



27 July 2009

Dr Ron Ben-David
Chairperson
Essential Services Commission
Level 2
35 Spring Street
MELBOURNE VIC 3000

Dear Ron

Inquiry into an Access Regime for Water and Sewerage Infrastructure Services – Response to Draft Decision

We welcome the Commission's Draft Report on its *inquiry into an access regime for water and sewerage infrastructure services* and we support most of the Commission's recommendations. We are particularly pleased the Draft Report recommends a Victorian water industry access regime be developed and refined over a staged implementation period. We note that this is consistent with the staged approach proposed in our response to the Commission's Issues Paper.

We believe that the access regime as envisaged in the Draft Report will only deliver limited community benefits. In order to achieve the full potential of an access regime, the following matters need to be addressed:

- An access regime should be considered to be one element of a broader reform agenda designed to deliver improved efficiency and better outcomes for customers and the environment.
- The water industry reform agenda, including the implementation of the access regime, should be staged to ensure the co-ordinated implementation of complementary elements, and the maximisation of benefits. The staged implementation approach should enable policy makers to review the costs and benefits achieved at each key step, and to evaluate the prospective costs and benefits before proceeding to the next step. We have developed a "roadmap" that provides a broad outline of a staged approach. We consider that a more detailed long-term water industry vision would assist in guiding and co-ordinating reform across the water sector.
- Wholesale market reform is a precondition for an effective open access regime. Further development of a wholesale water market and the introduction of a Water Grid Manager for

Victoria – to facilitate wholesale reform – are likely to deliver the greatest benefits to customers and the environment and should be considered the priority first step.

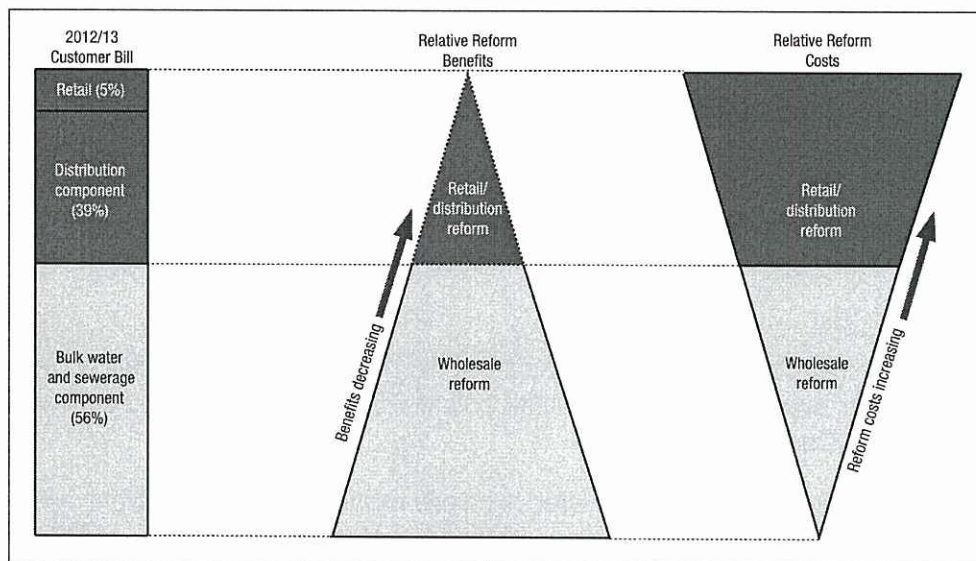
- The proposed access regime will result in a form of retail competition, the scope of which can be gradually extended subject to the assessment of expected net benefits at future stages.
- Until the nature and extent of retail competition is fully understood the benefits from functional separation of retail and distribution will be outweighed by the costs.

In the remainder of this letter, we expand on these points and also on aspects of the Commission’s access regime design.

Water industry reform roadmap

We strongly support further reform of the water sector where there are net benefits to customers and the environment. This position is consistent with our submissions to the Victorian Competition and Efficiency Commission’s *inquiry into reform of the metropolitan retail water sector*, in which we expressed support for further reforms including the introduction of a third party access regime and the creation of a Water Grid Manager.

The diagram below shows the composition of the average customer bill in 2012/13, and it depicts the relative costs and scale of potential benefits of further reform in the three key components of the value chain – namely: (1) bulk water and sewerage; (2) distribution; and (3) retail.

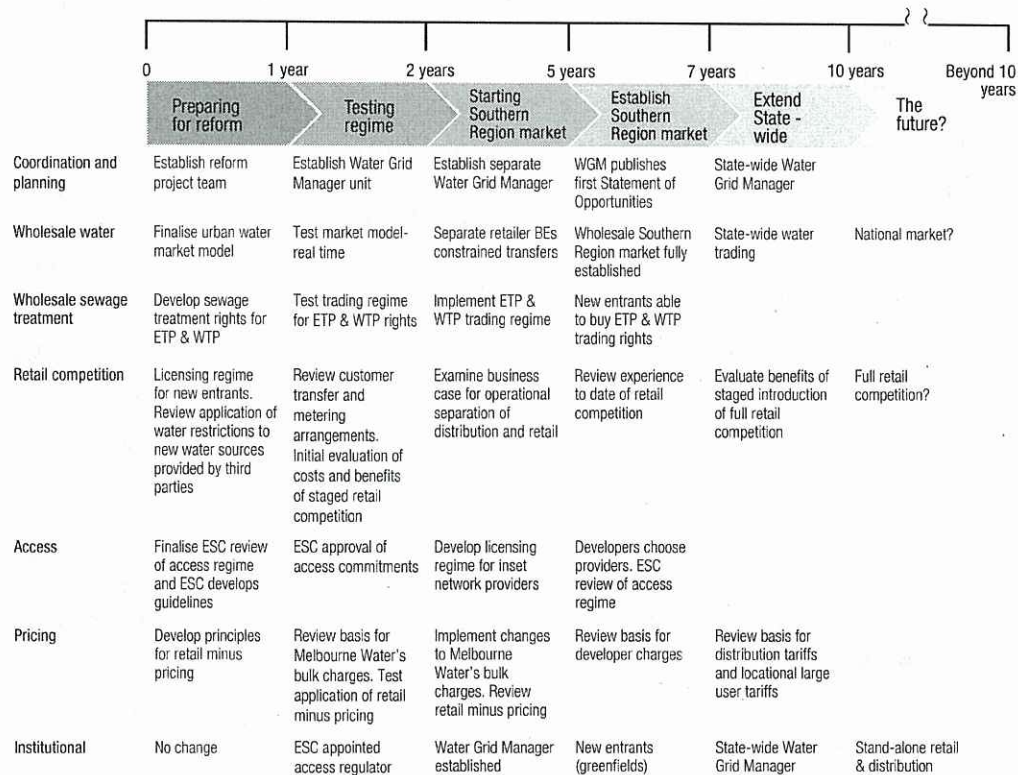


The Commission’s Draft Report¹ stated that the absence of wholesale trading arrangements could form a significant barrier to broader participation in the Victorian water sector. We strongly concur with the Commission’s view. We consider that the principal challenges – and hence the benefits of further reform – relate to the wholesale market and this should be a primary focus of the reform effort (refer to Attachment 1 for further details).

With these considerations in mind, a suggested road map for reform is set out below. The road map seeks to identify the major opportunities and potential benefits from reform, and to place these in a logical sequence and overall timetable. The road map also retains an incremental

¹ Essential Services Commission, 2009, *Inquiry into an Access Regime for Water and Sewerage Infrastructure Services: Issues Paper*, February, page 61.

approach to reform, to enable policy makers to review arrangements at each milestone in light of accumulated experience, and to make informed judgements on the likely costs and benefits of subsequent reform measures.



The key implications of this roadmap for the Commission's third party access proposals are:

- The development of the wholesale market should occur in parallel with the establishment of the open access regime. The Commission is in a prime position to foster the delivery of major benefits, by advocating the co-ordination of effort across a number of complementary elements that are necessary for an effective access regime, including in particular the introduction of a wholesale water market allied with the creation a Water Grid Manager to deliver the wholesale market reforms.
- Effective planning for the implementation of retail competition, such as the demand from large users, can only proceed after a comprehensive review of the costs and benefits has been completed.
- Until the nature and extent of retail competition is better understood, the benefits from functional separation of retail and distribution will be outweighed by the costs, as evidenced by the substantial costs incurred by Scottish Water² (refer to Attachment 1 for details).
- The retail-minus access pricing approach proposed by the Draft Report is consistent with retention of the existing retailer/distributor structure. We support the retail-minus access pricing approach at this stage of the reform process.

Attachment 1 sets out a more detailed discussion of our roadmap and the implications for the introduction of the access regime.

² Water Industry Commission for Scotland, 2005, *The Strategic Review of Charges 2006-10: The Final Determination*, Stirling, 30 November, pages 32, 365-6.

Access regime design

We are supportive of most recommendations in the Draft Report. As detailed above however, it appears that in advocating the early operational separation of retail and distribution functions (Recommendation 7.1) the Commission is proposing a premature step which is unlikely to be cost effective, and which appears to be out of sequence with the broader reform direction. In Attachment 2, we address seven other recommendations where our position differs to that proposed in the Draft Report.

Our detailed examination of the Commission's examples (set out in Attachment 3) has identified a number of potential impediments to the efficient provision of the new water and sewerage services described in those examples. Our analysis indicates the introduction of an access regime cannot resolve all of the potential impediments. We therefore recommend that the Commission, Government and water industry work together in relation to:

- the introduction of a Water Grid Manager to facilitate wholesale market reform – this work program should proceed in parallel with the development of the access regime;
- development of a policy position on how water restrictions will be affected by the competitive provision of new sources of water;
- evaluation of the costs and benefits of introducing retail competition;
- examination of storage access associated with the existing 'pooled' bulk entitlements in Melbourne and seasonal balancing storages, and development of appropriate charging arrangements for these storages;
- monitoring the development of sewer mining services, and examining the merits of introducing a dispute resolution process in relation to sewer mining.

Consistent with our earlier comments, our analysis suggests that the key impediments to effective competition principally reside in the wholesale market arrangements, where the commercial arrangements for facilitating new entrants are immature at best. In the absence of reforming the wholesale market, we believe that retail competition will prove to be small in scale and limited in terms of the benefits it delivers. On the other hand, the potential for net gains from the reform of the wholesale market is substantial.

Furthermore, on the basis of the issues and impediments identified in our analysis, we consider that the business case for operational separation of retail and distribution functions has not yet been made. It may be appropriate to examine this issue in detail at the time of the next price review.

If you require further details regarding the matters set out in this letter and its attachments, please contact Brett Mathieson, Manager, Regulation and Planning on 9872 2441.

Yours sincerely



Tony Kelly
Managing Director

Attachment 1: The metropolitan water industry and a reform roadmap

Current arrangements

The current structure of the metropolitan water industry comprises three retail water utilities with retail and distribution functions and one wholesaler with water harvesting, bulk water and sewage transfer and sewage treatment functions. This structure was put in place in 1995 and has delivered the following positive outcomes:

- Strengthened accountabilities for water and sewerage service delivery (e.g. separation of wholesale and retail functions) resulting in a strong focus on customers by the retail utilities.
- Gradual strengthening of commercial disciplines (e.g. introduction of skills based Boards operating under Corporations Law, tax equivalent regimes and shareholder dividends, and contracting out of non-core activities; these have delivered effective corporate governance and significant efficiency gains).
- Transition to independent regulation, with greater transparency of decision making and scrutiny of performance (e.g. independent environmental and drinking water quality regulation, price regulation and cost based pricing, transparent disclosure and performance reporting). These developments have contributed to an emphasis on effective long term planning and customer consultation.
- Creation of explicit obligations in customer service, environmental performance and Government requirements (e.g. through customer charters). This has provided clear, unambiguous obligations on water businesses.
- Introduction of elements of competition (e.g. the comparative competition regime). This has provided a major spur for innovation and continuous improvement.
- Improvements in planning (e.g. Sustainable Water Resource Strategies; striking the right balance between supply and demand) and water allocations (e.g. Bulk Water Entitlements). These improvements facilitate more efficient water transfers.

On a range of benchmarks the water industry in Melbourne currently delivers world class outcomes that are evidenced by:

- independent research indicating the Melbourne water retailers are on the efficiency frontier – benchmarking results clearly demonstrate superior performance and efficiency in the water sector
- best practice consultation and stakeholder engagement being undertaken
- our track record in innovation such as our best practice customer support arrangements
- international and national recognition of achievements in customer service
- strong performance in environmental sustainability.

The reforms implemented so far have all contributed to these positive outcomes. The next round of reforms should build on these, in the context of the challenges that lie ahead.

Challenges

Melbourne is currently pursuing water supply demand reductions through the Target 155 campaign and Stage 3a water restrictions caused by water shortages associated with drought and climate change. The new water supply augmentation projects announced in the Government's June 2007 State Water Plan will ease the impact of these water restrictions and provide Melbourne with a more reliable, secure water supply. Following the planned completion of the desalination plant at the end of 2011, around 35% of Melbourne's water supplies will be climate independent. As noted in the Government's response to the VCEC review³, Melbourne in the future will be part of an increasingly interconnected water 'grid' with access to a portfolio of water sources, each with a different risk/cost profile. This presents challenges in the form of optimising the costs and risks of water supplies, but it also presents opportunities for enhanced customer service and environmental outcomes.

Other challenges for provision of water supplies and sewerage services in Melbourne include the following:

- Only 22% of the state's rivers are in good or excellent health.
- Melbourne's population is expected to grow by 30% by 2030.
- CSIRO climate change forecasts (March 2005) indicate Melbourne's inflows from catchments will decrease by between 7% and 35% by 2050 with a medium scenario of 18%. Over the last few years, inflow reductions have been tracking towards the upper bound of this range.
- Climate change may also increase the volatility of rainfall and hence inflows into storages.

Significant work has been undertaken by the Melbourne water utilities on introducing cost effective alternative sources of water but the legal and institutional framework is incomplete. A number of the Commission's recommendations recognise the need to complete this framework, e.g. expanding the definition of water to which entitlements apply to include new and innovative sources of supply.

The recently completed Cave review of competition and innovation in water markets in the United Kingdom observed that the response to the challenges facing their water sector, which are similar to ours, could result in improved outcomes if delivered in the right way:

Together, increased demand and lower supply will place a premium on industry to find new and more efficient ways of allocating, treating and using water – not only to ensure sufficient supply, but also to protect the environment through the use of fewer inputs such as energy and chemicals and reduced need for new assets. This could be between, as well as within, companies. These changes will also have implication for the reliable collection and treatment of wastewater and the need for lower impact discharge back to the environment.

The present time is therefore an opportune moment to review the structure of the water sector and its legal and regulatory frameworks. Introduced in the right way, competition and co-operation between companies, driven by market mechanisms, market-like instruments or regulation can encourage innovation and the delivery of lower prices, a better service and improved environmental outcomes.⁴

³ Victorian Department of Treasury and Finance, 2008, *Victorian Government Response to Victorian Competition and Efficiency Commission's Final Report: Water ways: inquiry into Reform of the Metropolitan Retail Water Sector*, July, page 5.

⁴ Department for Environment, Food and Rural Affairs, 2009, *Independent Review of Competition and Innovation in Water Markets: Final Report, Professor Martin Cave*, April, London, page 5.

A reform road map

Future reforms should proceed where they are expected to deliver net benefits or improvements in terms of:

- customer/community outcomes
- environmental outcomes
- economic outcomes including improved efficiency in service provision.

The principal challenges – and hence the benefits of further reform – relate to the wholesale market and this should be a primary focus of the reform effort. In this context, it is noteworthy that this issue was recognised by the Commission in its February 2009 Issues Paper, and was noted again by the Commission in its June Draft Report as follows:

Currently there are no clear arrangements for potential access seekers planning to supply bulk water from a new supply source to offer water into any form of urban wholesale market.

Similarly, there are no clear provisions for potential access seekers proposing to provide some form of retail water services to purchase water supplies from a wholesale market.

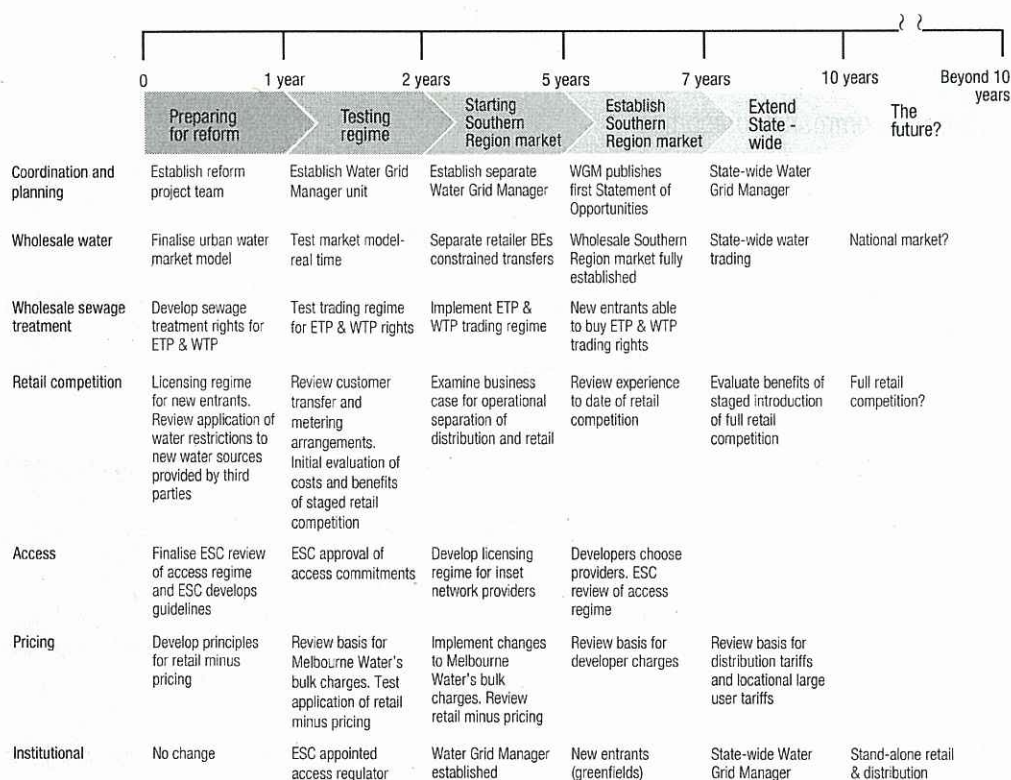
The absence of trading arrangements could form a significant barrier to broader participation in the Victorian water sector. The Commission recommends, therefore, that the Government investigate means by which trading could be extended.⁵

We strongly concur with the Commission's view. Reform and development of the wholesale market is a precondition for an effective open access regime. We consider there are significant potential benefits to be obtained from wholesale market reform delivered through the vehicle of an independently managed water grid, including:

- lowering the cost of wholesale water
- optimisation of water use
- achieving optimal State-wide urban to urban water transfers
- expanding rural to rural trading.

With these considerations in mind, a suggested road map for reform is set out below. The road map seeks to identify the major opportunities and potential benefits from reform, and to place these in a logical sequence and overall timetable. The road map also retains an incremental approach to reform, to enable policy makers to review arrangements at each milestone in light of accumulated experience, and to make informed judgements on the likely costs and benefits of subsequent reform measures.

⁵ Essential Services Commission, 2009, *Inquiry into an Access Regime for Water and Sewerage Infrastructure Services: Issues Paper*, February, page 61.



The stages proposed are outlined below. The progress from one stage to the next for each element would be subject to review to ensure that there are net benefits to customers and the environment.

- Preparing for reform (within 1 year) – this stage is about developing the initial frameworks and policies associated with:
 - wholesale water and sewage treatment capacity reform
 - access regime including the licensing regime for new entrants and retail minus pricing principles
- Testing the regime (years 1 to 2) – this stage is about testing the initial conceptual frameworks, particularly for:
 - the Southern Region wholesale water market and oversight by a water grid manager
 - a market for sewage treatment capacity for the Eastern and Western Sewage Treatment Plants operated by Melbourne Water
 - initial evaluation of costs and benefits of staged retail competition
 - approval of access commitments by water utilities
 - application of retail minus pricing reform
- Starting the Southern Region market (years 2 to 5) – this stage is about gradually implementing the new wholesale market arrangements in the Southern Region of Victoria as well as the access regime. Key features could be:

- Southern Region wholesale water market which could involve each retailer managing its own water supply-demand balance and constrained transfer rules (so as to learn from any impacts) – a Water Grid Manager could be established as a separate body to facilitate and oversight the implementation of this market model
- a market for sewage treatment capacity to the Eastern and Western Sewage Treatment Plants could gradually commence
- the business case for functional (operational) separation of retail and distribution could be developed and considered
- a licensing regime for inset network providers (e.g. large greenfields developments with their own water and sewerage servicing arrangements) could be developed and implemented.
- Establish the Southern Region market (years 5 to 7) – this stage is about a maturing of the Southern Region market arrangements and the access regime with the frameworks fully implemented. Key features could be:
 - Water Grid Manager could publish its first ‘Statement of Opportunities’ outlining the global Southern Region water supply and demand balance and a range of weather based scenarios forecasting future water supply and demand balance predictions
 - new entrants could be able to buy rights to sewage treatment capacity at Eastern and Western Sewage Treatment Plants
 - major review of the access regime.
- Extend State-wide (years 7 to 10) – the Water Grid Manager and the Southern Region water market arrangements could potentially be extended to cover the State, particularly to cover regional urban water utilities connected to the State water grid. A major review of the benefits of full retail competition could be undertaken.
- The future (beyond 10 years) – depending upon the success of the market arrangements that have been put in place and whether further reforms are likely to produce community benefits, consideration could be given to further expansion of water markets and retail competition.

An important implication of this roadmap for the Commission’s third party access proposals is that the “preparing for reform” stage should include the wholesale market as well as the open access regime. We recognise that the inclusion of wholesale market reform at this stage is challenging given the various initiatives underway across Government agencies and industry working groups. Nevertheless, as the Commission has recognised, it is axiomatic that delivering effective reform of the water sector in Victoria – which we strongly support – requires a co-ordinated reform program for the wholesale market. We encourage the Commission to use its open access initiative as an opportunity to co-ordinate and manage the wholesale market reforms to maximise the benefits from the introduction of open access.

A further implication of the roadmap is that the establishment of a sound business case for the separation of retail and distribution functions would probably not occur before the next water price review. Until the nature and extent of retail competition are fully understood – and the necessary systems and processes developed – the benefits from operational separation will be outweighed by the costs. Notwithstanding the present uncertainty regarding the benefits of operational separation, it is known that the costs of operational separation are likely to be

substantial, as evidenced by the expenditure allowances provided by the regulator in the 2006-10 Final Determination for Scottish Water⁶. That determination included allowances of approximately \$26 million for capital expenditure and \$38 million for operating expenditure associated with the establishment of a standalone retail business, and a further \$33 million capital investment for the establishment of arrangements to facilitate retail competition for business customers.

In any event, we note that the retail-minus access pricing approach proposed by the Draft Report is consistent with retention of the existing retailer/distributor structure. We support the retail-minus access pricing approach at this stage of the reform process as it avoids the immediate costs of introducing distribution tariffs without any detriment to the prospects for retail competition. We therefore suggest that the need for operational separation should be examined alongside the need for establishment of separate access prices as part of the next price review in 2013, in accordance with the Commission's reasoning set out in chapter 6 of the Discussion Paper.

⁶ Water Industry Commission for Scotland, 2005, *The Strategic Review of Charges 2006-10: The Final Determination*, Stirling, 30 November, pages 32, 365-6.

Attachment 2: Yarra Valley Water's comments on the Draft Report's recommendations

Yarra Valley Water concurs with many of the recommendations contained in the Draft Report. However, we do have specific comments on aspects of the recommendations that relate to: the coverage of the access regime; operational separation of water utilities' functions; ring fencing; the Commission's proposed role in arbitrating access disputes; trading of water entitlements; network management arrangements; and the need to develop appropriate arrangements to support and facilitate the access regime. The table below identifies the relevant recommendations, and sets out our comments on each. We are fully supportive of the remaining recommendations.

Draft Report Recommendation	Yarra Valley Water's comments
<p>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.</p>	<p>We support this recommendation, except we consider that the proposal not to declare services relating to the filtering, treating or processing of water or sewage is not soundly based. The Draft Report correctly describes the declaration criteria as requiring 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. We consider that access to water treatment works, for instance, may be an example of infrastructure that is essential to facilitating retail competition, especially if new water sources are required to be brought up to the necessary drinking water quality standards. For example, the Winneke water treatment plant is an integral part of the transfer process in providing potable water into the Melbourne water supply network from raw water sourced from the Goulburn and Yarra catchments. We think, therefore, that it is premature to decide that access to filtering or treatment processes should be not subject to declaration.</p>
<p>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 (also referred to as functional separation) of their water sourcing, water and sewerage distribution, and retail customer service functions.</p>	<p>The business case for operational separation has not yet been made. In particular, the benefits of introducing operational separation are highly uncertain. On the other hand, the costs of introducing the change would be significant as evidenced by the expenditure allowances provided by the regulator in the 2006-10 Final Determination for Scottish Water. That determination included allowances of approximately \$26 million for capital expenditure and \$38 million for operating expenditure associated with the establishment of a standalone retail business, and a further \$33 million capital investment for the establishment of arrangements to facilitate retail competition for business customers⁷.</p> <p>We support recommendation 6.2 of the Draft Report, which expressly provides for the application of retail-minus pricing of infrastructure access where: the retail price is regulated; the service is bundled; and the infrastructure operator also provides upstream or downstream services associated with the infrastructure in question (see page 79 of the Draft Report). Recommendation 6.2 recognises that where the provision of distribution and retail services is presently bundled (and subject to regulation) and where uncertainty exists regarding the nature and extent of access requirements:</p> <p style="text-align: right;">[Continued overleaf]</p>

Draft Report Recommendation	Yarra Valley Water's comments
<p>Recommendation 7.1 (Continued)</p>	<ul style="list-style-type: none"> • retail-minus pricing provides an appropriate and effective approach; and • the application of a case-by-case approach to the calculation of access prices is most appropriate in these circumstances (see page 76 of the Draft Report). <p>Moreover, recommendation 6.2 appears to reflect the Commission's appreciation of the practical difficulties in establishing separate prices (reference tariffs) for the various functions performed by the incumbent water utilities. For instance, page 83 of the Draft Report notes:</p> <p><i>"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."</i></p> <p>The Draft Report also notes (on page 86) that:</p> <p><i>"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."</i></p> <p>However, in proceeding to consider the case for functional separation, page 89 of the Draft Report states:</p> <p><i>"[Functional separation] 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."</i></p> <p>The reasoning set out on page 89 in support of functional separation is inconsistent with the reasoning set out on pages 83 and 86 of the Draft Report in support of the Commission's (otherwise sound) position on the application of retail minus pricing. In particular, as already noted, retail-minus is an access pricing approach which obviates the need for functional separation, thereby enabling an effective access regime to be established without incurring the costs and practical difficulties associated with the establishment of "unbundled" access prices.</p>

[Continued overleaf]

Draft Report Recommendation	Yarra Valley Water's comments
<p>Recommendation 7.1 (Continued)</p>	<p>The costs and difficulties that led the Commission to conclude that separate pricing of water utility activities is impractical in the early stages of reform leads to the conclusion that operational separation is also impractical and too costly at this time. Moreover, operational separation under a retail-minus pricing approach is unnecessary. We therefore suggest that the need for operational separation should be examined alongside the need for establishment of separate access prices as part of the next price review in 2013, in accordance with the Commission's reasoning as set out on page 86 of the Discussion Paper.</p>
<p>Recommendation 7.2: That the Government requires the water businesses to implement ring fencing of infrastructure facilities that is 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.</p>	<p>For reasons that are similar to those set out in relation to recommendation 7.1, we do not support the introduction of ring-fencing guidelines at this time. In particular, the retail-minus pricing approach is consistent with water utilities:</p> <ul style="list-style-type: none"> • not separately identifying the costs of different functions; and • not providing separate accounts for these services. <p>Given the rationale for, and characteristics of the retail-minus approach to network pricing, it is unnecessary to introduce ring-fencing guidelines alongside retail-minus pricing.</p> <p>That said, we do recognise that requests from third party access seekers may need to be treated as confidential by the relevant staff in the water utility, to avoid concerns regarding anti-competitive behaviour, but these confidentiality requirements should be substantially less onerous than ring-fencing guidelines.</p>
<p>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.</p>	<p>We recognise that the Commission is open and transparent in its consultation processes, and for this reason alone it may have many of the skills required to conduct dispute arbitrations. However, we also note that the National Electricity Rules provide for a commercial arbitrator to be appointed, principally because of the specific skills involved in resolving commercial disputes within a short timeframe. We favour adopting a similar dispute resolution process for the water industry, noting in particular that some disputes may raise issues regarding terms and conditions in commercial negotiations which are better resolved by a commercial arbitrator rather than an industry regulator.</p>

Draft Report Recommendation	Yarra Valley Water's comments
<p>Recommendations 10.2 and 10.3:</p> <p>That the Government reviews the Water Act 1989 with the aim of permitting businesses other than existing water business 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.</p> <p>That the Government investigates extending the existing trading arrangements for water entitlements.</p>	<p>We support these recommendations in principle. We have the following comments and suggestions in relation to the recommendations:</p> <ul style="list-style-type: none"> In Attachment 3, we conclude that storage and associated charging is a potential impediment to access provision. The creation of tradeable storage rights could be one option to overcome this impediment. Melbourne's water retailers hold "source" entitlements for catchment water which could potentially be unbundled into separate rights associated with shares to inflows, storage and outflow capacity to facilitate trading on either a permanent or temporary basis⁸. Another option is for a Water Grid Manager to hold the "source" bulk entitlements with "delivery" entitlements or financial rights held by market participants. However, the Southern Region rights framework needs to be consistent with the rest of the State. The review or amendment of the bulk entitlement regime should recognise that most water traded in Victoria is by private persons in the regulated water systems in northern Victoria - namely the Goulburn and Murray systems. Currently there is no real impediment to a private person buying these rights in declared systems in northern Victoria and in the Werribee and Thomson/Macalister water systems in southern Victoria and transferring them elsewhere utilising the proposed access regime.. It is noted that the Government's response to the VCEC review indicated that the DSE would report to Government on improving the current common law framework for alternative rights by June 2009. In addition, the Government is planning to provide bulk entitlements for desalinated water to the three retail water utilities in Melbourne as a 'pooled' entitlement. These developments indicate that a portfolio of Melbourne water sources with different characteristics is developing and that the existing water allocation framework is still evolving. DSE has undertaken some preliminary assessment of the options for a Southern Region urban wholesale market and Water Grid Manager. The focus has been on achieving efficient pricing outcomes through placing a value on water. But considerably more work needs to be undertaken to have confidence that a workable solution is available. The suggested roadmap outlined in Attachment 1 sets out a pathway for reform of the wholesale arrangements in the Southern Region water market as a first step. <p>In view of the points noted above and in our response, we suggest that the Commission's recommendation should be broadened to recommend that the Government undertake an assessment and, if feasible, the implementation of wholesale water market for the State.</p>

⁸ It should be recognised that, while 'source' bulk entitlements are the ideal right, there are practical constraints to the number of rights holders from any storage (refer NERA, 1994, *Water Trading in Victoria: Final Report*, November, page 3). This is the reason that in Goulburn and Murray systems 'delivery' bulk entitlements are used. The recent introduction of annual carryover in the Goulburn and Murray systems brings 'delivery' entitlements closer to the form of 'source' entitlements.

Draft Report Recommendation	Yarra Valley Water's comments
<p>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.</p>	<p>As indicated above in our comments on Recommendations 10.2 and 10.3, we consider that a priority action is to undertake an assessment and, if feasible, the implementation of a wholesale water market for the Southern Region. Preliminary work undertaken by DSE suggests that a Water Grid Manager (or Independent System Operator) is likely to be a key part of this possible future arrangement. We believe that a Water Grid Manager should be vehicle for delivering urban wholesale water market reform. The functions of such a body could include:</p> <ul style="list-style-type: none"> • Long term planning <ul style="list-style-type: none"> ○ Coordination of water supply and demand planning ○ Facilitation of the development of water markets ○ Development and application of an economic framework to decisions on new investment and delivery (i.e. optimal development of new infrastructure) ○ Implementation of Government policy on water security, including establishment of water restriction trigger levels • Operations <ul style="list-style-type: none"> ○ Direct (but not operate) transfer of bulk water within the Water Grid ○ Facilitate, record and monitor transfers ○ Monitor water usage and forecast aggregate demands ○ Advise Government on what level of water restrictions ought to be in place at any particular time ○ Establish and oversee emergency management arrangements ○ Transition entrance of new water sources ○ Publish an annual Statement of Opportunities • Economic framework <ul style="list-style-type: none"> ○ Develop and apply economic framework for dispatch decisions ○ Create mechanisms / rules for efficient transfer between users ○ Encourage and manage the entry of third parties ○ Produce the lowest overall community cost of supplying water <p>The timing for establishing this body will depend upon establishing the feasibility and arrangements for urban wholesale water market. This body would be the appropriate organisation to be responsible for implementing the new wholesale arrangements.</p>

Draft Report Recommendation	Yarra Valley Water's comments
<p>Recommendation 10.8: That appropriate arrangements are developed for: network balancing; interconnections into infrastructure facilities; network operation, maintenance and expansion; and emergency management.</p>	<p>We strongly agree that appropriate arrangements should be developed for: network balancing; interconnections into infrastructure facilities; network operation, maintenance and expansion; and emergency management. However, in contrast to other recommendations in chapter 10 of the Draft Report, the agency or agencies responsible for delivering these arrangements are not identified in this recommendation. Furthermore, in the competition examples provided in Appendix C of the Draft Report, there is practically no discussion of the importance of these arrangements in facilitating competition. In Attachment 3 to this submission, we have explained how the arrangements identified in recommendation 10.8 affect the prospects for competition. We urge the Commission to give greater priority to the resolution of these issues and identifying the responsible agency or agencies in the planning stages of its reform program.</p>

Attachment 3: Comments on the Commission's examples of competition and access

1. Introduction

Appendix C of the Draft Report sets out a number of different hypothetical examples describing the range of water and sewerage services that could be provided by new entrants. The Commission commented that one purpose of the examples is to clarify those types of activities that require access to monopoly infrastructure (and which therefore depend on the introduction of access arrangements) and those activities that can occur in the absence of an access regime.

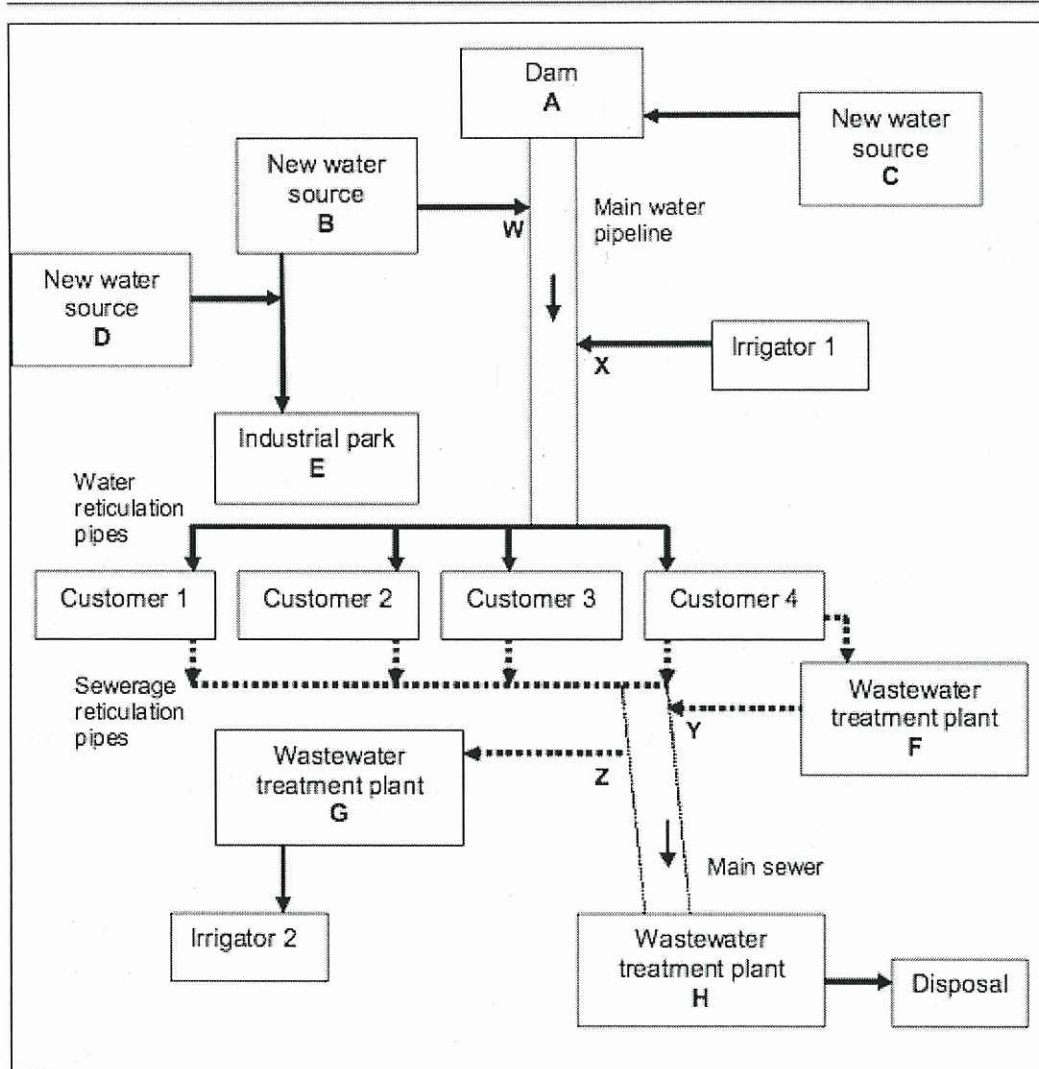
We have found the examples particularly useful in focusing on the key matters that must be addressed in order to create the conditions that will facilitate provision of the range of water and sewerage services contemplated by the Draft Report. This attachment is structured as follows:

- Section 2 presents our examination of the 12 examples presented in the Draft Report.
- Section 3 provides a summary of the key findings of our examination, and sets out the implications of these findings for the next steps in the reform program.
- Section 4 sets out the conclusions of our examination.

2. Examination of Draft Report's examples

The diagram below (Figure C.1) is an excerpt from Appendix C the Draft Report. It is reproduced here for convenience.

Figure C.1 **Diagram of a water supply system**
 Examples of different types of water and sewerage services



Appendix C of the Draft Report describes 12 examples. The table below provides a brief description of each example; each description should be read with reference to Figure C.1 (above). The table presents an examination of the issues arising, and the potential impediments to the provision of the particular services described in each example.

Example	Brief Description	Comments / issues
1	<p>A new entrant develops a new water source at point B, and injects water into the system via a new connection at point W. Water is sold to the incumbent distributor / retailer</p>	<p>The Draft Report contends that this example does <u>not</u> involve access. However, this conclusion assumes that the incumbent water utility is a willing buyer of the new water source. Under circumstances where a willing buyer cannot be assumed to exist, we have identified the following potential impediments to the efficient development of the service described in this example:</p> <ol style="list-style-type: none"> 1.1 A fair and reasonable interconnection agreement is required to cover technical and operational issues relating to the interconnection of the two pipelines. A mechanism for resolving disputes on fair and reasonable terms may also be required. 1.2 There may be capacity constraints at point W in the existing network. Rules or arrangements providing for fair and efficient outcomes in such circumstances would be required. 1.3 Assessing a fair and reasonable price for the water may be challenging. For example, should the price reflect the marginal or average cost of bulk water, and how would these costs be calculated? 1.4 Bilateral purchases may not optimise the outcome for the State or for the interconnected system as a whole. For example, depending on the charging arrangements for bulk water, the savings to one utility in obtaining a cheaper new source of water may be smeared across a number of incumbent utilities. Also, bilateral trades will lack the co-ordination benefits that may be obtained from a centralised procurement arrangement.
2	<p>A new entrant provides a new water source at point B, and provides water services to customers 1 and 2.</p>	<p>This Commission's example appears to assume that:</p> <ul style="list-style-type: none"> • Water provided from the new source will not be subject to water restrictions. • Customers 1 and 2 (who purchase the water provided by the new entrant) may continue to receive some retail supply services from the incumbent distributor / retailer. The customer(s) may therefore have two retail suppliers. <p>We have identified the following potential impediments to the efficient development of the service described in this example</p> <ol style="list-style-type: none"> 2.1 An interconnection agreement will be required as per issue 1.1 2.2 Arrangements for the efficient resolution of capacity constraint issues will be required as per issue 1.2 2.3 Avoidance of water restrictions. It would be inappropriate if avoidance of water restrictions became a primary motivation for competition from new entrants. There is a risk that the application of water restrictions may become confusing and anomalous if customers can avoid water restrictions by obtained relatively small quantities of water from a new supplier. 2.4 It is inevitable that injections from the new source of water will not always match precisely the consumption of customers 1 and 2. Arrangements are therefore needed to manage surpluses or shortfalls between injections provided by the new entrant and the aggregate consumption (off-take) of customers 1 and 2. These arrangements should foster efficient outcomes, and be fair and reasonable. 2.5 Customer transfer and metering arrangements. The outcomes described in this example can be achieved in a low-cost way providing that the numbers of customer transfers are small. However, widespread and extensive competition would require a substantial investment in new systems and processes.

Example	Brief Description	Comments / issues
3	<p>A new continuous water source (a desalination plant) is provided at point C and stored in the water business' dam for use during Summer. Customers 1-4 are supplied by the incumbent water utility.</p>	<p>The Draft Report contends that this example does <u>not</u> involve access. The example assumes that:</p> <ul style="list-style-type: none"> • The new entrant will sell water to the incumbent distributor / retailer, even though the dam could belong to a wholesaler – i.e. Melbourne Water. • There will be sufficient capacity in the dam to store all of the water injected by the desalination plant. <p>We have identified the same potential impediments to the efficient development of the service as those in example 1:</p> <ol style="list-style-type: none"> 3.1 An interconnection agreement will be required as per issue 1.1. 3.2 Arrangements for the efficient resolution of capacity constraint issues will be required as per issue 1.2. 3.3 Assessing a fair and reasonable price for the water may be challenging as per issue 1.3. 3.4 Bilateral purchases may not optimise the outcome on a system-wide or State-wide basis as per issue 1.4.
4	<p>As per example 3, the new entrant stores water at point C but acts as the retailer to directly customers 1-4.</p>	<p>This example (in contrast to Example 2) assumes or implies that:</p> <ul style="list-style-type: none"> • The dam is owned by the host distributor / retailer. • The new entrant would bear the costs associated with imbalances between injections and off-takes, and this would provide the new entrant with an incentive to seek and pay for storage. • Imbalances will be managed contractually between the incumbent distributor / retailer and the new entrant. • The retail supply relationship between the incumbent distributor / retailer and the relevant customers ceases. <p>We have identified the following potential impediments to the efficient development of the services in this example:</p> <ol style="list-style-type: none"> 4.1 An interconnection agreement will be required as per issue 1.1. 4.2 Avoidance of water restrictions as per issue 2.3. 4.3 Arrangements are needed to match injections and customer consumption as per issue 2.4. 4.4 Access water storage to be priced on fair and reasonable terms. Charging arrangements for water storage are potentially complex. It is also noted that the value of storage to the new entrant depends on the charging arrangements for being out-of-balance, where injections and customer consumption differ. If the new entrant does not face imbalance costs then the value of storage to the new entrant is zero, and there would be no rationale for the new entrant seeking storage. 4.5 Competitive neutrality. If new entrants face imbalance charges or storage charges, a question naturally arises as to whether the new entrants face a level playing field compared to incumbent water utilities. It is conceivable that more extensive reform of the existing charging arrangements between, for example, Melbourne Water and the 3 metropolitan retailers, will need to be undertaken to ensure a level playing field. 4.6 Customer transfer and metering arrangements as noted in issues 2.5 – the metering arrangements will also need to operate in accordance with the charging arrangements for storage.

Example	Brief Description	Comments / issues
5	This example describes a stand-alone inset network	The example raises no issues in terms of access, or pricing of storage or wholesale water as the inset network is not connected to the infrastructure of the incumbent water utility.
6	This example describes the entry of a new water supplier into the inset network.	This example raises the question of whether the inset network itself would be covered by the access regime. It is questionable whether the facilities would fall under the regime defined in Part IIIA of the Trade Practices Act.
7	An irrigator sells some of his water entitlement.	The example is simplified because all the monopoly assets and the relevant customers and new water sources are located in the same franchise territory. Relaxing this assumption implies the need for separate "cross-network" wheeling charges (and possibly, interconnection agreements).
8	Sewer mining	<p>The Draft Report contends that this example does <u>not</u> involve access. However, this conclusion assumes that the incumbent water utility is a willing seller of the waste water sought by the sewer mining operator. Under circumstances where a willing seller cannot be assumed to exist we have identified the following potential impediments to the efficient development of the service described in this example:</p> <p>8.1 There is a need for an interconnection agreement covering technical and operational issues relating to the extraction of waste water.</p> <p>8.2 Setting a fair price for the sale of bulk waste water by the incumbent water utility. As in the case of purchasing water from a new entrant, the pricing of waste water raises a number of issues and the potential for disputes.</p> <p>8.3 Contractual obligations and contingent costs. An agreement to extract sewage may impose contractual obligations on the incumbent water utility regarding the minimum quality standards and contingent costs if this standard is not met. Disputes may arise regarding the terms and conditions of this agreement.</p>
9	This example describes a (large-scale) trade waste customer	No new issues are raised in terms of access.
10	Out-sourcing of sewage treatment by an incumbent water utility	No new issues are raised in terms of access.
11	BOOT arrangement for contracting out sewage treatment	No new issues are raised in terms of access.
12	Procurement of new bulk water sources by an incumbent water utility via PPP arrangements	No new issues are raised in terms of access.

3. Key findings from examination of Draft Report examples

The table below summarises the key findings of the examination set out in section 2.

The table presents these findings by grouping the various examples into four "case studies". For each of these four cases, the table:

- identifies the impediments under the existing arrangements to the delivery of the outcomes (services) described in the case study;
- considers the question of whether an access regime will address these impediments;
- identifies any further remedies (in addition to the implementation of an access regime) that would be required to address any impediments; and
- summarises the key findings and conclusions from each case study.

Case study	Is this case feasible under the existing arrangements?	Issues and potential impediments to be addressed	Will the establishment of an access regime address these issues and impediments?	Potential remedies	Key findings and conclusions; implications for next steps
New source of water sold to incumbent water utility (ESC Draft Report examples 1, 3 and 7)	<p>Yes, subject to the proviso that the terms and conditions relating to the following matters can be agreed bilaterally:</p> <ul style="list-style-type: none"> • provision of physical interconnection between the facilities of the access seeker and the incumbent; • procurement of water by the incumbent. 	<p>If a willing buyer for the water is not available:</p> <ul style="list-style-type: none"> • disputes may arise as to the terms of the agreement required to cover technical and operational issues relating to interconnection; • assessing a fair and reasonable price for the water may be challenging. <p>Bilateral purchases may not optimise outcomes on a system-wide or State-wide basis.</p>	<p>Only partly.</p> <p>An access regime could provide a means of resolving any disputes relating to terms and conditions of interconnection.</p> <p>An access regime will not, of itself, assist in resolving issues relating to the valuation and pricing of the water resource.</p> <p>An access regime alone would be unlikely to lead to the optimisation of outcomes on a system-wide or State-wide basis.</p>	<p>Establishment of a water grid manager would address the issues associated with:</p> <ul style="list-style-type: none"> • valuing water; and • optimising outcomes on a system-wide basis. <p>In the absence of a wholesale market, the water grid manager may act as an independent procurement agency to facilitate valuation and trading of bulk water.</p>	<p>In the immediate term, the Commission should work with the Government and the water industry to develop proposals for the introduction of a water grid manager. This work program should proceed in parallel with the development of the access regime, recognising that the timeframe for implementation of the water grid manager would be of the order of 2 to 3 years.</p>

Case study	Is this case feasible under the existing arrangements?	Issues and potential impediments to be addressed	Will the establishment of an access regime address these issues and impediments?	Potential remedies	Key findings and conclusions; implications for next steps
<p>New retailer sells new source of water to customers of an incumbent water utility (ESC Draft Report example 2)</p>	<p>Yes, subject to:</p> <ul style="list-style-type: none"> the successful negotiation of an interconnection agreement as noted above; the incumbent water utility providing a "balancing" service to manage any differences between the injections provided by the new water source and the total off-take (consumption) of the relevant customers; and customer transfer and metering arrangements being in place. 	<ul style="list-style-type: none"> Application of water restrictions may become anomalous if customers can avoid restrictions by obtaining small quantities of water from a new supplier. Fair and reasonable arrangements will need to be developed to match injections and customer consumption volumes. Customer transfer and metering arrangements will be required. 	<p>Only partly.</p> <ul style="list-style-type: none"> Issues relating to application of water restrictions not addressed. Arrangements for balancing could be included in each incumbent's access commitment. Issues relating to pricing of the "balancing service" may prove to be challenging. Widespread and extensive retail competition would require a substantial investment in new systems and processes. 	<p>The development of a policy position on water restrictions is required.</p> <p>A water grid manager may be best placed to provide balancing services. However, the detail of the balancing service first needs to be developed with the assistance of the water industry.</p> <p>Consideration needs to be given to the effectiveness of manual processes for managing customer transfers and metering issues. Potentially, competition should be limited in the first instances to a smaller number of large customers.</p>	<p>In conjunction with the water industry and the Commission, the Government should develop a policy position on how water restrictions are affected by the competitive provision of new sources of water.</p> <p>In conjunction with the Government and the water industry, the Commission should develop a balancing service and consider whether a grid manager would be best placed to provide this service.</p> <p>The water industry should examine the effectiveness of existing systems and processes to accommodate significant retail competition.</p> <p>In conjunction with the industry, the Commission should then evaluate the costs and benefits of introducing retail competition - if net benefits are expected, different approaches to a staged introduction of retail competition should be examined to manage the cost impacts and to ensure the maximisation of net benefits from this reform.</p>

Case study	Is this case feasible under the existing arrangements?	Issues and potential impediments to be addressed	Will the establishment of an access regime address these issues and impediments?	Potential remedies	Key findings and conclusions; implications for next steps
<p>New retailer sells new source of water to incumbent water utility, and stores water in the incumbent's dam (ESC Draft Report example 4)</p>	<p>Yes, subject to:</p> <ul style="list-style-type: none"> the successful negotiation of an interconnection agreement as noted above; the incumbent water utility providing a "balancing" service to manage any differences between the injections provided by the new water source and the total off-take (consumption) of the relevant customers; and customer transfer and metering arrangements being in place. 	<p>As per example 2. In addition:</p> <ul style="list-style-type: none"> charging arrangements for storage need to be resolved; it may be worthwhile unbundling the existing 'pooled' bulk entitlements held by the metropolitan retailers – into separate retailer BEs and their individual components of rights to inflow share, storage share and outflow capacity share; and it may be necessary to unbundle existing charging arrangements (including balancing and storage charges) so that incumbents and new entrants compete on a level playing field. 	<p>Only partly.</p> <ul style="list-style-type: none"> Issues relating to application of water restrictions not addressed. Arrangements for balancing could be included in each incumbent's access commitment. Issues relating to pricing of the "balancing service" may prove to be challenging. To provide a level playing field, balancing charges may need to be applied to incumbents and new entrants. Widespread and extensive retail competition would require a substantial investment in new systems and processes. The bulk entitlement trading and associated charging arrangements for storage may be able to be addressed as part of the access arrangement. 	<ul style="list-style-type: none"> The development of a policy position on water restrictions is required. A water grid manager may be best placed to provide balancing services. However, the detail of the balancing service first needs to be developed with the assistance of the water industry. Consideration needs to be given to the effectiveness of manual processes for managing customer transfers and metering issues. Potentially, competition should be limited in the first instances to a smaller number of large customers Consideration needs to be given to the water entitlement trading and charging arrangements for storage, and should be developed with the assistance of industry. 	<p>In conjunction with the water industry and the Commission, the Government should:</p> <ul style="list-style-type: none"> develop a policy position on how water restrictions are affected by the competitive provision of new sources of water; and examine the existing bulk entitlement regime in Melbourne in relation to unbundling existing "pooled" entitlements and options for tradeable storage rights. <p>In conjunction with the Government and water industry working groups, the Commission should:</p> <ul style="list-style-type: none"> prior to the introduction of an access regime, devise charging arrangements for storage; develop a balancing service and consider whether a grid manager would be best placed to provide this service. <p>The water industry should examine the effectiveness of existing systems and processes to accommodate significant retail competition.</p>

[Continued overleaf]

Case study	Is this case feasible under the existing arrangements?	Issues and potential impediments to be addressed	Will the establishment of an access regime address these issues and impediments?	Potential remedies	Key findings and conclusions; implications for next steps
<p>New retailer sells new source of water to customers of an incumbent water utility, and stores water in the incumbent's dam (Continued)</p>					<p>In conjunction with the water industry, the Commission should then evaluate the costs and benefits of introducing retail competition - if net benefits are expected, the different approaches to a staged introduction of retail competition should be examined to manage the cost impacts and ensure maximisation of net benefits from this reform.</p>
<p>Sewer mining (ESC Draft Report example 8)</p>	<p>Yes, subject to the proviso that the terms and conditions relating to the following matters can be agreed bilaterally:</p> <ul style="list-style-type: none"> • interconnection agreement governing physical connection of the sewer miner's facility to the host's infrastructure, • agreement relating to the extraction of waste water, and resolution of any contractual issues; and • the establishment of a fair and reasonable price for the waste water. 	<p>If the incumbent is not a willing seller of waste water:</p> <ul style="list-style-type: none"> • disputes may arise as to the terms of the agreement required to cover technical and operational issues relating to interconnection; • assessing a fair and reasonable price for the waste water may be challenging. 	<p>Only partly.</p> <p>An access regime could provide a means of resolving any disputes relating to terms and conditions of interconnection.</p> <p>An access regime will not, of itself, assist in resolving issues relating to the valuation and pricing of the waste water resource.</p>	<p>The ESC may need to have powers to resolve disputes regarding the terms and conditions of sewer mining (including pricing of the waste water resource), where these cannot be negotiated between the parties.</p>	<p>The Commission should monitor the development of sewer mining services, and consider introducing a dispute resolution process to resolve disputes.</p> <p>In conjunction with the Government and the water industry, the Commission should (possibly as an interim step) develop principles to govern the pricing of waste water resources for sewer mining purposes.</p>

4. Conclusion

The detailed examination of the Commission's examples has identified a number of potential impediments to the efficient provision of the new water and sewerage services described in those examples. Importantly, the analysis presented in this attachment indicates that the introduction of an access regime cannot resolve all of these potential impediments. These observations have implications for the Commission's reform program and the next steps that should be adopted by the Commission, subject to discussions with the Government.

In particular, we recommend that:

- The Commission should work with the Government and the water industry to develop proposals for the introduction of a water grid manager. This work program should proceed in parallel with the development of the access regime, recognising that the timeframe for implementation of the water grid manager would be of the order of 2 to 3 years.
- In conjunction with the Commission and the water industry, the Government should develop a policy position on how water restrictions will be affected by the competitive provision of new sources of water.
- In conjunction with water industry working groups, the Commission should develop a balancing service and consider whether a grid manager would be best placed to provide this service.
- The water industry should examine the effectiveness of existing business systems and processes to accommodate significant retail competition.
- In conjunction with the Commission and the water industry, the Government should evaluate the costs and benefits of introducing retail competition, and if net benefits are expected, then different approaches to a staged introduction of retail competition should be examined, to manage the cost impacts and to ensure the maximisation of net benefits from this leg of reform.
- Prior to the introduction of an access regime, the Commission and the Government should work with the water industry to examine storage access associated with the existing 'pooled' bulk entitlements in Melbourne and seasonal storages and to develop appropriate charging arrangements for these storages.
- The Commission should monitor the development of sewer mining services, and consider introducing a dispute resolution process to resolve disputes. In conjunction with the Government and the water industry, the Commission should (possibly as an interim step) develop principles to govern the pricing of waste water resources for sewer mining purposes.

The recommendations set out above aim to address potential impediments to the competitive and efficient provision of water and sewerage services. It is noteworthy that the proposed operational separation of retail and distribution functions has not come to light as an issue or a potential impediment in the analysis. On the basis of the issues and impediments identified in our analysis, we consider that the business case for operational separation of retail and distribution functions has not yet been made. It may be appropriate to examine this issue in detail at the time of the next price review.

Our analysis suggests that the key impediments to effective competition principally reside in the wholesale market arrangements, where the commercial arrangements for facilitating new entrants are immature at best. In the absence of reforming the wholesale market, we believe that retail competition will prove to be small in scale and limited in terms of the benefits it delivers. On the other hand, the potential for net gains from the reform of the wholesale market is substantial.