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

DRAFT REPORT

JUNE 2009

An appropriate citation for this paper is:

Essential Services Commission 2009, *Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Draft Report*, June.

© 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.

PREFACE

The recent years of dry conditions in Victoria, and across southern Australia more generally, have highlighted the need for arrangements that encourage innovation in water management and service delivery. Providing businesses that have new ideas, products and technologies for supplying water and sewerage services with access to potential customers will promote greater innovation and efficiency in the delivery of those services.

Facilitating broader participation in providing water and sewerage services requires arrangements for the existing owners of natural monopoly infrastructure to share the use of their facilities with other businesses (to avoid the prohibitive costs associated with the inefficient duplication of such infrastructure). An access regime would establish a framework for other businesses to negotiate arrangements for sharing these infrastructure facilities.

The Victorian Government announced in July 2008 that it would develop an access regime for water and sewerage infrastructure services. In November 2008, the Commission was directed to conduct an inquiry into developing an access regime. The Commission's final report must be presented to the Minister for Finance by 28 September 2009.

This draft report sets out the Commission's draft recommendations for comment and its requests for further information to assist it in finalising its report. In formulating its draft recommendations, the Commission has considered submissions to its issues paper (released in February 2009), feedback provided at the May public hearing, the National Competition Council's assessment of the New South Wales' access regime for water and sewerage infrastructure services, access regimes in other industries and other jurisdictions, and its own research and analysis.

Recognising the extensive work program required to establish an appropriate state-based access regime, the Commission recommends staged implementation of the regime. In the initial stage, arrangements would be put in place to clarify which infrastructure services will be subject to access and to set out a clear and transparent framework for negotiations (backed up by dispute resolution mechanisms) between water businesses and businesses seeking access to infrastructure. By facilitating access, these initial arrangements will ensure that the benefits from innovation and greater public participation in the water industry are not delayed while the access regime is further developed and refined.

In subsequent stages of the implementation process, the initial arrangements will be built upon and refined as knowledge about, and experience in, providing access increases and a range of new and more diverse service providers start to participate in the Victorian water industry. This will ensure that the resulting regime is comprehensive, clear and transparent and tailored to conditions in Victoria's

water industry. By the end of the implementation period, all legislation and regulations necessary to support the regime will be in place.

These arrangements will provide more certainty and clarity than the existing national access provisions. The Victorian regime will provide streamlined arrangements for assessing and granting access applications that will reduce costs for both infrastructure operators and businesses seeking access.

A staged approach will allow refinement of the access regime and provide greater certainty that it will, in due course, satisfy the criteria for certification as an effective state-based access regime.

The Commission encourages interested parities to comment on this draft report and provide further information to assist the Commission in finalising its recommendations to the Government. Submissions are due by 27 July 2009.

Dr Ron Ben-David
Chairperson

HOW TO RESPOND TO THE DRAFT REPORT

The Commission encourages stakeholders to respond to the issues raised in this report. The responses received and the information generated through the public consultation process will assist the Commission in preparing its final report to the Minister for Finance.

Interested parties can provide comment on the Commission's approach and draft recommendations, or provide further information to assist the Commission in finalising its recommendations, in one of two ways:

Provide written comments or submissions

You can send a written submission or comments in response to this draft report. Written comments are due by 27 July 2009.

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

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

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

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

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

Attend the public hearing

The Commission will conduct a public hearing on Wednesday 15 July 2009. Stakeholders who have made submissions will be invited to provide further comment on the issues raised in their submission. Other interested parties will have an opportunity to make comments and ask questions.

The hearing will be conducted at the Commission's offices at Level 2, 35 Spring St, Melbourne. Stakeholders planning to attend the hearing should register with the Commission by Friday 10 July 2009 either by telephone on (03) 9651 0206 or by email to water@esc.vic.gov.au.

ABBREVIATIONS

ACCC	Australian Competition and Consumer Commission
AER	Australian Energy Regulator
COAG	Council of Australian Governments
the Commission	Essential Services Commission (Victoria)
CUAC	Consumer Utilities Advocacy Centre
DHS	Department of Human Services (Victoria)
DSE	Department of Sustainability and Environment (Victoria)
EPA Act	*Environment Protection Act 1970* (Vic)
ERA	Economic Regulation Authority (Western Australia)
ESC Act	*Essential Services Commission Act 2001* (Vic)
EWOV	Energy and Water Ombudsman of Victoria
IPART	Independent Pricing and Regulatory Tribunal (NSW)
IPE	independent procurement entity
NCC	National Competition Council
OHS Act	*Occupational Health and Safety Act 2004* (Vic)
TPA	*Trade Practices Act 1974* (Cth)
VicWater	Victorian Water Industry Association
Water Act	*Water Act 1989* (Vic)
WACC	weighted average cost of capital
Water Industry Act	*Water Industry Act 1994* (Vic)
WIRO	Water Industry Regulatory Order 2003 (Vic)

GLOSSARY

Access commitment	An agreement by an infrastructure operator to negotiate with access seekers on sharing specified infrastructure services (see chapter 3).
Access regime	An access regime is a set of legislative and regulatory arrangements that establish a right for an access seeker to negotiate with an infrastructure operator to share the use of natural monopoly infrastructure. An access regime generally includes a framework to facilitate access negotiations and dispute resolution mechanisms to apply when agreement cannot be negotiated.
Access seeker	A business or individual who applies to share the use of natural monopoly infrastructure.
Access undertaking	A voluntary commitment by an infrastructure operator that sets out the terms and conditions on which it will share the use of a specified natural monopoly infrastructure facility.
Arbitration	A process for resolving disputes between people or organisations by referring them to an arbitrator, either agreed on by them or provided by law. Typically, an arbitrator's decision is final and binding.
Certification	A determination by the relevant Australian Government Minister (the Minister for Competition Policy and Consumer Affairs) that a state-based access regime is consistent with National Competition Policy, including the principles in clause 6 of the Competition Principles Agreement (see appendix D).
Cherry picking	Singling out the most profitable customers from the larger customer base. Generally, this occurs where the price for a service reflects the average cost of providing a service to all customers and some customers can be serviced at a lower cost.
Commitment	See 'access commitment'.
Contestability	Contestability refers to markets that are relatively easy and cheap for new service providers to enter in order to compete with the incumbent(s). Provided a market is contestable, the threat of competition from a new entrant business will create an incentive for a monopoly service

	provider to operate more efficiently and to set prices to reflect costs, without charging monopoly profits.
Cost of service approach	A methodology for determining access prices. Determined by estimating the costs of providing each element of a service covered by an access regime. Also known as the ‘building block’ approach (see chapter 5).
Coverage	The scope of an access regime. Specifically, the geographical area and types of infrastructure services to which the regime applies.
Declaration	Confirmation that a particular infrastructure service satisfies the declaration criteria (see chapter 4).
Declared service	A specific infrastructure service that has been determined to satisfy the declaration criteria for access (see chapter 4).
Downstream market	A market downstream of a natural monopoly infrastructure facility. For example, sewerage treatment is downstream of the sewerage pipe network.
Economies of scale	A reduction in the unit cost of an activity that occurs when the number of units produced (volume of output) increases.
Functional separation	Where certain functions or activities of the business are operated as if they were independent of the rest of the business (see chapter 7).
Greenfields investment	Investment in a facility in an area where no similar facilities already exist.
Headworks	Dams, weirs and associated works used for the harvest, storage and supply of water.
Independent procurement entity	A body responsible for ensuring that water supply and demand are balanced at the lowest possible cost, while maintaining security of supply at a level determined by Government.
Infrastructure services	Services provided by using water and sewerage infrastructure facilities (see chapter 4).
Inset development	A new development within a larger area that has already been partly developed.
Judicial review	A type of court proceeding in which the judge reviews the legality of a decision or action taken by a public body.

Long run marginal cost (LRMC)	The change in total cost resulting from a one unit change in output, over a long enough timeframe such that no inputs are 'fixed'. It is the sum of short run marginal operating and long run marginal capital costs.
Marginal cost	The change in total cost when one additional unit is produced.
Merits review	A process where a person or body other than the original decision maker reconsiders the facts, law and policy aspects of the original decision to decide if it was the correct and reasonable decision given the available information and circumstances.
Natural monopoly	Exists where the costs of providing services is lower when there is a single supplier due to economies of scale over the range of demand for the service.
National competition policy (NCP)	A series of reforms as set out in three intergovernmental agreements to promote competition and discourage anti-competitive behaviour. The three agreements include the Competition Principles Agreement, the Conduct Code Agreement and Agreement to Implement the Competition Policy and Related Reforms.
RAB (regulatory asset base)	The value of water business assets for regulatory purposes. These values were initially set by the Minister for Water and are adjusted on an ongoing basis to account for new investments, asset disposals, depreciation and inflation.
Recycled water	Wastewater that is treated to a standard appropriate for its intended use.
Regulatory depreciation	An amount set to allow the regulated water businesses to recover the cost of capital investments over time.
Retail minus approach	A methodology for determining access prices. Determined by taking the approved retail price for a bundled service and applying a discount to account for the service components that the access seeker does not require from the infrastructure operator (see chapter 6).
Reticulation	A network of local pipelines used for transporting water or sewage.
Revenue requirement	The revenue needed by each water business to cover operating costs and taxes, and provide a return on assets and a return of assets (depreciation).
Ring fencing	The process of providing separate accounts for certain functions within a business (see chapter 7).

Sewage	Liquid waste discharged into the sewerage system.
Sewer mining	Process of extracting sewage from a sewerage system for the purpose of treating and recycling it.
Sewerage	A physical arrangement of pipes and plant for the collection, removal, treatment and disposal of liquid waste.
Stormwater	Rainfall run-off.
Third party access regime	See ‘access regime’.
Trade waste	Industrial and commercial liquid waste discharged to the sewerage system.
Transfer pricing	The price that is assumed to have been charged by one part of a company for products and services it provides to another part of the same company in order to calculate each division's profit and loss separately.
Undertaking	See ‘access undertaking’.
Upstream market	Markets upstream of an infrastructure facility. For example, water sourcing is upstream of the water distribution network.
Wastewater	Includes greywater, sewage and stormwater.
Water entitlement	A right to use water determined by the Minister for Water under the *Water Act 1989* (Vic). A water entitlement is the maximum amount of water authorised to be taken and used by a person or organisation under specified conditions.
Water storage	A space to hold water, such as a dam or reservoir.

CONTENTS

Draft report summary 1

1 Objectives of an access regime 13

- 1.1 Improving efficiency and reliability in the water industry 13
- 1.2 Sharing the use of water industry infrastructure 15
- 1.3 Access regimes in other industries and jurisdictions 25
- 1.4 Structure of this report 25

2 Framework for the inquiry 27

- 2.1 Scope of the inquiry 27
- 2.2 The Commission's role and legislative framework 28
- 2.3 Consultation process 30

3 Staged implementation process 33

- 3.1 Rationale for establishing a state-based access regime 33
- 3.2 Staged implementation of an access regime 35
- 3.3 Transitional arrangements 41
- 3.4 Proposed implementation process 43
- 3.5 Periodic review of the access regime 47

4 Coverage of an access regime 49

- 4.1 Identifying infrastructure subject to an access regime 49
- 4.2 Geographical coverage of the regime 50
- 4.3 Types of infrastructure services covered by the regime 52
- 4.4 Declaration of specific infrastructure services 59
- 4.5 Greenfields investments 62
- 4.6 Review of declarations 63

5 Negotiation framework and dispute resolution 65

- 5.1 Designing a negotiation framework 65
- 5.2 New South Wales' water industry access regime 66
- 5.3 Negotiation protocols 67
- 5.4 Dispute resolution 71
- 5.5 Implementation of the access regime 74

6 Access pricing 75

6.1 Access pricing principles 75
6.2 Methodologies for determining access prices 77
6.3 Comparison of pricing methodologies 80
6.4 Recommended pricing methodology 82
6.5 Other issues 84

7 Ring fencing 87

7.1 Key considerations in establishing ring fencing 87
7.2 Ring fencing in other jurisdictions and industries 88
7.3 Recommended ring fencing methodology 89
7.4 Other issues 91

8 Protection of health, customers and the environment 93

8.1 Assessment of the existing regulatory framework 93
8.2 Extension of existing legislation and regulations 94
8.3 Licensing 96
8.4 Licence application process 99
8.5 Other matters 100

9 Role of the Commission 101

9.1 The Commission as regulator of an access regime 101
9.2 Role and responsibilities 103

10 Other issues 107

10.1 Potential barriers to the effective operation of an access regime 107
10.2 System coordination and management issues 114

Appendix A Terms of reference 119

Appendix B List of submissions 127

Appendix C Examples of access 129

Appendix D Competition Principles Agreement – clause 6 principles 135

Appendix E Numerical example of applying the cost of service and retail minus access pricing approaches 141

DRAFT REPORT SUMMARY

On 19 November 2008, the Minister for Finance directed the Commission to undertake an inquiry into developing a state-based access regime for water and sewerage infrastructure services. The final report to the Minister is due by 28 September 2009. This draft report presents the Commission's draft recommendations for public comment.

Objectives of an access regime

Developing an access regime is one aspect of the Government's broader reform program to ensure 'the efficient utilisation of existing and new sources of supply to protect the long-term interests of consumers with respect to water security, quality, reliability and price'.[1] An access regime will contribute to this objective by:

> *promoting the economically efficient operation of, use of and investment in water and sewerage infrastructure, thereby promoting effective competition in upstream and downstream markets.*[2]

Competition is not an end in itself. Enabling new water and sewerage service providers to compete with the incumbent water businesses has the potential to improve community wellbeing by promoting innovation and efficiency in water sourcing and in water and sewerage service delivery.

But to compete effectively, a new water and sewerage service provider needs to share the use of infrastructure facilities operated by the incumbent businesses. The major water industry infrastructure facilities are 'natural monopolies' – this means that it is cheaper and more efficient to have a single provider of these infrastructure facilities. Duplication of these facilities by new water and sewerage service providers would be prohibitively expensive and would make new providers uncompetitive with the incumbent water businesses.

An access regime would facilitate the sharing of natural monopoly infrastructure facilities by potential new service providers.

Features of an effective state-based access regime

An effective access regime establishes a legal right for potential new service providers to apply to share the use of (that is, obtain access to) natural monopoly infrastructure. It would also establish a clear and cost-effective framework for

---

[1] Victorian Government 2008, *Victorian Government Response to the VCEC Final Report, Water Ways: Inquiry into Reform of the Metropolitan Retail Water Sector,* July, p. 5.

[2] From the terms of reference for the inquiry (see appendix A).

making access arrangements. The framework would include measures to facilitate the negotiation of access arrangements, backed up by mechanisms to resolve disputes where negotiation was unsuccessful.

An effective state-based access regime for the Victorian water industry would increase certainty, clarity and transparency about the infrastructure facilities subject to access, the processes for making access arrangements, access pricing, and conditions of access. This would benefit both the businesses seeking to share the use of infrastructure facilities (the access seekers) and the businesses operating those facilities (the infrastructure operators).

By tailoring the regulatory arrangements to the specific circumstances of the Victorian water industry, a state-based regime would provide streamlined arrangements that reduce costs for infrastructure operators and access seekers.

Implementing a Victorian water industry access regime

An extensive work program will be required to establish a state-based access regime that is tailored to the specific circumstances of the Victorian water industry. The Commission therefore recommends staged implementation of the regime. The initial stage of the implementation period would establish the foundations for the regime. Subsequent stages would build on and refine those foundations to develop a comprehensive set of arrangements tailored to the specific circumstances of the Victorian water industry.

During the first stage of the recommended implementation process, the water businesses would make ‘access commitments’ giving access seekers the right to negotiate with them on sharing specified infrastructure services. The Commission envisages that the Minister for Water would direct the water businesses to make access commitments in respect of their significant natural monopoly infrastructure.

The Commission would develop guidelines, in consultation with stakeholders, to assist the businesses in identifying specific infrastructure facilities for which access commitments should be made. The guidelines would also address other matters to be set out in access commitments to provide a clear and transparent framework for negotiations and dispute resolution.

Implementation measures undertaken during subsequent stages would include enactment and amendment of the legislation and regulations underpinning the regime. The implementation period would culminate in the regime’s submission for certification by the relevant Australian Government Minister.

The Commission considers that a staged implementation process will minimise the costs of developing an access regime by establishing a basic framework that is refined as better information becomes available to guide further development of the regime. By facilitating access, the initial arrangements will ensure that the benefits from innovation and broader participation in the water industry are not delayed.

Coverage of a water industry access regime

The coverage, or scope, of an access regime should be clearly defined in order to provide certainty and clarity to infrastructure operators and access seekers.

Coverage refers to the regime's geographical scope and the types of infrastructure services subject to access.

The Commission has concluded that an access regime should cover the entire state of Victoria. The types of infrastructure services covered by the regime should be urban and rural water and sewerage transport services including services, such as storage and metering services, that are subsidiary but inseparable to providing transport services. They would exclude: the filtering, treating or processing of water or sewage; the use of a production process; the use of intellectual property; and the supply of goods, including the supply of water or sewage; except to the extent that these services are an inseparable part of providing transport services.

It is important to highlight that an access regime would only apply to infrastructure facilities. It would not apply to the resources – the water, recycled water, sewage and other wastewater – that are transported by or stored in infrastructure facilities like water and sewerage pipelines and dams.

Within the coverage of the regime, services provided by specific infrastructure facilities should be identified as satisfying the criteria for access. Specifically, these services would be provided by significant natural monopoly infrastructure facilities. In addition, new water and sewerage service providers would have to use those services to be able to compete with incumbent providers of water and sewerage services. Identifying such infrastructure services from the outset of an access regime would improve certainty for access seekers and infrastructure operators.

In the initial implementation stage, the major infrastructure services satisfying the criteria for access would be subject to access commitments. In the first instance, the water businesses would be responsible for nominating specific infrastructure facilities for which access commitments would be made (assisted by guidelines to be prepared by the Commission). These nominations would be submitted to the Commission for approval and subject to the Commission's public consultation processes.

The Commission considers that there should be flexibility during the implementation period to add access commitments for other infrastructure facilities that were not initially nominated or to revoke an access commitment to reflect a significant change in circumstances. In addition, the Commission would be able to propose infrastructure services that satisfied the access criteria but had not been nominated by the business operating the infrastructure facility.

Negotiation framework and dispute resolution

The negotiate/arbitrate model forms the basis of an access regime as it allows participants to negotiate access on mutually beneficial terms and conditions that suit their particular circumstances. Well designed negotiation and dispute resolution processes will promote efficient outcomes by enabling access seekers and infrastructure operators to negotiate on an equal footing within a transparent and certain framework.

The Commission considers that an access regime should establish negotiation protocols, timeframes for various stages of the negotiation process, and minimum requirements for information to create a framework for negotiations. In the initial

implementation stage, the Commission would develop guidelines on these matters and the businesses would include them in their access commitments.

Where agreement cannot be reached through negotiation, the Commission would arbitrate in access disputes. While the Commission's decision would be final and binding, the parties would be able to appeal a decision through limited merits review (as provided for in the *Essential Services Commission Act 2001*) or judicial review.

Access pricing

Access pricing plays a key role in the effectiveness of an access regime in promoting broader participation in the industry. Access prices will be one of the major costs of providing certain water and sewerage services to customers – as such, they will be a significant factor in a decision on whether to provide those services.

There are two main methods for determining access prices – the cost of service (or building block) approach and the retail minus approach. In deciding which approach is preferable, the Commission has weighed up each approach's advantages and disadvantages as well as a number of practical considerations.

The cost of service approach is recommended for determining access prices where the costs associated with providing an infrastructure service can be identified easily. For some infrastructure facilities, separate charges for the services provided by the facility are already calculated, for example, Melbourne Water's bulk water and bulk sewerage transport service charges. For other facilities, such as discrete infrastructure facilities like the Goldfields Superpipe, the costs of providing infrastructure services could be calculated without significant administrative effort.

The retail minus approach can only be applied where the final retail price is regulated and the infrastructure operator provides services in the regulated retail market. Both of these conditions presently hold in the Victorian water industry. Where the costs associated providing an infrastructure service cannot be easily identified, the retail minus approach would be easier and less costly to apply. Another advantage of the approach is that it only needs to be applied when an access application is received.

The Commission recommends that the businesses' access commitments should set out principles for calculating access prices, including the method to be applied in those calculations. During the implementation period for the regime, the Commission proposes to develop access pricing guidelines in consultation with the water businesses and other stakeholders.

Ring fencing and functional separation

Ring fencing is the process of separating certain business units, such as those operating infrastructure facilities, from other units within a business. Separation can be implemented through accounting ring fencing, which requires separate financial accounts to be kept for each business unit, or through functional separation, which requires certain functions or activities of the business to be operated as if they were independent of the rest of the business.

In the context of an access regime, the purpose of ring fencing is to ensure that the costs associated with the infrastructure facilities subject to access can be clearly identified. Clarity and transparency around these costs will facilitate access pricing.

The Commission has concluded that functional separation should be implemented by the four metropolitan Melbourne businesses and nominated regional businesses to separate their water sourcing, water and sewerage distribution, and (where provided) retail customer service functions. Accounting ring fencing would be implemented for all water businesses.

During the implementation period, the Commission would develop accounting ring fencing guidelines in consultation with the water businesses. The guidelines would include guidance on allocating costs to the different services provided by the businesses. Accounting ring fencing would have to be implemented by the businesses within three months of becoming subject to access.

Protection of health, customers and the environment

An important objective in implementing an access regime is to ensure that existing obligations related to health and safety, water quality, customer protection and environmental protection are extended, as necessary, to new water and sewerage service providers. The Government will need to conduct a comprehensive review of the relevant legislation and regulations to identify amendments or additional measures needed to extend these obligations and ensure the relevant regulator has sufficient powers to require compliance.

The Commission also recommends that a functional licensing regime be established. Licences would impose certain conditions and obligations on new water and sewerage service providers, including operational and technical requirements, information collection and reporting requirements, and financial capacity requirements. The Commission would be responsible for assessing licence applications, granting and revoking licences, and monitoring compliance with licence conditions. The Commission's decisions could be appealed through limited merits review (as provided for in the *Essential Services Commission Act 2001*) or judicial review.

Regulation of an access regime

The Commission recommends that, following the implementation of the legislative and regulatory framework for an access regime, it should be appointed the regulator of the regime. Its regulatory role would include making coverage declarations for specific infrastructure services, arbitrating in access disputes, determining access prices (where necessary), administering the licensing system, and advising the Government on the operation of the regime.

During the implementation period, the Commission proposes that it would establish access guidelines (in consultation with stakeholders), approve access commitments, administer the licensing regime (when it is established), and advise the Government on refining the regime.

The Commission currently regulates Victorian access regimes in other industries and has considerable expertise in regulating the water industry. A single economic regulator for the water industry would reduce the regulatory burden on the industry.

Complementary measures

To obtain the full benefits from introducing an access regime, the Government will need to investigate complementary measures, such as removing obstacles to broader participation and competition in the water industry. The Commission has identified a number of aspects of the existing legal and institutional arrangements that could create such obstacles and these are addressed in the Commission's recommendations.

Coordination and network management measures will also be needed to ensure that the operation of the Victorian water industry is economically efficient when a larger number of businesses are providing water and sewerage services in the existing service areas.

LIST OF DRAFT RECOMMENDATIONS

Draft recommendation 3.1

That a Victorian water industry access regime is developed and refined over a staged implementation period.

Draft recommendation 3.2

That the Government requires the water businesses to prepare ‘access commitments’ giving access seekers the right to negotiate access to nominated infrastructure facilities during the implementation period.

Draft recommendation 3.3

That the Government develops and enacts new legislation and regulations, or amends existing legislation and regulations, to establish the legal framework for the access regime during an implementation period.

Draft recommendation 3.4

That a Victorian water industry access regime be reviewed not less than five years, and not more than ten years, after the legislative and regulatory amendments required to establish the legal framework for the access regime have been implemented.

Draft recommendation 4.1

That the entire state of Victoria be covered by a state-based access regime.

Draft recommendation 4.2

That water and sewerage transport services provided by water industry infrastructure be covered by a state-based access regime. The definition of water and sewerage transport services would include services, such as storage services, that are subsidiary but inseparable to providing transport services. It would exclude: the filtering, treating or processing of water or sewage; the use of a production process; the use of intellectual property; and the supply of goods, including the supply of water or sewage; except to the extent that these services are an inseparable part of providing transport services.

Draft recommendation 4.3

That metering devices that are an integral part of water and sewerage transport infrastructure be covered by a state-based access regime.

Draft recommendation 4.4

That the storage services provided by large infrastructure facilities like dams be covered by a state-based access regime.

Draft recommendation 4.5

That rural water transport services be covered by a state-based access regime.

Draft recommendation 4.6

That the Government requires the water businesses to nominate, within a six month timeframe, specific infrastructure facilities for which access commitments would be made. The businesses should assess whether the services meet the declaration criteria, taking into account guidance provided by the Commission. Provision should be made for making additional access commitments in respect of specific infrastructure facilities subsequently identified as meeting the declaration criteria.

Draft recommendation 4.7

That the Government requires the water businesses to apply for the Commission's approval of access commitments.

Draft recommendation 4.8

That a process is established to provide for case-by-case review of coverage declarations. The process should allow for revocation of declarations where the declared infrastructure services no longer satisfy the declaration criteria and to declare services provided by new or existing infrastructure that meet the declaration criteria. During the implementation period for the regime, similar processes should be established for access commitments by the businesses.

Draft recommendation 5.1

That the Government establishes minimum requirements for the type of information that infrastructure operators must make available to access seekers and that access seekers must provide to infrastructure operators.

Draft recommendation 5.2

That the Government requires the water businesses to include the negotiation protocols developed by the Commission in their access commitments. The water businesses would be required to comply with the negotiation protocols in responding to requests for information from access seekers and to access applications.

Draft recommendation 5.3

That the Government establishes a dispute resolution mechanism, including binding arbitration by an independent arbitrator and appeals provisions. Arbitration decisions should be subject to judicial review and limited merits review.

Draft recommendation 6.1

That the cost of service approach is used to determine access prices in respect of infrastructure where the costs associated with providing an infrastructure service can be easily identified.

Draft recommendation 6.2

That the retail minus approach is used to determine access prices in respect of infrastructure where a regulated retail price exists and the infrastructure operator provides services in the regulated retail market.

Draft recommendation 6.3

That the Government requires the water businesses to identify in their access commitments which pricing methodology will be applied to calculate access prices for the services provided by the infrastructure facility and note that prices will be calculated in accordance with the relevant pricing principles developed by the Commission.

Draft recommendation 6.4

That the Government reviews the Water Industry Regulatory Order 2003 to determine whether amendments are required to ensure an access regime can be effectively regulated.

Draft recommendation 7.1

That the Government requires the four metropolitan Melbourne businesses and nominated regional water businesses to commence, within six months, the process of implementing operational separation of their water sourcing, water and sewerage distribution, and retail customer service functions.

Draft recommendation 7.2

That the Government requires the water businesses to implement ring fencing of infrastructure facilities that are subject to access within three months of becoming subject to access. Ring fencing should be implemented in accordance with ring fencing guidelines to be formulated by the Commission.

Draft recommendation 8.1

That the Government conducts a comprehensive review of the legislation and regulations relating to health and safety, drinking water quality, customer protection and environmental protection in the water industry as soon as possible. The review should identify amendments or additional measures required to extend existing obligations in regard to these matters to new water and sewerage service providers and to ensure that the relevant regulator has sufficient powers to require compliance with these obligations by all service providers.

Draft recommendation 8.2

That the Government takes appropriate measures to ensure that new water and sewerage service providers are subject to the *Environment Protection Act 1970*, the *Safe Drinking Water Act 2003*, and the *Occupational Health and Safety Act 2004*.

Draft recommendation 8.3

That the Government establishes a functional licensing system for new water and sewerage service providers.

Draft recommendation 8.4

That the Commission is responsible for granting licences and monitoring compliance with licence conditions.

Draft recommendation 8.5

That the Government incorporates provisions for granting exemptions within the functional licensing system.

Draft recommendation 9.1

That the Commission is appointed the regulator of an access regime for the Victorian water industry. The Commission's regulatory role would include arbitrating in access disputes.

Draft recommendation 10.1

That the Government investigates whether the constitutional provision in respect of public ownership in the Victorian water industry would prevent opportunities for private provision of water or sewerage services.

Draft recommendation 10.2

That the Government reviews the *Water Act 1989* with the aim of permitting businesses other than the existing water businesses to hold and trade water entitlements and to extend the definition of water to which entitlements apply to include new and innovative sources of water.

Draft recommendation 10.3

That the Government investigates extending the existing trading arrangements for water entitlements.

Draft recommendation 10.4

That the Government amend the *Water Industry Act 1994* and the *Water Act 1989* to remove provisions that limit a water business to only servicing customers within a specified geographic area.

Draft recommendation 10.5

That the Government reviews its bulk water procurement processes to improve opportunities for development of low-cost new water sources.

Draft recommendation 10.6

That the Government reviews the adequacy and timeliness of publicly available information related to resource planning.

Draft recommendation 10.7

That until such time as the Government completes its review of network management arrangements, Melbourne Water and the regional businesses provide water supply coordination and management functions in their service areas.

Draft recommendation 10.8

That appropriate arrangements are developed for: network balancing; interconnections into infrastructure facilities; network operation, maintenance and expansion; and emergency management.

1 OBJECTIVES OF AN ACCESS REGIME

On 19 November 2008, the Minister for Finance directed the Commission to undertake an inquiry into the development of a state-based access regime for water and sewerage infrastructure services, under section 41 of the *Essential Services Commission Act 2001*. On 15 April 2009, the Minister agreed to the Commission's request for a four week extension for submission of its final report. The Commission requested the extension to allow more time for consultation. The final report is now due to be presented to the Minister by 28 September 2009.

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

1.1 Improving efficiency and reliability in the water industry

Prolonged drought, continuing water restrictions and significant price rises for water and sewerage services have increased the focus on efficient provision of these services and innovative solutions for balancing supply and demand. Improving security of supply has also been an important focus of the Government's water strategy.[3]

This inquiry occurs at a time when the Victorian water businesses are undertaking a number of major supply augmentation projects. For metropolitan Melbourne, these projects include the desalination plant, the Sugarloaf pipeline (in conjunction with the Foodbowl Modernisation Project), construction of a water treatment plant at the Tarago Reservoir, and upgrading the Eastern Treatment Plant to increase water recycling. In regional and rural Victoria, the water businesses are investing in substantial augmentation projects to enhance the security of water supply, in infrastructure renewal to improve service reliability and to reduce losses in rural water systems, and in increased water recycling and reuse.[4]

As well as these augmentation projects, the Government's water strategy includes a commitment to diversify water sources and promote innovation in developing local water supply solutions. For example, the metropolitan Melbourne water businesses are required to meet water recycling targets. While regional businesses are not subject to explicit recycling targets, there is a general obligation in their

---

[3] See Department of Sustainability and Environment 2007, *Our Water, Our Future—The Next Stage of the Government's Water Plan*, June.

[4] Major projects include: the Goldfields, Wimmera Mallee, Broadford, Hamilton and Merbein pipelines; the Foodbowl Modernisation Project; the Macalister Irrigation District 2030 project; and upgrading the Werribee Irrigation District Recycled Water Scheme.

Statements of Obligations to optimise the use of recycled water. Work is currently underway to clarify rights to alternative water sources, develop sewer mining guidelines and establish water sensitive urban design principles. In addition, the metropolitan water businesses are required to reduce costs by sharing services.[5]

For the longer term, the Government has stated that reform opportunities principally relate to:

> *clarifying roles and responsibilities in an augmented, diversified and interconnected Melbourne water supply system, including long-term, state-wide planning responsibilities*
>
> *developing water markets to enable water to move to its highest value use including exploring the feasibility of a large user market in Melbourne*
>
> *pricing reforms to signal efficient future investment and use*
>
> *strengthening governance arrangements to ensure water businesses continue to face incentives to deliver services at least cost and*
>
> *ensuring regulatory arrangements enable and facilitate competition and competitive market outcomes wherever possible.*[6]

Developing an access regime is one aspect of the Government's broader reform program to ensure regulatory arrangements enable and facilitate competition and competitive market outcomes. The Government has stated that its reform program will ensure 'the efficient utilisation of existing and new sources of supply to protect the long-term interests of consumers with respect to water security, quality, reliability and price'.[7]

1.1.1 Review of the structure of the metropolitan Melbourne water sector

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

In its final report, VCEC recommended that the Government implement a number of measures to facilitate the possible introduction of increased contestability and

---

5 See Essential Services Commission 2009, *Metropolitan Melbourne Water Price Review 2008-09—Draft Decision, Vol. I*, April, chapter 4; and Victorian Competition and Efficiency Commission 2008, *Water Ways: Inquiry into Reform of the Metropolitan Retail Water Sector*, Final report, February.

6 Victorian Government 2008, *Victorian Government Response to the Victorian Competition and Efficiency Commission's Final Report, Water Ways: Inquiry into Reform of the Metropolitan Retail Water Sector,* July, p. 5.

7 *ibid.*

competition in the water industry. It recommended that the Government develop an access regime for water and wastewater infrastructure services.[8]

In its response to VCEC's report, the Government supported VCEC's recommendation that it establish an access regime. It indicated that it would ask the Essential Services Commission to undertake an inquiry into developing a state-based access regime, including establishing an access pricing methodology and accounting ring fencing.[9]

1.1.2 The Government's objectives for an access regime

In the terms of reference for this inquiry, the Government listed its objectives in developing an access regime as:

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

The Government also indicated, in the terms of reference, that it intends to apply to the National Competition Council (NCC) for certification that the Victorian access regime is effective in promoting greater efficiency in the water industry by facilitating competitive provision of water and sewerage services.

1.2 Sharing the use of water industry infrastructure

This section discusses how sharing the use of certain water industry infrastructure facilities will contribute to improving the efficiency and reliability of water and sewerage service provision. It explains how an access regime would facilitate arrangements for sharing infrastructure and describes some potential examples of infrastructure access.

1.2.1 Reasons for sharing infrastructure facilities

The water industry is characterised by 'natural monopoly' infrastructure facilities. A natural monopoly exists where it is cheaper to have only a single supplier of

---

[8] Victorian Competition and Efficiency Commission 2008, *op.cit.* VCEC made a number of other recommendations, which are listed in its report.

[9] Victorian Government 2008, *op. cit.*.

particular services or facilities. In the water industry, it is cheaper and more efficient to have a single underground water and sewerage pipe network. Duplication of the network would, in most cases, be uneconomic because the marginal cost of providing services to additional customers will, over a wide range of demand levels, always be lower using the existing network.

Not all elements of the water and sewerage supply chain, however, exhibit natural monopoly characteristics.[10] These parts of the supply chain do not have to be supplied by a single monopoly provider. These services include water sourcing, water and sewerage treatment, and retail customer service functions.[11]

But to compete effectively with an incumbent service provider, a new business would have to use the natural monopoly infrastructure operated by the incumbent to deliver water and sewerage services to its customers. This is because the cost to a new business of delivering water and sewerage services would be prohibitive if it had to build its own (duplicate) infrastructure compared to sharing use of the existing infrastructure. Higher costs of providing services would result in the new business having to charge higher prices than the incumbent business; the new business would, therefore, be unable to compete with the incumbent business.

It would also be wasteful from the community's perspective to have resources used in duplicating infrastructure when existing infrastructure could have been used. For example, without arrangements to share the use of infrastructure, a new business planning to provide water and sewerage services to customers in the metropolitan Melbourne area would be faced with duplicating at least part of the network of underground water and sewerage pipes. Not only would duplication be very costly, it would create significant inconvenience to residents and businesses in those areas where streets were dug up to install a duplicate pipe network.

Competition is not an end in itself. Enabling businesses to compete in providing water and sewerage services has the potential to improve community wellbeing by promoting:

- a more efficient allocation of resources in the water industry so that resources are used where they are most highly valued by the community (this is known as allocative efficiency)
- efficiency and productivity improvements that reduce the costs of providing water and sewerage services using existing inputs, processes and technologies (productive efficiency)
- longer term efficiency and productivity improvements resulting from innovations in water sourcing, water and sewerage treatment processes and technologies,

---

[10] A detailed discussion of the supply chain for urban water and sewerage services, identifying which services could be expected to exhibit natural monopoly characteristics and which are potentially competitive, is included in the Commission's issues paper. See Essential Services Commission 2009, *Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, February, chapter 2.

[11] See, for example, Tasman Asia Pacific 1997, *Third Party Access in the Water Industry: An assessment of the extent to which services provided by water facilities meet the criteria for declaration of access*, Final report prepared for the National Competition Council, September.

service delivery methods, and customer service provision (dynamic efficiency) and

- greater customer choice, with innovative water and sewerage services that better reflect customer needs and preferences.[12]

1.2.2 Purpose of an access regime

An access regime is a set of legislative and regulatory arrangements that establish a right for new businesses to negotiate with an infrastructure operator to share the use of natural monopoly infrastructure. An access regime includes a framework to facilitate those negotiations, such as negotiation protocols and guidance on reasonable terms and conditions for access, and provides for arbitration to resolve disputes when agreement cannot be negotiated.

Without an access regime, a business proposing to offer water or sewerage services could try to negotiate with the incumbent business to agree on arrangements to allow it to share the existing infrastructure operated by the incumbent. Private negotiations may, however, face a number of difficulties.

First, the incumbent could have an incentive not to agree to provide access, knowing that the new business intends to compete with it for a share of its customers. 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. Incumbent businesses generally derive substantial market power from their ownership of essential infrastructure.

Second, where an industry is characterised by a large incumbent business with detailed technical and market information, on one side, and small potential entrants with limited technical and market information and experience, on the other side, negotiations may not take place on an equal basis. On the information available to the Commission, it seems likely that some opportunities for providing innovative water and sewerage services will suit small, specialised businesses seeking to enter the industry.

Third, private negotiations can require significant time and resources, particularly when neither side has much experience in such negotiations and no clear framework exists to guide those negotiations. When disputes arise, this can add significant cost and delay to the negotiation process.

Developing an access regime would address these issues by providing a clear framework for negotiations. An access regime would establish a legal right for businesses seeking access to negotiate reasonable terms and conditions of access with an incumbent business operating specified natural monopoly infrastructure. An incumbent business would not be able to use its market power to

---

[12] In relation to improved allocative and productive efficiencies, Coliban Water noted that its customers could benefit from reduced congestion in the existing sewerage system and recovery of additional revenues from under-utilised assets. See Coliban Water 2009, *Submission to Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, 15 April.

refuse access or to set terms and conditions that created an unreasonable barrier to access.

In addition, establishing a framework for access negotiations would help to equalise the negotiating powers of the two parties and reduce the time and costs involved in reaching an access agreement. A clear framework to guide negotiations would also help to reduce the likelihood of disputes. If a dispute did arise, the parties would have available dispute resolution mechanisms to resolve the dispute in a timely and cost-effective manner.

1.2.3 Examples of infrastructure access

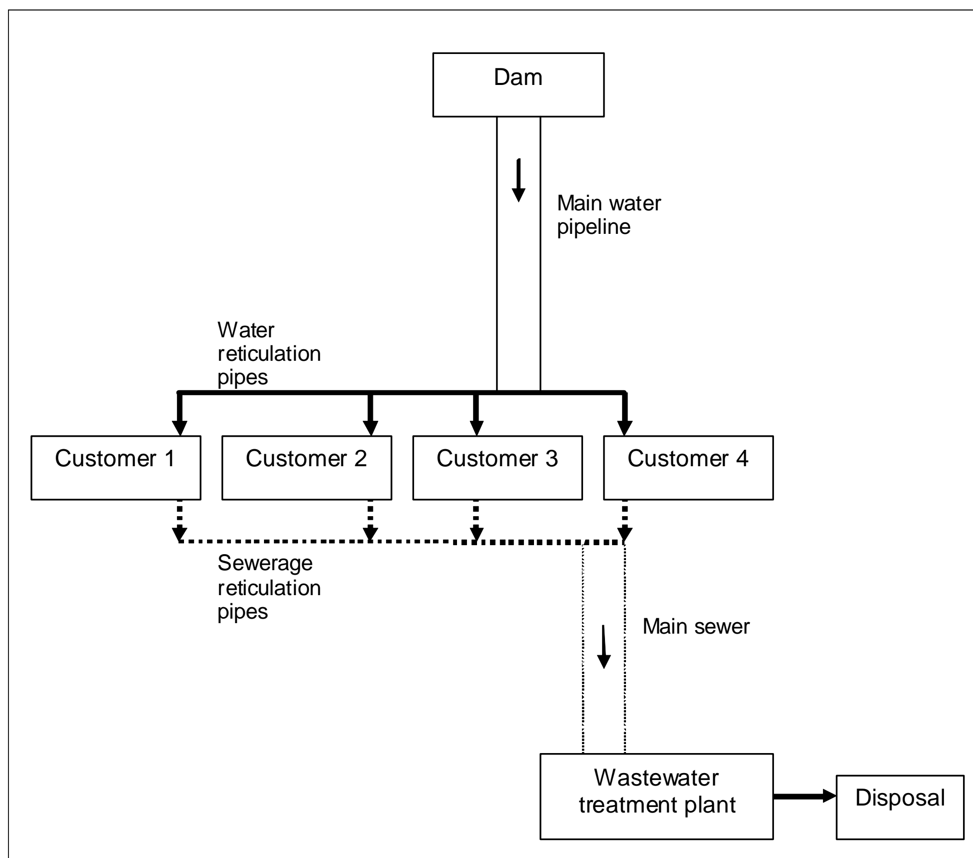
Currently, the existing publicly-owned water businesses provide water and sewerage services to their customers using infrastructure facilities that they own and operate. A simplified illustration of a supply system for water and sewerage services is shown in figure 1.1.

Water sourced from the dam is transported (moved) along the main water pipeline. When the pipeline reaches the town or city, it branches off into a network of water reticulation pipes that transports the water from the main water pipe to customers' premises (household, industrial or commercial customers). Customers' wastewater is discharged into sewerage reticulation pipes that transport the sewage to the main sewer. From the main sewer, the sewage is transported to a wastewater treatment plant, where it is treated to the standard required for discharge into the environment (set by the Environment Protection Authority).

Currently these services are all provided by Victoria's publicly-owned water businesses.

In metropolitan Melbourne, the main water and sewerage pipelines are operated by Melbourne Water while the water and sewerage reticulation pipes are operated by the three retailers according to their location. Melbourne Water also owns and operates Melbourne's dams and it will have a contract with the desalination plant operator for the supply of desalinated water. The retailers pay Melbourne Water for the supply of bulk water and sewerage services (including treatment of bulk water and sewage).

Figure 1.1 **Simple diagram of water and sewerage service provision by an existing water business**



The regional water businesses are vertically integrated. Each business operates the storages, main water and sewerage pipelines, water and sewerage reticulation pipes, and treatment facilities in their respective service areas. Rural services provided by regional water businesses may be provided via channels rather than pipelines. Wastewater services are not provided to rural customers so there are no sewerage pipelines in rural areas.[13]

In the potentially competitive segments of the supply chain for water and sewerage services, there is a range of water and sewerage services that could be provided by other businesses in competition with the incumbent water business. Some of these services cannot be provided without the use of natural monopoly infrastructure operated by the existing water businesses. The provision of other services does not require access to natural monopoly infrastructure. The businesses supplying these services could be private businesses entering the

---

13 Further detail on the current industry structure is provided in the Commission's issues paper. See Essential Services Commission 2009, *Issues Paper, op. cit.*, chapter 2.

water industry or existing water businesses currently restricted to other service areas.

Private businesses have shown interest in establishing contractual arrangements to supply water directly to users or to provide wastewater treatment services. Some innovative methods of providing water and sewerage services (which substitute for the services provided by the existing water businesses) are already occurring on a limited scale; several examples were listed in the issues paper.[14] In addition, the water businesses have contracts with private businesses for the supply of various services associated with delivering water and sewerage services. These include, for example, Public-Private Partnership (PPP) arrangements for the construction and operation of major capital works, maintenance agreements and purchase of various support services. Most existing arrangements do not require the use of publicly-owned infrastructure.

To clarify the types of activities requiring access to infrastructure and those that do not require infrastructure access, figure 1.2 illustrates some examples of activities that might involve the provision of water or sewerage services by businesses other than the existing water business in a particular supply area. To simplify the explanation, it is assumed that the incumbent water business owns and operates all the existing infrastructure, including the dam, the pipelines and the treatment plant. It provides all water and sewerage services to all existing customers 1 to 4.

Example 1: Water services

Business A establishes a new source of water (1) or (2), such as a desalination plant or a new aquifer, as shown in figure 1.2.

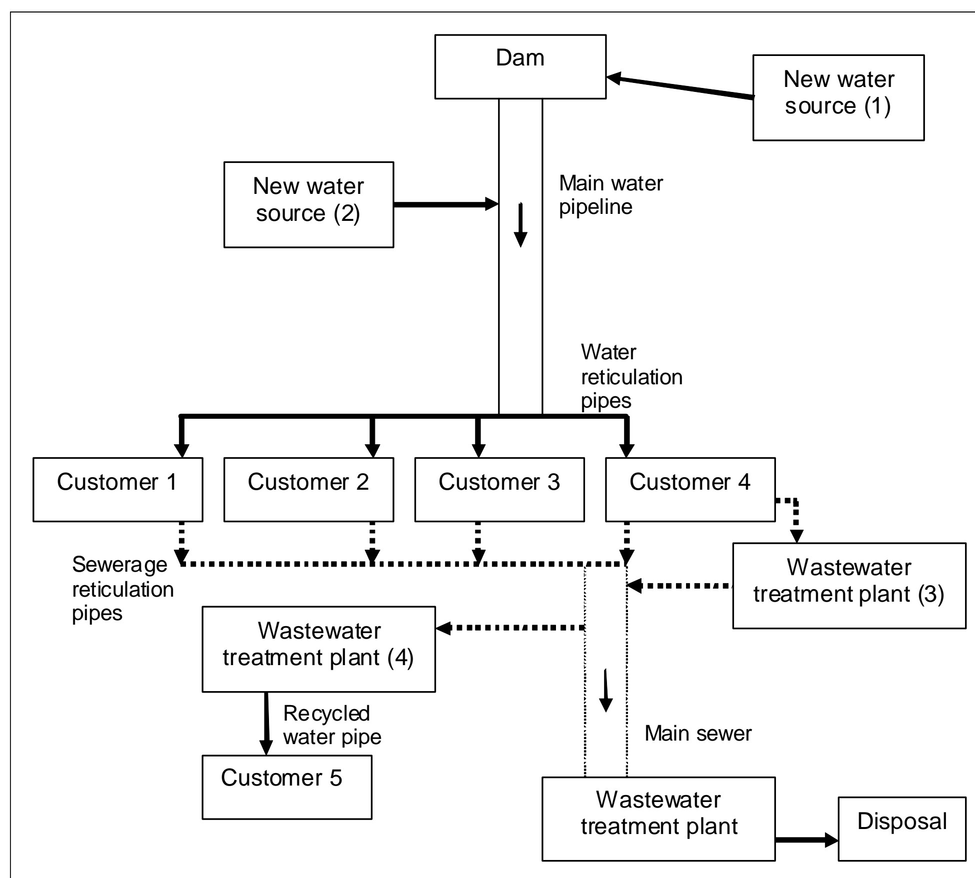
The first option for Business A does not require access to natural monopoly infrastructure. Business A sells the water to the incumbent water business, which distributes the water to its customers through its own pipelines. Business A constructs its own pipe to transport the water from its water source to an interconnection point with the water business' infrastructure, either into the main water pipeline or into the water business' dam. Business A does not use any of the water business' infrastructure. Therefore, it does not need to negotiate access.

The second option illustrates a situation where Business A does need to negotiate access to the incumbent water business' natural monopoly infrastructure. Under this option, Business A wants to sell the water directly to customers, instead of to the water business. It needs access to the main water pipeline and the water reticulation pipe network (and possibly to the storage provided by the water business' dam) to be able to deliver the water to its retail customers when they want it. It would therefore need access to that infrastructure before it could deliver water services directly to customers.

---

14 *ibid.*

Figure 1.2 **Simple diagram of water and sewerage service provision with participation by other businesses**



Three main advantages arise from allowing Business A to share the use of the natural monopoly infrastructure:

- When Business A has the choice of selling directly to end-use customers, a market exists for Business A's water. Without a market for its water, Business A would have no option but to sell to the single buyer (the incumbent water business) and would risk being offered an uneconomically low price on a 'take-it-or-leave-it' basis. This risk would discourage Business A (and other potential entrants to the water industry) from developing a new water source. In contrast, the existence of a market, and a market-determined price, would promote investment by Business A (and other new entrants) in developing new, cost-effective sources of water. Development of these new water sources would improve the efficiency and reliability of water supply.
- The possibility of competition from new entrants to the water industry would create a strong incentive for the incumbent water business to improve the efficiency of its operations and to develop innovative, cost-effective ways of meeting customers' demands. This would further improve the efficiency and reliability of water supply.

- Customers would be able to choose the water provider that best meets their individual needs and preferences.

Example 2: Wastewater treatment

This example illustrates provision of a sewerage service to a retail customer by a business other than the incumbent water business, where access to the water business' infrastructure is not required.

Business B constructs a new wastewater treatment plant (3) under contract with an industrial customer 4 to provide sewerage services because the customer's wastewater does not meet the water business' trade waste acceptance standards.[15] Business B builds a sewerage pipeline to take the wastewater from the customer's premises to its treatment plant. After treating the wastewater to meet the water business' trade waste acceptance standards, it discharges the treated wastewater into the water business' main sewer via a sewerage reticulation pipe. Business B is therefore a customer of the water business and pays it for sewerage services.

The water business then transports the wastewater through its main sewer to its own treatment plant where it treats it to the standard required for discharge into the environment.

Example 3: Sewerage services

In the first case under this example, there is no access to the water business' infrastructure. Business C constructs a new wastewater treatment plant (4) and builds a pipeline connecting its treatment plant to the main sewer. It extracts sewage from the main sewer under a commercial agreement with the water business. It treats the sewage and sells the treated water to a new customer 5 (who may be an irrigator or a factory) using a recycled water pipe that it constructs and operates. It does not use any of the incumbent water business' pipes to transport (move) the sewage to its treatment plant or to take the recycled water to its customer.

Extraction of sewage from the water business' sewer is known as sewer mining.[16] The incumbent water business transports sewage from customers 1 to 4 along the sewerage reticulation network and then the main sewer, all owned and operated by it, to its treatment plant. Business C pays the incumbent water business a price for purchasing sewage, which it extracts from the main sewer. The sewage is a resource that Business C buys and uses to produce recycled water.

In the second case under this example, access to the water business' infrastructure is needed. Instead of purchasing sewage from the water business,

---

15 The water businesses set acceptance standards for trade waste that can be discharged into their sewers. These standards cover chemical, biological, radiological, bacteriological and physical characteristics of the trade waste. They reflect environmental requirements and technical requirements related to the capacity of each treatment plant.

16 Sewer mining guidelines are currently being developed by an industry working group, with input from the Department of Sustainability and Environment.

Business C offers to provide retail sewerage services to customers 1 and 2. In this case, Business C has to negotiate access with the water business to use its sewerage reticulation network and its main sewer. Access to this infrastructure is needed to move the sewage from the premises of customers 1 and 2 to Business C's interconnection point with the main sewer.

Since the sewage from customers 1 and 2 has been mixed in with the sewage from customers 3 and 4, Business C obviously cannot ensure it takes only the sewage discharged by its own customers. Instead, it extracts sewage in the same amount and of equivalent quality to that discharged by its own customers. This sewage is transported along its own pipe to its treatment plant (4). The sewage remaining in the main sewer is transported along the main sewer to the incumbent business' treatment plant.

There are three main advantages from allowing Business C to share the use of the natural monopoly infrastructure:

- If Business C can provide retail sewerage services to customers more efficiently and cheaply than the incumbent water business can, customers will benefit. Alternatively, Business C might provide a higher standard of service, such as more environmentally sustainable discharge practices, for which some customers may be willing to pay a higher sewerage charge.
- The possibility of competition from new entrants to the water industry would create a strong incentive for the incumbent water business to improve the efficiency of its operations and to develop innovative, cost-effective ways of meeting customers' demands. This would improve the efficiency of sewerage service provision.
- Customers would be able to choose the sewerage service provider that best met their individual needs and preferences.

Access to resources vs access to infrastructure

The three examples described above highlight that the term 'access', as used in the context of an access regime, refers to sharing the use of infrastructure facilities. It does not refer to:

- producing water (or recycled water)
- being supplied with water (or recycled water)
- discharging sewage or
- receiving sewage (or wastewater).

Water, wastewater and recycled water are resources. Infrastructure facilities are required to transport these resources from one point to another or to store them for a certain period of time; these facilities include water and sewerage pipes and storage facilities, such as dams. Other infrastructure facilities are used to produce or treat these resources; examples of these facilities include wastewater treatment plants, desalination plants, and pumping facilities. As noted in section 1.2.1, access is only required to infrastructure facilities that are natural monopolies.

Businesses proposing to provide water or sewerage services will generally need water and wastewater resources to be able to provide those services. For example, a business proposing to supply water services to customers will require a source of

water, as well as access to water pipelines (or channels in rural areas) to deliver the water to its customers. It could purchase water from a water business or other water supplier (such as a desalination plant operator) or it could supply water from its own water source, such as an aquifer. If the business was proposing to supply recycled water to customers, it would need a source of wastewater, such as sewage or stormwater, to produce the recycled water provided to its customers.

If businesses are unable to obtain the resources needed to provide water and sewerage services, they will not be able to make full use of the opportunities opened up by an access regime. Chapter 10 identifies some impediments to businesses being able to obtain the resources required, such as limitations of existing water markets. These impediments to obtaining resources will need to be addressed to obtain the full benefits of an access regime.

More examples of activities involving access to infrastructure

Appendix C provides more examples of potential activities in the water industry, highlighting which would require access to natural monopoly infrastructure and which can occur without such access. Since facilitating access is expected to generate new and innovative ways of providing water and sewerage services, the examples given in appendix C, especially those involving access, are not exhaustive.

Finally, it is important to note that access to infrastructure may be sought by water businesses proposing to offer services that require the use of infrastructure facilities owned by another business. It should also be noted that, while the examples given in this section all refer to sharing the use of a publicly-owned water business' natural monopoly infrastructure, access could conceivably be needed to privately-owned infrastructure, where the infrastructure exhibited natural monopoly characteristics and was required to enable other businesses to provide water and sewerage infrastructure services. A theoretical example of such access is described in appendix C. An actual example is described in box 1.1.

Box 1.1 **Eastern Irrigation Scheme**

The Eastern Irrigation Scheme is a joint project between Water Infrastructure Group and Melbourne Water. Under the partnership, Water Infrastructure Group designed and built a Class A treatment plant to supply recycled water. It also designed and built the 60 km pipeline network that distributes Class A recycled water to 80 customers in a 170 square km area around Cranbourne.

The Eastern Irrigation Scheme, operating under the brand TopAq, supplies recycled water to customers for horticultural, recreational and industrial uses. Recycled water is also supplied to South East Water for on-sale to its recycled water customers in third pipe residential developments. South East Water shares the use of Water Infrastructure Group's recycled water pipeline network to deliver the water to its customers.

Source: Water Infrastructure Group 2009, *Eastern Irrigation Scheme*, www.topaq.com.au.

1.3 Access regimes in other industries and jurisdictions

In Australia, access regimes have been implemented in the gas, electricity, rail, telecommunications, and grain handling and storage industries. Access arrangements have also been developed for ports and airports.[17] Overseas, access regimes have been established for various network-based utility industries, particularly telecommunications, gas and electricity.

New South Wales is the first Australian state to establish an access regime for the water industry. Other Australian governments, including the Western Australian and Queensland Governments, are considering the future development of access regimes for water industry infrastructure. The United Kingdom has established a limited access regime for water industry infrastructure and is undertaking further reforms to extend the opportunities for competition and broader participation in the water sector.[18]

Generally, access regimes have been implemented in the context of broader reforms designed to boost innovation and efficiency in the industry.

1.4 Structure of this report

Chapter 2 of this report describes the framework within which this inquiry is being undertaken.

Chapter 3 outlines a proposed staged approach to implementing an access regime.

Chapters 4–10 set out the Commission's analysis and recommendations in more detail in respect of specific issues:

- Chapter 4 discusses the criteria for assessing whether particular infrastructure services should fall within the scope of an access regime and identifies the types of infrastructure services that are likely to satisfy those criteria. A staged approach is recommended for identifying the specific infrastructure services that meet the criteria of being significant natural monopoly infrastructure providing essential services required by businesses wanting to compete in markets upstream or downstream of the infrastructure.
- The recommended features of a negotiation framework for access requests are described in chapter 5. The recommended framework includes dispute resolution and appeal mechanisms.
- Chapter 6 compares alternative access pricing methodologies and identifies the key factors for determining when a particular methodology should be applied.
- Guidelines for accounting ring-fencing, and a staged process for implementing ring-fencing for particular infrastructure services, are discussed in chapter 7.

---

[17] The key features of these access regimes are discussed in the Commission's issues paper for this inquiry. See Essential Services Commission 2009, *Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, February, appendix C.

[18] *ibid.*, chapter 3, section 3.3.

- Chapter 8 discusses how the existing legislative and regulatory provisions relating to customer protection, water quality, public health and safety, and environmental protection can be extended to new water and sewerage service providers.
- The Commission's role in regulating a Victorian access regime is considered in chapter 9.
- Chapter 10 discusses potential barriers to competition that would need to be removed to support the effective operation of an access regime. It also identifies system coordination and management issues that would need to be addressed.

2 FRAMEWORK FOR THE INQUIRY

In conducting this inquiry, the Commission is guided by a number of factors, including:

- the terms of reference, which set out the Government's objectives and outline the scope of the inquiry
- the Commission's legislative objectives and the principles it must apply in regulating industries and advising the Government on industry regulation and
- stakeholder comments obtained from the public consultation process.

2.1 Scope of the inquiry

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

- which water and sewerage services should be subject to access
- who will be eligible to seek access
- an appropriate negotiation framework and dispute resolution mechanism
- the terms and conditions of access, including safety requirements, the allocation of capacity among competing users, interoperability issues, and service quality issues
- a methodology for access pricing and accounting ring fencing
- information publication and reporting requirements on businesses
- the appropriate division of responsibilities for network operation, maintenance and expansion
- implementation issues, including transitional arrangements, and
- the appropriate role of the Commission as regulator.

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

In conducting the inquiry, the Commission may examine access regimes in other industries and state-based access regimes for water and sewerage services in other states. The Commission can recommend when a future review of an access

regime should occur and comment on potential barriers to effective implementation of the regime.

The Commission's recommendations must be consistent with National Competition Policy, including the principles in clause 6 of the Competition Principles Agreement,[19] and with the relevant sections of the *Essential Services Commission Act 2001* (ESC Act), including the Commission's objectives in section 8 of the Act (see box 2.1) and Part 3A relating to third party access regimes (including the pricing principles; see box 2.2). The Commission should also have regard to the Victorian Government's commitment to public ownership of water businesses set out in the *Constitution Act 1975*.

In making its recommendations, the terms of reference require the Commission to be cognisant of other work programs taking place in Victoria's water sector, including:

- development of arrangements for optimising system management of the expanded water grid and new water sources to ensure the desired security of supply is achieved at least cost
- expansion and increased interconnectivity of the Victorian Water Grid and clarification of responsibilities for its management and coordination
- consideration of market-based mechanisms
- clarification of rights to alternative water sources and
- development of objectives and key principles of water sensitive urban design.

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

The Commission is also guided by the Government's objectives in developing an access regime for the water industry, which focus on promoting efficiency and innovation in the water industry while maintaining existing standards in health and safety, water quality, and resource and environmental management (see section 1.1.2).

2.2 The Commission's role and legislative framework

The Commission is Victoria's independent economic regulator of essential services supplied by the water and sewerage industry.[20] In carrying out its role, the

---

[19] Council of Australian Governments 1995, *Competition Principles Agreement,* 11 April 1995 (as amended to 13 April 2007). The clause 6 principles are included at appendix D.

[20] The Commission also regulates the ports, grain handling and rail freight industries and aspects of the retail energy (electricity and gas) industries. The Commission provides advice to the Victorian Government on a range of regulatory and other matters and is responsible for developing and administering the Victorian Renewable Energy Target and the Victorian Energy Efficiency Schemes. More information about the

Commission is primarily guided by the regulatory framework set out in the ESC Act and the *Water Industry Act 1994* (box 1.1).

Box 2.1 **The Commission's regulatory objectives**

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

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

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

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

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*

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

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 1.2). The Water Industry Regulatory Order (WIRO) made by the Governor in Council under the Water Industry Act sets out pricing principles for determining approved charges for water and sewerage services.[21]

Box 2.2 **Pricing principles for third party access charges**

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

(a) that regulated access prices should—

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

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

(b) that the access price structures should—

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

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

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

2.3 Consultation process

On 20 February 2009, the Commission commenced its consultation process for this inquiry with the release of an issues paper.[22] 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.

---

[21] The WIRO is available on the Commission's website at www.esc.vic.gov.au.

[22] Essential Services Commission 2009, *Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, February. The paper is available on the Commission's website www.esc.vic.gov.au.

Submissions to the issues paper were initially due by 30 March 2009. After receiving a number of requests for more time to make submissions, the Commission asked the Minister for Finance to extend the due date for the Commission's final report. After receiving the Minister's agreement for an extension, the Commission extended the due date for submissions to the issues paper to 21 April 2009. Fifteen submissions were received.[23]

On 4 May, the Commission held a public meeting to discuss in more detail stakeholder feedback on the key issues for the inquiry. Attendees who had not made submissions to the issues paper were given the opportunity to ask questions and provide comments. In addition, the Commission sought further information to assist it in analysing the issues and reaching its findings.

In submissions and at the public meeting, there was broad support for the establishment of an access regime for the Victorian water industry. Stakeholders generally supported a staged and cautious approach to implementing an access regime to ensure that the benefits from the regime would exceed its costs. There was also general agreement that existing obligations relating to consumer protection, health and safety, water quality and environmental protection should apply to all businesses providing water and sewerage services. In formulating its draft recommendations, the Commission has given careful consideration to the stakeholder feedback it has received.

The Commission has also had discussions with the NCC to assist it in better understanding the NCC's guidance on the requirements for certification of access regimes.

Before the Commission finalises its recommendations and final report to the Minister, there will be further opportunities for interested parties to provide information and comments. The Commission will hold another public meeting on 15 July 2009.[24] Submissions on the Commission's draft recommendations and the analysis set out in this draft report are due on 27 July 2009.

This draft report identifies a number of matters where the Commission is seeking further information. The Commission asks that responses to these information requests are also provided by 27 July 2009.

---

[23] Submissions can be viewed on the Commission's website www.esc.vic.gov.au.

[24] Details of the meeting are provided at the beginning of this report in the section titled 'How to respond to this draft report'.

3 STAGED IMPLEMENTATION PROCESS

The terms of reference for this inquiry state that the Commission's findings and recommendations should provide the Government with the information necessary to implement an access regime as soon as practicable. They also allow the Commission to make recommendations on any transitional arrangements that may be appropriate.

Recognising the extensive work program required to establish an appropriate state-based access regime, the Commission recommends staged implementation of the regime. In the initial stage, arrangements would be put in place to clarify which infrastructure services will be subject to access and to set out a transparent framework for negotiations (backed up by dispute resolution mechanisms) between water businesses and businesses seeking access to infrastructure. By facilitating access, these initial arrangements will ensure that the benefits from innovation and broader participation in the water industry are not delayed while the access regime is further developed and refined.

In subsequent stages of the implementation process, the initial arrangements will be built upon and refined as knowledge about, and experience in, providing access increases and participation in the Victorian water industry becomes more diverse. This will ensure that the resulting regime is comprehensive, clear and transparent and tailored to conditions in Victoria's water industry. By the end of the implementation period, all legislation and regulations necessary to support the regime will be in place.

This chapter describes the implementation process recommended by the Commission. Further detail in respect of specific matters is provided in the rest of the report.

3.1 Rationale for establishing a state-based access regime

As noted in chapter 1, facilitating access to natural monopoly infrastructure can improve community well-being by encouraging innovation, increasing efficiency in water and sewerage provision, and better meeting customers' needs and preferences.

Broad provisions to facilitate access arrangements already exist at the national level. The Commission's issues paper for this inquiry described in some detail the regulatory framework established by Australian governments for negotiating access to services provided by natural monopoly infrastructure.[25]

---

[25] Essential Services Commission 2009, *Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, February, chapter 3.

Under the National Competition Principles Agreement, 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 (that is, the facility is a natural monopoly). In addition, access to the infrastructure should be necessary to permit effective competition in related markets.[26]

The National Access Regime was established through amendments to the *Trade Practices Act 1974* (TPA). Part IIIA of the Act provides three avenues for granting access to natural monopoly infrastructure:[27]

- declaration of an infrastructure service – A service that has been declared under the TPA has been confirmed as satisfying the declaration criteria[28] and a legal right to negotiate access to that service on reasonable terms and conditions has been established.
- an undertaking by an infrastructure operator to provide access – Infrastructure operators can submit voluntary access undertakings to the Australian Competition and Consumer Commission (ACCC) for approval. An undertaking may relate to existing or proposed infrastructure. It should set out the terms and conditions on which an infrastructure operator will allow other businesses to share the use of specified natural monopoly infrastructure.
- certification of a state-based access regime – Once a state-based access regime has been assessed and certified as being effective under the TPA, the regime forms the regulatory basis for access requests. Access seekers cannot apply for declaration of infrastructure services under the National Access Regime if they are already covered by a certified state-based regime.

While applying for certification is not mandatory, the Victorian Government has committed, under clause 2.9(b) of the Council of Australian Governments' (COAG) Competition and Infrastructure Reform Agreement, to seek certification of any state-based access regimes.

The main purpose of establishing a state-based access regime for an industry, instead of relying on the national access provisions, is to provide greater certainty, clarity and transparency for access seekers and infrastructure operators. By tailoring the regulatory arrangements to the specific circumstances of the industry and the state, a state-based access regime can provide streamlined arrangements for negotiating access agreements, or obtaining arbitration of a dispute, that reduce

---

[26] Council of Australian Governments 1995, *Competition Principles Agreement,* 11 April 1995 (as amended to 13 April 2007).

[27] 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.

[28] The declaration criteria require the infrastructure to be a significant natural monopoly facility, the use of which needs to be shared to allow businesses to compete in related markets where competition is feasible. 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.

costs for both infrastructure operators and businesses seeking access. The Western Australian Economic Regulation Authority (ERA) noted that:

> *The development of a State-based regime, in which the general terms and conditions of access are clear to access seekers in advance, could reduce considerably the risks and delays in obtaining access.*[29]

To obtain these benefits in the Victorian water sector, the Commission's recommendations have to provide the Government with the information needed to develop a comprehensive access regime that establishes clear processes customised to the specific circumstances of the industry. The NCC has highlighted that:

> *… a state or territory access regime that merely replicates the negotiate/arbitrate approach already available under the general provisions of Part IIIA of the TPA would appear to offer little benefit while arguably adding to cost and uncertainty.*[30]

3.2 Staged implementation of an access regime

The terms of reference for this inquiry are wide-ranging in scope (see section 2.1 and appendix A). An extensive work program involving research, consultation and detailed review of existing legislation and regulations will be required to address thoroughly the full list of matters the Commission must consider in making recommendations on developing an access regime. The Commission considers that properly dealing with these matters requires a step-by-step approach.

In designing a state-based access regime, the Commission's overarching concern is to minimise the costs of implementing the regime while promoting the greatest benefits to the community from facilitating access and broader participation in the industry. As mentioned in chapter 1, one of the Commission's legislated objectives in regulating the water sector is that, wherever possible, it must ensure that the costs of regulation do not exceed the benefits.

Many submissions expressed concern that the costs of implementing an access regime should not exceed its expected benefits. To minimise costs, many submissions advocated a cautious and staged approach to implementation.[31]

The Commission has concluded that a staged implementation process will minimise implementation costs while promoting access, innovation and competition. Costs will be minimised by establishing a basic framework that is refined as better information becomes available to guide further development of the

---

[29] Economic Regulation Authority 2008, *Inquiry on Competition in the Water and Wastewater Services Sector: Final Report*, June, p. 67.

[30] National Competition Council 2009, *Water Industry Competition Act 2006 (NSW): Application for certification of the NSW water industry infrastructure services access regime*, Draft recommendation, 2 April, p. 7, available at www.ncc gov.au.

[31] Submissions can be viewed on the Commission's website www.esc.vic.gov.au.

regime. It will also allow for a step-by-step approach to addressing the full list of matters set out in the terms of reference. At the conclusion of the implementation process, Victorians will have a comprehensive and transparent access regime designed for the specific circumstances of the Victorian water industry.

In deciding on an appropriate implementation process and timeframe, the Commission has been guided by a number of key considerations:

- the NCC's assessment of the New South Wales access regime for its water industry
- the need to determine the coverage of the access regime and identify specific infrastructure facilities that are subject to access applications
- the need to extend the existing legislative and regulatory framework for consumer protection, health and safety, water quality, and environmental protection, to new businesses providing water and sewerage services and
- the substantial legislative program required to establish an access regime and implement complementary reforms.

These considerations are discussed in more detail below.

3.2.1 The National Competition Council's assessment of the New South Wales access regime

New South Wales is currently the only Australian state to have developed an access regime for water and sewerage infrastructure services. One of the New South Wales Government's objectives in establishing the regime was to have the regime certified under the TPA. As such, the New South Wales regime provides an important starting point for developing a Victorian access regime.

On 19 December 2008, the New South Wales Government applied to the NCC for a recommendation under the TPA that the state's access regime for water industry infrastructure be certified as an effective access regime. On 2 April 2009, the NCC released its draft recommendation.[32]

The NCC has concluded that the New South Wales regime satisfies the criteria for certification and has proposed to recommend certification of the regime for ten years.[33] In its draft recommendation, however, it expressed reservations about some aspects of the regime. It suggested that several issues would benefit from further consideration by the New South Wales Government and by other governments developing access arrangements for water industry infrastructure.

First, the NCC highlighted that a state-based regime should provide more certainty than the TPA regulations and be tailored to the specific conditions of the industry. In particular, the scope of the regime's coverage should be clear from the outset.

In respect of New South Wales' regime, the NCC was critical of the two-stage process that businesses seeking to negotiate access to infrastructure may have to

---

[32] National Competition Council 2009, *op. cit.*

[33] The New South Wales Government had proposed a certification period of 25–50 years.

undertake: first, to have the area in which the infrastructure is located covered by the regime; and second, to have the right to negotiate access to a particular infrastructure facility provided through formal declaration of that facility. It expressed the view that an access regime's application should be clearly defined from the commencement of the regime.

South East Water similarly noted, in its submission, that a regime modelled on New South Wales' regime could leave 'uncertainty about the potential for declaration of future assets and uncertainty around the status of key existing assets'.[34]

Second, the NCC was concerned that the New South Wales regime is a principles-based regime that gives too much discretion to the regulator and the Premier and Minister for Water. In industries (like the water industry) where the Government has a substantial ownership interest in the businesses that will be exposed to competition from access seekers, it considered that an access regime should be transparent and well-defined. In addition, it stated that limited merits review of regulatory decisions is desirable.

Third, the NCC highlighted that licensing arrangements should not include requirements that could form an unreasonable barrier to efficient competition. In this regard, it drew attention to the requirement for retail water supply licence applicants to have access to sufficient quantities of water from 'non-public utility sources' as a potential deterrent to private participation in the New South Wales water industry.

Fourth, the NCC noted that its decision to recommend a relatively short certification period of ten years (compared to 25–50 year certification periods in other industries) reflects the 'embryonic stage of development' of broader participation in the water industry and uncertainty about the nature and level of demand for access to infrastructure services.[35] Consequently, the NCC considered that 'there would be significant benefit in reviewing at a relatively early stage how the … Regime has operated to facilitate access, with the opportunity taken for any necessary fine-tuning'.[36] It stated that any fine-tuning could occur when an application for extension of the certification period was made.

In designing a Victorian access regime, the Commission and the Victorian Government have an opportunity to address the concerns expressed by the NCC in relation to New South Wales' regime. Staged implementation of the regime will allow the development of a more comprehensive and well-defined regime that provides greater clarity, certainty and transparency. It will also allow the Victorian Government to fine-tune the access regime in response to industry developments and a better understanding of the nature and extent of demand for access, prior to an application for certification.

---

[34] South East Water 2009, *op. cit.*, p. 17.

[35] National Competition Council 2009, *op. cit.*, p. 7.

[36] *ibid.*

3.2.2 Tailoring the regime's coverage to Victorian water industry conditions

In making recommendations to the Government on the scope (or coverage) of a Victorian access regime, the Commission needs to balance three factors:

- providing certainty and clarity for infrastructure operators and potential access seekers on which infrastructure facilities come under the access regime
- ensuring that the regime does not impose excessive costs on infrastructure operators (currently, the existing water businesses) by requiring access provisions to be made for infrastructure facilities that are unlikely to be subject to access requests and
- allowing sufficient flexibility in access arrangements so as not to discourage activities that would result in benefits to the community.

The Commission considers that a staged implementation period would allow for the coverage of the regime, and its application to specific infrastructure facilities, to be refined over time. When access to publicly-owned infrastructure is facilitated, new opportunities for innovative activities will arise and broader participation in the industry will become possible. As better information becomes available about the prospective nature and extent of demand for access, the application of the regime could be more precisely defined. Chapter 4 details the Commission's recommended approach to defining the coverage of an access regime.

Some submissions suggested that it was not possible to identify, with any certainty, which water industry infrastructure facilities were likely to be subject to access requests. Yarra Valley Water, for example, stated that there is 'considerable uncertainty as to the nature of the future activities and innovations … that might be forthcoming under an open access regime'.[37]

Several submissions argued that existing provisions are sufficient to permit any potential access seekers to negotiate access with the water businesses. The relatively few examples of negotiated access arrangements were seen as indicating that future demand for access was unlikely to be significant. For example, Yarra Valley Water expressed the view that:

> *… there is already some scope to accommodate innovation and new activities (which may require access to monopoly infrastructure in the Melbourne metropolitan area) within the existing regulatory arrangements, or with minimal change to those arrangements. We also note that there is little evidence to suggest that the existing arrangements – or the commercial conduct of the incumbent water companies in Victoria – are impeding the development of innovative services through third party access to monopoly facilities.*[38]

---

[37] Yarra Valley Water 2009, *Submission to Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, 7 April, p. 4.

[38] *ibid.*, p. 3.

Melbourne Water made similar comments, stating that it has privately negotiated terms and conditions of access to its infrastructure services. It added that it does not have incentives to restrict access to its infrastructure services.[39] It expressed the view that 'demand for access in the short to medium term is likely to be limited'.[40]

VicWater, the peak industry association for the Victorian water businesses, submitted that 'current legislative and regulatory regimes provide an adequate framework for water businesses to develop access arrangements as privately negotiated contracts'.[41]

Some examples of existing access agreements were identified in submissions. These included:

- Melbourne Water and Southern Rural Water have negotiated terms and conditions for the transfer of water owned by Southern Rural Water from the Thomson Reservoir to a point of connection with City West Water.[42]
- Central Highlands Water is running a pilot program for third party access to the Goldfields Superpipe. The program is open to community and commercial customers seeking to purchase more water.[43]

A number of other arrangements were nominated as examples of access agreements. These involved sewer mining, private provision of wastewater treatment facilities and associated pipelines, and public-private partnership (PPP) arrangements. However, as explained in section 1.2.3 and appendix C, these activities do not involve access unless another business shares the use of infrastructure services provided by a water business or privately-owned infrastructure operator. Many examples given in submissions did not involve access.

On the information available to the Commission, it seems that relatively few access arrangements have been negotiated to date for access to publicly-owned water industry infrastructure. The Commission does not see this as indicating that there is likely to be little demand for access when an access regime is in place. There are a number of explanations for the small number of successful access negotiations (or requests for access) to date. Key among these reasons is the lack of a clear framework to guide access negotiations.

Potential access seekers face higher costs and risks in formulating business proposals that require negotiated access to infrastructure when they are uncertain about their obligations under existing legislation and regulations (and the costs of

---

[39] Melbourne Water 2009, *Submission to Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, 16 April, p. 3.

[40] *ibid.*, p. 4.

[41] Victorian Water Industry Association (VicWater) 2009, *Submission to Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, 14 April, p. 1.

[42] Melbourne Water 2009, *op. cit.*

[43] Central Highlands Water 2009, *Submission to Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, 14 April.

complying with those obligations). The Commission notes that current examples of access, such as the arrangements between Melbourne Water and Southern Rural Water, are often between existing water businesses that have clearly articulated obligations relating to customer protection, health and safety, water quality, and environmental standards.

In the case of the Goldfields Superpipe, the Commission understands that all of the arrangements for delivering additional water to customers nominally 'accessing' the pipeline have been undertaken by Central Highlands Water on behalf of those customers.

When potential access seekers cannot quantify all the costs associated with proposals requiring access, they cannot accurately assess the expected commercial returns from such proposals. Potential access seekers would generally have little definite knowledge about the likely access price. Further, without an expected timeframe for getting a decision on an access request, planning and organising resource requirements would be more difficult. All of these uncertainties would tend to deter broader participation in activities requiring access by increasing the costs and risks associated with such activities.

The Commission has concluded that existing access provisions do not give potential access seekers sufficient certainty about the processes, costs involved or obligations with which they must comply in providing water and sewerage services. It is likely therefore that much of the prospective demand for access remains latent. The Commission considers that the staged implementation process it recommends will improve the environment for potential access seekers and help to reveal opportunities for commercially viable activities where access is required.

3.2.3 Extending the framework for customer protection, health and safety, water quality and environmental protection

Most submissions advocated extending the existing legislative and regulatory framework for customer protection, health and safety, water quality and environmental protection to new businesses providing water and sewerage services, particularly services to retail customers.

Submissions highlighted that the Government would have to review the existing framework to identify what would need to be done to ensure that new businesses were subject to the same obligations as the water businesses. The Consumer Utilities Advocacy Centre (CUAC) stated that the existing framework could contain 'gaps that could limit its coverage or that the relevant regulatory agency lacks sufficient powers to effectively regulate a new entrant'.[44]

Identifying the necessary legislative and regulatory amendments will require a detailed review of existing legislation and regulations. Following this review, the Government may have to undertake a substantial legislative program to implement the required changes. The Commission envisages that the full review of relevant

[44] Consumer Utilities Advocacy Centre 2009, *Submission to Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, 7 April, p. 6.

legislation and regulations and required legislative program would occur during the staged implementation period.

As the first step in this process, the Commission recommends that the Government identify key measures to be implemented as a matter of priority from the commencement of the implementation period. These measures would ensure that existing obligations would apply to businesses granted access before the completion of the full review and legislative program. Chapter 8 discusses in more detail broad measures to apply existing obligations to new businesses.

3.2.4 Establishing a legal framework for an access regime

To establish the legal basis for a Victorian access regime, the Government will need to formulate and enact new or amended legislation and regulations. The Commission notes that the New South Wales Government introduced the *Water Industry Competition Act 2006* to establish an access regime for the water industry.

The Commission notes that the Government is currently undertaking a substantial work program to improve the efficiency of the water industry (see section 1.1). The resulting reforms are expected to remove existing obstacles to broader participation and competition in the water industry and open up new opportunities for innovative and more efficient ways of meeting customer demands for water and sewerage services. Chapter 10 discusses in more detail barriers to broader participation and competition. Implementing the reforms is likely to require detailed review of existing legislation and result in legislative amendments to implement the reforms.

A substantial legislative program will be required to enact new legislation or amend existing legislation to:

- establish a legal and regulatory basis for the access regime
- extend the existing legislative and regulatory framework for customer protection, health and safety, water quality and environmental protection to new businesses providing water and sewerage services (as discussed in section 3.2.3) and
- implement reforms to improve the efficiency of the water industry and remove barriers to competition.

A staged approach to legislative reform is likely to be required. The process is expected to require substantial time and resources to complete.

3.3 Transitional arrangements

The terms of reference allow the Commission to make recommendations on any transitional arrangements that may be appropriate. There was general support in submissions and at the public meeting for transitional arrangements in implementing an access regime.

Melbourne Water advocated 'a light handed approach to access regulation for the water industry in Victoria, particularly in the early stages of any regime's development'.[45] South East Water stated that it:

> *… would prefer access to be implemented incrementally to ensure a smooth transition and to ensure that the assets that can offer the greatest net benefit are opened up first. However South East Water recognises that requests for access from new participants are likely to be relatively unpredictable depending on perceived customer requirements and opportunities for innovation.*[46]

Central Highlands Water drew attention to the 'importance of a transitional process to learn from a staged implementation and in retaining flexibility for modification as a result of those learnings'.[47] It favoured guidelines to the market on the type of assets that can be declared and initially limiting access arrangements to a few large assets and a smaller number of non-residential customers. VicWater also supported transitional arrangements that would initially apply only to large non-residential customers or third parties seeking to supply large non-residential customers. It considered that such arrangements would 'ensure that the access regime can be assessed and refined in more detail before it is applied' more broadly.[48]

Barwon Water recommended transitional arrangements that provide guidelines for infrastructure operators and businesses seeking access. It considered this would be more efficient than the current situation where the incumbent water business would have to deal with ad hoc requests without guidelines to assist them and access seekers.[49] A comment was made at the May public meeting organised by the Commission that businesses sometimes approach the water businesses to discuss proposals involving access only to withdraw them when the obligations associated with providing water and sewerage services, or planning and approval requirements, are explained to them.

Yarra Valley Water advocated a step by step approach that addresses any immediate barriers to innovation and access present in the existing access provisions. As an initial step, it suggested that all incumbent water businesses should have an obligation to provide access on fair and reasonable terms. Such an obligation could be imposed either through the businesses' Statement of Obligations or through a Ministerial direction pursuant to sections 307 and 307A of the *Water Act 1989* (the Water Act).[50] Yarra Valley Water considered that such an obligation 'would clarify that open access to monopoly infrastructure is mandated

---

45 Melbourne Water 2009, *op. cit.*, p. 1.

46 South East Water 2009, *op. cit*, p. 8.

47 Central Highlands Water 2009, *op. cit*, p. 3.

48 VicWater 2009, *op.cit.*, p. 5.

49 Barwon Water 2009, *Submission to Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, 14 April.

50 The Act allows the Minister for Water, in consultation with the Treasurer, to give written directions to a water corporation in relation to the performance of any of its functions.

and that Victorian water companies are required to provide such access on fair and reasonable terms'.[51]

The Commission does not support limiting access arrangements to particular customers or particular types of services. Restricting access in this way could exclude innovative solutions that would generate significant benefits for customers and the community more generally. Such solutions could, for example, involve the supply of services to greenfields developments, such as new housing estates or inset developments.

The Commission notes stakeholders' support for a staged implementation process, with modification and refinement of the arrangements to reflect knowledge and experience gained in the initial implementation stages. It agrees that guidelines would improve the information available to potential access seekers and assist in reducing costs to the water businesses and businesses proposing activities that require access to publicly-owned infrastructure. It has taken into account stakeholders' comments in developing its recommendations on a staged implementation process.

3.4 Proposed implementation process

The Commission recommends that an access regime for the Victorian water industry be implemented in four main stages. The initial stage would establish the foundations for a state-based access regime, which would be built on and refined during the next two stages. The third stage would include the enactment or amendment of legislation and regulations underpinning the regime. In the final stage, the Government would apply for certification of the regime under the TPA.

The key stages in the implementation period recommended by the Commission are summarised in table 3.1. Broad timeframes for completing each stage are indicated. Each stage is discussed further below.

3.4.1 Stage 1: Access commitments and licensing

As the first stage of implementing an access regime, the Commission recommends that clearer arrangements be put in place to facilitate access to natural monopoly infrastructure. This would ensure that the benefits from facilitating access are not delayed while the details of the access regime, and the supporting legislation and regulations, are developed and refined.

[51] Yarra Valley Water 2009, *op. cit.*, p. 5.

Table 3.1 **Indicative implementation timetable**

	Proposed steps	*Estimated duration*
Stage 1	Businesses formulate access commitments for specific infrastructure (6 months) Government implements a licensing regime and extends obligations for customer protection, health and safety, water quality, and environmental protection to new businesses (12 months)	12 months
Stage 2	Commission monitors operation of access commitments, outcomes from access, and the licensing framework and recommends refinements to the access arrangements	12 months
Stage 3	Government develops and enacts legislation to establish a state-based access regime (6 months) Commission refines guidance for water businesses and access seekers and prepares templates and other documentation (6 months)	6 months
Stage 4	Government applies for certification	9-12 months

Access commitments

To facilitate access and improve certainty and clarity for industry participants, the Commission recommends that the water businesses should make 'access commitments' giving access seekers the right to negotiate with them on sharing specified infrastructure services. The criteria for identifying which infrastructure services should be covered by an access regime are discussed in chapter 4. These access commitments would be similar to the voluntary undertakings that infrastructure operators can make under the national access provisions.

Unlike access undertakings, which are voluntary, the Commission envisages that the Government would require the water businesses to make access commitments in respect of their significant natural monopoly infrastructure. The Minister for Water could direct the water businesses to make access commitments under the Water Act.

While access commitments would be modelled on access undertakings under the national access provisions, they would initially contain less detailed information. This will ensure that water businesses are not required to incur excessive costs in developing access commitments for infrastructure facilities for which there is little or no demand for access. Greater detail could be added on a step-by-step basis as more experience and knowledge are gained during the implementation period.

Access commitments would be submitted to the Commission for approval to ensure that they are reasonable and consistent with both the national access

provisions, the specific circumstances of the Victorian water industry, and Government objectives.

In the first instance, the water businesses would be responsible for nominating specific infrastructure facilities for which access commitments would be made. These nominations would be reviewed by the Commission and subject to public consultation. Additional infrastructure services could be proposed by the Commission, which would advise the Government of its recommendations. The Commission considers that there should be flexibility during the implementation period to add access commitments for other infrastructure facilities that were not initially nominated or to revoke an access commitment to reflect a significant change in circumstances.

Guidance would need to be provided on identifying specific infrastructure services for which access commitments should be made. The infrastructure subject to access commitments would have to meet the criteria of being provided by significant natural monopoly infrastructure facilities and of being needed to promote competition in related markets.

The Commission would also formulate guidance for the businesses on the matters that should be included in access commitments, including negotiation protocols, timeframes for various stages of the negotiation process, and the information that should be provided as part of the negotiation process. The access commitments would provide for dispute resolution when agreement cannot be reached through negotiation. Chapter 5 discusses the negotiation framework in more detail.

The Commission would also formulate guidance on other matters such as access pricing principles and accounting ring fencing. Chapters 6 and 7 discuss access pricing and ring-fencing.

A public consultation process and industry workshops on certain technical matters would provide feedback to assist the Commission in developing the guidelines.

Draft recommendation 3.1

That a Victorian water industry access regime is developed and refined over a staged implementation period.

Draft recommendation 3.2

That the Government requires the water businesses to prepare ‘access commitments’ giving access seekers the right to negotiate access to nominated infrastructure facilities during the implementation period.

Licensing

To clarify the obligations on new water and sewerage service providers, the Commission recommends that a licensing regime be established and that existing legislative obligations relating to health and safety and water quality be extended to

those businesses. Chapter 8 discusses these obligations and a licensing framework in more detail.

As noted in section 3.2.3, identifying the necessary legislative and regulatory amendments will require a detailed review of existing legislation and regulations. Following this review, a substantial legislative program may be required to implement the necessary changes. These processes are expected to take around 12 months to implement.

3.4.2 Stage 2: Refinement of access framework

During the second stage of the implementation process, the Commission proposes to monitor how the arrangements established in the first stage are operating. The Commission, the water businesses, access seekers and other industry participants would all have the opportunity to improve their knowledge and understanding of the nature and extent of demand for access in the Victorian water industry.

This knowledge would allow the water businesses to develop and refine their access commitments and to nominate any additional infrastructure facilities or services that should be covered by the access regime. The Commission would identify any aspects of the access provisions, its guidance to the businesses and the licensing provisions that need extension, modification or refinement to improve the operation of the access regime.

3.4.3 Stage 3: Legislative and regulatory amendments

In the third stage, the Government would develop and enact new legislation and regulations, or amend existing legislation and regulations, to establish the legal framework for the access regime. Any legislative or regulatory changes required to enable broader participation and competition in the water industry would also be addressed to ensure the access regime is effective in achieving the Government's objectives.

The Commission would finalise its guidance and develop templates and other required documentation. It notes that the Independent Pricing and Regulatory Tribunal's (IPART) development of documentation associated with the New South Wales access regime required a significant investment of time and resources.

Draft recommendation 3.3

That the Government develops and enacts new legislation and regulations, or amends existing legislation and regulations, to establish the legal framework for the access regime during an implementation period.

3.4.4 Stage 4: Application for certification of the regime

The Commission expects that finalisation of the regime to the stage where the Government can apply for certification will take approximately 3 years. The Commission considers that the knowledge and experience gained during the

implementation period will allow the Government to establish a comprehensive, transparent and well-defined access regime customised to the circumstances of the Victorian water industry.

The Commission anticipates that such a regime would satisfy the requirements for certification and would avoid the concerns about the New South Wales regime identified by the NCC. It may therefore receive certification for a longer period than ten years. If so, this would provide greater certainty for both infrastructure operators and access seekers, recognising that many water industry infrastructure facilities are long-lived and require substantial capital investments.

3.5 Periodic review of the access regime

The terms of reference allow the Commission to recommend the timing of a future review of the access regime to ensure it remains relevant and effective.

Melbourne Water supported periodic review of an access regime 'to ensure that it is achieving its objectives and for the regulator and industry to understand where improvements are required'.[52] Barwon Water stated that the access regime should be reviewed during the water plan period so any required changes can be implemented prior to preparing the next Water Plan.[53]

The Commission considers that the access regime should be reviewed not less than five years, and not more than ten years, after the completion of stage 3 of the implementation process. A review should be scheduled to allow the water businesses to make any required changes to their access provisions before they begin preparing their Water Plans for the next price review. This timing would also allow the Commission to take into account the outcomes of the review and any modifications to the access regime, including the approach to access pricing, during its price review.

Draft recommendation 3.4

That a Victorian water industry access regime be reviewed not less than five years, and not more than ten years, after the legislative and regulatory amendments required to establish the legal framework for the access regime have been implemented.

[52] Melbourne Water 2009, *op. cit.*, p. 5.

[53] Barwon Water 2009, *op. cit.*, p. 5.

4 COVERAGE OF AN ACCESS REGIME

The terms of reference for this inquiry require the Commission to make recommendations on which water and sewerage infrastructure facilities should be subject to access. In broad terms, these will be natural monopoly facilities that are not economically feasible to duplicate. New water and sewerage service providers would need to share the use of these facilities to be able to efficiently provide services to their customers in related markets. Identifying specific infrastructure facilities that satisfy these criteria would increase certainty for both the access seekers and the incumbent water businesses.

This chapter discusses the Commission's draft recommendations in relation to the coverage of the access regime, including the process for identifying specific infrastructure facilities during the implementation period for the regime.

4.1 Identifying infrastructure subject to an access regime

In designing a Victorian access regime for water industry infrastructure, the types of infrastructure services covered by the regime must be clearly defined to provide certainty and clarity to industry participants and potential new entrants. Coverage defines the scope of a regime in terms of its geographical boundaries and the generic types of infrastructure services that are subject to the regime.

Once the scope of the regime has been defined, particular infrastructure facilities that fall within the regime's scope and satisfy the criteria for access can be identified. Within an access regime, the process of confirming that a particular infrastructure service satisfies those criteria is known as declaration (and the criteria for access are known as declaration criteria).

Australian governments have established a set of declaration criteria for determining the infrastructure services to be included in access regimes under National Competition Policy.[54] The infrastructure facility must be:

- significant—Significance may be measured in relation to the nation, the state or to a particular region.
- not economically feasible to duplicate—This is the definition of a natural monopoly. It means that, within the likely range of reasonably foreseeable demand for the service, the cost of providing the service (such as transporting water or sewage) is lower if it is provided by a single infrastructure facility (such as a single water or sewerage pipeline network).

---

[54] These criteria are included in clause 6 of the Competition Principles Agreement. See appendix D.

- necessary to permit effective competition in related markets—Businesses providing services in upstream or downstream markets can only compete effectively if they can share the use of the infrastructure.
- able to be used safely by an access seeker at an economically feasible cost—Access should be granted only where appropriate regulation can ensure that safety requirements can be met at reasonable cost.

It is important to note that any infrastructure facilities that meet these declaration criteria but are not covered by a certified state-based regime would be covered by the national access provisions under the *Trade Practices Act* 1974 (TPA).

Further, it should be emphasised that an access regime only applies to infrastructure; it does not apply to water or wastewater resources, such as the water carried in pipelines or the sewage carried in sewers (see section 1.2.3). The Commission recognises that arrangements to allow water industry participants to obtain water or wastewater resources may be needed to support the operation of an access regime for the water industry. Issues associated with the rights to own and trade these resources are discussed in chapter 10.

4.2 Geographical coverage of the regime

The terms of reference for the inquiry require the Commission to make recommendations on developing an access regime covering water and sewerage infrastructure across Victoria.

In New South Wales, the coverage of the water industry access regime is limited to water and sewerage infrastructure that falls within a scheduled geographic area, as specified in the *Water Industry Competition Act 2006* (NSW). Currently the only areas covered by the regime are the areas of operation of Sydney Water and Hunter Water.[55]

An access seeker proposing to provide a water or sewerage service that requires the use of natural monopoly infrastructure located outside of the scheduled area would have to apply for the Premier to extend the coverage of the regime to include the relevant geographic area. Once the regime's coverage was extended to add the relevant area, the access seeker could then apply for declaration of the services provided by the infrastructure facility. For the access seeker, this two-stage process could increase the time, costs and risks involved in obtaining the right to negotiate access to the infrastructure facility. The National Competition Council (NCC) identified this as a potential concern in its assessment of the New South Wales regime.

In contrast, under the National Gas Law, all pipelines were either declared upon the commencement of the gas access regime or defined as falling within the scope of the regime. The National Gas Law therefore provides certainty for participants in the gas industry about the extent of the gas access regime's coverage.

---

[55] Independent Pricing and Regulatory Tribunal (IPART), *WICA Access Fact Sheets*, available at www.ipart.nsw.gov.au.

In determining the geographic coverage of a Victorian water industry access regime, interstate issues should be considered. The Competition Principles Agreement requires that where more than one state-based regime applies to certain infrastructure facilities, the regimes should be consistent or a single process should apply for seeking access to those facilities. In assessing whether a state-based access regime is effective (for the purposes of certification), the NCC considers whether a state-based regime's influence extends beyond the limits of the state, such as when it applies to infrastructure facilities that are not wholly located in the state or are part of a wider interstate network.

In Victoria, interstate issues could arise in respect of services located in the Murray Darling Basin, where trading has created a single market that crosses state borders. The relevant state governments, including the Victorian Government, have agreed that consistent regulatory arrangements should be put in place through a national scheme.

In respect of the Murray Darling Basin, South East Water stated that the infrastructure facilities used to provide services to irrigators and urban customers should be considered separately. It noted that some regional urban facilities could meet the criteria for coverage under a state based regime. But it suggested that the existence of a competitive market in the irrigation sector, and a possible move to national regulation of this sector, should be taken into account in determining whether irrigation infrastructure facilities should be covered.[56]

Access arrangements for infrastructure services provided within the Murray Darling Basin could be made through a national regime; these services would not then be covered by a state-based access regime. While a national water industry access regime could be established in the future, no specific national access arrangements have as yet been established for the industry beyond the general access provisions under the TPA.

At present, the Murray-Darling Basin is not included within the scheduled geographic area covered by New South Wales' access regime. No other state currently has a state-based access regime for its water industry. Therefore, including the Murray-Darling Basin within a Victorian access regime would not result in infrastructure facilities located in this area becoming subject to more than one state-based access regime. If the Basin were to subsequently become subject to another state-based access regime, an inter-governmental agreement could be made to ensure that a single process applied for seeking access.

The Commission has concluded that the entire state should be covered by a Victorian access regime. In respect of the Murray-Darling Basin, it seeks further information on whether any barriers to gaining access to infrastructure facilities arise as a result of differing state arrangements. It also seeks further information in relation to existing arrangements for sharing the use of rural infrastructure facilities (see section 4.3.3).

---

[56] South East Water 2009, *op. cit.,* p. 17.

Are there currently any barriers to getting access to infrastructure services as a result of differing state arrangements in the Murray Darling Basin?

Draft recommendation 4.1

That the entire state of Victoria be covered by a state-based access regime.

4.3 Types of infrastructure services covered by the regime

An access regime needs to define the types of infrastructure services covered by the regime. Figure 4.1 illustrates a simple water and sewerage network to show, in very broad terms, the types of natural monopoly infrastructure facilities in the water sector. It also identifies the main type of service provided by each facility.

The Commission considers that the generic types of infrastructure services that meet the criteria for access include:

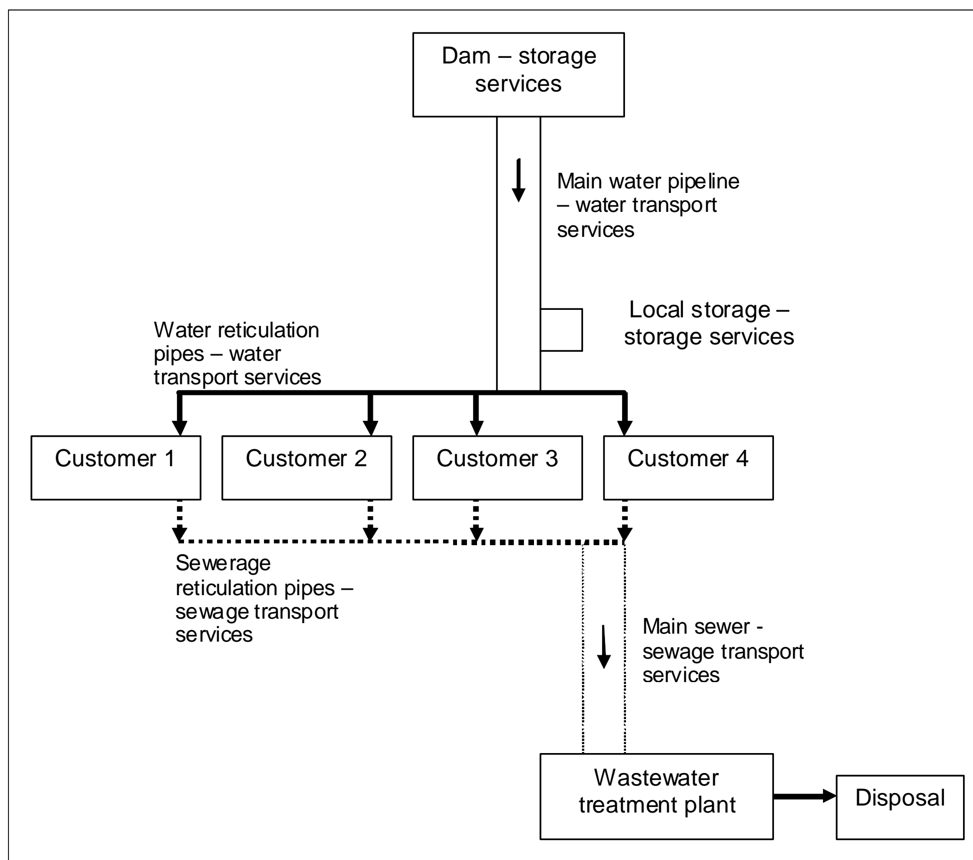
- the water transport services provided by main (trunk) and reticulation water pipes (and facilities associated with those pipes)
- the sewage transport services provided by main (trunk) and reticulation sewerage pipes (and facilities associated with those pipes) and
- storage services provided by storage facilities for water and sewage, such as local storages that are integral to the pipeline networks.

4.3.1 Water and sewage transport services

Water transport services (also known as water conveyance services) refer simply to the process of moving water from one place to another, generally through a pipeline or, in rural areas, a channel or waterway. For example, water businesses transport water from storage facilities (such as dams) and treatment plants (such as a recycled water plant or a desalination plant) along pipelines to their customers. Similarly, sewage transport services (also known as sewage conveyance services) refer to the process of moving sewage through sewerage pipes from one place, such as customers' premises, to another, such as a treatment plant. (These examples are illustrated very simply in figure 4.1).

Water and sewage reticulation is the transport of water or sewage along small local pipelines that branch off the main water pipeline or the main sewer. Examples are the transport of water along the pipes connecting a customer's premises into the main water pipeline and the transport of sewage along the pipes connecting from a customer's premises into the main sewer (as shown in figure 4.1).

Figure 4.1 **Simple diagram of water and sewerage infrastructure services**



Note: This diagram is for an urban water and sewerage system. In rural areas, channels (instead of pipelines) may be used to transport water and in some rural areas there may only be a water network.

Water and sewerage pipes have natural monopoly characteristics and are generally not economically feasible to duplicate. Access to these facilities is required to permit broader participation in upstream or downstream markets.[57]

In New South Wales' water industry access regime, the coverage provisions define infrastructure services subject to the regime as being:

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

[57] Some examples of access to water and sewerage infrastructure were discussed in section 1.2.3 and further examples are described in appendix C.

inseparable aspect of the storage, conveyance or reticulation of water or sewage.

This means that the transport services provided by water and sewerage pipes are covered by the New South Wales regime. Small storages that are an integral part of providing transport services are included in the coverage of transport services, but dams are not covered. Dams are discussed further in section 4.3.3.

Services associated with filtering, treating and processing water and sewage, or producing water or recycled water, are not included in New South Wales' coverage definition. The infrastructure required to provide these services, such as treatment plants and desalination plants, do not generally exhibit natural monopoly characteristics and do not therefore meet the criteria for access.[58] No submissions were received suggesting that these types of infrastructure facilities should be included in a state-based access regime.

Melbourne Water recognised that the water and sewerage pipeline networks are generally not economic to duplicate and that access to these assets may be necessary to enhance competition in upstream or downstream markets. It supported the inclusion of water and sewerage transport services in the definition of services covered by a Victorian access regime.[59] It also supported the inclusion of service reservoirs, which are used to optimise operation and are an integral part of providing transport services.

Southern Rural Water noted that it is currently sharing the use of infrastructure owned and operated by Melbourne Water, City West Water and Western Water to transport water from its drought reserves in the Thomson Reservoir to irrigators in Bacchus Marsh.[60]

Draft recommendation 4.2

That water and sewerage transport services provided by water industry infrastructure be covered by a state-based access regime. The definition of water and sewerage transport services would include services, such as storage services, that are subsidiary but inseparable to providing transport services. It would exclude: the filtering, treating or processing of water or sewage; the use of a production process; the use of intellectual property; and the supply of goods, including the supply of water or sewage; except to the extent that these services are an inseparable part of providing transport services.

---

58 As noted in the issues paper, treatment plant operators could enter into contracts to sell treatment services, including to access seekers. The decision whether to offer these services would be made on commercial grounds.

59 Melbourne Water 2009, *op. cit.*, p. 14.

60 Southern Rural Water 2009, *Submission to Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, 21 April, p. 2.

4.3.2 Metering

In the New South Wales regime, metering devices associated with the infrastructure facilities covered by the regime are defined as integral to the provision of services by that infrastructure. Therefore, the infrastructure operator is responsible for providing metering devices as part of its infrastructure facilities.

The Commission notes that metering occurs at a number of different points in water and sewerage networks. Meters at the headworks measure the quantities of bulk water supplied to wholesale customers. In-system meters measure water flows and sewage flows within the water and sewerage networks at various interconnection points. Meters would have to be installed at interconnection points with access seekers' infrastructure, for example, at water injection points or sewage off-take points (see figure 1.2 in chapter 1 for a simple illustration of interconnection points with a main water pipeline and a main sewer).

The Commission considers that headworks meters and in-system meters are integral to the water transport service and the sewerage transport service and should be provided by the infrastructure operator.

Retail meters measure water usage by customers at the retail level to allow the water retailer to bill customers on the basis of usage. An argument could be made that retail metering is a retail service rather than an integral part of the water transport service. Allocating responsibility for providing retail meters to the retail water businesses[61] could create an incentive for retailers to find efficiencies in providing metering services, which could be passed on as lower retail water charges to customers.

Separating retail meters from the provision of infrastructure services would also allow businesses providing retail sewerage services the option of charging for sewerage services on the basis of actual sewage volumes discharged. Currently the metropolitan Melbourne retailers estimate sewerage discharges because sewage discharges by residential customers are not metered.

A new retail business might want to install a different type of water meter to provide a different quality of service to its customers. For example, in the energy industry, the nature of metering has changed with the introduction of PowerSmart Home smart meters.[62] In Victoria, approximately 2.5 million 'smart meters' will be installed over a 4 year period from 2009 to allow Victorian energy users to better manage their energy use by providing more detailed information about their consumption with the opportunity to save money on their power bill and reduce greenhouse gas

---

[61] Or the retail business unit of a vertically integrated business where functional separation has been implemented; see chapter 7.

[62] These smart meters record how much electricity is used in half hour periods and have an internal clock to record the time of day and date when the electricity is used. This information enables customers to monitor their energy use more effectively and helps them either to reduce their usage or to reduce their bills by using some power at off-peak times. Traditional mechanical electricity meters are only able to measure total electricity usage. See Energy Australia, *Introducing PowerSmart home*, available at www.energy.com.au.

emissions. [63] In April 2009, the New South Wales Government announced a trial of smart water meters in Sydney homes.

A number of other factors would, however, need to be considered before deciding whether retail meters should be defined as part of the infrastructure service (and provided by the infrastructure operator) or whether retail meters should be provided by the retail water service provider. An important consideration is the costs to customers of potentially having to change their meters when they switch to another water provider (which could form a barrier to switching). Another factor might be whether there are economies of scale in providing meters to customers. The Commission seeks feedback from stakeholders on whether retail metering devices should be included in the definition of infrastructure services covered by the regime.

Should retail metering devices be included in the definition of infrastructure services covered by the regime?

Draft recommendation 4.3

That metering devices that are an integral part of water and sewerage transport infrastructure be covered by a state-based access regime.

4.3.3 Water storage services

Water storages, such as dams and reservoirs, are an integral part of the water supply chain, allowing water to be collected when it is available (such as from rainfall and run-off or when it is produced by a desalination plant or recycling plant) and delivered to customers when it is needed. Access seekers may need access to storage services to be able to supply water efficiently to their customers.

As noted in section 4.3.1, the New South Wales regime does not cover storage services provided by dams. Only small local storages that form an integral part of the water transport network are included in the definition of the water transport services covered by the regime.

The Western Australian Department of Treasury and Finance suggested, in a submission to the Economic Regulation Authority (ERA), that 'access to … dams … may encourage competition through private sector participation'.[64] The

---

[63] For more information, see the Department of Primary Industry's website www.dpi.vic.gov.au/dpi/dpinenergy.nsf.

[64] Department of Treasury and Finance 2008, Submission to the Economic Regulation Authority's *Inquiry on Competition in the Water and Wastewater Services Sector: Draft Report*, p. 10.

arguments for including the water storage services of large dams in the coverage of an access regime include:

- large dams are uneconomical to duplicate and environmental concerns are a significant obstacle (and cost barrier) to the construction of further large dams
- many existing dams have excess capacity at least in the short term
- new businesses are likely to require storage services to be able to source and supply water effectively
- large dams are of state and/or regional significance and
- access to the storage services provided by large dams can be provided without undue risk to human health and safety.

Melbourne Water and VicWater (the peak industry association for the Victorian water businesses) opposed the inclusion of large water storages in a state-based access regime's coverage. Both submissions highlighted the seasonal variability in capacity available within the water storage system. VicWater stated that spare capacity in dams and other large storages should be kept as a buffer against drought to provide security of supply against future year's shortages.[65]

While the Commission recognises the important role of dam capacity in contributing to security of water supply, it notes that there may be scope to use spare capacity to provide short term storage services. Providing such services would improve efficiency by making use of under-utilised infrastructure and allow the infrastructure operators (the existing water businesses) to earn a return on the spare capacity in the storages. The water businesses undertake extensive forecasting of seasonal supplies and demands, guided by longer range inflow forecasts, which would provide them with the information needed to manage the risks involving in allowing access to their storage infrastructure.

Southern Rural Water commented that storage capacity in large dams is currently owned by the various parties with bulk entitlements in the system (including the water businesses and power generators). It noted that it has been allocated a share of the water storage capacity in the Thompson reservoir in respect of its irrigation requirements.[66]

The existing arrangements do not appear to allow new participants in the water sector to hold or trade bulk entitlements in relation to storage capacity in dams. Chapter 10 highlights that the right to hold and trade bulk water entitlements is effectively limited to existing water businesses, creating a barrier to participation by other businesses and individuals.

Tradable entitlements to the storage capacity of dams and other large storage facilities could be created, which would allow businesses entering the water sector to purchase access to storage facilities services, either permanently or on a temporary basis. The Productivity Commission suggested that storage capacity

---

65 Melbourne Water 2009, *op. cit.*; Victorian Water Industry Association (VicWater) 2009, *op. cit.*

66 Southern Rural Water 2009, *op. cit.,* p. 2.

share arrangements could be made for managing storages (mostly dams). Such arrangements would define entitlements in terms of a share of dam capacity (not the water contained in the dam), and inflows and outflows (which would include deductions for evaporation and seepage losses).[67] A market for these entitlements could then be established.

If such arrangements were developed, businesses proposing to supply water services could purchase storage entitlements on the market and they would not need to negotiate access arrangements with the infrastructure operator. Despite this, there are two reasons for still including the storage services provided by natural monopoly infrastructure in the coverage of an access regime. First, it would provide an option for obtaining access in the event that the arrangements for tradable storage entitlements contained any unforeseen gaps. Second, it would improve certainty for infrastructure operators and other participants in the water sector about how any requests for access to those services would be assessed (under a Victorian access regime). As noted previously, if storages such as dams were not covered by a state-based access regime but met the requirements for declaration under the national access provisions of the TPA, access seekers could apply for access under the TPA.

Draft recommendation 4.4

That the storage services provided by large infrastructure facilities like dams be covered by a state-based access regime.

4.3.4 Rural water transport services

In rural areas, water services relating to irrigation uses have been unbundled and water trading has been introduced. Delivery shares, which can be purchased on the market, potentially provide a mechanism for new water suppliers to purchase a right to use water transport services provided by the relevant rural water business.

To some extent, therefore, these services may already be covered by an effective mechanism for providing access to these infrastructure services.[68] However, the existing arrangements relate to the delivery of water purchased from the relevant rural business. It is not clear whether a business that developed a new water source would be able to inject that water into the rural business' delivery system and use purchased delivery shares to move the water from its water source to its customers. In addition, restrictions on who can trade delivery shares may prevent access to the infrastructure by some groups or individuals.

---

67 Productivity Commission 2006, *Rural Water Use and the Environment: The Role of Market Mechanisms*, Research report, Melbourne.

68 An exception is the Wimmera Mallee pipeline, where the allocation of water entitlements, unbundling and introduction of water trading has not been introduced (in respect of its domestic and stock services). The Department of Sustainability and Environment, in consultation with GWMWater and other stakeholders, is developing a plan to establish tradable water entitlements and unbundling in the future.

The Commission seeks stakeholder feedback on whether the existing arrangements for tradable delivery shares pose any impediments to particular groups or individuals, or to particular types of activities, in gaining access to the transport services provided by rural water infrastructure facilities.

If any impediments that currently restrict the use of rural water delivery (transport) infrastructure were addressed, businesses or individuals needing access to those infrastructure facilities would be able to purchase delivery shares on the market. An access regime might, however, still cover those services to ensure that: rural infrastructure operators are subject to the same pricing principles applied in access pricing; and terms and conditions relating to injections into the system and network management can be applied to businesses obtaining access by purchasing delivery shares.

Further, as noted previously, if rural infrastructure facilities were not covered by a state-based access regime but met the requirements for declaration under the national access provisions of the TPA, access seekers could apply for access under the TPA.

Do the existing arrangements for tradable delivery shares provide adequate access to the infrastructure services provided by rural water infrastructure facilities? Are there any impediments to access for particular groups or individuals, or for particular types of activities?

Draft recommendation 4.5

That rural water transport services be covered by a state-based access regime.

4.4 Declaration of specific infrastructure services

In New South Wales, for a particular infrastructure facility within the scheduled (geographical) areas to be covered by the water industry access regime, the services it provides must be subject either to a coverage declaration made by the Minister or to an access undertaking made by the infrastructure operator and approved by IPART. Applications for a coverage declaration may be made by the infrastructure operator, an access seeker who has failed to obtain access through negotiation, or the Minister. IPART assesses declaration applications, undertakes public consultation on applications and recommends whether a coverage declaration should be made. IPART's report, the Minister's decision and the reasons for the decision are published.

No infrastructure services have, as yet, been declared under the New South Wales regime, except for those declared under the TPA as a result of Services Sydney's

declaration application.[69] These services, which were declared from the commencement of the regime, are the sewage interconnection and transport services provided by Sydney Water's Bondi, Malabar and North Head reticulation networks.

For other infrastructure facilities, businesses seeking access will have to apply for a coverage declaration in order to establish a right to share the use of that infrastructure if initial negotiations with the infrastructure operator are not successful. As a result, the process of obtaining access is likely to be longer, more costly and more risky for the access seeker than if those services were already declared.

South East Water expressed the view that a regime similar to the New South Wales regime could leave 'uncertainty about the potential for declaration of future assets and uncertainty around the status of key existing assets'.[70]

The NCC also expressed concern that the New South Wales regime does not provide market participants with sufficient certainty and gives too much discretion to the regulator, the Premier and Minister for Water. It considered that the coverage of a state-based access regime should be clearly defined from the regime's commencement.[71]

The Commission sees value in declaring specific infrastructure services from the outset. These would be services that satisfy the declaration criteria (listed in section 4.1) and are expected to be most likely to be subject to access requests. As discussed in chapter 3, the Commission recommends that, during the implementation period, the water businesses make 'access commitments' in respect of their significant natural monopoly infrastructure. Access commitments would give access seekers the right to negotiate access to these facilities and set out a framework to facilitate negotiations. They would be less detailed and less costly to prepare than formal declaration. Greater detail could be added on a step-by-step basis as more experience and knowledge are gained during the implementation period.

The Commission envisages that the water businesses would initially nominate specific infrastructure for which they would make access commitments. These nominations would be reviewed by the Commission and subject to public consultation. Additional infrastructure services could be proposed by the Commission, which would advise the Government of its recommendations. The Commission considers that there should be flexibility during the implementation period to add access commitments for other infrastructure facilities that were not initially nominated or to revoke an access commitment to reflect a significant change in circumstances.

Guidance would need to be provided on identifying specific infrastructure services for which access commitments should be made. The infrastructure facilities subject

---

69 See Essential Services Commission 2009, *Issues Paper, op. cit.*, box 3.1.

70 South East Water 2009, *op. cit.*, p. 17.

71 National Competition Council 2009, *op. cit.*

to access commitments would have to meet the criteria of being significant natural monopoly infrastructure facilities and being needed to promote competition in related markets. In broad terms, the businesses would take into account the following factors in assessing whether to nominate a particular infrastructure facility.

First, the services provided by the facility should fall within the geographic scope and generic types of services covered by the regime (discussed in section 4.3).

Second, the facility should meet the criterion of significance. Significance at a state or regional level can be measured in a number of ways:

- size or physical capacity
- size and nature of the markets serviced by the infrastructure, which may be affected by the geographic area serviced, distance covered (for example, by a pipeline) and interconnection with infrastructure facilities in other parts of the state (for example, through a water grid)
- volume or value of water or sewage carried by the infrastructure
- the facility's contribution to trade within the state and interstate
- its importance to providing services in other significant markets and
- the cost of the infrastructure.[72]

Submissions to this inquiry have identified specific infrastructure facilities that would satisfy the declaration criteria. Melbourne Water put forward its bulk water and sewerage pipeline networks and noted that it already shares the use of its water network under privately negotiated arrangements, such as those with Southern Rural Water.[73]

Central Highlands Water identified the Goldfields pipeline as meeting the declaration criteria and noted that it is currently testing access arrangements for the pipeline.[74] Colliban Water also suggested the Goldfields pipeline as potentially being covered by an access regime but highlighted that, at present, the pipeline is fully utilised supplying water to Bendigo and has no spare capacity to provide service to access seekers.[75]

---

[72] These significance criteria are identified in Independent Pricing and Regulatory Tribunal 2008, *The NSW Water Industry Access Regime: Part 3 of the Water Industry Competition Act 2006: Application template for coverage declaration*, available at www.ipart.nsw.gov.au/water/ network-access/documents/WICAACCESS-ApplicationFormCoveragdecalration_000.pdf.

[73] Melbourne Water 2009, *op. cit.,* p. 15, Southern Rural Water 2009 *op. cit.,* p. 2.

[74] Central Highlands Water 2009, *op. cit.,* p. 1.

[75] Colliban Water 2009, *op. cit.,* p. 7.

Draft recommendation 4.6

That the Government requires the water businesses to nominate, within a six month timeframe, specific infrastructure facilities for which access commitments would be made. The businesses should assess whether the services meet the declaration criteria, taking into account guidance provided by the Commission. Provision should be made for making additional access commitments in respect of specific infrastructure facilities subsequently identified as meeting the declaration criteria.

Draft recommendation 4.7

That the Government requires the water businesses to apply for the Commission's approval of access commitments.

4.5 Greenfields investments

The terms of reference require the Commission to ensure that the recommended access arrangements will not discourage new investment in infrastructure (also known as greenfields investments). The regime should maintain incentives for efficient long term investment in water and sewerage infrastructure.

The national gas access regime contains a number of features aimed at encouraging investment, including the greenfields pipeline incentive. The greenfields pipeline incentive effectively provides for an 'access holiday', that is, a specified amount of time during which the pipeline cannot be declared as covered by the gas access regime. Before a new (greenfields) pipeline is commissioned, an infrastructure service operator may apply to the NCC for a 15-year no-coverage determination. If the application is approved, the pipeline will not be subject to access for 15 years after being commissioned.

In the New South Wales' water industry access regime, infrastructure owners can apply for a binding non-coverage declaration that exempts new infrastructure facilities from the application of the regime for up to 10 years. Non-coverage declarations can only be made for infrastructure that is not expected to meet the declaration criteria during the non-coverage period. Such 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 to provide services other than water and sewerage services (or associated services).

The Minister may revoke a non-coverage declaration at the request of the infrastructure operator. A non-coverage declaration will cease to apply if the infrastructure is modified significantly during the period (such as by being extended or increased in capacity) or if it begins to meet the declaration criteria.

Typically the purpose of a non-coverage declaration is to give an infrastructure operator certainty that its infrastructure would not be expected to satisfy the declaration criteria for a certain period. A non-coverage declaration does not, and

should not, provide immunity from declaration in order to allow a business to earn monopoly profits to recoup the cost of its investment.

Where an infrastructure facility would meet the declaration criteria, the infrastructure operator could obtain greater certainty about the terms and conditions of access by making a voluntary undertaking under an access regime (or an access commitment during the implementation period). Undertakings set out the proposed terms and conditions of access, including indicative access prices or a method for calculating access prices. Access pricing would incorporate a rate of return that appropriately reflects the risk associated with the investment (as currently applied in determining prices more generally). Undertakings would have to be approved by the regulator as reasonable.

The risks associated with greenfields investments and implications for access pricing are discussed in section 6.5.

Should greenfields infrastructure investments be exempt from the application of an access regime for a certain period? If so, what would be an appropriate period? Are there any other, or alternative, measures that should be considered to ensure an access regime does not reduce incentives for efficient investment?

4.6 Review of declarations

Most access regimes include arrangements for reviewing coverage declarations, including revoking existing declarations and making additional coverage declarations. These processes may be activated when new infrastructure facilities are constructed (or come into operation) or when circumstances have changed such that an infrastructure facility no longer meets the declaration criteria.

South East Water suggested that coverage declarations should be reviewed on a case by case basis when triggered by the development of a new asset, modification of an asset, introduction of a new technology or a state policy change.[76]

The New South Wales water industry access regime sets out a process for case-by-case declaration of specific infrastructure services or revocation of coverage declarations for specific services. A similar process applies for non-coverage declarations. The processes include public consultation. The national gas access regime includes similar provisions.

The Commission considers that similar provisions should be included in a Victorian water industry access regime. During the implementation period for the regime, similar processes should be established for access commitments to provide flexibility to add access commitments for infrastructure facilities that were not

[76] South East Water 2009, *op. cit.,* p. 18.

initially nominated or to revoke an access commitment to reflect a significant change in circumstances.

> **Draft recommendation 4.8**
>
> That a process is established to provide for case-by-case review of coverage declarations. The process should allow for revocation of declarations where the declared infrastructure services no longer satisfy the declaration criteria and to declare services provided by new or existing infrastructure that meet the declaration criteria. During the implementation period for the regime, similar processes should be established for access commitments by the businesses.

5 NEGOTIATION FRAMEWORK AND DISPUTE RESOLUTION

Under the Competition Principles Agreement, the negotiate/arbitrate model forms the basis of an access regime as it allows participants to negotiate access on mutually beneficial terms and conditions that suit their particular circumstances. An access regime for water and sewerage infrastructure services is, however, likely to require specific regulatory arrangements to facilitate effective negotiations.[77]

Well designed negotiation and dispute resolution processes will promote efficient outcomes by enabling access seekers and infrastructure operators to negotiate on an equal footing within a transparent and certain framework. The terms of reference for this inquiry require the Commission to make recommendations on an appropriate negotiation framework and dispute resolution processes.

5.1 Designing a negotiation framework

The basic premise of the negotiate/arbitrate model is that access seekers should, in the first instance, try to negotiate access arrangements with the infrastructure operator. The main aims of establishing a negotiation framework are to:

- reduce the costs and time required to assess the feasibility of, and apply for access to, infrastructure (from the access seeker's point of view), to assess the application (from the infrastructure operator's point of view), and to reach agreement on access terms and conditions (for both the access seeker and infrastructure operator)
- ensure access seekers have sufficient information and bargaining power to be able to negotiate reasonable access terms and conditions with the infrastructure operator
- provide flexibility to the access seeker and infrastructure operator to negotiate terms and conditions suited to their particular circumstances and
- provide for dispute resolution when agreement cannot be reached through negotiation.

Submissions to the issues paper and comments made at the public meeting generally supported negotiation as being a good starting point for access applications. There was also general agreement in submissions that the negotiation arrangements should provide for dispute resolution through binding arbitration.

[77] Essential Services Commission 2009, *Issues Paper*, *op. cit*. The paper is available on the Commission's website www.esc.vic.gov.au.

Syncline Energy, however, expressed concern that in some cases infrastructure operators would have a vested interest in not granting access when it would allow a new entrant to compete with it for customers in related markets, potentially reducing its market power and revenue base. This is particularly relevant for vertically integrated businesses; this is generally the situation in regional Victoria.

The Commission considers that establishing a clear right for access seekers to negotiate access on reasonable terms and conditions, supported by a transparent negotiation and dispute resolution framework, would address this concern. Functional separation (discussed in chapter 7) would further improve the negotiating environment.

The Competition Principles Agreement provides guidance on the key features of a negotiation framework for an access regime. The framework should:

- establish a legal right for parties to negotiate access and a process for enforcing this right (such as through binding arbitration)
- require infrastructure operators to use all reasonable endeavours to accommodate access seekers' requirements, including providing the information needed to allow them to negotiate effectively, and
- ensure that access outcomes balance a range of factors, including the legitimate business interests of infrastructure owners, the efficient use of infrastructure, and community benefits from competitive outcomes.[78]

Additional provisions may be required when negotiation and power asymmetries between access seekers and infrastructure operators are significant. Some businesses seeking access in the Victorian water industry are likely to be significantly smaller than the existing water businesses, particularly the metropolitan Melbourne businesses.

Access regimes in other industries have generally adopted the negotiate/arbitrate model, supported by regulatory arrangements that provide a framework for negotiations and establish dispute resolution mechanisms. While the level of prescription and amount of detail in regulatory arrangements vary across industries, all negotiation frameworks establish a legal right for potential access seekers to negotiate access and dispute resolution mechanisms. Some access regimes require infrastructure operators to publish standard terms and conditions, such as the Victorian grain access regime and the national gas access regime.[79]

5.2 New South Wales' water industry access regime

The New South Wales access regime establishes a comprehensive negotiation framework for businesses seeking access to an infrastructure service subject to a coverage declaration or access undertaking. The framework comprises of:

---

[78] See clauses 6(4)(a)-(c), (e)-(i), and (m)-(o) of the Competition Principles Agreement (included at appendix D).

[79] For a more detailed discussion of access regimes in other industries, see Essential Services Commission 2009, *Issues Paper*, *op. cit.*, appendix C, available at www.esc.vic.gov.au.

- negotiation protocols and guidelines[80]
- information requirements (to access seekers, from access seekers and general information disclosure) and
- a dispute resolution mechanism.

The negotiation protocols are a minimum requirement that access seekers and infrastructure operators must comply with, in addition to other specific requirements applying to them. The parties can agree to vary the protocols and, if so, they must notify IPART. These protocols set out processes and timeframes for:

- an access seeker to obtain information from an infrastructure operator
- an access seeker to apply for access
- the infrastructure operator to provide an assessment of the access request
- the access seeker and infrastructure operator to conduct access negotiations (including holding meetings and sharing information)
- the access seeker and infrastructure operator to resolve disputes and
- referring disputes to IPART for arbitration.

The protocols require each party to negotiate in good faith and require the infrastructure operator 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. IPART may decline to arbitrate in a dispute if the negotiation protocols have not been complied with.

In its assessment of the New South Wales application for certification of its access regime, the NCC stated that it was satisfied that the negotiation framework and dispute resolution mechanism set out under the regime are consistent with the Competition Principles Agreement.[81] The New South Wales provisions therefore provide an important starting point for developing a Victorian negotiation framework and dispute resolution mechanism.

5.3 Negotiation protocols

Negotiation protocols set out the rules for access negotiations, such as minimum information requirements, application requirements and a dispute resolution process. They can also specify timeframes, application costs and other charges, rules for prioritising access (commonly known as queuing rules) and procedures for negotiating the terms and conditions of access agreements. The protocols improve the certainty and transparency of the process and can reduce time delays and associated costs.

---

[80] The negotiation protocols and guidelines are available on IPART's website at www.ipart.nsw.gov.au/water/network-access/documents.

[81] National Competition Council 2009, *op. cit.*

Most water businesses indicated support, at the public meeting, for negotiation rules such as timeframes, a process to monitor the progress of access applications, information provision and pricing principles.

Melbourne Water argued it already publishes sufficient information to inform and assist access seekers in making an access application so negotiation protocols would be unnecessary. Published information includes bulk supply agreements and the unbundled prices charged to retailers. Melbourne Water stated that, if negotiation protocols were to be included in an access regime, the parties should be allowed to agree to deviate from the protocols in order to reduce compliance costs.

The Commission has concluded that negotiation protocols should be included in the negotiation framework for an access regime. Flexibility could be provided by allowing a water business and access seeker to agree to vary the negotiation provisions set out in access commitments to suit the particular circumstances of an access request, where they both agree (as allowed for in the New South Wales access regime). Some of the matters to be addressed in negotiation protocols are discussed below.

5.3.1 Information provision

Access seekers will not be able to negotiate effectively if they lack sufficient information. Negotiation protocols can require infrastructure operators to make relevant information available to the access seeker.

Under New South Wales' water industry access regime, for example, IPART sets out minimum requirements for information provision by the infrastructure operator to the access seeker. Within 14 days of an access request, the infrastructure operator must provide an access seeker with an information pack that includes:

- a list of all the services provided by the infrastructure operator
- a description of the procedures to obtain access to declared services and indicative timeframes
- a description of the methods the infrastructure operator will use to assess, and make a decision on, a request for access to infrastructure services
- a copy of the access undertaking (if one has been made)
- a copy of the infrastructure operator's cost allocation manual explaining how costs have been allocated to particular services
- a copy of any proposed access agreement
- a contact for the infrastructure operator and
- a copy of the negotiation protocols.[82]

In addition, the negotiation protocols require an access seeker to provide certain information to the infrastructure provider. This information must include a detailed

---

[82] IPART 2007, *Negotiation Protocols, Water Industry Competition (Access to Infrastructure Services) Regulation*, p. 5.

description of terms, nature and extent of access requested and supporting information that will enable the infrastructure operator to assess and respond to the request.

In addition to information specific to the infrastructure in respect of which access is sought, access seekers and businesses assessing the commercial viability of proposals requiring access would also need more general information about:

- regulatory and legislative obligations, including licensing requirements
- the application process and expected timelines
- any guidelines relating to negotiations, dispute resolution and pricing principles and
- standard terms and conditions.

Establishing a 'one-stop-shop' for this type of information would reduce costs to potential access seekers. For example, IPART publishes information on its website, including fact sheets explaining the key features of the access regime, information about the regulatory framework, negotiation protocols, and guides dealing with licences, access applications and arbitration. The Commission proposes that this type of information relating to a Victorian access regime should be published in a single place, such as on the Commission's website.

Draft recommendation 5.1

That the Government establishes minimum requirements for the type of information that infrastructure operators must make available to access seekers and that access seekers must provide to infrastructure operators.

5.3.2 Application and negotiation process

Guidelines may be developed to ensure the application and negotiation process is certain and transparent and the process is completed within a reasonable timeframe. The New South Wales access regime sets out a staged application and negotiation process, with timelines for each stage.

First, the access seeker requests an information pack from the infrastructure operator. The infrastructure operator has 14 days to provide the information pack. If an access seeker decides to proceed with an access application after receiving relevant information from the infrastructure operator, it must then apply for access to the infrastructure operator.

The access application must include sufficient information to enable the infrastructure operator to undertake a preliminary assessment of the application. The infrastructure operator must provide its preliminary assessment to the access seeker within 28 days of receiving an access application. The assessment must include a statement about the availability of the infrastructure specified in the access application, full details of the infrastructure service requested, access terms and conditions, the proposed price or pricing methodology, details of the

infrastructure operator's operating protocols, and relevant system operations and planning information.

If the access seeker decides to proceed, the parties must then agree a timeframe for negotiations, which must not exceed 90 days.

The Commission proposes that negotiation protocols including a process for applications and negotiations would be developed, in consultation with stakeholders, within the first six months of the implementation period. These negotiation protocols should be complied with by access seekers and infrastructure operators.

Draft recommendation 5.2

That the Government requires the water businesses to include the negotiation protocols developed by the Commission in their access commitments. The water businesses would be required to comply with the negotiation protocols in responding to requests for information from access seekers and to access applications.

5.3.3 Application fees and charges

The water businesses submitted that access seekers should meet the costs involved in assessing access applications. Otherwise the costs would be borne by the water business' customer base through higher prices for water and sewerage services.

In New South Wales, IPART determined that an infrastructure operator could charge an access seeker a $2500 fee for assessing an access application. The negotiation protocols provide that each party is responsible for its own negotiation costs and any joint negotiation costs are apportioned equally.

Access seekers may request additional information from the infrastructure operator, such as more detailed information on a particular aspect of the infrastructure than commonly provided. The Commission considers it would be appropriate for the access seeker to be responsible for the cost to the infrastructure operator of providing additional information. Under the Victorian rail access regime, an infrastructure operator may charge a fee for proving detailed information required by the access seeker. It must itemise the fee upon the request of the access seeker.[83]

[83] Under the rail access regime in Victoria, an infrastructure provider may charge an access seeker a fee for the provision of an information pack and any additional information requested. The combined fee for the information pack must not exceed $1000. The fee may be refunded if an access agreement is reached.

The Commission considers that appropriate fees and charges should be determined during the implementation period. Fees should reflect costs and not form an unreasonable barrier to access requests.

5.3.4 Terms and conditions

Under the negotiate/arbitrate model, the access seeker and infrastructure operator would negotiate terms and conditions of access that relate specifically to the infrastructure facility that is subject to access. Access terms and conditions commonly relate to service standards, operational requirements and network management, such as:

- water quality standards (including aesthetic aspects such as taste and colour), pressure requirements at interconnection points (injection and off-take points) and average and peak flow rates
- sewerage and trade waste composition and volumes at injection points
- metering and measurement of water quality, water pressure and flow rates, including responsibilities for meters and measurement equipment
- information requirements for system planning and operations
- required asset performance and arrangements for reviewing asset performance
- procedures for agreeing scheduled or planned maintenance, including notification and arrangements applying in the event of interruption ('unplanned' maintenance) or reduced service, including notification and compensation
- time of infrastructure use and management of capacity constraints (which may be seasonal or time of day)
- communication protocols, such as who to contact in the event of a leak
- penalties and compensation for technical and operational breaches
- allocation of system losses and
- emergency procedures and incident management plans for health and safety issues and/or risks to supply system integrity, including notification of access seekers' customers.

More general terms and conditions of access applying to water and sewerage service providers, such as those relating to customer protection, health and safety, water quality and environmental protection, would be included in legislation, licence conditions or codes of conduct (see chapter 8).

5.4 Dispute resolution

It is important for an access regime to be supported by a dispute resolution mechanism when negotiations are unsuccessful. Typically, Australian access regimes provide for binding arbitration by an independent regulator. There was general agreement from stakeholders that the negotiation framework for a Victorian water industry access regime should provide for dispute resolution through binding arbitration with rights of appeal.

Generally, dispute resolution mechanisms will provide for an escalating process, moving through higher level negotiations to mediation and finally to arbitration.

Mediation has the advantage of assisting the infrastructure operator and access seeker to come to a negotiated agreement, where possible, under the direction of an expert mediator. In contrast, arbitration imposes a final decision on the two parties.

In its voluntary access undertaking (made under the Victorian rail access regime), the Australian Rail Track Corporation nominated a hierarchy of dispute resolution steps, including: [84]

- negotiation (including escalation to senior management and chief executive officers)
- mediation
- arbitration and
- appeal (merits based review or judicial review).

The ACCC identified a number of alternative approaches to arbitration that are pursued wherever possible for the national telecommunications access regime and may include:

- determination by an expert, agreed by the parties
- a direction by the ACCC to attend a conciliation or mediation conference and
- the issuing of an advisory opinion by the ACCC to facilitate commercial negotiations.

IPART's negotiation protocols for the New South Wales water access regime describe a list of actions that would indicate to it that the parties have negotiated in good faith. Alternatives to arbitration, such as escalation of the dispute to senior management and mediation, are included in IPART's list.

The Commission considers that the dispute resolution mechanisms included in a Victorian water industry access regime should encourage the parties to try to resolve the dispute themselves through higher level negotiations (by senior management or chief executive officers) and mediation before they seek arbitration of the dispute.

5.4.1 Arbitration

If higher level negotiations and mediation are not successful in resolving an access dispute, the infrastructure operator and access seeker can apply for arbitration of the dispute, where an independent party makes a decision that is binding on them.

The parties to the dispute may nominate a private arbitrator under the *Commercial Arbitration Act 1984*, which provides for a final and binding decision. Yarra Valley Water supported the use of commercial arbitration as applied in the national electricity access regime.

---

[84] Australian Competition and Consumer Commission 2008, *Final Decision: Australian Rail Track Corporation Access Undertaking – Interstate Rail Network*, July, pp. 32–38.

Alternatively, arbitration could be undertaken by the regulator, which would have expertise in regulating the industry and detailed knowledge of industry conditions. IPART is the arbitrator of access disputes in the New South Wales water industry access regime.

5.4.2 Appeals

There are two potential avenues for appealing arbitration decisions – judicial review and merits review. Judicial review can only consider errors of law, where the correct processes have not been followed or the law has been applied incorrectly. Judicial review of decisions (by a regulator or private arbitrator) may be conducted by the Victorian Supreme Court on appeal.

In contrast, merits review allows an independent body (appeals panel) to consider the merits or reasonableness of the original decision and to replace the decision with its own decision if warranted. Merits reviews question whether the original decision was correct given the circumstances and the information available to the decision maker. Merits reviews provide an incentive for regulators to make reasonable decisions, and to consider all relevant factors, by ensuring that they are accountable for their decisions.

The NCC highlighted the lack of merits review provisions in the New South Wales water industry access regime and suggested that other jurisdictions allow for merits review of regulatory decisions, including arbitration decisions, when developing an access regime.

Submissions supported provisions for merits review of arbitration decisions. While Yarra Valley Water supported at least limited merits review, VicWater and Central Highlands Water expressed concern that limited merits review would not be sufficient and that full merits review would be required.

Limited merits review generally limits the appeal panel to considering whether the original decision was biased, or unreasonable given all the information available to the decision maker at the time of making the decision, or not made in accordance with the relevant laws. In contrast, full merits review would effectively reopen the entire decision and allow for appeal on any aspect of that decision, including whether different decision making processes should have been adopted. It would also allow the appeals panel to consider additional information that was not available when the additional decision was made.

Limiting the grounds for merits reviews recognises that an appeal panel has limited expertise, resources and time to reach its decision. It is not appropriate for an appeal panel to ‘second guess’ the decision maker.

In regard to new information that becomes available after the original decision was made, the Commission considers that any new information that is significant enough to alter the outcome of the access application should result in a new access application, rather than appeal of the original decision. The NCC expressed the view that limited merits review provisions would be sufficient to ensure that decision making would be unbiased and transparent. The Commission has concluded that limited merits review provisions should be included in an access regime.

Draft recommendation 5.3

That the Government establishes a dispute resolution mechanism, including binding arbitration by an independent arbitrator and appeals provisions. Arbitration decisions should be subject to judicial review and limited merits review.

5.5 Implementation of the access regime

As discussed in chapter 3, the Commission recommends staged implementation of the regime. In the first stage of the implementation period, the water businesses should make ‘access commitments’, which would establish a legal right for access seekers to negotiate with infrastructure owners for access to services provided by specific infrastructure facilities.

During the initial stage of the implementation period, a transparent framework for negotiations, supported by dispute resolution mechanisms, would be established in consultation with stakeholders and other interested parties. The negotiation framework would include guidelines that would formally establish (among other things) standard terms and conditions, information requirements, dispute resolution processes and pricing principles.

Establishing a transparent negotiation framework with sufficient available information and a simple and inexpensive application process, will help to facilitate access. Potential access seekers must be able to quantify all the costs associated with proposals requiring access, so that they can accurately assess the expected commercial returns from such proposals. Further, expected timeframes for getting a decision on an access request is important for planning and organising resource requirements. Addressing potential access seeker’s uncertainties and reducing perceived regulatory risk would help to promote broader participation in activities requiring access.

Facilitating access through these initial arrangements will ensure that the benefits from innovation and broader participation in the water industry are not delayed while the access regime is further developed and refined.

6 ACCESS PRICING

The terms of reference for this inquiry require the Commission to make recommendations on a methodology for determining access prices. Access pricing plays a key role in the effectiveness of an access regime in promoting competition as access prices influence the extent to which new entrants are able to compete with the incumbent business in the potentially competitive elements of the water sector. This chapter discusses the Commission's draft recommendations on an access pricing methodology and related issues involved in developing and implementing an access regime for the Victorian water industry.

6.1 Access pricing principles

Under an effective access regime, access prices would allow efficient businesses to participate effectively in the water industry while ensuring that the water businesses recover the efficient costs of providing access.

The Competition Principles Agreement contains principles for determining efficient access prices (see appendix D). These principles are also reflected in the ESC Act (see box 1.1 in chapter 1). The Commission is required to ensure that these principles are met in all regulated industries where third party access regimes exist.

In summary, the principles require that access prices should provide water businesses with enough revenue to cover the costs of providing access. Different access seekers should be charged different access prices when the costs of providing access differ between users of the infrastructure, but access pricing should not otherwise discriminate between access seekers. Access pricing should also promote efficiency and provide incentives to reduce costs or improve productivity.

As discussed in chapter 5, the first step in determining an access price is negotiation between the infrastructure operator and the access seeker. An access regime should include provisions that ensure that the access pricing principles are met, such as guidance that provides a framework for negotiating access prices. It should also provide processes for determining an access price when the infrastructure operator and access seeker cannot reach agreement.

6.1.1 Guidance on setting access prices

Regulatory guidance on access prices may be needed to facilitate effective negotiations between the infrastructure operator and access seeker and provide a level of certainty to market participants on the method for calculating access prices.

The Commission received a number of submissions on this matter. Barwon Water argued that the existing pricing principles (contained in the Competition Principles

Agreement) are sufficient and that reference tariffs and further guidance on access prices are not required. It stated that setting lower and upper price limits could distort cost signals and create inefficient outcomes. Central Highlands Water advocated a system of pricing principles that allows for access prices to be calculated on a case-by-case basis. It also supported a dispute resolution process.

Melbourne Water argued that any regulatory guidance on access prices should reflect uncertainties about the nature of future access demands and that any guidance on access pricing should be broad. It also noted that its existing bulk water and sewerage transport prices, which were determined using a cost of service approach, would provide a good starting point for determining access prices.

VicWater did not support setting reference tariffs for entire reticulation systems because such tariffs would not accurately reflect costs. But it also considered that setting a reference tariff for each specific infrastructure facility would be too costly. It argued that regulatory guidance on access pricing should be limited to guidance on tariff structures and the process for calculating access prices.

The Consumer Utilities Advocacy Centre (CUAC) supported regulatory guidance on access prices to provide a framework for access negotiations. It indicated that guidance could include indicative tariffs or reasonable price boundaries (that is, upper and lower price limits).

In the early stages of the access regime, the Commission recommends that general guidance should be provided by way of pricing principles and methods for calculating access prices.

This approach would promote effective negotiations between infrastructure operators and access seekers. It would provide flexibility to calculate prices on a case-by-case basis, which will be particularly important in the early stages of an access regime as opportunities for access emerge. For this reason, the Commission does not recommend that reference tariffs form part of the regulatory guidance on access prices in the initial stages of the implementation period. Reference tariffs or more detailed guidance on setting prices may be developed when the extent and nature of access requirements are better understood.

6.1.2 Implementation arrangements

The Commission recommends that the access commitments discussed in chapter 3 set out detailed principles for calculating access prices and the process for negotiating access prices. During the implementation period, the Commission proposes to develop access pricing guidelines in consultation with the water businesses and other interested parties. These pricing guidelines would provide a basis for pricing provisions included in the water businesses' access commitments.

6.2 Methodologies for determining access prices

The two key approaches to determining access prices are the cost of service approach and the retail minus approach.[85] Both approaches ensure that the infrastructure operator is able to generate sufficient revenue to cover the efficient cost of providing access to the relevant infrastructure without allowing it to generate monopoly profits. Both methodologies satisfy the pricing principles in clause 6 of the Competition Principles Agreement.

This section describes the two approaches and identifies important considerations for determining which methodology to apply in setting the price of access to particular infrastructure facilities.

6.2.1 Cost of service (building block)

Under the cost of service approach, access prices are determined by estimating the cost to an infrastructure operator of sharing with an access seeker the use of its infrastructure. The access prices allow the infrastructure operator to recover these costs.

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

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

Figure 6.1 illustrates how the cost of service approach would be used to calculate access prices. Under the cost of service approach, the first step in determining the access price is to calculate the revenue required to provide the service subject to the access. The amount of revenue that the infrastructure operator needs to recover (known as the revenue requirement) is the efficient cost of providing access to the relevant infrastructure. As shown in figure 6.1, the major components of the revenue requirement are operating expenditure, regulatory depreciation and return on assets.[86]

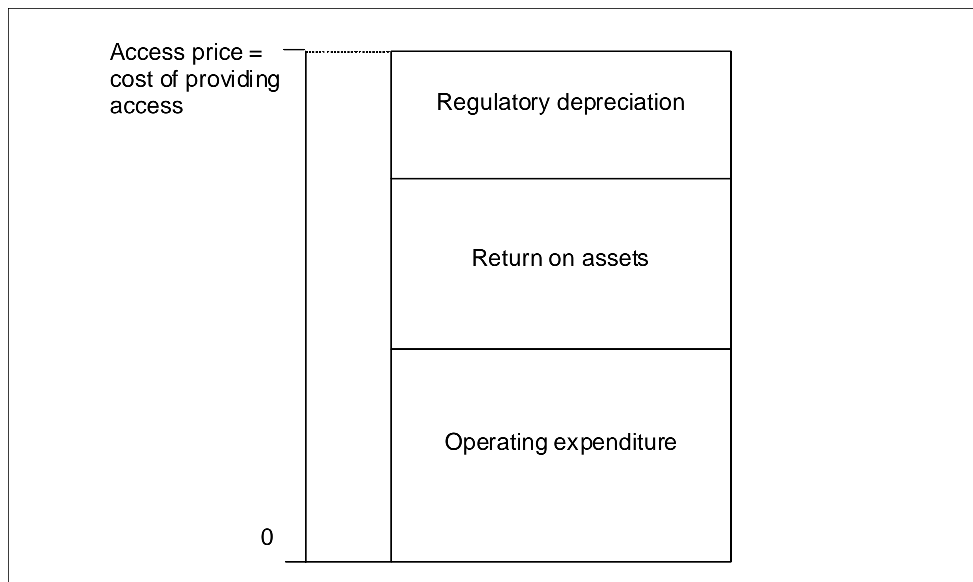
---

[85] Other approaches to determining the costs of providing services include econometric benchmarking and productivity indexing. These are alternatives to the cost of service approach.

[86] Other items that may be included in the revenue requirement include tax liabilities or adjustments from previous years or regulatory periods.

Operating expenditure represents the ongoing costs incurred by the infrastructure operator to provide the service and maintain the infrastructure.

Figure 6.1 Cost of service approach - example



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

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

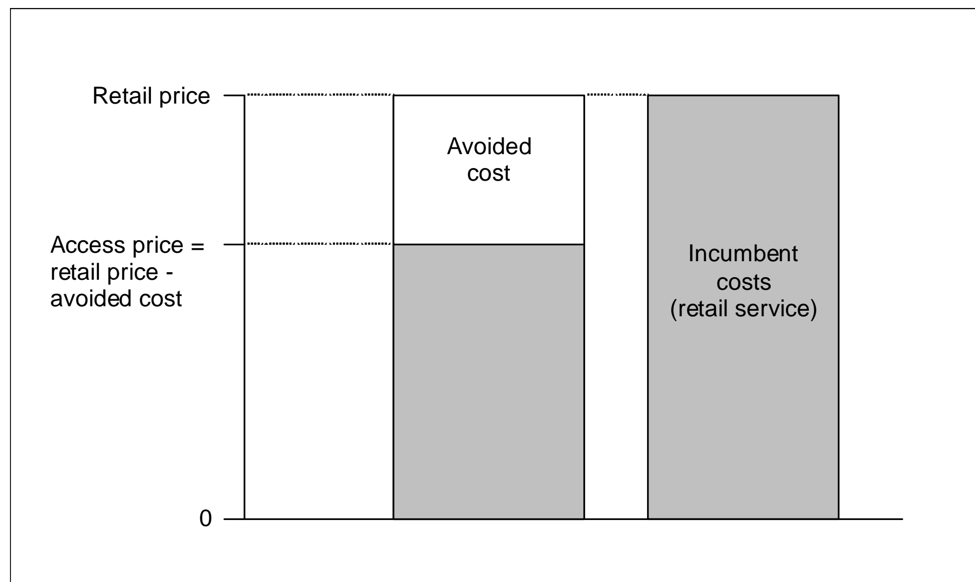
6.2.2 Retail minus

The retail minus approach uses existing regulated retail prices as the basis for determining access prices. Under this approach, the access price is determined by taking the approved retail price for a bundled service and applying a discount to account for the services the access seeker does not require the infrastructure operator to provide to it. 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 the access seeker.

Figure 6.2 shows how the retail minus approach is used to calculate access prices.

Figure 6.2 Retail minus approach - example



Consider an example where the retail price of an incumbent water business is regulated and determined using a building block approach, as shown by the second bar in figure 6.2. An access seeker may require the use of the infrastructure operator's network, but not the storage, treatment or retail services provided by the infrastructure operator. Under the retail minus approach, the discount applied to the bundled price (which covers all service components) would reflect the costs of providing the services that are not provided to the access seeker. The first bar in figure 6.2 shows how the access price is determined by deducting the total avoided cost from the regulated retail price.

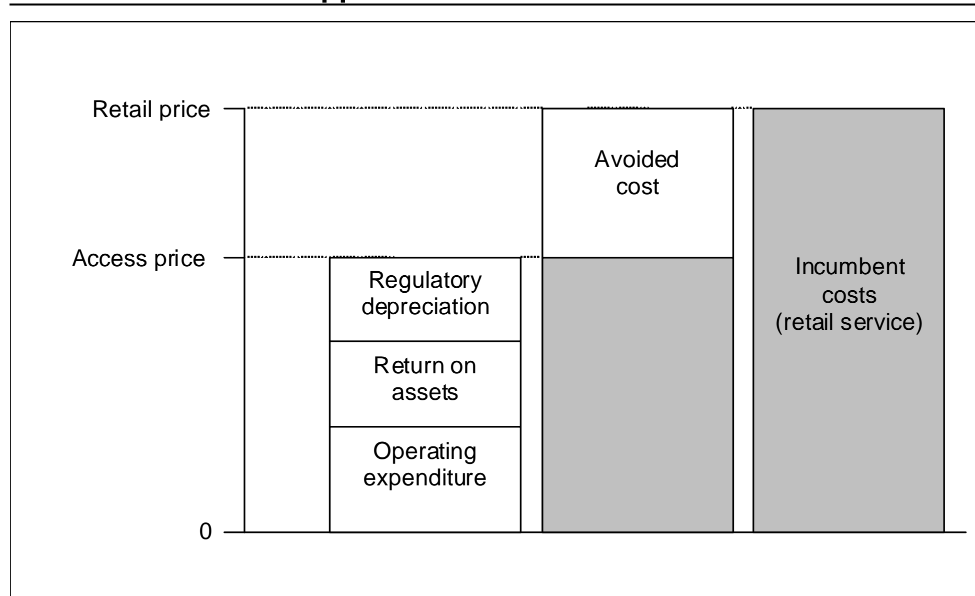
The retail minus approach has generally been used in cases where the retail price is regulated, where the service is bundled and where the infrastructure operator also provides upstream or downstream services associated with the infrastructure in question. An example of the application of the retail minus approach is the ACCC determination in respect of the access dispute between Sydney Water and Services Sydney.[87]

[87] Australian Competition and Consumer Commission 2007, *ACCC determination—Sydney water access dispute*, News release, 19 July, available at www.accc.gov.au/content/ index.phtml/itemId/793017/fromItemId/2332.

6.3 Comparison of pricing methodologies

Conceptually the cost of service and retail minus approaches are different ways of calculating the same access price. In practice, however, difficulties in accurately identifying all relevant costs may result in the two methods producing somewhat different price outcomes. The calculation of access prices under the two approaches is compared in figure 6.3.

Figure 6.3 Equivalence of the cost of service and the retail minus approaches



The first bar shows the access price for an infrastructure service calculated using the cost of service approach. The third bar shows the costs to the infrastructure operator (who is also the incumbent retail service provider) of providing the bundled retail service; these costs are calculated using the cost of service approach to determine the regulated retail price for the bundled service. Determining the access price using the retail minus approach requires the costs avoided by the infrastructure operator from not providing certain services to the access seeker (the white area labelled 'avoided cost') from the regulated retail price. As shown in figure 6.3, the access price is the same under both approaches. A numerical example showing the equivalence of the cost of service approach and the retail minus approach is provided in appendix E.

While the two approaches are conceptually equivalent, each approach has different advantages and disadvantages in practice. The advantages and disadvantages of each approach are compared in this section.

6.3.1 Costs of determining access prices

The retail minus approach is generally regarded as simpler and less costly to apply than the cost of service approach. In addition, it only needs to be applied when an access application is received.

The cost of service approach is generally regarded as being more information intensive than the retail minus approach and hence viewed as imposing a larger administrative burden. However, as the Commission currently regulates retail water and sewerage tariffs using a cost of service approach, the additional administrative costs of determining access prices using the same approach could be relatively small.

A key practical issue with using the cost of service approach, however, is the need to separately identify expenditures associated with the infrastructure subject to the access regime, including disaggregating the businesses' regulatory asset bases to separately identify an asset base for each infrastructure facility subject to access. This does not have to be done to apply the retail minus approach.

6.3.2 Basis for measuring costs

There are different ways of measuring the costs of providing infrastructure services, in particular whether variable costs should be calculated on the basis of short run or long run marginal costs.

VicWater argued that access charges based on the cost of service approach will be largely driven by the cost of sunk investments and may not send a signal to access seekers regarding the incremental or avoided costs faced by the incumbent. It supported access prices based on incremental costs (long run marginal cost) to send a more accurate pricing signal about the cost of supplying infrastructure services, thereby promoting economic efficiency. G21 Geelong Region Alliance made similar comments that access prices should reflect the full costs of providing infrastructure services, rather than only the short run costs of providing access.

The Commission agrees that access prices based on incremental or long run marginal cost will provide appropriate price signals to access seekers. Marginal cost pricing is consistent with both the cost of service approach and the retail minus approach (where the regulated retail price reflects long run marginal costs).

6.3.3 Understandability of access pricing methodology

An advantage of the cost of service approach is the clear relationship between access prices and the cost of providing access, which makes access prices easier to understand. A further advantage is that the Commission has been using the cost of service approach since 2005 and all water businesses and key stakeholders are familiar with it.

South East Water pointed out that the retail minus approach is consistent with the ACCC determination in the Services Sydney case and forms the basis of access pricing in New South Wales.

6.3.4 Cherry picking

A potential disadvantage of the cost of service approach is the risk of 'cherry picking' when regulated retail prices do not accurately reflect the costs of servicing different customer groups. Several submissions raised concerns about applying the cost of service approach in this context. Cherry picking can occur when the retail price is uniform across the customer base even though the costs of providing services vary across different groups of customers (this is sometimes called 'postage stamp' pricing).

When an access price is calculated using the cost of service approach, the price will reflect the cost of providing access. A new retail business (sharing the use of infrastructure to deliver services to its customers) would be able to set its retail price to reflect the actual costs of servicing particular customer groups. For customers that can be serviced at a cost that is lower than the regulated retail price charged by the incumbent retail business, the access seeker would be able to undercut the incumbent by charging a lower price reflecting the costs of servicing those customers. It would, therefore, be able to win those customers from the incumbent business; this is cherry picking. The incumbent would be left with the customers for whom the costs of providing retail services are high.

Most of the water businesses highlighted the scope for cherry picking under the current 'postage stamp' pricing approach adopted for setting retail water prices.[88] Central Highlands Water noted that significant cross-subsidies exist between systems and customers and that there are highly variable costs associated with different geographical services and sources of water. City West Water suggested that a cost of service approach to access pricing may not be consistent with the Government's preference for largely uniform retail prices across Melbourne. G21 Geelong Region Alliance also highlighted the risk of cherry picking.

VicWater, South East Water, Yarra Valley Water, Coliban Water and G21 Geelong Alliance all supported the retail minus approach as it preserves the current postage stamp pricing policy and discourages new entrants from cherry picking customers.

6.4 Recommended pricing methodology

In deciding which method to apply to determine access prices for a particular infrastructure facility, the advantages and disadvantages of each approach in relation to the particular infrastructure facility need to be weighed up. In addition, a number of practical considerations should be taken into account. In some circumstances, the cost of service approach is likely to be preferred or easier to apply. In other cases, the retail minus approach is preferable. This section identifies when each methodology would be suitable.

6.4.1 Applying the cost of service approach

The Commission recommends applying the cost of service approach to determine access prices in two types of circumstances.

---

88 Submissions are available on the Commission's website www.esc.vic.gov.au.

The first of these is where charges for the services provided by an infrastructure facility are already calculated. For example, in respect of Melbourne Water's water and sewerage pipelines, Melbourne Water noted that it has separate charges for its bulk water and bulk sewerage transport services. It noted that these charges could be used as basis for determining access prices for the use of its water and sewerage transport services. The charges are approved by the Commission and are calculated using a cost of service approach.

The second situation is where access is provided to a discrete infrastructure facility and the costs associated with this infrastructure can be identified easily. In these cases, the Commission considers that the administrative costs of calculating an access price using the cost of service approach are likely to be small. In addition, the cost of service approach would result in more cost reflective access prices. Some examples of discrete infrastructure facilities are large pipelines such as the Goldfields Superpipe, the Sugarloaf pipeline and the future Grampians–Hamilton pipeline.

6.4.2 Applying the retail minus approach

The retail minus approach can only be applied where the final retail price is regulated and the infrastructure operator provides services in the regulated retail market. Both of these conditions presently hold in the Victorian water industry. Yarra Valley Water indicated that in these circumstances, the application of the retail minus approach to access pricing would be a sound first step.

The Commission considers that the administrative costs of applying the cost of service approach to all infrastructure facilities are likely to be high under the existing industry structure and regulatory arrangements. In contrast, the retail minus approach is relatively easy to adopt in the presence of regulated retail prices. Another advantage of the retail minus approach is that it only needs to be applied when an access application is received. This makes it suitable for use during the implementation period for the access regime.

The Commission recommends that the retail minus approach be used to calculate access prices, except in the cases referred to in section 6.4.1.

6.4.3 Implementing access pricing

During the implementation period, the Commission recommends that the access commitments developed by the businesses identify which access pricing approach will be used to calculate access prices for the services provided by the particular infrastructure facility. The Commission proposes to develop pricing principles and other guidance to assist the businesses in applying each of these approaches.

As noted in the terms of reference for this inquiry, one of the Government's objectives for the access regime is not to inhibit further reform of the water industry in the longer term. Future reforms to promote competition in the bulk supply or retail sectors may reduce the need for regulated retail water and sewerage tariffs to be set. If retail prices for some services were no longer regulated (because they were determined in competitive markets), the retail minus approach could no longer be applied to the infrastructure facilities used in providing those retail

services. The Commission's recommended approach provides sufficient flexibility for the cost of service approach to be adopted more generally if required.

Draft recommendation 6.1

That the cost of service approach is used to determine access prices in respect of infrastructure where the costs associated with providing an infrastructure service can be easily identified.

Draft recommendation 6.2

That the retail minus approach is used to determine access prices in respect of infrastructure where a regulated retail price exists and the infrastructure operator provides services in the regulated retail market.

Draft recommendation 6.3

That the Government requires the water businesses to identify in their access commitments which pricing methodology will be applied to calculate access prices for the services provided by the infrastructure facility and note that prices will be calculated in accordance with the relevant pricing principles developed by the Commission.

6.5 Other issues

The Commission's issues paper and submissions identified several other issues.

6.5.1 Pricing of access to greenfields investments

The terms of reference for this inquiry require the Commission to make recommendations to ensure that an access regime does not inappropriately deter new investments in infrastructure. While access to infrastructure can increase competition and promote efficient investment in related markets, access prices need to be set so as not to discourage efficient investment in infrastructure subject to (or potentially subject to) an access regime. Access prices should therefore provide sufficient revenue to cover the efficient costs of providing access, including a return on and of assets, with the return on investment set 'commensurate with the risks involved'.[89]

South East Water and Central Highlands Water both suggested that an access regime could increase the risk associated with greenfield investments. They suggested that non-coverage periods for greenfield investments or risk premiums for greenfield investments would address the additional risk. VicWater also highlighted the higher risk of greenfield investments as an issue but argued for a

89 National Competition Council 2003, *op cit.*, p. 58.

non-coverage period as the most appropriate method of addressing the risk. Non-coverage declarations are discussed in section 4.5.

By increasing opportunities for broader participation in the water industry, however, an access regime could increase the potential demand for the services provided by new (and existing) infrastructure facilities. For example, construction of a greenfields pipeline to transport water to a new housing development could prompt the development of a new industrial estate in the same area since access to the pipeline would enable water to be delivered to it. Coliban Water noted that an access regime could enable the recovery of additional revenues from under-utilised assets.[90] In this way, it is possible that developing an access regime could reduce some of the demand risks associated with greenfields infrastructure developments.

The Competition Principles Agreement includes provisions for reflecting commercial and regulatory risk in access prices (clause 6(5)(b)(i)). The Commission notes that its price review processes set a rate of return for all capital investments by the water businesses. This rate of return is calculated taking into account the risks associated with water industry investments. The Commission seeks further information on any additional net risks of investing in infrastructure facilities caused by an access regime.

The 'investment risks' from access should not include risks related to potential loss of market share in related markets; the Competition Principles Agreement explicitly excludes 'costs associated with losses arising from increased competition in upstream or downstream markets' (clause 6(4)(j)(ii)).

Are there higher risks associated with investing in infrastructure facilities caused by an access regime? If so, how do these additional risks arise?

6.5.2 Structure of access prices

In addition to providing infrastructure operators with sufficient revenue to cover the efficient costs of providing access, the Competition Principles Agreement requires that prices must also allow multi-part pricing and price discrimination when they facilitate efficiency and provide incentives to reduce costs or otherwise improve productivity.

Current water and sewerage prices are generally two-part tariffs consisting of a variable charge and a fixed service charge. Access prices based on these prices, either by applying a retail minus approach or by using existing bulk water and sewerage transport charges, will exhibit the same tariff structure as those prices.

Variable access prices should be set with reference to the incremental or long run marginal cost of providing access, with any residual costs recovered from the access seeker through a fixed service charge. As the cost of providing access may differ in terms of the balance between fixed and variable costs compared to

[90] Coliban Water 2009, *op. cit.*

bundled retail services, the balance between fixed and variable charges may differ for access prices.

For infrastructure facilities where the cost of service approach is adopted, a two-part tariff structure is likely to be preferred. This tariff structure would ensure that access prices reflect the cost of providing access while ensuring the infrastructure operator can recover the full costs of providing access.

6.5.3 Implications for the current price determination framework

In its role in regulating retail prices, the Commission is principally guided by the Water Industry Regulatory Order 2003 (the WIRO). The WIRO sets out the prescribed services for which the Commission is responsible for regulating prices. Currently the prescribed services include retail water services, retail sewerage services, storage operator and bulk water services, and bulk sewerage services. The WIRO contains the principles against which the Commission must assess prices. The WIRO principles are generally consistent with the pricing principles included in the Competition Principles Agreement.[91]

The WIRO is likely to require amendment as part of implementing an access regime. For example, the definition of prescribed services in the WIRO may need to be reviewed to ensure that the infrastructure services covered by an access regime are specifically included. The Commission envisages that the Government would review the WIRO during the implementation period when it puts in place the legislative and regulatory amendments required to establish the legal framework for the regime.

Draft recommendation 6.4

That the Government reviews the Water Industry Regulatory Order 2003 to determine whether amendments are required to ensure an access regime can be effectively regulated.

The Commission sought feedback on whether the process for determining access prices and prices for water and sewerage services should be consistent. Barwon Water and Coliban Water suggested that access prices should be reviewed during the Commission’s price reviews for water and sewerage services.

During the implementation period, access prices will need to be calculated outside of the price review process. The Commission considers that it may be worthwhile assessing access prices as part of the next price review in 2013 if the extent of access during the implementation period is sufficient to justify scheduled access prices. In the early stages of the access regime, however, the Commission recommends that pricing principles be adopted to enable access prices to be calculated when an application for access is received.

---

[91] The WIRO is available on the Commission’s website www.esc.vic.gov.au.

7 RING FENCING

The terms of reference for this inquiry require the Commission to make recommendations on introducing ring fencing as part of developing an access regime.

Ring fencing is the process of separating certain business units or functions from other units or functions within a business. Separation can be implemented through accounting ring fencing, which requires separate financial accounts to be kept for different business units or functions, or through functional separation, which requires certain functions or activities of the business to be operated as if they were independent of the rest of the business.

In the context of an access regime, the purpose of ring fencing is to ensure that the costs associated with the infrastructure facilities subject to access can be clearly identified. Clarity and transparency around these costs will facilitate access pricing and improve certainty for access seekers. This chapter discusses the approach recommended for establishing appropriate ring fencing.

7.1 Key considerations in establishing ring fencing

An effective access regime should include provisions that require a facility owner to at least:

- maintain a separate set of accounts for each service that is the subject of an access regime
- maintain a separate consolidated set of accounts for all of the activities undertaken by the infrastructure service operator and
- allocate any costs that are shared across multiple services. [92]

In the NCC's guidance on certification,[93] it stated that more rigorous ring fencing arrangements may be required in some industries to ensure the required accounting information is transparent and objective. Such arrangements may be necessary in industries with high levels of vertical integration, where an infrastructure operator provides water or sewerage services, or has interests, in the same markets as those in which access seekers intend to participate.

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

---

[92] Under clause 6(4)(n) of the Competition Principles Agreement (included at appendix D), for an access regime to be certified as an effective access regime, infrastructure providers must have separate accounting arrangements for the elements of a business that are covered by the regime.

[93] National Competition Council 2003, *op. cit.*

- segregate access-related functions from other functions
- protect confidential information disclosed by an access seeker to the infrastructure operator from improper use and disclosure to affiliated bodies and
- establish staffing arrangements between an infrastructure operator and affiliated bodies that avoid conflicts of interest.[94]

Submissions by the water businesses generally raised concerns about the costs of ring fencing. Regional businesses questioned whether ring fencing would be necessary for those businesses that are unlikely to receive an access application.

Yarra Valley Water stated that, given uncertainty regarding the extent and scope of future demand for access, it would be inappropriate and unnecessary to make extensive changes to the regulatory accounting rules in advance of any access request being received.

7.2 Ring fencing in other jurisdictions and industries

Ring fencing guidelines have been developed in other industries, as well as in the New South Wales water industry, where access regimes have been introduced.

Under New South Wales' water industry access regime, the infrastructure operator must, within three months after an infrastructure service becomes the subject of a coverage declaration, keep separate accounts for the infrastructure services that are the subject of the declaration. It must also submit a cost allocation manual to the regulator (IPART) for its approval in respect of that infrastructure. The manual should set out the basis on which the infrastructure operator proposes to establish and maintain accounts for the infrastructure services subject to the coverage declaration. The infrastructure operator must then ensure that costs are allocated between each of those services, and between those services and other activities, in accordance with its manual.[95]

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

The Victorian rail access regime requires the Commission to make Commission Instruments that include ring fencing rules. The purpose of the ring fencing rules is to facilitate commercially neutral access to regulated below-rail services by requiring the infrastructure operator to establish a separate organisational structure

---

94 *ibid.*, pp. 70-71.

95 Independent Pricing and Regulatory Tribunal (IPART) 2008, *WICA Access Fact Sheet No. 2: The access regime – coverage, revocation and binding non coverage declaration and access undertakings,* available at www.ipart.nsw.gov.au.

for the business unit providing regulated below-rail services and ensure that this business unit conducts its activities at arm's length to the above-rail business.

7.3 Recommended ring fencing methodology

The Commission acknowledges the water businesses' concern that imposing extensive accounting ring fencing arrangements on all businesses may be onerous and costly. It has concluded that a staged approach to implementing ring fencing should be adopted during the regime's implementation period (discussed in chapter 3). During the implementation period, the Commission proposes to develop ring fencing guidelines in consultation with the businesses.

In addition, the Commission has concluded that there would be value in functional separation of the water businesses operating infrastructure facilities that are most likely to be subject to access requests. Functional separation and ring fencing guidelines are discussed further in this section.

7.3.1 Functional separation

Functional separation entails creating a separate business unit to operate the infrastructure facilities most likely to be subject to access. It would involve physical separation of the infrastructure operator unit from the other units of the business, separate staffing, separate operational support systems and information management systems, and limits on information exchanges between the infrastructure operator unit and the other units.

In the water industry, functional separation would aim to separate the natural monopoly infrastructure functions, being water storage and water and sewerage distribution (transport), from the potentially competitive functions, which include water sourcing, sewerage treatment, and retailing.

The infrastructure operator unit would be required to supply services on a non-discriminatory basis to all customers, including the other business units and access seekers. The other units would pay for the services provided by the infrastructure operator unit; this process is termed transfer pricing. (Similarly, the infrastructure operator unit would pay for services provided by the other units.) The prices paid by the other units for infrastructure services would be calculated using the same costs and pricing principles as used to calculate the access prices charged to access seekers.

The Commission considers that functional separation would facilitate broader participation in the water sector. It would promote clarity and transparency in allocating costs between business units and therefore in determining access prices. Transfer pricing between the infrastructure operator unit and the other units would provide a basis for setting access prices for those infrastructure services. For example, the transfer price paid by the retail business unit to the business unit supplying water transport services would provide indicative access charges for a business seeking access to the water distribution (pipeline) network.

In addition, the requirement for services to be provided on a non-discriminatory basis to all customers of the infrastructure operator unit would ensure that

infrastructure services are made available to all market participants on an equal basis.

The Commission considers that functional separation would be appropriate for the metropolitan businesses and some regional businesses where access to infrastructure facilities is likely to be sought in the near future. Such facilities are likely to include large water pipelines, such as the Goldfields Superpipe. Central Highlands Water and Coliban Water noted in their submissions that access applications were likely in respect of the Goldfields Pipeline. The Commission understands that some degree of functional separation has already been implemented by those businesses.

For other regional businesses, particularly the smaller businesses that do not expect access applications in the near future, functional separation may not be justified at this stage. The Commission considers that functional separation could be undertaken during the access regime's implementation period.

This approach would be consistent with other industries such as the Victorian rail and electricity industries, where business units subject to access must be functionally separated from the other business units.

Ring fencing could still be necessary for functionally separated business units that operated more than one infrastructure facility because access could be sought to the services provided by only one of those facilities.

7.3.2 Ring fencing guidelines

The Commission proposes that accounting ring fencing guidelines would be developed in consultation with businesses during the implementation period. Based on ring fencing approaches adopted in other industries and the New South Wales water industry, the guidelines would include, but not be limited to, guidance on:

- financial separation – The guidelines should contain clear guidance on how infrastructure operators should separate out the financial information related to the parts of their business that are subject to access. They should also provide guidance on how businesses are to allocate shared costs between different parts of the business units (such as the costs associated with corporate services).
- functional separation – The guidelines should contain clear guidance for the metropolitan and nominated regional businesses on the requirements for creating functionally separate business units.
- commercial neutrality – The guidelines should stipulate that businesses are not to provide infrastructure services to other parts of its business on more favourable terms and conditions, including more favourable prices, than provided to other (competing) businesses.
- information sharing – The guidelines should require an infrastructure operator to make any information shared with other parts of its own business available to businesses seeking access.
- compliance – The guidelines should provide for the Commission to undertake on-going compliance monitoring of ring fencing arrangements to ensure that they

are being maintained by the infrastructure operator. This may be on an annual basis or a more ad-hoc basis.

- timing –Once an infrastructure service becomes subject to access, businesses should have to become compliant with the ring fencing guidelines within a specified timeframe.

Including guidance to the businesses on allocating costs to different services in the ring fencing guidelines could avoid the need for businesses to prepare cost allocation manuals, as required under the New South Wales' access regime. Barwon Water argued for the Commission to stipulate a cost allocation process for this reason. Some explanation of how businesses have complied with the ring fencing guidelines would, however, still be required. The requirements on businesses will need to be developed, in consultation with the businesses, during the implementation period for the regime.

Draft recommendation 7.1

That the Government requires the four metropolitan Melbourne businesses and nominated regional water businesses to commence, within six months, the process of implementing operational separation of their water sourcing, water and sewerage distribution, and retail customer service functions.

Draft recommendation 7.2

That the Government requires the water businesses to implement ring fencing of infrastructure facilities that are subject to access within three months of becoming subject to access. Ring fencing should be implemented in accordance with ring fencing guidelines to be formulated by the Commission.

7.4 Other issues

South East Water recommended that changes to the Regulatory Accounting Code proposed as a result of the Commission's review of regulatory accounts should be deferred until the access regime inquiry is completed. It stated that deferral would avoid the need for multiple changes to the Code.

The purpose of the current review of the Regulatory Accounting Code is to streamline the processes for reviewing the water businesses' regulatory accounts, remove inconsistencies in the accounts and improve the reliability of the information contained in the accounts. The Commission considers that the review, and amendment of the Code, should proceed as planned to avoid delay in improving the regulatory accounts. Future changes to the Code associated with introducing ring fencing will build on the improvements made following the review.

8 PROTECTION OF HEALTH, CUSTOMERS AND THE ENVIRONMENT

As noted in the terms of reference for this inquiry, an important objective in implementing an access regime is to ensure that existing water businesses and new service providers are able to comply with legislation and regulations related to resource management, the environment, water quality, health and safety. In addition, clause 6(3)(a)(iii) of the Competition Principles Agreement (included at appendix D) requires that, where use of an infrastructure facility has safety implications, appropriate regulatory arrangements should exist.

The existing water businesses are subject to a range of regulations relating to customer protection, water quality, public health and safety, and environmental protection. These regulations are administered by a number of agencies, including:

- the Commission in respect of economic regulation of prices, service standards and market conduct
- the Department of Sustainability and Environment (DSE) which regulates water resource allocation, environmental flows, dam safety, water conservation and reuse
- the Department of Human Services (DHS) in relation to the safety and quality of drinking water, public health aspects of water discharges and water reclamation and reuse, and concession and other assistance programs for customers in hardship
- the Environment Protection Authority (EPA) which is responsible for preventing pollution and protecting Victoria's environment and
- the Energy and Water Ombudsman of Victoria (EWOV) which investigates and resolves disputes between customers and their water provider.

This chapter makes recommendations on the nature of legislative and regulatory amendments required to extend existing obligations to new water and sewerage service providers. It recommends establishing licensing arrangements to ensure new service providers comply with obligations applying to the existing water businesses.

8.1 Assessment of the existing regulatory framework

The institutional arrangements currently in place provide a sound foundation for an access regime. However, the existing framework could contain gaps that either limit its applicability to new service providers or give the relevant regulatory agency insufficient powers to effectively regulate new providers of water and sewerage services. The Government will need to undertake a full review of the legal and regulatory framework to ensure that appropriate obligations apply to both incumbents and new service providers.

Submissions generally supported extending existing obligations to new businesses providing water and sewerage services. The existing water businesses have stated that the existing regulatory framework should be applied to new entrants to the water industry to maintain public health and provide a level playing field for all market participants. The Consumer Utilities Advocacy Centre (CUAC) submitted that parts of the existing framework, such as the Customer Service Code, should be strengthened before an access regime commences.[96]

The Commission's key considerations in recommending amendment of the existing regulatory framework to support the development of an access regime are that:

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

Draft recommendation 8.1

That the Government conducts a comprehensive review of the legislation and regulations relating to health and safety, drinking water quality, customer protection and environmental protection in the water industry as soon as possible. The review should identify amendments or additional measures required to extend existing obligations in regard to these matters to new water and sewerage service providers and to ensure that the relevant regulator has sufficient powers to require compliance with these obligations by all service providers.

8.2 Extension of existing legislation and regulations

Some obligations could be imposed on new water and sewerage service providers by amending existing legislation. To maintain protection of health, customers and the environment, existing legislation and regulations will need to be extended to cover new entrants.

8.2.1 Environmental protection

The *Environment Protection Act 1970* (EPA Act) is Victoria's primary environment protection legislation. Environmental legislation is administered by the EPA. The EPA Act requires all scheduled premises to obtain an EPA licence. A scheduled premise may include an entity that removes salt from water, disposes of waste into the environment, or undertakes treatment of waste.[97]New entrants to the water

---

96 Customer Utilities Advocacy Centre 2009, *op. cit.,* p. 5.

97 More detailed information is available on the EPA website www.epa.vic.gov.au.

industry would be obliged to have an EPA licence if they are undertaking any activities that require a licence.

Under the EPA Act, state environment protection policies (SEPPs) have been made to provide more detailed requirements and guidance for the application of the Act. Under the EPA Act, the requirements in environmental regulations, works approvals, licences and other regulatory tools, must be consistent with SEPPs. The SEPP (Groundwaters of Victoria), which was developed to provide an integrated framework of environment protection goals for groundwater, may be relevant to water sourcing by new water service providers.

In the New South Wales water industry, new water and sewerage service providers are required to comply with the requirements of New South Wales' environment protection acts, the *Environmental Planning and Assessment Act 1979* (NSW) and the *Protection of the Environment Operations Act 1997* (NSW). The Commission will consult with the EPA on the amendments required to ensure that new water and sewerage service providers in Victoria are subject to the requirements of the EPA Act.

Compliance with the relevant provisions of the EPA Act could also be included as a condition of a water industry licence (discussed in section 8.3) to provide an additional safeguard. While the licence condition would not provide the regulator (recommended to be the Commission) with the power to prosecute any breaches of environmental regulations, it would give the licence regulator the power to refuse a licence to any water or sewerage service provider that persistently breached environmental regulations. It would also allow for refusal of a licence to applicants who were unable to demonstrate the capacity to comply with the environmental regulations.

8.2.2 Drinking water quality standards

Maintaining existing standards of drinking water quality is imperative to ensure public health is protected. In Victoria, drinking water standards are regulated by the *Safe Drinking Water Act 2003*, which is administered by DHS. DHS identified three options for ensuring new water service providers were obliged to comply with the Act. A new provider could be declared a licence holder within the meaning of the *Water Industry Act 1994*, an authority within the meaning of the Water Act, or a 'water supplier' under the Safe Drinking Water Regulations 2005.[98]

In New South Wales, water industry licences required by new service providers contain conditions relating to the supply of drinking water that: is fit for human consumption; complies with any requirement of the licence conditions; and complies with any requirements under the *Public Health Act 1991* (NSW).[99]

The Commission considers that new water service providers should be declared as 'water suppliers' under the Safe Drinking Water Regulations 2005 to ensure that

---

[98] Department of Human Services 2009, *Submission to Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper,* 15 April.

[99] Water Industry Competition (General) Regulation 2008, New South Wales Government Gazette, p. 28.

they must comply with the requirements of the Safe Drinking Water Act. This would ensure that compliance with drinking water standards by these new providers would be monitored by DHS, which has technical expertise in regulating these standards and would be able to prosecute any breaches of those standards.

Compliance with the Safe Drinking Water Act could also be included as a condition of a water industry licence to provide an additional safeguard. While the licence condition would not provide the regulator (recommended to be the Commission) with the power to prosecute any breaches of drinking water standards, it would give the regulator the power to refuse a licence to any water provider that persistently breached those standards. It would also allow for refusal of a licence to applicants who were unable to demonstrate the capacity to comply with the safe drinking water standards.

8.2.3 Occupational health and safety

The *Occupational Health and Safety Act 2004* (OHS Act) regulates workplace health and safety, including requiring measures to ensure employees' health and safety at work and to avoid workplace accidents.[100] Access seekers should be required to comply with all appropriate occupational health and safety requirements outlined in the OHS Act and the Occupational Health and Safety Regulations 2007.

Draft recommendation 8.2

That the Government takes appropriate measures to ensure that new water and sewerage service providers are subject to the *Environment Protection Act 1970*, the *Safe Drinking Water Act 2003*, and the *Occupational Health and Safety Act 2004.*

8.3 Licensing

The New South Wales Government has established a licensing system for new water and sewerage service providers under the *Water Industry Competition Act 2006* (NSW). Applications for licences are made to IPART which recommends to the Premier whether a licence should be granted. The licensing system contains two types of licences: a network operator's licence and a retail supplier's licence. A network operator's licence is required to construct, maintain or operate water industry infrastructure. A retail supplier's licence is required to supply water (potable or non-potable) or to provide sewerage services.

The Victorian water businesses and CUAC supported the introduction of licences for new water and sewerage service providers. South East Water suggested that licences should cover customer protection measures while Melbourne Water suggested that licences should require licensees to comply with the legislative obligations imposed on the existing water businesses.

---

[100] More detailed information is available on the Workcover website www.workcover.vic.gov.au.

The Victorian Water Industry Act contemplates licensing for a number of activities, including the provision of water and sewerage services, drainage services, sewerage treatment, and water headworks services. It may be appropriate in Victoria for separate licensing of each of these activities. The appropriate types of licences should be considered further during the implementation period.

Draft recommendation 8.3

That the Government establishes a functional licensing system for new water and sewerage service providers.

Licences typically set out such matters as: the services or activities the licensee is able to perform; the term (duration) of the licence; the requirement to comply with technical or operational codes or agreements; confidentiality requirements; dispute resolution requirements; maintenance of accounts; information and audit provisions; payment provisions; requirements to comply with relevant laws; communications protocols; and requirements for ending, transferring or revoking a licence. The Commission considers that water industry licences would deal with similar requirements.

Some of the key matters to be included in water industry licences are discussed in the rest of this section.

8.3.1 Customer protection

To ensure existing standards of customer protection are maintained, compliance with the Customer Service Code (the Code) should be a requirement of the licences. The Code may need to be separated into a network Code and a retail Code, as in other industries (such as the energy sector, which has distribution, retail and marketing codes), since the necessary customer protection measures will differ according to the types of service provided and the nature of the customer.

In New South Wales, licensed service providers must conform to the water industry code of conduct, marketing code of conduct and transfer code of conduct. The water industry code of conduct outlines the responsibilities relating to water quality, liability for infrastructure failure, payment of fees and charges for use of infrastructure, customer complaint handling, and liability in the event of water supply failure. A Victorian licensing system should include responsibilities in relation to these matters.

A marketing code of conduct would relate to the marketing of water supplies and sewerage services, including the type of information needed by customers and cooling off periods for new customers. A transfer code of conduct would include provisions relating to the information, procedures and timeframes governing transfers of customers between licensed retailers. Marketing and transfer codes of conduct may need to be developed, and compliance with those codes included in Victorian retail licences, if the Government decides that retail contestability is a desired outcome.

Any water or sewerage service provider that is servicing retail customers would be required to join the EWOV scheme. A retailer of last resort (RoLR) scheme, which would ensure that water customers would continue to receive supply in the event of failure of their existing retailer, would be required if competition existed at the retail level. VicWater expressed concerns about the allocation of costs associated with RoLR obligations. The details of an appropriate RoLR scheme should be developed in consultation with stakeholders if the Government decides to allow retail competition.

8.3.2 Operational and technical requirements

Licence conditions would need to include requirements for adequate risk management plans to ensure any risks to the public and the environment from their activities are appropriately managed. In addition, licensees would be required to develop emergency management and contingency plans.

Licences for infrastructure operators would need to contain requirements for licensees to prepare detailed infrastructure operating plans covering design, construction, operation and maintenance to ensure that facilities are properly designed and constructed, operated in a safe and reliable manner, and maintained in a proper condition. These plans should be audited on a regular basis. These types of provisions are included in New South Wales' network operator's licence conditions.

Licenses would also contain provisions relating to metering and customer connections.

8.3.3 Information reporting

Information collection, reporting and auditing requirements underpin the regulatory arrangements for water and sewerage services. Currently, the Water Industry Act includes provisions, under s. 4G, requiring regulated entities to provide to the Commission information that the Commission requires to enable it to perform its functions.

Access seekers would have to be made subject to these provisions to the extent necessary to enable the Commission to perform its functions. Given that access seekers would operate in the competitive segment of the water supply chain, information collection, reporting and auditing requirements may be lower than the requirements applying to monopoly segments where more stringent regulation may be required to ensure that monopoly power is not exercised. In the electricity and gas industries, the purpose and nature of information collected differs according to whether the infrastructure or services are provided under competitive or monopoly conditions.

To ensure information requirements are met, conditions should be placed on licences requiring access seekers to comply with the Commission's and other regulators' reporting requirements.

8.3.4 Financial capacity

In order to obtain a licence, access seekers would be required to demonstrate that they have sufficient capacity to carry out the activity and comply with the licence

obligations. In New South Wales, the Minister must be satisfied that the licence applicant is financially viable, as demonstrated by evidence of the applicant's financial history, such as the last three years' financial statements. Financial requirements aim to ensure that water and sewerage service providers are likely to continue to provide services over the sustained period (and prevent short term operations by so-called 'fly-by-night' operators).

The Commission recommends that financial capacity be a consideration in granting licences to ensure the long term financial viability of the water industry in Victoria.

8.3.5 Other conditions

As noted in section 8.2, a cross reference to existing legislative obligations could be included in licence conditions. Such conditions would allow the regulator to revoke a licence if a business persistently breached conditions set out in EPA Act, the Safe Drinking Water Act, or the OHS Act.

8.4 Licence application process

The Commission recommends that it be responsible for granting licences and monitoring compliance with licence conditions.

Licence applicants would apply to the Commission. The application process would be conducted in a similar manner to those in electricity and gas. Initially, the application would be published on the Commission's website, and then advertised in a Victorian daily newspaper inviting the public to obtain a copy of the application and to make submissions.[101] With respect to water, it may be appropriate that the Commission would consult with DHS, EPA and DSE, or obtain advice from appropriate consultants, on various technical issues. The Commission would make a decision, notify the applicant and publish its decision. An applicant that was refused a licence would be entitled to a limited merits review and appeal to the Supreme Court.

Under the IPART regime, licence holders are required to pay an annual licence fee. The licence fee is designed to cover the costs involved in monitoring, compliance, enforcement, conduct of investigations, and the management of the register of licences. In Victoria, existing water businesses are required to pay annual licence fees relating to DHS, the EPA and the Commission to recover the costs of regulation. The Commission recommends that annual licence fees should set.

Finally, appropriate penalties would need to apply when a licensee failed to comply with licence conditions. Financial penalties may be imposed or the licence could be revoked for serious or persistent breaches of conditions.

---

[101] Essential Services Commission 2006, *Procedures for applications for electricity licences and electricity licence transfers,* November, p. 3.

Draft recommendation 8.4

That the Commission is responsible for granting licences and monitoring compliance with licence conditions.

8.5 Other matters

Two other matters would need to be considered in developing a licensing system – the provision of guidance on applying for licences and complying with licence conditions, and possible exemptions from having to obtain a licence.

8.5.1 Guidance on licensing requirements

In the energy sector, the Commission has issued Procedures and detailed Guidance Notes for licence applicants. IPART has also developed detailed 'How to Apply Guides' for licence applicants. Guidance could also be provided on how to comply with licence conditions.

The Commission envisages that in establishing a licensing system it would set out guidance notes to assist applicants.

8.5.2 Exemptions from licensing requirements

A further consideration is whether businesses providing highly specialised services on a limited basis should be exempt from licensing requirements. If a service provider is delivering a highly specialised service to a single or small group of customers, it may be appropriate to either exempt the business from the licensing requirements or require it to obtain a modified licence. For example, in Victoria, alpine resorts provide water and sewerage services in national parks. These services are not subject to economic regulation but are governed by the Safe Drinking Water Act.

Such exemptions would ensure that the cost of obtaining and complying with a licence do not stifle the development of new or innovative services. Licence exemptions are provided for in the energy licensing frameworks.

The Commission recommends that the licensing system allows for the granting of an exemption from obtaining a licence.

Draft recommendation 8.5

That the Government incorporates provisions for granting exemptions within the functional licensing system.

9 ROLE OF THE COMMISSION

A state-based access regime would have to be regulated to ensure that it operates effectively and that water sector participants comply with all relevant obligations. The terms of reference for the inquiry require the Commission to consider and make recommendations on the Commission's role as regulator of an access regime.

9.1 The Commission as regulator of an access regime

As noted in chapter 2, the Commission is Victoria's independent economic regulator of essential services supplied by the water and sewerage industry. The Commission's primary objective under the ESC Act is to promote the long-term interests of Victorian consumers with regard to the price, quality and reliability of essential services. In pursuing this 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.

These legislative objectives are all relevant to regulation of an access regime. The Commission is the regulator of the Victorian intra-state rail access regime, the Victorian grain and wheat storage and handling access regime, and the Victorian channel access regime (which relates to port facilities).

In addition, the Commission has considerable expertise in regulating the water industry in respect of prices, service standards and reliability. It has extensive knowledge of the existing water businesses and their specific circumstances. The costs of regulating the industry and the compliance costs imposed on industry participants (infrastructure operators and access seekers) would be reduced by having a single economic regulator for the industry.

The NCC considers the Commission to be independent and sufficiently resourced to regulate an access regime.[102] A further consideration in deciding on an

---

[102] National Competition Council 2003, *op. cit.*, p. 28.

appropriate regulator of an access regime, highlighted by the NCC, is whether regulation of the regime is conducted in a transparent manner.

In deciding on various regulatory matters, the Commission aims to be open and transparent and to consult with as many stakeholders as is practicable. The Commission's general approach to consultation is set out in its *Charter of Consultation and Regulatory Practice*.[103] In general, the Commission's consultation papers, reports, and other documents and submissions are published and made available on the Commission's website. Stakeholders typically have a number of opportunities to be involved in the Commission's processes, including making submissions and attending public meetings. The Commission also consults with other regulators, such as the EPA and DHS, and other government agencies, such as DSE and the Energy and Water Ombudsman (Victoria) (EWOV).

Submissions generally supported the appointment of the Commission as the regulator of a water industry access regime. However, the Commission acknowledges the views expressed in some submissions that the Commission should not also arbitrate in access disputes. In considering these views in relation to arbitration of access disputes, the Commission has taken into account two key factors.

First, the NCC has noted that 'an access regime's arbitration framework must engender confidence among the parties', by ensuring that the dispute resolution body is independent and has sufficient resources and expertise to carry out its dispute resolution role, and that arbitration is binding.[104] The NCC noted that, where the regulator is also the arbitrator, there may be benefits from being able to draw on past experience with industry issues and that, in highly technical access disputes, finding a suitably qualified alternative arbitrator may be difficult.

Second, the Commission has taken into account the provisions included in the ESC Act for parties to appeal the Commission's decision. As well as appeal to the Supreme Court on matters of law, the Commission's decisions can be appealed through the limited merits review provisions included in its Act.

Section 56 of the ESC Act provides for an appeal panel to be convened to consider an appeal made against any requirements, decisions and determinations made by the Commission. The appeal panel is independent of the Commission and is established through the Victorian Civil and Administrative Tribunal (VCAT).[105] The Commission notes that several submissions nominated VCAT as an alternative arbitrator to the Commission.

An appeal panel must consist of three members, the chairperson and two other people, one of whom must have knowledge of administrative law or law of procedure and evidence. The other two members are selected based on their

[103] The Charter can be found on the Commission's website www.esc.vic.gov.au.

[104] National Competition Council 2003, *op. cit.*, p. 16.

[105] In the event of a clear conflict of interest, either the Commission or the appellant may request that a panel member be replaced. An application can also be made to the Supreme Court to dissolve the panel.

knowledge of commerce, economics, law or public administration. The appeal panel must be established within 7 working days of an appeal being lodged.

The powers of the appeal panel are set out in part 3 of the ESC Act. If the panel determines that a decision by the Commission is biased, or unreasonable given all of the information available to it at the time of making the decision, or not made in accordance with the relevant laws, it may set aside the decision and send it back to the Commission for amendment. Alternatively, it can replace the Commission's decision with its own decision. Otherwise, it will affirm the Commission's decision.

The Commission (as arbitrator) would bear the onus of establishing that its decision was made in accordance with law and is reasonable having regard to all relevant circumstances.

The Commission considers that the appeals provisions of the ESC Act provide sufficient accountability and protection against biased or unreasonable decision making. As well as arbitration decisions in respect of access disputes, these appeals provisions would apply to other regulatory decisions by the Commission as regulator of an access regime, such as decisions on licences and access prices. The Commission considers, therefore, that the provisions available for appealing its regulatory decisions in respect of an access regime would be sufficient to engender confidence among infrastructure operators and access seekers.

After weighing up the relevant considerations, the Commission has concluded that it is best placed to regulate an access regime, including arbitrating in access disputes.

Draft recommendation 9.1

That the Commission is appointed the regulator of an access regime for the Victorian water industry. The Commission's regulatory role would include arbitrating in access disputes.

9.2 Role and responsibilities

The preceding chapters in this report have mentioned various roles for the Commission in the context of the issues that need to be addressed in developing an access regime. This section summarises the Commission's proposed role in regulating a water industry access regime.

9.2.1 Coverage declarations/access commitments

As noted in chapter 3, the Commission proposes that, during the implementation period, access commitments by the water businesses would be submitted to it for approval. The Commission would review the businesses' nominations for specific infrastructure facilities for which access commitments would be made, through a process including public consultation. Additional infrastructure services could be proposed by the Commission, which would advise the Government of its recommendations. The Commission would also review subsequent proposals by

the businesses to make access commitments for other infrastructure facilities that were not initially nominated. It could also revoke an access commitment to reflect a significant change in circumstances.

The Commission would formulate guidance for the businesses on the criteria to be applied in identifying specific infrastructure services for which access commitments should be made. Guidance would also be developed on the matters that should be included in access commitments, including negotiation protocols, timeframes for various stages of the negotiation process, and the information that should be provided as part of the negotiation process.

The Commission proposes that these arrangements form the basis for making coverage declarations after completion of the implementation period.

9.2.2 Negotiation framework and dispute resolution

The Commission proposes that it would develop guidance for infrastructure operators and access seekers on negotiation protocols, information requirements and dispute resolution mechanisms and provide advice to infrastructure operators and access seekers on complying with these guidelines and other requirements.

It proposes to publish general information on its website, including fact sheets explaining the key features of the access regime, information about the regulatory framework, the negotiation protocols, and guides dealing with licences, access applications and arbitration.

As noted in section 9.1, the Commission considers that it is best placed to arbitrate in access disputes, having sufficient resources and expertise to carry out this role.

9.2.3 Access pricing and ring fencing

As noted in chapter 6, the Commission considers that regulatory guidance on access prices is likely to be needed to facilitate effective negotiations between an infrastructure operator and access seeker and provide a level of certainty to market participants on the method for calculating access prices. The Commission proposes to develop pricing principles and other guidance to assist the businesses in applying the cost of service and retail minus approaches.

The Commission considers that it may be worthwhile assessing access prices as part of the next price review (in 2013) if the extent of access during the implementation period is sufficient to justify scheduled access prices. In the early stages of the access regime, however, the Commission recommends that access prices be calculated in accordance with pricing principles when an application for access is received. The Commission would monitor compliance with the pricing principles.

9.2.4 Licensing

The Commission proposes that it be responsible for assessing licence applications and granting licences (see chapter 8). It would also monitor compliance with licence conditions. The appeal mechanisms provided for in the ESC Act would allow for appeals of the Commission’s decisions on granting or revoking licences.

The Commission would also adminster the register of licenses and be responsible for license reviews.

9.2.5 Performance monitoring and reporting

In its current role as economic regulator of the Victorian water industry, the Commission monitors and reports on the performance of the water businesses in providing water and sewerage services. The Commission envisages that new water and sewerage service providers would be subject to some of the same monitoring and reporting requirements, taking into account the types of services offered.

It proposes to extend its monitoring and reporting to include the performance of an access regime for the water industry.

9.2.6 Review of the regime

The Commission considers that an access regime should be reviewed on a periodic basis to ensure that it is operating effectively and to identify any modifications required to improve its effectiveness. Modifications may also be required to address any changes in the circumstances of the Victorian water industry to ensure that the regime remains appropriately tailored to industry circumstances.

The Commission recommends that it should undertake any future reviews of an access regime after it has been implemented. It should also be able to provide advice to the Government on the operation of the regime, or any aspect related to its regulation, as required.

10 OTHER ISSUES

Under the Competition Principles Agreement, the legislation establishing an access regime must state clearly that the objective of the regime is to:

> *promote the economically efficient use of, operation and investment in, significant infrastructure thereby promoting effective competition in upstream or downstream markets.*[106]

In developing access regimes in other industries, governments have commonly introduced complementary measures to ensure that the access regime is effective in facilitating broader participation in the industry to which the regime applies. These complementary measures have often addressed obstacles to broader participation and competition with the incumbent business. Without complementary measures in the water industry, the full benefits from introducing an access regime, in terms of substantially boosting innovation and efficiency, are unlikely to be achieved.

Coordination and network management measures will also have to be implemented to ensure that the operation of the Victorian water industry is economically efficient when a larger number of businesses are providing water and sewerage services in the existing service areas. Such measures will also promote economically efficient investment in water industry infrastructure.

The terms of reference for this inquiry allow the Commission to make observations regarding potential barriers to effectively implementing an access regime. They also require the Commission to make recommendations on coordination and network management.

This chapter highlights the main barriers that would need to be addressed by the Government to support the effective operation of an access regime. It also identifies a number of coordination and management issues.

10.1 Potential barriers to the effective operation of an access regime

The Commission notes that the Government is currently undertaking an extensive work program to identify measures to improve the efficiency of the water industry. Some of the projects underway in the water industry were listed in the terms of reference for this inquiry. The Commission also notes the Government's statement about the opportunities for longer term reform of the water industry set out in its

---

[106] Clause 6(5)(a) of the Competition Principles Agreement. See appendix D.

response to the Victorian Competition and Efficiency Commission's (VCEC) report.[107]

A number of submissions highlighted that the Government's program for water industry reform would have important implications for designing an effective access regime. For example, Melbourne Water commented that an appreciation of the Government's competitive reforms 'is necessary to design a fit for purpose access regime'.[108] South East Water stated that its 'preferred outcome would be to integrate the introduction of third party access regime into a well defined reform program for the industry'.[109]

Several submissions commented on the Government's reform program. Yarra Valley Water expressed the view that the most important challenges for the water industry will not be addressed through an access regime. It nominated a number of issues the Government should address in its reform program, including creating a water grid manager, allocating water entitlements, optimising environmental flows, and developing new water sources in an economically efficient and environmentally sustainable way.

A private company involved in a number of recycling projects in New South Wales, Jemena, submitted that it would be 'desirable to remove barriers to retail contestability and provide for access to facilitate innovative models'.[110] While it did not believe full retail contestability would be an appropriate policy objective, it suggested that, without reforms to increase the scope for competition and innovation in providing retail water and sewerage services, '[t]he demand for access is likely to be limited'.[111]

Reform of the legislative and regulatory environment, and consequent changes in industry structure, are expected to open up new opportunities for innovative and more efficient ways of meeting customer demands for water and sewerage services. These new opportunities could generate access applications to enable businesses to provide new services using existing infrastructure. These applications may come from private businesses planning to start offering water and sewerage services or existing publicly-owned water businesses planning to extend into other service areas (including greenfield developments).

The Commission's issues paper identified aspects of the existing legal and institutional arrangements that could create potential barriers to broader participation in the water industry, including:

- constitutional provisions for public ownership in the water industry

---

[107] Victorian Government 2008, *op. cit.* The reform opportunities identified by the Government are listed in section 1.1.

[108] Melbourne Water 2009, *op. cit.*, p. 1.

[109] South East Water 2009, *Submission to Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, 14 April, p. 14.

[110] Jemena 2009, *Submission to Inquiry into an Access Regime for Water and Sewerage Infrastructure Services—Issues Paper*, 16 April, p. 3.

[111] *ibid.*, p. 2.

- legislative and regulatory arrangements relating to bulk water entitlements and potential constraints on the ability of the existing water businesses to compete with each other
- resource management processes, including procurement processes and demand and supply management, and
- the property rights applying to different types of water.[112]

The issues paper asked for submissions on any other potential barriers to the effective operation of an access regime. Potential barriers are discussed in more detail in the rest of this section.

10.1.1 Constitutional provisions

The terms of reference for this inquiry require the Commission to have regard to the Victorian Government's commitment to public ownership of water businesses set out in the *Constitution Act 1975* (the Victorian Constitution). The *Constitution (Water Authorities) Act 2003* amended the Victorian Constitution to require that where 'a public authority has responsibility for ensuring the delivery of a water service, that or another public authority must continue to have that responsibility' (sec. 97(1) of the Victorian Constitution).

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

Draft recommendation 10.1

That the Government investigates whether the constitutional provision in respect of public ownership in the Victorian water industry would prevent opportunities for private provision of water or sewerage services.

10.1.2 Legislative and regulatory arrangements

In developing an access regime for the water industry, the Government will need to undertake a comprehensive review of relevant legislative and regulatory provisions to identify whether amendments are required to support the effective operation of the regime. The Commission has identified several major areas where amendments are likely to be required.

---

[112] Essential Services Commission 2009, *Issues Paper, op. cit.*

Water entitlements

The Minister for Water issues water entitlements and administers water allocations under the Water Act. A water entitlement is the maximum amount of water authorised to be taken and used by a person under specified conditions. There are four different types of issued entitlements to take water: bulk entitlements; environmental entitlements; water shares and water licences.

Bulk entitlements may be granted to water corporations, the Minister for Environment and other specified bodies defined in the Water Act (such as electricity companies). The right to hold and trade bulk water entitlements is effectively limited to existing water businesses, creating a barrier to participation by other businesses or individuals. Water entitlements may also be granted to irrigators and diverters.[113]

The legislation states that entitlements can be held in relation to water in a waterway, water in storage works of a water corporation and groundwater. This definition would exclude some new water sources developed by the existing water businesses or by new businesses. The Commission notes that the Government is currently considering amendments to bulk water entitlements to reflect new water sources, such as the desalination plant and the Sugarloaf pipeline. Amendments may also be needed to support the development of innovative water sources by private businesses.

Draft recommendation 10.2

That the Government reviews the *Water Act 1989* with the aim of permitting businesses other than the existing water businesses to hold and trade water entitlements and to extend the definition of water to which entitlements apply to include new and innovative sources of water.

Water trading in urban systems

Water trading commenced in Victoria in 1991 after the Water Act allowed permanent transfers of rights and established trading regulations. In 2004, the Council of Australian Governments (COAG) agreed under the National Water Initiative to undertake reforms to achieve a nationally compatible water market.

The Victorian Government has developed policy and legislative approaches to support interstate water trade. The *Water (Resource Management) Act 2005* instituted further reforms in water use and management, including trade and the unbundling of water entitlements. Currently, most water trade in Victoria is in the regulated water systems in northern Victoria, the Goulburn and Murray River systems.

[113] Department of Sustainability and Environment 2008, *Allocation and trading*, available at www. ourwater.vic.gov.au/allocation.

Legislative and regulatory amendments would be needed to establish water markets to extend trading to bulk water entitlements within urban systems. Currently there are no clear arrangements for potential access seekers planning to supply bulk water from a new supply source to offer water into any form of urban wholesale market.[114] Similarly, there are no clear provisions for potential access seekers proposing to provide some form of retail water services to purchase water supplies from a wholesale market.

The absence of trading arrangements could form a significant barrier to broader participation in the Victorian water sector. The Commission recommends, therefore, that the Government investigate means by which trading could be extended.

Draft recommendation 10.3

That the Government investigates extending the existing trading arrangements for water entitlements.

Competition between the existing water businesses

Section 11 of the *Water Industry Act 1994* prohibits competition between the three metropolitan retail water businesses by limiting the area within which each business can provide water and sewerage services. The provision also prevents the metropolitan retailers from competing with the regional urban businesses.

Similar provisions are not included in the Water Act, although a business may require approval from the Minister for Water before it could begin offering certain services in another water business' service district (or outside Victoria). Water businesses regulated under the Water Act are able to supply water to customers outside their district without the Minister's approval. Arrangements for the supply of water from one water business to another already exist. For example, Melbourne Water supplies bulk water to Gippsland Water and Western Water, and GWMWater has agreed to supply bulk water to Wannon Water.

The Commission considers that efficiency and productivity within the water sector would be promoted by not confining an existing water business to only servicing customers within a specified geographic service area. This would provide greater incentives for innovation.

[114] Referring back to example 1 described in section 1.2.3, a business planning to supply bulk water from a new supply source would have no option but to sell to a single buyer (the incumbent water business) without a market to determine the price.

Draft recommendation 10.4

That the Government amend the *Water Industry Act 1994* and the *Water Act 1989* to remove provisions that limit a water business to only servicing customers within a specified geographic area.

10.1.3 Resource management processes

Improving resource management processes and the information available about expected future demand and supply for water and sewerage services would improve the opportunities for developing low-cost new water sources.

Procurement processes

The current arrangements for planning and managing water supply procurement may form an impediment to the development of innovative supply options. The lack of transparency in decision making on which water sources to develop, when to develop them and how to operate them once they are in place, creates risks for potential water suppliers and could limit broader participation in bulk water provision. Further, there may be a real or perceived conflict of interest for the relevant water business as a supplier and seller of bulk water. These include scope for bias when selecting which sources to invest in or use.[115]

In Western Australia, the Economic Regulatory Authority (ERA) proposed the creation of an independent procurement entity (IPE) as a means of separating bulk water procurement from the role of the government and the state-owned water business, thereby reducing some of the potential risks faced by private sector suppliers. The ERA noted that the IPE model would also clarify the role of government and reduce the risk of political interference in investment decisions.[116]

The IPE would have responsibility for ensuring that supply and demand were balanced at least expected cost, subject to the constraint of maintaining security of supply at the level set by the government. Independence from government would improve certainty for the private sector, transparency in decision making, and consistency in approach. The ERA noted that the proposed reforms would support an access regime by facilitating broader participation in supplying water.

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

---

115 Economic Regulatory Authority 2008, *Inquiry on Competition in the Water and Wastewater Services Sector: Final Report*, June.

116 *ibid.*

> **Draft recommendation 10.5**
>
> That the Government reviews its bulk water procurement processes to improve opportunities for development of low-cost new water sources.

Information provision

Access seekers require information on industry conditions, costs, the expected demand and supply balance, and other matters to assess the viability of proposed projects and other forms of participation in the water industry.

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

Melbourne Water noted that, in the water sector, much of the information required by access seekers to assess the viability of proposed projects 'is currently available in one form or another'.[117] Information on industry conditions, costs, the expected demand and supply balance, and excess capacity is published in the water businesses' Water Plans, the Commission's price determinations and annual performance reports, and government publications such as the Sustainable Water Strategies prepared for the four Victorian regions and the Government's *Our Water, Our Future* planning documents.[118]

In relation to demand management, the ERA identified that uncertainty about the trigger conditions for the imposition of water restrictions or the provision of rebates for water conservation measures may create a barrier to private supply of water. Water restrictions and rebates influence the level of water use and therefore the returns expected by private providers of water services, including recycled water. Uncertainty about the trigger conditions increases the risks associated with supplying water services. The ERA concluded that 'the rules that govern the introduction or amendment of these factors [should] be known with certainty'.[119]

The Commission sees value in reviewing whether the publicly available information relating to resource planning is adequate, easy to understand and released on a timely basis and that the resource planning processes are sufficiently open and transparent.

---

[117] Melbourne Water 2009, *op. cit.*, p. 27.

[118] See Department of Sustainability and Environment 2004, *Our Water, Our Future—Securing Our Water Future Together,* Victorian Government White Paper, June; and 2007, *Our Water, Our Future—The Next Stage of the Government's Water Plan*, Victorian Government, June. The Government's policy documents and the regional Sustainable Water Strategies are available at www.ourwater.vic.gov.au/programs.

[119] Economic Regulatory Authority 2008, *op. cit.*, p. 31.

Draft recommendation 10.6

That the Government reviews the adequacy and timeliness of publicly available information related to resource planning.

10.1.4 Property rights related to different types of water

The VCEC report noted that clarifying the property rights and obligations associated with different water resources would support broader participation in the water sector by providing clearer information on costs, risks and opportunities.[120] It noted further that uncertainty about rights, especially to wastewater, recycled water and stormwater, could create a barrier to some activities that could be proposed by new participants in the sector.

The Commission notes that the Department of Sustainability and Environment is developing a report to the Government on clarifying rights to alternative water sources and identifying where the rights framework could be improved.

10.1.5 Other potential barriers

One of the Government's objectives in establishing an access regime is, as noted in the terms of reference for this inquiry, to 'facilitate the development of innovative local solutions to water supply, consistent with broader sustainable urban planning objectives'.

South East Water commented that a state-based access regime should not be biased towards any specific solutions, as it could be if it was designed to be consistent with current urban planning policies. South East Water considered that a competitive water market would best promote the development of efficient and innovative means of supplying water services. The Commission notes that similar issues arise in respect of water recycling policies that set targets for recycling.

In the Commission's view, it is important to ensure that government policies do not inadvertently create barriers to identifying efficient innovations in water and sewerage service provision. Policies that mandate or subsidise certain approaches could reduce the viability of other more efficient and innovative solutions.

10.2 System coordination and management issues

With increasing integration of the Victorian water network to create a Victorian Water Grid, an important consideration is how to manage the grid to ensure that the desired level of supply security is achieved while minimising the cost of supply on a day-to-day basis. Coordinating different sources of bulk water and directing the transfer of bulk water across the grid will be essential elements in achieving this objective.

---

120 Victorian Competition and Efficiency Commission 2008, *op. cit.*

An access regime is expected to result in an increase in the number of businesses using particular water networks. New businesses will be able to use these networks to supply water from new sources with varying cost structures. A larger number of market participants, and greater diversity in the nature and cost of supply sources, will increase the importance and complexity of coordination across the water supply grid.

10.2.1 Network management

In its report on the Melbourne water sector, VCEC noted that a Water Grid Manager or other system coordinator could be established to undertake the day-to-day operation and coordination of the water supply system. The grid manager would determine operating rules for the grid and how much water to take from different sources to meet demand at any particular time.[121] Its tasks would include:

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

The grid manager would also need to manage temporary supply shortages or congestion.

VCEC considered that, in the short term, a grid manager would need to take a centralised approach. Without a well functioning market for trading bulk water entitlements, the system coordinator would have to estimate costs and willingness to pay without access to genuine market valuations. However, if such a market was established in future, the grid manager's task would become one of managing bids from market agents and despatching water from lowest to highest bids to meet demand.

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

- whether to set up a framework for a centralised approach in the short term that leaves open the option of a transition to a decentralised approach
- how to establish the water grid manager so that it has no conflicts of interest in its operation of the network
- clarity around the allocation of responsibilities for managing the commodity and for managing the transfer of that commodity
- pricing and operational arrangements and
- how the water grid manager should interact with water businesses and users on the boundaries of the metropolitan market (where there is scope for interconnection).[122]

---

[121] Victorian Competition and Efficiency Commission 2008, *op. cit.*

[122] *ibid.*

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

The Consumer Utilities Advocacy Centre emphasised the need for accountability in managing the water supply grid. It expressed concern that:

> *Unbundling of the wastewater sector and breaking up obligations along the supply chain, for example, may make it easier for businesses to avoid responsibility for supply failures.*[123]

Barwon Water expressed the view that a grid manager would not be needed for regional networks, stating that: 'Regional water companies are in the best position to coordinate, manage and optimise their systems to provide a secure level of supply at least cost.'[124] Coliban Water noted, however, that:

> *It is currently able to optimise the management of its distribution network to best match demand and supply across areas. It is also able to balance the use of different assets at different times of day and throughout the year to meet the varying demand from different locations. Providing rights of access to third parties to that infrastructure would add a level of complexity to the current management arrangements.*[125]

In developing an access regime, the Government would need to ensure that appropriate arrangements were in place for coordination and day-to-day management of water supply requirements where access could occur. In the short term, at least, it seems to the Commission that Melbourne Water in metropolitan Melbourne and the regional businesses in their service areas are best placed to provide the required coordination and management functions.

Draft recommendation 10.7

That until such time as the Government completes its review of network management arrangements, Melbourne Water and the regional businesses provide water supply coordination and management functions in their service areas.

10.2.2 Network balancing

Another issue that will need to be dealt with is network balancing. While the access arrangements between access seekers and infrastructure operators will go some

---

[123] Consumer Utilities Advocacy Centre 2009, *op. cit.*, p. 4.

[124] Barwon Water 2009, *op. cit.*, p. 4.

[125] Coliban Water 2009, *op. cit.*, p. 7.

way to matching water demand with its supply, imbalances may be expected to occur on a daily basis. Management of these imbalances may best be undertaken by the infrastructure operator (such as through the operation of service reservoirs and by varying pressure at different points in the network). The costs of network management should be passed on to those who generate the imbalances. Such imbalances may also impact on service quality elsewhere in the network.

A methodology for estimating system losses and processes for allocating the associated costs will need to be developed. Losses should be maintained at an economically efficient level (which is unlikely to be negligible). The costs associated with losses would have to be taken into account in access pricing. Network balancing could be managed by an infrastructure operator or grid manager.

10.2.3 Interoperability

In terms of interoperability, issues can arise where an access seeker requires interconnection between its own infrastructure and a water business' infrastructure. For example, an access seeker might propose to connect into a sewer main in order to take out sewage (equivalent to the sewage discharged into the sewerage reticulation network by the access seeker's sewerage customers), which it would then transport along its own pipeline to its treatment plant. Alternatively, a business with a new water source might propose to connect its own pipeline into the main water pipeline in order to inject water that is then delivered to its customers through the water business' water supply network. (See the examples in section 1.2.3).

Interoperability issues may involve operating procedures and other terms and conditions of access. Terms and conditions imposed on interconnections by the infrastructure operator should be no more stringent than required to ensure the safe and efficient operation of the infrastructure. Negotiation of these terms and conditions would occur within the negotiation framework discussed in chapter 5.

South East Water noted that the quantities of water or sewage put into, or taken out of, the network by access seekers would have to be measured. Additional metering could be required at interconnection points. It identified other issues that would need to be considered in developing an access regime, including:

- determination of responsibility for meter provision and reading
- allocation of the cost of additional metering and
- development of a protocol for measuring sewage volumes.[126]

10.2.4 Network operation, maintenance and expansions

Currently water businesses have responsibilities related to planning, operation, maintenance and development of water and sewerage networks, including backlog programs for currently unserviced areas. The Consumer Utilities Advocacy Centre emphasised the importance of efficient network planning and design.[127]

---

[126] South East Water 2009, *op. cit.*, p. 12.

[127] Consumer Utilities Advocacy Centre 2009, *op. cit.*

An access regime will need to identify responsibilities for network operation, maintenance and network expansions. It seems likely that the incumbent infrastructure operator would retain these responsibilities. Access seekers would need to comply with operational and maintenance requirements and provide information required by the infrastructure operator to assist it in planning for network augmentation and expansion. These requirements could be included in the conditions of a licence (see chapter 8).

10.2.5 Emergency management

A further consideration is determining responsibility for managing emergencies. Currently water businesses are required to have emergency management plans. The water businesses generally supported extension of the existing emergency management arrangements to new businesses providing water or sewerage services.

These arrangements would have to be reviewed to appropriately allocate primary responsibility for co-ordinating and managing emergencies. New businesses could be required to provide information and participate, as appropriate, in emergency planning and co-ordination exercises. Requirements relating to emergency management could be included in the conditions of a licence (see chapter 8).

Draft recommendation 10.8

That appropriate arrangements are developed for: network balancing; interconnections into infrastructure facilities; network operation, maintenance and expansion; and emergency management.

APPENDIX A | TERMS OF REFERENCE

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.

Yours sincerely

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

Victoria
The Place To Be

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

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

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

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

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

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

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

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

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

Scope

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

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

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

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

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

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

The Commission should have regard to the *Constitution Act 1975*, which outlines the Victorian Government commitment to public ownership of water businesses.

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

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

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

In the course of the review the Commission may make recommendations regarding:

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

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

Specific Terms of Reference

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

Recommendations should be consistent with the principles in clause 6 of the Competition Principles Agreement. The National Competition Council has given guidance on how it considers these principles under the following categories:

- coverage of services – appropriately identifying and defining the services of the water and sewerage supply chain to which access is to be provided, noting that for certification, the services must be provided by infrastructure that is not economical to duplicate and acts as a bottleneck to competition in other markets;
- negotiation framework – establishing a legal right for parties to negotiate access, an enforcement process to support this right, requiring service providers use all reasonable endeavours to accommodate the requirements of access seekers, requiring that access outcomes strike an appropriate balance among a range of factors including the legitimate business interests of facility

owners, the efficient use of infrastructure and competitive outcomes that benefit the community, and having a regulatory framework that includes appropriate ring-fencing within a regulated business and prohibits conduct for the purposes of hindering access;

- dispute resolution – provide mechanisms to resolve a dispute between a service provider and access seekers;
- appropriate terms and conditions of access – terms and conditions should promote the efficient use of infrastructure and efficient investment in dependent markets while not deterring efficient investment in infrastructure. The access regime will need to be guided by the pricing principles set out in s35C of the *Essential Services Commission Act 2001*. Access terms and conditions should address safety requirements, the allocation of capacity among competing users, interoperability issues, and service quality issues;
- transitional arrangements – may include timetables to phase in availability for different classes of customer, and potential interim arrangements. Arrangements should be necessary and phased out as early as possible;
- greenfields investment – the access regime should not inappropriately deter new investment in infrastructure; and
- interstate issues – ensure state-based access solutions do not pose an impediment to interstate access if relevant.

The Commission should also consider and make recommendations on:

- whether different services will require different access arrangements;
- who will be eligible to seek access;
- the role of the Essential Services Commission as regulator;
- information requirements access providers will be required to publish;
- other information and reporting requirements;
- the responsibilities of network operation and maintenance;
- responsibilities for approving, undertaking and financing expansion of the network;
- specification of and obligations with respect to service quality, environmental and public health standards; and
- responsibility for network balancing and associated costs.

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

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

- new entry and administrative burdens; and

- the need for any amendments to existing arrangements, such as Regulated Asset Values, to meet the Government's objectives for establishment of an access regime.

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

Review Process

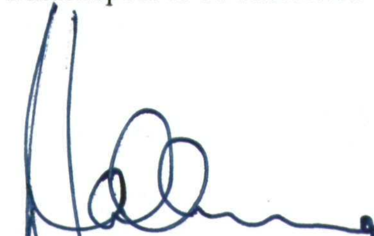
The Review will be conducted independently by the Victorian Essential Services Commission (ESC) under s.41(1) of the *Essential Services Commission Act 2001*, which requires that: "The Commission must conduct an inquiry into any matter which the Minister by written notice refers to the Commission under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

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

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

Timetable

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



TIM HOLDING MP
Minister for Finance, WorkCover
and the Transport Accident Commission.
Date: 19/11/2008

APPENDIX B LIST OF SUBMISSIONS

Business	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
DHS	15/04/2009
GWMWater	14/04/2009
Coliban Water	15/04/2009
Jemena	16/04/2009
Melbourne Water	16/04/2009
CUAC	20/04/2009
Southern Rural Water	21/04/2009
Western Water	21/04/2009

APPENDIX C EXAMPLES OF ACCESS

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 is expected to promote innovation in offering new services that better meet customers' demands and preferences.

This appendix describes a series of examples to clarify what types of activities involve access and which can occur without access. To assist in describing these activities and to illustrate the infrastructure to which access might be required, a simple diagram of a water supply system is set out in figure C.1.

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.

Example 1

A business establishes a new water source at **B**, for example by discovering an aquifer and sinking a bore to extract water (after obtaining the required permits). The business makes a contract with the incumbent water business that owns and operates the main water pipeline to sell the water to it. The water business then sells the water to its customers (customers 1–4).

The business at **B** builds a pipeline connecting 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.

The business at **B** does not have to use the main water pipeline to move water to its customer, the water business. It simply injects the water at the interconnection point **W** into the water business' pipeline (after moving it from the source of the water along its own small pipeline). This example does not, therefore, involve access. It is an example of a water purchase by the water business.

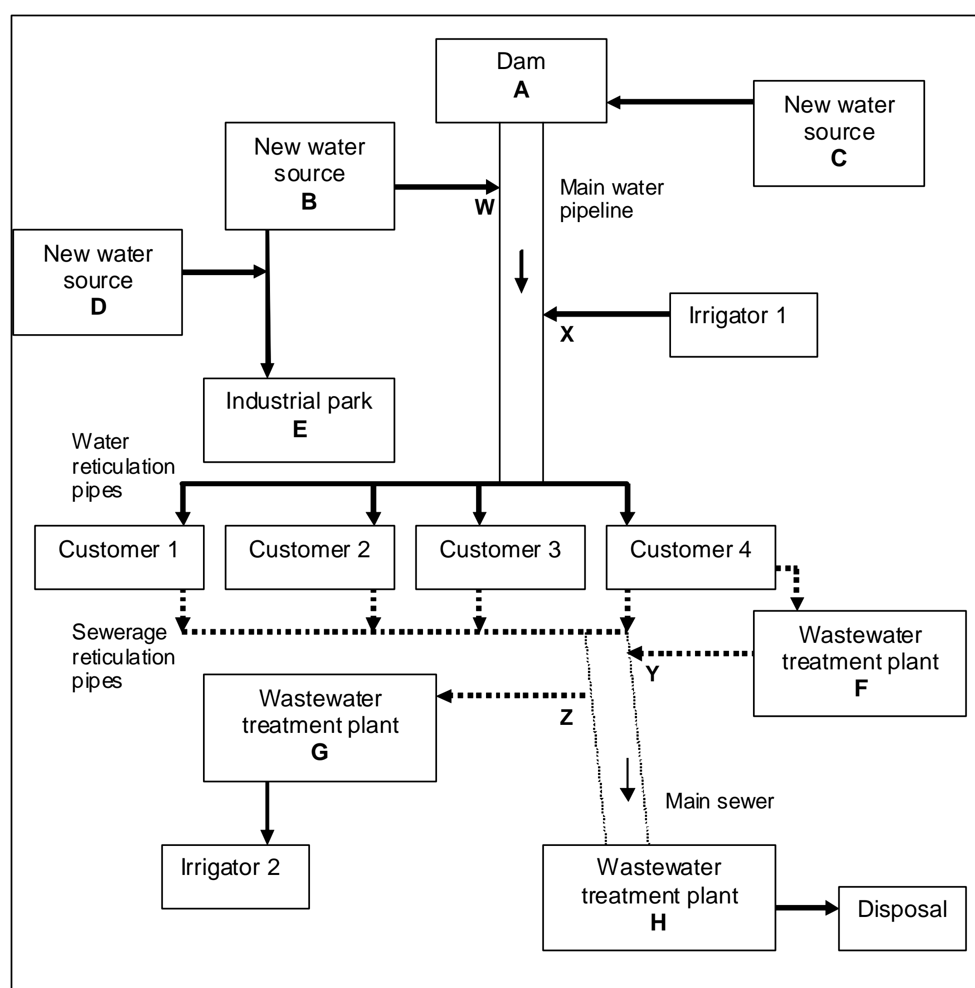
Example 2

In this example, the business at **B** makes a contract with customers 1 and 2 (which could be residential or non-residential customers) to supply water to them. The business could either supply all the water used by those customers (that is, the customers would switch from the incumbent water business) or it could provide additional water (for example, when potable water restrictions are in place).

In this case, the business at **B** needs to move the water from point **B** to its customers. It builds a pipeline connecting into the main water pipeline at **W**. It then negotiates with the incumbent water business that owns and operates the main

water pipeline to share the use of the main water pipeline and the reticulation pipes connecting to its customers' premises. This is, therefore, an example of access.

Figure C.1 **Diagram of a water supply system**
Examples of different types of water and sewerage services



Example 3

A business establishes a new water source at **C**, for example by building and operating a desalination plant (sourcing water from the nearby ocean). The business makes a contract with the incumbent water business that owns and operates the main water pipeline to sell the water to it. The water business then sells the water to its customers (customers 1–4).

The desalination plant operates on a continuous basis, producing a constant supply of water over time. However, the water business wants to use the water during summer when demand is high. Therefore, the business at **C** builds a pipeline connecting into 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 business at **C** simply injects the water into the water business' dam (after moving it from the desalination plant along its own small 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.

Example 4

Similar to example 2, in this case, the business at **C** makes a contract with customers 3 and 4 to supply water to them. Both customers 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 business at **C**, which produces a constant supply of water over the year needs to store the water during autumn and winter.

In order to meet its customers' needs, the business at **C** negotiates with the incumbent water business to use some of the storage capacity of the dam to store the water until it is needed by customers 3 and 4. The water is then delivered to those customers using the main water pipeline and the reticulation pipes connecting to its customers' premises, owned by the incumbent water business. The business at **C** builds a pipeline connecting into the dam.

Since the business at **C** is sharing the use of the incumbent water business' infrastructure, that is, its dam and pipeline, this is an example of access.

Example 5

In this example, the business at **B** decides to sell its water directly to the industrial businesses in an industrial park located at **E**. The business at **B** builds a pipeline directly to the industrial park, including a reticulation pipe network servicing each customer's premises. The business is not using any infrastructure owned by the incumbent water business.

This is an example of direct private provision of water to retail customers. Alternatively, the new water source at **B** could be owned by another publicly owned water business that has decided to extend its customer base by supplying the customers in the industrial park (in competition with the incumbent water business operating in that area).

Example 6

After the business at **B** builds its pipeline to the industrial park located at **E** (described in example 5), another business establishes a new water source at **D**, for example a small desalination plant to treat brackish water that could not previously be used. It makes contracts with some of the industrial customers in the industrial park at **E** to supply water to them.

The business at **D** then seeks access to the pipeline built by the business at **B** to deliver the water to its customers. This could be an example of access to infrastructure built by a private business.

Example 7

Irrigator 1 implements water saving measures on his property and sells some of his water entitlement to the water business. He builds a connecting pipeline or channel connecting with the main water pipeline at **X**. This is an example of water trading and does not involve access.

Example 8

A business establishes a wastewater treatment plant at **G.** It builds a sewerage pipeline connecting into the main sewer owned and operated by the water business at point **Z**. It extracts sewage under a commercial agreement with the water business. It then sells the treated water to irrigator 2.

This is an example of sewer mining, involving the purchase of sewage from the water business. The business at **G** does not use the water business' infrastructure. It uses it own sewerage pipeline to move the sewage purchased from the water business from the offtake point at **Z** to its treatment plant. It moves the treated water to its irrigator customer along a pipeline that it owns and operates. This example does not, therefore, involve access.

Example 9

A business establishes a wastewater treatment plant at **F**. It has a contract with customer 4 to provide sewerage services (for example, because the customer's sewage does not meet the water business' trade waste acceptance standards). The business at **F** builds a sewerage pipeline connecting customer 4 to its treatment plant.

The sewage is treated to remove contaminants until it meets the water business' trade waste acceptance standards. The business at **F** then discharges the treated wastewater into the water business' main sewer at **Y** using a sewerage reticulation pipe. The water business moves the wastewater along its sewer to its own treatment plant at **H** 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. The business at **F** is a customer of the water business using its sewerage services.

Example 10

The incumbent water business contracts with the business at **F** to treat water to a specified standard and put the treated wastewater back into the main sewer. Customer 4 remains the water business' customer and pays it for sewerage services. This example does not involve access. It is an example of a water business contracting out the provision of a service (treatment of wastewater) to a private operator on its behalf.

Example 11

This example is the same as example 10 except that the private operator builds and operates the treatment plant under a Build, Own, Operate and Transfer (BOOT) arrangements with the incumbent water business. Again, this is not access but contracting out the provision of a service (treatment of wastewater) to a private operator.

Example 12

In this case, the business at **C** (discussed in examples 3 and 4) builds the desalination plant under a public-private partnership (PPP) arrangement with a private operator. Again, this is not access but contracting out the provision of a service (sourcing and supplying water) to a private operator.

APPENDIX D 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(d) Any right to negotiate access should include a date after which the right would lapse unless reviewed and subsequently extended; however, existing contractual rights and obligations should not be automatically revoked.

(e) The owner of a facility that is used to provide a service should use all reasonable endeavours to accommodate the requirements of persons seeking access.

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

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

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

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

   (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.

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

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

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

   (iii) the terms of access for the third party taking into account the costs borne by the parties for the extension and the economic benefits to the parties resulting from the extension.

(k) If there has been a material change in circumstances, the parties should be able to apply for a revocation or modification of the access arrangement which was made at the conclusion of the dispute resolution process.

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

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

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

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

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

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

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

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

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

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

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

(iv) provide incentives to reduce costs or otherwise improve productivity.

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

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

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

(iii) should have regard to the policies and guidelines of the original decision-maker (if any) that are relevant to the decision under review.

APPENDIX E NUMERICAL EXAMPLE OF APPLYING THE COST OF SERVICE AND RETAIL MINUS ACCESS PRICING APPROACHES

This appendix provides a numerical example of the cost of service approach and the retail minus approach to calculating access prices. It also demonstrates how both approaches will conceptually result in the same access price.

E.1 Application of the cost of service approach

Under the cost of service approach, the access price is calculated by estimating the efficient cost of providing access to the relevant service.

In this example, a water business' water delivery system is covered by the access regime and water transport is the relevant service. The cost of providing water transport service can be separately identified from the cost of the water business' other activities.

If the costs to provide the water delivery service consist of operating expenditure of $30, a rate of return of $20 and regulatory depreciation of $10, the cost of service approach will result in an access price of $60. This is shown in figure E.1(a).

E.2 Application of the retail minus approach

The retail minus approach is generally used when the price for the bundled retail service is regulated.

In this example the retail service is a standard water service. The retail water price reflects the cost of the providing all elements of the water service, such as storage, treatment, transport and customer service. The retail price is regulated and is determined using a cost of service approach. In this example the retail price is $100. This is shown in figure E.1(c).

To determine the access price using the retail minus approach, the cost of providing the elements of the retail water service that are not provided are deducted from the retail price. In this example, the cost of providing storage, treatment and customer service are deducted from the retail price to obtain the access price for the service that is provided, which is water transport. If the cost of providing the other elements of the retail water service is $40 and the retail price is $100, the retail minus approach will also result in an access price of $60. This is shown in figure E.1(b).

As shown in this simple numerical example, both approaches result in an access price of $60.

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