INQUIRY INTO AN ACCESS REGIME FOR WATER AND SEWERAGE INFRASTRUCTURE SERVICES

ISSUES PAPER

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The water industry is often described as a ‘natural monopoly’— it is cheaper and more efficient to have a single underground water and sewerage pipe network than to have competing businesses duplicate basic water and sewerage infrastructure. But not all elements of the water and sewerage supply chain are natural monopolies. Some services, like water sourcing, water and sewage treatment, and retail services, are potentially competitive.

Enabling new businesses to compete with the existing water businesses in providing water and sewerage services, where competition is possible, would promote greater innovation and efficiency. To compete effectively, however, new businesses would need to share the use of natural monopoly infrastructure services to serve their customers.

The Victorian Government announced in July 2008 that it would develop an access regime for water and sewerage infrastructure services to enable effective competition in markets upstream and downstream from the natural monopoly infrastructure. In November 2008, the Commission was directed to conduct an inquiry into developing an access regime and report to the Minister for Finance by 31 August 2009.

The Commission will need to make recommendations on:

• what infrastructure services should be subject to access
• the framework for negotiations between infrastructure operators and businesses seeking access to the infrastructure on access prices, terms and conditions
• mechanisms for resolving disputes between infrastructure operators and businesses seeking access
• changes to legislation and regulations required to implement an effective access regime, and
• how the access regime should be regulated.

The Commission has also been asked to make recommendations on how access prices should be determined and on how financial information should be reported to separate out the services subject to access (known as accounting ring fencing).

This issues paper identifies the key issues that the Commission will address in making its recommendations on developing an access regime. Interested parties are encouraged to provide comments on matters relevant to designing an access regime that will meet the Government’s objectives. Submissions are due by 30 March.

Dr Ron Ben-David
Chairperson
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1 INTRODUCTION

On 19 November 2008, the Minister for Finance directed the Commission to undertake an inquiry into the development of a state-based access regime for water and sewerage infrastructure services, under section 41 of the Essential Services Commission Act 2001. The Commission is required to report to the Minister by 31 August 2009.

The terms of reference for the inquiry require the Commission to recommend an access regime covering water and sewerage infrastructure across Victoria. The Commission should also make recommendations on the methodology for access pricing and accounting ring fencing. The terms of reference are provided at appendix A.

1.1 Background and context for the inquiry

Prolonged drought, continuing water restrictions and significant price rises for water and sewerage services have increased the focus on efficient provision of these services and innovative solutions for balancing supply and demand. Improving security of supply has also been an important focus of the Government’s water strategy.¹

In August 2007, the Government announced a review of the structure of the retail water industry in metropolitan Melbourne, to be undertaken by the Victorian Competition and Efficiency Commission (VCEC). The terms of reference required VCEC to make recommendations to ensure that the water industry provides a least cost, effective and efficient service to households and industry into the future.

In its final report, VCEC recommended that the Government implement a number of measures to facilitate the possible introduction of increased contestability² and/or competition in the water industry. It recommended that the Government develop an access regime for water and wastewater infrastructure services.³

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¹ See Department of Sustainability and Environment 2007, Our Water Our Future—The Next Stage of the Government’s Water Plan, June.

² Contestability refers to markets that are relatively easy and cheap for new service providers to enter in order to compete with the incumbent(s). Provided a market is contestable, the threat of competition from a new entrant business will create an incentive for a monopoly service provider to operate more efficiently and to set prices to reflect costs, without charging monopoly profits.

³ Victorian Competition and Efficiency Commission 2008, Water Ways: Inquiry into Reform of the Metropolitan Retail Water Sector, Final Report, February. VCEC made a number of other recommendations, which are listed in its report.
In its response to VCEC’s report, the Government supported VCEC’s recommendation that it establish an access regime. It indicated that it would ask the Essential Services Commission to undertake an inquiry into developing a state-based access regime, including establishing an access pricing methodology and accounting ring fencing.4

As noted in the terms of reference for the inquiry, the Government’s objectives in supporting the establishment of an access regime include:

- promoting the economically efficient operation of, use of and investment in water and sewerage infrastructure, thereby promoting effective competition in upstream and downstream markets
- ensuring existing water businesses and new service providers are able to comply with legislation and regulations related to resource management, the environment, water quality, health and safety
- providing certainty and, where appropriate, consistency for incumbent and potential providers of water and/or sewerage services in the terms and conditions governing access to Victoria’s water and sewerage infrastructure services
- facilitating innovation in local water supply solutions consistent with broader sustainable urban planning objectives and
- not inhibiting the potential for further reform of the water industry in the longer term.

This inquiry occurs at a time when the Victorian water businesses are undertaking a number of major supply augmentation projects. For metropolitan Melbourne, these projects include the desalination plant, the Sugarloaf pipeline (in conjunction with the Foodbowl Modernisation Project), construction of a water treatment plant at the Tarago Reservoir, and upgrading the Eastern Treatment Plant to increase water recycling. In regional and rural Victoria, the water businesses are investing in substantial augmentation projects to enhance the security of water supply, in infrastructure renewal to improve service reliability and to reduce losses in rural water systems, and in increased water recycling and reuse.5

As well as these augmentation projects, the Government’s water strategy includes a commitment to diversify water sources and promote innovation in developing local water supply solutions. For example, the metropolitan Melbourne water businesses are required to meet water recycling targets. While regional businesses are not subject to explicit recycling targets, there is a general obligation in their Statements of Obligations to optimise the use of recycled water. Work is currently underway to clarify rights to alternative water sources, develop sewer mining guidelines and establish water sensitive urban design principles.

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5 Major projects include: the Goldfields, Wimmera Mallee, Broadford, Hamilton and Merbein pipelines; the Foodbowl Modernisation Project; the Macalister Irrigation District 2030 project; and upgrading the Werribee Irrigation District Recycled Water Scheme.
1.2 The Commission’s role and legislative framework

The Commission is Victoria’s independent economic regulator of essential services supplied by the water and sewerage industry. In carrying out its role, the Commission is primarily guided by the regulatory framework set out in the Essential Services Commission Act 2001 and the Water Industry Act 1994 (box 1.1).

Box 1.1 The Commission’s regulatory objectives

The Essential Services Commission Act 2001 outlines objectives to which the Commission must have regard in undertaking its functions across all industries. The Commission’s primary objective is to promote the long-term interests of Victorian consumers with regard to the price, quality and reliability of essential services. In seeking to achieve this primary objective, the Commission must have regard to:

- facilitating the efficiency, incentives for long term investment and the financial viability of regulated industries
- preventing the misuse of monopoly or transitory market power
- facilitating effective competition and promoting competitive market conduct
- ensuring regulatory decision making has regard to the relevant health, safety, environmental and social legislation applying to the regulated industry
- ensuring users and consumers (including low income or vulnerable customers) benefit from the gains from competition and efficiency, and
- promoting consistency in regulation across states and on a national basis.

The Water Industry Act 1994 contains the following additional objectives that the Commission must meet in regulating the water sector:

- wherever possible, the costs of regulation do not exceed the benefits
- regulatory decision making and regulatory processes have regard to any differences in the operating environments of regulated entities, and
- regulatory decision making has regard to the health, safety, environmental sustainability (including water conservation), and social obligations of regulated entities.

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6 The Commission also regulates the ports, grain handling and rail freight industries and, until they were transferred to the national regulator (the Australian Energy Regulator), it regulated the electricity and gas industries. The Commission provides advice to the Victorian Government on a range of regulatory and other matters and is responsible for developing and administering the Victorian Renewable Energy Target and the Victorian Energy Efficiency Schemes. More information about the Commission’s role and current work program is available on the Commission’s website at www.esc.vic.gov.au.
Part 3A of the Essential Services Commission Act 2001 specifically deals with third party access regimes. Section 35A of the Act states that the Commission’s objective in regulating third party access regimes is:

*to promote the economically efficient operation of, use of and investment in, the infrastructure by means of which services are provided, thereby promoting effective competition in upstream and downstream markets.*

Part 3A of the Act includes pricing principles for determining regulated access prices (box 1.2). The Water Industry Regulatory Order (WIRO) made by the Governor in Council under the Water Industry Act 1994 sets out pricing principles for determining approved charges for water and sewerage services. These pricing principles may also be relevant to determining access charges for water and sewerage infrastructure services.

**Box 1.2  Pricing principles for third party access charges**

Section 35C of the Essential Services Commission Act 2001 states that the pricing principles relating to the price of access to a service are—

(a) that regulated access prices should—

(i) be set so as to generate expected revenue for a regulated service or services that is at least sufficient to meet the efficient costs of providing access to the regulated service or services; and

(ii) include a return on investment commensurate with the regulatory and commercial risks involved; and

(b) that the access price structures should—

(i) allow multi-part pricing and price discrimination when it aids efficiency; and

(ii) not allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher; and

(c) that access pricing regimes should provide incentives to reduce costs or otherwise improve productivity.

**1.3  Scope of the inquiry**

The state-based access regime is intended to cover water and sewerage infrastructure across the state. The terms of reference (included at appendix A) require the Commission to make recommendations on:

* which water and sewerage services should be subject to access

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7 The WIRO is available on the Commission’s website at www.esc.vic.gov.au.
• who will be eligible to seek access
• an appropriate negotiation framework and dispute resolution mechanism
• the terms and conditions of access, including safety requirements, the allocation
  of capacity among competing users, interoperability issues, and service quality
  issues
• a methodology for access pricing and accounting ring fencing
• information publication and reporting requirements on businesses
• the appropriate division of responsibilities for network operation, maintenance
  and expansion
• implementation issues, including transitional arrangements, and
• the appropriate role of the Commission as regulator.

The terms of reference also require the Commission to ensure that the
recommended arrangements will not discourage new investment in infrastructure,
including greenfields investments, or pose an impediment to interstate access. It
should also ensure that the arrangements allow existing businesses and new
entrants to comply with legislative and regulatory obligations relating to resource
management, the environment, water quality, health and safety.

In conducting the inquiry, the Commission may examine access regimes in other
industries and state-based access regimes for water and sewerage services in
other states. The Commission can recommend when a future review of an access
regime should occur and comment on potential barriers to effective implementation
of the regime.

The Commission’s recommendations must be consistent with National Competition
Policy (NCP), including the principles in clause 6 of the Competition Principles
Agreement,8 and with the relevant sections of the Essential Services Commission
Act 2001, including the Commission’s objectives in section 8 (see box 1.1) and
Part 3A relating to third party access regimes (including the pricing principles; see
box 1.2 above). The Commission should also have regard to the Victorian
Government’s commitment to public ownership of water businesses set out in the
Constitution Act 1975.

In making its recommendations, the Commission is required to be cognisant of
other work programs taking place in Victoria’s water sector, including:
• development of arrangements for optimising system management of the
  expanded water grid and new water sources to ensure the desired security of
  supply is achieved at least cost
• expansion and increased interconnectivity of the Victorian Water Grid and
  clarification of responsibilities for its management and coordination
• consideration of market-based mechanisms

8 Council of Australian Governments 1995, Competition Principles Agreement, 11 April
1995 (as amended to 13 April 2007). The clause 6 principles are included at
appendix B.
• clarification of rights to alternative water sources and
• development of objectives and key principles of water sensitive urban design.

The Commission may also make recommendations on implementing and obtaining certification for the recommended access regime and can recommend any appropriate transitional arrangements and any technical requirements, guidelines or regulations required to support the regime.

1.4 Review process and key dates

This issues paper marks the first stage of the Commission’s inquiry. The structure of the paper is as follows:

• This chapter outlined the scope of the inquiry and relevant objectives in establishing an access regime for water and sewerage infrastructure services in Victoria.

• Chapter 2 summarises the current structure of the Victorian water industry and discusses the potential for greater private participation in the industry.

• Chapter 3 considers the options for establishing access arrangements for water and sewerage services and outlines the requirements for certification of state-based access regimes. It outlines key features of access regimes in other industries and state-based access regimes for water and sewerage infrastructure services that have been developed or are being developed in other states.

• Chapter 4 raises a number of issues relevant to determining what services are covered by an access regime. It highlights important features of an appropriate negotiation framework and dispute resolution mechanisms.

• Chapter 5 notes some important issues for access pricing and assesses alternative access pricing methodologies in the context of the Victorian water industry and the Government’s objectives in establishing a state-based access regime. It also outlines the important features of an accounting ring fencing methodology.

• Chapter 6 discusses legislative and regulatory issues associated with introducing an access regime. It identifies some potential barriers to increasing competition and private participation in the water industry. It also considers other important non-price issues, particularly those involved in ensuring that customer protection, health and safety, water quality and environmental standards are maintained. System coordination issues are also discussed.

The paper identifies the key issues that the Commission will need to consider in addressing the terms of reference. It highlights specific questions on which the Commission is seeking feedback from stakeholders; these questions are set out in boxes at the end of relevant sections. However, stakeholders can make comments on any issue related to the terms of reference for the inquiry.

In addition to seeking comments from stakeholders in response to this issues paper, the Commission will conduct a public hearing to further seek the views of interested stakeholders.

The Commission will consider the submissions received in response to the issues paper, the comments made at the public hearing and the outcomes of its own
analysis in preparing a draft report. The draft report will be released for further public comment and submissions. The Commission will consider all comments received in preparing its final report to the Minister. The timetable for the review is set out in table 1.1.

<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
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<tr>
<td>20 February 2009</td>
<td>Release issues paper</td>
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<tr>
<td>30 March 2009</td>
<td>Submissions to issues paper due</td>
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<tr>
<td>April 2009</td>
<td>Public hearing</td>
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<tr>
<td>early May 2009</td>
<td>Release draft report</td>
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<tr>
<td>early July 2009</td>
<td>Submissions to draft report due</td>
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<tr>
<td>31 August 2009</td>
<td>Submit final report to Minister for Finance</td>
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1.5 How to respond to this issues paper

The Commission encourages stakeholders to respond to the issues raised in this paper and to identify any further issues that they consider should be addressed as part of the inquiry. The responses received and the information generated through the public consultation process will assist the Commission in preparing its report to the Minister for Finance.

Interested parties can provide comment on the issues raised in this paper in one of two ways:

**Provide written comments or submissions**

You can send a written submission or comments in response to this issues paper. Written comments are due by 30 March 2009.

We would prefer to receive them by email at water@esc.vic.gov.au.

You can also send comments by fax (03) 9651 3688 or by mail to:

Essential Services Commission
Level 2, 35 Spring St
Melbourne VIC 3000

The Commission’s normal practice is to make all submissions publicly available on its website. If there is information that you do not wish to be disclosed publicly on the basis that it is confidential or commercially sensitive, you should discuss the matter first with Commission staff.

If you do not have access to the Internet, you can contact Commission staff to make alternative arrangements to view copies of the submissions. Please contact the Commission by telephone on (03) 9651 0206.
Attend the public hearing

The Commission will conduct a public hearing in April 2009. Stakeholders who have made submissions will be invited to provide further comment on the issues raised in their submission. The hearing will provide an opportunity for other interested parties to make comments and ask questions. Details of the hearing will be advertised in the major metropolitan newspapers and placed on our website www.esc.vic.gov.au.
PROMOTING INNOVATION AND EFFICIENCY IN WATER AND SEWERAGE SERVICE PROVISION

The key purpose of establishing an access regime for an industry characterised by natural monopoly is to enable more than one business to operate in those segments of the industry where competition is feasible. Effective competition (or contestability) in those segments of a market is expected to improve public wellbeing by promoting:

- a more efficient allocation of resources (allocative efficiency)
- efficiency and productivity improvements, leading to lower costs of providing products and/or services from existing input sources, processes and technologies (productive efficiency)
- longer term efficiency and productivity improvements, with lower costs and improved service quality arising from new and improved input sources, processes and technologies (dynamic efficiency) and
- greater customer choice, with innovative product offerings of products and/or services that better reflect customer needs and preferences.

As noted in section 1.1, one of the Government's objectives in developing an access regime is to promote the economically efficient operation of, use of and investment in water and sewerage infrastructure.

This chapter outlines the current structure of the water industry in Victoria. It identifies which segments of the industry are characterised by natural monopoly and which are potentially competitive. This analysis is then applied to identify options for enabling competition in the provision of water and sewerage services by implementing an access regime. Finally, some complementary measures are considered for their implications for an access regime.

2.1 Current industry structure

The Victorian water businesses are diverse in terms of size, the services they provide and the environments in which they operate. The metropolitan water sector comprises four water businesses—the bulk water supplier, Melbourne Water, and three retailers. In regional areas, 15 water businesses provide urban and/or rural services.

2.1.1 Metropolitan Melbourne

In the metropolitan area, Melbourne Water provides wholesale services to the three metropolitan retailers and to several regional businesses. These services include:
• harvesting, storage and treatment of raw water supplies
• transmission (transport) of bulk water supplies
• the operation of the bulk sewerage network and treatment of the majority of sewage and
• managing rivers and creeks and major drainage systems in the Port Phillip and
  Westernport regions (local councils provide local drainage services).

The three metropolitan retailers supply water and sewerage services to more than
1.6 million customers, representing over 70 per cent of the state’s population. The
functions of these retailers include:
• distributing and supplying water to retail customers
• operating the sewerage network from customers’ premises through to the trunk
  sewer network
• providing trade waste services to commercial and industrial customers
• operating some small sewage treatment plants from which recycled water may
  be provided
• providing a range of retail functions, including meter reading, customer billing,
  and handling call centre enquiries and complaints, and
• billing metropolitan customers for drainage services provided by Melbourne
  Water and parks charges on behalf of Parks Victoria.

Each retailer services a specific geographic area and does not compete directly
with other retailers for customers. The performance of the three retailers is
compared to provide ‘comparative competition’ and create incentives for more
efficient operation and innovation.

2.1.2 Regional and rural Victoria

The regional water businesses operate within geographically defined areas. Each
business occupies a monopoly position in providing specified services within its
defined service area. In contrast to the metropolitan sector, the regional
businesses are generally vertically integrated.

Some regional businesses provide mainly urban services to regional cities and
towns throughout Victoria. Other regional businesses (often called rural
businesses) provide predominantly rural water services to customers in regional
areas. Other regional water businesses provide a mixture of urban and rural
services.

Urban services provided by regional water businesses include:
• harvesting water and operating and managing headworks, although some
  regional urban businesses purchase water from regional rural water businesses
  or from Melbourne Water
• treating water
• distributing water to households and industrial customers
• collecting, treating and disposing of sewage and further treating sewage for recycling and reuse purposes and

• a range of retail customer service functions, including meter reading, billing and payment, and handling call centre enquiries and complaints.

Rural services provided by regional water businesses include:

• supplying water for irrigation, private diverters and stock and domestic water users

• providing irrigation drainage services

• sourcing bulk entitlements

• operating storage facilities and the infrastructure of irrigation districts

• constructing and maintaining delivery and irrigation drainage services

• licensing ground water and surface water extraction and

• dealing with customer issues such as billing, payment collection and complaints.

2.2 Rationale for establishing an access regime

The water industry is often described as a ‘natural monopoly’. A natural monopoly exists in situations where it is cheaper for a single supplier to provide particular services relative to the cost that would be incurred if more than one supplier provided those services.

Natural monopolies usually derive from economies of scale or scope in production. In water and sewerage service provision, size and scope economies flow from the significant fixed costs associated with installing infrastructure, such as pipe networks, and the efficiency of having a single underground water and sewerage pipe network. Marginal costs of servicing customers are typically low and either fall or do not increase as more customers are provided with services (over the range of demand subject to economies of scale).

In industries where infrastructure facilities exhibit natural monopoly characteristics, duplication of the network is generally uneconomic because it is cheaper for a single business to provide the service. The marginal cost of providing services to additional customers will, over a wide range of demand levels, always be lower for the incumbent provider than for potential new entrants. This creates a cost barrier to potential new entrants wanting to compete with the incumbent service provider.

However, not all elements of the water and sewerage supply chain exhibit natural monopoly characteristics. Figure 2.1 shows the supply chain for urban water and sewerage services, identifying which services could be expected to exhibit natural monopoly characteristics. See Tasman Asia Pacific 1997, Third Party Access in the Water Industry: An assessment of the extent to which services provided by water facilities meet the criteria for declaration of access, Final report prepared for the National Competition Council, September, available at www.ncc.gov.au/pdf/PIReWrTa-001.pdf.
monopoly characteristics and which are potentially competitive. The only natural monopoly elements of the supply chain are the water and sewerage (wastewater) pipe networks (and associated equipment such as meters)—these are shown as shaded boxes in figure 2.1.

Figure 2.1  **Urban water and sewerage supply chain**

Natural monopoly and potentially competitive services

The extent to which a water storage will exhibit natural monopoly or potentially competitive characteristics depends on the nature of the storage facility.

Source: Based on figure 1.1 and discussion in Tasman Asia Pacific 1997, *Third Party Access in the Water Industry: An assessment of the extent to which services provided by water facilities meet the criteria for declaration of access*, Final report prepared for the National Competition Council, September.

Water storage facilities may exhibit natural monopoly or potentially competitive characteristics depending on their nature. Large dams are likely to be natural monopolies if they cannot be efficiently duplicated and the marginal cost of storing additional water is low due to excess capacity. Small local storages that form an integral part of the water transport network will be inseparable from that natural

The rural supply chain is a truncated version of the urban supply chain. It does not typically include wastewater flows as wastewater services are not generally provided by rural water businesses. In addition, raw water may not be treated prior to supply for irrigation purposes. Rural bulk water delivery and associated storage and metering facilities will exhibit natural monopoly characteristics. Rural delivery infrastructure is discussed in section 2.2.2.
monopoly facility. However the provision of other water storages is likely to be potentially competitive.

The other services in the supply chain, including water procurement, water and wastewater treatment and retail services, are potentially competitive.

Figure 2.1 highlights that each of the potentially competitive functions in the supply chain is dependent upon natural monopoly infrastructure services to serve end use customers and source wholesale product. A necessary condition for effective competition in the potentially competitive markets within the supply chain is access to the relevant infrastructure services by businesses wanting to provide services in those markets.

2.2.1 Innovative provision of water and sewerage services

Participation by new entrants in the potentially competitive markets could take a number of possible forms. Box 2.1 outlines some options identified by the Economic Regulation Authority in a recent report on the Western Australian water industry. The list of options is not exhaustive since competition could be expected to generate new and innovative ways of meeting customer needs and preferences.

Private businesses have shown interest in establishing contractual arrangements to supply water directly to users or to provide wastewater treatment services. Some innovative methods of providing water and sewerage services (which substitute for the services provided by the existing water businesses) are already occurring on a limited scale, for example:

- In Sydney, Orica extracts contaminated groundwater from the Botany Sands Aquifer for treatment at its groundwater treatment plant. The plant provides high quality recycled water for Orica's own use as well as selling recycled water to other industrial, commercial and some residential (non-potable) users in the Botany and surrounding areas.

- In Victoria, a number of small local operators treat wastewater and supply recycled water to golf courses and sporting fields.

- Some industrial users have grouped together to develop small rainwater capture facilities to supply water for their own use.

- A number of small scale sewer mining projects are operating around Australia, including at Sydney Olympic Park, Flemington racecourse, and Southwell Park in the Australian Capital Territory.

- Some regional Victorian water businesses have developed innovative arrangements to source water for sporting fields and other facilities.

While these arrangements generally do not involve access to publicly owned infrastructure, they suggest that there is a demand for innovative water and sewerage services and that there are private operators potentially interested in supplying such services. Facilitating access would be expected to enhance the environment for new entry and further innovation in potentially competitive segments of the market.
Box 2.1  **Potential sources of competition in water and sewerage service provision**

In advising the Western Australian Government on possible competitive enhancements in the water and wastewater sector, the Economic Regulation Authority identified a number of potential sources of competition in the industry. In many of these examples, access would be required to facilitate the competitive provision of services.

**Water sourcing and production**

A bulk water market could be established with competing suppliers of bulk water, including private suppliers. Alternatively, an independent supplier could tender to provide a specified volume of water at a specified level of security of supply, or to construct a specific water supply project.

**Water treatment**

A private business could construct its own treatment plant and tender to supply treatment services. Or private and publicly owned treatment plant operators could compete to provide treatment services in a market.

**Water retailing**

A market for the provision of retail water services could be established with retailers (publicly or privately owned) competing for customers. Or service provision for an entire market could be put out to tender.

**Sewage collection**

A market for the provision of retail sewage collection services could be established with retailers (publicly or privately owned) competing for customers. Or service provision for an entire market could be put out to tender.

**Sewage treatment**

Service providers could compete to treat wastewater for either disposal or recycling. Alternatively, an independent entity could tender for a specified project or outcome. Sewer mining is an example of private provision of sewage treatment services.

**Sewerage disposal and recycled water retailing**

A market for recycled water could be established with suppliers (publicly or privately owned) offering competing recycled water products in the market. There is already, to some extent, a market for treated wastewater by-products, such as for use in the agricultural sector.


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**2.2.2 Access to rural water delivery infrastructure**

In rural areas of Victoria, water rights have generally been unbundled to separate entitlements to receive water from the rights to have that water delivered via the
delivery infrastructure. So far, unbundling has occurred mainly for rural irrigation services.11

Water trading has also been introduced, allowing the trading of water entitlements and delivery shares. Trading by irrigators and other rural customers has led to water being re-allocated to more valuable uses, using the rural businesses’ delivery networks to transport purchased water to where it is needed. Regional water businesses have also purchased water entitlements in the market and used the rural businesses’ delivery networks to transport the water from its source to their own customers.

 Tradable delivery shares, which can be bought and sold on the market, provide a mechanism for new entrant water suppliers to use the water conveyance and, where applicable, reticulation services of the infrastructure service provider (the relevant rural water business). In rural areas where unbundling has occurred, a business wanting access to the rural delivery network (that is, the channel system or pipeline network as relevant) is able to buy delivery shares to transport water from its source to that business’s customers. In that sense, therefore, access to services provided by publicly owned infrastructure is already available in some rural areas. However, a number of other considerations will determine the extent to which competitive provision of water services is likely to occur. These considerations include the availability of alternative water sources and rules around the injection of water from alternative sources into the rural delivery network (as distinct from trading water purchased from the incumbent water business).

### 2.2.3 Access to urban water delivery infrastructure

The Melbourne metropolitan retailers hold source entitlements to water and use Melbourne Water’s infrastructure assets to store and transport water to their customers.12 Sewage collected by the retailers is transported to Melbourne Water’s treatment plants through the retailers’ sewage reticulation pipes and then through Melbourne Water’s sewerage network. The arrangements for providing access to Melbourne Water’s infrastructure services could provide a framework for extending access to metropolitan access seekers under an access regime.

Some regional urban businesses have bulk entitlement arrangements with rural businesses or Melbourne Water.

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11 In some regions, domestic and stock entitlements have also been unbundled. In other regions, such as the Wimmera Mallee, domestic and stock entitlements remain bundled at present. For more information on unbundling, see the Department of Sustainability and Environment’s website www.ourwater.vic.gov.au/allocation/water_entitlements.

12 In 2004, the Victorian Government decided that bulk water entitlements for Melbourne would be assigned to the metropolitan retail water businesses as a pool and that trading would be permitted between the pool and other water entitlement owners. See Department of Sustainability and Environment 2004, Our Water Our Future—Securing Our Water Future Together, June.
2.3 Lessons from the implementation of access regimes in other jurisdictions and industries

Third-party access regimes have been implemented in various network-based utility industries, such as telecommunications, gas and electricity, both in Australia and overseas. In contrast, access regimes have been established in relatively few water industries. The main features of access regimes in water industries in other jurisdictions and access regimes in other industries are outlined in section 3.3 in chapter 3 and appendix C.

In most industries where access regimes have been implemented, a number of complementary measures have also been introduced to facilitate greater competition and private participation in the industry. Introducing an access regime without such complementary measures is unlikely to substantially boost innovation and efficiency in the industry, though some benefits would still be obtained. In designing an access regime without taking complementary measures, care would need to be taken to ensure that the benefits from the regime outweighed the costs.

2.3.1 Complementary measures in other industries

The complementary measures adopted in other jurisdictions for their water industries, as well as in other industries, vary in nature and in the processes through which they were implemented. However, two features are common to all industries. First, the reform process is lengthy. Designing and implementing the various measures has required significant research, including cost-benefit analysis of expected outcomes. Second, the reform strategy has evolved as more information is obtained. Regular monitoring and review of actual outcomes has been important to ensure that government objectives are being achieved effectively without adverse unanticipated consequences.

For example, in the Victorian electricity industry, investigation of reform options commenced in the early 1990s, based in part on experience overseas. Establishing an access regime and implementing other measures to facilitate competition and greater private participation occurred on a staged basis, with the last stage of the process being completed this year. Similarly, in the United Kingdom’s electricity sector, establishing an access regime and implementing complementary measures took more than eight years. At each stage of the process, outcomes were carefully reviewed to ensure that competition was operating effectively and that the regulatory framework was appropriate.

In the United Kingdom’s water industry, the first steps in facilitating competition and private participation in the industry were taken almost 20 years ago. A limited access regime has been introduced, with extension of the regime dependent on further complementary reforms. The Office of Water (Ofwat) is currently undertaking its second review of the water sector to review the outcomes of reforms to date and to plan the next stages in the reform process. The next stage in the reform process is expected to take around five years and further reforms are expected after that period. The reform program will continue to be reviewed and modified, as appropriate, to reflect increasing understanding of the work needed, as detailed plans are developed, and greater knowledge as the market itself develops.
In south-east Queensland’s water industry, a substantial reform program has commenced, including major restructuring of the industry in a staged process. A number of measures have been proposed, including vertical disaggregation of functions (including separation of contestable elements of water provision from natural monopoly elements), creation of a water grid and a non-profit statutory water grid manager, and possible introduction of third-party access to the distribution network.

In Western Australia, the Economic Regulation Authority (ERA) recently completed an inquiry into the water industry and reform options. The ERA recommended a number of reforms, including establishing a third party access regime and an independent procurement entity responsible for managing all supply sources and demand options. It concluded that decisions on further measures to enable greater competition would require detailed cost-benefit analysis of the options and better information about potential outcomes.

The Victorian Competition and Efficiency Commission (VCEC) came to a similar conclusion in its 2008 review of the metropolitan Melbourne water sector. It recommended a number of measures, including the establishment of an access regime. Before further measures could be recommended, a comprehensive cost-benefit analysis of options would be required.

Another defining feature of reforms in other industries is that, as government objectives differed across industries, different measures were implemented in each industry. In some cases, objectives were modified as experience was gained from earlier stages of reform and the costs and benefits to customers and the public more generally could be quantified.

### 2.3.2 Implications for Victoria

The key purpose of establishing an access regime in the Victorian water industry is to enable effective competition in upstream and downstream markets. However, a number of complementary reforms will be necessary to facilitate competition and obtain the full benefits from opening up the provision of water and sewerage services to new providers.

It is clear from experiences in other industries that implementing a strategy to enable greater competition in an industry dependent on natural monopoly facilities is a lengthy and evolving process. Further, there is limited experience of implementing such reform strategies in water industries. There are also important differences between the water industry and other network-based industries (like electricity, gas, telecommunications and rail).

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14 Major distinguishing features of the water industry are: the competing use of water for environmental flows; the high transportation/transmission costs of water relative to the value of the resource; the ability to store water; the public good aspects of ensuring community health through safe drinking water; the variable and uncertain supply of the resource; and the risks associated with ‘lumpy’ augmentation investments.
Without extensive and wide-ranging research into the types of reforms required in
the Victorian water industry, identification of their expected outcomes and
quantification of their costs and benefits, it is not possible, at this stage, to map out
a detailed reform strategy or to identify an end-point for the reform process. In
these circumstances, it will be important to introduce measures to complement a
Victorian access regime in a carefully staged process with regular review to ensure
that:

• markets are operating effectively with no unforeseen adverse consequences
• any problems are addressed, and
• appropriate regulatory arrangements are in place, taking into account the
development of the market.

The Government highlighted in the terms of reference for this inquiry that one of its
objectives is to ‘not inhibit the potential for further reform of the water industry in
the longer term’. In reaching its recommendations on an appropriate access
regime, the Commission will place a high priority on ensuring that a state-based
access regime is flexible enough to remain appropriate and applicable to a range
of different industry structures.

What lessons can be learned from experiences in developing and implementing
access regimes in other industries?
What factors should the Commission take into account in making its
recommendations to ensure that an access regime will be flexible enough to not
inhibit the potential for further reform of the water industry in the longer term
and to remain applicable to a range of different industry structures?
In the terms of reference for this inquiry, the Victorian Government indicated that it intends to seek certification from the National Competition Council (NCC) of the state-based access regime it establishes for water and sewerage infrastructure services. The certification criteria are therefore an important consideration for the Commission in making its recommendations on designing an access regime.

This chapter describes the regulatory framework within which certification occurs and outlines the certification criteria, including the NCC’s guidance on meeting those criteria. Access arrangements in other states and other industries are outlined.

### 3.1 Regulatory framework for infrastructure access

Businesses intending to supply water or sewerage services in competition with the incumbent water businesses often need to use the existing water and/or sewerage infrastructure, specifically the pipelines and associated services (as discussed in chapter 2). Businesses requiring the use of infrastructure services have three main pathways for seeking access.

#### 3.1.1 Private negotiation of access

Where no formal access arrangements exist, the access seeker can enter into private negotiations with the infrastructure provider to reach agreement on access terms and conditions, including the price of access. This pathway to obtaining access is illustrated in figure 3.1. However, infrastructure providers generally derive substantial market power from their ownership of essential infrastructure. Vertically integrated infrastructure operators in particular have an incentive to limit or discourage access to protect their position in potentially competitive upstream or downstream markets.

Consequently governments have introduced arrangements to provide a regulatory framework for access negotiations. These arrangements establish a legal right for access seekers to negotiate shared use of infrastructure services and provide for dispute resolution, generally through arbitration by an independent regulator. An access regime can be established through state legislation or access can be sought under Part IIIA of the *Trade Practices Act 1974*. 
3.1.2 State-based access regime

An access regime may be established under state (or territory) legislation. The state-based access regime would establish a right for access seekers to seek access to infrastructure services covered by the regime. The regime would establish a negotiation framework, including the dispute resolution provisions that would apply if negotiations fail (such as arbitration). The regime may also set out guidance on access terms and conditions, such as information provision, price guidance, or safety requirements.

The Western Australian Economic Regulation Authority (ERA) noted that establishing a state-based access could significantly reduce the time taken and cost incurred in gaining access:

*The development of a State-based regime, in which the general terms and conditions of access are clear to access seekers in advance, could reduce considerably the risks and delays in obtaining access.*

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In addition, state-based regimes can be tailored to the specific circumstances of the state.

The pathway to obtaining access through a state-based access regime is shown in figure 3.2.

**Figure 3.2** Options for third party access to infrastructure services—state-based regime pathway

State-based access regimes can be certified under the Part IIIA of the Trade Practices Act 1974 (the process is discussed in section 3.1.3). While applying for certification is not mandatory, all state and territory governments and the federal government committed, under clause 2.9(b) of the Council of Australian Governments (COAG) Competition and Infrastructure Reform Agreement, to seek certification of their access regimes.

Until a state-based regime has been certified, an unsuccessful access seeker may seek to have an infrastructure service declared under the Trade Practices Act 1974. In deciding whether to consider a declaration application, the NCC will assess whether the state-based regime is an effective regime under the Act. If the NCC considers the regime to be effective (and not subject to substantial difficulties as a result of the infrastructure facility being situated in more than one jurisdiction), it will decline to consider the access seeker’s application.16

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16 See clause 6(2) of the Competition Principles Agreement, included at appendix B.
3.1.3 Access through the Part IIIA of the Trade Practices Act

Under the National Competition Policy (NCP), all Australian governments agreed to a national access regime for third party access to services provided by significant infrastructure where:

- it would not be economically feasible to duplicate the facility
- access to the service is necessary to permit effective competition in upstream or downstream markets
- the facility is of national significance, having regard to its size, importance to interstate or overseas trade or commerce, or its importance to the national economy and
- the safe use of the facility by the person seeking access can be assured at an economically feasible cost and, if there is a safety requirement, appropriate regulatory arrangements exist.17

The National Access Regime was established through amendments to the Trade Practices Act 1974. Part IIIA of the Act includes the criteria set out above for determining what are nationally significant infrastructure services and, in addition, requires that access is not contrary to the public interest, such that the costs of access regulation do not outweigh the benefits.18

Part IIIA of the Act provides three avenues for granting access to an infrastructure service:19

- declaration of an infrastructure service
- an undertaking by an infrastructure operator to provide access
- certification of a state-based access regime.

Declaration

After private negotiation on access with an infrastructure service provider has been attempted and failed, an access seeker has the option of seeking access to the service through declaration. The declaration pathway is shown in figure 3.3.

Declaration establishes the right for a third party to negotiate with the infrastructure owner on the terms and conditions of access. If negotiations fail, either party can request binding arbitration by the Australian Competition and Consumer Commission (ACCC) to resolve the dispute.

To have a particular infrastructure service declared, an access seeker must apply to the NCC. The NCC considers the application before forwarding a

19 Part IIIA of the Trade Practices Act 1974 governs access regulation for all industries with the exception of telecommunications, which is regulated under Part XIC of the Act, and gas, which is regulated under the Natural Gas Law and National Gas Rules.
recommendation to the relevant Minister, who decides whether to declare the service.\textsuperscript{20} The Minister’s decision may be appealed to the Australian Competition Tribunal.

Figure 3.3 **Options for third party access to infrastructure services—declaration pathway**

A potential disadvantage of the declaration process is the time and expense involved, first in obtaining declaration and second in determining access terms and conditions. An example is the lengthy process involved in Services Sydney obtaining access to Sydney Water’s sewerage pipeline services. The process began with unsuccessful negotiations with Sydney Water, followed by an application for declaration of the services, then further unsuccessful negotiations over terms and conditions, and finally arbitration on the access pricing methodology (box 3.1). Despite eventually obtaining access, Services Sydney has not proceeded with its intended provision of retail sewage collection services or the construction of the planned reclamation plant.

Another important disadvantage is uncertainty about access terms and conditions, both for access seekers and infrastructure operators, since negotiations over terms and conditions do not occur until after declaration.

\textsuperscript{20} The Council has considered declaration applications for rail services, electricity network services, gas pipeline services, airport services and electronic database services.
Box 3.1  **Access by Services Sydney to Sydney Water’s sewerage pipeline services**

In 1999 Services Sydney, a private company, began negotiations with Sydney Water for access to its sewerage pipeline services. Services Sydney intended to compete with Sydney Water in providing retail sewage collection services within the Sydney area, using Sydney Water’s sewage reticulation network to transport sewage from the customers’ premises to new trunk main sewers that it would construct to interconnect with Sydney Water’s sewage reticulation network.

It also planned to build a new state-of-the-art water reclamation plant to treat the sewage and produce tertiary treated recycled water that it eventually planned to return to Sydney’s catchment dams or sell for other uses, such as agricultural or environmental flows. Services Sydney’s business model involved competing for customers principally on the basis that its effluent treatment would be more environmentally friendly than the ocean outfall system used by Sydney Water.

After access negotiations with Sydney Water were unsuccessful, Services Sydney applied in March 2004 to the National Competition Council (NCC) to declare the services. In December 2004, the NCC recommended that the services be declared for a period of 50 years. However the relevant New South Wales Government Minister did not declare the services by the due date and was deemed to have decided not to declare them. Services Sydney appealed the decision to the Australian Competition Tribunal. In December 2005, the Tribunal handed down its decision to declare the services.

In November 2006, Services Sydney notified the Australian Competition and Consumer Commission (ACCC) of an access dispute with Sydney Water in relation to the methodology for pricing access in respect of the declared sewage transportation services.

In June 2007, the ACCC determined that the access price that Services Sydney should pay Sydney Water in respect of the customers supplied by Services Sydney is Sydney Water’s regulated retail price for those customers minus Sydney Water’s ‘avoidable costs’, plus any ‘facilitation costs’ associated with providing access.


In its response to VCEC’s report, the Victorian Government stated that:

> to avoid the risks associated with ad hoc applications for access under Part IIIA of the Commonwealth Trade Practices Act 1974,
the Government will develop a state based access regime for water and wastewater infrastructure services.\textsuperscript{21}

Access undertakings

Under Part IIIA of the Trade Practices Act 1974, infrastructure operators can submit a voluntary access undertaking to the ACCC for approval. An undertaking may relate to existing or proposed infrastructure and it should set out the terms and conditions on which an infrastructure service provider will provide access to relevant services. The pathway to access when an undertaking is in place is shown in figure 3.4. If the ACCC approves an undertaking, the services covered by that undertaking are immune from declaration.

Figure 3.4 Options for third party access to infrastructure services—undertaking pathway

An access undertaking has the primary purpose of giving infrastructure operators some certainty about the terms and conditions on which access will be made available. In particular, it allows infrastructure operators considering new infrastructure investments to determine these matters before committing to the investment. While access undertakings must comply with criteria set out in the

Trade Practices Act 1974, the asset owner has greater flexibility in determining the terms and conditions of access than under the declaration process.22

Infrastructure service providers may also make undertakings in respect of services covered by state-based access regimes or declared services (such as in the telecommunication access regime). In these cases, undertakings provide greater certainty for access seekers and potential access seekers on terms and conditions of access, such as setting out reference tariffs.

**Certification of a state-based access regime**

A state can apply to the NCC to have a state-based access regime certified as an ‘effective access regime’ for the purposes of the Trade Practices Act 1974. Declaration is not available for infrastructure services that are already the subject of an effective access regime.

The certification process is activated when the Premier applies to the NCC for assessment of the effectiveness of the state-based regime. Following consideration of the application, the NCC makes a recommendation to the relevant Commonwealth Minister, who then decides whether to certify the regime as effective. Certification remains in force for the duration specified in the Commonwealth Minister’s decision. The applicant Government may apply to the Australian Competition Tribunal for a review of the decision.23

The pathway to obtaining access through a certified state-based access regime is illustrated in figure 3.5.

The major advantage of certification is that it provides infrastructure operators and access seekers with certainty about how access will be regulated. While this certainty is of benefit to access seekers, it is also crucial for infrastructure operators, especially in relation to new investment. To provide further certainty, an infrastructure operator providing services that are subject to a certified state-base access regime may make an undertaking setting out the detailed terms and conditions of access, including reference prices or the method for determining access prices. Some access regimes, such as the national gas access regime, require infrastructure service providers covered by the regime to submit undertakings (or access arrangements) that set out the standard terms and conditions governing access.

Under the Competition and Infrastructure Reform Agreement, the Victorian Government agreed that it would seek certification of any state-based access regime.

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22 The Australasian Rail Track Corporation made an access undertaking for the services provided by its below rail network.

23 The application for review must be made within 21 days after publication of the decision.
3.2 Certification requirements

In determining whether an access regime is an effective regime under the Trade Practices Act 1974, the NCC is required to assess the regime against the certification criteria set out in clauses 6(2)-6(5) of the Competition Principles Agreement (included at appendix B). Applications for certification must include evidence that each of these clause 6 principles is satisfied. An effective access regime may contain additional matters that are not inconsistent with the clause 6 principles.

The NCC has published guidance on satisfying the certification requirements.\(^\text{24}\) It notes that the clause 6 principles are used as guidelines, rather than binding rules, and that a range of regulatory arrangements are capable of delivering efficient outcomes. Its primary focus in assessing a state-based access regime is on

whether the regime establishes an appropriate framework for achieving three main efficiency objectives:

- ensuring the efficient use and operation of natural monopoly infrastructure, in particular by preventing opportunities for misuse of market power through denial of access or monopoly pricing of infrastructure services
- promoting efficient investment in natural monopoly infrastructure, by ensuring infrastructure is maintained and developed appropriately, infrastructure owners earn sufficient returns on their investments, and incentives for over- or underinvestment in natural monopoly infrastructure and in upstream or downstream markets are minimised
- promoting competition in activities that rely on the shared use of natural monopoly infrastructure.

Access arrangements should also balance the legitimate commercial interests of infrastructure owners and other parties, the efficient operation of the infrastructure facility, and the benefits to the public from competitive markets.

In undertaking its assessment, the NCC groups the clause 6 principles under five categories to provide a framework for its analysis. The categories are:

- coverage of services, that is, which infrastructure services are subject to access
- treatment of interstate issues, arising where infrastructure facilities cross state borders or are subject to more than one state access regime
- negotiation framework, including ring fencing and information provision
- dispute resolution and
- terms and conditions of access, including pricing of access.

The NCC also considers an access regime’s treatment of greenfields investments and any transitional arrangements included in the regime in determining whether to recommend certification.

The NCC’s approach to assessing compliance with the certification criteria is outlined below. The remaining chapters in this paper discuss issues that should be considered in designing a state-based access regime for Victorian water and sewerage infrastructure services that satisfies the certification criteria.

### 3.2.1 Coverage of services

Clause 6(3) requires access regimes to limit their coverage to infrastructure services provided by significant infrastructure that is not economically feasible to duplicate. In addition, access to the infrastructure service must be necessary to permit effective competition in related markets. These principles are intended to ensure that the regime applies only to infrastructure services where the benefits resulting from access are expected to outweigh the costs of providing access.

The NCC has required definition of the services covered by access regimes in both generic terms and by nominating particular facilities providing those services. In respect of water and sewerage infrastructure services, an example of a generic definition could be ‘the transport of water within a water reticulation pipeline’. The regime would then identify particular pipelines to which the access arrangements...
would apply in respect of the water transport services provided by those pipelines. A pipeline could be identified by name, where one exists, or by reference to pipelines within a specified geographic area. Schedule A of the National Gas Code (now replaced by the National Gas Law and National Gas Rules) listed the pipelines covered by the access regime at its commencement.25

A regime can provide for coverage of future extensions to existing infrastructure facilities provided they fall within the scope of a generic service covered by the regime. Such facilities would have to be subject to an independent assessment at an appropriate time to ensure consistency with clause 6(3). The National Gas Rules set out a process for case-by-case coverage of extensions and expansions to the capacity of existing pipelines covered by the access regime.26

Clause 6(4)(d) requires that the services covered by the regime should be subject to periodic review to ensure that the impact of changes in industry conditions and technological developments are taken into account on a regular basis. Factors such as demand growth, technological innovation and long term changes in rainfall patterns could lead to duplication of a water or sewerage infrastructure facility becoming economically feasible, leading to the need to review whether that facility should continue to be covered by the access regime.

Issues to be considered in determining what water and sewerage infrastructure services should be covered by an access regime and how often coverage should be reviewed are discussed in chapter 4.

### 3.2.2 Treatment of interstate issues

The principles set out in clauses 6(2) and 6(4)(p) address situations where infrastructure facilities cross state borders or multiple state-based regimes apply to a particular service.

### 3.2.3 Negotiation framework

The principles in clauses 6(4)(a)-(c), (e)-(i), and (m)-(o) describe the key features of the negotiation framework on which an access regime should be based. The NCC considers that, for most industries, the principles establish a negotiate/arbitrate model as ‘a cornerstone’ of an access regime.27 Under this model, access is determined on the basis of terms and conditions negotiated and agreed between the infrastructure service provider and the access seeker, with formal arbitration as the principal mechanism for resolving disputes.

To support the negotiate/arbitrate approach, the principles require that the regime:

- establishes a legal right for parties to negotiate access and a process for enforcing this right

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27 National Competition Council 2003, op. cit., p. 15.
3 DESIGNING A STATE-BASED ACCESS REGIME

- requires infrastructure service providers to use all reasonable endeavours to accommodate access seekers’ requirements and
- ensures that access outcomes balance a range of factors, including the legitimate business interests of infrastructure owners, the efficient use of infrastructure, and community benefits from competitive outcomes.

The regulatory framework established by an access regime must also include appropriate ring fencing (see section 5.2), information and reporting requirements (see section 6.4) and prohibit conduct for the purpose of hindering access (such as through non-discriminatory pricing provisions (see section 5.1).

The NCC notes that a more prescriptive approach may be required ‘where the [infrastructure] services covered are characterised by an incumbent service provider and many relatively small potential access seekers’.28 On the information available to the Commission, including experience in other jurisdictions (such as New South Wales and the United Kingdom), it seems likely that, at least in the early stages of an access regime, negotiations over access to water and sewerage infrastructure services will be between a large incumbent water business and one or more small access seekers.29

In these circumstances, the NCC states that further regulatory measures should be implemented to address information and negotiating power asymmetries between access seekers and infrastructure service providers to facilitate effective access negotiations. These measures could include independent regulatory guidance on indicative tariffs or reasonable price boundaries and the release of appropriate information to the market. Issues in establishing an appropriate negotiation framework for an access regime are discussed in chapter 4. Reporting requirements are discussed in section 6.4.

3.2.4 Dispute resolution

An effective access regime must provide mechanisms to resolve disputes between an infrastructure service provider and access seekers. The principles the NCC assesses a regime’s dispute resolution mechanisms against are set out in clauses 6(4)(a)-(c), (g)-(l), and (n) and 6(5)(c). The NCC notes that ‘an access regime’s arbitration framework must engender confidence among the parties’,30 by ensuring that the dispute resolution body is independent and has sufficient resources and expertise to carry out its dispute resolution role, and that arbitration is binding.

An access regime is required to provide guidance to the arbitrator/regulator on:

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28 bid., p. 12.

29 Access seekers are likely to be ‘small’ in terms of their activities within the water industry and the size of their initial investments in entering the market for water and/or sewerage service provision. They may be large existing businesses in other industries, such as gas or electricity.

30 National Competition Council 2003, op. cit., p. 16.
• the factors to be taken into account in making a determination, including the legitimate commercial interests of infrastructure owners, safety requirements and the public benefits from competitive markets
• the circumstances in which it can require the infrastructure operator to extend or expand the capacity of a facility or grant interconnection rights
• the compensation payable when an existing right to use a facility is prohibited
• the matters that can be taken into account in any merits reviews of decisions.

3.2.5 Terms and conditions of access

The principles governing the setting of appropriate terms and conditions of access are set out in clauses 6(4)(a)-(c), (e)-(g), (i), (k), and (n) and 6(5)(b). Most of these principles relate to the framework within which negotiations over terms and conditions of access may occur, relating to negotiation rights, dispute resolution, modifying agreements and information provision.

Clause 6(4)(i) lists a number of factors that should be taken into account by the regulator/arbitrator in determining terms and conditions of access. These include the infrastructure owner’s legitimate business interests and investment in the facility, the costs of providing access, the interests of all parties holding contracts for use of the facility, operational and technical requirements needed for safe and reliable operation of the facility, economically efficient operation of the facility, and the public benefits from competitive markets.

Price is a crucial aspect of access terms. When the Competition Principles Agreement was amended in 2007, a new clause 6(5) was added to the certification criteria (among other amendments). Clause 6(5)(b) incorporates pricing principles requiring that regulated access prices should be set so as to:
• generate expected revenue that is at least sufficient to meet the efficient costs of providing access to the regulated service, including a return on investment that reflects the regulatory and commercial risks involved
• allow multi-part pricing and price discrimination when it facilitates efficiency
• not allow a vertically integrated infrastructure service provider to set terms and conditions that discriminate in favour of its downstream operations, except to that extent that the cost of providing access to other operators is higher and
• provide incentives to reduce costs or otherwise improve productivity.

Pricing issues are discussed further in chapter 5. Non-price terms and conditions, including safety requirements, service quality issues, environmental protection, and system coordination issues, are discussed in detail in sections 6.2 and 6.3.

3.2.6 Greenfields investments

Under clause 6(5)(a) of the Competition Principles Agreement, access regimes are required to promote efficient investment in significant infrastructure. In assessing an access regime for certification purposes, the NCC considers whether any aspects of the regime would deter efficient infrastructure investment, for example by generating uncertainty about expected future returns on the investment or by
preventing infrastructure operators from earning returns that fully reflect the risks involved.

One of the factors considered by the NCC in this regard is the length of the certification period. A longer period will provide greater certainty about the regulatory framework, which may facilitate financing the investment. In the case of the Darwin-Tarcoola rail line (Northern Territory/South Australian Rail Regime), the NCC recommended a relatively long certification period of 30 years. It considered that the regulatory framework was flexible enough to account for the risk factors inherent in a greenfields investment and to adapt through time to significant changes in the market environment.³¹

### 3.2.7 Transitional arrangements

Where transitional arrangements constrain the operation of an access regime, for example by limiting its application to specified classes of customer for an initial period, the NCC considers whether these arrangements reduce the effectiveness of the regime. In doing so, it weighs up the anti-competitive effects of the arrangements against their public benefits, such as helping industry participants to adjust to greater competition. It requires any such arrangements to be necessary and phased out as soon as possible.

### 3.3 Access regimes in other jurisdictions and industries

The terms of reference allow the Commission to examine access regimes in other industries and state-based access regimes for water and sewerage services in other states in developing its recommendations on a Victorian access regime. The Commission will consider the features of other access regimes, and experiences in implementing these regimes, in the context of conditions in the Victorian water industry and the Government’s objectives in establishing an access regime.

Water and sewerage access regimes have been implemented in a limited number of other jurisdictions in Australia and overseas. The main access regimes for water and sewerage infrastructure services are in New South Wales and the United Kingdom. Their key features are outlined below. Chapters 4-6 refer to specific features of these regimes, as relevant, in discussing options for establishing an access regime for the Victorian water industry.

The Western Australian Government has also considered establishing an access regime for its water industry and the Queensland Government intends to consider implementing an access regime in future.

**New South Wales**

In 2006, the New South Wales Government introduced a range of reforms to encourage private sector participation in the supply of water and provision of sewerage services. The reforms are designed to promote competition, investment

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³¹ ibid., pp. 18-19.
and innovation in water industry infrastructure, while safeguarding public health, the environment and consumers.

The reforms have been implemented by the Water Industry Competition Act 2006 (NSW). Among other things, the Act establishes:

- an access regime to permit private sector access to certain water infrastructure services and sewerage infrastructure services, allowing competition in the supply of water services and provision of sewerage services
- a licensing scheme to regulate the involvement of the private sector in the supply of these services and
- a dispute resolution process to resolve disputes arising under the access regime and other disputes arising in connection with sewer mining.

The coverage provisions of the regime are outlined in box 4.1 in chapter 4. The regime is regulated by Independent Pricing and Regulatory Tribunal (IPART), which also regulates the provision of water and sewerage services by the incumbent publicly-owned water businesses. The negotiation protocols established by IPART are discussed section 4.2 in chapter 4.

In December 2008, the New South Wales Government applied to the NCC for certification of the access regime. The NCC has commenced its assessment process, including public consultation, and intends to submit its recommendation to the federal Minister in mid-2009.

Western Australia

In Western Australia, the ERA recommended the implementation of a state-based third party access regime for water and sewerage infrastructure services. The ERA considered that a simple regime that can be refined later should be implemented, given that likely demand for access is unknown. It proposed that its regime be modelled on the New South Wales regime.

The ERA considered that the Western Australian access regime should not be finalised until the New South Wales regime has been declared effective so that any amendments required to obtain certification can be incorporated in designing the Western Australian regime.

United Kingdom

In England and Wales, the water licensing regime allows competing suppliers to develop their own water source and use existing supply networks to supply water to their own customers, or to buy bulk water supplies from other suppliers and sell the water on to customers.

Since 1 December 2005, non-household customers who are likely to use at least 50 ML of water a year at each of their premises have been able to choose their water supplier from new entrant water service suppliers. New entrant water

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33 Further details about the application and the NCC’s assessment process are available on the NCC’s website at www.ncc.gov.au/publication.asp?publicationID=226&activityID=31.

34 Economic Regulation Authority 2008, op. cit.
businesses need a licence from the Office of Water (Ofwat) before they can supply water to eligible customers. There are two types of licence, both of which involve access to existing water industry infrastructure:

- retail licence – a water supply licence to purchase a wholesale supply of water from an appointed water company and use its supply system to deliver water to customers’ premises
- combined licence – to deliver water to eligible customers through an appointed water company’s supply system.

Licensees need access to appointed water companies’ supply systems to supply their customers. All appointed water companies have to comply with Ofwat’s guidance on providing access by developing access codes that follow its guidance and template and by publishing indicative access prices. They must also deal fairly with licensees’ applications for access. Ofwat can consider queries and make determinations about some aspects of the new licensing regime.35

To date, there have been 17 inset appointments, mainly in previously unserviced areas. In 2008, Ofwat assessed the level of competition in the industry as generally being low.36 It identified a number of obstacles to further competition and private participation in the industry.

Ofwat is currently undertaking its second review of competition in the water sector. The operation of the access and licensing arrangements will be considered in that review.

Access regimes in other industries
Access regimes have been established in a number of industries in Australia. Appendix C outlines the key features of access regimes in the gas, electricity, rail, telecommunications, and grain handling and storage industries, and access arrangements for ports and airports.

Chapters 4-6 refer to specific features of these regimes, as relevant, in discussing options for establishing an access regime for the water industry.

What factors should the Commission take into account in designing a third party access regime for water and sewerage infrastructure services?

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35 For more information, see Ofwat’s website at www.ofwat.gov.uk/competition/wsl.
This chapter discusses issues related to coverage of the regime, the negotiation framework and dispute mechanisms, with a particular focus on criteria for certification. Specific questions on which the Commission is seeking feedback from stakeholders are highlighted.

4.1 Coverage of services

In designing a Victorian access regime for water and sewerage infrastructure services, the regime must identify which types of infrastructure services satisfy the certification criteria of being:

- significant—significance may be measured in relation to the state or to a particular region
- not economically feasible to duplicate—being facilities for which, within the likely range of reasonably foreseeable demand for the service, economies of scale or scope exist such that the cost of the service is lower if it is provided by a single infrastructure facility
- necessary to permit effective competition in related markets—where the service is integral to operating effectively in upstream or downstream markets and the infrastructure service provider has the ability and incentive to exercise monopoly power to limit competition in those markets
- able to be used safely by an access seeker at an economically feasible cost—access should not be required where appropriate regulation cannot ensure safety requirements are met at reasonable cost.

4.1.1 Types of infrastructure services to be covered

On the basis of its preliminary analysis and experience in other jurisdictions, the Commission considers that the generic types of infrastructure facilities covered by an access regime are likely to include:

- water conveyance and reticulation pipes and associated metering devices
- sewage conveyance and reticulation pipes and any associated metering devices and
- storage facilities for water and sewage, such as local storages that are integral to the pipeline networks.

Water and sewerage transport services

As discussed in chapter 2, water and sewage conveyance and reticulation pipes exhibit natural monopoly characteristics over a wide range of demand and are
generally not economically feasible to duplicate. Metering devices associated with these infrastructure facilities are integral to the provision of the infrastructure services.

Box 4.1  News South Wales – coverage of water and sewerage infrastructure services

The Water Industry Competition Act 2006 (NSW) defines an infrastructure service as:

the storage, conveyance or reticulation of water or sewage by means of water industry infrastructure … but: (a) does not include the storage of water behind a dam wall, and (b) does not include: (i) the filtering, treating or processing of water or sewage, or (ii) the use of a production process, or (iii) the use of intellectual property, or (iv) the supply of goods (including the supply of water or sewage, except to the extent to which it is a subsidiary but inseparable aspect of the storage, conveyance or reticulation of water or sewage.

The access regime covers water and sewerage infrastructure that falls within a scheduled area, as specified in the Act (currently the areas of operations of the Sydney Water Corporation and the Hunter Water Corporation). The Minister can add more scheduled areas or include more land in the existing scheduled areas.

For a service within the scheduled areas to be covered by the regime, it must be the subject of a coverage declaration by the Minister or an access undertaking approved by IPART. Applications for a coverage declaration may be made by the infrastructure service provider, an access seeker who has failed to obtain access through negotiation, or the Minister. IPART assesses declaration applications and recommends whether a coverage declaration should be made. The criteria for assessing coverage applications are similar to those in the clause 6 principles (discussed in chapter 3) but with an added criterion that access (or increased access) would not be contrary to the public interest. IPART calls for public submissions on the application and its report, the Minister’s decision and the reasons for the decision are made publicly available.

Infrastructure that is the subject of a binding non-coverage declaration is exempt from the regime for up to 10 years. Non-coverage declarations may be made for proposed infrastructure that has not been constructed at the time of the application (that is, greenfields investments) and infrastructure that has been de-commissioned or is being used for a different purpose to those specified in the Act. The Minister may revoke a non-coverage declaration at the request of the infrastructure service provider. The process is similar to that for applying for a coverage declaration.

In addition, access to these facilities is required to permit new entrants to compete effectively in upstream or downstream markets. Services Sydney, for example, planned to compete with Sydney Water for retail customers for sewage collection and treatment services. To do so, it required access to Sydney Water’s sewage reticulation network to transport sewage from its proposed customers’ premises to new pipes connecting to its proposed water reclamation plant (see box 3.1 in chapter 3). Another (hypothetical) example could be a business that developed a new water source, such as captured stormwater or groundwater treated to potable standard. The business would require access to the relevant water conveyance and reticulation network, and possibly water storage facilities, to deliver the water to its customers (who could be existing retail water businesses, large industrial users or other retail customers).

Other access regimes generally have comparable definitions of generic infrastructure facilities covered by the regime. The national gas access regime, for example, covers pipelines used for the haulage of natural gas, defining a pipeline as including gas transmission pipelines and distribution networks and related facilities, but excluding upstream facilities.

The coverage provisions in the New South Wales’ state-based access regime are outlined in box 4.1. Infrastructure services covered by the regime are defined as ‘the storage, conveyance or reticulation of water or sewage by means of water industry infrastructure’. The definition excludes storage of water in dams.

**Water storage services**

The Western Australian Department of Treasury and Finance suggested, in its submission to the Economic Regulation Authority (ERA), that ‘access to other infrastructure, such as dams or wastewater treatment facilities, may encourage competition through private sector participation’.37 There are arguments for including the water storage services of large dams in the coverage of infrastructure services:

• large dams are uneconomical to duplicate and environmental concerns are a significant obstacle (and cost barrier) to the construction of further large dams
• many existing dams have excess capacity
• storage services can be necessary to permit new businesses to compete effectively in sourcing and supplying water
• large dams are of state and/or regional significance
• access to the storage services provided by large dams can be provided without undue risk to human health and safety.

However, the nature of property rights to water, specifically the allocation of bulk water entitlements, whether water can be traded and any restrictions on trading, are important considerations in determining whether the storage services provided by large dams should be covered by an access regime. These issues were raised

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in the NCC’s decision not to declare the water storage and release services to which Lakes R Us had sought access (box 4.2).

Box 4.2 Lakes R Us declaration application

In 2007, the NCC recommended in regard to an application by a private company, Lakes R Us Pty Ltd, that the water storage and release services of Snowy Hydro and State Water should not be declared. The services were assessed as satisfying the criteria for national significance and being uneconomical to duplicate. However, the NCC determined that access to the services could not promote competition in any other market without significant changes to the nature and scope of property rights for water in New South Wales.

In addition, access was assessed as being contrary to the public interest because Lakes R Us’s proposed activities would substantially alter existing water allocation arrangements, with the potential to impose significant costs on a range of parties, including state governments, water users and the environment.


Other considerations

Water and sewage treatment is excluded from the infrastructure services covered by the New South Wales’ access regime because these services are part of the production process and because treatment plants are considered economically feasible to duplicate. However, in some markets, particularly those servicing relatively small populations, it may be uneconomical to duplicate treatment facilities. The Western Australian Department of Treasury and Finance has suggested that the provision of access to wastewater treatment facilities may encourage competition through private sector participation in the water industry.

Consideration could be given to whether recycled water infrastructure facilities, such as recycled water pipelines, should be included in the infrastructure services covered by an access regime.

Rivers also provide water conveyance services, particularly in rural areas. While rivers and other natural watercourses may not be subject to an access regime, the Government could consider how access to the water conveyance services provided by these natural facilities could be facilitated, where appropriate, where use of rivers to transport water would facilitate competition in associated markets.

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38 Treatment plant operators could enter into contracts to sell treatment services to other parties, including access seekers. The decision whether to offer these services would be made by the operator on commercial grounds.

39 Department of Treasury and Finance 2008, op. cit.
Safety requirements and regulation of safety standards to ensure that infrastructure facilities can be used safely by access seekers without compromising human health and safety are discussed in section 6.2. If existing safety regulations had to be strengthened, or new regulations imposed, to protect existing health and safety standards, the costs of doing so would have to be assessed.

Which types of water and sewerage infrastructure services should be covered by an access regime? Consideration should be given to types of services that are expected to satisfy the criteria of being significant, not economically feasible to duplicate, and necessary to permit effective competition in related markets.

4.1.2 Specific infrastructure services to be covered

In determining which specific infrastructure services should be covered by an access regime, the first consideration is to ensure that they fall within the generic types of services covered by the regime (see section 4.1.1). The second consideration is whether the specific service satisfies the criteria for coverage.

Significance

Significance at a state or regional level can be measured in a number of ways: size, cost of the infrastructure, geographic area or distance covered, volume or value of water or sewage going through the infrastructure, contribution to trade within the state and interstate, contribution to trade outside Australia, and importance to providing services in other significant markets. Interconnection of a infrastructure service provider’s infrastructure facility with infrastructure facilities in other parts of the state (for example through a water grid) may be a factor in determining significance.

Rural infrastructure services

In respect of the rural water businesses, chapter 2 noted that most rural water services (that is, those relating to irrigation uses) have been unbundled and water trading has been introduced. Delivery shares, which can be purchased on the market, provide a mechanism for new entrant water suppliers to use the water conveyance and, where applicable, reticulation services of the infrastructure service provider (the relevant rural water business).

Consequently, an access regime may not need to cover these services as they are already covered by an effective mechanism for providing access to the infrastructure services. However, it may be necessary to put in place


41 An exception is the Wimmera Mallee pipeline, where the allocation of water entitlements, unbundling and introduction of water trading has not been introduced (in
arrangements to ensure consistency between an access regime and the arrangements for rural delivery services.

Interstate issues

A further consideration in determining coverage of the regime is interstate issues. The NCC considers whether a state-based regime’s influence extends beyond the limits of the state and whether, where more than one state regime applies to a service, the regimes are consistent or a single process should apply for seeking access. It also considers interstate issues in respect of facilities that are wholly located in one state but are part of a wider interstate network.

Interstate issues would therefore arise in respect of services located in the Murray Darling Basin area, where trading has created a single market that crosses state borders. The relevant states have agreed that consistent regulatory arrangements should be put in place through a national scheme. Consequently, access arrangements for infrastructure services provided within the Murray Darling Basin could be made through a national regime regulated by the Australian Competition and Consumer Commission (ACCC). If so, these services would not be covered by the state-based access regime.

| How should the significance of specific water and sewerage infrastructure services be measured? |
| Do the access arrangements in place for irrigation infrastructure services, that is tradable delivery shares, provide adequate access to those services? |
| Should water and sewerage infrastructure services in the Murray Darling Basin be subject to the state-based access regime or a national access regime? |

Case-by-case assessment

Under the New South Wales’ regime, some specific water and sewerage infrastructure services were declared as covered by the regime from its commencement (see box 4.1). Coverage of further services is subject to case-by-case assessment following an application by the infrastructure service provider, an access seeker who has failed to obtain access through negotiation, or the Minister. The ERA’s final report recommended a similar approach, with case-by-case assessment of specific services, stating that ‘it is problematic to attempt to identify a detailed list of assets to which access would apply at this point in time’.42

respect of its domestic and stock services). However, GWMWater is currently developing a plan to establish tradeable water entitlements and unbundling in the future.

In assessing potential services on a case-by-case basis, the coverage criteria would have to be satisfied, including identifying any specific circumstances that could argue against coverage. In addition, the costs of allowing access would have to be weighed up against the expected benefits from access.

A case-by-case approach would allow the regime can provide for coverage of future extensions to existing infrastructure facilities. The national gas access regime, for example, sets out a process for case-by-case coverage of extensions and expansions to the capacity of existing pipelines covered by the access regime.

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<th>Question</th>
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<td>Is the approach to coverage adopted in the New South Wales’ access regime—combining initial declaration of specific services with a process for case-by-case declaration of other services—appropriate for a Victorian access regime?</td>
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<tr>
<td>Are there any specific water and sewerage infrastructure services that should be declared from the commencement of an access regime?</td>
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### 4.1.3 Greenfields investments

Clause 6 of the Competition Principles Agreement requires access regimes to promote efficient investment in significant infrastructure, including in greenfields investments.

The national gas access regime contains a number of features aimed at encouraging investment, including the greenfields pipeline incentive. The greenfields pipeline incentive effectively provides for an access holiday. Before a new (greenfields) pipeline is commissioned, an infrastructure service provider may apply to the NCC for a 15-year no-coverage determination. If the application is approved, the pipeline will not be subject to access for 15 years after being commissioned.

The New South Wales access regime similarly provides for greenfields investments to be subject to a binding non-coverage declaration for up to 10 years. The NCC has raised concerns about these provisions where they exclude services that would otherwise meet the criteria for declaration.43

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<th>Question</th>
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<td>What features should be incorporated into a Victorian access regime to ensure sufficient investment is made in new (greenfields) investments in water and sewerage infrastructure facilities?</td>
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4.1.4 Reviewing coverage

The clause 6 principles require an effective access regime to provide for periodic review of the infrastructure services covered by the regime. A number of rail access regimes include a process for scheduled reviews.

Alternatively, the regime could include a process to extend coverage to new services on a case-by-case basis as well as revocation provisions where the coverage criteria in clause 6(3)(a) are no longer met for particular services. In the national gas access regime, the process for case by case coverage (which is similar to the process for revocation) is that:

- any person may seek coverage of a pipeline by applying to the NCC
- the NCC publishes a public notice on the application and calls for submissions, including from the infrastructure service provider
- the NCC considers the submissions and makes a recommendation to the relevant Minister, applying specified criteria, and
- the Minister considers the recommendation and decides on coverage.

The New South Wales access regime for water and sewerage services provides a similar process for case-by-case declaration or revocation of coverage (see box 4.1 and section 4.1.2).

Should an access regime provide for scheduled reviews of coverage or should it incorporate provisions for case-by-case assessment of applications for coverage declarations or revocation of coverage?
Is the process for case-by-case assessment adopted in the New South Wales regime appropriate for Victoria?

4.1.5 Transitional arrangements

Access regimes may include transitional arrangements that constrain the operation of the regime, for example by limiting its application to specified classes of customer for an initial period, to assist industry participants to adjust to greater competition and allow for the resolution of implementation issues. In assessing the regime for certification, the NCC assesses the impact of any transitional arrangements on the effectiveness of the regime.

In the national gas access regime, contestability for different classes of customer was phased in over several years to allow for the resolution of metering issues, removal of cross-subsidies and avoidance of price shocks for some customers. Competitive reforms were also phased in for the electricity industry (see section 2.3.1 in chapter 2).

The United Kingdom’s water industry access regime is also being phased in. Currently, access seekers can only supply non-household customers who are likely to use at least 50 ML of water a year at each of their premises. The Office of Water (Ofwat) is currently reviewing these arrangements and the broader framework for
competitive reform in the water industry with the aim of eventually extending choice of water and sewerage service provider to other retail customers, including households.

Should an access regime include transitional arrangements? If so, what type of arrangements should be included, what would be their purpose and how long would they need to be in place?

Are there any implementation issues that should be resolved during a transition period?

4.2 Negotiation framework

In assessing the negotiation framework established by an access regime, the NCC assesses whether the regulatory arrangements establish an environment in which access seekers can enter effective negotiations.

To support the negotiate/arbitrate approach, the principles require that the regime:

- establishes a legal right for parties to negotiate access and a process for enforcing this right
- requires infrastructure service providers to use all reasonable endeavours to accommodate access seekers’ requirements and
- ensures that access outcomes balance a range of factors, including the legitimate business interests of infrastructure owners, the efficient use of infrastructure and community benefits from competitive outcomes.

As noted in section 3.2.3, an access regime for water and sewerage infrastructure services is likely to require specific regulatory arrangements to facilitate effective negotiations. It seems likely that, at least in the early stages of an access regime, negotiations over access to the infrastructure services covered by the regime will be between a large incumbent service provider and one or more relatively small access seekers. In these circumstances, potential access seekers may lack sufficient information and bargaining power to negotiate reasonable terms and conditions. The negotiation framework would need to address these problems to ensure that potential access seekers can negotiate effectively.

The NCC’s guidance on the certification criteria states that addressing information and market power asymmetries is likely to require at least:

- a process through which access seekers can obtain information required to effectively negotiate terms of access
- guidance on appropriate access prices or price boundaries, such as through independent and transparent regulatory processes or an effective competitive tendering process that establishes reference tariffs.

In New South Wales, the access regime sets out negotiation protocols for access seekers seeking access to an infrastructure service covered by a coverage
declaration or access undertaking. The protocols, prepared by IPART, take the form of minimum requirements that access seekers and infrastructure service providers must comply with, as well as additional requirements applying to them. The parties may agree not to follow the protocols and, if so, they must notify IPART.

The protocols set out processes for obtaining information from service providers, requesting access, the service provider’s assessment of the request, negotiating the access agreement (including the holding of meetings and sharing of information), dispute resolution, and referral of disputes to IPART for arbitration. The protocols require each party to negotiate in good faith and require the infrastructure service provider to use all reasonable endeavours to accommodate the access seeker’s requirements. If either party later applies to IPART to have an access dispute arbitrated, IPART will consider whether that party has complied with the protocols and attempted to resolve the dispute by negotiating in good faith.

In this regard, the Commission notes that one of the Government’s objectives in implementing an access regime is to provide certainty and, where appropriate, consistency for the existing water businesses and for potential new providers of water and/or sewerage services in the terms and conditions governing access.

Some access regimes set out reference access prices or price boundaries to assist access seekers in negotiating an appropriate access price. Pricing issues are discussed in chapter 5.

Should an access regime include regulatory guidance on the processes to be followed in negotiating access, such as negotiation protocols?

4.3 Dispute resolution

An effective access regime must provide mechanisms to resolve disputes between an infrastructure service provider and access seekers. The dispute resolution body must be independent and have sufficient resources and expertise to carry out its dispute resolution role. Arbitration must be binding.

In its guidance on the certification criteria, the NCC noted that the Commission, IPART, the ACCC, and other state economic regulatory bodies were independent and sufficiently resourced to regulate an access regime. Consequently, the Commission could perform the role of the arbitrator, including by appointing a sufficiently qualified arbitrator, to make a determination in an access dispute.

In New South Wales, access disputes can be referred to IPART for arbitration. IPART can arbitrate the dispute itself or appoint a member of its panel of arbitrators (which consists of persons approved by the Minister and other individuals that

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45 National Competition Council 2003, op. cit., p. 28.
IPART considers suitably qualified to conduct arbitrations). IPART has set out the processes to be followed in arbitrating a dispute; these are available on its website. The decision of the arbitrator is binding. If necessary, the determination may be enforced in the same manner as a judgement or court order.

The New South Wales access regime provides only limited rights of appeal. On questions of law, an appeal may be made to the Supreme Court. Similarly, decisions by the Minister on coverage declarations, access undertakings and binding non-coverage declarations may be the subject of judicial review in the Supreme Court. The regime does not provide for merits review of arbitration determinations by IPART or ministerial decisions in relation to access declarations and undertakings.

The NCC has highlighted the absence of merits review provisions in the New South Wales water access regime. It noted that ‘if there is insufficient opportunity to test decisions relating to licensing, coverage and access disputes, then there may be a question about effectiveness’.

The Essential Services Commission Act 2001 provides for limited merits review of the Commission’s decisions. Under s. 55 (2) of the Act, the grounds for appeal are that the decision was not made in accordance with the law, or is unreasonable having regard to all the relevant circumstances, or there has been bias, or the determination is based wholly or partly on an error of fact in a material respect.

Section 56 of the Act provides for the appointment of an appeal panel. The panel is to be:

constituted from a pool of persons appointed by the Governor in Council because of their knowledge of, or experience in, one or more of the fields of industry, commerce, economics, law or public administration.

When constituting an appeal panel, the Registrar must use his or her best endeavours to constitute the appeal panel consisting of—

(a) a chairperson who has experience in conducting contested hearings; and

(b) at least one member who has technical or industry experience or knowledge relevant to the appeal.

Judicial review of decisions is also available through appeal to the Victorian Supreme Court.

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47 National Competition Council 2008, op. cit.
What dispute resolution mechanisms should be included in a Victorian access regime?

Should the Commission be the arbitrator in access disputes?

Are the existing merits review provisions under the *Essential Services Commission Act 2001* sufficient for reviewing access–related decisions?
The terms of reference for this inquiry require the Commission to make recommendations on appropriate methodologies for access pricing and accounting ring fencing. This chapter discusses issues related to these matters. Specific questions on which the Commission is seeking feedback from stakeholders are highlighted.

5.1 Access pricing methodology

This section discusses the various pricing issues involved in developing and implementing an access regime for the Victorian water industry, with particular reference to the requirements for certification. In particular, it discusses the processes that may be used to calculate access prices and the issues associated with these approaches. The structure of access prices, consistency with current pricing arrangements and the Commission’s role is also discussed.

5.1.1 Certification criteria relating to access pricing

The methodology for determining access prices will be required to meet a number of principles contained in clause 6 of the Competition Principles Agreement in order for the access regime to be certified. Clause 6(5)(b) requires that regulated access prices should be set so as to:

- generate expected revenue that is at least sufficient to meet the efficient costs of providing access to the regulated service, including a return on investment that reflects the regulatory and commercial risks involved
- allow multi-part pricing and price discrimination when it facilitates efficiency
- not allow a vertically integrated infrastructure service provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher, and
- provide incentives to reduce costs or otherwise improve productivity.

These principles are also reflected in the 

Essential Services Commission Act 2001,

as amended in 2007. The Commission is required to ensure that these principles are met in all regulated industries where third party access regimes exist.

As discussed in chapter 4, an access regime is required to establish the framework for access seekers and infrastructure service providers to negotiate access and a process for enforcing this right. Access negotiations in the Victorian water industry may initially involve one or more relatively small access seekers and a large infrastructure service provider, in which case asymmetries in information and bargaining power between the negotiating parties may be expected. As such,
some specific regulatory arrangements to facilitate effective negotiation may be required. Further, the terms of reference note that one of the Government’s objectives in establishing an access regime is to provide certainty to market participants about the terms and conditions under which access will be provided. Specific regulatory arrangements may be appropriate to provide certainty to market participants, even in situations where asymmetries in information are less likely (such as access negotiations between two water businesses, for example). Some regulatory arrangements may include guidance on setting access prices or establishing reference tariffs.

Further, in cases where an access provider and access seeker fail to reach agreement, the regulator/arbitrator may make a determination on the access prices to apply and non-price terms and conditions of access. An access regime is required to specify how access prices will be determined by the regulator in cases where the infrastructure service provider and access seeker are unable to reach agreement.

The regulator/arbitrator must ensure that any access prices determined by it and guidance on setting access prices are consistent with the clause 6 principles.

Should an access regime include regulatory guidance on prices, such as indicative tariffs or reasonable price boundaries, to provide a framework for access negotiations between infrastructure operators and access seekers?

5.1.2 Alternative access pricing methodologies

There are two key approaches to determining access prices—the cost of service approach and the retail minus approach. Both these approaches ensure that the infrastructure service provider is able to generate sufficient revenue to cover the efficient cost of providing access to the relevant infrastructure without allowing it to generate monopoly profits.

The following sections describe the two approaches, discuss their advantages and disadvantages and identify a number of issues relating to the choice of approach. Issues related to greenfields investment are also discussed.

Cost of service approach

Under the cost of service approach, access prices are determined by assessing the costs that an access provider expects to incur in providing the relevant service (for example, water transport services) and setting prices that allow the access provider to recover these costs.

The cost of service approach is commonly known as the ‘building block’ approach and is currently used by the Commission to regulate prices for water, sewerage and other services provided by the Victorian water businesses. In the case of water and sewerage, the Commission uses this approach to determine prices for the ‘bundled’ service, which includes all elements of the service. For example, water
prices pay for storage, treatment and delivery of water as well as customer service and retail functions.

As a method for determining access prices, the cost of service approach has commonly been used in cases where the various service components have been unbundled. In the Victorian gas and electricity industries, the cost of service approach has been used to regulate electricity distribution tariffs and gas access prices. The approach has been used widely in other jurisdictions in regulating bundled water services, including in New South Wales and the United Kingdom.

The first step in determining the access price under the cost of service approach is to determine the revenue requirement for the service component subject to the access. The revenue requirement represents the amount of revenue that the infrastructure service provider needs to cover the efficient costs of providing access to the relevant infrastructure services. The major components of the revenue requirement are operating expenditure, regulatory depreciation and return on assets.

Operating expenditure represents the ongoing costs that are incurred by the infrastructure service provider in providing the service and maintaining its assets.

Regulatory depreciation and return on assets are the means by which the infrastructure service provider recovers its capital investments over time. When a capital investment is made by the infrastructure service provider, capital expenditure is incorporated into the business’s regulatory asset base. The capital expenditure is returned to the infrastructure service provider over the life of the relevant asset through regulatory depreciation and deducted from the regulatory asset base. A rate of return is applied to the balance of the regulatory asset base to provide the infrastructure service provider with the return on assets, which covers the financing costs of past investments.

In the case of the Victorian water industry, the regulatory asset base currently in place for each business represents the opening regulatory asset values as of 1 July 2004 (as required under the WIRO), adjusted for all subsequent net capital expenditure and regulatory depreciation. The rate of return that is provided to the water businesses is assessed during the Commission’s periodic price reviews and represents the efficient financing costs of the industry, taking into account the prevailing financial market conditions at the time.

In order to calculate access prices for the Victorian water industry under the cost of service approach, it is necessary that all operating and capital expenditure attributable to the infrastructure to which an access regime applies is separately identified. Further, the businesses’ regulatory asset bases would need to be disaggregated into those components where the access regime applied and those where it does not apply. Issues related to accounting ring fencing are discussed in more detail in section 5.2.

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Other items that may be included in the revenue requirement include tax liabilities or adjustments from previous years or regulatory periods.
Retail-minus approach

Unlike the cost of service approach, which bases the access price on expected costs, the retail minus price uses existing prices as the basis for determining access prices. Under the retail minus approach, the access price is determined by taking the existing price for a bundled service and applying a discount to account for the service components that the access seeker does not require from the infrastructure service provider.

For example, an access seeker may require water transport services but not the storage, treatment or retail services provided by the infrastructure service provider. Under the retail minus approach, the discount applied to the bundled price (which covers all service components) would reflect the costs of providing the services that are not required.

The retail minus approach has generally been used in cases where the final retail price is regulated, where the service is bundled and where the infrastructure service provider also provides upstream or downstream services associated with the infrastructure in question. An example of the application of the retail minus approach is the ACCC determination in respect of the Sydney Water access dispute.49

In practice, the discount used in the retail minus approach can be calculated in two ways. First the discount may represent the costs avoided by the infrastructure service provider in not having to provide certain service components to the access seeker. Second, the discount under the retail minus approach may represent the costs incurred by a potential new entrant to provide the services avoided by the infrastructure service provider in providing access, which provides an indication of the long run marginal cost of providing the service.

The discount method is the key issue associated with the retail minus approach, as the cost concept used to calculate the discount will result in different access prices. Depending on the definitions and calculation of the various costs used to determine access prices, the cost of service and retail minus approaches can result in the same or very similar access prices.

5.1.3 Comparison of access pricing methodologies

The cost of service approach is generally regarded as being more information intensive than the retail minus approach and hence viewed as imposing a larger administrative burden. However, as the Commission currently regulates retail water and sewerage tariffs using a cost of service approach, the additional administrative costs of determining access prices using the same approach could be relatively small. Further, the Commission has been using this approach since 2005 and all water businesses and key stakeholders are familiar with it.

The key issue with using the cost of service approach is the need to separately identify expenditures associated with the infrastructure subject to the access regime, including separating the businesses’ regulatory asset bases according to whether or not the services are subject to access.

The retail minus approach is also a viable approach to determining access prices in the Victorian water industry. Retail minus is generally regarded as less administratively intensive than the cost of service approach. In addition, it only needs to be applied when an access application is received. However, under a retail minus approach, the choice of discount method will be a crucial determinant of how effective the access regime will be in promoting competition in upstream and downstream markets.

It should also be noted that the retail minus approach is only applicable in cases where the final retail price is regulated and the infrastructure service provider provides upstream or downstream services linked to the relevant infrastructure. Both of these conditions presently hold for the Victorian water industry. However, future reforms to promote competition in the bulk supply or retail sectors could potentially eliminate the need for regulated retail water and sewerage tariffs to be set. If reforms such as these were undertaken, the retail minus approach could no longer be applied.

As noted in the terms of reference for this inquiry, one of the Government’s objectives for the access regime is not to inhibit further reform of the water industry in the longer term. A cost of service approach is sufficiently flexible to be applied in the context of a variety of different industry structures, from the current industry structure right up to full retail competition.

What issues should be considered in determining access prices?

What is the most appropriate methodology for determining access prices for the Victorian water industry—cost of service or retail minus?

5.1.4 Pricing of access to greenfields investments

The terms of reference for this inquiry specifically require the Commission to make recommendations to ensure that an access regime does not inappropriately deter new investments in infrastructure.

While access to infrastructure can increase competition and promote efficient investment in related markets, access prices need to be set so as not to discourage efficient investment in infrastructure subject to (or potentially subject to) an access regime. Access prices should therefore provide sufficient revenue to cover the efficient costs of providing access, including a return on and of assets, with the return on investment set ‘commensurate with the risks involved’.

Investment in greenfield areas generally involves greater risk than established infrastructure facilities due to uncertainty about expected demand by future

customers for the services provided by the assets, any unforeseen costs or operational complications, and the amount of revenue expected to be earned. An access regime may increase the risk for infrastructure access providers as potential customers may choose to have upstream or downstream services provided by the access seeker.

To mitigate against these risks and to ensure adequate incentives for investments in new infrastructure, the New South Wales access regime includes provisions for binding non-coverage declarations on new infrastructure for a period of 10 years. However, the National Competition Council has raised concerns that these declarations may not be consistent with the certification criteria.\textsuperscript{51}

An alternative approach is to apply a higher rate of return in respect of greenfields assets to reflect the higher degree of risk. This could be best achieved through the cost of service approach, where the rate of return is a key component of determining the access price.

\begin{center}
\textbf{How should the greater risks associated with greenfields investments be taken into account in determining access prices?}
\end{center}

5.1.5 Structure of access prices

In addition to providing infrastructure service providers with sufficient revenue to cover the efficient costs of providing access, the Competition Principles Agreement requires that prices must also:

\begin{itemize}
\item allow multi-part pricing and price discrimination when it facilitates efficiency
\item not allow a vertically integrated infrastructure service provider to set terms and conditions that discriminate in favour of its downstream operations, except to that extent that the cost of providing access to other operators is higher and
\item provide incentives to reduce costs or otherwise improve productivity.
\end{itemize}

The tariff structure for access prices approved by the Commission would need to be consistent with these principles.

The Commission’s initial views, based on its experience in regulating retail water and sewerage tariffs, is that an appropriate tariff structure for access prices would take the form of a two-part tariff consisting of fixed and variable components. The variable component would generally be set to reflect the long run marginal cost of providing the service, with any residual recovered from customers through fixed charges.

In the case of retail water and sewerage prices, there is a variety of approaches to setting the variable and fixed components. For example, a number of water businesses currently apply a uniform tariff structure to all customers within their supply area while others have different prices to reflect differences in cost between ...

\textsuperscript{51} National Competition Council 2008, \textit{op. cit.}
supply systems. Further, there is a variety of methods for determining fixed costs. Most water businesses adopt a uniform fixed charge for all customers, while other businesses based their fixed charges on meter size on the basis that it represents that capacity they command in the supply system, which in turn is a key driver of fixed costs.

How should access prices be structured to ensure that the full costs of providing access are recovered without unnecessarily deterring access?

5.1.6 Consistency with current regulatory framework

In its role in regulating retail prices, the Commission is principally guided by the Water Industry Regulatory Order 2003 (the WIRO). The WIRO sets out the prescribed services for which the Commission is responsible for regulating prices. Currently the prescribed services include:

- retail water services
- retail sewerage services
- storage operator and bulk water services
- bulk sewerage services.

The WIRO contains the principles that the Commission must assess prices against. These principles are that prices must:

- provide for a sustainable revenue stream to the regulated entity that nonetheless does not reflect monopoly rents and or inefficient expenditure by the regulated entity
- allow the regulated entity to recover its operational, maintenance and administrative costs
- allow the regulated entity to recover its expenditure on renewing and rehabilitating existing assets
- allow the regulated entity to recover a rate of return on assets as at 1 July 2004 that are valued in a manner determined by, or at an amount otherwise specified by, the Minister at any time before 1 July 2004
- allow the regulated entity to recover a rate of return on investments made after 1 July 2004 to augment existing assets or construct new assets
- provide incentives for the sustainable use of Victoria’s water resources by providing appropriate signals to water users about
  - the costs of providing services, including costs associated with future supplies and periods of peak demands and or restricted supply, and
  - choices regarding alternative supplies for different purposes
- take into account the interests of customers of the regulated entity, including low income and vulnerable customers
- provide the regulated entity with incentives to pursue efficiency improvements and to promote the sustainable use of Victoria’s water resources and
enable customers or potential customers of the regulated entity to readily understand the prices charged by the regulated entity for prescribed services, or the manner in which such prices are to be calculated or otherwise determined.

These principles are generally consistent with the Competition Agreement Principles.

In order to facilitate the implementation of an access regime, the WIRO is likely to need amendment. One option is for the WIRO to specifically include the services that are subject to an access regime. In this case, the WIRO may need to be amended to allow for separate regulatory asset values to be determined for assets subject to an access regime and those that are not. Another option is for the WIRO to be amended to exclude the services that are subject to access regime, where the principles and processes for determining access prices differed from those currently included in the WIRO for price determinations.

Under the WIRO, the Commission has flexibility to decide on the length of the regulatory period, but has previously indicated a preference for five year regulatory periods. The timing of determinations on access prices could be linked to the current price review timelines and regulatory periods. Alternatively, there is flexibility under the regulatory process to review access prices on a more regular basis.

It is also necessary to consider the interaction of access prices and other regulated tariffs. The NCC has raised concerns about the requirement under the New South Wales water access regime that the access pricing principles must be implemented in a manner consistent with pricing determinations for water and sewerage services, including the maintenance of ‘postage stamp pricing’. Postage stamp pricing for retail services could restrict the scope for access seekers to compete on price, where their costs of providing a service are lower than those of the incumbent service provider. In these circumstances, the effectiveness of an access regime in promoting competition in related markets would be constrained.

Another issue is how to make allowance in setting prices for government policies that increase costs for the incumbent water businesses. Such policies include community service obligations (such as sewer backlog projects), water conservation programs and other measures that the businesses are directed to implement by their Statements of Obligations but that they would not necessarily provide on purely commercial grounds.

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52 National Competition Council 2008, op. cit.

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5.1.7 Metropolitan bulk water charges

As noted in section 2.2.3 in chapter 2, the Melbourne metropolitan retailers use Melbourne Water’s infrastructure assets to store and transport water to their customers. Melbourne Water recovers the costs of providing these storage and transport services through bulk water charges paid by the retailers. These charges could provide a basis for calculating access prices for businesses seeking access to water infrastructure services.

Melbourne Water’s bulk water prices consist of fixed service charges for each retailer and usage charges for each ML of water stored and delivered to the retailers. Since 2006-07, these prices were unbundled to charge separately for the headworks and transfer (that is, conveyance) components of its bulk water services.

In its Water Plan for the 2009-13 regulatory period, Melbourne Water stated that the bulk water charges payable by each retailer are calculated using the following approach:

- The revenue required to provide each service is calculated.
- The share of revenue required from each retailer is determined according to its use of Melbourne Water’s systems.
- Usage charges are based on the long run marginal cost of providing the services.
- Residual costs are recovered from retailers as fixed service charges according to their share of use of Melbourne Water’s systems.

Bulk sewerage charges have not been unbundled. These charges currently reflect the costs of both transport and treatment of sewage. These charges would have to be unbundled to provide a basis for calculating access prices to sewerage infrastructure services in metropolitan Melbourne.

Do Melbourne Water’s unbundled bulk water charges provide an appropriate basis for determining access prices for water infrastructure services?

5.2 Accounting ring fencing methodology

Under clause 6(4)(n) of the Competition Principles Agreements (included at appendix B), for an access regime to be certified as an effective access regime, it must impose appropriate accounting requirements on service providers. That is,

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54 Melbourne Water’s bulk sewerage charges comprise service charges for each retailer and a series of usage charges for sewer volumes and pollutant loads (to reflect the costs of treating different types of waste). Bulk sewerage charges are further differentiated between the Eastern and Western Treatment Plants to reflect the different costs incurred at each plant.
infrastructure service providers must make available financial information that focuses exclusively on the elements of their business subject to the regime. The availability of relevant accounting information is necessary for access seekers and regulatory bodies (including dispute resolution bodies) to assess the terms and conditions of access.

To satisfy clause 6(4)(n), an effective access regime should include provisions that require a facility owner to at least:

- maintain a separate set of accounts for each service that is the subject of an access regime
- maintain a separate consolidated set of accounts for all of the activities undertaken by the infrastructure service provider and
- allocate any costs that are shared across multiple services.

In the NCC’s guidance on certification, it states that more rigorous ring fencing arrangements may be required in some industries to ensure the necessary accounting information is transparent and objective. Such arrangements may be necessary in industries with high levels of vertical integration, where an infrastructure service provider operates, or has interests in, the same markets as those in which access seekers intend to participate.

In these circumstances, ring fencing arrangements should include measures to:

- segregate access-related functions from other functions
- protect confidential information disclosed by an access seeker to the infrastructure service provider from improper use and disclosure to affiliated bodies and
- establish staffing arrangements between infrastructure service provider and affiliated bodies that avoid conflicts of interest.

These guidelines will need to be considered in establishing an access regime for water and sewerage infrastructure services in Victoria. As it is likely, at least in the short term, that Victorian water businesses will remain vertically integrated, the more extensive ring fencing arrangements noted by the NCC may be required. Less extensive ring fencing arrangements may be necessary in the future if the Government decided that structural separation of the vertically integrated water businesses was appropriate. At that time, the ring fencing arrangements could be reviewed.

In the electricity industry, the ring fencing guidelines established by the Commission prevent electricity infrastructure providers giving preferential treatment to a related retailer by cross-subsidising an affiliated retailer’s activities, giving an affiliated retailer preferential access to distribution services, conducting joint...
marketing with a retailer, or giving an affiliated retailer access to information held by the distributor. The ring fencing measures include:

- requiring electricity distributors to meet operational separation requirements
- ensuring information is shared equally between all retailers and
- separating the marketing of distribution and retail businesses.

Financial separation is regulated by the regulatory accounting information requirements.

The Australian Energy Regulator (AER) currently requires gas and electricity transmission businesses to comply with ring fencing guidelines. The guidelines require a transmission network service provider to ensure legal and operational separation of its transmission business from other related businesses. A related business under the guidelines includes generation, distribution and retail supply businesses. Gas transmission businesses are also required to submit annual ring fencing compliance reports to the AER.

In the New South Wales water industry, the infrastructure service provider must, within three months after an infrastructure service becomes the subject of a coverage declaration, keep separate accounts for the infrastructure services that are the subject of the declaration. It must also submit a cost allocation manual to the regulator (IPART) for its approval in respect of that infrastructure. This should set out the basis on which the infrastructure service provider proposes to establish and maintain accounts for the infrastructure services subject to the coverage declaration. The infrastructure service provider must then ensure that costs are allocated between each of those services, and between those services and other activities, in accordance with its manual.

However, infrastructure service providers that have made access undertakings are not required to submit a cost allocation manual for approval by IPART. The NCC has noted its concern about this discrepancy.

The Victorian rail access regime, as set out in the Rail Corporations Act 1996, requires the ESC to make Commission Instruments which include ring fencing rules. The purpose of the ring fencing rules is to facilitate commercially neutral access to regulated below rail services by requiring the access provider to establish a separate organisational structure for the business unit providing regulated below rail services, and ensuring that this business unit conducts its activities at arm’s length to the above rail business. The ring fencing rules impose various obligations on an access provider.

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59 National Competition Council 2008, op. cit.
The ESC assesses an access provider’s proposed ring fencing processes during its assessment of proposed access undertakings submitted by the access provider and via the ESC’s on-going compliance monitoring.

Currently the Commission collects some of the information that would be required to implement accounting separation for ring fencing in the water industry. Through its regulatory accounting process, it collects information on each water business’s revenue and expenditure across the business’s activities. Within this process, the template titled ‘unbundled segments’ specifically requires the metropolitan retail and regional urban businesses to provide a breakdown of revenue and expenditure allocated to water collection and storage, water treatment and storage, water transport, sewage treatment and sewage transport. Melbourne Water is also required to provide a breakdown of its bulk water operating costs and revenue into water collection and storage, treatment and transport, and its sewerage revenue and expenditure into treatment and transport.

The businesses generally allocate costs based on estimates of revenue and expenditure for those cost categories. They also provide explanatory notes regarding the allocation of corporate expenditure across the cost categories.

To implement accounting separation, the Commission will have to collect information that separates retail costs from the distribution functions. In addition, regulatory asset values will have to be separately identified for the infrastructure services subject to access. Separate regulatory asset values are necessary to determine access prices under a cost of service (or building block) approach (as discussed in section 5.1).

To implement ring fencing in the Victorian water industry, the Commission could establish a set of ring fencing guidelines for the water businesses. Businesses could report to the Commission annually, or as required, on their compliance with the guidelines and provide financial information as part of the regulatory accounting information collection process, prepared in accordance with the guidelines.

The Commission is currently undertaking a review of the regulatory accounting code and templates. This review will ensure that the collection of unbundled information is maintained to assist in developing accounting ring fencing.

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| How should ring fencing be implemented in the Victorian water industry? |
| What information should be included in ring fencing guidelines? |
| Should Victorian infrastructure service providers be required to prepare cost allocation manuals and/or reports on compliance with the ring fencing guidelines? |
| Should a more prescriptive regulatory framework apply to infrastructure service providers that are vertically integrated? |
This chapter discusses legislative, regulatory and co-ordination issues that would need to be considered when implementing an access regime. Specific questions on which the Commission is seeking feedback from stakeholders are highlighted.

6.1 **Constraints on competition and private participation**

Clause 6(5)(a) of the Competition Principles Agreement requires access regimes to state that the purpose of the regime is to:

*promote the economically efficient use of, operation and investment in, significant infrastructure thereby promoting effective competition in upstream or downstream markets.*

This principle highlights that promoting effective competition is the fundamental objective underlying the establishment of an access regime. In respect of the New South Wales Government’s application for certification of its access regime for water and sewerage infrastructure services, the NCC notes that, although the legislation establishing the regime includes the clause 6(5)(a) objects principle:

*the NSW Government has provided no statement in its Application regarding its support for appropriate access arrangements as a means of achieving competitive outcomes in the provision of water and sewerage services. While this support may be implicit, it would assist the Council’s assessment of the effectiveness of the WICA Access Regime if the NSW Government provided a statement outlining its policy objectives regarding competitive service provision and how it sees the WICA Access Regime as contributing to the delivery of those objectives.*

For a Victorian state-based access regime to receive certification, it may be necessary for the Victorian Government to issue a policy statement on its plans for further competitive reform of the water industry. In its response to the Victorian Competition and Efficiency Commission’s (VCEC) report, the Government stated that future reform opportunities principally relate to:

*clarifying roles and responsibilities in an augmented, diversified and interconnected Melbourne water supply system, including long-term, state-wide planning responsibilities*

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60 National Competition Council 2008, *op. cit.*
developing water markets to enable water to move to its highest value use including exploring the feasibility of a large user market in Melbourne

pricing reforms to signal efficient future investment and use

strengthening governance arrangements to ensure water businesses continue to face incentives to deliver services at least cost and

ensuring regulatory arrangements enable and facilitate competition and competitive market outcomes wherever possible.61

The Commission notes that the Victorian Government is currently undertaking a number of work programs directed at promoting competitive outcomes in the water industry, including those listed in the terms of reference for this inquiry.

An important element in competitive reform—to ensure that an access regime will effectively promote competition—is removing barriers to competition and private participation. Unless such barriers are removed, access will have little impact in terms of promoting competition within the water industry. The terms of reference provide for the Commission to make observations regarding potential barriers to effectively implementing an access regime.

On the basis of its preliminary analysis, the Commission has identified a number of potential areas where barriers to competition and private participation in the water industry may exist. These include:

• constitutional, legislative and regulatory constraints on, or impediments to, competition and private involvement in the industry

• water demand and supply management processes

• the property rights framework applying to different types of water and sewage.

6.1.1 Constitutional constraints

The terms of reference for the inquiry require the Commission to have regard to the Victorian Government’s commitment to public ownership of water businesses set out in the Constitution Act 1975. The Constitution (Water Authorities) Act 2003 amended the Constitution Act 1975 to require that where a public authority was responsible for delivering water services at the time of its enactment, a public authority must continue to have that responsibility.

This potential constraint has not prevented a range of commercial relationships involving private provision of water and sewerage services or associated services. The Government and the publicly owned water businesses have, for example, entered into public-private partnerships (PPPs) that include ‘Build Own Operate’ and ‘Build Own Operate Transfer’ projects, such as the Yan Yean treatment plant in Melbourne, Aqua 2000 in Bendigo and the proposed desalination plant for Melbourne.

6.1.2 Legislative and regulatory barriers

Victorian legislation places restrictions on who can hold bulk water entitlements. The right to hold and trade bulk water entitlements is limited to existing water businesses, creating a barrier to private participation in bulk water provision and trade.

Legislative and regulatory amendments would be needed to establish water markets to extend trading in bulk water entitlements within urban systems. Currently there are no clear arrangements for potential access seekers planning to supply bulk water from a new supply source to offer water into any form of urban wholesale market. Similarly, there are no clear provisions for potential access seekers intending to provide retail water services (if permitted under the Victorian Constitution) to purchase water supplies from a wholesale market. The absence of such a market would form a significant barrier to competition and private participation.

In its request for additional information in relation to the New South Wales Government’s certification application, the NCC raised concerns about licensing provisions that could constrain the scope of the access regime to promote effective competition in related markets. To be granted a licence to supply water, the applicant must satisfy the New South Wales Minister that ‘sufficient quantities’ of water will be obtained from sources other than a public utility. The NCC was concerned that this requirement:

> could have the effect of precluding competitive options around more innovative/better targeted/cheaper water supply retail services (for example in competition with Sydney Water or Hunter Water) where the (potential) competitor wishes to source water from public water utilities, including from the bulk water provider the Sydney Catchment Authority. 62

In preparing its draft report for the inquiry, the Commission will review relevant legislative and regulatory provisions to identify whether any other barriers to competition or private participation exist.

6.1.3 Water demand and supply management-related barriers

The current arrangements for planning and managing water supply procurement may form an impediment to the development of innovative supply options by private providers. The lack of transparency in decision making on which water sources to develop, when to develop them and how to operate them once they are in place, creates risks for potential private water suppliers and could reduce private sector participation in bulk water provision. Further, there may be a real or perceived conflict of interest for the relevant water business as a supplier and

62 National Competition Council 2008, op. cit.
seller of bulk water. These include scope for bias when selecting which sources to invest in or use.\textsuperscript{63}

In Western Australia, the Economic Regulatory Authority (ERA) proposed the creation of an independent procurement entity (IPE) as a means of separating bulk water procurement from the role of the Government and the state-owned water business, thereby reducing some of the potential risks faced by private sector suppliers. The ERA noted that the IPE model would also clarify the role of government and reduce the risk of political interference in investment decisions.\textsuperscript{64}

The IPE would have responsibility for ensuring least expected cost balancing of supply and demand, subject to the constraint of maintaining security of supply at the level set by the government. Independence from government would improve certainty for the private sector, transparency in decision making, and consistency in approach. The ERA noted that the proposed governance reforms to enhance competition to supply bulk water would support a third party access regime that allowed competition for end users outside the formal procurement process.

As noted in the terms of reference for this inquiry, the Victorian Government is currently reviewing arrangements for optimising system management of the expanded water grid and new water sources so that the desired level of security is achieved by relying on least cost sources of supply first. It is also considering whether market-based mechanisms could be used to inform future management decisions.

In relation to demand management, the ERA identified that uncertainty about the trigger conditions for the imposition of water restrictions or the provision of rebates for water conservation measures may create a barrier to private supply of water. Water restrictions and rebates influence the level of water use and therefore the returns expected by private providers of water services, including recycled water. Uncertainty about the trigger conditions increases the risks associated with supplying water services. The ERA concluded that 'the rules that govern the introduction or amendment of these factors [should] be known with certainty'.\textsuperscript{65}

\textbf{6.1.4 Property rights barriers}

The VCEC report noted that clarifying the property rights and obligations associated with different water resources would support competition by providing clearer information on costs, risks and opportunities.\textsuperscript{66} It noted further that a lack of clarity of rights, especially to wastewater, recycled water and stormwater, could be a barrier to some activities that could be proposed by new entrants using existing infrastructure services.


\textsuperscript{64} ibid.

\textsuperscript{65} ibid., p. 31.

How significant are the potential barriers listed above in discouraging competition and private participation in the water industry?
Are there any other significant barriers to competition and private participation?

### 6.2 Customer protection, health and safety, and environmental issues

The terms of reference note that one of the Government’s objectives in implementing an access regime is to ensure that existing water businesses and new service providers are able to comply with legislation and regulations related to resource management, the environment, water quality, health and safety. Clause 6(3)(a)(iii) of the Competition Principles Agreement (included at appendix B) requires that, where an infrastructure facility must be used safely, appropriate regulatory arrangements should exist.

The current institutional and regulatory framework for managing customer protection, water quality and public health, and environmental impacts may need to be adapted to accommodate new entrants to the water sector. Key considerations in regulating these areas in the context of an access regime are that:

- safety and service quality regulation should not unreasonably hinder access or create artificial barriers to entry
- the actions of the access seeker should not compromise the safe and reliable operation of the water or sewerage networks or impact on the service quality of other users
- the costs of additional regulation to facilitate access must be weighed up against the benefits from access, including wider public benefits from increased competition.

#### 6.2.1 Current institutional framework and responsibilities

A number of parties impose obligations and regulatory requirements on the water businesses:

- The Minister for Water is generally responsible for water and environmental policy issues and imposes obligations on the water businesses in relation to these issues via each business’s respective Statement of Obligations. In addition, the Minister for Water and the Treasurer are responsible for administering governance arrangements and key corporate planning activities.

- The Commission is the economic regulator of the water sector. Included in its functions are responsibility for approving prices for prescribed water and sewerage services; regulating standards and conditions of supply of retail water, sewerage and other prescribed services; and monitoring, auditing and reporting on the performance of water businesses.

- The Department of Sustainability and Environment (DSE) is responsible for regulating water resource allocation and environmental flows through bulk entitlement processes, and setting broad policy parameters for technical issues covering dam safety, water conservation and reuse.
• The Department of Human Services (DHS) administers legislation relating to the safety and quality of drinking water supplies in Victoria. Since 1 July 2004, DHS assumed responsibility for administering the drinking water quality regulatory arrangements established under the Safe Drinking Water Act 2003 and its Regulations.

• DHS also administers legislation and funding arrangements for the provision of concessions and grants to improve the affordability of water services to low income households. It also administers the Utility Relief Grants Scheme, which provides one-off financial contributions towards customers’ bills in the case of payment difficulties.

• In conjunction with the Environment Protection Authority (EPA), DHS is responsible for administering public health aspects of water discharged to the environment, reclaimed water schemes and water reuse schemes.

• The EPA is responsible for preventing pollution and protecting Victoria’s environment. It uses statutory and partnership tools to minimise waste, recycle effluent and biosolids, manage waste discharges, manage odour and greenhouse gas emissions, and prevent pollution of groundwater and surface waters. The key statutory environmental policy affecting the water industry is the State Environment Protection Policy (SEPP) (Waters of Victoria) 2003 and its schedules.

• The Energy and Water Ombudsman of Victoria (EWOV) is an independent body responsible for investigating and resolving disputes between Victorians and their electricity, gas and water providers. Participation in the EWOV scheme is required as a licence condition for the metropolitan retailers and under legislation for Melbourne Water and the regional businesses. EWOV deals with a range of issues, including problems associated with service provision, bills, credit payment services, land and land access, disconnection/restriction, and complaints referred to it by the Commission and/or the water businesses.

• Trade Measurement Victoria and the National Standards Commission regulate water meter accuracy and the types of meters that may be used.

It appears that the set of institutional arrangements currently in place provides a sound foundation for the third party access regime. However, as the institutional framework has been developed around monopoly government-owned suppliers of water and sewage services, it is possible that the existing framework contains gaps that could limit its coverage or that the relevant regulatory agency lacks sufficient powers to effectively regulate a new entrant.

Consequently, the legal and regulatory framework will need to be reviewed to ensure that appropriate obligations apply to both incumbents and new entrants in relation to customer protection, water quality, public health and safety, and environmental protection.

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67 EWOV’s services are available to both residential and business customers.
### 6.2.2 Consumer protection framework

The Commission is currently responsible for regulating standards and conditions of supply of retail water, sewerage and other prescribed services. The Water Industry Regulatory Order (WIRO) allows the Commission to approve standards set out in a water business’s Water Plan, to specify those standards in a Code or to do both.

The Commission’s approach to regulating the standards and conditions of supply for retail water, sewerage and recycled water services to urban customers is as follows:

- **establish a Customer Service Code that imposes a consistent overarching framework for the delivery of these services to customers**—The Code includes requirements relating to connection and service provision, charging for services, complaint and dispute handling procedures, billing, payment and collection processes, dealing with financial hardship, the quality and reliability of services provided, works and maintenance programs, information provision to customers and approved guaranteed service level schemes. Since 1 July 2005, all metropolitan retail and regional businesses providing water, recycled water and sewerage services to urban customers have been required to comply with the Code requirements, and the Commission will audit this compliance.\(^{68}\)

- **require each business to develop a Customer Charter**—The Charter informs customers about the services the business offers, the respective rights and responsibilities of the business and its customers, and the service standards that the business proposes to deliver over the regulatory period. The Charter must cover certain minimum information requirements set by the Customer Service Code. Once approved, each business’s service standards are reflected in its Customer Charter.

- **monitor compliance with Code**—Compliance is monitored through performance monitoring and risk-based regulatory audits.

The Commission also publishes an annual comparative performance report detailing the level of service provided by each of the water businesses. Similar reports are published on the performance of electricity and gas distribution businesses and energy retailers. The use of performance monitoring and regulatory audits is also a feature of the New South Wales’ regulatory framework for water and sewerage services.

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The Commission’s preliminary view is that the existing customer protection framework would require any new entrant providing retail services to meet the requirements of the Customer Service Code, establish a Customer Charter and report on performance against the requirements in the Code.

Any retail customers of a new entrant will need access to effective customer complaints and dispute resolution processes. As noted in section 6.2.1, membership of the EWOV scheme is required as a licence condition for the metropolitan retailers and under legislation for Melbourne Water and the regional businesses. In New South Wales, licensed retail suppliers will be required to belong to an approved external ombudsman scheme to deal with disputes and complaints involving small retail customers. In the energy sector, licensed retailers are required to be members of external ombudsman schemes. The Commission suggests therefore that new entrants to the water industry should be required to join the EWOV scheme relating to water and sewerage services, where these entrants have retail customers.

| Should the existing customer protection framework be extended to cover new entrants to the water industry? |
| Should new entrants providing retail services be required to participate in the Energy and Water Ombudsman of Victoria (EWOV) scheme relating to water and sewerage services? |

An additional concern is what happens in the event that an access seeker providing retail services can no longer supply water or provide sewerage services to its customers.

In the Australian energy sector, ‘retailer of last resort’ arrangements have been established. In the event of a new entrant failing, the incumbent retailer is allocated responsibility to continue services to the new entrant’s customer. Where a competitive market with multiple retailers exists, the remaining retailers are allocated responsibility for continuing to service the customers of a failed retailer. Usually the relevant jurisdictional regulator is responsible for declaring a supply failure and allocating responsibility to a retailer of last resort.

In the New South Wales water industry, the Water Industry Competition Act 2006 provides that a licensed retail supplier or a public water utility may be declared by the Minister as a retailer of last resort. In the event that the Minister declares a supply failure in relation to a licensed retail supplier, the retailer of last resort must commence supplying water services or providing sewerage services to customers of the failed retailer.

| Should retailer of last resort arrangements be established in conjunction with the development of an access regime to protect customers in the event of that access seekers start to provide retail water or sewerage services? |
| If so, what factors should be taken into account in designing appropriate retailer of last resort arrangements? |
6.2.3 Protecting public health and water quality

New entrants to the water industry may seek access in order to deliver water from new sources to their customers. New water supplies would have to be subject to appropriate water quality standards, partly for health and safety reasons, but also to manage any impacts from mixing water from different sources on the colour, taste or appearance of water supplies.

These supply quality issues are not unique to the water industry. In the gas industry, quality standards must be met before gas can be injected into the network. These standards cover purity, composition, energy content and temperature. Similarly, in most competitive electricity systems, a grid code specifies technical quality requirements. These codes usually include standards relating to connections to the grid, voltage and frequency.

Currently within the water industry, schemes managed through public-private partnerships inject water into distribution systems under contracts with water businesses. In the metropolitan Melbourne water system, both Melbourne Water and the three metropolitan retailers are responsible for ensuring water quality standards are met for water supplied from their respective networks. In the regional areas, the relevant water business is responsible for meeting specified water quality standards.

Water businesses have legal obligations under the Safe Drinking Water Act 2003 to monitor and maintain the quality of drinking water they supply in their area. The Safe Drinking Water Act 2003 provides a framework for drinking water quality that includes:

- risk management obligations
- a set of standards for key water quality parameters and
- information disclosure requirements.

The Commission’s preliminary views are that any new entrant seeking to inject water will need to have in place appropriate risk management plans. They will also need to conduct monitoring and sampling to be able to demonstrate that the water to be injected into the system will be compatible with the achievement of water quality standards. The access arrangements will also need to provide for appropriate compensation mechanisms in the event of breaches of quality standards.

Will any changes to existing water quality regulatory arrangements be required to ensure that public health, safety and water quality standards are not compromised by allowing access seekers to enter the water industry?

Do any aspects of the existing water quality regulatory arrangements create an unreasonable impediment to new entry by potential access seekers?

6.2.4 Environmental protection

The overall regulatory framework will need to ensure that EPA’s environmental standards continue to be complied with. Before an access seeker could be granted
access to transport sewage through existing sewerage infrastructure facilities, measures would have to be put in place to ensure that there is sufficient hydraulic capacity to support sewage flows without spilling in dry weather and that any trade waste accepted would not damage the system or treatment facilities.

The Commission’s preliminary view is that any new entrant seeking to transport sewage would need to have in place appropriate risk management plans and conduct monitoring and sampling to be able to demonstrate that the sewage can be safely transported and contained within the sewerage system. Most water businesses have trade waste acceptance criteria and new entrants would have to ensure sewage and other wastewater disposed of into the sewerage network met these criteria. The access arrangements would also need to provide for appropriate compensation mechanisms in the event of breaches.

| Is the existing environmental protection regulatory framework sufficient to ensure that access will not compromise existing environmental standards? |
| Do any aspects of the existing environmental protection regulatory arrangements create an unreasonable impediment to new entry by potential access seekers? |

### 6.2.5 Regulatory instruments

An access regime for water and sewerage infrastructure services will need to include appropriate mechanisms to ensure that access seekers comply with all relevant customer protection, health and safety, and environmental protection requirements. Several regulatory instruments are currently used in the water industry:

- **licences**—The *Water Industry Act 1994* allows for the licensing of water services providers. Licences have been granted to the three metropolitan water retailers.

- **Statements of Obligations (SoOs)**—The Act allows for the creation of SoOs which contain many provisions similar to those commonly found in utility businesses’ licences. SoOs have been formulated for all Victorian water businesses.

- **codes**—The *Water Industry Act 1994* allows the Commission to make Codes for water and sewerage service providers. The Commission has issued Codes specifying (and requiring compliance with) urban and rural customer service standards and regulatory accounting standards.

- **bulk service agreements (BSAs)**—Currently the terms and conditions of service delivery at the wholesale-retail interface in Melbourne are governed by separate bulk service agreements (BSAs) for water and for sewerage services. The BSAs specify that water and sewerage services will be supplied in accordance with a range of performance schedules.

Some aspects of these regulatory instruments would require modification to accommodate entry by access seekers and private participation in the water industry:
• licences—The licensing arrangements focus on entities rather than activities. As such, the licenses are geographically specific and bundle together monopoly activities with potentially competitive activities.

• Statements of Obligations (SoOs)—The SoOs include requirements related to governance matters that would not be appropriate in relation to private participants in the water industry. In particular, the SoOs allow the Minister to direct the (publicly owned) water businesses to undertake certain activities that may not meet commercial decision criteria.

• bulk service agreements—The BSAs were implemented at the time of disaggregation and were drafted largely to reflect the status quo. Specifying a mixture of quality and operational matters in consistent and non-discriminatory terms and conditions is likely to be required to facilitate entry by access seekers.

In the New South Wales water industry, a system of functional licences can be issued by the Minister on advice from IPART. Standard licence conditions include requiring a licensed network operator to prepare and implement an infrastructure operating plan and water quality or sewage management plan (as relevant), and a licensed retail operator to prepare and implement a retail supply management plan. The licences require businesses to adhere to a water industry code of conduct, marketing code of conduct and transfer code of conduct. Before a licence is issued, the applicant are required to have, and continue to have, the capacity (including technical, financial and organisation capacity) to carry out the activities to be undertaken.

In the energy sector, a hierarchy of functional licences, codes (such as the System Code, Distribution Code, Retail Code and Market Code of Conduct) and non-binding guidelines have been used to regulate service quality and customer protection. Licences and codes have been developed as ‘living documents’, allowing the terms and conditions to develop as the industry and the level of competition has evolved over time.

An alternative to licensing could be to develop a registration system where businesses apply to be registered to perform specified water or sewerage service functions. As a condition of registration, businesses would be required to comply with relevant technical codes and market rules.

On the basis of its preliminary assessment, the Commission considers that an effective set of regulatory instruments could be based around:

• the establishment of a licensing or registration framework that distinguishes potentially competitive and natural monopoly activities and permits entry and competition in potentially contestable activities and

• a set of technical codes to be complied with by network users that set out the appropriate minimum terms and conditions of bulk supply, distribution and retail service requirements.

The BSAs were initially viewed as an interim arrangement pending commercial negotiation of more satisfactory, long term service contracts. The Water Industry Act 1994 envisages development of a Bulk Supply Code as be an alternative to BSAs. The Commission has consulted on a Bulk Supply Code but is yet to issue such a Code.
In New South Wales, licences are issued by the Minister on advice from IPART. However, it would be possible in Victoria for the Commission to be granted the power to issue licences, provided the applicant meets the requirements for issue of a licence. In this event, the Commission’s decision could be appealed to its Appeals Panel (see section 4.3).

The licensing (or alternative) arrangements would need to ensure that all water and sewerage service providers complied with EPA, DHS and other relevant requirements.

Should a licensing system be developed for the water industry? If a licensing system is not used, what alternative approaches could be considered for regulating service quality and customer protection in the water industry?

Who should be responsible for assessing licence applications (or applications for registration) and for making decisions on the issue of licences?

6.3 System coordination and management issues

With increasing integration of the Victorian water network to create a Victorian Water Grid, an important consideration is how to manage the network to ensure that the desired level of supply security is achieved while minimising the cost of supply on a day-to-day basis. Coordinating the different sources of bulk water and directing the transfer of bulk water across the grid will be essential elements in achieving this objective. Since an access regime will open up the potential for new sources of water with varying cost structures to be supplied by new entrants accessing the network, these coordination issues will become more significant.

6.3.1 Network management

VCEC noted that a Water Grid Manager or other system coordinator could be established to undertake the day-to-day operation and coordination of the water supply system. The grid manager would determine operating rules for the grid and how much water to draw down from different sources to meet demand at any particular time. Its tasks would include:

- integration and optimisation of all sources of water
- managing the transfer of bulk water within the grid
- creating the mechanisms for the efficient transfer of water between users
- managing the entry of third parties
- optimising the transfer of water to produce the lowest overall community cost of supplying water.

VCEC considered that, in the short term, a grid manager would need to take a centralised approach. Without a well functioning market for trading bulk water

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70 Victorian Competition and Efficiency Commission 2008, op. cit.
entitlements, the system coordinator would have to estimate costs and willingness to pay without access to genuine market valuations. However, if such a market was established in future, the grid manager’s task would become one of managing bids from market agents and despatching water from lowest to highest bids to meet demand.

Issues that would need to be considered when establishing a water grid manager include:

- whether to set up a framework for a centralised approach in the short term that leaves open the option of a transition to a decentralised approach
- how to establish the water grid manager so that it has no conflicts of interest in its operation of the network
- clarity around the allocation of responsibilities for managing the commodity and for managing the transfer of that commodity
- pricing and operational arrangements
- how the water grid manager should interact with water businesses and users on the boundaries of the metropolitan market (where there is scope for interconnection).71

The Commission notes that the Victorian Government is currently investigating arrangements for optimising system management of the expanded water grid, appropriate roles and responsibilities in the new system (including whether an independent system or grid manager should be established), and expansion and increased interconnectivity of the Victorian Water Grid.

What features should be included in the arrangements for managing the Victorian Water Grid to ensure that potential access seekers are able to participate effectively in the water industry?

6.3.2 Interoperability

In terms of interoperability, issues can arise where an access seeker requires interconnection between its own infrastructure, for example a sewer mains to transport sewage from the infrastructure operator’s sewage reticulation network to the access seeker’s treatment plant (see box 3.1 in chapter 3 on the Services Sydney proposal). Issues may involve operating procedures and other terms and conditions of access. Terms and conditions imposed on interconnections by the infrastructure service provider should be no more stringent than required to ensure the safe and efficient operation of the infrastructure.

6.3.3 Network balancing

Another issue that will need to be dealt with is network balancing. While the selected set of access rights and prices will go some way to matching demand for the commodity with supply, imbalances may be expected to occur on a daily basis.

71 ibid.
Management of these imbalances may best be undertaken by the infrastructure service provider (such as through the operation of service reservoirs and by varying pressure at different points in the network). The costs of this network management should be passed on to those who generate the imbalances. Such imbalances may also impact on service quality elsewhere in the network.

A methodology for estimating system losses and processes for allocating the associated costs will need to be developed. Losses should be maintained at an economically efficient level (which is unlikely to be negligible). Furthermore, they represent a level of service relevant for pricing purposes. Network balancing could be managed by an infrastructure service provider or grid manager.

How should network balancing and system losses be managed?

6.3.4 Network operations, maintenance and expansions

Currently water businesses have responsibilities related to planning, operation, maintenance and development of water and sewerage networks, including backlog programs for currently unserviced areas.

An access regime will need to identify responsibilities for network operation, maintenance and network expansions. It seems likely that the incumbent infrastructure operator would retain these responsibilities. Access seekers would need to comply with operational and maintenance requirements and provide information required by the infrastructure operator to assist it in planning for network augmentation and expansion.

6.3.5 Emergency management

A further consideration is determining responsibility for managing emergencies. Currently water businesses are required to have emergency management plans. These arrangements would have to be reviewed to appropriately allocate primary responsibility for co-ordinating and managing emergencies. New entrants could be required to provide information and participate, as appropriate, in emergency planning and co-ordination exercises.

How should the existing emergency management procedures be modified to include access seekers?

6.4 Information and reporting requirements

Information collection, reporting and auditing requirements underpin the regulatory arrangements for water and sewerage services. Currently, the Water Industry Act 1994 includes provisions, under s. 4G, requiring regulated entities to provide to the Commission information that the Commission requires to enable it to perform its functions.
Access seekers would have to be made subject to these provisions to the extent necessary to enable the Commission to perform its functions and to achieve the objectives of the Water Industry Act 1994. In the competitive segments of the water supply chain, the information collection, reporting and auditing requirements are likely to be lower than for the monopoly segments. In the natural monopoly segments, more stringent regulation may be required to ensure that monopoly power is not exercised. In the electricity and gas industries, the purpose and nature of information collected differs according to whether the infrastructure or services are provided under competitive or monopoly conditions.

The amount and type of information and reporting required will depend on the extent of competitive pressures in each market segment and progress in implementing other competitive reforms in the water industry. It may be necessary to review the information and reporting requirements applying to various participants in the water industry as competitive markets develop.

To ensure information requirements are met, a condition could be placed on a licence or equivalent instrument (see section 6.2), requiring access seekers to comply with certain reporting requirements. Alternatively, access seekers could be included within the definition of ‘regulated entity’ included in the Water Industry Act 1994.

Similar arrangements would have to be made to ensure that access seekers are subject to the information provisions relating to other relevant regulators, such as the EPA and DHS. Information requirements relating to performance against environmental, health and safety standards will remain important with the introduction of access arrangements.

Access seekers will require information on industry conditions, costs, the expected demand and supply balance, and other matters to enable them to assess the viability of proposed projects and other forms of participation in the water industry. Clause 6(4)(e) requires infrastructure service providers to ‘use all reasonable endeavours to accommodate the requirements’ of access seekers (and potential access seekers).

The NCC’s guidance on satisfying this requirement notes that access regimes assessed as having satisfied this criterion have included regulations that have required infrastructure owners to:

- provide access seekers with written information on spare capacity, other system information and indicative access terms and conditions, including sufficient information for access seekers to understand how access prices are calculated
- respond to access requests and negotiate terms and conditions within a reasonable timeframe
- provide a written explanation as to why a particular request for access cannot be accommodated, including likely prospects for future access.  

IPART’s negotiation protocols include information disclosure requirements and a timetable for responding to access requests. In the national electricity market, the

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72  National Competition Council 2003, op. cit., p. 36.
National Electricity Market Management Company (NEMMCO) has responsibility for providing information to assist market participants. Each year it publishes a Statement of Opportunities, which is a 10-year forecast intended to assist market participants assess the future need for generation capacity, demand-side response and augmentation of the network. It also publishes other information, including the Projected Assessment of System Adequacy, which provides short term forecasts.

The NCC noted that:

An access regime that fails to provide access seekers with adequate information is unlikely to satisfy clause 6(4)(e) because such information is essential to enable the access seeker to participate in effective access negotiations.

In relation to resource planning, the Government may need to review whether the information that is publicly released is adequate, easy to understand and released on a timely basis and that the resource planning processes are sufficiently open and transparent to satisfy the certification requirements. Resource planning is discussed further in section 6.1.3.

In determining information requirements to be placed on infrastructure service providers and access seekers, confidentiality provisions would need to be taken into account. In addition, the principles for best practice regulation developed by the Victorian Government would have to be applied.74

| What Information collection, reporting and auditing requirements should be placed on access seekers providing water and/or sewerage services? What factors should be taken into account in determining the amount and type of information required by regulators? |
| What types of information would access seekers need to be able to assess the viability of proposals to provide water and sewerage services and to be able to negotiate effectively with infrastructure service providers? |
| What types of information would be subject to confidentiality requirements? |

### 6.5 The Commission’s role in regulating an access regime

The state-based access regime would have to be regulated to ensure it was operating effectively and water industry participants were complying with all obligations on them. Regulatory responsibilities could include:

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• establishing a negotiation framework, which, as discussed in section 4.2, may require setting up a negotiation process (and guidelines), formulating indicative prices or pricing principles, and setting information disclosure requirements

• monitoring and enforcing compliance with the requirements of the negotiation framework

• assessing declaration applications and undertakings

• assessing licence applications

• monitoring and enforcing compliance with declaration, undertakings and licence conditions

• assessing and approving access prices for compliance with the pricing principles in clause 6(5)(b) of the Competition Principles Agreement and any other principles established by an access regime (discussed in chapter 5)

• arbitrating in access disputes (discussed in section 4.3)

• reporting on the performance of an access regime

• reviewing the effectiveness of the regime or the coverage of the regime on a regular basis.

As noted in section 4.3, the NCC considers the Commission to be independent and sufficiently resourced to regulate an access regime.\(^{75}\)

A further consideration for the NCC is whether regulation of the regime is conducted in a transparent manner. In deciding on various regulatory matters, the Commission aims to be open and transparent and to consult with as many stakeholders as is practicable. The Commission's general approach to consultation is set out in its Charter of Consultation and Regulatory Practice.\(^{76}\) In general, the Commission’s consultation papers, reports, and other documents and submissions are published and made available on the Commission’s website. Stakeholders typically have a number of opportunities to be involved in the Commission’s processes, including making submissions and attending public meetings. The Commission also consults with other regulators, such as the EPA and DHS, and other government agencies, such as DSE and the Energy and Water Ombudsman (Victoria) (EWOV).

In the context of dispute resolution, the NCC has raised the issue of independence of the arbitrator from the regulator. The NCC noted that, where the regulator is also the arbitrator, there may be benefits from being able to draw on past experience with industry issues and that, in highly technical access disputes, finding a suitably qualified alternative arbitrator may be difficult. It noted that, where the regulator is the arbitrator, measures to guarantee the arbitrator’s independence may be necessary. Possible measures are listed in the NCC’s guidance on certification.\(^{77}\)

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\(^{75}\) National Competition Council 2003, *op. cit.*, p. 28.

\(^{76}\) The Charter can be found on the Commission’s website www.esc.vic.gov.au.

\(^{77}\) *ibid.*, p. 40.
The Commission considers that there would be advantages in giving it responsibility for regulating an access regime, including arbitrating in access disputes. The Commission has considerable expertise in regulating the water industry in respect of prices, service standards and reliability. It has extensive knowledge of the existing water businesses and their specific circumstances. The costs of regulating the industry and the compliance costs imposed on industry participants (infrastructure service providers and access seekers) would be reduced by having a single economic regulator for the industry. For example, the process for assessing and approving access prices could be conducted simultaneously with price determinations.

The terms of reference for this inquiry allow the Commission to recommend on the timing for future review of an access regime to ensure it remains relevant and effective. The Commission suggests that a suitable period for reviewing the operation of the regime is five years from the date of its implementation. However, provision should be made to conduct a review earlier if market developments suggest that earlier review of the operation of an access regime is necessary.

6.6 Sustainable urban planning objectives

One of the Government’s objectives in establishing an access regime is to ‘facilitate the development of innovative local solutions to water supply, consistent with broader sustainable urban planning objectives’.

The Competition Principles Agreement provides that an effective access regime may contain other matters in addition to those required under the certification criteria provided that they are not inconsistent with the clause 6 principles. Therefore an access regime may include provisions to achieve the Government’s sustainable urban planning objectives.

What provisions should be included in an access regime to facilitate the development of innovative local solutions to water supply, consistent with broader sustainable urban planning objectives and nor inconsistent with the certification criteria?
Mr Dennis Cavagna  
Acting Chairperson  
Essential Services Commission  
Level 2, 35 Spring Street  
MELBOURNE VIC 3000

Dear Mr Cavagna

STATE-BASED ACCESS REGIME FOR WATER AND SEWERAGE INFRASTRUCTURE SERVICES IN VICTORIA

In accordance with my powers under section 41 of the Essential Services Commission Act 2001, I refer to the Essential Services Commission the attached Terms of Reference for an inquiry into the development of a state-based access regime for water and sewerage infrastructure services, including the access pricing methodology for the Victorian water industry.

Should you require any further information please contact Mr Daen Dorazio, Senior Economist, at the Department of Treasury and Finance on 9651 1650.

Yours sincerely

TIM HOLDING MP  
Minister for Finance, WorkCover  
and the Transport Accident Commission
Essential Services Commission Act 2001
Part 5 Inquiry and Report
Notice of Reference – State-based access regime

Pursuant to section 41 of the Essential Services Commission Act 2001, I, Tim Holding MP, Minister for Finance, WorkCover and the Transport Accident Commission, hereby direct the Essential Services Commission (‘the Commission’) to conduct an inquiry into development of a state-based access regime for water and sewerage infrastructure services, including the access pricing methodology for the Victorian water industry.

Background

Victorian Competition and Efficiency Commission (VCEC) Inquiry into Reform of the Metropolitan Retail Water sector

On 21 August 2007 the Victorian Government directed the VCEC to undertake a review of the metropolitan retail water sector. On 3 July 2008, the Government released the final VCEC report on the Inquiry into Reform of the Metropolitan Retail Water Sector and the Government's response to this report.

The Victorian Government, in its response to the VCEC report, supported the recommendations that:

- the Government develop an access regime for water and sewerage infrastructure services (recommendation 5.6);
- the access regime that is established give responsibility to the Essential Services Commission to develop the access pricing methodology, having regard to the legislative objectives of a state-based access regime (recommendation 5.7); and
- the Commission should develop a methodology for implementing accounting ring-fencing, audit the information provided and publish the information as part of its ongoing monitoring role for the Victorian water sector (recommendation 4.2).

A state-based access regime will facilitate the efficient use of Victoria’s water infrastructure by improving regulatory certainty for all parties regarding the framework for third parties seeking involvement in the water sector.

As a first step, the Government committed to ask the Commission to undertake an inquiry into the development of a state-based access regime, following consideration of the broader objectives of an access regime.

Consultation on and findings of the inquiry should provide the Government with the necessary information to implement an access regime as soon as practicable.

The Government will consider the final report once it is received from the Commission and proceed with drafting a state-based access regime as appropriate.
Scope

The focus of the inquiry will be to assess and make recommendations on the development of a state-based access regime for water and sewerage infrastructure services in Victoria. This will include issues related to introducing ring fencing (including an accounting methodology). The regime is intended to cover water and sewerage infrastructure across the state of Victoria.

The Government’s objectives in supporting the establishment of a state-based access regime include to:

- promote the economically efficient operation of, use of and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets;
- not put at risk the ability of third parties or existing water businesses to comply with relevant objectives in other legislation and regulatory instruments including those related to resource management, the environment, water quality, health and safety;
- provide consistency (where appropriate) and certainty for market participants and potential new participants about the terms and conditions under which access can be sought to Victoria’s water and sewerage infrastructure services;
- facilitate the development of innovative local solutions to water supply, consistent with broader sustainable urban planning objectives; and
- not inhibit the potential for further reform of the water industry in the longer term.

Consistent with the Competition and Infrastructure Reform Agreement, the Victorian Government intends to seek certification from the National Competition Commission of any state-based access regime.

Recommendations should be cognisant of other work programs that are taking place in Victoria’s water sector including:

- arrangements for optimising system management of the expanded water grid and new water sources, so that the desired level of security is achieved by relying on the least cost sources of supply first;
- amendments to bulk water entitlements, to reflect the new water sources (i.e. the desalination plant and Sugarloaf pipeline);
- consideration of whether market-based mechanisms could be used to inform future management decisions;
- appropriate roles and responsibilities in the new system; for example, whether an independent system or grid manager should be established;
- expansion and increased interconnectivity of the Victorian Water Grid;
- the report to Government that is being developed by the Department of Sustainability and Environment to clarify rights to alternative water sources and identify where the rights framework could be improved (VCEC recommendations 5.2 and 5.3); and
- objectives and key principles of water sensitive urban design.
The Commission should have regard to the Constitution Act 1975, which outlines the Victorian Government commitment to public ownership of water businesses.

In conducting the inquiry, the Commission may have regard to access regimes in other industries and state-based access regimes that have been developed or are being developed in Australia. However ultimately the Commission should ensure its recommendations are specific to Victoria’s water and sewerage infrastructure services and the Government’s objectives in developing an access regime.

The Government will have regard to the recommendations from this inquiry when developing a state-based access regime for water and sewerage infrastructure services.

Recommendations may include timing for a review of the access regime in the future to ensure it remains relevant and effective.

In the course of the review the Commission may make recommendations regarding:
- how to best give effect to the access regime having regard to other VCEC recommendations, including that the retailers will be made statutory corporations under the Water Act 1989;
- the expected time taken to establish and have the access regime certified;
- any transitional measures that may be appropriate; and
- any technical requirements, guidelines or regulations required to give effect to the regime.

The Commission may also make observations regarding potential barriers to effectively implementing the access regime.

**Specific Terms of Reference**

The Commission will ensure its recommendations are consistent with National Competition Policy, including the Competition and Infrastructure Reform Agreement and competitive neutrality principles and policies.

Recommendations should be consistent with the principles in clause 6 of the Competition Principles Agreement. The National Competition Council has given guidance on how it considers these principles under the following categories:
- coverage of services – appropriately identifying and defining the services of the water and sewerage supply chain to which access is to be provided, noting that for certification, the services must be provided by infrastructure that is not economical to duplicate and acts as a bottleneck to competition in other markets;
- negotiation framework – establishing a legal right for parties to negotiate access, an enforcement process to support this right, requiring service providers use all reasonable endeavours to accommodate the requirements of access seekers, requiring that access outcomes strike an appropriate balance among a range of factors including the legitimate business interests of facility
owners, the efficient use of infrastructure and competitive outcomes that benefit the community, and having a regulatory framework that includes appropriate ring-fencing within a regulated business and prohibits conduct for the purposes of hindering access;

- dispute resolution – provide mechanisms to resolve a dispute between a service provider and access seekers;

- appropriate terms and conditions of access – terms and conditions should promote the efficient use of infrastructure and efficient investment in dependent markets while not deterring efficient investment in infrastructure. The access regime will need to be guided by the pricing principles set out in s35C of the Essential Services Commission Act 2001. Access terms and conditions should address safety requirements, the allocation of capacity among competing users, interoperability issues, and service quality issues;

- transitional arrangements – may include timetables to phase in availability for different classes of customer, and potential interim arrangements. Arrangements should be necessary and phased out as early as possible;

- greenfields investment – the access regime should not inappropriately deter new investment in infrastructure; and

- interstate issues – ensure state-based access solutions do not pose an impediment to interstate access if relevant.

The Commission should also consider and make recommendations on:

- whether different services will require different access arrangements;

- who will be eligible to seek access;

- the role of the Essential Services Commission as regulator;

- information requirements access providers will be required to publish;

- other information and reporting requirements;

- the responsibilities of network operation and maintenance;

- responsibilities for approving, undertaking and financing expansion of the network;

- specification of and obligations with respect to service quality, environmental and public health standards; and

- responsibility for network balancing and associated costs.

The Commission will also make recommendations on the methodology for access pricing and appropriate ring fencing (including an accounting methodology addressing recommendation 4.2 from the VCEC report).

Factors to consider in evaluating the different approaches to access pricing, cost allocation and ring fencing will include:

- new entry and administrative burdens; and
• the need for any amendments to existing arrangements, such as Regulated Asset Values, to meet the Government's objectives for establishment of an access regime.

The Commission will also ensure its recommendations are consistent with the relevant sections of the Essential Services Commission Act 2001, including the objective of the Commission in section 8 and Part 3A relating to third party access regimes.

Review Process

The Review will be conducted independently by the Victorian Essential Services Commission (ESC) under s.41(1) of the Essential Services Commission Act 2001, which requires that: “The Commission must conduct an inquiry into any matter which the Minister by written notice refers to the Commission under this Part”.

In conducting the inquiry, the Commission will make publicly available a draft report and seek submissions regarding this inquiry. The final report will be submitted to the Minister and made publicly available consistent with s. 45 of the Essential Services Commission Act 2001.

The specific design and conduct of the review process will be determined by the Commission and publicised at the outset of the review.

Timetable

Review to commence November 2008
Draft report to be submitted May 2009
Final report to be submitted 31 August 2009

TIM HOLDING MP
Minister for Finance, WorkCover
and the Transport Accident Commission.
Date: 19/11/2008
The National Competition Council assesses state-based access regimes against the following principles included in the Competition Principles Agreement made by the Council of Australian Governments on 11 April 1995 and amended on 13 April 2007:

6.(1) Subject to subclause (2), the Commonwealth will put forward legislation to establish a regime for third party access to services provided by means of significant infrastructure facilities where:

(a) it would not be economically feasible to duplicate the facility;

(b) access to the service is necessary in order to permit effective competition in a downstream or upstream market;

(c) the facility is of national significance having regard to the size of the facility, its importance to constitutional trade or commerce or its importance to the national economy; and

(d) the safe use of the facility by the person seeking access can be ensured at an economically feasible cost and, if there is a safety requirement, appropriate regulatory arrangements exist.

(2) The regime to be established by Commonwealth legislation is not intended to cover a service provided by means of a facility where the State or Territory Party in whose jurisdiction the facility is situated has in place an access regime which covers the facility and conforms to the principles set out in this clause unless:

(a) the Council determines that the regime is ineffective having regard to the influence of the facility beyond the jurisdictional boundary of the State or Territory; or

(b) substantial difficulties arise from the facility being situated in more than one jurisdiction.

(3) For a State or Territory access regime to conform to the principles set out in this clause, it should:

(a) apply to services provided by means of significant infrastructure facilities where:

   (i) it would not be economically feasible to duplicate the facility;
(ii) access to the service is necessary in order to permit effective competition in a downstream or upstream market; and

(iii) the safe use of the facility by the person seeking access can be ensured at an economically feasible cost and, if there is a safety requirement, appropriate regulatory arrangements exist; and

(b) reasonably incorporate each of the principles referred to in subclause (4) and (except for an access regime for: electricity or gas that is developed in accordance with the Australian Energy Market Agreement; or the Tarcoola to Darwin railway) subclause (5).

There may be a range of approaches available to a State or Territory Party to incorporate each principle. Provided the approach adopted in a State or Territory access regime represents a reasonable approach to the incorporation of a principle in subclause (4) or (5), the regime can be taken to have reasonably incorporated that principle for the purposes of paragraph (b).

(3A) In assessing whether a State or Territory access regime is an effective access regime under the Trade Practices Act 1974, the assessing body:

(a) should, as required by the Trade Practices Act 1974, and subject to section 44DA, not consider any matters other than the relevant principles in this Agreement. Matters which should not be considered include the outcome of any arbitration, or any decision, made under the access regime; and

(b) should recognise that, as provided by subsection 44DA(2) of the Trade Practices Act 1974, an access regime may contain other matters that are not inconsistent with the relevant principles in this Agreement.

(4) A State or Territory access regime should incorporate the following principles:

(a) Wherever possible third party access to a service provided by means of a facility should be on the basis of terms and conditions agreed between the owner of the facility and the person seeking access.

(b) Where such agreement cannot be reached, Governments should establish a right for persons to negotiate access to a service provided by means of a facility.

(c) Any right to negotiate access should provide for an enforcement process.

(d) Any right to negotiate access should include a date after which the right would lapse unless reviewed and subsequently extended; however, existing contractual rights and obligations should not be automatically revoked.
(e) The owner of a facility that is used to provide a service should use all reasonable endeavours to accommodate the requirements of persons seeking access.

(f) Access to a service for persons seeking access need not be on exactly the same terms and conditions.

(g) Where the owner and a person seeking access cannot agree on terms and conditions for access to the service, they should be required to appoint and fund an independent body to resolve the dispute, if they have not already done so.

(h) The decisions of the dispute resolution body should bind the parties; however, rights of appeal under existing legislative provisions should be preserved.

(i) In deciding on the terms and conditions for access, the dispute resolution body should take into account:

(ii) the owner’s legitimate business interests and investment in the facility;

(iii) the costs to the owner of providing access, including any costs of extending the facility but not costs associated with losses arising from increased competition in upstream or downstream markets;

(iv) the economic value to the owner of any additional investment that the person seeking access or the owner has agreed to undertake;

(v) the interests of all persons holding contracts for use of the facility;

(vi) firm and binding contractual obligations of the owner or other persons (or both) already using the facility;

(vii) the operational and technical requirements necessary for the safe and reliable operation of the facility;

(viii) the economically efficient operation of the facility; and

(j) The owner may be required to extend, or to permit extension of, the facility that is used to provide a service if necessary but this would be subject to:

(i) such extension being technically and economically feasible and consistent with the safe and reliable operation of the facility;

(ii) the owner’s legitimate business interests in the facility being protected; and

(iii) the terms of access for the third party taking into account the costs borne by the parties for the extension and the economic benefits to the parties resulting from the extension.
(k) If there has been a material change in circumstances, the parties should be able to apply for a revocation or modification of the access arrangement which was made at the conclusion of the dispute resolution process.

(l) The dispute resolution body should only impede the existing right of a person to use a facility where the dispute resolution body has considered whether there is a case for compensation of that person and, if appropriate, determined such compensation.

(m) The owner or user of a service shall not engage in conduct for the purpose of hindering access to that service by another person.

(n) Separate accounting arrangements should be required for the elements of a business which are covered by the access regime.

(o) The dispute resolution body, or relevant authority where provided for under specific legislation, should have access to financial statements and other accounting information pertaining to a service.

(p) Where more than one State or Territory access regime applies to a service, those regimes should be consistent and, by means of vested jurisdiction or other cooperative legislative scheme, provide for a single process for persons to seek access to the service, a single body to resolve disputes about any aspect of access and a single forum for enforcement of access arrangements.

(5) A State, Territory or Commonwealth access regime (except for an access regime for: electricity or gas that is developed in accordance with the Australian Energy Market Agreement; or the Tarcoola to Darwin railway) should incorporate the following principles:

(a) Objects clauses that promote the economically efficient use of, operation and investment in, significant infrastructure thereby promoting effective competition in upstream or downstream markets.

(b) Regulated access prices should be set so as to:

   (i) generate expected revenue for a regulated service or services that is at least sufficient to meet the efficient costs of providing access to the regulated service or services and include a return on investment commensurate with the regulatory and commercial risks involved;

   (ii) allow multi-part pricing and price discrimination when it aids efficiency;

   (iii) not allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher; and
(iv) provide incentives to reduce costs or otherwise improve productivity.

(c) Where merits review of decisions is provided, the review will be limited to the information submitted to the original decision-maker except that the review body:

(i) may request new information where it considers that it would be assisted by the introduction of such information;

(ii) may allow new information where it considers that it could not have reasonably been made available to the original decision-maker; and

(iii) should have regard to the policies and guidelines of the original decision-maker (if any) that are relevant to the decision under review.
Access regimes have been established in a number of industries. This appendix outlines the key features of access regimes in the gas, electricity, rail, telecommunications, and grain handling and storage industries, and access arrangements for ports and airports.

C.1 Gas access regime

The national gas access regime facilitates the development and operation of a national market for natural gas and establishes the rights and obligations of pipeline operators and users in relation to access to gas transmission and distribution pipelines.

Natural gas pipelines provide haulage (transport) and storage services for natural gas users and producers. Access is based on the premise that gas transmission and distribution pipelines play a critical role in promoting effective competition in the gas market. That is, for new sources of gas production to enter the market, access to pipelines is needed.

Legislative framework

The National Gas Law (NGL) and the National Gas Rules (NGR) establish the access regime for gas transmission and distribution pipelines. The NGR took effect on 1 July 2008, replacing the National Third Party Access Code for Natural Gas Pipeline (the Gas Code). The NGL is made under the National Gas (South Australia) Act 2008 and implemented through application laws within each Australian jurisdiction.

Coverage

The national gas access regime applies to the services of transmission and distribution pipelines used for the haulage of natural gas. A service means a service provided by means of a covered pipeline.\(^78\) Generally, gas pipelines that are covered by the regime are those that have natural monopoly characteristics and meet the coverage test of the regime. The coverage decision is made by the relevant state or federal Minister on recommendation by the National Competition

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\(^78\) Characteristically, gas transmission pipelines exhibit significant economies of scale. It is generally cheaper to expand an existing pipeline than it is to build a new pipeline. These characteristics mean that there is rarely any incentive for pipeline owners to invest in speculative spare capacity and for this reason; the gas transmission pipelines are subject to access regulation. See s. 15 of the NGL for coverage criteria and Part 4 of the NGR for the coverage process.
Access arrangements

The gas access regime requires owners or operators of pipelines covered by the Code to submit and agree on an upfront access arrangement with the regulator. The Australian Energy Regulator (AER) is the economic regulator of gas transmission and distribution pipelines and makes a decision whether to approve or not approve access arrangements.

The pipeline operator’s access arrangement sets out the standard terms, conditions and processes governing access to the pipeline by a third party. Specifically, the pipeline operator’s access arrangement must include both price and non-price terms including: a description of the services to be offered; reference tariffs consistent with the pricing principles in the rules; a queuing policy such as rules for allocating spare and future capacity; an extension and expansion process; capacity trading arrangements; and review and expiry dates of the access arrangement, including trigger events.

Once an access arrangement has been approved, third parties can gain access to reference services on the terms and conditions set out in the access arrangement. Parties are free, however, to negotiate around the reference tariffs. The gas access regime also provides for judicial and merits reviews.

The national gas access regime also contains a number of features aimed at encouraging investment, namely, the greenfields pipeline incentive and a new light handed regulatory regime. The greenfields pipeline incentive effectively provides for an access holiday. Before a new (greenfields) pipeline is commissioned, a service provider may apply to the NCC for a 15-year no-coverage determination, which means the pipeline remains uncovered for 15 years from commissioning. The NGL also introduced a light regulation option which avoids upfront revenue and price regulation and means that service providers of covered pipelines are not required to submit an access agreement. Light regulation is targeted at pipelines with a small number of users who have countervailing market power.

C.2 Electricity access regime

The National Electricity Market (NEM) is the market for the wholesale supply and purchase of electricity in participating jurisdictions together with an access regime to facilitate access to the transmission and distributions networks within participating jurisdictions.  

79 Providers of pipelines offer gas transportation services to third parties via access contracts. Typically, a party negotiates a long-term bilateral contract with the operator, which sets out the conditions of use. A contract typically features a maximum daily quantity allocation and sets a capacity charge, which must be paid regardless of the amount of gas a customer transports on the pipeline. To assist pipeline customers, the Gas Rules require pipeline operators to develop access arrangements that set out terms and conditions of access.

80 Two jurisdictions have electricity markets that are not interconnected with the National Electricity Market, namely Western Australia and the Northern Territory.
Legislative framework

Access to Australian electricity networks (transmission and distribution) was originally facilitated by the National Electricity Code. However in June 2005, the National Electricity Code was subsumed by the National Electricity Law (NEL) and National Electricity Rules (NER). The NEL is contained in a schedule to the National Electricity (South Australia) Act 1996 and is applied as law in each participating jurisdiction of the NEM by application statutes, for example the National Electricity (Victoria) Act 2005. The AER is responsible for the economic regulation of electricity transmission and distribution networks while the Australian Energy Market Commission (AEMC) is responsible for rule making and market development.81

Coverage

There is no equivalent to the gas coverage test in the electricity regime. All transmission and distribution networks that form part of the NEM (as defined in the NEL) are subject to the NER. These Rules include a set of rules and processes for providing connection to a transmission or distribution network and access to the networks forming the national grid to generators and customers. The NER also set out the issues to be considered by regulators in setting prices.82

In terms of price regulation, chapter 6A (economic regulation of transmission services) of the NER applies to all Transmission Network Service Providers (TNSPs). The NER require the AER to determine a revenue cap for prescribed transmission services and negotiated transmission services,83 which sets the maximum allowable revenue a network provider can earn during a regulatory period. However, in the case of distribution services, for the purposes of price control, the AER must first classify a ‘distribution service’ as a ‘direct control service’ for which a revenue determination would apply. An unclassified distribution service is not regulated under the NER.

Access arrangements

The national electricity regime requires both transmission and distribution network providers to provide access (interconnection) on terms and conditions that are consistent with the NER.84 Access disputes are subject arbitration processes as defined in the NER. Both the gas and electricity access regimes have similar objects and pricing principles clauses to help guide the regulator in approving access arrangements.

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81 The AER is established by Part IIIAA of the TPA. The AEMC is established by the Australian Energy Market Commission Establishment Act 2004 of South Australia.
82 See chapter 5 of the NER for access issues and chapter 6 for pricing issues. Available at www.aemc.gov.au.
83 See chapter 10 of the NER.
84 Upon application, a TNSP must provide transmission services on terms and condition that are consistent with chapters 4 (power system security), 5 (network connection) and 6A (economic regulation of transmission) of the NER. For distribution network providers, access must be provided on terms and conditions that are consistent with chapters 4-7 of the NER.
C.3 Rail access regime

The provision of most rail track (‘below rail’ infrastructure) in Australia is subject to the National Access Regime (established by Part IIA of the Trade Practices Act 1974) with the inter-state rail network\(^{85}\) specifically covered by an ACCC approved access undertaking. Most intra-state rail networks however are covered by state-based access regimes.

*Legislative framework*

Table 1 summarises the various rail access regimes in place with Australia.

<table>
<thead>
<tr>
<th>State &amp; regulator</th>
<th>Legislation &amp; manner in which access is established</th>
<th>Role of regulator</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales – Independent Pricing and Regulatory Tribunal</td>
<td><em>Transport Administration Act 1988; access undertaking</em></td>
<td>Considers access undertakings submitted by service providers. Approves reference tariffs and terms and conditions of access. Arbitrates in access disputes.</td>
</tr>
<tr>
<td>Queensland – Queensland Competition Authority</td>
<td><em>Queensland Competition Authority Act 1998; access undertaking</em></td>
<td>Considers access undertakings submitted by service providers. Approves reference tariffs and terms and conditions of access. Arbitrates in disputes.</td>
</tr>
<tr>
<td>South Australia - Essential Services Commission of South Australia</td>
<td><em>Railways (Operations and Access) Act 1997; legislated access regime</em></td>
<td>Establishes principles for the calculation of floor and ceiling prices and information and reporting requirements. Monitors costs of an access provider. A separate arbitrator is appointed to arbitrate in disputes.</td>
</tr>
<tr>
<td>Victoria – Essential Services Commission</td>
<td><em>Rail Corporations Act 1996 and Declaration Orders; access arrangement</em></td>
<td>Assesses access arrangements from service providers. Develops guidelines on regulatory accounting, ring fencing, capacity use, network management, access pricing methodologies. Arbitrates in access disputes.</td>
</tr>
<tr>
<td>Western Australia - Economic Regulation Authority</td>
<td><em>Railways (Access) Act 1998; legislated access regime</em></td>
<td>Approves pricing principles and reviews floor and ceiling costs. Commercial arbitration.</td>
</tr>
<tr>
<td>Interstate rail network (ARTC) – Australian Competition and Consumer Commission</td>
<td><em>Trade Practices Act 1974 (Part IIA); access undertaking</em></td>
<td>Assesses voluntary access undertakings from service providers. Approves terms and conditions of access. Arbitrates in disputes.</td>
</tr>
</tbody>
</table>

\(^{85}\) The interstate rail network connects the mainland capital cities via standard gauge track linking Kalgoorlie in Western Australia, Adelaide, Wolseley and Crystal Brook in South Australia, Melbourne and Wodonga in Victoria and Broken Hill, Cootamundra, Albury, Macarthur, Moss Vale, Unanderra, Newcastle (to the Queensland border) and Parkes in New South Wales.
Coverage
Each rail access regime determines coverage, that is, what rail services the access regime applies to either explicitly through the legislation or through a state-based declaration process (as in Queensland and Victoria).

Access arrangements
In general, most state based rail access regimes adopt a negotiate-arbitrate negotiation framework, supported by some form of access undertaking or arrangement that specifies the terms and conditions of access.86 The majority of rail access undertakings address similar matters, including:

- the definition of reference services
- a process for negotiating access
- a dispute resolution process
- detailed methodologies, processes or principles for determining access prices
- a proforma standard access agreement
- network management protocols
- capacity expansions and interconnection processes and
- performance indicators, service quality standards and/or public reporting frameworks.

The criteria and processes for the regulator to approve access undertakings and arrangements are similar across jurisdictions. The regulator must have regard to the legitimate business interests of the access provider or owner; the interests of persons who may seek access and the public interest.

In terms of pricing, most rail access regimes either adopt explicit reference tariffs and/or a floor–ceiling approach to provide guidance on the appropriate access price or price boundaries.87

C.4 Telecommunications access regime
The telecommunications access regime was introduced in 1997 to promote competition in the telecommunications industry and facilitate access to the incumbent’s (that is, Telstra’s) network and increase the number of service providers and carriers.

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86 The aim of an access undertaking is to facilitate negotiation of an access contract. The undertaking sets out the contractual terms and conditions for accessing the service in question (in the case of rail, this is track capacity or train paths).

87 The floor represents the incremental cost of providing the service while the ceiling represents the stand alone or economic cost of providing the service.
**Legislative framework**

Part XIC of the Trade Practices Act 1974 establishes the access regime for the telecommunications industry. Part XIC is an industry-specific access regime and was established to promote the long term interests of end users.

**Coverage**

The telecommunications access regime does not apply to all telecommunications services. Rather the ACCC must first ‘declare’ the relevant service (Division 2 of Part XIC of the Act). Before it declares a service, the ACCC must hold a public inquiry and give access providers, access seekers and consumers the opportunity to comment. There are four main aspects to the regime, namely declaration of a service, model terms and conditions, arbitration of access disputes and access undertakings.

**Access arrangements**

Once a service is declared, an access provider is subject to standard access obligations (SAOs) which require the access provider to:

- supply the service to other carriers
- ensure that quality and the fault handling of the service provided to other carriers is equivalent to that which it provides itself and
- allow interconnection.

The access provider must provide the SAOs either via a commercially negotiated contract or in accordance with an access undertaking which an access provider may submit to the ACCC for approval. Where the access provider and access seekers are unable to agree on the terms and conditions of access to a declared service, the ACCC is required to arbitrate.

When the ACCC declares a service, it also must provide pricing principles and model terms and conditions of access to help facilitate the access process. Pricing principles state the general approach the ACCC will take to pricing and in the event of arbitration, the ACCC must have regard to those pricing principles.

**C.5 Grain and wheat storage and handling access regime**

There is currently a federal and one state-based (Victorian) access regime for grain and wheat storage and handling.

**Commonwealth wheat access regime**

On 1 July 2008 the *Wheat Export Marketing Act 1998* (Cwth) came into operation. This Act establishes a system for accrediting exporters of bulk wheat. Under the

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88 Part XIB of the Trade Practices Act 1974 sets out the competition and conduct provisions for the telecommunications industry.

system, to gain accreditation to export wheat, exporters who own or operate port terminal services must pass an access test relating to each of those services.

The access test requires an export marketer providing one or more port terminal services for wheat export to have a formal access undertaking in place. This access undertaking is assessed by the ACCC under the requirements of Part IIIA of the Trade Practices Act 1974. The access test is also satisfied when a state-based access regime in relation to port access has been certified as being ‘effective’ under Division 2A of Part IIIA of the Trade Practices Act 1974.

Victorian grain access regime

The Grain Handling and Storage Act 1995 establishes an access regime applying to declared export grain terminals in Victoria. Third party access regulation is intended to ensure that the control of key infrastructure facilities is not used to undermine competition in upstream and downstream industries and that consumer interests are protected.90

The Victorian grain access regime provides for two forms of access regulation:

- A default negotiate-arbitrate regime where the access provider is required to provide access to those services to access seekers on fair and reasonable terms and conditions. Once it receives a request for access, it must make a formal proposal of terms and conditions within 20 working days of receiving a request. The Essential Services Commission requires each access provider, through its Guidelines, to publish its standard terms and conditions of access on its website as well as provide certain financial statements relating to regulated activities. Where a dispute arises between an access seeker and an access provider in relation to access to prescribed services, the access seeker can apply to the Commission to resolve the dispute.

- Alternatively, the Act provides for each access provider to submit a light handed access undertaking to the Commission for approval. Under this option, the Commission’s role is confined to approving the undertaking, and ensuring that it is complied with. At the present time, no access undertakings have been approved by the Commission, and the default negotiate/arbitrate access regime applies to all of the regulated facilities.

If the Victorian access regime were repealed, or was not certified as an effective state-based regime, wheat exporters would be required by the access test under to lodge proposed access undertakings under the Commonwealth regime by 1 October 2009.

C.4 Port access arrangements

Only three access regimes exist in relation to ports within Australia (excluding grain facilities).

90 Under the Act, access regulation covers the services of moving, inspecting, testing, stock control (including marshalling, storing and management), weighing, elevating and loading grain insofar as these services facilitate the export shipping of grain in the ports of Geelong, Portland and Melbourne.
South Australia

Access to port services in South Australia was introduced via the Maritime Services (Access) Act 2000. The access regime is a negotiate-arbitrate regime and applies only to regulated services such as services facilitating access to the port, certain berths, loading and unloading facilities and bulk handling facilities. The Act provides for access to occur on fair commercial terms. This means the access provider is to provide regulated services on terms agreed to between the access provider and the customer or as determined by arbitration.

The access regime is set out in Part 3 of the Act, which explicitly sets out a process for negotiating access. Access seekers must seek information from the infrastructure service provider relating to current utilisation levels of relevant facilities, technical requirements of use, rules of use (such as safety requirements) and price information. The regulator (the Essential Services Commission of South Australia) also issues a number of information guidelines to facilitate the access process. Where a dispute arises, the matter is referred first to conciliation and, failing that, to arbitration. The processes surrounding dispute resolution are outlined in the Act.

Victoria

While economic regulation in the form of price monitoring applies to four of Victoria’s ports (Melbourne, Portland, Geelong and Hastings), the only access regime in relation to port facilities within Victoria is the Victorian Channel Access Regime. The Commission is the economic regulator in Victoria.

Part 3 of the Victorian Ports Service Act 1995 establishes the regime, which applies to channels declared by the Governor in Council by Order. However, to date no channels have been declared and as a result, the access regime has not been implemented.

Section 59 of the Act sets out the access obligations of channel operators in the event of declaration of channel services. Under this section, the channel operator would be required to provide access on fair and reasonable terms and conditions and use all reasonable endeavours to meet the requirements of a person seeking access to prescribed channels. It would have to make a formal proposal of terms and conditions within 30 business days of receiving a request for access, or within such reasonable lesser period as is fixed by the Commission. Sections 60 and 61 of the Act give an access seeker the right to request a determination from the Commission on the terms and conditions on which access is to be provided.

Queensland

Part 5 of the Queensland Competition Authority Act 1997 sets out a general third party access regime applying to declared services in Queensland. Only one port has been declared for access, the Dalrymple Bay Coal Terminal, which is a common user coal export terminal located in central Queensland. Under the

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Queensland access regime, declaration forces the access provider to submit an access undertaking to the regulator (the Queensland Competition Authority) for approval. An access undertaking sets out access terms and conditions and certain obligations on the infrastructure service provider relating to negotiation of terms and conditions.

The access regime provides for recourse to mediation or arbitration in the event of an access dispute. Ultimately, the terms and conditions for access will be embodied in an access agreement between the infrastructure service provider and the access seeker. However, the parties to an access agreement may agree to terms and conditions of access other than those in an approved undertaking.

C.5 Airports access arrangements

Before 2002, all capital city and some regional airports were subject to price regulation (by price caps). However, following a Productivity Commission review, the Australian Government removed direct price regulation and introduced price monitoring via Part VIIA of the Trade Practices Act 1974 in respect of charges for aeronautical and related services at Adelaide, Brisbane, Canberra, Darwin, Melbourne, Perth and Sydney Airports.

If monitoring indicates that further investigation is required, then under Part VIIA, the Government can direct the ACCC to undertake a public inquiry. Potentially, this could lead to the reintroduction of stricter price controls.

In introducing price monitoring, the Government left open the option for airlines to seek ‘declaration’ of airports under the Part IIIA national access regime when commercial agreements cannot be reached. Hence the monitored airports are potentially subject to the Part IIIA national access regime.

Declaration application by Virgin Blue

On 9 December 2005, the Australian Competition Tribunal (ACT) handed down a determination in favour of Virgin Blue, against a decision of the Parliamentary Secretary to the Treasurer not to declare domestic airside services at Sydney Airport. The Tribunal found that increased access to airside services would promote competition in the market for the carriage of domestic air passengers into and out of Sydney. Following the determination, domestic airside services at Sydney Airport were declared for five years from 9 December 2005. 93

Virgin Blue notified the ACCC of an access dispute with Sydney Airport Corporation Limited (SACL) on 29 January 2007 under Part IIIA and arbitration commenced in February 2007. The dispute related to the level of, and methodology for, calculating the price SACL was charging Virgin Blue for using airside services at Sydney airport. Virgin Blue withdrew its dispute with SACL in May following negotiated commercial settlement of the dispute.

93 Airside services include landing, takeoff and movement between runways and passenger arrival and departure gates.