified elsewhere ways for improving logistic chain operations.

Economic regulation

key issues raised with the taskforce



As outlined in chapter 3, a discussion of infrastructure raises a number of complex policy issues. Chief among these is the role of regulation, particularly economic regulation, in the provision of infrastructure. A summary of the main views presented to the taskforce, an assessment of the current economic regulatory framework and suggestions for reforming that framework are provided in this chapter.

Views expressed in submissions

A substantial proportion of the commentary provided to the taskforce dealt with issues relating to the type of regulation imposed (light or heavy handed) and the timeliness, consistency, independence and accuracy of regulatory decisions. Access regulation was the main area of concern.

Companies were both proponents and critics of access regulation. As asset owners they were critical of the rates of return granted to them by regulators, arguing that the outcomes of the regulatory process are a disincentive to investment. As access seekers they welcomed the role of the regulator in preventing what was perceived as the abuse of monopoly power.

The taskforce was told by a number of parties that the current regulatory regime increases risk and that this is an impediment to infrastructure investment. It was submitted by parties that several key features of the regulatory regime have the effect of creating regulatory risk:

1. ***Objectives of regulation*** — submissions argued that legislation differs from industry to industry and jurisdiction to jurisdiction and that regulators are able to exercise high levels of discretion under the legislation. Such arrangements invite or allow for widely differing interpretation. The lack of a clear, consistent, primary objective in legislation has the effect of increasing regulatory risk as investors cannot be certain of how the regulator will react in any particular situation. As an example, concerns were raised about the conflicting objectives of the ACCC given its dual roles of competition and

consumer regulator. A number of parties commented that the consumer protection objective means that too much emphasis is placed on consumer protection and the minimisation of monopoly rents, to the detriment of investment by infrastructure providers.

2. **Independence** — a commonly expressed view was that there is an unwarranted level of interference and bias in the decisions of regulatory bodies. A number of parties expressed a strong preference for regulation by a single national regulator on this basis. It was argued that direct government ownership of infrastructure assets can undermine the independence and transparency of the regulatory process, enmeshing government in a conflict of interest between its role as regulator and its position as asset owner. Similarly, the taskforce was advised of cases where state regulatory decisions have inhibited or blocked possible competition from the private sector, to the benefit of government owned enterprises. It was suggested that governments, where they are asset owners, are being placed in a conflict of interest situation, particularly where the revenue generated supports the government's taxation base or other social objectives.
3. **Consistency** — concern was expressed over the lack of consistency in regulatory decisions. In most instances legislation differs by industry and by jurisdiction, at times in ways that are substantial but at other times in matters of wording that nonetheless invite or allow for differing interpretation. The level of discretion provided to regulators exacerbates the problem. As a result, precedent develops only very slowly, and to the extent to which precedent does develop, regulators have little formal requirement to give it weight.
4. **Rate of return** — service users generally argued that rates of return for regulated assets are too high considering their long lives and for which the owner bears negligible revenue risk. Regulated assets owners, on the other hand, were of the view that regulators are not providing an adequate rate of return and that this is deterring new investment.
5. **Timeliness** — a significant number of submissions commented that regulators are taking too long to make decisions and that this is having a detrimental impact on commercial decision making. While some respondents welcomed the suggestion that statutory time limits be imposed on regulatory agencies, they were also concerned that rushed decisions may produce less efficient outcomes than is currently the case. Regulatory agencies pointed to the relative newness of access legislation. They argued that in first round decision making the regulator is coming to terms with features of a particular item of infrastructure that must be taken into account. Accordingly,

it was suggested that second and subsequent decisions will be more timely. Regulators also pointed out that timeliness is not an asymmetric issue and that decision making can be impeded by the speed with which market participants provide them with advice and information. It was also suggested that the often adversarial nature of regulatory decision making does not facilitate timely decisions because of gaming of the process.

Australian regulatory practice

Australia's experience with access regulation is still relatively new. In many regulated industries, regulators have only gone through one or two regulatory periods (that is, the periods between reviews of the regulated firm's terms and conditions, which in Australia generally occur each five years). It may be that left to its own devices, regulatory practice would become more routine because all those involved would have clearer expectations of what was involved.

Nonetheless, that cannot justify postponing or avoiding the resolution of problems that are apparent and identified here as issues with Australia's regulatory system. Four interrelated areas are especially important in this respect:

- narrowing the scope of regulation to areas where it is clearly needed;
- clarifying regulatory objectives;
- reducing fragmentation and inconsistency in our regulatory arrangements; and
- making regulation more timely.

Each of these areas is of direct significance to Australia's export related infrastructure, as it is there that the pressures associated with the need for capacity expansion are being most acutely felt. The discussion below relates specifically to the treatment of infrastructure used by export industries, even though it may be of some relevance to Australia's regulated infrastructure as a whole.

Limiting regulation to where it is needed

As discussed in chapter 3, any feasible system of regulation is likely to be characterised by a level of 'government failure' that leads to a cautious approach in the design of regulatory mechanisms and a setting of modest and achievable regulatory goals.

As a nation, Australia has a strong interest in the efficiency of export oriented infrastructure. However, it is important to remember that export

industries operate in competitive world markets. Producers have little ability to increase price above the competitive level, as they are largely price takers for the final output. As a result, Australia's export chains are strongly exposed to world market disciplines, and hence have strong incentives to be, and remain, efficient.

Moreover, even in those rare instances where there is scope for export prices to be profitably increased, those increases are in Australia's long term interests.

As such, the view of the taskforce is that regulation should be sparingly applied to infrastructure used by export industries. Where the objective of regulation is to achieve well functioning markets through the control of market power, heavy handed regulation should only be brought into play where that market power is substantial and likely to be used to the detriment of the economy. There needs, in other words, to be careful testing to ensure that regulation is only applied where its benefits will outweigh its costs.

Set against this background, the taskforce has concerns that the current provisions of Part IIIA of the Trade Practices Act, which define the economy-wide access regime, may cast the regulatory net too wide. More specifically, a service can be declared (that is, subjected to a regulated access regime) if doing so will promote competition in a market (other than the market in which the service itself is provided). In practice, this means that a facility may be subjected to a regulated access regime, with access made available on regulated terms to third parties, if the services it provides facilitate competition in some downstream market — for example, if access to a rail link will promote competition in the provision of transport services. There are two difficulties with this test.

To begin with, the market in which competition is promoted need not be in Australia. As a result, even if the entire impact of declaration is to provide gains to foreign buyers (at the expense of Australian producers), the regulatory apparatus can be brought into play.

Second, promoting competition does not necessarily equate to increasing efficiency. For example, third party access to a vertically integrated, tightly managed, logistics chain may promote competition, but undermine the efficiency with which that chain is operated and managed.

Currently, there is no clear mechanism allowing an 'efficiency override' for applications for declaration of export related facilities under Part IIIA or its associated regimes. Part IIIA lacks any authorisation mechanism, based on efficiency, that could be used to limit the scope of access. While there is a public benefit limb to the Part IIIA tests, its phrasing significantly narrows its impact. Finally, while there is an exemption provided for 'production

processes’, that term is not defined, nor is any guidance given as to the purpose and scope of the exemption.

Even if efficiency considerations were not explicitly included in Part IIIA, the taskforce believes it would be desirable to clarify the ‘production process’ exemption. More specifically, it should be made clear that the purpose of the exemption is to prevent the imposing of third party access in vertically integrated, tightly managed, logistics chains, especially those related to our export industries. This would minimise the risk that access regimes would disrupt and undermine the very areas of the economy that have performed best in the management of export related infrastructure.

Regulatory objectives

While regulation in Australia operates under a wide range of differing regimes, a common feature of these regimes is that they require regulators to pursue multiple, somewhat conflicting objectives. Given these ‘laundry lists’ of objectives, regulators have generally interpreted their function as being that of weighing the various goals that they have been set and seeking, within that weighting, some especially desirable point. Given the resulting wide regulatory discretion, it is hardly surprising that this system is characterised by ambit claims and other influence-seeking tactics.

The taskforce notes that the Australian Government, in responding to the Productivity Commission’s inquiry into the national access regime, intends to clarify the objective of Part IIIA of the *Trade Practices Act 1974* by inserting an object clause:

The object of this Part is to:

- (a) promote the economically efficient operation and use of, and investment in, essential infrastructure services, thereby promoting effective competition in upstream and downstream markets; and
- (b) provide a framework and guiding principles to encourage a consistent approach to access regulation in each industry.

The Government also noted in its response that:

The promotion of economic efficiency is a fundamental objective of competition policy. The first objective explicitly recognises the importance of fostering efficient investment in new essential infrastructure, while at the same time encouraging the efficient use of existing facilities through innovation and productivity improvements (Australian Government 2004).

It is important that this economic efficiency interpretation is the overriding objective of access regulation and that alternative ‘laundry lists’ do not distract from the consistent application of this central objective.

There are conflicting views on how well regulators have performed their role. The regulators, and the firms that have benefited from lower price access to infrastructure, have strongly defended the regulatory system's performance to date. The regulated firms, on the other hand, have put the view that Australian regulators have focused too heavily on the quest to eliminate monopoly rents, in practice giving inadequate weight to the importance of ensuring that needed infrastructure will be available. In the specific context of export related infrastructure, this has taken the form of a focus on delivering reductions in the charges that service providers are allowed to impose on infrastructure users.

It is understandable that regulatory authorities will concentrate on objectives that are readily measurable. The apparent gains from lower prices for key services are all too readily understood and communicated. There is therefore a risk that lower prices will be seen as inherently good, with regulators concentrating on securing price falls for infrastructure without sufficient consideration of the long term consequences.

The dangers that this poses to investors in infrastructure have been made all the greater by regulators' reliance on mechanisms and approaches for setting allowed prices that are complex and rely on an ability to attain a degree of precision that is not likely to be attainable in practice. As has been apparent for Dalrymple Bay, this can result in prolonged and arcane debates over the precise magnitude of parameters being used in regulatory models, at the expense of the overriding objective of efficient infrastructure provision.

While the desire for a perhaps excessive degree of precision may have been at work in some instances, in others, it has been claimed that the primary factor has been the regulator's desire to achieve a particular outcome. While it may be understandable for regulators to seek an outcome in a particular case that they strongly believe accords with the community interest, even where this conflicts with the outcomes that consistency with precedent would have yielded, this can undermine the predictability, clarity and accountability of the regulatory process.

Part of the problem lies with the blurring of the boundaries between policy and regulation. Rather than operating within a framework in which policy goals are clearly articulated, regulators are combining functions of policy advocacy, policy design and implementation. Within that broad scope there is a reduced level of accountability, as there have rarely been clearly set out objectives against which their performance could be assessed.

In this regard the taskforce notes the Australian Government's implementation of new arrangements to govern the relationship between ministers and statutory authorities, including most Commonwealth regulators. This follows

the Review of the Corporate Governance of Statutory Authorities and Office Holders (Department of Finance and Administration 2003), also known as the Uhrig Review, which found governance could be enhanced by providing greater clarity in the relationships between ministers, their departments, the Parliament, the public, statutory authorities and office holders.

Streamlining and better defining the objectives that regulators should pursue would help address the risks and difficulties the current situation gives rise to. To begin with, regulators should, as their primary duty, be required to ensure that efficient investment in Australia's infrastructure occurs, and occurs in a manner consistent with the continued, reliable and secure provision to the community of the services that infrastructure provides.

Additionally, the regulator's functions in pursuing that objective should be modified to ensure that regulators, rather than seeking an 'optimal' point, focus their task on assessing whether what has been proposed as the regulated terms and conditions of access is a reasonable commercial outcome. This would be consistent with the views of the Productivity Commission, which has suggested that regulators, in assessing terms and conditions, should be required to:

- take as their starting point the terms and conditions proposed by the service provider;
- in assessing those, take account of the fact that for many of these terms and conditions, there will be a reasonable range of values, rather than a single, 'true', value; and
- on that basis, assess whether what has been proposed falls within that reasonable range.

Securing less fragmented, more consistent regulation

A key purpose of competition reforms was to provide a more consistent approach to regulation across jurisdictions and within industry segments. In practice, almost all access arrangements have been established under state based regimes in the areas of rail, ports, gas and electricity. In all, there are four national regimes (electricity, interstate gas pipelines, telecommunications and ARTC), with the other 22 operating regimes all being state based, of which only nine have been certified by the National Competition Council as 'effective' (that is, as consistent with the criteria set out in the Competition Principles Agreement). As matters stand, each jurisdiction has its own economic regulator, to the list of which must now be added the Australian Energy Regulator.

This outcome contrasts with the vision that underpinned the national competition policy, of a single regulator implementing a common approach to regulation across industries and jurisdictions. In practice, while there are

some important commonalities in approach between regulators, the reality is that Australian regulation involves multiple regulators administering somewhat differing regimes, each of which vests considerable discretion in the regulator.

A common solution proposed in submissions to this problem was for regulation to be carried out by a single body. That took a number of different forms, including a single ‘national’ regulator (generally the ACCC), an infrastructure regulator and a national transport regulator. There are costs and benefits associated with each of these approaches.

The taskforce agrees that governments should give consideration to the practicality and desirability of a single regulator. The challenges to such an approach are well understood. There are nevertheless various ways in which the number of regulatory agencies might be reduced. One approach, for example, could involve changed institutional and regulatory arrangements under cooperative state and territory legislation.

Many of the identified problems and their solutions, however, do not simply lie in the design of the institutional arrangements. Perhaps even more important are regulatory processes that deliver efficient and timely outcomes.

The risk of deterring efficient investment is all the greater when the regulation being applied is inconsistent across industries and jurisdictions and when regulatory institutions are highly fragmented. This is for three reasons:

- Inconsistent and fragmented regulation undermines predictability, because regulatory decisions in any one instance have less value as precedents that can be expected to guide decisions in others.
- Inconsistent and fragmented regulation reduces the cost effectiveness and overall quality of the regulatory process, as scarce regulatory expertise is spread over a large number of distinct regulatory regimes.
- Inconsistent and fragmented regulation creates the risk that prices will be set on a different basis for competing services — for example, road and rail. Investments in infrastructure supporting export industries are then determined more by regulatory price distortions than by underlying economics.

Nowhere are the costs associated with Australia’s current arrangements clearer than in rail. Relatively low cost upgrades that would materially reduce interstate transit times have been stalled in controversies over the allocation of the relevant costs between parties and jurisdictions. While the bulk of the freight at issue is domestic, the complex web of arrangements that characterise Australian rail regulation are reflected in difficulties such as those associated with the rail/port interface at Port Waratah and the persistence of inefficiencies in Australia’s export grain logistics chain.

The taskforce believes that it is important to explore the scope for simplifying and streamlining the regulatory process as it applies to export oriented infrastructure.

Timeliness of regulatory decision making

It is understandable that it takes some time for regulators to come to final decisions on complex issues involving very high stakes for the parties and the community. However, it also needs to be recognised that delay has a real cost, and that there comes a point where the search for ever greater accuracy yields steeply diminishing returns. In at least some instances, regulatory processes in Australia seem to have gone well beyond that point, with decisions taking three years or more. For export oriented activities, which are operating in fast changing world markets, these delays can translate into unacceptable losses in competitiveness.

Better specifying the goals that regulators are to pursue, and defining their functions more narrowly, would simplify the regulatory task and hence provide some help in this respect. It would also provide a sound basis for reviewing and tightening the timelines that regulators were required to observe.

In practice, having clarified regulatory objectives, there is no reason why it should take more than six months for regulators to come to a decision on the terms and conditions of access. To begin with, regulators can require the parties to provide the bulk of the information needed for a decision to be reached. Additionally, greater reliance on a conference procedure, similar to that used in New Zealand, would allow the information provided to be tested, in a context open to all interested parties and that provides for public scrutiny. Finally, vested with a simpler task, regulators would not need to pursue a level of analysis that yields few returns.

While it would be desirable to require regulators to make their decisions within a six month timeframe, this leaves open the question of the delays that can arise from review by the Australian Competition Tribunal (ACT) of regulatory decisions.

There are many virtues to full merits review. To begin with, it imposes greater accountability on regulators, correcting decisions that are not capable of rigorous justification. Additionally, by articulating the underlying principles that guide the relevant decision, the review process can provide guidance for future regulatory decision making and enhance the predictability of, and confidence in, the regulatory process. Last, it can help ensure the political independence of the regulatory process.

As a general matter, where regulators rely on coercive powers to override property rights, there is a compelling case for providing effective and extensive rights of appeal. As a result, it is essential that the scope for merits review remain available where it is now provided for, and be made available in those state and territory regimes where it currently is not.

However, it is also important here to ensure that decisions are timely. One change that would help in this respect is to allow merits review but require that it be ‘on the documents’. As well as shortening the length of proceedings, this would also provide the parties to access proceedings with stronger incentives to submit, as part of those proceedings, all the material relevant to a proper consideration of the facts.

That said, such a change should not be implemented in a manner that allows regulators to distort the review process by relying, in their final decision, on arguments that the parties have not had an opportunity to examine and rebut. Rather, in any review ‘on the documents’, it must be open to the parties to comment on those aspects of any final regulatory decision that previously had not been part of the regulatory proceedings.

Given a restriction of merits review to a review on the documents, there is no reason for the review process to take more than six months. Imposing such a time limit would ensure that the entire regulatory process, from first consideration by the relevant regulator to disposition on review, occurred within one year.

Proposed access regulation reforms

After considering the broad range of issues and views put to it, the taskforce considers that there is scope to improve the way in which the economic regulatory regime is applied to infrastructure used for exports. The proposed changes are aimed at reducing regulatory risk by addressing the key concerns of infrastructure providers and users: the level of regulation required for export oriented infrastructure, the clarity of regulatory objectives, the consistency of regulatory decisions and the timeliness of regulatory decisions.

In our view, there should be a presumption that issues associated with export oriented infrastructure will be resolved by commercial negotiation between the infrastructure provider and users. We accept that this will often be imperfect, but it is still likely to be preferable to intrusive regulation. We therefore believe that some further tightening is desirable of the hurdles that need to be met before regulatory solutions are imposed on export oriented infrastructure.

Where regulation is warranted, the presumption, in the first instance, should be for light handed regulation by the relevant regulator, such as price monitoring. Only where light handed regulation has demonstrably failed should more intrusive regulatory approaches be applied.

In cases where more heavy handed regulation is warranted, the framework for *infrastructure used for exports* needs to be reformed based on the following principles:

1. Processes should be streamlined and more certainty placed on the time involved in each stage. Time limits should be placed on all regulators and parties to the regulatory process.
2. The relevant test applied by regulators should be simplified and based on whether what has been proposed by the infrastructure owner is reasonable in the commercial circumstances and in the light of the statutory objectives. This test — under which a regulator could not reject a proposed access arrangement that fell within a reasonable range, merely because it preferred another point in that range — should be applied universally and uniformly, as envisaged under the national competition policy reforms. Simplifying the regulatory test to one that merely considers whether the infrastructure provider’s proposal is reasonable in the commercial circumstances and falls within a reasonable range should reduce the complexity of the regulator’s task and result in a more timely process.
3. There should be opportunities for merits review of any regulatory decisions that involve the terms and conditions of access. However, that review should be limited to only those issues in dispute and use only the information that was before the decision maker at the time the decision was made (subject to the requirement that the parties have had the opportunity to respond to any arguments put by the regulator that they have not previously had the chance to respond to). A time limit should also apply to this process.

In some instances the national interest may require that the Australian Government be in a position to intervene when a six months period has expired but the situation is at an impasse, with no acceptable regulatory outcome in sight. To avoid this possibility stalling the process, the Commonwealth Minister could be given the power to declare the service, without reference to the NCC and without further appeal, and referring the matter to the ACCC for arbitration (again on the ‘reasonable test’, again with a strict six months time limit, and again with the right of appeal to the ACT).

Other regulation

key issues raised with the taskforce



WHILE the majority of submissions focused on the economic regulatory framework, there were a number of other regulatory issues raised with the taskforce. This chapter contains a summary of the most commonly raised issues.

Regulatory approval of new infrastructure

The construction of new infrastructure, or the significant expansion of existing infrastructure, often involves long lead times. In part this reflects the inherent engineering complexity of the task. It also reflects the high level of public scrutiny that infrastructure is frequently subjected to, particularly in such matters as environmental and planning laws. Planning and other approval processes accentuate delays and add to the time needed for infrastructure facilities to be built.

For the most part these approvals are the responsibility of state and territory governments and cover matters such as the environment, occupational health and safety, local planning and zoning and industrial relations.

The maze of regulatory compliance requirements is costly and time consuming for business. To address this, a number of states are moving to adopt a 'one-stop shop' single point of contact for project facilitation. These agencies provide proponents with information, advice and support to assist with necessary government approvals and may also identify the sequence and timings for key approvals and the relevant government programmes that may assist the project. In some cases a single minister may have the authority to give all the necessary state approvals.

The taskforce sees merit in more widespread adoption of the one-stop shop approach by governments.

Environmental regulation

Relatively few comments were registered on the operation of environmental protection legislation, indicating that this is now an accepted and well understood process. Environmental regulation is an area in which there is overlapping Commonwealth and state responsibility. The Commonwealth legislation (the *Environment Protection, Biodiversity and Conservation Act 1999*) is administered through bilateral agreements enabling the Commonwealth to rely on state or territory assessment processes and, in limited circumstances, state or territory approvals.

The timeliness of Commonwealth processes are enhanced by statutory time limits for all decisions and there is a high level of compliance with the statutory timeframes. The Department of the Environment and Heritage, and in some cases the Minister, must provide a statement where there is a failure to meet the deadline and this enhances accountability.

Concern was raised with the taskforce over extended delays to environmental approvals for the Nathan Dam in Queensland. The decision of the Commonwealth Minister for the Environment to approve the project was appealed in the Federal Court. The decision has required the Minister to remake his decision and the approval process is now awaiting the provision of further information by the proponent. Although in this instance the project has experienced a long delay, it is nevertheless a groundbreaking case which has had significant legal implications for the future interpretation of the Act.

Several parties raised concerns over the interaction between the *Environment Protection Biodiversity and Conservation Act 1999* and the *Great Barrier Reef Marine Park Act 1975*. These Acts afford some duplication of roles and responsibilities, which is inefficient, may produce policy inconsistencies and cause administrative delays. These observations are consistent with those made by the Productivity Commission (2003). The Commission, in its report on the Great Barrier Reef catchment observed that there are a significant number of statutory and nonstatutory bodies with environmental roles. Flowing from these fragmented arrangements, it reported poor levels of coordination, inconsistencies of approach and regulatory duplication. The taskforce is of the view that there is scope for further streamlining of environmental approval and other administrative processes as they relate to the protection of the Great Barrier Reef Marine Park.

Transport regulation

Road and rail regulation in Australia share similar regulatory issues. That is, their regulation is jurisdiction based even though they are now national industries.

A common complaint in relation to road transport was the complex licensing requirements, which are costly to satisfy, and the differing operating standards such as allowable mass limits. These are impediments that substantially increase the cost of doing business and reduce the competitiveness of these businesses.

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:

- seven rail safety regulators with nine different pieces of legislation;
- three transport accident investigators;
- fifteen pieces of legislation covering occupational health and safety of rail operations;
- six access regulators; and
- seventy-five pieces of legislation with powers over environmental management.

Details of these regulatory requirements are set out in appendix D.

The National Transport Commission was established jointly by the Australian Government and state and territory governments in 2003 to harmonise road and rail transport regulations across jurisdictions. Its predecessor, the National Road Transport Commission, had existed since the mid-1990s. Although some tangible results have been achieved in a number of areas, progress to date can, at best, be described as slow.

The National Transport Commission noted:

Delays in implementation are not simply the product of inertia or resistance to change. The reasons are frequently more systemic and include the unwillingness of jurisdictions to share meaningful data for managing implementation and monitoring compliance patterns.

The taskforce is of the view that the process of harmonising road regulations and rail regulations needs a renewed commitment by all parties (also see box 3). A reinvigorated agenda, preferably with some time limits, is required if progress is to be made.

There is also a need, noted elsewhere in this report, to address competitive neutrality problems between road and rail.

Box 3 :**Regulation of road and rail operations compared with energy regulation**

The disparate regulatory arrangements for road and rail can be compared with what is being achieved in the energy sector under the auspices of the Ministerial Council on Energy. A national energy regulator has been established and will have responsibility for enforcement of a common set of laws applying to the operation of the wholesale, transmission, distribution and retail (excluding retail pricing) electricity and gas markets operating across the eastern states and territories (excluding electricity and gas in Western Australia and electricity in the Northern Territory). It is a model that could be considered for the transport sector.

Regulatory conflicts of interest

Potential conflicts of interest may be exacerbated where a government agency has multiple roles. In the case of the Port of Gladstone, the Central Queensland Port Authority has three distinct roles:

- operator of the Gladstone dedicated coal loaders (RG Tanna and Barney Point);
- management of the port; and
- regulation of ship movements into and out of the port.

Coal operations are a major source of revenue for the Central Queensland Port Authority at Gladstone and there is scope for conflicts of interest to arise in relation to the differing functions and products moved through the port.

The taskforce has concerns that in arrangements such as at Gladstone there is scope for regulatory approval processes to be used to delay or prevent private sector infrastructure investment where it does not align with the overall commercial interest of the government agency. In common with views expressed elsewhere, the taskforce is of the view that all regulatory processes require objective timeframes for decisions to be made. Accountability is also necessary which requires decisions to be transparently documented and subject to appeal to an independent party.

Competition regulation

Since 7 July 2004 Port Waratah Coal Services has had in place a capacity management system to reduce the imbalance between the demand for coal loading services at the port and the capacity of the Hunter Valley coal chain.

This system required authorisation by the ACCC. The objective of the system is to reduce the vessel queue (which had been over 50 vessels) and achieve maximum coal throughput while minimising demurrage. The authorisation was recently extended by the ACCC, with a number of modifications, to a medium term capacity distribution system to operate until 31 December 2007.

Dalrymple Bay Coal Terminal recently applied for a similar system and this was given interim authorisation by the ACCC on 29 April 2005. Dalrymple Bay Coal Terminal, in its submission to the ACCC, suggested that the system will reduce the queue to a workable point over the next three months and could save coal producers demurrage costs over the next twelve months of up to \$550 million.

The taskforce recognises that the operation of capacity balancing systems may save substantial demurrage costs. Nevertheless, there is a concern that the system can reduce the longer term commercial pressure on the parties to take action to remediate the demand for, and investment in, new coal supply chain capacity.



AS EVIDENT from the discussion in previous chapters, the taskforce considers that there are a number of actions that can be pursued to improve the way in which infrastructure used for exports is regulated, planned and coordinated.

The taskforce makes ten key recommendations, covering regulatory reforms, planning and coordination and other matters:

Regulatory reforms

1. That the Council of Australian Governments (COAG) consider whether the multiplicity of regulators and the fragmentation of the regulatory system is in Australia's long run interest and examine the scope for establishing a single national regulator or, in other ways, reducing the number of regulators affecting Australia's export oriented infrastructure.
2. That COAG explore the scope for simplifying and streamlining the regulatory process as it applies to export oriented infrastructure. In particular:
 - by providing a presumption that issues to do with export oriented infrastructure will be resolved by commercial negotiation between the infrastructure provider and users.
 - by providing, in instances where regulation is warranted, a presumption, in the first instance, that light handed regulation such as price monitoring be applied by the relevant regulator.
 - by limiting the use of more intrusive regulatory approaches to instances where light handed regulation has demonstrably failed.
3. Where more heavy handed regulation is warranted, that COAG make changes to the regulatory framework to improve timeliness, consistency and clarity of objectives through:

- streamlining processes and providing more certainty about the time involved in each stage. Time limits should be placed on all regulators and parties to the regulatory process.
 - simplifying the relevant test applied by regulators by basing it on whether what has been proposed by the infrastructure owner is reasonable in the commercial circumstances and in light of the statutory objectives. This test — under which a regulator could not reject a proposed access arrangement that fell within a reasonable range, merely because it preferred another point in that range — should be applied universally and uniformly, as envisaged under the national competition policy reforms. Simplifying the regulatory test to one that merely considers whether the infrastructure provider’s proposal is reasonable in the commercial circumstances and falls within a reasonable range should reduce the complexity of the regulator’s task and result in a more timely process.
 - providing the opportunity for merits review of any regulatory decisions that involve the terms and conditions of access. However, that review should be limited to only those issues in dispute and use only the information that was before the decision maker at the time the decision was made (subject to the requirement that the parties have had the opportunity to respond to any arguments put by the regulator that they have not previously had the chance to respond to). A time limit should also apply to this process.
 - allowing parties to appeal directly to the Australian Competition Tribunal if the regulator fails to issue a decision by the end of the time limit allowed for it to make a decision. A time limit should apply to the Australian Competition Tribunal if a matter is appealed in these circumstances.
4. That in circumstances where a six month period has passed and the relevant regulatory process is at an impasse, with no acceptable regulatory outcome in prospect, the federal Minister be given the power to declare the service, without reference to the National Competition Council and without further appeal. The matter would then be referred to the Australian Competition and Consumer Commission for arbitration (again on the ‘reasonable test’, with a strict six months time limit, and with the right of appeal to the Australian Competition Tribunal).
 5. That COAG renew the commitment to harmonising road regulations and rail regulations and establish a reinvigorated agenda, including time limits.

Planning and coordination

6. That the long term planning of land transport infrastructure that is being undertaken jointly between the Australian Government and the states and territories under AusLink be developed as quickly as possible in order to establish a known and agreed planning framework.
7. That the Department of Transport and Regional Services facilitate the establishment of groups for the coordination of logistics chains of national importance, either directly or via relevant industry organisations, consistent with competition law.
8. That the existing AusLink programme be extended to include ports of national significance and their associated shipping channels.
9. That the Productivity Commission be asked to carry out an infrastructure audit along the lines of that carried out in New Zealand. This would be repeated every five years, and would help inform ongoing policy initiatives in this area.

Other

10. That the ‘one stop shop’ approach — where there is a single point of contact for project facilitation and approvals — be established in each jurisdiction. The single point of contact would provide proponents with information, advice and support to assist with necessary government approvals; identify the sequence and timings for key approvals; and identify relevant government programmes that may assist the project. Preferably, a single minister should have the responsibility for obtaining all necessary state approvals and conveying them to the project proponent.

A

Consultations

AGL

Alcoa World Alumina Australia

Alinta

Anglo Coal Australia

Austral Bricks

Australian Chamber of Commerce and Industry

Australian Government

- Austrade
- Australian Competition and Consumer Commission
- Australian Quarantine and Inspection Service
- Bureau of Transport and Regional Economics
- Department of Finance and Administration
- Department of Industry, Tourism and Resources
- Department of Transport and Regional Services
- Department of the Treasury
- Reserve Bank of Australia

Australian Horticultural Exporters Association

Australian Logistics Council

Australian Meat Holdings

Australian Rail Track Corporation

Australasian Railway Association

Australian Trucking Association

AWB

BGC

BHP Billiton

BHP Billiton Mitsubishi Alliance

Boral
Brisbane Airport Corporation
Brisbane Markets
Bulla Dairy Foods
Bunbury Port Authority
Business Council of Australia
Central Queensland Ports Authority
Comalco Aluminium
Commerce Queensland
Competition Carriers' Coalition
Dalrymple Bay Coal Terminal
Elders
Energy Users Association of Australia
Ensham Resources
Excel Coal
Fremantle Ports
Graincorp
Hay Point Services Coal Terminal
Heat and Control
Hunter Valley Coal Chain Logistics Team
International Paint
Jellinbah Resources
Laverton Transport
Macarthur Coal
Meat and Livestock Australia
Minerals Council of Australia
Morton Seed and Grain
Murray Goulburn
National Association of Forest Industries
National Farmers' Federation

New South Wales Government

- Department of Infrastructure, Planning and Natural Resources
- NSW Treasury
- Premier’s Department

New Zealand Government

- Ministry of Economic Development
- New Zealand High Commission

NSW Minerals Council

Nutrition Care Pharmaceuticals

Orford Refrigeration

Pacific National

Patrick

Peabody Energy Australia Coal

Peerless Foods

Port of Melbourne Corporation

Port Jackson Partners Limited

Port Waratah Coal Services

Prime Infrastructure

Queensland Cotton

Queensland Customs Brokers

Queensland Government

- Department of Natural Resources and Mines
- Department of State Development and Innovation
- Department of the Premier and Cabinet
- Queensland Competition Authority
- Queensland Rail
- Queensland Transport
- Queensland Treasury

Queensland Resources Council

Queensland Sugar

Queensland University of Technology

Ranbury Management Group

Rio Tinto

Rio Tinto Coal Australia

Rio Tinto Iron Ore

Schenker Australia

Sino Access

Tasmanian Government

- Department of Infrastructure, Energy and Resources

Theiss

Victorian Abalone Divers Association

Victorian Employers' Chamber of Commerce and Industry

Visy Industries

Victorian Government

- Department of Infrastructure
- Department of Innovation, Industry and Regional Development
- Department of Premier and Cabinet
- Department of Primary Industries
- Department of Sustainability and Environment
- Department of Treasury and Finance

Vocum Exhibition Services

Western Australian Government

- Department of Industry and Resources
- Department for Planning and Infrastructure
- Department of Treasury and Finance
- Economic Regulation Authority
- Minister for Planning and Infrastructure, The Hon. Alannah MacTieran
MLA

WCBM

Wesfarmers Curragh

Wool Industries Secretariat

Xstrata Coal

B

Submissions received

Albany Port Authority

Alcoa World Alumina Australia

Anglo Ports

Association of Australian Ports and Marine Authorities

Association of Superannuation Funds of Australia

Austral Bricks

Australasian Railway Association

Australian Chamber of Commerce and Industry

Australian Council for Infrastructure Development

Australian Government

- Australian Competition and Consumer Commission
- Department of Foreign Affairs and Trade
- Department of Industry, Tourism and Resources
- National Competition Council
- The Hon Dr Sharman Stone MP, Parliamentary Secretary to the Minister for Finance and Administration

Australian Grain Exporters Association

Australian Meat Industry Council

Australian Pipeline Industry Association

Australian Reef Pilots

AWB

BEMAX Resources

BHP Billiton

Brisbane Airport Corporation

Business Council of Australia

Chamber of Commerce and Industry, Western Australia

Centre for International Economics and Pacific Road Corporate Finance
Economic Regulation Authority, Western Australia
Elders
Energy Networks Association
Enertrade
ExxonMobil
GrainCorp
Holden
In Tempore Advisory
John A. Stevens
John Ralph
Macarthur Coal
Minerals Council of Australia
Morton Seed and Grains
National Transport Commission
Newcastle Coal Infrastructure Group
Newcastle Rail Terminals
Nolan Meats
Northern Territory Cattlemen's Association & Northern Territory Livestock
Exporters Association
NSW Road Transport Association
OMC International
P&O Ports
Pacific National
Pastoralists and Graziers Association of Western Australia
Patrick
Port of Brisbane Corporation
Port Waratah Coal Services
Prime Infrastructure
Queensland Government
Queensland Rail

Queensland Resources Council
Rio Tinto
Roach Industries
South Australian Government
South Australian Freight Council
S. Kidman & Co
SeaHawke Fish Distribution Centre
Shell Australia
SGSDA Consulting
Shane Condon
Sustainable Transport Coalition
The Hon. Eric Ripper MLA, Deputy Premier, Western Australia
Tourism and Transport Forum
Victorian Freight and Logistics Council
Victorian Government
WMC Resources
Xstrata Coal

Additional resources received from:

Australian Rail Track Corporation
Bureau of Transport and Regional Economics
Engineers Australia
Fremantle Ports
Geoscience Australia
Pacific National
Sea Freight Council of NSW

The National Access Regime

THE regulatory provisions of the National Access Regime are contained in Part IIIA of the *Trade Practices Act 1974* and Clause 6 of the Competition Principles Agreement between the Australian Government and state and territory governments.

The regime is a regulatory framework that provides an avenue for firms to use certain infrastructure services owned and operated by others when commercial negotiations on access are unsuccessful.

- Introduced in 1995, the current regime draws heavily on the recommendations of the Hilmer Committee inquiry into competition policy.
- Governments in the first half of the 1990s had introduced specific access regimes for telecommunications networks and certain gas pipelines, and had commenced work on national access arrangements for gas pipelines and electricity grids.

The access regime is intended to: promote more efficient use of existing infrastructure; delay or avoid wasteful duplication of infrastructure facilities; encourage new firms to compete in upstream and downstream markets and encourage efficient investment in those markets; and contribute to better outcomes for consumers.

Scope of Part IIIA and relationship to state and territory regimes

Access arrangements in Australia comprise both the generic national access regime established by Part IIIA and several industry regimes.

Part IIIA is an umbrella framework that sets out mechanisms for permitting third party access to the services supplied by eligible facilities or infrastructure; the arbitration of access disputes; and the roles and responsibilities of the institutions which administer the arrangements.

Most of the industry regimes are governed by state and territory legislation and some of these regimes have been certified under Part IIIA (see below for more on certification). Other regimes operate under specific Commonwealth

legislation outside of Part IIIA (for example, telecommunications, financial payments clearing system, postal services).

A variety of Commonwealth and state and territory bodies are responsible for administering the various regimes, applying criteria that vary from regime to regime. Institutional roles relating to Part IIIA are summarised below.

Relevant state and territory ministers are the decision makers for ‘declaration’ under Part IIIA of infrastructure services provided by state and territory bodies (see next paragraph).

Obtaining access to an infrastructure service under Part IIIA

Having a service declared: A party wanting access to a particular infrastructure service applies to the National Competition Council (NCC) to have the service declared. The NCC then makes a recommendation to the designated minister (the Commonwealth Minister, unless the provider of the services is a state or territory body and the state or territory is a party to the Competition Principles Agreement, in which case the responsible minister of the state or territory is the designated minister).

- To be declared, a service must satisfy a number of criteria, including that: access would promote competition in another market; it would be uneconomic to develop another facility to provide the service; the facility is nationally significant; and the service is not already covered by an effective access regime.
- Declaration gives the access seeker the right to negotiate with the service provider, with provision for arbitration if those negotiations are unsuccessful.

Seeking access through an effective access regime: Where an ‘effective’ access regime already exists, declaration is not available and an access seeker must use the effective regime.

- In the case of a state or territory access regime, the question of effectiveness can be predetermined through a process called ‘certification’. An access regime can be certified as effective by the designated Commonwealth Minister following the Council’s recommendation that the regime satisfies the clause 6(4) criteria contained in the Competition Principles Agreement.

Seeking access under the provisions of an access undertaking: Part IIIA allows service providers to submit a voluntary access undertaking to the Australian Competition and Consumer Commission (ACCC) for approval.

An undertaking sets out the terms and conditions under which access to the service(s) will be provided.

- An undertaking may be submitted in relation to existing or proposed infrastructure, and can apply either to an individual service, or provide the basis for an industry access code.
- Services covered by undertakings cannot be declared.

Productivity Commission review of the national access regime

The Productivity Commission supported the retention of the regime but made thirty-three recommendations to improve its operation, including in relation to clarifying the regime's objectives and scope, strengthening incentives for commercial negotiation and improving the certainty and transparency of regulatory processes.

- The Commission's main concern was the potential for access regulation to deter investment in essential infrastructure — that 'regulatory risk' was greater than it need be.

The Productivity Commission found that the facilitation of access under Part IIIA had mainly involved the certification mechanism. At the time of the Commission's report, there had only been two declarations (covering certain cargo handling services at Sydney and Melbourne airports) and one undertaking accepted by the ACCC (for the National Electricity Code). There have since been a number of undertakings accepted.

However, the Commission found that the influence of the declaration process has been more pervasive than the limited number of declarations might indicate. Even where certification applications have been rejected, or states and territories have not sought certification for their regimes, the Part IIIA framework and threat of declaration have helped to shape those regimes, and access in some cases had been achieved instead via negotiations (PC 2001).

Government response to the Productivity Commission review

The Australian Government issued an interim response to the Commission's review in September 2002 and announced its final response, which supports most of the Commission's proposed reforms, in February 2004.

The Australian Government's response has sought to balance often competing interests (for example, between various stakeholders and industry

sectors) while providing greater certainty and incentives for investors. More specifically, the changes being proposed by the Australian Government are designed to improve the focus and workability of the regime.

- This includes changes designed to improve the certainty and transparency of decision making processes (including target time limits for decision making by regulatory bodies) and providing stakeholders with greater confidence about the regulatory framework so they are able to make well informed decisions.

The Australian Government intends to introduce legislative changes that give effect to most of the measures in its final response in the winter 2005 parliamentary sittings.

- Some remaining measures are the subject of further consideration — for example, in the context of the development of industry specific access regimes and future consultation with state and territory governments on possible amendments to the CPA.

Institutional roles

National Competition Council (NCC)

In relation to Part IIIA, the NCC recommends to relevant ministers:

- whether particular infrastructure services should be declared for access;
- whether state and territory access regimes are effective; and
- whether particular gas pipelines should be covered under the Gas Code, an industry regime developed under Part IIIA.

Australian Competition and Consumer Commission (ACCC)

In relation to Part IIIA, the ACCC:

- can arbitrate a dispute if, once a service is declared, the parties are unable to negotiate terms and conditions of access;
- determines whether to accept voluntary access undertakings offered by infrastructure owners; and
- determines whether to accept access undertakings required for particular services under certain state and territory access regimes that have been deemed effective; in other effective regimes, state based regulatory agencies — such as the Independent Pricing and Regulatory Tribunal of New South Wales and the Queensland Competition Authority — carry out regulatory duties.

Australian Competition Tribunal (ACT)

- The Tribunal hears applications for reviews on ACCC decisions on certain trade practices matters. In relation to Part IIIA, it hears applications for reviews on certain decisions made by designated ministers and the ACCC.

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Rail freight

relevant legislation, by state

New South Wales

Rail safety

Rail Safety Act 2002 – NSW Independent Transport Safety and Reliability Regulator

Road and Rail Transport (Dangerous Goods) Act 1997

Occupational health and safety

Occupational Health and Safety Act 2000 – WorkCover NSW

Environmental management

Road Transport (Safety and Traffic Management) Act 1997 – NSW RTA

Roads Act 1993 – NSW RTA

Protection of the Environment Operations Act 1997 – NSW EPA

Contaminated Land Management Act 1997 – NSW EPA

Dangerous Goods Act 1995 – WorkCover NSW

Environmental Planning and Assessment Act 1979 – Local Councils

Environmentally Hazardous Chemicals Act 1985 – NSW EPA

Heritage Act 1977 – NSW Minister for Planning

Local Government Act 1993 – Local Councils

National Parks and Wildlife Act 1974 – Director General of the NPWS

Native Vegetation Conservation Act 1997 – Director General of Land and Water Conservation

Noxious Weeds Act 1993 – Director General of the Department of Agriculture

Ozone Protection Act 1989 – NSW EPA

Pesticides Act 1999 – NSW EPA

Radiation Control Act 1990 – NSW EPA

Rivers and Foreshores Improvement Act 1948 – Waterways Authority

Rural Fires Act 1997 – NSW Rural Fire Service

Threatened Species Conservation Act 1995 – Director General of the NPWS

Transport safety investigation

Rail Safety Act 2002 – NSW Office of Transport Safety Investigation

Victoria

Rail Safety

Transport Safety Act 1983 – Department of Infrastructure, Public Transport Division

Occupational health and safety

Occupational Health and Safety Act 2004 – WorkSafe Victoria

Health Act 1958 – Local Councils

Environmental management

Environment Protection Act 1970 – Victorian EPA

Dangerous Goods Act 1985 – WorkSafe Victoria

Road Transport (Dangerous Goods) Act 1995 – WorkSafe Victoria

Flora and Fauna Guarantee Act 1988 – Minister for Environment and Conservation

Heritage Act 1995 – Minister for Planning

Planning and Environment Act 1987 – Minister for Planning

Environment Effects Act 1978 – Minister for Planning

Building Act 1993 – Local Councils

Archaeological and Aboriginal Relics Preservation Act 1972 – Minister for Aboriginal Affairs

Water Act 1989 – Department of Natural Resources and Environment

Transport safety investigation

Transport Safety Act 1983 – Department of Infrastructure, Public Transport Division

Queensland

Rail safety

Transport Infrastructure Act 1994 – Queensland Transport

Occupational health and safety

Workplace Health and Safety Act 1995 – WorkCover Queensland

Health Act 1937 – WorkCover Queensland;

Radiation Safety Act 1999 – WorkCover Queensland

Explosives Act 1999

Fire and Rescue Service Act 1990

Environmental management

Environmental Protection Act 1994 – Queensland EPA

Nature Conservation Act 1992 – Queensland EPA

Dangerous Goods Safety Management Act 2001 – Queensland EPA

Land Act 1994 – Queensland EPA

Rural Lands Protection Act 1985 – Queensland EPA

Soil Conservation Act 1986 – Queensland EPA

Vegetation Management Act 1999 – Queensland EPA

Queensland Heritage Act 1992

Water Act 2000

Transport safety investigation

Transport Safety Investigation Act 2003 – Australian Transport Safety Bureau

Western Australia

Rail safety

Rail Safety Act 1998 – Department of Planning and Infrastructure, Office of Rail Safety

Rail Freight System Act 2000

Occupational health and safety

Occupational Health, Safety and Welfare Act 1984 – WorkSafe Western Australia

Environmental management

Environment Protection Act 1986 – WA EPA

Dangerous Goods (Transport) Act 1998 – WorkCover Western Australia

Bushfire Act 1954 – Local Government

Explosives and Dangerous Goods Act 1961 – Minister for Minerals and Energy

Radiation Safety Act 1975 – WA EPA

Heritage of WA Act 1990 – Minister for Planning

Local Government Act 1995 – Local Councils

Conservation and Land Management Act 1984 – Minister for Environment and Conservation

Metropolitan Region Town Planning Scheme Act 1959 – Minister for Planning

Town Planning and Development Act 1928 – Minister for Planning

Western Australian Planning Commission Act 1985 – Minister for Planning

Transport safety investigation

Transport Safety Investigation Act 2003 – Australian Transport Safety Bureau

South Australia

Rail safety

Rail Safety Act 1997 – Transport SA

Occupational health and safety

Occupational Health, Safety and Welfare Act 1986 – WorkCover Corporation of South Australia

Environmental management

Environment Protection Act 1993 – SA EPA

Dangerous Substances Act 1979 – WorkCover Corporation of South Australia

Development Act 1993 – Local Councils

Explosives Act 1961 – WorkCover Corporation of South Australia

Radiation Protection and Control Act 1982 – SA EPA

Heritage Act 1993 – Minister for Planning

Local Government Act 1999 – Local Councils

National Parks and Wildlife Act 1972 – Minister for Environment and Conservation

Native Vegetation Act 1991 – Minister for Environment and Conservation

Country Fires Act 1989 – SA Country Fire Service Board

Public and Environmental Health Act 1987 – Local Councils

Sewerage Act 1961 – SA Water Corporation

Soil Conservation and Land Care Act 1989 – Minister for Environment and Conservation

Water Resources Act 1997 – SA Water Corporation

Wilderness Protection Act 1992 – Minister for Environment and Conservation

Transport safety investigation

Transport Safety Investigation Act 2003 – Australian Transport Safety Bureau

Tasmania

Rail safety

Rail Safety Act 1997 – Department of Infrastructure, Energy and Resources

Occupational health and safety

Workplace Health and Safety Act 1995 – WorkCover Tasmania

Public Health Act 1997.

Environmental management

Environmental Management and Pollution Control Act 1994 – Tasmania
EPA

Dangerous Goods Act 1988 – WorkCover Tasmania

Water Management Act 1999 – Tasmania Water Corporation

Transport Act 1981

Traffic Act 1921

Transport safety investigation

Transport Safety Investigation Act 2003 – Australian Transport Safety
Bureau

Northern Territory

Rail safety

Rail Safety Act 1998 – Department of Infrastructure, Planning and Environment

Occupational health and safety

Public Health Act 1960 – NT WorkSafe

Environmental management

Environmental Assessment Act 1982 – NT EPA

Dangerous Goods Act 1980 – NT Office of Work Health and Electrical Safety

Bushfires Act 2001 – Local Government

Radioactive Ores and Concentrates Act 1980 – WA EPA

Soil Conservation and Land Utilisation Act 1969 – Minister for Environment and Conservation

Waste Management and Pollution Control Act 1998 – Minister for Environment and Conservation

Planning Act 1993 – Minister for Planning

Water Act 1992 – NT Water Corporation

Water Supply and Sewerage Services Act 1983 – NT Water Corporation

Traffic Regulations Act 1988

Transport safety investigation

Transport Safety Investigation Act 2003 – Australian Transport Safety Bureau

Source: Patrick

Abbreviations

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
ACT	Australian Competition Tribunal
ARTC	Australian Rail Track Corporation
BTRE	Bureau of Transport and Regional Economics
COAG	Council of Australian Governments
CPA	Competition Principles Agreement
DITR	Department of Industry, Tourism and Resources
DOTARS	Department of Transport and Regional Services
HVCCLT	Hunter Valley Coal Chain Logistics Team
Mtpa	Million tonnes per annum
NCC	National Competition Council
OECD	Organisation for Economic Cooperation and Development
PC	Productivity Commission

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