

Level 2, 35 Spring St Melbourne 3000, Australia Telephone +61 3 9651 0222 +61 1300 664 969 Facsimile +61 3 9651 3688

INQUIRY INTO AN ACCESS REGIME FOR WATER AND SEWERAGE INFRASTRUCTURE SERVICES

FINAL REPORT VOLUME III: SUPPLEMENTARY MATERIAL

SEPTEMBER 2009

An appropriate citation for this paper is:

Essential Services Commission 2009, *Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Final Report, Volume III: Supplementary Material*, September.

© Essential Services Commission. This publication is copyright. No part may be reproduced by any process except in accordance with the provisions of the Copyright Act 1968 and the permission of the Essential Services Commission.

STRUCTURE OF THE FINAL REPORT

The Commission's final report on its inquiry into developing a state-based access regime for water and sewerage infrastructure services is set out in three volumes:

- The first volume sets out the Commission's findings and its recommendations to the Minister for Finance.
- The second volume provides a comprehensive explanation of the Commission's analysis and findings. It elaborates on the reasoning behind its recommendations and discusses responses received from stakeholders.
- This volume comprises supplementary material set out in appendices to the report. These appendices provide background information and more technical analyses related to several issues covered in the second volume.

The three volumes are all available on the Commission's website www.esc.vic.gov.au. The Commission's issues paper, its presentation to the public hearing on 15 July 2009, submissions to the issues paper and draft report, and a report prepared by Deloitte on functional separation are also available on its website.

CONTENTS

Abbreviatio	Abbreviations		
Appendix A	Terms of reference	1	
Appendix B	Commission's role and legislative framework	8	
B.1	The Commission's regulatory objectives	8	
B.2	Regulation of third party access regimes	9	
B.3	Regulation of the water industry	9	
Appendix C	Consultation process for the inquiry	12	
Appendix D	Examples of access	15	
Appendix E	Existing regulatory framework for third party access	29	
E.1	Private negotiation of access	29	
E.2	State-based access regime	30	
E.3	National Access Regime	32	
E.4	Certification criteria	37	
Appendix F	Competition Principles Agreement – clause 6 principles	39	
Appendix G	Competition and Infrastructure Reform Agreement	44	
Appendix H	Access pricing approaches	51	
H.1	Cost of service approach	51	
H.2	Retail minus approach	52	
H.3	Some technical issues in calculating access prices	53	
Appendix I	Access regimes in other jurisdictions and other industries	56	
I.1	Water industry access regimes in other jurisdictions	56	
1.2	Water industry reform in other Australian States	63	
I.3	Access regimes in other Australian industries	64	

ABBREVIATIONS

ACCC	Australian Competition and Consumer Commission
AER	Australian Energy Regulator
COAG	Council of Australian Governments
the Commission	Essential Services Commission (Victoria)
ERA	Economic Regulation Authority (Western Australia)
ESC Act	Essential Services Commission Act 2001 (Vic)
IPART	Independent Pricing and Regulatory Tribunal (NSW)
NCC	National Competition Council
ТРА	Trade Practices Act 1974 (Cth)
VicWater	Victorian Water Industry Association
Water Industry Act	Water Industry Act 1994 (Vic)
WIRO	Water Industry Regulatory Order 2003 (Vic)

WATER AND SEWERAGE ABBREVIATIONS INFRASTRUCTURE SERVICES ACCESS REGIME INQUIRY

APPENDIX A TERMS OF REFERENCE

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE INFRASTRUCTURE SERVICES REFERENCE ACCESS REGIME INQUIRY

APPENDIX A TERMS OF



Minister for Finance



Level 26, 121 Exhibition Street Melbourne Victoria 3000 GPO Box 4509 Melbourne Victoria 3001 Australia Telephone: (+61 3) 8684 8000 Facsimile: (+61 3) 8684 8014

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.

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

TIM HOLDING MP Minister for Finance, WorkCover and the Transport Accident Commission. Date:

APPENDIX B COMMISSION'S ROLE AND LEGISLATIVE FRAMEWORK

The Commission is Victoria's independent economic regulator of essential services supplied by the water and sewerage industry. The Commission also regulates the ports, grain handling and rail freight industries and aspects of the retail energy (electricity and gas) industries. The services provided by these sectors are among the most important contributors to the social and economic wellbeing of all Victorians.

In addition to its regulatory decision making role in these sectors, the Commission provides advice to the Victorian Government on a range of regulatory and other matters. It is also responsible for developing and administering the Victorian Renewable Energy Target and the Victorian Energy Efficiency Schemes.¹

B.1 The Commission's regulatory objectives

The Essential Services Commission Act 2001 (ESC Act) 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, guality 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.

In regulating the water sector, the Commission is also guided by the regulatory objectives set out in the Water Industry Act 1994. These additional objectives require the Commission to ensure that:

wherever possible, the costs of regulation do not exceed the benefits

Further information about the Commission's role and current work program is available on the Commission's website www.esc.vic.gov.au.

- 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.

B.2 Regulation of third party access regimes

Part 3A of the ESC Act 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 ESC Act includes pricing principles for determining regulated access prices (box B.1).

Box B.1 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.

B.3 Regulation of the water industry

The Water Industry Regulatory Order (WIRO) made by the Governor in Council under the Water Industry Act 1994 sets out the detailed framework within which the Commission makes decisions on the water businesses' pricing and service standard proposals.

The WIRO requires the Commission to approve or specify the price arrangements to apply to each of the water businesses for each regulatory period. The Commission must approve the price arrangements if it is satisfied that the prices or the manner in which prices are to be calculated or otherwise determined have been developed in accordance with the procedural requirements and comply with the regulatory principles outlined in the WIRO. Alternatively, the Commission may specify the prices that a business may charge or the manner in which those prices are to be calculated or otherwise determined if it is not satisfied that the arrangements proposed in the Water Plan were developed in accordance with the procedural requirements and comply with the regulatory principles.

The procedural requirements include the need for businesses to consult with customers and relevant regulatory agencies before submitting the Water Plan to the Commission for assessment. The WIRO sets out a number of regulatory principles with which the businesses must comply in proposing prices and the Commission must comply in approving prices for water and sewerage services (box B.2).

The Commission has undertaken four independent reviews of water prices. It completed price reviews in June 2005 for 17 metropolitan and regional businesses providing urban services and in June 2006 for five businesses providing rural services. In its 2008 price review, the Commission determined prices for the then 16 regional businesses servicing rural and urban customers and for Melbourne Water's drainage and waterways services. In its 2009 price review, it determined prices for the three metropolitan retail businesses and for Melbourne Water's bulk water and sewerage services. The Commission's final decisions and Determinations for each water businesses are available on its website www.esc.vic.gov.au.

WATER AND SEWERAGE INFRASTRUCTURE SERVICES ROLE AND LEGISLATIVE ACCESS REGIME INQUIRY

Box B.2 WIRO pricing principles

Clause 14(1) of the WIRO requires the Commission to be satisfied that prices are set so as to:

(i) 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;

(ii) allow the regulated entity to recover its operational, maintenance and administrative costs:

(iii) allow the regulated entity to recover its expenditure on renewing and rehabilitating existing assets;

(iv) allow the regulated entity to recover:

(A) 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;

(B) all costs associated with existing debt incurred to finance expenditure prior to 1 July 2006, in a manner determined by the Minister at any time before 1 July 2006;

(v) 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;

(vi) provide incentives for the sustainable use of Victoria's water resources by providing appropriate signals to water users about:

(A) the costs of providing services, including costs associated with future supplies and periods of peak demands and or restricted supply; and

(B) choices regarding alternative supplies for different purposes;

(vii) take into account the interests of customers of the regulated entity, including low income and vulnerable customers;

(viii) provide the regulated entity with incentives to pursue efficiency improvements and to promote the sustainable use of Victoria's water resources; and

(ix) 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.

Source: Water Industry Regulatory Order, clause 14(1).

APPENDIX C CONSULTATION PROCESS FOR THE INQUIRY

In undertaking its regulatory and review functions, the Commission aims to be open and transparent and to consult widely with stakeholders. The Commission's general approach to consultation is set out in its Charter of Consultation and Regulatory Practice (available on the Commission's website www.esc.vic.gov.au)

Consultation with the water businesses, community groups, potential access seekers, and other interested parties has formed an important part of the inquiry process. The Commission's consultation process for the inquiry included:

- An issues paper On 20 February 2009, the Commission commenced its consultation process for this inquiry with the release of an issues paper. The paper identified the key issues that the Commission would consider in addressing the terms of reference and providing recommendations to the Government on developing an access regime for the Victorian water industry. It highlighted specific issues on which the Commission was seeking feedback from stakeholders and invited comments on any issue related to the terms of reference. Fifteen submissions were received (table C.1).
- A draft report The Commission's draft report was released on 5 June 2009. The report set out the Commission's draft recommendations for comment, the reasoning behind its recommendations, and requests for further information to assist it in finalising its recommendations and report to the Minister. Twenty submissions were received (table C.2).
- Two public hearings On 4 May 2009, the Commission held a public meeting to discuss stakeholder feedback on the key issues for the inquiry. The Commission held a second public hearing on 15 July 2009 to receive stakeholder feedback on its draft recommendations and to obtain further information on matters discussed in the draft report.
- Stakeholder meetings The Commission met with several water businesses and community groups to discuss issues relevant to the inquiry and to obtain further information.

In line with its charter, the Commission kept stakeholders informed during the course of the inquiry through regular website updates (www.esc.vic.gov.au) and its newsletter Essential Water News. The Commission's issues paper, draft and final reports, submissions, and its presentation at the July public hearing are all available on its website.

The Commission also consulted with relevant Victorian Government departments, including the Departments of Human Services, Sustainability and Environment, and Treasury and Finance. In addition, it held discussions with the National Competition Council (NCC) to assist it in better understanding the NCC's guidance

WATER AND SEWERAGE ACCESS REGIME INQUIRY

on the requirements for certification of access regimes. It has also discussed the approach to establishing an access regime and outcomes to date with Ofwat, the regulator of the United Kingdom's water industry, and with the Independent Pricing and Regulatory Tribunal in New South Wales.

	Date received
G21 Geelong Region Alliance	30/03/2009
Yarra Valley Water	07/04/2009
Barwon Water	14/04/2009
VicWater	14/04/2009
Central Highlands Water	14/04/2009
City West Water	14/04/2009
South East Water	14/04/2009
GWMWater	14/04/2009
Department of Human Services	15/04/2009
Coliban Water	15/04/2009
Jemena	16/04/2009
Melbourne Water	16/04/2009
Consumer Utilities Advocacy Centre	20/04/2009
Southern Rural Water	21/04/2009
Western Water	21/04/2009

Table C.1 Submissions to the issues paper

Table C.2 Submissions to the draft report

	Date received
Anthony McMahon (commercial-in- confidence)	24/06/2009
Rod Gent	30/06/2009
Maurice Schinkel	22/07/2009

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE ACCESS REGIME INQUIRY

APPENDIX C CONSULTATION INFRASTRUCTURE SERVICES PROCESS FOR THE INQUIRY

	Date received
Goulburn-Murray Water	27/07/2009
Barwon Water	27/07/2009
Gippsland Water	27/07/2009
Coliban and Central Highlands Water Joint Venture	27/07/2009
Jemena	27/07/2009
North East Water	27/07/2009
Central Highlands Water	27/07/2009
Victorian Water Industry Association	27/07/2009
Wendy Ambler	27/07/2009
South East Water	27/07/2009
GWMWater	27/07/2009
City West Water	28/07/2009
Melbourne Water	28/07/2009
Yarra Valley Water	28/07/2009
Coliban Water	29/07/2009
Goulburn Valley	30/07/2009
Consumer Utilities Advocacy Centre, Consumer Action Law Centre and Victorian Council of Social Services	04/08/2009

WATER AND SEWERAGE APPENDIX C CONSULTATION INFRASTRUCTURE SERVICES PROCESS FOR THE INQUIRY ACCESS REGIME INQUIRY

A range of water and sewerage services could be provided by businesses entering the potentially competitive segments of the supply chain for water and sewerage services. Competition from new businesses entering these segments would promote innovation in: new methods of providing services at lower cost; improving security and reliability of supply; or new services that better meet customers' demands and preferences.

This appendix describes a series of examples of third party participation in supplying water and sewerage services to clarify the types of activities that would require access to natural monopoly infrastructure services and those that would occur without access to such services. To assist in describing these activities and to illustrate the infrastructure to which access might be required, simplified diagrams of segments of the water supply system are included.

It should be noted that the businesses supplying the services described in the examples could be private businesses entering the water industry or existing water businesses currently restricted to other service areas. For simplicity, the examples generally assume that the natural monopoly infrastructure shown in the diagrams is owned and operated by an incumbent water business. Access could, however, be required to the services provided by natural monopoly infrastructure owned and operated by a private infrastructure operator.

WATER AND SEWERAGE APPENDI INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY

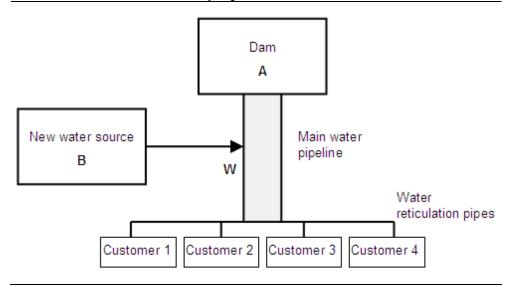
Example 1: Water provision from a new water source—without access

This example is illustrated in figure D.1. A new business establishes a new water source at **B**, for example by discovering an aquifer and sinking a bore to extract the water (after obtaining the required permits). An incumbent water business owns and operates the main water pipeline and network of water reticulation pipes shown in figure D.1. The new business enters into a contract with the water business to sell it water from the new water source. The water business then sells the water to its customers (customers 1-4).

The new business builds a pipeline connecting the new water source at **B** into the main water pipeline at **W**. The water business moves the water from the interconnection point at **W** along the main water pipeline and delivers the water to its customers through the connecting network of water reticulation pipes.

In this example, the new business does not need to use any of the water business' pipelines. It uses its own water pipeline to move water to its customer, which is the water business, and injects the water into the water business' pipeline at the interconnection point. This example does not, therefore, involve access. It is an example of a water purchase by the water business.

Figure D.1 Example of a new water source—with no access to natural monopoly infrastructure services



WATER AND SEWERAGE APPEND INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY

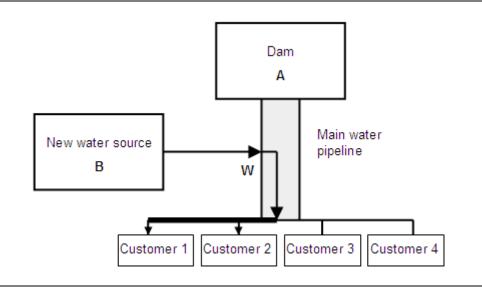
Example 2: Water provision from a new water source—with access

This example is illustrated in figure D.2. As in the first example, a new business establishes a new water source at **B** (such as a new aquifer). But, instead of entering an arrangement to sell the water to the incumbent water business, it offers supply water directly to customers 1 and 2 (who could be residential or non-residential customers). The new business could either supply customers 1 and 2 with all their water needs, or it could provide additional water to that already supplied by the water business (for example, when potable water restrictions are in place).

In this example, the new business needs to move the water from its water source to the properties of customers 1 and 2. It builds a pipeline from its water source at **B** and connects into the main water pipeline at **W**. It then negotiates with the water business, which owns and operates the main water pipeline and reticulation pipes, to share the use of the pipeline and the reticulation pipes to transport the water to its customers' properties.

Without the use of the existing pipelines to transport the water, the new business would be faced with building a new main water pipeline and new reticulation pipes to the properties of customers 1 and 2 to transport the water to its customers. This example does, therefore, require access to natural monopoly infrastructure services.

Figure D.2 Example of a new water source—with access to natural monopoly infrastructure services



ESSENTIAL SERVICES COMMISSION VICTORIA

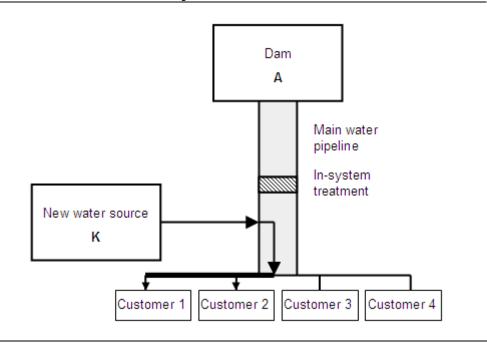
WATER AND SEWERAGE APPEND INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY

Example 3: Water provision from a new water source—with access and treatment by the access seeker

This example is illustrated in figure D.3. As in the second example, a new business (the access seeker) establishes a new water source at point **K** and enters arrangements to sell the water to customers 1 and 2. To transport the water from the new water source to its customers, the new business negotiates access with the water business to share the use of its main water pipeline and reticulation pipes.

In this example, however, the new business injects water from the new water source into the main water pipeline at a point downstream of an in-system treatment facility, which treats the water to a certain quality level (for example, to potable standard). As a condition of providing access to its infrastructure downstream of the in-system treatment facility, the water business requires the new water business to treat the water from the new water source to potable standard prior to injection into its main water pipeline. This is because the new business' water mixes with the water business' water after the water business has treated its water to the required standard for delivery to customers (that is, potable standard).

Figure D.3 Example of a new water source—with access to natural monopoly infrastructure services and treatment by the access seeker



ESSENTIAL SERVICES COMMISSION VICTORIA

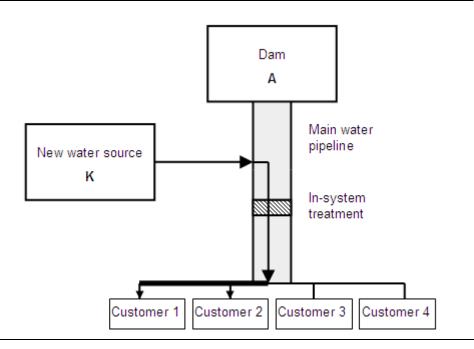
WATER AND SEWERAGE APPEND INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY

APPENDIX D EXAMPLES OF ACCESS

Example 4: Water provision from a new water source—with access and injection upstream of an in-system treatment facility

This example, which is illustrated in figure D.4, is the same as the previous example, except that the new business injects water from its new water source into the main water pipeline at an interconnection point upstream of an in-system treatment facility. As in example 3, the treatment facility treats the water to potable standard. Up to that point, the water has only been treated to chlorinated and disinfected standard. Treatment to this level occurs as the water leaves the dam.

Figure D.4 Example of a new water source—with access to natural monopoly infrastructure services and injection upstream of an in-system treatment facility



In example 3, the new water business was required to treat its water to potable standard since its interconnection point was downstream of the in-system treatment facility. In this example, the new business' water is mixed with the water business' water prior to treatment to potable standard. In this example, the new business' water would only have to be treated to chlorinated and disinfected standard prior to injection into the main water pipeline.

The new business would then have two options. It could treat its water to chlorinated and disinfected standard and pay the water business for treatment to potable standard. Or, subject to technical requirements, it could treat its water to potable standard prior to injection. Its choice would be a commercial decision based on comparing the costs of the two treatment options.

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE APPEND INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY

APPENDIX D EXAMPLES OF ACCESS

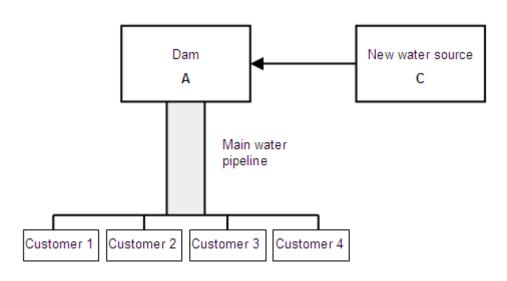
Example 5: Water provision from a new water source—with no access to natural monopoly infrastructure services

This example is illustrated in figure D.5. A new business establishes a new water source at **C**. In this example, the new water source is a desalination plant owned and operated by the new business. The desalination plant operator makes a contract to sell desalinated water to the incumbent water business, which owns and operates the main water pipeline. The water business then sells the water to its customers (customers 1–4).

The desalination plant operates on a continuous basis, producing desalinated water at a constant rate. However, the water business wants to use this water during summer when demand is high. Therefore, the desalination plant operator builds a pipeline from the desalination plant at **C** to the dam owned and operated by the water business. The water business stores the water in the dam before moving it along the main water pipeline and delivers the water to its customers through the connecting network of water reticulation pipes.

As in example 1, this example does not involve access to the water business' infrastructure. The desalination plant operator simply injects the water into the water business' dam (after moving it from the desalination plant along its own pipeline). This is another example of a water purchase by the water business, where the water business decides to store the water before delivering it to its customers.

Figure D.5 Example of a new water source—with no access to natural monopoly infrastructure services



ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE A INFRASTRUCTURE SERVICES A ACCESS REGIME INQUIRY

APPENDIX D EXAMPLES OF ACCESS

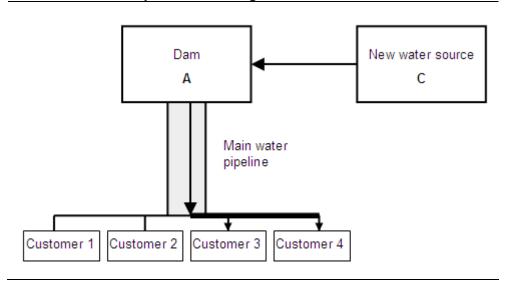
Example 6: Water provision from a new water source—with access to transport and storage services

This example is illustrated in figure D.6. As in example 5, a new business establishes a new water source by building and operating a desalination plant at **C**. In this example, however, the desalination plant operator makes a contract to supply water to customers 3 and 4, rather than selling the water to the incumbent water business. Customers 3 and 4 have peak demands and require different quantities of water at different times of the year. For example, customer 3 could be a local council that wants to buy water to maintain its parks and gardens during spring and summer. Consequently, the desalination plant operator, whose plant produces a constant supply of desalinated water over the year, needs to store some of the water during autumn and winter.

In order to meet its customers' needs, the desalination plant operator negotiates with the water business to use some of the storage capacity of the dam. It also makes an access arrangement with the water business for access to the transport services provided by its main water pipeline and reticulation pipes.

The desalination plant operator then builds a pipeline connecting its desalination plant into the dam and stores water in the dam until it needs to deliver it to its customers. The water is delivered to customers 3 and 4 using the main water pipeline and the reticulation pipes. This example involves access to the storage services provided by the dam as well as the transport services provided by the water business' pipelines.

Figure D.6 Example of a new water source—with access to transport and storage services



ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE APPEND INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY

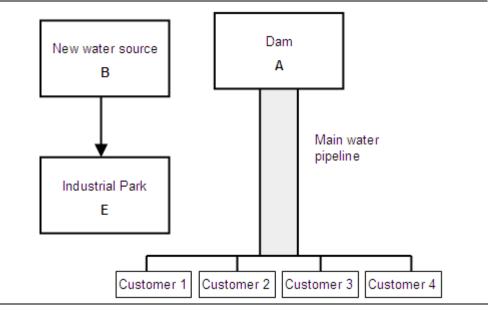
Example 7: Water provision from a new water source—with supply directly to an end-use customer without access to natural monopoly infrastructure services

This example is illustrated in figure D.7. The new business sells water from a new water source at **B** to industrial customers in an industrial park located at **E**. The new business builds a pipeline from its new water source directly to the industrial park and a network of reticulation pipes to each customer in the industrial park. The industrial park is a greenfields development that did not have any existing water infrastructure. The business does not use any infrastructure operated by the water business.

This is an example of direct private provision of water to retail customers, where access to an incumbent water business' infrastructure is not required.

The new water source at **B** could potentially be owned by a publicly owned water business that intends to extend its customer base by supplying the customers in the new industrial park which is located within the supply area of another incumbent water business (where permitted by legislation).

Figure D.7 Example of a new water source—with supply directly to an end-use customer without access to natural monopoly infrastructure services



WATER AND SEWERAGE APPEND INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY

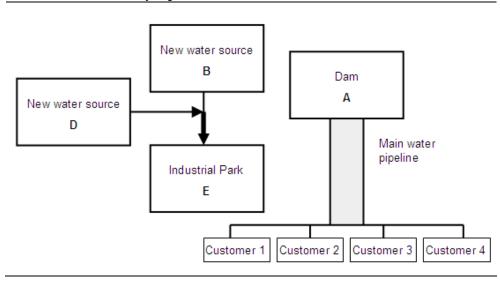
Example 8: Water provision from a new water source—with supply directly to an end-use customer without access to natural monopoly infrastructure services

This example, which is illustrated in figure D.8, is an extension of the example 7. After the first new business constructs its pipeline from its new water source at **B** to a greenfields industrial park development at **E**, a second new business establishes a second new water source at **D** (for example, a small desalination plant to treat brackish water that could not previously be used). The second new business then makes contracts to supply water to some of the industrial customers in the industrial park in competition with the first new business.

To deliver water to its customers in the industrial park, the second new business needs access to the main water pipeline and the network of reticulation pipes inside the industrial estate, which are both owned and operated by the first new business. After making access arrangements with the first business, the second new business builds a pipeline to connect its new water source at **D** into the first business' pipeline. The first business will earn revenue from the second business' access to its pipeline.

Where the first business is privately-owned, this would be an example of access to natural monopoly infrastructure owned and operated by a private business.

Figure D.8 Example of a new water source—with access to services provided by privately-owned natural monopoly infrastructure



ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE APPEND INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY

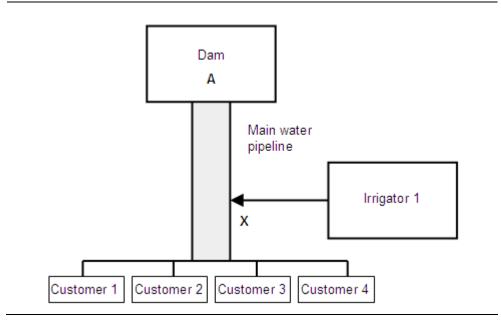
APPENDIX D EXAMPLES OF ACCESS

Example 9: Sale of water—with no access to natural monopoly infrastructure services

This example is illustrated in figure D.9. In this example, an irrigator (irrigator 1) decides to sell some or all of its water entitlement to an urban water business. The irrigator builds a pipeline or channel from its property to the main water pipeline interconnecting at **X**. This example assumes that the irrigator is delivered its water allocation from a different (rural) water business.

This example involves water trading (on-selling water to another purchaser, that is, the urban water business) and does not require access to the urban water business' infrastructure.

Figure D.9 Sale of water—with no access to natural monopoly infrastructure services



ESSENTIAL SERVICES COMMISSION VICTORIA

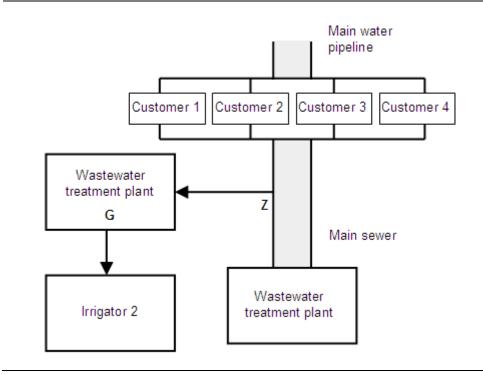
WATER AND SEWERAGE APPEND INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY

Example 10: Sewer mining—with no access to natural monopoly infrastructure services

This example is illustrated in figure D.10. A new business builds a new wastewater treatment plant at **G**. It makes a commercial agreement with an incumbent water business to extract a certain amount of sewage from the water business' main sewer at an interconnection (or off-take) point at **Z**. The new business builds a sewerage pipeline from the water business' main sewer to transport the sewage from the off-take point to its treatment plant. It then treats the sewage and sells recycled water to irrigator 2, transporting the recycled water to the irrigator along a pipeline that it owns and operates.

This is an example of sewer mining. The new business purchases sewage from the water business. It does not have to use the water business' infrastructure to transport the sewage to its treatment plant or use any of the water business' infrastructure to transport the recycled water to its customer. Sewer mining does not require access to natural monopoly infrastructure.

Figure D.10 Sewer mining—with no access to natural monopoly infrastructure services



ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE APPEND INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY

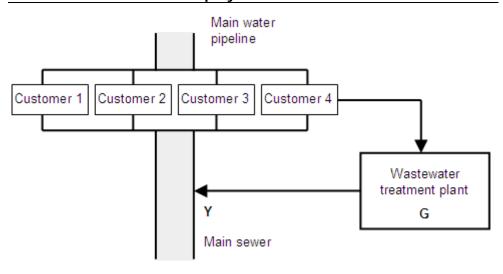
Example 11: Provision of sewerage services—with no access to natural monopoly infrastructure services

This example is illustrated in figure D.11. A new business establishes a wastewater treatment plant at **G**. It has a contract with customer 4 to provide sewerage services, for example, because the customer's sewage does not meet the incumbent water business' trade waste acceptance standards. The new business builds a sewerage pipeline connecting customer 4 to its treatment plant at **G**.

The new business treats the sewage at its wastewater treatment plant to remove contaminants until it meets the incumbent water business' trade waste acceptance standards. The new business then discharges the treated wastewater into a sewerage reticulation pipe that connects its property to the water business' main sewer at point **Y**. The water business transports the sewage along the sewerage reticulation pipe and the main sewer to its own treatment plant, where it treats it to the standard required for discharge into the environment (set by the Environment Protection Authority).

In this example, there is no access to monopoly infrastructure services. The new business provides a sewage treatment and disposal service to customer 4 but does not need to use the water business' infrastructure to provide this service. In disposing of the treated sewage, the new business is a sewerage customer of the water business. The water business uses its own sewerage reticulation pipe and main sewer (and other facilities) to provide sewerage services to the new business.

Figure D.11 **Provision of sewerage services—with no access to** natural monopoly infrastructure services



ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE A INFRASTRUCTURE SERVICES A ACCESS REGIME INQUIRY

Example 12: Contracting out the provision of sewage treatment no access to natural monopoly infrastructure services

This example also uses figure D.11. A new business establishes a wastewater treatment plant at point **G**.

In a modification of example 11, however, the incumbent water business enters into a contract with the new business to treat the sewage discharged by customer 4 to its general trade waste acceptance standards and then to discharge the treated sewage back into its sewerage network. Customer 4 remains the water business' customer and pays it for sewerage services. The water business pays the new treatment plant operator for treatment services.

This example does not involve access. It is an example of a water business contracting out the provision of a service (treatment of sewage) to a private operator on its behalf.

Example 13: Provision of sewage treatment services under a BOOT scheme—no access to natural monopoly infrastructure services

This example is the same as in example 12 except that the new business builds and operates the treatment plant under a Build, Own, Operate and Transfer (BOOT) arrangements with the incumbent water business. Again, this example does not involve access but is an example of a water business contracting out the provision of a service (treatment of sewage) to a private operator.

Example 14: Development of a new water source through a PPP no access to natural monopoly infrastructure services

Referring to figure D.5, this example differs from example 5 in that the desalination plant operator constructs the desalination plant under a public-private partnership (PPP) arrangement with the water business. The desalination plant operator has a contract with the water business to supply it with desalinated water. As with examples 12 and 13, this example does not involve access. It is an example of a water business contracting out the provision of a service (sourcing and supplying water) to a private operator.

A range of water and sewerage services could be provided by businesses entering the potentially competitive segments of the supply chain for water and sewerage services. Competition from new businesses entering these segments would promote innovation in: new methods of providing services at lower cost; improving security and reliability of supply; or new services that better meet customers' demands and preferences.

This appendix describes a series of examples of third party participation in supplying water and sewerage services to clarify the types of activities that would require access to natural monopoly infrastructure services and those that would occur without access to such services. To assist in describing these activities and to illustrate the infrastructure to which access might be required, simplified diagrams of segments of the water supply system are included.

WATER AND SEWERAGE APPENDI INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY It should be noted that the businesses supplying the services described in the examples could be private businesses entering the water industry or existing water businesses currently restricted to other service areas. For simplicity, the examples generally assume that the natural monopoly infrastructure shown in the diagrams is owned and operated by an incumbent water business. Access could, however, be required to the services provided by natural monopoly infrastructure owned and operated by a private infrastructure operator.

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE APPENDI INFRASTRUCTURE SERVICES ACCESS ACCESS REGIME INQUIRY

APPENDIX D EXAMPLES OF ACCESS

APPENDIX E

EXISTING REGULATORY FRAMEWORK FOR THIRD PARTY ACCESS

In industries characterised by natural monopoly infrastructure, it is more efficient for businesses requiring the use of that infrastructure (to provide services to their customers) to share the use of the existing infrastructure, instead of duplicating it for their own use. From a community perspective, duplicating natural monopoly infrastructure is wasteful of resources—those resources would be better used to provide other products or services required by the community.

There are three main pathways for businesses to make arrangements for sharing the use of natural monopoly infrastructure (that is, for obtaining access to the services provided by those infrastructure facilities):

- by negotiating an access agreement with the infrastructure provider through private negotiations
- · by applying for access under a state-based access regime, where such a regime has been established in respect of the infrastructure in question
- by applying for access under the national access provisions established by federal legislation.

E.1 Private negotiation of access

A business seeking to share the use of natural monopoly infrastructure (an 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 E.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.

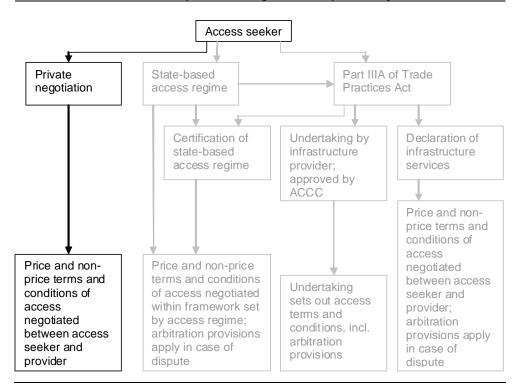
Further, where the infrastructure provider is a large incumbent business and the access seeker is relatively small and lacks detailed technical and market information and experience, negotiations may not occur on an equal basis. Under these circumstances, the access seeker may not be able to negotiate access on reasonable terms and conditions.

In addition, without a framework to guide negotiations or experience in previous access negotiations, private negotiations may require significant time and resources. In the event of dispute, the costs and delays involved in obtaining

WATER AND SEWERAGE INFRASTRUCTURE SERVICES REGULATORY FRAMEWORK ACCESS REGIME INQUIRY

APPENDIX E EXISTING FOR THIRD PARTY ACCESS access could be substantial for both the access seeker and the infrastructure provider.

Figure E.1 **Options for third party access to infrastructure** services—private negotiation pathway



To address concerns about the cost and effectiveness of private negotiation of access agreements, 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 the National Access Regime.

E.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 binding arbitration). The regime may also set out guidance on access terms and conditions, such as information provision, price guidance, or safety requirements.

The pathway to obtaining access through a state-based access regime is shown in figure E.2.

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE INFRASTRUCTURE SERVICES ACCESS REGIME INQUIRY

APPENDIX E EXISTING REGULATORY FRAMEWORK FOR THIRD PARTY ACCESS

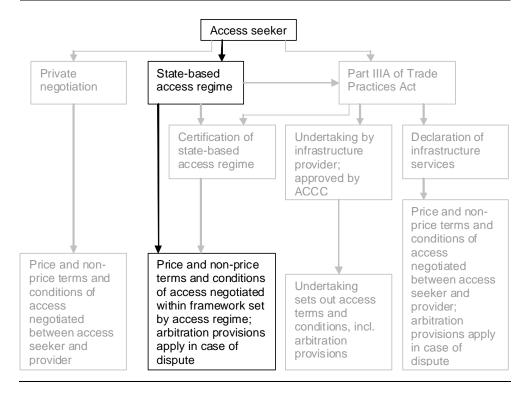


Figure E.2 **Options for third party access to infrastructure services—state-based regime pathway**

By establishing a clear and transparent framework for access seekers and infrastructure providers to negotiate access agreements, a state-based access regime could significantly reduce the time taken and cost incurred in providing access to natural monopoly infrastructure services. Giving access seekers a legal right to seek access, and requiring infrastructure providers to make available certain information related to access to their infrastructure, puts access seekers on a more equal footing with the infrastructure provider.

In addition, state-based regimes can be tailored to the specific circumstances of the state. This can improve certainty and reduce costs for access seekers and infrastructure providers.

Unless a state-based access regime has been certified under the national access provisions, an unsuccessful access seeker may seek to have an infrastructure service declared under those provisions. If an application for declaration were successful, the access seeker could then seek to obtain access under the National Access Regime.

While applying for certification is not mandatory, all state and territory governments have committed, under clause 2.9(b) of the Council of Australian Governments (COAG) Competition and Infrastructure Reform Agreement, to seek certification of significant third party access regimes.

WATER AND SEWERAGE INFRASTRUCTURE SERVICES ACCESS REGIME INQUIRY

APPENDIX E EXISTING REGULATORY FRAMEWORK FOR THIRD PARTY ACCESS

E.3 National Access Regime

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.²

The National Access Regime was established through amendments to the Trade Practices Act 1974 (TPA). 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.³

Part IIIA of the TPA provides three avenues for granting access to an infrastructure service:4

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

E.3.1 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 E.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.

WATER AND SEWERAGE INFRASTRUCTURE SERVICES REGULATORY FRAMEWORK ACCESS REGIME INQUIRY

APPENDIX E EXISTING FOR THIRD PARTY ACCESS

² Council of Australian Governments 1995, Competition Principles Agreement, 11 April 1995 (as amended to 13 April 2007).

See National Competition Council 2002, The National Access Regime: A Guide to Part IIIA of the Trade Practices Act 1974, Part A: Overview, Commonwealth of Australia, available at www.ncc.gov.au/pdf/DEGGeGu-001a.pdf.

⁴ 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.

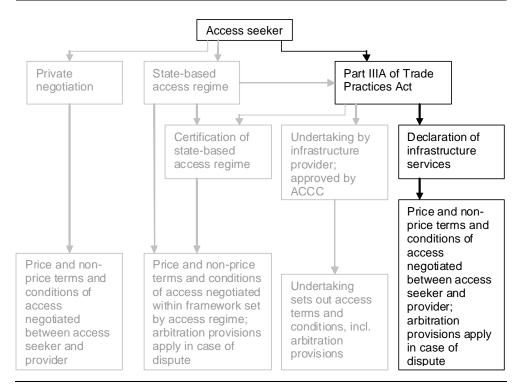


Figure E.3 **Options for third party access to infrastructure services**—declaration pathway

To have a particular infrastructure service declared, an access seeker must apply to the National Competition Council (NCC). The NCC considers the application before forwarding a recommendation to the relevant Minister, who decides whether to declare the service.⁵ The Minister's decision may be appealed to the Australian Competition Tribunal.

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 E.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.

WATER AND SEWERAGE INFRASTRUCTURE SERVICES ACCESS REGIME INQUIRY

⁵ The Council has considered declaration applications for rail services, electricity network services, gas pipeline services, airport services and electronic database services.

Box E.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.

Sources: NCC 2004, Application by Services Sydney for Declaration of Sewage Transmission and Interconnection Services Provided by Sydney Water: Final Recommendation, 1 December: ACCC 2007, ACCC determination-Sydney water access dispute, News release, 19 July, available at www.accc.gov.au/content/index.phtml/itemId/793017/fromItemId/2332.

E.3.2 Access undertakings

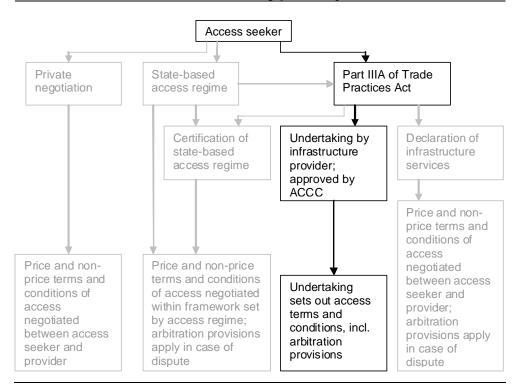
Under Part IIIA of the TPA, infrastructure operators can submit a voluntary access undertaking to the ACCC for approval. An undertaking may relate to existing or proposed infrastructure and it should set out the terms and conditions on which an infrastructure service provider will provide access to relevant services. The pathway to access when an undertaking is in place is shown in figure E.4. If the

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE INFRASTRUCTURE SERVICES REGULATORY FRAMEWORK ACCESS REGIME INQUIRY

APPENDIX E EXISTING FOR THIRD PARTY ACCESS ACCC approves an undertaking, the services covered by that undertaking are immune from declaration.

Figure E.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 TPA, the asset owner has greater flexibility in determining the terms and conditions of access than under the declaration process.⁶

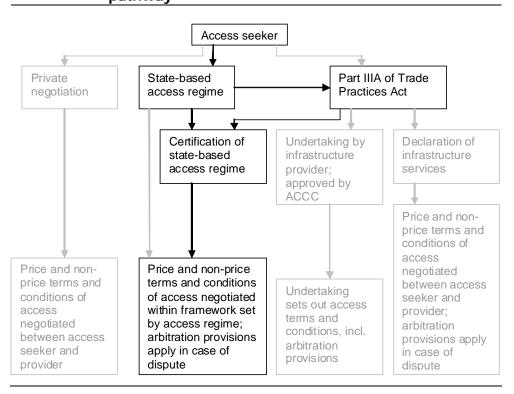
Infrastructure service providers may also make undertakings in respect of services covered by state-based access regimes or declared services (such as in the telecommunication access regime). In these cases, undertakings provide greater certainty for access seekers and potential access seekers on terms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

⁶ The Australasian Rail Track Corporation made an access undertaking for the services provided by its below rail network.

E.3.3 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 TPA. The pathway to obtaining access through a certified state-based access regime is illustrated in figure E.5.

Figure E.5 Options for third party access to infrastructure services—certified state-based access regime pathway



When a state-based access regime has been certified under the TPA, access seekers cannot apply for declaration of infrastructure services that are covered by the state-based access regime. Where a certified state-based regime has been established for a particular industry, applications for declaration can still be made for services that are not covered by that 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 (the Minister for Competition Policy and Consumer Affairs), who then decides whether to certify the regime as effective. Certification remains in force for the duration specified in the Commonwealth Minister's

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE INFRASTRUCTURE SERVICES ACCESS REGIME INQUIRY

APPENDIX E EXISTING REGULATORY FRAMEWORK FOR THIRD PARTY ACCESS decision. The applicant Government may apply to the Australian Competition Tribunal for a review of the decision.⁷

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.

F.4 **Certification criteria**

In determining whether an access regime is an effective regime under the TPA, 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 F). 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.⁸ 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.

⁷ The application for review must be made within 21 days after publication of the decision.

⁸ National Competition Council 2003, The National Access Regime: A Guide to Part IIIA of the Trade Practices Act 1974, Part C: Certification of Access Regimes, Commonwealth of Australia, available at www.ncc.gov.au/pdf/DEGeGu-003a.pdf. Since publication of the Guide, the Competition Principles agreement was amended in 2007 to include two new clauses relevant to certification, namely clauses 6(3A) and 6(5).

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.

APPENDIX F

COMPETITION PRINCIPLES AGREEMENT - CLAUSE 6 PRINCIPLES

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.
 - For a State or Territory access regime to conform to the principles set (3) 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;

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE INFRASTRUCTURE SERVICES PRINCIPLES AGREEMENT -ACCESS REGIME INQUIRY

APPENDIX F COMPETITION CLAUSE 6 PRINCIPLES

- (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.

WATER AND SEWERAGE INFRASTRUCTURE SERVICES PRINCIPLES AGREEMENT -ACCESS REGIME INQUIRY

- (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:
 - (i) the owner's legitimate business interests and investment in the facility;
 - (ii) 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;
 - (iii) the economic value to the owner of any additional investment that the person seeking access or the owner has agreed to undertake:
 - (iv) the interests of all persons holding contracts for use of the facility;
 - (v) firm and binding contractual obligations of the owner or other persons (or both) already using the facility;
 - (vi) the operational and technical requirements necessary for the safe and reliable operation of the facility;
 - (vii) the economically efficient operation of the facility; and
 - (viii) the benefit to the public from having competitive markets.
- 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.
- (I) 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:
 - generate expected revenue for a regulated service or services (i) 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

WATER AND SEWERAGE INFRASTRUCTURE SERVICES PRINCIPLES AGREEMENT -ACCESS REGIME INQUIRY

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 decisionmaker; 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.

APPENDIX G

COMPETITION AND **INFRASTRUCTURE REFORM** AGREEMENT

WHEREAS the Council of Australian Governments at its meeting in Canberra on 10 February 2006 agreed to a programme for the implementation of further National Competition Policy reforms;

AND WHEREAS the Parties intend to achieve a simpler and consistent national approach to the economic regulation of significant infrastructure;

THE COMMONWEALTH OF AUSTRALIA

THE STATE OF NEW SOUTH WALES

THE STATE OF VICTORIA

THE STATE OF QUEENSLAND

THE STATE OF SOUTH AUSTRALIA

THE STATE OF WESTERN AUSTRALIA

THE STATE OF TASMANIA

THE AUSTRALIAN CAPITAL TERRITORY, AND

THE NORTHERN TERRITORY OF AUSTRALIA

agree as follows:

Interpretation

- 1.1 For the purposes of this agreement significant infrastructure means infrastructure, including ports and export related infrastructure, that falls within the scope of sub-clause 6(3)(a) of the Competition Principles Agreement or Part IIIA of the Trade Practices Act 1974.
- 1.2 Nothing in this agreement requires existing access regimes certified in accordance with Part IIIA of the Trade Practices Act 1974 to be resubmitted for assessment.
- 1.3 The access regimes for electricity and gas which are to be developed and certified in accordance with the Australian Energy Market Agreement and the access regime for the Tarcoola to Darwin Railway will be taken to satisfy the requirements of clause 2 of this agreement.

WATER AND SEWERAGE APPENDIX G COMPETITION INFRASTRUCTURE SERVICES AND INFRASTRUCTURE ACCESS REGIME INQUIRY

- 1.4 For the purposes of clause 6.1 government business enterprises are enterprises that are incorporated under State, Territory or Commonwealth legislation and are classified as Public Financial Corporations or Public Non-Financial Corporations, excluding central borrowing authorities, under the Government Financial Statistics Classifications.
- 1.5 For the purposes of this agreement the term "regulator" also includes dispute resolution bodies.
- 1.6 This agreement is to be read in conjunction with, and does not replace, the Competition Principles Agreement 1995 and the Trade Practices Act 1974.

Simpler and consistent regulation of significant infrastructure

- 2.1 The Parties agree to establish a simpler and consistent national approach to economic regulation of significant infrastructure.
- 2.2 The Parties agree that, in the first instance, terms and conditions for third party access to services provided by means of significant infrastructure facilities should be on the basis of terms and conditions commercially agreed between the access seeker and the operator of the infrastructure.
- 2.3 The introduction of price monitoring for services provided by means of significant infrastructure facilities should be considered, where this would improve the level of price transparency, as a first step where price regulation may be required, or when scaling back from more intrusive regulation.
- 2.4 All third party access regimes for services provided by means of significant infrastructure facilities will include the following consistent regulatory 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:
 - generate expected revenue for a regulated service or services that is i. 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.
 - Where merits review of regulatory decisions is provided, the review will be C. limited to the information submitted to the regulator.

WATER AND SEWERAGE INFRASTRUCTURE SERVICES AND INFRASTRUCTURE ACCESS REGIME INQUIRY

- 2.5 The Parties agree to amend clause 6 of the Competition Principles Agreement to include sub-clause 2.4 above.
- 2.6 The Parties agree to introduce requirements that regulators will be bound to make regulatory decisions under an access regime within six months, provided that the regulator has been given sufficient information.
 - Regulators will have the discretion to determine when the six month time а limit is suspended:
 - i. Grounds for commencing time limits include when the regulator considers that sufficient information has been provided to enable the regulatory process to commence; and
 - Grounds for suspending time limits include requests for further ii. information from significant infrastructure facility service providers, provided these are on reasonable grounds, and consultation periods during which the regulator seeks submissions from third parties or the community.
 - b. Where the service provider of a significant infrastructure facility has not provided the requested information, a regulator will be permitted to make a determination on the information before it in order to satisfy six month time limits.
- 2.7 The principles in clause 2.4 and 2.6 will be incorporated in existing access regimes for services provided by means of significant infrastructure facilities and Part IIIA of the Trade Practices Act 1974 as soon as practicable or as they are reviewed, provided that they are included in such regimes no later than the end of 2010.
- 2.8 Commonwealth and State officials will oversight the implementation of the principles in clauses 2.4 and 2.6, including developing a streamlined process and appropriate administrative arrangements for the certification of access regimes, and may develop further proposals for consideration by COAG for the adoption of appropriate additional regulatory principles that may contribute to a simpler and consistent national approach to regulation.
- 2.9 The Parties agree that, to advance the objective of a simpler and consistent national approach to regulation, all state and territory access regimes for services provided by means of significant infrastructure facilities will be submitted for certification in accordance with the Trade Practices Act 1974 and the Competition Principles Agreement.
 - a. All new third party access regimes will be submitted for certification as soon as practicable.
 - b. Third party access regimes existing at the time this agreement commences will be submitted for certification as soon as practicable, or as they are reviewed, provided they are submitted for certification no later than the end of 2010.

The certification of access regimes under this clause is subject to Parties C. agreeing a streamlined certification process and appropriate administrative arrangements to be developed as part of the mechanism established under clause 2.8.

Rail freight infrastructure

- 3.1 The Parties agree to implement a simpler and consistent national system of rail access regulation, using the Australian Rail Track Corporation access undertaking to the Australian Competition and Consumer Commission as a model, to apply to the following agreed nationally significant railways:
 - a. Interstate rail track from Perth to Brisbane, currently managed by the Australian Rail Track Corporation and other parties, subject to the outcome of commercial negotiations; and
 - b. Major intra-state freight corridors on an agreed case by case basis depending on the costs and benefits of inclusion under a national regime.
- 3.2 The Parties agree to develop an agreed approach to the application of the Australian Rail Track Corporation access undertaking model including pricing and access mechanisms that will be appropriate if vertically integrated operators retain control of relevant sections of track.
- 3.3 The Parties agree that state based rail access regimes governing other significant export related rail infrastructure facilities will be submitted for certification as required by clause 2.9.
- 3.4 This agreement does not require any change to passenger priority policies.

Port competition and regulation

- 4.1. The Parties agree that:
 - a. ports should only be subject to economic regulation where a clear need for it exists in the promotion of competition in upstream or downstream markets or to prevent the misuse of market power; and
 - b. where a Party decides that economic regulation of significant ports is warranted, it should conform to a consistent national approach based on the following principles:
 - wherever possible, third party access to services provided by means of i. ports and related infrastructure facilities should be on the basis of terms and conditions agreed between the operator of the facility and the person seeking access;
 - ii. where possible, commercial outcomes should be promoted by establishing competitive market frameworks that allow competition in and entry to port and related infrastructure services, including stevedoring, in preference to economic regulation;

WATER AND SEWERAGE INFRASTRUCTURE SERVICES AND INFRASTRUCTURE ACCESS REGIME INQUIRY

- iii. where regulatory oversight of prices is warranted pursuant to clause 2.3, this should be undertaken by an independent body which publishes relevant information; and
- iv. where access regimes are required, and to maximise consistency, those regimes should be certified in accordance with the Trade Practices Act 1974 and the Competition Principles Agreement.
- 4.2 The Parties agree to allow for competition in the provision of port and related infrastructure facility services, unless a transparent public review by the relevant Party indicates that the benefits of restricting competition outweigh the costs to the community, including through the implementation of the following:
 - port planning should, consistent with the efficient use of port infrastructure, a. facilitate the entry of new suppliers of port and related infrastructure services:
 - b. where third party access to port facilities is provided, that access should be provided on a competitively neutral basis;
 - c. Commercial charters for port authorities should include guidance to seek a commercial return while not exploiting monopoly powers; and
 - d. any conflicts of interest between port owners, operators or service providers as a result of vertically integrated structures should be addressed by the relevant Party on a case by case basis with a view to facilitating competition.
- 4.3 Each Party will review the regulation of ports and port authority, handling and storage facility operations at significant ports within its jurisdiction to ensure they are consistent with the principles set out in clauses 4.1 and 4.2.
 - Significant ports include: a.
 - i. Major capital city ports and port facilities at these ports;
 - ii. Major bulk commodity export ports and port facilities, except those considered part of integrated production processes; and
 - iii. Major regional ports catering to agricultural and other exports.

Promotion of competitive infrastructure arrangements through competitive tendering

5.1 In some circumstances competitive infrastructure market structures are not feasible because the infrastructure exhibits natural monopoly characteristics. Where governments are considering the development of such monopoly infrastructure, they can initiate competition for the market through competitive tendering that promotes efficient service delivery. This allows the market to establish the terms and conditions for the supply of infrastructure services, reducing the need for subsequent regulation.

WATER AND SEWERAGE INFRASTRUCTURE SERVICES AND INFRASTRUCTURE ACCESS REGIME INQUIRY

- 5.2 The Parties agree to consider the use of competitive tendering to establish the terms and conditions for the supply of significant new services provided by government owned monopoly infrastructure.
- 5.3 The Commonwealth has introduced amendments to Part IIIA of the Trade Practices Act 1974 to provide that declaration will not apply to government owned infrastructure developed by way of a competitive tender approved by the Australian Competition and Consumer Commission.
- 5.4 For the purposes of clause 5.3, the Parties agree to work together to develop a consistent set of criteria for access related elements of tenders for the provision of nationally significant infrastructure facility services.

Competitive neutrality of government business enterprises

6.1 The Parties agree to enhance the application of competitive neutrality principles to government business enterprises engaged in significant business activities in competition with the private sector:

Objectives

- a. That the enterprise has clear commercial objectives.
- That any non commercial objectives or obligations established for the b enterprise are clearly specified and publicly reported.
- C. That enterprises do not exercise regulatory or planning approval functions in circumstances in which they compete with private sector enterprises.

Governance

- d. That the responsibilities of the governing board of the enterprise and the performance measures against which the board will be held accountable are published.
- e. That the governing board is appointed on the basis of particular skills needed by the board.
- That having received strategic guidance from the government about the f achievement of its objectives, the enterprise has operational autonomy in the day to day management of its affairs.
- That the dividend policy applicable to the enterprise should be clearly and g. publicly specified.
- That any payments to the government as shareholder or for the purposes h. of competitive neutrality, such as taxes, tax equivalent payments, special dividends, capital repayments, are identified in a transparent manner.

Reporting

i. That at least annually the enterprise will report publicly on its commercial performance and on its performance of any non commercial activities.

WATER AND SEWERAGE INFRASTRUCTURE SERVICES AND INFRASTRUCTURE ACCESS REGIME INQUIRY

- j. That any directions given to the enterprise by the government are published.
- k. That where the legislation establishing an enterprise derogates from competitive neutrality the derogation has been published.

New parties and withdrawal of parties

- 7.1 A jurisdiction that is not a Party at the date of this Agreement commences operation may become a Party by sending written notice to all the Parties.
- 7.2 A Party may withdraw from this Agreement by sending written notice to all other Parties. The withdrawal will become effective six months after the notice was sent.
- 7.3 If a Party withdraws from this Agreement, this Agreement will continue in force in respect of the remaining Parties.

Review of this Agreement

8.1 Once this Agreement has operated for five years, the Parties will review its operation and terms.

Commencement of this Agreement

9.1 This Agreement commences once the Commonwealth and at least four other jurisdictions have executed it.

APPENDIX H

This appendix sets out a numerical example to illustrate how the cost of service and retail minus approaches would be applied to calculate access prices. It demonstrates how both approaches will conceptually result in the same access price although, in practice, difficulties in accurately identifying all relevant costs may result in the two methods producing somewhat different price outcomes.

This appendix also discusses various practical matters that need to be considered when applying the access pricing methodologies. The advantages and disadvantages of each pricing methodology and the Commission's recommendations on access pricing are discussed in chapter 5 of volume II.

H.1 Cost of service approach

Under the cost of service approach, the access price for a particular infrastructure service is calculated by estimating the efficient cost of providing access to that service. The price is calculated by determining the minimum amount of revenue, known as the revenue requirement, that the infrastructure operator requires to provide the service to an access seeker while still meeting regulatory obligations and the required service standards.

The major components of the revenue requirement are operating expenditure, regulatory depreciation and return on assets. The relevant operating expenditure will be the ongoing costs incurred by the infrastructure operator to provide the infrastructure service to access seekers and a reasonable share of the cost of maintaining the infrastructure, calculated by reference to the access seekers' use of the infrastructure relative the broader customer base. Regulatory depreciation and the return on assets are the means by which the infrastructure operator recovers its capital investments over time. A share of the costs of financing the infrastructure operator's capital investments associated with the infrastructure subject to access would have to be allocated to access seekers.

In the Commission's regular price reviews, the cost of service (or 'building block') approach is generally adopted to determine the aggregate revenue requirement for a water business to provide all of the water and sewerage services it proposes to deliver to customers. In contrast, for access pricing purposes, a separate revenue requirement would have to be calculated for providing each infrastructure service subject to access. This would require the determination of a separate regulatory asset value (RAV) for each infrastructure asset subject to access in order to calculate the relevant amount of regulatory depreciation and return on assets. Currently, only an aggregate RAV has been determined for each water business.

Once the revenue requirement was determined, an access price would be set to allow the infrastructure operator to earn its revenue requirement for providing

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE APPENDIX H A INFRASTRUCTURE SERVICES APPROACHES ACCESS REGIME INQUIRY

APPENDIX H ACCESS PRICING APPROACHES

access, based on an assumed level of demand for access to that infrastructure service.

To illustrate the application of the cost of service approach, consider an example where an infrastructure operator's water transport network is subject to access. To calculate the access price for water transport services, the revenue requirement for providing those services needs to be determined. If, for simplicity, the cost of providing water transport services consists of operating expenditure of \$30, a rate of return of \$20 and regulatory depreciation of \$10, the revenue requirement will be \$60. Where there is a single access seeker, the access price for providing the service is \$60 under the cost of service approach. This example of the cost of service approach is illustrated in figure H.1 as column (a).

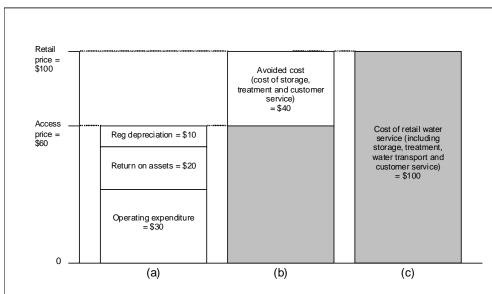


Figure H.1 Comparison of access pricing methodologies Water transport service

H.2 Retail minus approach

The retail minus approach uses existing regulated retail prices as the basis for determining access prices. An access price is calculated by applying a discount to the retail price to reflect the service components that the access seeker does not require. The discount on the retail price reflects the costs avoided (or potentially avoided) by the infrastructure operator in not having to provide those services to an access seeker.

To illustrate how the retail minus approach is applied, the previous example of access to an infrastructure operator's water transport network is used. Assume that a retail water price of \$100 has been determined through a separate price review process. The retail water price reflects the costs of providing all components of delivering a retail water service to a customer. These costs, which include storage, treatment, water transport, customer service and retail services, total \$100. The retail price for the 'bundled' service is shown in figure H.1 at column (c).

WATER AND SEWERAGE INFRASTRUCTURE SERVICES APPROACHES ACCESS REGIME INQUIRY

If an access seeker only requires water transport services, the other components of providing the full water service to a retail-level customer (that is, the storage, treatment, customer service and retail services) will not be provided to the access seeker. To determine the access price for providing the water transport service only, the retail price is reduced by a discount, representing the costs of providing the service components that the access seeker does not receive. If the costs of providing storage, treatment, customer service and retail services sum to \$40, applying this discount to the retail price of \$100 results in an access price of \$60. This is the same access price as calculated for this example using the cost of service approach. The retail minus example is illustrated in figure H.1 at column (b).

H.3 Some technical issues in calculating access prices

In applying either access pricing methodology, a number of technical matters would need to be considered during the implementation period for the access regime. These include alternative definitions of cost for calculating access prices and the level of aggregation applied in calculating costs (and access prices).

Avoided cost versus avoidable cost

As noted in section H.2, in determining access prices using the retail minus approach, a discount representing the costs of the services not provided to the access seeker must be calculated. The cost concept used to calculate the discount is a key consideration under the retail minus approach, as the definition used can result in significantly different access prices. The two alternative cost concepts are avoided cost and avoidable cost.

Avoided cost is defined as those costs that are not, or will not be, incurred when there is a reduction in the number of units supplied (compared to a higher level of supply). It is calculated as the reduction in costs incurred by the infrastructure operator when the quantity of services supplied is reduced (as a result of the access seeker meeting part of the demand for those services). Avoided cost is a short run concept and refers to the costs directly avoided by the infrastructure operator in not supplying certain retail and other functions; these costs will generally be operating costs. It refers therefore to the short run marginal cost of the service components that are not provided to the access seeker.

Alternatively, avoidable cost varies according to the time horizon over which the cost is assessed. In the short term, an infrastructure operator may have low avoidable costs since its capital assets are sunk; this means that, when the quantity of certain services supplied falls, these assets cannot be used to supply different services. (In the short run, avoidable cost will be similar to avoided cost.) Over a longer time period, however, an infrastructure operator may be able to avoid undertaking its next (expensive) augmentation investment when an access seeker meets part of the growth in demand; the cost of financing the investment in the (avoided) augmentation would be the infrastructure operator's avoidable cost. Avoidable cost therefore represents that long run marginal cost of the service components that are not provided to the access seeker.

WATER AND SEWERAGE APPENDIX H A INFRASTRUCTURE SERVICES APPROACHES ACCESS REGIME INQUIRY Taking a medium to longer term approach, avoidable cost will generally result in a larger discount to the regulated retail price and the calculation of a lower access price (than using avoided cost to calculate the discount). Further, avoidable cost is likely to more closely resemble the cost of a new entrant business, which has not yet incurred sunk investments in water industry infrastructure.

In its determination in the access dispute between Services Sydney and Sydney Water Corporation, the ACCC required that avoidable cost be used to calculate the access price.⁹

Incumbent cost versus hypothetical new entrant cost

In applying the cost of service approach, there are different ways to calculate the components of the revenue requirement for providing the infrastructure service.

The incumbent cost of service represents the cost an (incumbent) infrastructure operator incurs to deliver the service, including an allowance for the cost of past capital investments that have not already been depreciated or recovered from customers. Using incumbent cost provides a high degree of investment certainty that the infrastructure operator can recover its costs even if the technological or demand environment changes over time.

In contrast, the hypothetical new entrant cost is the cost that a new entrant business would incur if it commenced providing the same services using the most efficient configuration of assets and operating methods available at the time. In industries with rapid technological change, the hypothetical new entrant cost is likely be lower than the incumbent cost of service because a new entrant business would use the latest, most efficient production methods and capital assets. In industries where technological change is slower, the hypothetical new entrant cost is likely to be higher than the incumbent cost of service since the incumbent business will have depreciated or recovered some of its investment costs.

Level of cost aggregation

In setting regulated retail prices, costs are generally averaged over a specified area to determine a uniform retail price applying to the provision of a particular service within that area. (That is, the costs of providing a service within an area are aggregated, then divided by the quantity of services supplied, to calculate an average cost per unit of service.) This is known as 'postage stamp pricing' and is widely applied across Australia and overseas.

Applying the retail minus approach to regulated retail prices that reflect average costs will result in access prices that are also based on average costs. Access prices calculated in this way will be consistent with the regulated retail prices and will thereby minimise opportunities for cherry picking. IPART cited the maintenance of existing postage stamp pricing for retail services as a key consideration in

⁹ ACCC 2007, Access Dispute between Services Sydney Pty Ltd and Sydney Water Corporation: Final Determination Statement of Reasons, 22 June, available at www.accc.gov.au.

choosing the efficient component pricing rule, which is a form of the retail minus approach. 10

In applying the cost of service approach, costs could be averaged over the same level of aggregation as retail prices instead of calculating the cost of access for each infrastructure service. Averaging costs in this way would require information about the costs of providing specific infrastructure services within a specified area, not just the costs of providing those infrastructure services as required by a particular access seeker.

¹⁰ IPART 2005, Investigation into Water and Wastewater Service Provision in the Greater Sydney Region: Final Report, October, p. 46.

APPENDIX I ACCESS REGIMES IN OTHER JURISDICTIONS AND OTHER **INDUSTRIES**

This appendix outlines the regulatory arrangements that have been adopted in establishing access regimes for the water industries in New South Wales, the United Kingdom and Scotland, and for other Australian industries. Regulatory reforms currently underway in the water industries in several Australian States are also outlined.

For ease of reference, the features of each access regime are discussed under similar headings as used in Volume II of the final report.

1.1 Water industry access regimes in other jurisdictions

The section outlines the key features of access regimes established in the New South Wales, United Kingdom and Scottish water industries.

I.1.1 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 aim to promote competition, investment and innovation in water industry infrastructure, while safeguarding public health, the environment and consumers. One of the key reforms implemented to promote competition and innovation was the establishment of an access regime for the water industry.

Coverage

The access regime covers water and sewerage infrastructure that falls within a scheduled area, as specified in the Water Industry Competition Act 2006 (NSW) (currently the areas of operations of the Sydney Water Corporation and the Hunter Water Corporation). The relevant Minister (the Premier) 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 the regulator (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 included in the Competition Principles Agreement (included at

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE ACCESS REGIME INQUIRY

APPENDIX I ACCESS REGIMES INFRASTRUCTURE SERVICES IN OTHER JURISDICTIONS AND OTHER INDUSTRIES

appendix F) 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 operator. The process is similar to that for applying for a coverage declaration.

Negotiation and dispute resolution

The New South Wales water access regime operates under a negotiate/arbitrate model. 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 operators 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 infrastructure operators; requesting access; the infrastructure operator'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 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 IPART considers suitably gualified to conduct arbitrations). IPART has set out the processes to be followed in arbitrating a dispute; these are available on its website www.ipart.nsw.gov.au. 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.

WATER AND SEWERAGE ACCESS REGIME INQUIRY

APPENDIX I ACCESS REGIMES INFRASTRUCTURE SERVICES IN OTHER JURISDICTIONS AND OTHER INDUSTRIES

Pricing

Under the negotiate/arbitrate model, the infrastructure operator and access seeker are free to negotiate access pricing. Once a service is declared, the infrastructure operator is required to submit an undertaking to IPART for approval. The undertaking must specify the pricing methodology that the infrastructure operator will use when determining an access price. Access prices must be consistent with regulated postage-stamp pricing and IPART has also specified pricing principles that the infrastructure operator must observe when negotiating access prices.

The pricing principles allow for multi-part pricing and price discrimination (where it promotes efficiency) and do not allow a vertically integrated infrastructure operator to discriminate in favour of its downstream operations (other than to the extent that the costs are higher for the access seeker).

While IPART has indicated its preference for the retail minus approach to access pricing because it allows for postage-stamp pricing, it does not require it to be applied on negotiating access agreement.

Ring fencing

Infrastructure operators are required to maintain separate accounts for declared infrastructure services within three months of a coverage declaration being made. Once a service is declared, infrastructure operators prepare a cost allocation manual and submit it to IPART for approval. The manual sets out how accounts for the declared infrastructure services will be established and maintained and, once approved, is published on IPART's website. Where a voluntary undertaking has been made, the service provider is not required to submit a cost allocation manual for approval by IPART but would generally be expected to do so.

Licensing

The New South Wales water industry features a system of functional licences. 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.

Before a licence is issued, the applicant is required to have, and continue to have, the capacity (including technical, financial and operational capacity) to carry out the activities to be undertaken. Licences are issued by the Minister on the basis of a recommendation from IPART.

The licences require businesses to adhere to a water industry code of conduct, marketing code of conduct and transfer code of conduct. 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. Licensed retail suppliers are required to belong to an approved external ombudsman scheme to deal with disputes and complaints involving small retail customers.

WATER AND SEWERAGE ACCESS REGIME INQUIRY

APPENDIX I ACCESS REGIMES INFRASTRUCTURE SERVICES IN OTHER JURISDICTIONS AND OTHER INDUSTRIES

Regulatory arrangements

The New South Wales Government introduced a range of reforms, under 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.

In December 2008, the New South Wales Government applied to the NCC for certification of the access regime. In August 2009, the federal Minister for Competition Policy and Consumer Affairs accepted the NCC's final recommendation that the regime be certified as effective for a period of 10 years.¹¹

I.1.2 United Kingdom

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.

Coverage

Since 1 December 2005 the Water Supply Licensing (WSL) regime in the United Kingdom has allowed licensees to compete for non-domestic customers who use at least 50 ML of water a year at each of their premises. The Government announced in 2002 that competition would not be extended to residential customers. Under the access regime, licensees can develop water sources or purchase bulk water from other suppliers and use existing network infrastructure to transport the water to their own customers. Sewerage services are not covered by the regime.

The regime also provides for new entrants to become 'appointed' to serve a new site or a large customer through an 'inset' process. For example, a developer of a large new residential area may decide to have the area serviced by a different business to the incumbent water and sewerage service provider. Through the inset process, potential appointees compete to be permanently appointed to the new

WATER AND SEWERAGE ACCESS REGIME INQUIRY

¹¹ The Minister's determination was published on 14 August 2009.

area. Appointees are then subject to the same obligations as the incumbent water companies. To date, there have been 17 inset appointments in the United Kingdom.

Negotiation and dispute resolution

Under the WSL regime access seekers have a right to negotiate with infrastructure operators to access water infrastructure services in order to supply water to their customers. In reaching an access agreement, parties must agree on terms and conditions of access including access prices. Infrastructure operators are required to develop access codes that comply with the Ofwat's guidance, publish indicative access prices and deal fairly with licensees' applications for access.

Where negotiations fail, Ofwat can consider gueries and make determinations on some matters, including wholesale prices. If the access seeker accepts Ofwat's determination, both the infrastructure operator and the access seeker will be bound by the decision.

The initial experience of the water access regime in the United Kingdom is that negotiated access to water infrastructure has not been sufficiently transparent and that access negotiations between an access seeker and the incumbent water business have frequently been protracted. In a report assessing the outcomes of the access regime. Ofwat identified a number of obstacles to reaching agreement including some terms and conditions (such as the duration of the agreement), Ofwat's limited powers to formally determine terms of an agreement and a lack of clarity in Ofwat's guidance.¹² Ofwat has since published guidance papers on its access codes to speed up and improve the transparency of the negotiation process, see www.ofwat.gov.uk. For example, Ofwat's guidance sets out standard provisions to be included in an infrastructure operator's access agreements.

Although seven licences have been granted under the regime (two to new entrants and five to subsidiaries of the existing water companies), no customer has switched supplier to date.

Pricing

Access prices must be set using 'Costs Principle', which is a retail minus approach. This prescriptive mechanism for calculating the access price allows the infrastructure operator to recover expenses 'reasonably incurred in providing wholesale water supplies or allowing water to be introduced into its system'.¹³ This can also include the infrastructure operator's unavoidable retail costs, which Ofwat identified as one of the biggest obstacles to the development of competition in water supply. In its assessment of the United Kingdom's regime, the Western

¹² Ofwat 2007, Outcomes of Ofwat's internal review of market competition in the water sector, April, available at www.ofwat.gov.uk.

¹³ Ofwat 2009, Water Supply Licensing: Guidance on access codes - version 5, January p. 60.

Australian Economic Regulation Authority also highlighted transaction costs as an impediment to competition in the industry.¹⁴

The incumbent water companies publish indicative access prices for infrastructure services.

Ring fencing

As part of the ongoing water reform program, Ofwat is currently working with incumbent water businesses to implement accounting ring fencing with the intention of progressing to legal separation of retail businesses in the future.¹⁵

Ofwat has proposed to introduce separated price controls for each set of contestable and natural monopoly activities, before it sets prices for the period after 2015.¹⁶

Licensing

New water businesses are required to obtain a licence from 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, and
- combined licence to deliver water to eligible customers through an appointed water company's supply system.

As part of Ofwat's second review of competition in the water sector, the operation of the access and licensing arrangements will be considered.

Regulatory arrangements

The Water Act 2003 (UK) established the Water Supply Licensing (WSL) regime, which commenced in December 2005. Ofwat is the economic regulator for the water and sewerage industry in the United Kingdom.

I.1.3 Scotland

From 1 April 2008, the Scottish water industry was opened up to full retail competition for non-domestic (that is, non-residential) customers.

Coverage

The regime only allows for retail competition and common-carriage has been specifically ruled out.¹⁷ Scottish Water is the bulk water and sewerage

¹⁴ Economic Regulation Authority 2007, Draft Report: Inquiry on Competition in the Water and Wastewater Services Sector, December, pp 67-68.

¹⁵ Legal separation of upstream water and sewerage markets will be reviewed by Ofwat at a later date.

¹⁶ OFWAT 2008, Ofwat's review of competition in the water and sewerage industries: part II, May, pp 42-56.

infrastructure service provider. Retail companies purchase bulk water and sewerage services from Scottish Water and sell retail services for customers.

There are around 130,000 non-domestic customers in Scotland, all of whom are able to select a new water and sewerage provider.

Negotiation and dispute resolution

The retail competition model is a regulated regime. Market codes set out rules that apply equally to all retailers to regulate dealings with Scottish Water.

A template wholesale service agreement (WSA) is a contract between Scottish Water and a retail business that covers the water and sewerage services that Scottish Water agrees to provide and the commercial terms on which those services are provided. Scottish Water and the retailers may reach an agreement that differs to the template, subject to approval by the Water Industry Commission of Scotland (WICS).

Pricing

WICS approves Scottish Water's wholesale water and sewerage tariffs in accordance with Scottish Water's charges scheme. Scottish Water is required to publish indicative wholesale tariffs on its website.

WICS sets out a minimum service standard and default set of charges that retail service providers are required to at least meet. The retailers must provide information about the combinations of services and prices that they offer and are prohibited from favouring particular customers and customer groups. Retailers have an incentive to reduce costs or improve service levels to attract customers.

Ring fencing

The Water Services etc (Scotland) Act 2005 required Scottish Water to divest itself of its retail function for non-domestic customers. WICS has stated that until fully separated from the wholesale business, Scottish Water's retail business (SWBS) will not receive a permanent licence.

Licensing

There are three types of licences for water and sewerage services:

- general licence
- specialist licence and
- self-supply licence.

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE ACCESS REGIME INQUIRY

APPENDIX I ACCESS REGIMES INFRASTRUCTURE SERVICES IN OTHER JURISDICTIONS AND OTHER INDUSTRIES

¹⁷ Common-carriage means that more than one company is using the same network to supply their customers. It is therefore similar to access.

Businesses that provide retail water and sewerage services are required to obtain a general licence. Suppliers that specialise in representing individual customers to apply for a departure from the wholesale charge require a specialist licence. Selfsupply licences allow a business to purchase bulk water directly from Scottish Water and supply the water to the multiple sites that it owns or operates. The licensee therefore assumes the responsibilities of a general licence holder in supplying water and sewerage services to itself.

Licensees have 'provider of last resort' duties they are obligated to supply customers who approach them and must offer default tariffs. Scottish Water has no retailer of last resort duties but it must maintain physical supplies for two months.

Regulatory arrangements

The Water Services etc (Scotland) Act 2005 established the framework for competition. WICS is responsible for implementing the framework and regulating the licensing system. A central market agency was also established to manage the transfer of customer information between retail providers.

1.2 Water industry reform in other Australian States

While New South Wales is the only jurisdiction in Australia to have established a water access regime, there are a number of significant water industry reforms underway across the country. For example, the Tasmanian and South Australian State Governments, which currently have price-setting responsibility for water and sewerage services, have committed to establishing independent price regulation.

Through structural and institutional reforms in both Tasmania and south east Queensland, water and sewerage services that were previously provided by the local councils and municipally owned bulk water authorities, are now provided by a smaller number of amalgamated regional corporations. In Tasmania, the reforms have established three vertically integrated regional corporations, with a fourth common service corporation.¹⁸ In south east Queensland, the various water and sewerage functions are now provided by separate businesses. Retail water and sewerage services are provided by three regional corporations and there are separate state owned authorities providing: water storage and treatment services, the production and treatment of desalinated water and significant transport infrastructure services. The Queensland Government has established a water grid and a non-profit statutory water grid manager.

In Western Australia, the Economic Regulation Authority (ERA) recently completed an inquiry into the water industry and reform options. ¹⁹ 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

¹⁸ The common service provider will provide any services to the three regional water corporations where duplication of services can be avoided (for example, payroll).

¹⁹ Economic Regulation Authority 2008, *Final Report: Inquiry on Competition in the Water* and Wastewater Services Sector, December.

competition would require detailed cost-benefit analysis of the options and better information about potential outcomes.

The South Australian Government announced in June 2009 that it will introduce legislation to establish a state-based access regime for water and sewerage infrastructure. The Queensland Government has stated that it will consider the future development of an access regime.

1.3 Access regimes in other Australian industries

Access regimes have also been established in other industries. This section outlines the key features of access regimes in the Australian gas, electricity, rail, telecommunications, and grain handling and storage industries, and access arrangements for ports and airports.

I.3.1 Gas access regime

Coverage

The national gas access regime applies to the services of transmission and distribution pipelines used for the haulage (transport) of natural gas. 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 Council (NCC). Where a pipeline is not covered, the gas access regime does not apply.

The national gas access regime 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.

Light regulation is a new classification of covered pipeline under the National Gas Law (NGL) and consists of limited access arrangements. Infrastructure operators may apply for a determination under the NGL that its pipeline services are subject to light regulation.

Negotiation and dispute resolution

The regime is based on the negotiate/arbitrate model. Infrastructure operators of pipelines covered by the Code are required to submit an upfront access arrangement for approval by the regulator, the Australian Energy Regulator (AER).

Arrangements 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

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE ACCESS REGIME INQUIRY

APPENDIX I ACCESS REGIMES INFRASTRUCTURE SERVICES IN OTHER JURISDICTIONS AND OTHER INDUSTRIES

- capacity trading arrangements and
- review and expiry dates of the access arrangement, including trigger events.

Once an access arrangement has been approved by the regulator (the AER), third parties can gain access to reference services on the terms and conditions set out in the access arrangement. Approved access arrangements are published on the infrastructure service providers' websites. Parties can, however, negotiate prices different to the reference tariffs.

Where a dispute arises between the parties, the regulator will act as arbitrator, although alternative dispute resolution methods are encouraged by the AER in its guidelines. The regime also provides for judicial and merits based reviews.

Pricing

The regime adopts a form of cost-based price regulation. The AER determines the infrastructure operator's revenue requirement using the cost of service (building block) approach. The infrastructure operators propose reference tariffs, consistent with pricing principles, which are reviewed annually by the AER.

Ring fencing

Chapter 4, Part 2 of the NGL imposes ring fencing requirements, known as 'structural and operational separation requirements', for covered pipeline service providers.

Licensing

Generally, the licensing arrangements for gas distribution and retail activities are administered by an independent regulator in the relevant State or Territory, with the exception of Queensland where the Director-General of the Department of Mines and Energy is responsible.

Regulatory arrangements

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 Act 2008 (South Australia) and implemented through application laws within each Australian jurisdiction.

I.3.2 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 (Victoria, New South Wales, Australian Capital Territory, South Australia, Queensland and Tasmania.)

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 are subject to the National Electricity Rules (NER).

WATER AND SEWERAGE ACCESS REGIME INQUIRY

APPENDIX I ACCESS REGIMES INFRASTRUCTURE SERVICES IN OTHER JURISDICTIONS AND OTHER INDUSTRIES

Negotiation and dispute resolution

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. The NER also sets out the issues to be considered by regulators in setting prices. Both the gas and electricity access regimes have similar pricing principles clauses to help guide the regulator in approving access arrangements.

Access disputes are subject arbitration processes as defined in the NER.

Pricing

In terms of price regulation, chapter 6A (economic regulation of transmission services) of the NER applies to all Transmission Network Service Providers (TNSPs). The AER determines a revenue cap for prescribed transmission and negotiated transmission services, based on the cost of service approach. TNSPs submit pricing proposals to the AER, which assesses the pricing methodology used to determine whether it is consistent with the pricing principles of the NER.

The AER also determines a revenue cap for standard control services based on the cost of service approach. The AER regulates the prices that may be charged by Distribution Network Service Providers (DNSPs) for negotiated distribution services.

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.

Ring fencing

A TNSP is required to be a legal entity and is not permitted to compete with other firms using its network. Therefore, a TNSP generally cannot engage in electricity generation, distribution or retail activities. Furthermore, there are restrictions on information flows.

Accounting separation is required for activities subject to an ACCC determined revenue cap and costs are allocated to avoid cross-subsidisation between activities.

Licensing

The licensing arrangements for electricity generation, transmission, distribution and retail activities are similar to the national gas access regime, where licencing is administered by the independent regulator in the participating jurisdiction, with the exception of Queensland where the Director-General of the Department of Mines and Energy is responsible.

Regulatory arrangements

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 the NER.

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE ACCESS REGIME INQUIRY

APPENDIX I ACCESS REGIMES INFRASTRUCTURE SERVICES IN OTHER JURISDICTIONS AND OTHER INDUSTRIES

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.

I.3.3 Rail access regimes

The provision of most rail track ('below rail' infrastructure) in Australia is subject to the National Access Regime (established by Part IIIA of the Trade Practices Act 1974) with the inter-state rail network specifically covered by an ACCC approved access undertaking. Intra-state rail networks are typically covered by state-based access regimes and in most instances these regimes have not yet been certified.

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).

Negotiation and dispute resolution

In general, 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.

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 pro-forma 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 infrastructure operator (or owner), the interests of access seekers and the public interest.

Pricing

Generally, rail access regimes have pricing principles that are broadly consistent with those in clause 6(5)(b) of the Competition Principles Agreement (see appendix F), which provide for: prices to generate sufficient revenue; permit multi-part pricing and price discrimination when it aids efficiency; and prohibits certain forms of price discrimination between like-for-like services provided to parties competing in the

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE ACCESS REGIME INQUIRY

APPENDIX I ACCESS REGIMES INFRASTRUCTURE SERVICES IN OTHER JURISDICTIONS AND OTHER INDUSTRIES

same upstream or downstream market. 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.

ARTC's voluntary undertaking approved by the ACCC, sets out indicative prices for 'indicative' services and pricing principles for 'non-indicative' services.

Ring fencing

The state-based rail access regimes generally require functional separation of the infrastructure operators' access activities including appropriate measures to control information flow between the business units and maintain separate financial accounts

Regulatory arrangements

Rail access regimes in Australia differ in how they have been established. In New South Wales, Queensland and federally, rail access is established through undertakings submitted by rail access providers. In South Australia and Western Australia, the rail access regimes are largely set out in legislation as negotiate/arbitrate frameworks (New South Wales also has a default regime of this type). The Victorian Rail Access Regime combines a legislated access regime with requirements for rail network operators to have access arrangements, which resemble an undertaking.

Victoria is not the only example of a compulsory undertaking approach. The Australian Rail Track Corporation was obliged to submit an access undertaking to the ACCC under the intergovernmental agreement through which ARTC was established. In contrast, in New South Wales and Queensland the rail infrastructure was first declared under state legislation which gave rail access providers the opportunity to submit undertakings post-declaration. However, the Queensland Competition Authority also has the ability to require Queensland Rail to submit an access undertaking or can impose an undertaking in some circumstances.

Regulatory arrangements for the respective jurisdictions are set out in Table 1.1.

WATER AND SEWERAGE ACCESS REGIME INQUIRY

APPENDIX I ACCESS REGIMES INFRASTRUCTURE SERVICES IN OTHER JURISDICTIONS AND OTHER INDUSTRIES

State & regulator	Legislation & manner in which access is established	Role of regulator
New South Wales – Independent Pricing and Regulatory Tribunal	<i>Transport Administration Act</i> 1988; access undertaking	Considers access undertakings submitted by service providers. Approves reference tariffs and terms and conditions of access. Arbitrates in access disputes.
Queensland – Queensland Competition Authority	<i>Queensland Competition Authority Act 1998</i> ; access undertaking	Considers access undertakings submitted by service providers. Approves reference tariffs and terms and conditions of access. Arbitrates in disputes.
South Australia – Essential Services Commission of South Australia	<i>Railways (Operations and Access) Act 1997</i> ; legislated access regime	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.
Victoria – Essential Services Commission	Rail Corporations Act 1996 and Declaration Orders; access arrangement	Assesses access arrangements from service providers. Develops guidelines on regulatory accounting, ring fencing, capacity use, network management, access pricing methodologies. Arbitrates in access disputes.
Western Australia – Economic Regulation Authority	<i>Railways(Access) Act 1998</i> ; legislated access regime	Approves pricing principles and reviews floor and ceiling costs. Commercial arbitration.
Interstate rail network (ARTC) – Australian Competition and Consumer Commission	TPA (Part IIIA); access undertaking	Assesses voluntary access undertakings from service providers. Approves terms and conditions of access. Arbitrates in disputes.

Table 1.1 Australian rail access regimes

I.3.4 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.

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

ESSENTIAL SERVICES COMMISSION VICTORIA

WATER AND SEWERAGE ACCESS REGIME INQUIRY

APPENDIX I ACCESS REGIMES INFRASTRUCTURE SERVICES IN OTHER JURISDICTIONS AND OTHER INDUSTRIES

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.

Negotiation and dispute resolution

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 guality 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.

Pricing

When the ACCC declares a service, it is required to provide pricing principles and model terms and conditions of access. Pricing principles state the ACCC's approach to access pricing in arbitrating disputes.

Ring fencing

The Telecommunications Act 1997 requires Telstra to submit a draft operational separation plan (OSP) to the Minister for approval. The ACCC is responsible for monitoring Telstra's compliance with the approved OSP.

In September 2009, the Commonwealth Government announced reforms to the telecommunications industry that will require Telstra to functionally separate network operations and wholesale functions from the rest of Telstra.²⁰

Licensing

The Telecommunications Act 1997 defines two types of organisations that can provide telecommunication services to the public: carriers (the infrastructure operators) and carriage service providers (which access the network to supply carriage services).

Carriers are required to obtain a licence from the Australian Communications and Media Authority (ACMA). Although carriage service providers are not required to hold a licence to provide services, these organisations are subject to a range of regulatory obligations.

²⁰ Ministerial media release, 2009, *Historic reforms to telecommunications regulation*, available at www.minister.dbcde.gov.au/media/media releases/2009/088.

Regulatory arrangements

Part XIC of the TPA 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.

1.3.5 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.

Coverage

The Commonwealth 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 TPA. 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 TPA.

In Victoria, the state-based access regime currently applies to the declared export grain terminals in the ports of Geelong and Portland.

Negotiation and dispute resolution

While the ACCC has not published any guidance about the required content of undertakings, undertakings typically set out negotiation protocols and a dispute resolution process as required by Part IIIA of the TPA. For example, access prices and terms and conditions may be subject to arbitration by the ACCC or a private arbitrator in the event of a dispute.

The Victorian regime provides for two forms of access regulation: a negotiate/arbitrate regime and light handed regulation. The Commission's role as regulator is primarily to resolve disputes that arise between parties under the regime. Where an infrastructure provider submits a light handed access undertaking to the Commission for approval, the Commission's role is confined to approving the undertaking and ensuring compliance.²¹

Pricing

The ACCC has indicated that a less prescriptive publish-negotiate-arbitrate approach to access pricing is appropriate for undertakings in respect of bulk wheat handling services under Division 6 of Part IIIA of the TPA. While the TPA does not prescribe a particular methodology for setting access prices, the methodology adopted should be consistent with the pricing principles in section 44ZZCA of the TPA.

In Victoria, access prices are negotiated between the infrastructure operator and the access seeker/s. The Commission may make a determination if approached to resolve an access pricing dispute.

²¹ No access undertakings have been approved by the Commission to date.

Ring fencing

When assessing a proposed undertaking for port services in the export of wheat under the national regime, the ACCC must ensure that adequate ring fencing arrangements are established. The arrangements should contain non-discrimination and 'no hindering access' clauses, fair and transparent port terminal protocols, indicative access agreements and appropriate measures to ensure information is treated appropriately to prevent against anti-competitive discrimination.

Licensing

Bulk wheat exporters in Australia must be accredited by Wheat Exports Australia under the Wheat Export Accreditation Scheme.²² Accreditation is required to ensure that an exporter is a fit and proper company to export bulk wheat from Australia.

Regulatory arrangements

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 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.

In Victoria, the Grain Handling and Storage Act 1995 established an access regime applying to declared export grain terminals in Victoria.

Other issues

The Victorian Government indicated through the Council of Australian Governments (COAG) February 2006 that it would review the Victorian Grain Handling and Storage Access Regime to determine whether the state-based regime should continue to apply to the Victorian bulk grain. In its final report, the Commission recommended to the Minister for Finance that the regime be repealed from 1 October 2009.23

If the Victorian access regime is repealed, wheat exporters will be required by the access test to lodge proposed access undertakings under the Commonwealth regime by 1 October 2009.

I.3.6 Airport regulation

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 from 2003, airportspecific access regulation no longer applied.

²² See www.wea.gov.au.

²³ Essential Services Commission 2009, *Review of Victorian Grain Handling and Storage* Access Regime: Final Report, May.

The Australian Government introduced price monitoring via Part VIIA of the TPA 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.

Virgin Blue notified the ACCC of an access dispute with Svdnev 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.

I.3.7 Port access regime

Three access regimes exist in relation to ports within Australia (excluding grain facilities) — in Queensland, South Australia and Victoria.

Coverage

In Queensland, the Dalrymple Bay Coal Terminal is the only port that has been declared for access.

The South Australian port access regime applies only to regulated services such as services facilitating access to the port, certain berths, loading and unloading facilities and bulk handling facilities.

In Victoria, the only access regime in relation to port facilities is the Channel Access Regime, which applies to channels declared by the Governor in Council by Order. To date no channels have been declared and as a result, the access regime has not been implemented.

Negotiation and dispute resolution

Both the Queensland and South Australian port access regimes are based on the negotiate/arbitrate model.

ACCESS REGIME INQUIRY

WATER AND SEWERAGE APPENDIX I ACCESS REGIMES INFRASTRUCTURE SERVICES IN OTHER JURISDICTIONS AND OTHER INDUSTRIES

In Queensland, once an infrastructure asset is declared, the infrastructure provider must submit an access undertaking to the regulator (the Queensland Competition Authority) for approval. The access undertaking will set out access terms and conditions and the infrastructure operator's obligations relating to the negotiation process. However, the infrastructure operator and access seeker are free to negotiate access terms and conditions that are different to those in the approved undertaking. The regime provides for recourse to mediation or arbitration in the event of an access dispute.

Under the South Australian access regime, access seekers must obtain information from the infrastructure operator 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 that establishes the regime.²⁴

In Victoria, section 59 of the Port Services Act 1995 sets out the access obligations of channel operators in the event of declaration of channel services. The channel operator is 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 must make a formal proposal of terms and conditions within 30 business days of receiving a request for access. 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.

Pricing

The Queensland Competition Authority applies revenue cap regulation to the Dalrymple Bay Coal Terminal, which is a Government-owned port that is leased to a private consortium of businesses.

In both Victoria and South Australia, 'prescribed' port services are regulated through price monitoring frameworks that are administered by the respective independent economic regulators. The infrastructure operators are required to publish prices on their websites, however, they may negotiate different prices and/or price structures with access seekers if both parties agree.

Ring fencing

Under the Victorian regime, an infrastructure operator would be required to maintain separate financial accounts for the prescribed channels that are subject to access.

Licensing

In Victoria, the economic regulator administers the licensing regime, including issuing licences to providers of prescribed port services.

²⁴ *Maritime Services (Access) Act 2000* (South Australia).

Regulatory arrangements

The port access regimes are set out in legislation for all three states:

- Queensland part 5 of the Queensland Competition Authority Act 1997
- · South Australia the Maritime Services (Access) Act 2000 and
- Victoria part 3 the Port Services Act 1995 (Victoria).

In each state, port infrastructure services are subject to independent economic regulation.

Other issues

The Essential Services Commission undertook a review in June 2009 to determine whether the regulation of port prescribed services should continue in Victoria. In the report, the Commission recommended to the Minister for Finance that the access regime and price monitoring framework should continue to apply to prescribed port services.25

The Essential Services Commission of South Australia indicated that it will commence a similar review in late 2009.

²⁵ Essential Services Commission 2009, Review of Victorian Ports Regulation: Final Report, June.