



ICRC

independent competition and regulatory commission

FINAL REPORT

Water and Sewerage Services Price Regulation: Incentive Mechanisms

Report 11 of 2020, August 2020



The Independent Competition and Regulatory Commission is a Territory Authority established under the Independent Competition and Regulatory Commission Act 1997 (the ICRC Act). The Commission is constituted under the ICRC Act by one or more standing commissioners and any associated commissioners appointed for particular purposes. Commissioners are statutory appointments. Joe Dimasi is the current Senior Commissioner who constitutes the Commission and takes direct responsibility for delivery of the outcomes of the Commission.

The Commission has responsibilities for a broad range of regulatory and utility administrative matters. The Commission has responsibility under the ICRC Act for regulating and advising government about pricing and other matters for monopoly, near-monopoly and ministerially declared regulated industries, and providing advice on competitive neutrality complaints and government-regulated activities. The Commission also has responsibility for arbitrating infrastructure access disputes under the ICRC Act.

The Commission is responsible for managing the utility licence framework in the ACT, established under the Utilities Act 2000 (Utilities Act). The Commission is responsible for the licensing determination process, monitoring licensees' compliance with their legislative and licence obligations and determination of utility industry codes.

The Commission's objectives are set out in section 7 and 19L of the ICRC Act and section 3 of the Utilities Act 2000. In discharging its objectives and functions, the Commission provides independent robust analysis and advice.

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Correspondence or other inquiries may be directed to the Commission at the following address:

Independent Competition and Regulatory Commission
PO Box 161
Civic Square ACT 2608

The Commission may be contacted at the above address or by telephone on (02) 6205 0799. The Commission's website is at www.icrc.act.gov.au and its email address is icrc@act.gov.au

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Executive summary

Incentive mechanisms are an important tool in the Independent Competition and Regulatory Commission's (the Commission) regulatory framework as they encourage Icon Water to pursue efficiency improvements that can be shared between the business and consumers. Efficiency improvements benefit the business but also flow through to consumers in the form of lower prices and/or improved service quality.

The Commission uses a suite of incentive mechanisms to encourage Icon Water to find and implement efficiencies in its operating and capital expenditures and in its delivery of regulated services at standards of quality, safety, reliability and security that meet the needs of consumers and are in their long-term interests. These incentive mechanisms work together to promote better outcomes for consumers.

In its final decision on the 2018 Water and Sewerage Services Price Investigation, the Commission indicated that it would undertake a review of the incentive mechanisms (the review). The Commission has now completed the review.

The purpose of this review was to ensure that the Commission's approach to determining water and sewerage prices provides appropriate and effective incentives for Icon Water to operate efficiently. The review has also confirmed the Commission's regulatory framework continues to be consistent with the Commission's objectives under the *Independent Competition and Regulatory Commission Act 1997* (the ICRC Act).

The Commission assessed each of the incentive mechanisms considered in this review against an assessment framework that reflects its objectives and considerations set out in the ICRC Act. This assessment framework helped the Commission in identifying and assessing the relative benefits and costs of its existing incentive mechanisms and other potential mechanisms.

The Commission has found evidence that the incentive mechanisms currently used by the Commission have been effective in strengthening Icon Water's incentives to operate, invest and deliver services efficiently.

The Commission's assessment of other incentive mechanisms found that such mechanisms can improve incentives for a regulated business to find and implement efficiencies in its operating and capital expenditures and in its delivery of regulated services at standards valued by consumers. However, in the Commission's view, some of these alternative mechanisms have significant implementation challenges and, in some cases, the benefits are likely to be more than offset by the implementation costs. Further, some mechanisms are less likely to achieve net benefits in the ACT context. No submissions supported the adoption of other incentive mechanisms.

The Commission's final decision is to maintain its current approaches to incentive mechanisms for operating and capital expenditure, service standards, and price control mechanisms. The Commission will continue to monitor the development of other incentive mechanisms to identify any mechanisms that may be suitable for consideration in a future period.

This final report summarises stakeholders' feedback, approaches taken in other jurisdictions, and research and analysis undertaken by the Commission in reaching its final decision.

1. Introduction

The Independent Competition and Regulatory Commission (the Commission) has undertaken this review of incentive mechanisms for water and sewerage services (the Review) to ensure that its approach to determining water and sewerage services prices gives Icon Water appropriate incentives to operate, invest and deliver services efficiently. It has also ensured the Commission's regulatory framework continues to be consistent with the Commission's objectives in the *Independent Competition and Regulatory Commission Act 1997* (the ICRC Act).

1.1 Background to this Review

The Commission is the Australian Capital Territory's (ACT) independent economic regulator, which regulates prices, access to infrastructure services and other matters in relation to regulated industries in the ACT. The Commission also has functions under the *Utilities Act 2000* (the Utilities Act) for licensing electricity, natural gas, water and sewerage utility services and making industry codes.

The Commission is responsible for setting regulated prices for the supply of water and sewerage services, as well as setting minimum service standards (also called guaranteed service levels or GSLs) for water and sewerage services in the Consumer Protection Code, made under the Utilities Act.

The Commission undertakes price investigations in accordance with Part 3 of the ICRC Act, and determines Price Directions under Part 4 of the ICRC Act. The 2018 Price Direction determines the Commission's methodology for setting the maximum prices that Icon Water can charge for water and sewerage services for the period 1 July 2018 to 30 June 2023.

The Commission established this Review as a reset principle in the 2018 Price Direction for regulated water and sewerage services prices for Icon Water. Reset principles are principles governing the redetermination of prices in a regulated industry, and can provide the opportunity to assess and update, if necessary, aspects of the methodology that will be used by the Commission in the next price investigation.¹

The Commission's approach for this Review has been to consider the effectiveness of the current incentive mechanisms used by the Commission and whether any enhancements can be made. In undertaking the Review, the Commission considered incentive mechanisms used in other jurisdictions and whether these incentive mechanisms could be either more effective than the mechanisms currently in place or complement the existing mechanisms.

The Commission released an issues paper on 4 December 2019 as the first step in the consultation process for this Review. The Commission received submissions on the issues paper from Icon Water, the ACT Civil and Administrative Tribunal (ACAT) and the ACT Council of Social Services (ACTCOSS). The Commission released a draft report on 7 May 2020 as the second step in the consultation process. The Commission received submissions on the draft report from Icon Water and the ACAT. All submissions to the issues paper

¹ ICRC Act section 20B

and the draft report are available on the Commission's website. Summaries of the submissions are in **Error! Reference source not found.** The Commission has considered issues raised in submissions in reaching its final decision; its consideration is set out in the relevant chapters of this report.

1.1.1 The regulatory model

The Commission uses a 'building block' methodology to determine the efficient costs that Icon Water can recover from its customers in a regulatory period. It is the most widely used approach in Australia for determining the revenue a utility business may recover through regulated prices.

Under the building block model, the allowed revenue in any one year is the sum of the efficient operating expenditure for that year and a contribution to the costs of capital investments made over time (referred to as the regulatory asset base), plus allowances for forecast tax paid by the business. The contribution to the costs of capital investments is the sum of what is known as the 'return on capital' and the 'return of capital'. This method of allowing for the recovery of the regulated businesses' capital investments gives the regulated firm a reasonable assurance that it will be able to pay back its lenders and pay equity investors a reasonable return on their investment—given the relative risk of the business compared to other investments.

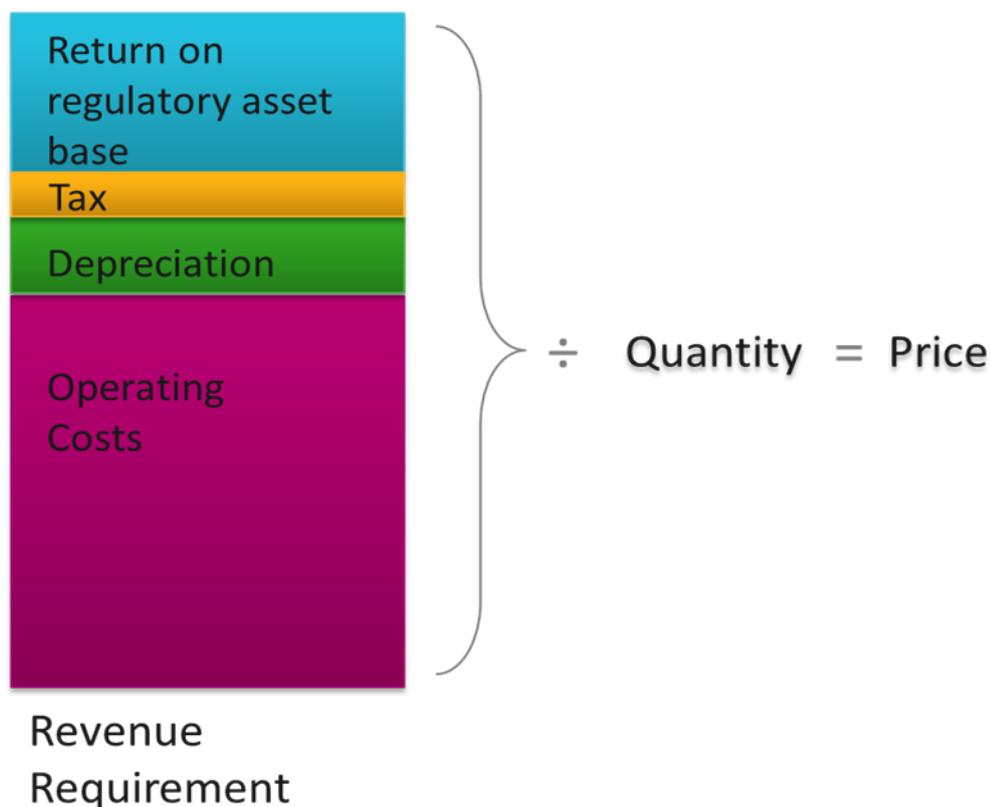
In other words, the total allowed revenue is the sum of the following cost components or 'blocks':

- operating expenditure for that year;
- return on capital, equal to the cost of capital multiplied by the regulatory asset base;
- return of capital, also known as depreciation;
- an allowance for the forecast tax paid by the firm; and
- the pass-through of specified uncertain, unforeseen or government-mandated costs.

Service standards, licence obligations and legislative requirements on Icon Water's operations influence its operating expenditure and capital investment decisions.

The total allowed revenue (or revenue requirement) calculated using the building block model is then divided by the forecast (or expected) demand for water and sewerage services, which includes estimates of future water usage and number of water and sewerage service connections, to derive a price for each service (illustrated in Figure 1.1).

Figure 1.1 Simplified building blocks methodology



Under the building block methodology, expenditure is only included in calculating the revenue requirement when it is deemed both prudent and efficient. For Icon Water's 2018 Price Direction, the Commission defined prudent and efficient as:

- *Prudent expenditure*: This encompasses whether the project, program or activity would reasonably be expected of a utility operating in the circumstances that apply. Evidence considered for prudence would include substantiation of the benefits of and the need for the project, program or activity.
- *Efficient expenditure*: This relates to whether the project, program or activity is delivered or proposed to be delivered with the best value for money. Evidence considered for efficiency would include exploration of alternative service delivery options, assessment of lowest cost over the life cycle, and the 'deliverability' of the proposed project, program or activity.²

1.1.2 Purpose of incentive mechanisms

Incentive-based regulation aims to encourage regulated businesses to pursue efficiency improvements that are shared between the business and consumers. Efficiency is important because it can lead to more cost-effective service delivery that better meets the needs of water and sewerage service customers. Incentive-

² ICRC 2018a, p.7

based regulation is linked to the Commission's objectives (see Box 1.1), which require the Commission to promote efficiency in regulated services.

Many regulators in Australia and overseas adopt incentive-based forms of regulation. These include the Australian Energy Regulator (AER), the Victorian Essential Services Commission (ESC), the Independent Pricing and Regulatory Tribunal (IPART) in New South Wales, the Essential Services Commission of South Australia (ESCOSA), the Office of the Tasmanian Economic Regulator (OTTER) and international regulators such as the Water Services Regulation Authority (Ofwat) and the Office of Gas and Electricity Markets (Ofgem) in the United Kingdom.

Incentive schemes are commonly applied for operating expenditure, capital works expenditure, service standards, and customer engagement. These incentive schemes link financial rewards and penalties for the regulated business to the achievement of targeted outcomes. Additionally, incentive mechanisms may allocate risks to, or share risks between, the parties (customers or regulated entity) that are best placed to manage the risk.

1.1.3 Other reviews of incentive mechanisms

A number of regulators, including the AER and ESC, have recently reviewed their incentive mechanism frameworks. The Commission has considered these reviews to inform its thinking on potential enhancements to its existing incentive mechanisms framework for Icon Water.

The Commission previously undertook a Review of Efficiency and Service Standard Incentive Mechanisms in 2005. At that time, the Commission noted that there were benefits in implementing efficiency sharing schemes; however, the cost to design, implement and maintain such schemes were likely to outweigh the benefits, given the other efficiency tools used by the Commission at the time.³ Further information on the 2005 Review can be found on the Commission's website.⁴

The Commission notes that since the 2005 Review, the regulatory environment has evolved and as such it is timely to review the Commission's approach to incentive mechanisms.

1.2 Commission's role and objectives

In carrying out its functions under the ICRC Act, the Commission has the following objectives as set out in sections 7 and 19L of the ICRC Act (Box 1.1).

When making a price direction, in addition to the terms of reference and legislative objectives, the Commission is also required to have regard to the provisions in section 20(2) of the ICRC Act (Box 1.2). Of particular relevance to this Review are considerations related to service standards, efficiency, and least cost planning.

As part of this Review, the Commission also gave consideration to the pricing principles outlined in the Commission's Final Report of regulated water and sewerage services prices 2018-23 for Icon Water (Table 1.1 below).⁵ These require the Commission to balance economic efficiency, environmental and social

³ ICRC 2005, p. 21

⁴ ICRC 2005

⁵ ICRC 2018a, p. 5

objectives. The Commission acknowledges that there are likely to be trade-offs in balancing the various objectives and other objectives set by government policies. Most relevant to this review are the pricing principles relating to economic efficiency and regulatory transparency and simplicity.

Box 1.1 Sections 7 and 19L: Commission's objectives

Section 7:

- (a) to promote effective competition in the interests of consumers;
- (b) to facilitate an appropriate balance between efficiency and environmental and social considerations; and
- (c) to ensure non-discriminatory access to monopoly and near-monopoly infrastructure.

Section 19L:

To promote the efficient investment in, and efficient operation and use of regulated services for the long-term interests of consumers in relation to the price, quality, safety, reliability and security of the service.

Box 1.2 Section 20(2): Commission's considerations

- (a) the protection of consumers from abuses of monopoly power in terms of prices, pricing policies (including policies relating to the level or structure of prices for services) and standard of regulated services; and
- (b) standards of quality, reliability and safety of the regulated services; and
- (c) the need for greater efficiency in the provision of regulated services to reduce costs to consumers and taxpayers; and
- (d) an appropriate rate of return on any investment in the regulated industry; and
- (e) the cost of providing the regulated services; and
- (f) the principles of ecologically sustainable development mentioned in subsection (5);
- (g) the social impacts of the decision; and
- (h) considerations of demand management and least cost planning; and
- (i) the borrowing, capital and cash flow requirements of people providing regulated services and the need to renew or increase relevant assets in the regulated industry; and
- (j) the effect on general price inflation over the medium term; and
- (k) any arrangements that a person providing regulated services has entered into for the exercise of its functions by some other person.

Note: Underlining added.

Table 1.1 Regulatory objectives and pricing principles for water and sewerage tariffs

Objective	
Overarching interpretation	<p>To promote efficient investment in, and efficient operation and use of, regulated services for the long-term interests of consumers in relation to the price, quality, safety, reliability and security of the service.</p> <p>The various aspects of economic efficiency are given emphasis but with the ultimate objective being the long-term interests of consumers. 'Economic efficiency' when properly defined encompasses environmental objectives. Consumer interests must take account of equity and other social impacts, as required by the ICRC Act.</p> <p>Economic efficiency considerations related to pricing are a starting point but need to be balanced with environmental and social considerations.</p>
Pricing principle	
1. Economic efficiency in use	<p>Regulated prices should promote the <u>economically efficient use</u> of Icon Water's <u>water and sewerage services infrastructure</u> and should also encourage economically efficient use of the water resource itself.</p> <p>This includes having regard to uneconomic bypass where water supply is sourced from a higher cost alternative.</p>
2. Economic efficiency for investment and operation	<p>Regulated prices and <u>supporting regulatory arrangements should facilitate the efficient recovery of the prudent and efficient costs of investment and operation.</u></p> <p>The finance recovery aspect of this principle is often described as ensuring revenue adequacy or financial viability. Costs also need to be efficient, which is primarily dealt with by auditing and incentive-sharing mechanisms.</p>
3. Environmental considerations	<p>Regulated prices and complementary mechanisms should ensure that environmental objectives are effectively accounted for.</p>
4. Community impact – gradual adjustment	<p>Any change to prices or other regulatory arrangements that will have substantial consumer impacts should be phased in over a transition period to allow reasonable time for consumers to adjust to the change.</p>
5. Community impact – fair outcomes for low-income households	<p>Adverse impacts on households with low incomes need to be limited or moderated by phasing and other compensating mechanisms or limits on changes to regulated prices or other regulatory arrangements.</p>
6. Regulatory governance – simplicity	<p>Regulated prices and their form should be simple for consumers to understand and straightforward for the utility to implement.</p>
7. Regulatory governance – transparency	<p>Regulated prices should be set using a <u>transparent methodology</u> and be subject to <u>public consultation and scrutiny.</u></p>

Note: Underlining added

1.3 Commission's approach to this Review

The Commission's approach to this Review has been guided by its legislative objectives and the considerations discussed in section 1.2. The Commission has also considered submissions and other feedback on its approach received from stakeholders.

In its submission to the issues paper, ACTCOSS welcomed the fact the Commission's regulatory objectives and pricing principles for water and sewerage tariffs require it to balance economic efficiency considerations related to pricing with environmental and social considerations. ACTCOSS pointed to its concern that the 'adverse impacts on households with low incomes need to be limited or moderated by phasing and other compensating mechanisms or limits on changes to regulated prices or other regulatory arrangements'.⁶ ACTCOSS submitted that a 'fundamental strength of the [Commission's] current approach is that the ICRC must take account of equity and other social impacts, including fair outcomes for low-income households'.⁷

ACTCOSS stated that, for the Commission to achieve its legislative objectives, three factors are 'critical to achieving social justice in relation to the efficient provision of water and sewerage services in the ACT'.⁸

- equitable distribution of risk so that those exposed to risk to have the ability and incentive to manage it
- fair outcomes for consumers—especially for low-income households—in terms of price, quality, safety, reliability and security of the service
- sustainable use and management of water resources—including ensuring cultural flows for Traditional Custodians.

In its submission to the draft report, ACAT raised similar issues. In particular, the ACAT suggested that, consistent with sections 7 and 20 of the ICRC Act, the Commission considers environmental objectives explicitly. The ACAT suggested that the overarching interpretation could recognise the increasing pressure on water resources in the Murray Darling Basin and the likely long-term impacts of climate change on water availability for the Canberra community. The ACAT stated that the ACT's overall water policies and pricing should 'provide incentives for water conservation, with particular emphasis on large users; provide safety net pricing for basic household use, to assist low income households; and ensure cultural flows for Traditional Custodians'.⁹

The Commission developed an assessment framework to ensure that its assessment of incentive mechanisms in this Review was based on the legislative objectives and considerations outlined in section 1.2. Table 1.2 sets out the assessment framework.

In assessing incentive mechanisms in this Review, the Commission also considered the feasibility and cost of implementation as part of its assessment.

The Commission notes that several criteria explicitly required consideration of the long-term interests of consumers, which addressed the points made by ACTCOSS and the ACAT. In addition, the Commission considers that appropriate risk sharing will promote efficiency in Icon Water's operations and its

⁶ ACTCOSS 2020, p. 2

⁷ ACTCOSS 2020, p. 4

⁸ ACTCOSS 2020, p. 5

⁹ ACAT 2020b

investment decisions; risk sharing is discussed in section 3.2 of this draft report. The Commission also notes that, in determining regulated water and sewerage prices, environmental and social considerations form an essential element of the Commission's analysis and assessment, beyond incentive mechanisms (which are the focus of this Review).

Table 1.2 Commission's assessment framework

Criteria
1. Promotes efficient operations in providing regulated services for the long-term interests of consumers
2. Promotes efficient investment in, and use of, capital and other assets used to provide regulated services for the long-term interests of consumers
3. Promotes efficient and least cost planning in making investment and operating decisions
4. Encourages standards of quality, safety, reliability and security of regulated services that meet the needs of consumers and are in their long-term interests
5. Allows for the recovery of efficient and prudent costs
6. Is transparent and simple for consumers to understand
7. Is straightforward and cost effective for the regulator and utility to implement

In its submission to the issues paper, ACTCOSS recommended that the Commission's draft report include 'an assessment of the strengths and weaknesses of current incentive mechanisms and if/how any other incentive mechanisms used by other regulators might address any weaknesses and be appropriate to the ACT'.¹⁰ ACTCOSS stated that this would ideally:

include evidence of the relative benefits and costs for consumers, including any anticipated price impacts. If possible, it would also be useful to compare Icon Water's performance on price and service quality with other regions/water and sewerage services providers.¹¹

ACTCOSS suggested that it may be useful to benchmark Icon Water's performance against providers in other jurisdictions.

The Commission has, to the extent possible, identified and compared the benefits and costs of its existing incentive mechanisms and alternative mechanisms. Data limitations prevent a full quantitative assessment of relative benefits and costs and estimation of expected price impacts. The Commission's approach has,

¹⁰ ACTCOSS 2020, p. 3

¹¹ ACTCOSS 2020, p. 3

therefore, necessarily been qualitative, while using quantitative measures where available. While the Commission has referred to suitable benchmarks where available, it recognises the comparability issues associated with benchmarks from other jurisdictions because different operating characteristics in the ACT, such as different geology, water quality and population density, affect the costs of delivering services.

1.4 Review timeline

The Commission has followed the timeline set out in Table 1.3. In developing this timeline, the Commission considered the timing of other regulatory processes, in the ACT and in other jurisdictions. The Commission's aim was to allow enough time for Icon Water and other stakeholders to participate fully in the Review.

Table 1.3 Timeline for the review of incentive mechanisms

Task	Date
Release of issues paper	4 December 2019
Submissions on issues paper close	28 February 2020
Draft report	7 May 2020
Submissions on draft report close	10 July 2020
Workshop	23 July 2020
Final report	Late August 2020

The closing date for submissions on the draft report was 10 July 2020. Written submissions received by the closing date were considered in developing the Commission's final report and decision.

The Commission also convened a videoconference with interested stakeholders following the release of the draft report and has considered the issues raised in that workshop in making its final decision.

1.5 Structure of this final report

The remainder of this paper is structured as follows:

- Chapter 2 discusses the Commission's expenditure related incentive mechanisms.
- Chapter 3 discusses other incentive mechanisms.

2 Expenditure incentive mechanisms

This chapter outlines the expenditure related incentive mechanisms considered by the Commission, the submissions received as part of this Review, and the Commission's considerations and final decision. These incentive mechanisms relate to operating expenditure, capital expenditure and total expenditure.

2.1 Operating expenditure

2.1.1 Current operating expenditure incentive mechanisms

The Commission currently determines Icon Water's operating expenditure allowance after undertaking a detailed review of its forecast expenditure and assessing it for efficiency and prudence. The review is known as a 'base-step-trend review' and includes the following steps:

- Base – establishes a base year operating expenditure and adjusts the base year to remove non-recurrent costs¹²
- Step – adjusts the base year to reflect efficient step changes in costs from new obligations
- Trend – adjusts for expected changes in efficiency and input costs that may occur over the regulatory period.¹³

As part of its 'base-step-trend review', the Commission uses assumptions for how these efficient costs may change over the regulatory period.¹⁴ Efficiency improvements are expected over time due to changes in technology, economies of scale as customer growth occurs, and improvements in how the business operates (e.g. efficiencies in business processes).

This approach gives Icon Water incentives to achieve cost efficiencies. This is because, if Icon Water is unable to achieve the efficient level of operating expenditure approved by the Commission, its profits will be lower (a result of having higher operating costs). Conversely, if Icon Water can do better than the efficient level of costs and deliver services with lower operating costs, Icon Water will increase its profits in the regulatory period. In following regulatory periods, Icon Water's customers benefit from this approach as these efficiency gains flow through to customers in the form of lower prices.

Submissions to the issues paper

Icon Water stated that the current regulatory framework gives it incentives to continuously identify and implement efficiencies in its operating expenditure program. Icon Water cited the Commission's decision to

¹² A non-recurrent cost is an unusual charge, expense, or loss that is unlikely to occur again in the normal course of a business.

¹³ ICRC 2018a, p. 49

¹⁴ ICRC 2018a, p. 48

approve its proposed 3.7 per cent real reduction in operating expenditure for the 2018-23 period as evidence of this.¹⁵

Icon Water identified other existing mechanisms that give it incentives to operate efficiently. For example, Icon Water has obligations to operate efficiently under the *Territory-owned Corporations Act 1990* (ACT), including:

...[a] legislated objective to ‘operate at least as efficiently as any comparable business’ and ‘to show a sense of social responsibility by having regard to the interests of the community in which it operates...’. As part of this, Icon Water’s performance is regularly monitored, including through annual reports to the ACT Government which cover both financial performance and service quality. The annual reports are published on Icon Water’s website, creating an additional layer of public accountability for Icon Water’s expenditure.¹⁶

Icon Water’s submission stated ‘that there remains limited evidence on the benefits of new incentive schemes for the ACT’.¹⁷ Icon Water noted ‘it is not clear that the current regulatory approach results in outcomes which necessitate introducing additional regulatory controls’.¹⁸ Icon Water stated that introducing new incentive schemes would increase regulatory and administrative costs and add greater complexity in revenue determinations, which it considers would not be in the best interests of customers.¹⁹

The ACAT submitted that it generally agreed with Icon Water’s submission, specifically that the general principles underlying the current form of regulation have been successful in the ACT and have helped drive affordability and service quality for ACT water and sewerage customers.

ACTCOSS stated that the Commission’s regulatory approach has been relatively successful in driving improvements to affordability and service quality for ACT water and sewerage customers. ACTCOSS saw a risk with incentive mechanisms for operating expenditure that efficiency may be pursued at the expense of service quality, but was reasonably confident that this risk is effectively mitigated through the Commission’s service standard incentive mechanisms, specifically the guaranteed service levels (GSLs) (These are discussed in section 3.1 of this report.)

¹⁵ Icon Water 2020a, p. 5

¹⁶ Icon Water 2020a, p. 6

¹⁷ Icon Water 2020a, p. 4

¹⁸ Icon Water 2020a, p. 4

¹⁹ Icon Water 2020a, p. 4

Commission's analysis for the draft report

As explained in the draft report, there is evidence that the Commission's current approach has been effective in reducing Icon Water's operating expenditure to more efficient levels. For example, while Icon Water's 2018 price proposal included lower operating expenses (3.7 per cent or \$33 million lower than operating expenditure in the 2013-18 period), the Commission's assessment found a further \$2.1 million in operating cost savings for the 2018-23 period.²⁰ In the 2008-13 price investigation, the Commission identified a \$24.9 million reduction in efficient operating expenditure through its prudence and efficiency assessment process.²¹

In undertaking its 2018 efficiency and prudence assessment, the Commission was assisted by expert analysis and advice by a professional services and engineering consultancy. The consultant conducted a comprehensive, in-depth review of Icon Water's proposed operating expenditure, including benchmarking its performance, removing inefficient expenditure from the base year 2016-17, assessing the cost escalation factors used for future years, and reviewing the drivers of forecast efficiencies over the regulatory period.²²

The Commission noted that similar approaches to reviewing operating expenditure are used by economic regulators for water businesses in other jurisdictions, such as IPART in New South Wales,²³ the ESC in Victoria,²⁴ ESCOSA in South Australia,²⁵ OTTER in Tasmania,²⁶ and the AER for electricity network service providers (NSPs).²⁷ Economic regulators regularly find proposed operating expenditure that does not meet the prudence and efficiency assessment hurdle and adjust expenditure accordingly. This indicates that the approach is effective.²⁸ The Productivity Commission noted in its 2017 Inquiry into National Water Reform that 'independent economic regulation encourages efficient service delivery by applying rigorous scrutiny to utilities' operational and investment decisions, and so requiring regular, consistent and high quality business planning processes'.²⁹

The Commission accepted that Icon Water faces additional incentives, outside of the Commission's price regulation processes, to pursue operating expenditure efficiencies. These include:

- annual reporting to the ACT Legislative Assembly and public scrutiny through appearances before Assembly committees
- performance oversight by the ACT Government as its shareholder
- public reporting of performance and compliance with licence obligations through the Utility Licence Annual Report, which is monitored and reported on by the Commission (see section 3.1 of this draft report for more details)

²⁰ ICRC 2018a, p. 52

²¹ ICRC 2008, p. 61

²² Calibre 2018, pp. 41-62

²³ IPART 2020a, p. 36 and IPART 2020b, p. 32

²⁴ ESC 2016b, p. 33

²⁵ ESC 2016b, p. 33

²⁶ OTTER 2018

²⁷ AER 2019, p. 7

²⁸ ESCOSA 2020, p. 114

²⁹ Productivity Commission, p. 209

- reporting on service outcomes imposed by technical, health and environmental regulators, including compliance with safety, water quality and environmental requirements.³⁰

Public reporting enables greater scrutiny by the Legislative Assembly, media and general public of Icon Water's performance. Where under-performance was found, there would be negative impacts on Icon Water's reputation and pressure on its board and executives to improve service outcomes or face removal.

2.1.2 Operating expenditure efficiency sharing schemes

Some regulators have adopted efficiency sharing schemes to give regulated businesses continuous incentives to improve efficiency in their operating (and capital) expenditures. These schemes allow a regulated business to retain part of an efficiency gain for a fixed period, regardless of when the efficiency improvement was made within a regulatory period.

These schemes attempt to overcome the 'periodicity problem', which refers to the situation where regulated businesses may have lower incentives to find efficiency gains in later years of the regulatory period. This situation arises because operating expenditure and allowed profit is reset at the beginning of each regulatory period. Any additional profits resulting from efficiency gains made during the previous regulatory period will be returned to consumers in the form of lower prices, removing the additional profits from the regulated business. Therefore, an efficiency gain made in the later years of the regulatory period is worth less to the regulated business, compared to an efficiency gain made in early years, because it keeps the additional profits for a shorter time. By allowing the regulated business to retain part of an efficiency gain for a fixed period, these schemes seek to overcome the periodicity problem.

In the issues paper, the Commission sought feedback on the appropriateness of introducing an efficiency sharing scheme for operating expenditure in the ACT. Box 2.1 outlines two current efficiency sharing schemes used by IPART and the AER.³¹

Box 2.1 Operating expenditure efficiency sharing schemes

Sydney Water

The expenditure efficiency benefit sharing scheme for Sydney Water allows it to keep the value of an efficiency gain for four years regardless of when it was made in the regulatory period.³² Efficiency gains can be recovered in the following regulatory period via a 'carryover payment' that is added to Sydney Water's building block model revenue requirement.

The scheme applies to controllable operating expenditure, which comprises approximately 70 per cent of total operating expenditure for regulated services.

³⁰ Icon Water 2020a, p. 5

³¹ For details about the Sydney Water incentive scheme, see IPART 2016 and for details about the AER's scheme, see AER 2013.

³² Sydney Water did not seek to carryover any operating expenditure efficiency gains as part of its 2020 Price Submission to IPART.

The scheme is asymmetric in that it does not allow automatic sharing of permanent cost increases but does allow for the automatic sharing of cost decreases. IPART considers this is in the long-term interests of consumers.

The scheme does not apply to capital expenditure, reflecting concerns that it would lead to inefficient deferral of capital expenditure, limited opportunities for efficient trade-offs between operating and capital expenditure, and complexity.³³

AER

The AER's efficiency benefit sharing scheme (EBSS) allows NSPs to retain a share of efficiency gains for a fixed period (known as the carryover period and typically equal to the length of the regulatory period of five years). The AER also penalises NSPs for efficiency losses as it requires NSPs incur the costs of delivering higher than forecast operating expenditure in each year of a regulatory period.³⁴ This penalty aims to remove the incentive faced by NSPs to increase operating expenditure at the end of the regulatory period.³⁵ This incentive can arise because operating expenditure at the end of a regulatory period is used to inform the level of operating expenditure for the next regulatory period.

The AER noted that the EBSS addresses two potential incentive problems with its the revealed cost 'base step-trend' forecasting approach for assessing operating expenditure:

- A NSP has an incentive to increase operating expenditure in the expected 'base year' to increase its forecast operating expenditure allowance for the following regulatory control period.
- A NSP's incentive to make sustainable changes to its practices and reduce its recurrent operating expenditure declines as the regulatory control period progresses. It then increases again after the base year used to forecast operating expenditure for the following regulatory control period. By deferring these ongoing efficiency gains until after the base year, the NSP can retain the benefits of doing so for longer because they will not be reflected in the operating expenditure forecasts for the following period.³⁶

Sources: IPART 2016; AER 2013.

Submissions to the issues paper

Icon Water stated that it did not support the introduction of an operating expenditure efficiency sharing scheme. Icon Water acknowledged that there can be benefits from such schemes but stated that:

... there exist a number of theoretical and practical limitations to opex [operating expenditure] incentive schemes. For instance, it can be problematic in practice to distinguish genuine efficiencies achieved by a business' management from natural productivity

³³ IPART 2016, p. 268

³⁴ AER 2013a, p. 5

³⁵ AER 2013b

³⁶ AER 2013b, p. 6

gains that are economy or industry wide. In the case of the latter, there is no clear case for a business to receive additional rewards. Similarly, where costs have increased through external factors, there is no basis in economic theory to impose additional penalties on the business.³⁷

Icon Water raised concerns about the potential negative interaction of an operating expenditure sharing scheme with the Commission's existing operating expenditure incentive mechanism.³⁸ Icon Water stated that it may have a greater revenue risk from failing to meet efficiency targets as it may be required to retain any overspend for the duration of any carryover period.³⁹

Icon Water submitted that the current incentive arrangements already provide a strong incentive to reduce costs and it did not see evidence of temporal distortions in Icon Water's expenditure.⁴⁰ It stated that the decision to implement an operating expenditure incentive scheme must be based on an informed evaluation of the costs and benefits of the scheme which may be difficult to properly ascertain.⁴¹

The ACAT submitted that it agreed with Icon Water that introducing new schemes would result in added regulatory and administrative costs, and greater complexity in revenue determinations, which is not in the best interests of its customers.

Commission's analysis for the draft report

The Commission noted that in the water sector, operating expenditure efficiency incentive sharing schemes are relatively uncommon. As explained in the draft report, the New South Wales economic regulator IPART has the only scheme currently available, which is optional for regulated water businesses to use.⁴² Currently neither Sydney Water or Hunter Water have sought to use the IPART scheme in their current or proposed regulatory periods.⁴³ Hunter Water noted 'reservations about the effectiveness of the current ECM [efficiency carryover mechanism] model because it only applies to operating expenditure and is asymmetric (that is, it only applies to efficiency gains, but not to losses)' in its 2020 pricing submission.⁴⁴

In contrast, the AER has had an operating expenditure efficiency sharing scheme in place since 2008 for electricity NSPs (see Box 2.1). The AER reviewed the scheme in its 2013 Better Regulation review and found that the scheme has worked well to date. In particular, the review found that the scheme ensured that NSPs face an essentially constant benefit or cost from implementing an efficiency gain or loss as it arises.⁴⁵

³⁷ Icon Water 2020a, pp. 8-9

³⁸ Icon Water 2020a, p. 9

³⁹ Icon Water 2020a, p. 9

⁴⁰ Icon Water 2020a, p. 9

⁴¹ Icon Water 2020a, p. 9

⁴² IPART 2020a, p. 32

⁴³ IPART 2020b, p. 32

⁴⁴ IPART 2020b, p. 33

⁴⁵ AER 2008, p. 4

The Commission found that there are important differences between water and electricity businesses that may reduce the expected benefits from efficiency sharing schemes in the water sector. The different ownership and governance arrangements for water and electricity businesses mean that their incentives are likely to differ. Electricity NSPs are privately owned and have strong incentives to maximise profits for their shareholders. In contrast, water businesses are typically government-owned monopolies that have multiple objectives and are subject to strong government, parliamentary and public oversight.

As noted by Icon Water in its submission to the issues paper, the ACT Government, as Icon Water's sole shareholder, requires it to pursue several broad objectives under the *Territory-owned Corporations Act 1990* (ACT).⁴⁶ These objectives are:

to operate at least as efficiently as any comparable business; and

to maximise the sustainable return to the Territory on its investment in the corporation or subsidiary in accordance with the performance targets in the latest statement of corporate intent of the corporation; and

*to show a sense of social responsibility by having regard to the interests of the community in which it operates, and by trying to accommodate or encourage those interests.*⁴⁷

These different shareholder arrangements and broad legislative objectives suggest that Icon Water may be less likely to be subject to the 'periodicity problem' and more likely to implement efficiencies when identified, compared to electricity NSPs.

In addition, the Commission recognised the practical challenges in implementing an operating expenditure sharing scheme highlighted by Icon Water. The Commission agreed that efficiency gains resulting from economy or industry wide developments, such as technological improvements, should benefit consumers rather than being retained by the regulated business for a period as additional profits.

2.2 Capital expenditure

2.2.1 Current capital expenditure incentive mechanisms

The Commission maintained its long-standing approach to capital expenditure incentives for the 2018 Price Direction. This involves reviewing the prudence and efficiency of Icon Water's proposed and actual capital expenditure over the 2018-2023 regulatory period. Specifically:

⁴⁶ Icon Water 2019, annual report, p. 11

⁴⁷ *Territory-owned Corporations Act 1990* (ACT), section 7(1)

- At the beginning of the regulatory period, following a prudency and efficiency assessment, the Commission approves a proposed capital expenditure allowance by Icon Water to be included in the regulatory asset base. This process is known as an ex-ante review. Icon Water earns a return on and a return of this capital allowance (see section 1.1 for further details on the building block methodology).⁴⁸
- As part of the assessment for the next regulatory period, the Commission will review the actual capital expenditure incurred by Icon Water over the 2018-23 regulatory period to assess its prudency and efficiency. This process is known as an ex-post review. The Commission will use the findings from its ex-post review in determining the roll forward value of the regulatory asset base⁴⁹ for the next regulatory period.

As a result of these reviews, Icon Water has incentives over the regulatory period to find capital expenditure efficiencies. This is because, during the regulatory period, Icon Water earns a return on and depreciation of the capital expenditure allowance set by the Commission rather than on its actual capital expenditure during the regulatory period. If Icon Water finds efficiencies in its capital program and spends less than the allowance, its profit will be larger.

The ex-post review provides a disincentive for Icon Water to overspend on its capital expenditure unless the higher expenditure can be demonstrated, to the Commission's satisfaction, to be efficient and prudent. For example, the Commission may assess as prudent and efficient actual capital expenditure that was higher than the capital allowance where it was required to service a higher than forecast growth in customer numbers. Only capital investments that have been assessed by the Commission as prudent and efficient can be rolled into the regulatory asset base for the next regulatory period.

If the Commission (after its ex-post review of capital expenditure) rejects the inclusion in the regulatory asset base of capital expenditure assessed as not prudent or efficient, Icon Water would need to fund the cost of this expenditure over the asset's life either from revenue earned from unregulated services or from any retained earnings.

The Commission signalled its intention as part of the 2018 Price Direction to investigate opportunities to explore enhancements to its capital expenditure incentive mechanisms before its next price investigation for the regulatory period from 1 July 2023. The Commission indicated that it would consider capital expenditure incentive mechanisms used by other regulators;⁵⁰ these are discussed in section 2.2.2.

Submissions to the issues paper

Icon Water supported the Commission's capital expenditure framework and submitted that it is effective in providing incentives to recognise and implement efficiencies in its expenditure. Icon Water also supported the Commission's ex-post capital expenditure prudency and efficiency assessment, which determines the level of actual capital expenditure that is added (or rolled into) to the regulatory asset base.⁵¹ Icon Water stated:

⁴⁸ The return of the capital allowance is the depreciation over time of the assets.

⁴⁹ The roll forward value of the regulatory asset base is a key input to the building block model at the beginning of a regulatory period. The roll forward value sets the asset values that will be used to calculate the return on and the value of depreciation for the next regulatory period.

⁵⁰ ICRC 2018a, p 168

⁵¹ Icon Water 2020a, p. 5

Such incentives have also generally operated in the interests of Icon Water's customers, with the ACT combined water and sewerage bill being less than the average of Australian urban water utilities.⁵²

As discussed in section 2.1, Icon Water submitted that it has incentives to achieve efficiencies through the objectives set out in the *Territory-owned Corporations Act 1990* (ACT) and through regular scrutiny of its financial performance and annual reports. Icon Water stated 'that these arrangements, taken together, create a very strong incentive environment for efficient capital and operating expenditure'.⁵³

The ACAT submitted that it generally agreed with Icon Water's submission that the general principles underlying the current form of regulation have been successful in the ACT and have helped drive affordability and service quality for ACT water and sewerage customers.

ACTCOSS stated that the Commission's regulatory approach has been relatively successful in driving improvements to affordability and service quality for ACT water and sewerage customers. ACTCOSS saw a risk with incentive mechanisms for capital expenditure that efficiency may be pursued at the expense of service quality but was reasonably confident that this risk is effectively mitigated through the Commission's service standard incentive mechanisms, specifically the guaranteed service levels (GSLs). (These are discussed in section 3.1 of this draft report.)

Commission's analysis for the draft report

As explained in the draft report, the Commission's current two-step approach is well-established. Similar approaches are widely used by regulators in other jurisdictions to promote efficiency in the delivery of water and sewerage services and for electricity network services.

In New South Wales, IPART conducts both ex-ante and ex-post reviews of the water businesses' proposed capital investments to determine the capital allowance and the amounts rolled into the regulatory asset base. As part of its latest ex-ante review in March 2020, IPART made a draft decision to reduce Sydney Water's proposed capital expenditure by 18 per cent for the 2020 regulatory period, noting drought projects such as the Prospect to Macarthur Link project would no longer be prudent given recent significant rainfall.⁵⁴ As part of the ex-post review (also in March 2020), IPART has proposed to disallow the roll-forward of \$27.1 million of actual capital expenditure by Sydney Water because it considered that the project was not prudent or efficient.⁵⁵

The South Australian economic regulator, ESCOSA, also undertakes a two-stage prudency and efficiency assessment of SA Water's proposed capital expenditures.⁵⁶ In the ex-post analysis completed for its 2020 price review, ESCOSA found that \$0.6 million in capital expenditure was not efficient and a further \$22.0 million was inefficiently timed, and made a draft decision to reduce SA Water's regulatory asset base by

⁵² Icon Water 2020a, p. 6

⁵³ Icon Water 2020a, p. 6

⁵⁴ IPART 2020c, p. 26

⁵⁵ IPART 2020b, p. 29

⁵⁶ ESCOSA 2020, p. 100

these amounts.⁵⁷ Further, in its 2020 price review, ESCOSA's ex-ante review of SA Water's proposed capital expenditure allowance identified that 17 per cent of proposed water network capital investments and 11 per cent of proposed sewerage network investments could not demonstrate prudence and efficiency.⁵⁸

The Tasmanian economic regulator, OTTER, also undertakes a similar two-stage efficiency and prudence assessment for TasWater.⁵⁹ In the electricity sector, the AER has adopted a similar approach to assessing the proposed capital expenditures of NSPs.⁶⁰

The Commission found evidence that its current approach has been effective in reducing Icon Water's capital expenditure to more efficient levels.

In its 2018-23 price review, the Commission reviewed Icon Water's actual capital expenditure for the 2013-18 regulatory period and accepted it as prudent and efficient, noting the actual capital expenditure was \$62 million lower than approved for the period.⁶¹ In undertaking its ex-post review, the Commission was assisted by expert analysis and advice by a professional services and engineering consultancy. The consultant's historical capital expenditure analysis found that the lower expenditure over 2013-18 'was primarily a result of deferrals of renewal and growth projects and project efficiencies identified as projects were refined'.⁶² For some of the projects examined in detail, deferral reflected efficient reprioritisation or identification of a more efficient alternative.⁶³

The Commission's ex-ante review of Icon Water's proposed capital expenditure for the 2018-23 regulatory period was assisted by its consultant's analysis and advice. The consultant conducted a comprehensive, in-depth review of Icon Water's proposed capital expenditure, including the drivers of planned capital projects, Icon Water's planning and procurement processes, and cost benchmarking.⁶⁴ The Commission's review found that aspects of Icon Water's proposed expenditure did not meet the prudence and efficiency criteria. In response to the Commission's draft decision, Icon Water revised its proposal by deferring low priority projects and finding other efficiency savings. As a result, the final capital expenditure allowance that the Commission approved for the 2018-23 period reflected a \$51.2 million reduction in capital expenditure compared to Icon Water's initial proposal, which led to lower prices for ACT consumers.⁶⁵

Icon Water's actual capital spending over a regulatory period can differ from what it proposed, and received an allowance for, at the beginning of a regulatory period. The Commission considers that it is appropriate that Icon Water has discretion regarding the amount and type of capital expenditure that occurs throughout the regulatory period. This is because Icon Water operates in a changing environment and needs to make decisions on appropriate expenditures to meet its commitments and sustain the long-term reliability of its services during a regulatory period. It also gives Icon Water scope to find more efficient ways of delivering projects.

⁵⁷ ESCOSA 2020, p. 207

⁵⁸ ESCOSA 2020 p. 98

⁵⁹ OTTER 2018, p. 103

⁶⁰ AER 2013b

⁶¹ ICRC 2018, p. 58-64

⁶² Calibre 2018, p. 64

⁶³ Calibre 2018, pp. 87-89

⁶⁴ See Calibre 2018, pp. 63-64 for a detailed description of its assessment approach

⁶⁵ ICRC 2018, p. 72

2.2.2 Capital expenditure efficiency sharing schemes

The issues paper sought feedback on capital expenditure efficiency sharing schemes and outlined the AER's capital expenditure efficiency sharing scheme (CESS). Details on the AER's capital expenditure efficiency sharing scheme are outlined in Box 2.2.

Box 2.2 Details of the AER's capital expenditure efficiency sharing scheme for network service providers

The CESS was introduced in 2012 to 'incentivise NSPs to undertake efficient capex [capital expenditure] by further rewarding efficiency gains and penalising efficiency losses',⁶⁶ following assessment by the Australian Energy Market Commission that there were 'two main problems with the current incentives facing NSPs to deliver efficient capex under the existing rules:

- The incentive to incur capex efficiently declines during a regulatory control period.
- Capex above the allowance is not subject to any regulatory scrutiny which means that there is a risk that capex above the allowance may be inefficient'.⁶⁷

Like the AER's operating efficiency benefit sharing scheme, the capital expenditure sharing scheme is an application of an efficiency carryover scheme for capital expenditure. The scheme operates on a fixed-sharing basis. This means that at the end of each regulatory period, a sharing ratio of 30 per cent is applied to the value of the cumulative capital expenditure underspend or overspend to determine the NSP's share that can be retained or paid for by the NSP for a five year period.

The carryover payment can be positive or negative depending on whether there is underspend or overspend compared to the forecast. The payment also takes account of the net benefit the NSP has already earned, or net cost already incurred, in the regulatory period. This amount is added to or deducted from the next period's allowed revenue.

The AER's CESS makes adjustments to remove the incentive to inefficiently defer capital expenditure from one regulatory period to the next period, by excluding from the carryover payment amounts for inefficient capital deferrals. Without such an adjustment, a business would still earn a return on and return of capital on the deferred expenditure even though it had not actually occurred.

Submissions to the issues paper

Icon Water submitted that it 'maintains its position that there is limited evidence on the benefits of a capex scheme for water and sewerage services, and the potential for significant regulatory complexity and cost'.⁶⁸ Additionally, Icon Water noted:

⁶⁶ AER 2013b, p. 10

⁶⁷ AER 2013b, p. 10

⁶⁸ Icon Water 2020a, p.10

introducing capex schemes requires being able to correctly identify genuine productivity improvements as distinct from capex deferrals or external shocks. In particular, a regulated business can achieve a capex efficiency in one of three ways:

- 1) spending less to achieve the same output;*
- 2) deferring capex from regulatory period 1 to period 2; and*
- 3) increasing capex in regulatory period 1 to achieve a reduction in period 2.*

Only the first and third of these represent true productivity improvements.⁶⁹

Icon Water also noted in its submission that the ESC in Victoria adopted a CESS between 2001 and 2005 for NSPs but removed the CESS in the following regulatory period after finding it had created a strong incentive to defer capital expenditure.⁷⁰ Icon Water submitted that ‘no capex incentive schemes have been applied to water businesses in Australia’.⁷¹

The ACAT submitted that it agreed with Icon Water that introducing new schemes would result in added regulatory and administrative costs, and greater complexity in revenue determinations, which is not in the best interests of its customers.

Commission’s analysis for the draft report

The Commission found that the only capital expenditure efficiency sharing scheme currently in use by an economic regulator in Australia is the AER’s CESS for NSPs.

In the absence of a capital efficiency sharing scheme, a business may find its incentive to make capital expenditure efficiencies decline over the regulatory period (known as the periodicity problem discussed in section 2.1.2 above). However, as explained in the draft report, the Commission found two potential problems associated with capital expenditure sharing schemes.

- Such schemes may introduce incentives for the regulated business to prefer capital expenditure over operating expenditure, including when operating expenditure (such as maintenance of assets) would be more efficient. This can arise if there are differences in how capital expenditure efficiency gains and operating expenditure efficiency gains are shared between the regulated business and its customers.
- These schemes can create an incentive for the regulated business to inefficiently defer capital expenditure. The business may be able to claim it has achieved capital efficiencies by delaying

⁶⁹ Icon Water 2020a, pp. 9-10

⁷⁰ Icon Water 2020a, p. 10

⁷¹ Icon Water 2020a, p. 10

expenditure from one regulatory period to another but the deferred capital investment may be delivered at a higher cost in a future regulatory period.⁷²

The Commission noted that the Victorian ESC's decision to discontinue its capital efficiency sharing scheme for electricity NSPs in 2005 reflected concerns that it 'is not confident that the reported capital expenditure efficiencies of the 2001-05 regulatory period are sustainable or that these will be shared with customers given the increase in forecast 2006-10 capital expenditure'.⁷³ At the time, NSPs were proposing an increase in capital expenditure of over 50 per cent in the following regulatory period.

During the 2013-18 regulatory period, Icon Water's actual capital expenditure was below the capital expenditure allowance in 2015 and 2016 and substantially below the allowance in 2017. However, capital expenditure was higher in 2018, the last year of the regulatory period. The Commission has not found evidence that the underspend in the three middle years of the regulatory period reflected inefficient deferral of capital expenditure from one regulatory period to a later period. As noted in section 2.2.1, the Commission's consultant noted in its review of Icon Water's 2013-18 capital expenditure that the underspend 'was primarily a result of deferrals of renewal and growth projects and project efficiencies identified as projects were refined'.⁷⁴ The consultant referred to 'the Lake Tuggeranong SPS [sewer pump station] project [as] a good example of deferring capital expenditure for an alternative solution'.⁷⁵

2.3 Total expenditure approach ('totex')

In Australia, economic regulators typically set revenue allowances for regulated businesses using a 'building block' framework (described section 1.1) that treats operating expenditure and capital expenditure separately.⁷⁶ An alternative, which has been adopted in the United Kingdom, is to adopt a total expenditure (or 'totex') approach.

Under a 'totex' approach, a building block methodology is still used but the distinction between operating and capital expenditure is removed. A benefit of the 'totex' approach is that it can reduce incentives faced by regulated businesses to favour capital expenditure over operating expenditure. Where operating expenditure and capital expenditure are treated separately, businesses may prefer capital expenditure, even when operating expenditure would be more efficient, because capital expenditure increases a business' regulated asset base on which it earns returns over the lives of the assets. In contrast, operating expenditure is usually recovered in the year in which it is incurred.

By removing the distinction between operating and capital expenditure, a 'totex' approach may allow businesses more flexibility to find the most efficient ways of delivering regulated services. Whether this flexibility results in greater efficiency in practice depends very much on the way the approach is implemented.

⁷² AER 2013b, p. 10. Even if the capital investment is delivered at the same cost in a future period, the delay may result in a lower level of service to customers until the investment is made.

⁷³ ESC 2006, p. 432

⁷⁴ Calibre 2018, p. 64

⁷⁵ Calibre, p. 70

⁷⁶ Frontier Economics 2017, p. 5

No economic regulators in Australia have adopted a ‘totex’ approach, although the Australian Energy Market Commission (AEMC) has considered its potential application to electricity network regulation.⁷⁷ The lack of uptake in Australia mainly reflects the significant challenges in implementing the approach. Moving to a ‘totex’ approach would require a change in how forecast costs are assessed and the regulator would have to develop a method for calculating a return on ‘totex’. In the issues paper, the Commission sought feedback on whether to adopt a ‘totex’ approach in the next water and sewerage services price investigation.

Submissions to the issues paper

Icon Water submitted that ‘a totex framework has not been adopted by economic regulators in Australia and would require a change in the regulatory forecasting approach among other implementation challenges’.⁷⁸ Icon Water stated:

*A totex scheme would also carry similar risks and costs to opex and capex schemes as described in preceding sections. For these reasons, Icon Water does not support the introduction of a totex scheme.*⁷⁹

The ACAT submitted that introducing new schemes would result in added regulatory and administrative costs, and greater complexity in revenue determinations, which is not in the best interests of its customers.

Commission’s analysis for the draft report

As explained in the draft report, ‘totex’ approaches have been adopted by Ofwat and Ofgem, the economic regulators in England and Wales for the water networks and the electricity and gas networks, respectively. Economic regulators in the Netherlands and Germany have also adopted ‘total cost’ approaches in regulating energy businesses.⁸⁰

Ofwat implemented the ‘totex’ approach as part of its 2014 price review to address a perceived capital expenditure bias emerging from its previous regulatory approach to treating capital expenditure and operating expenditure separately. Under Ofwat’s regulatory framework at the time, the private regulated entities had an incentive to attribute expenditure to capital expenditure in order to increase their regulatory asset base, thus increasing the total returns they earned from the allowed rate of return on their regulatory asset base (Box 2.3).⁸¹

⁷⁷ Frontier Economics 2017, p. 79

⁷⁸ Icon Water 2020a, p. 10

⁷⁹ Icon Water 2020a, p. 10

⁸⁰ Frontier Economics 2017

⁸¹ Frontier Economics 2017, p. 57

Box 2.3 Ofwat's 'totex' framework

Ofwat implemented its 'totex' approach as part of its 2014 price review after concluding that there was widespread support for the view that there was a 'capital expenditure bias'. The main features of the Ofwat approach are:

- Approach to setting 'totex' allowance: Ofwat used a new set of 'totex' benchmarking models to set an efficient 'totex' allowance for each regulated water business for the five-year period. Capital expenditure data was smoothed over five years to address the 'lumpy' nature of capex projects. This replaced the separate operating expenditure and capital expenditure benchmarking models used previously.
- Recovery of allowed expenditure: The 'totex' allowance was recovered through allowed revenue in two ways. First, a proportion of the 'totex' was included in the annual revenue allowance. This proportion was referred to as the Pay-As-You-Go (PAYG) rate and was proposed by the regulated businesses in their plans and submitted for review by Ofwat. Second, the remainder of 'totex' was added to the regulatory asset base, where a rate of return and depreciation allowance were applied. The asset life to generate the depreciation charge was proposed by each regulated business.
- Reconciliation of actual and allowed expenditure: The adjustment for variations between allowed and actual spending was made through a 'totex menu'. This set a single incentive rate (in practice around 50 per cent) for the share of any savings retained by the regulated water business.

Source: Frontier Economics 2017, p. 57

Ofgem began implementing its current RIIO (revenue = incentives + innovation + outputs) regulatory framework, using a 'totex' approach, as part of its 2015-23 determination for electricity networks in England and Wales. The RIIO framework with a 'totex' approach was adopted in response to network providers historically preferring capital expenditure solutions in order to increase their regulatory asset values.⁸² In the three years following the implementation of this framework, Ofgem reported that the 'totex' approach had contributed to a six per cent underspend on allowances across electricity network providers.⁸³

In Australia, the 'totex' approach has been considered in relation to electricity network regulation. One of the recommendations from the Independent Review into the Future Security of the National Electricity Market (the Finkel Review) was for the AEMC to undertake modelling to determine if there was evidence of a capital expenditure bias in the regulatory determinations of Australian network providers. If sufficient evidence were found of such as bias, the Finkel Review recommended that the AEMC should assess alternative models for network incentives, including the 'totex' approach.⁸⁴

The AEMC's modelling did not show that the current regulatory framework created a clear systematic bias in favour of capital expenditure. However, in certain circumstances when the expected cost of capital was lower than the regulated cost of capital, the AEMC found that there was an incentive to favour capital

⁸² Ofgem 2019, p. 9

⁸³ Ofgem 2019, p. 9

⁸⁴ AEMC 2019, p. 64

expenditure.⁸⁵ After consulting with stakeholders and receiving submissions on its findings, the AEMC decided not to recommend reforms to current incentive mechanisms, citing little support from industry stakeholders which did not consider it a priority issue at the time.⁸⁶ The AEMC will monitor expenditure trends to identify any evidence of emerging risks of unbalanced incentives that may lead to expenditure bias. It will also continue to monitor overseas developments, including Ofgem's implementation of its RIIO framework.

In the draft report, the Commission considered whether there was evidence of bias towards capital expenditure in Icon Water's investment decisions. The Commission noted that Ofgem became increasingly aware of a capital expenditure bias through mounting evidence that a number of regulated businesses were simply recording operating expenditure as capital expenditure.⁸⁷ This may be evident if there was overspending on the capital expenditure allowance included in a regulatory determination. As discussed in section 2.2.2 above, Icon Water recorded an underspend of \$56.4 million on its approved allowance over the 2013-18 period through deferrals of capital projects and efficiencies in its delivery of capital projects. In addition, the Commission considered that its current approach of ex-ante and ex-post reviews is a strong safeguard against the mis-recording of operating expenditure as capital expenditure found in the UK.

The lack of evidence for a significant bias towards capital expenditure in Icon Water's expenditure decisions suggests that there may be little benefit to be gained from implementing a 'totex' approach. Conversely, there would likely be large costs to implement the approach. In advice to the AEMC, Frontier Economics found that considerable development work would need to be undertaken to adopt this approach, including:

- reconsidering the assessment of an entity's cost forecasts
- designing a new 'totex' incentive mechanism
- developing an approach for determining the proportion of the 'totex' allowance to be expensed and the proportion to be capitalised into the regulatory asset base
- developing an approach for setting depreciation allowances for both existing and new assets
- reviewing the appropriateness of any existing benchmarking models
- preparing and publishing guidelines setting out how the regulator proposes to implement the 'totex' approach.⁸⁸

2.4 Commission's draft decision

As described above in this chapter, to inform its draft decision, the Commission considered incentive mechanisms that are currently used by the Commission and other economic regulators to promote greater efficiency in operating, capital and total expenditure, as well as submissions and other feedback from stakeholders. The Commission used the assessment framework set out in section 1.2 (Table 1.2) to assess and compare the incentive mechanisms discussed in this chapter and set out its detailed comparison of the different incentive mechanisms.

⁸⁵ AEMC 2019, p. 64

⁸⁶ AEMC 2019, p. 66

⁸⁷ Frontier Economics 2017, p. 30

⁸⁸ Frontier Economics 2017, p. ix

The Commission's draft decision was to maintain its existing incentive mechanisms for operating and capital expenditures, and not to introduce new expenditure incentive mechanisms.

Submissions to the draft report

Icon Water and the ACAT supported the Commission's draft decision to maintain its incentive mechanisms for operating and capital expenditures. They did not support implementing new incentive schemes. Icon Water stated that new schemes may have risks as well as implementation costs that would be unlikely to exceed the benefits for consumers.⁸⁹

2.5 Commission's final decision

The Commission's final decision is to maintain its existing incentive mechanisms for operating and capital expenditure, and not to introduce new expenditure incentive mechanisms.

The Commission will continue to monitor the development of other incentive mechanisms to identify any mechanisms that may be suitable for consideration in a future period.

Commission's considerations

Following consideration of submissions and views expressed at the workshop, the Commission has confirmed its analysis and considerations as set out in its draft report.

For operating expenditure, the Commission's current 'base-step-trend review' approach to estimating a prudent and efficient level of expenditure for the regulatory period gives Icon Water effective incentives to operate efficiently and achieve cost efficiencies. Rigorous regulatory and public scrutiny of Icon Water's operational decisions strengthens its incentives to adopt high-quality, least-cost business planning processes and ensure that its operational decisions aim to provide the standards of quality, safety, reliability and security of regulated services that best meet the long-term interests of consumers. By allowing Icon Water to recover its prudent and efficient costs, the Commission's approach supports Icon Water's financial viability and the ongoing delivery of services to consumers.

As a well-established and widely adopted approach, the Commission's 'base-step-trend review' approach has the advantage of being straightforward and cost effective for the Commission and Icon Water to implement. In addition, the approach is transparent and simple for consumers and other stakeholders to understand.

The Commission concluded that an operating expenditure efficiency sharing scheme could potentially strengthen Icon Water's incentives to achieve cost efficiencies in its operating expenditures. The Commission considered that such a scheme, if one were to be adopted, would complement, rather than replace, the Commission's existing approach. This was because it would still be necessary for the Commission to determine a prudent and efficient level of expenditure for the regulatory period against which Icon Water could seek cost savings by finding further efficiencies.

⁸⁹ Icon Water 2020b, p. 1

However, the Commission concluded that the practical difficulties associated with implementing such a scheme would lead to costs that would not be justified by any further efficiencies that might be found as a result of the scheme.

In part, this reflected the likelihood that the added benefits of an efficiency sharing scheme would be relatively low for three reasons. First, the Commission found that its current approach has been, and will continue to be, effective in giving Icon Water strong incentives to implement cost efficiencies in its operating expenditures. Second, the Commission did not find evidence of distortions in the timing of Icon Water's operating expenditures. Third, as a government-owned corporation, Icon Water has additional incentives to operate efficiently due to its legislative objectives and strong government, parliamentary and public oversight.

For capital expenditure, the Commission concluded that its current approach of a two-stage (ex-ante and ex-post) prudency and efficiency assessment of Icon Water's proposed capital expenditure performs well against the Commission's assessment criteria (see Table 2.1 below). The Commission found evidence that the approach has been effective in giving Icon Water incentives to find cost efficiencies in its capital expenditure program and to undertake investment decisions after good planning that considers consumers' long-term interests in the quality, safety, reliability and security of regulated services.

Rigorous regulatory and public scrutiny of Icon Water's investment decisions during the Commission's price investigations strengthens its incentives to invest prudently and efficiently and use its assets efficiently in supplying regulated services. As noted above, as a government-owned business, Icon Water has additional incentives to invest efficiently due to its legislative objectives and strong government, parliamentary and public oversight.

Further, as a well-established and widely adopted approach, the Commission's two-stage prudency and efficiency assessment approach for capital expenditure is straightforward and cost effective for the Commission and Icon Water to implement. It is also well understood by stakeholders and transparent in how it is implemented.

As for operating expenditure, the Commission considered that a capital efficiency sharing scheme, if one were to be adopted, would complement, rather than replace, the Commission's existing approach. This is because it would still be necessary for the Commission to determine a prudent and efficient capital allowance for the regulatory period against which Icon Water could seek cost savings by finding further efficiencies. In addition, an ex-post review of actual capital expenditure would likely be needed to check whether any underspend (or overspend) resulted from cost efficiencies (or inefficiencies) for which Icon Water was responsible or were the result of broader economy or industry wide cost reductions (or increases) that were out of Icon Water's control.

While there could be additional benefits from a capital efficiency sharing scheme, the Commission concluded that these benefits are unlikely to outweigh the costs of designing, implementing and managing such a scheme. Similar to the Commission's assessment of operating expenditure efficiency sharing schemes, the Commission found three reasons for this—the effectiveness of the Commission's current approach, little evidence of significant inefficient deferral of capital expenditure, and the additional efficiency incentives associated with scrutiny as a government-owned business.

Regarding incentive mechanisms for efficient total expenditure, the Commission noted, based on Ofgem's experiences, that a well-designed 'totex' approach may offer a feasible regulatory approach where there is evidence of systematic capital expenditure bias in the operating and investment decisions of a regulated business. However, the Commission did not find evidence of such a bias in Icon Water's expenditure

decisions. On the contrary, the Commission found that its current expenditure incentive mechanisms have been effective in encouraging Icon Water to find cost efficiencies in both its operating and capital expenditures. In particular, the Commission's ex-post prudency and efficiency review of actual capital expenditure (compared to the capital allowance) gives Icon Water a disincentive to overspend inefficiently on capital assets. This is because the Commission will not allow the additional capital expenditure to be rolled into the regulatory asset base (and receive an ongoing return for the lives of the relevant assets) unless it assesses the additional expenditure to be efficient and prudent.

While the 'totex' approach potentially satisfies many of the Commission's assessment criteria in Table 2.1, there is significant uncertainty about the extent to which the benefits would be achieved in practice. There would be difficult implementation challenges and costs, including in designing how the approach would be implemented in the context of Icon Water's operations and the ACT water market. The Commission concluded that these challenges and complexities make the approach unlikely to satisfy the Commission's assessment criteria for cost-effectiveness, ease of implementation, transparency, or simplicity. Table 2.1 sets out the Commission's final assessment of expenditure incentive mechanisms.

Table 2.1 Commission's assessment of expenditure incentive mechanisms

Criteria	Current operating expenditure incentive mechanisms	Operating expenditure efficiency sharing schemes	Current capital expenditure incentive mechanisms	Capital expenditure efficiency sharing schemes	'Totex' approach
Promotes efficient operations in providing regulated services for the long-term interests of consumers	✓	✓			?
Promotes efficient investment in, and use of, capital and other assets used to provide regulated services for the long-term interests of consumers			✓	✓	?
Promotes efficient and least cost planning in making investment and operating decisions	✓	✓	✓	✓	?
Encourages standards of quality, safety, reliability and security of regulated services that meet the needs of consumers and are in their long-term interests	✓	✓	✓	✓	?
Allows for the recovery of efficient and prudent costs	✓	✓	✓	✓	?
Is transparent and simple for consumers to understand	✓	✓	✓	✓	

Criteria	Current operating expenditure incentive mechanisms	Operating expenditure efficiency sharing schemes	Current capital expenditure incentive mechanisms	Capital expenditure efficiency sharing schemes	'Totex' approach
Is straightforward and cost effective for the regulator and utility to implement	✓		✓		

3 Other incentive mechanisms

This chapter outlines the service standards and price control incentive mechanisms currently used by the Commission and the PREMO framework adopted in Victoria to strengthen the regulated water businesses' incentives to operate and invest efficiently and better meet the needs of their customers. In assessing these incentive mechanisms, the Commission has considered schemes adopted by other regulators, including overseas regulators. The chapter includes a summary of the submissions received on the issues paper and the draft report and sets out the Commission's considerations and final decision.

3.1 Service standards

The Commission's regulatory framework provides incentives for Icon Water to maintain service standards through two mechanisms.

First, the Commission requires Icon Water to deliver services to certain minimum service standards imposed through the Consumer Protection Code (the Code). Rebates are payable when Icon Water does not meet the minimum service standards. Payment of rebates gives Icon Water stronger incentives to meet the standards and recognises that, in some instances, certain customers did not receive services at the expected level of quality, safety or reliability.

In 2019, the Commission completed a review of the Code, including the minimum service standards.⁹⁰ The Commission decided to enhance the consumer protections provided by minimum service standards and renamed them guaranteed service levels (GSLs). The Commission also decided to update the rebate values and introduce automatic payment of rebates where the GSLs set out in the new Code have not been met. The new Code took effect from 1 July 2020.⁹¹ The new Code includes GSLs for:

- customer connection times
- responding to complaints
- notice of planned interruption
- duration of interruptions (single event)
- frequency of interruptions
- response time to notification of a fault, problem or concern that affects the premises of the customer.

The GSLs, and automatic payment of rebates when GSLs are not met, is a service level incentive mechanism. Icon Water has an incentive to provide at least the minimum level of service quality to its customers so that it will minimise GSL rebate payments.

Second, the Commission requires Icon Water to report annually on its performance and compliance with licence conditions through its Utility Licence Annual Report (ULAR). The ULAR framework requires Icon

⁹⁰ Further details of the Commission's review of the Consumer Protection Code are available at <https://www.icrc.act.gov.au/projects/current-projects/consumer-protection-code-review>.

⁹¹ *The Utilities (Consumer Protection Code) Determination 2020* is available at <https://www.legislation.act.gov.au/di/2020-6/>

Water to report on service standard outcomes compared to the minimum service standards set out in the Code (or the GSLs from the 2020-21 ULAR). Icon Water must describe the actions it took to meet its obligations under its utility licence and details of any material breaches of those obligations. In addition, Icon Water must meet its reporting requirements under the Utilities Act, including providing details on customer complaints, aspects of the performance of Icon Water's water and sewerage networks, and compliance with industry codes (including the Consumer Protection Code).

The Commission monitors Icon Water's performance based on the information and data reported through the ULAR framework and other relevant information available to it. The Commission seeks to identify issues reported over multiple reporting periods that have the potential to affect customers or prevent Icon Water from meeting its licence obligations.

Each year, the Commission publishes a monitoring report that assesses the performance of all ACT utilities (as reported through their ULARs). By increasing opportunities for public scrutiny of Icon Water's performance, the monitoring report strengthens Icon Water's incentives to deliver regulated services to standards of quality, safety, reliability and security that meet the needs of consumers and promote their long-term interests.

Submissions to the issues paper

Icon Water stated that it is already required to meet multiple safety, quality, and reliability standards and that this has resulted in it meeting or exceeding customer expectations. Icon Water submitted that additional service standard incentive schemes may offer little additional benefit while imposing new administrative costs. Icon Water considered that the existing arrangements are operating effectively.

Icon Water raised concerns about implementing a new service standards incentive scheme that provided financial incentives to exceed minimum service standards. Even when higher services standards would be the interests of customers, the costs of the scheme would need to be considered in relation to the expected benefits. Icon Water submitted that the likely additional costs of developing and maintaining a new service standards incentive scheme may be substantial for both Icon Water and the Commission.⁹²

Icon Water considered there would be significant risk to it and its customers if performance measures were newly created and there was no understanding of the potential variability of metrics over time.

It also raised concerns about willingness to pay surveys, which it expects would be an important tool in establishing whether a service improvement is in the interests of customers. Icon Water stated: 'a key risk is that estimates of willingness to pay may lead to an imprecise measure of service performance and consumer preferences, resulting in poorly calibrated incentives that fail to achieve economic efficiency'.⁹³

The ACAT submitted that current incentive mechanisms have 'helped drive affordability and service quality for ACT water and sewerage customers'.⁹⁴ However, it disagreed with Icon Water's suggestion that customers may be encouraged to make frivolous complaints if a service incentive scheme includes as a factor the number of complaints against the utility.

⁹² Icon Water 2020a, p. 11

⁹³ Icon Water 2020a, p. 12

⁹⁴ ACAT 2020a, p. 2

Based on its experience, the ACAT does not consider that is a reasonable reflection of customer behaviour. However, the ACAT does not support introduction of a new service incentive scheme because the new approach to GSLs in the Consumer Protection Code commencing on 1 July 2020 might prove to be very effective in this regard. The ACAT also notes that Icon Water’s constructive participation in the ACAT energy and water complaints process, and their new customer hardship scheme, demonstrate that Icon Water is performing well in this area.⁹⁵

ACTCOSS stated that its understanding is that the Commission’s regulatory approach has been relatively successful and helped drive improvements in affordability and service quality for ACT water and sewerage customers. It highlighted ‘a risk that arises with incentive mechanisms, for operating and capital expenditure, is that efficiency may be pursued at the expense of service quality’.⁹⁶ However, ACTCOSS is:

reasonably confident that this risk is effectively mitigated through the GSLs. We believe that this has been further strengthened through the recent amendment of the Consumer Protection Code requiring automatic payment of rebates to customers where GSLs are not met.⁹⁷

Commission’s analysis for the draft report

To inform its assessment, the Commission examined service incentive schemes in other industries and jurisdictions. The Commission considered the costs and benefits of additional service schemes and whether it would be appropriate to adopt additional service schemes in the ACT.

As discussed in the draft report, there are service incentive schemes in some industries that provide a financial incentive for businesses to exceed performance targets when it is the interests of consumers to do so. An example of this type of scheme is the AER’s Service Target Performance Incentive Scheme (known as STPIS) which applies to electricity NSPs. Under the scheme, the AER approves performance targets for a regulatory period based on the utility’s performance over the previous period and any proposed changes, based on customer engagement. The regulated business is rewarded through an increase in its revenue allowance if it exceeds the performance target (where it is in consumers’ interests to do so) and is penalised through a decrease in its revenue allowance if the target is not met. The rewards and penalties are based on estimates of consumer willingness to pay for service and reliability improvements.

⁹⁵ ACAT 2020a, p. 2

⁹⁶ ACTCOSS 2020, p. 4

⁹⁷ ACTCOSS 2020, p. 4

This type of scheme requires the utility and regulator to understand whether it is in the interests of consumers to improve services beyond a minimum standard. This information may be obtained through surveys and other research (such as workshops) with consumers, which attempt to estimate their willingness to pay for service improvements. This research is relatively expensive compared to other forms of consumer engagement.⁹⁸ Moreover, surveys can lead to imprecise estimates of willingness to pay if not designed carefully. This may mean that long lived and materially significant investment decisions are based on the views of a potentially small number of surveyed customers or dependent on the wording of the questionnaire.⁹⁹

In the United Kingdom, Ofwat has used a Service Incentive Mechanism (SIM) that provides a financial incentive to incentivise good customer service performance relative to other companies in the sector.¹⁰⁰ The scheme gives companies incentives to improve their performance by calculating a comparative measure of performance (the 'SIM score') which is used to conduct a relative assessment by ranking companies in the sector against each other. A range of qualitative and quantitative performance measures are considered, including number of complaints and satisfaction of customers who have contacted their water company. The scores are used to set a financial incentive of between -12 per cent to +6 per cent of residential retail revenue. The scheme also creates a reputational incentive because businesses can compare their ratings against each other.¹⁰¹

As a SIM-type scheme is based on benchmarking the relative performance of companies, it may not be well suited to the ACT where there is only one water business. It can be difficult to accurately benchmark important aspects of performance without introducing perverse incentives.¹⁰² For example, measuring call centre waiting times might result in an incentive for operators to rush consultations, and measuring outage times might affect safety precautions.

The Commission found that water regulators in other Australian jurisdictions generally do not have specific schemes that encourage improvements to services beyond the minimum service standards or GSLs. In South Australia, ESCOSA has stated that 'it is not considered appropriate to incentivise performance above standards set on an efficient basis, other than to allow for a small buffer to acknowledge the difficulty in setting precise targets'.¹⁰³

In its 2018 water and sewerage services price investigation, the Commission determined efficient costs at a level that would allow Icon Water to maintain service levels at an appropriate standard.

The Commission considered there was evidence that the current levels of service are of a high standard, with the Bureau of Meteorology finding that Icon Water received a relatively low 2.8 water and sewerage complaints per 1000 properties in 2018-19, which was 24 per cent lower than the previous year.¹⁰⁴ The Commission's annual monitoring of Icon Water's performance through its ULAR has found that Icon Water

⁹⁸ CEPA 2011, p. 2

⁹⁹ CEPA 2011, p. 2

¹⁰⁰ Ofwat 2019, p. 5

¹⁰¹ Ofwat 2019, p. 5

¹⁰² Queensland Government 2017, p. 6

¹⁰³ ESCOSA 2013a, p. 15

¹⁰⁴ Bureau of Meteorology, p. 25

has consistently performed relatively well over time, with low overall numbers of complaints and satisfactory performance statistics for its water and sewerage networks.¹⁰⁵

The Commission also noted the ACAT's satisfaction with Icon Water's constructive participation in the ACAT energy and water complaints process and its new customer hardship scheme, and its view that Icon Water is performing well in this area. ACTCOSS's submissions to the issues paper and draft report also commented positively that the Commission's regulatory approach has been relatively successful in helping to drive improvements in affordability and service quality for ACT water and sewerage customers.¹⁰⁶

Commission's draft decision

The Commission's draft decision was to retain its existing incentive mechanisms for service standards and not to introduce new incentive mechanisms.

As noted above, the Commission considered that there was evidence that its current approach has been effective in strengthening Icon Water's incentives to provide regulated services efficiently at standards of quality, safety, reliability and security that met the needs of consumers and were in their long-term interests. Setting minimum service standards or GSLs, and providing for the payment of rebates to consumers when these standards are not met, gives Icon Water incentives to at least meet these minimum standards. The Commission considered that automatic payment of these rebates from 1 July 2020 would further strengthen these incentives.

In addition, public reporting on Icon Water's performance through its ULAR and the Commission's annual performance monitoring report increase public scrutiny and creates strong incentives for Icon Water to improve its performance in providing regulated services to its customers.

Icon Water faces additional incentives, outside of the Commission's regulatory processes, to pursue operating expenditure efficiencies, some as a result of being a government-owned business. As discussed in chapter 2, these include:

- annual reporting to the ACT Legislative Assembly and public scrutiny through appearances before Assembly committees
- performance oversight by the ACT Government as its shareholder
- reporting on service outcomes imposed by technical, health and environmental regulators, including compliance with safety, water quality and environmental requirements.

The Commission's service standard incentive mechanisms are well-established and widely adopted by other regulators. These mechanisms are transparent and simple for consumers and other stakeholders to understand. In addition, they have the advantage of being straightforward and cost effective for the Commission and Icon Water to implement.

The Commission considered that the benefits of additional incentive mechanisms for service standards were unlikely to outweigh the costs to design, implement and maintain a new service standards incentive

¹⁰⁵ In some years, Icon Water's network performance has deteriorated, particularly for the number of sewer blockages, due to weather-related issues, mainly sustained low rainfall conditions, which are out of Icon Water's control. The Commission's 2018-19 ULAR monitoring report is available on its website at <https://www.icrc.act.gov.au/utilities-licensing/utility-licence-annual-reports>.

¹⁰⁶ ACAT 2020b

mechanism. There would be significant challenges in implementing a financial incentive-based mechanism like Ofwat's Service Incentive Mechanism, which relies on detailed benchmarking against other comparable water businesses. Benchmarks from other jurisdictions may not be sufficiently comparable because of different operating characteristics in the ACT, such as different geology, water quality and population density, that affect the costs of delivering services.

Submissions to the draft report

Icon Water and the ACAT supported the existing incentive mechanisms for service standards. In its submission to the draft report, Icon Water referred to its compliance with high service standard across its network, with the customer satisfaction rate exceeding 90 per cent according to its latest customer survey in 2018-19. It stated that it 'consistently performs well in the Commission's Utility Licence Annual Report, with a low rate of approximately 2.8 complaints per 1,000 properties recorded in 2018-19'.¹⁰⁷

3.2 Price control mechanism

The price control mechanism is the method by which price regulation is implemented. Price control mechanisms typically allocate certain risks between the regulated business and its customers.

As explained in the draft report, the Commission has a long standing practice of regulating Icon Water's regulated prices and revenues using a hybrid price and revenue cap with a demand volatility adjustment mechanism known as a 'deadband'.¹⁰⁸ This form of control involves the Commission setting prices for individual water and sewerage services, as well as approving the forecast demand and water sales revenue cap that Icon Water can recover over the five-year regulatory period. The actual revenue recovered by Icon Water depends on the level of water demand. Actual demand may differ from forecast demand, which means that Icon Water will recover more revenue (than the revenue cap) when demand is higher than forecast and less revenue when demand is lower than forecast. A more detailed explanation of individual price caps and revenue caps is in Box 3.1.

In applying the revenue cap for the regulatory period, the Commission uses a six per cent threshold (referred to as a 'deadband') to assess whether Icon Water's revenue from water sales over the period has met, exceeded or fallen short of the revenue cap. If Icon Water's water usage revenue differs from the revenue cap by more than plus or minus six per cent, the Commission will allow a revenue adjustment for the difference above or below the six per cent threshold. The revenue adjustment will be recovered from (or returned to) customers in the following regulatory period.

The 'deadband' essentially shares demand risk—that is, the risk of water usage being lower or higher than expected—between Icon Water and its customers. The Commission considers that the 'deadband' appropriately allocates demand risk by:

- requiring Icon Water to manage the revenue impacts of reductions in demand of up to six per cent from forecast demand by identifying and implementing efficiency improvements, reducing variable costs, providing information to customers on water saving measures, and earning lower than expected profits, and noting that the return on its capital investments includes an allowance for business risk¹⁰⁹

¹⁰⁷ Icon Water 2020b, p. 2

¹⁰⁸ ICRC 2018a, p. 11

¹⁰⁹ If demand is higher than forecast, Icon Water would benefit from higher revenue and profits.

- requiring customers to share larger risks that would affect the long-term financial sustainability of Icon Water and its ability to continue to deliver water and sewerage services in the future (that is, where demand is more than six per cent lower than forecast demand).¹¹⁰

During the 2018-23 regulatory period, revenue from water usage charges is forecast to account for approximately 77 per cent of Icon Water's water revenue requirement (\$881.3 million) and approximately 44 per cent of Icon Water's total revenue requirement (\$1,546 million).¹¹¹ The six per cent 'deadband' is equivalent over the five year 2018 Price Direction period to approximately \$41 million or 2.6 per cent of Icon Water's total revenue requirement for the period. This means that Icon Water is exposed to demand risk that may result in revenue being \$41 million higher or lower than forecast.

Box 3.1 Forms of price control

This box outlines the two main forms of price control. There are other price control mechanisms, such as hybrid approaches that combine elements of individual price caps and revenue caps.

Individual price caps

The individual price cap approach sets an initial price and price path for each regulated service provided over the regulatory period. Individual price caps give regulated businesses and customers price certainty over the regulatory period (subject to any pass-through mechanism events¹¹²).

Individual price caps allocate demand risk to the regulated business. If demand is higher than expected, the regulated business will earn higher revenue. Because there are high fixed costs in supplying water to customers (from the costs of dams, pipes, treatment facilities, and administration that do not vary with the amount of water delivered to customers), the regulated business will make higher than expected profits because higher demand will usually result in its revenue increasing by more than its costs increase. Conversely, if demand is lower than expected, the regulated business will earn lower than expected revenue and earn less profit because its revenue will fall by more than its costs fall.¹¹³ The regulated entity has incentives to achieve additional efficiencies over the regulatory period to manage demand volatility risk.

Revenue cap

A revenue cap gives the regulated business certainty about the revenue it will earn over the regulatory period. It does this by adjusting the prices customers pay to account for differences between actual and forecast demand over the regulatory period, either during the period or at the end of the period. If demand is lower than forecast, prices will be increased to ensure the revenue

¹¹⁰ Where demand is more than six per cent higher than forecast, Icon Water would benefit from higher revenue and profits up to the six per cent 'deadband' and customers would benefit during the next regulatory period from any variation above the six per cent 'deadband' through lower prices.

¹¹¹ ICRC 2018a, p 138

¹¹² Pass-through mechanisms are used to pass through the cost impacts of events that are uncertain at the start of the regulatory period but may occur and have a material cost impact on the business providing the service.

¹¹³ If demand is lower because of lower than expected water inflows into its lowest cost water sources, the business' costs could increase because it has to obtain water from higher cost sources.

cap will be met. If demand is higher than forecast, prices will be reduced to ensure the revenue cap is not exceeded.

In contrast to individual price caps, customers do not have certainty about the prices they will pay. The risk of actual demand being different to forecast demand is borne by customers; that is, a revenue cap allocates demand risk to customers, in contrast to individual price caps which allocate demand risk to the regulated business.

Under a revenue cap approach, regulated businesses have different incentives to achieve efficiencies. Since a revenue cap provides revenue certainty for regulated entities, a regulated business has incentives to reduce costs to increase its profits. However, the incentives to find efficiencies may be blunted compared to individual price caps as the regulated entity is insulated from demand risk.

The Commission's hybrid form of control gives Icon Water incentives to carefully plan for and manage the risk of lower water consumption. The 'deadband' approach increases Icon Water's incentives to invest in better understanding the factors driving customer usage and the growth in connections so that it can more accurately forecast and manage demand. At the same time, the Commission has recognised the difficulties of accurately forecasting water inflows (and rainfall) and has therefore limited Icon Water's exposure to demand risk by setting the 'deadband' threshold.

Submissions to the issues paper

Icon Water largely supports the current hybrid price and revenue cap. Icon Water stated that:

...this form of control generally achieves an appropriate balance between providing customers with price certainty while also allowing Icon Water to be confident about the revenue it will earn over the regulatory period, which assists with longer term planning and investment.¹¹⁴

However, Icon Water submitted that this approach to price control only achieves full cost recovery when all customers are charged the maximum prices allowed by the Commission. Icon Water stated that this approach may create a risk of uneconomic bypass because it has a disincentive to offer discounts due to forgone revenue. Uneconomic bypass may occur where a large user has alternative sources of water supply that are lower cost for that user (compared to the tier 2 usage charge) but are still more expensive than Icon Water's marginal cost of supply.¹¹⁵ Icon Water submitted that a discount mechanism should be

¹¹⁴ Icon Water 2020a, pp. 6-7

¹¹⁵ Icon Water 2020a, p. 7

introduced for large water customers that can demonstrate a credible case of potential uneconomic bypass, as it proposed in its 2018-23 Pricing Proposal.¹¹⁶

Icon Water supported the Commission's six per cent 'deadband' approach to sharing demand risk between Icon Water and its customers. Icon Water noted that there may be a case in future regulatory periods to revisit the threshold value of six per cent, as was done in the 2008-13 regulatory period in response to the Millennium drought where the 'deadband' threshold was set at three per cent, before being raised to six per cent when the drought broke.¹¹⁷

The ACAT submitted that the current form of regulation has been successful in helping to drive affordability and service quality for ACT water and sewerage customers. It agreed with Icon Water that introducing new schemes would result in added regulatory and administrative costs, and greater complexity in revenue determinations, which is not in the best interests of its customers.

However, the ACAT disagreed with Icon Water's argument that the current structure of the tier 2 price may create a risk of uneconomic bypass. The ACAT considers that this part of Icon Water's submission is out of scope in a review of incentive mechanisms and should be disregarded by the Commission. The ACAT stated that its view on this issue 'is based on the need for a "lifeline supply" of water for vulnerable domestic customers, and on a strong imperative for improving water efficiency in the ACT'.¹¹⁸

ACTCOSS submitted that promoting efficiency in the provision of regulated water and sewerage services, while achieving social justice objectives, requires 'equitable distribution of risk so that those exposed to risk to have the ability and incentive to manage it'.¹¹⁹

Commission's analysis for the draft report

As explained in the draft report, demand volatility adjustment approaches are well-established and widely used incentive mechanisms. Similar adjustment approaches are applied by regulators in other jurisdictions, tailored for their own circumstances.

The Commission's 'deadband' was introduced during the 2008-13 regulatory period as a method to address the risks posed by setting prices in advance of knowing actual demand. At the time, IPART applied a 'deadband' mechanism to Sydney Water and Hunter Water, using a 5 per cent threshold.¹²⁰ The 'deadband' mechanism was introduced largely in response to the increased uncertainty around forecasting caused by the Millennium drought, which severely depleted water storage levels and altered the consumption behaviour of customers as level three water restrictions were imposed. To reflect the uncertainty around supply and demand at that time, the 'deadband' materiality threshold was set at three per cent.¹²¹ As part of the 2013-18 Substituted Price Direction, the 'deadband' was raised to six per cent to reflect the increasing stability of supply and demand forces as the drought abated.¹²²

¹¹⁶ Icon Water 2020a, p. 7

¹¹⁷ Icon Water 2020a, p. 7

¹¹⁸ ACAT 2020a, p. 2

¹¹⁹ ACTCOSS 2020, p. 3

¹²⁰ ICRC 2008, p. 124, IPART 2020 2, p. 47 and IPART 2020, p. 29

¹²¹ ICRC 2008, p. 124

¹²² ICRC 2015, p. 12

In South Australia, ESCOSA imposes a revenue cap on SA Water in conjunction with a demand volatility adjustment mechanism.¹²³ ESCOSA considers that most of the demand risk should rest with SA Water. It therefore requires that, for each 1.0 per cent change in demand from the forecast, 30 per cent of the additional (or lost) revenue will be passed through to SA Water customers through lower (or higher) prices at the end of the regulatory period.¹²⁴ This approach was initially introduced in 2013. While ESCOSA's demand volatility adjustment mechanism differs from the Commission's mechanism, it provides similar incentives for the regulated water business to operate efficiently and manage risks associated with lower than forecast water demand (and therefore revenue).

In recent draft decisions by IPART and ESCOSA, each regulator emphasised the importance of these mechanisms in appropriately allocating demand risk between the regulated business and its customers.¹²⁵

The Commission found an additional benefit from its current hybrid form of price control. By increasing Icon Water's incentives to invest in better understanding the factors driving customer usage and the growth in connections, and more accurately forecasting demand, the 'deadband' approach complements and supports the Commission's existing capital expenditure incentive mechanism. Good demand forecasts are an important input to Icon Water's planning of its capital expenditure program, improving the information base for its investment decisions. For the Commission, better demand forecasts support its ex-ante review of the prudence and efficiency of Icon Water's proposed capital expenditure during its price investigations.

In relation to Icon Water's submission on uneconomic bypass, the Commission considered these issues in some detail in its 2018 price investigation and in its 2016 tariff structure review. The Price Direction sets a maximum price and a revenue cap. This allows Icon Water to negotiate on a commercial basis with large users and agree on tailored prices that would address its concerns about the risk of uneconomic bypass.¹²⁶ Commercial decisions on prudent discounts should be part of everyday business for businesses such as Icon Water. The Commission understands that Icon Water has negotiated with at least one major consumer, with the aim of preventing losses incurred from potential uneconomic bypass.

In its final decision on the 2018 price investigation, the Commission considered that differentiated tariff structures for residential and large non-residential water consumers may be part of the response to the risk of uneconomic bypass. The Commission noted that water utilities in similar jurisdictions have adopted a variety of commercial tariffs with higher fixed and lower variable charges.

Commission's draft decision

The Commission's draft decision was to retain its existing form of price control.

The Commission considered that its current hybrid price and revenue cap with a demand volatility adjustment mechanism (the 'deadband') provides appropriate incentives for Icon Water to operate efficiently and carefully plan for and manage the risk of lower than forecast water consumption in the ACT. By sharing demand risks between Icon Water and its customers, the 'deadband' threshold provides incentives for Icon Water to carefully plan for and manage the risk of lower water consumption, while

¹²³ ESCOSA 2013, p. 5

¹²⁴ ESCOSA 2013, p. 39

¹²⁵ IPART 2020, p. 29, IPART 2020 2, p. 47 and ESCOSA 2017, p. 9

¹²⁶ ICRC 2018a, pp. 30-32

limiting Icon Water’s exposure to financial viability risk. As noted above, the ‘deadband’ approach supports the Commission’s current capital expenditure incentive mechanism by encouraging Icon Water to invest in better understanding and forecasting future demand.

As an established incentive mechanism that is also used by other Australian regulators, the Commission considered that its hybrid form of price control with a ‘deadband’ threshold is straightforward and cost effective for the Commission and Icon Water to implement. It is also transparent and relatively simple for consumers and other stakeholders to understand.

The Commission noted Icon Water’s comment that there may be a case in future regulatory periods to revisit the threshold value of six per cent and its concerns about uneconomic bypass. The Commission will consider both of these issues again during its next water and sewerage services price investigation.

Submissions to the draft report

Icon Water and the ACAT supported the Commission’s existing incentive mechanism for the form of price control and did not support introducing new incentive mechanisms.

Icon Water supported the Commission’s intention to continue monitoring the suitability of the six per cent threshold value for the ‘deadband’ and the issue of uneconomic bypass. However, it stated that ‘any changes to tariffs for large non-residential customers must be weighed against the potential bill impacts for residential and small business customers’.¹²⁷

The ACAT agreed with the Commission’s ‘deadband’ approach to managing demand risk but it did not agree with Icon Water’s proposal that prices should be reduced for large customers to address ‘uneconomic bypass’.¹²⁸

3.3 Victorian ‘PREMO’ approach

In 2018, the ESC implemented a new regulatory framework for water businesses in Victoria known as PREMO—Performance, Risk, Engagement, Management and Outcomes. The framework is based on strong customer engagement and is designed to provide incentives for water businesses to deliver services and outcomes that matter most to customers as efficiently as possible¹²⁹ (Box 3.4).

Box 3.4 PREMO framework

Under PREMO, each business’ rate of return is linked to the outcomes it proposed to deliver to customers. This is achieved by allowing the return on equity to vary according to the level of ‘ambition’ shown in the business’ price submission to the ESC. A higher rate of return is allowed for businesses committing to improvements in customer value, including significant improvements in cost efficiency.

¹²⁷ Icon Water 2020b, p. 2

¹²⁸ ACAT 2020b

¹²⁹ ESC 2016, p. 4

Ambition is assessed using the PREMO Assessment Tool and broadly involves assessing the proposal against the five elements of PREMO:

- Performance—have the performance outcomes to which the business committed in its price submission been met or exceeded?
- Risk—has the business sought to allocate risk to the party best positioned to manage that risk?
- Engagement—how effective was the business’ customer engagement?
- Management—is there a strong focus on efficiency? Are controllable costs increasing, staying the same, or decreasing?
- Outcomes—do proposed service outcomes represent an improvement, the status quo, or a withdrawal of service standards?

In addition to affecting the rate of return, there are likely to be reputational incentives for businesses to be as ambitious as possible. The PREMO ratings are published, allowing businesses to be compared against each other. This form of competition by comparison creates incentives for businesses to avoid being positioned at the bottom of the ranking, as it may increase attention of the Government as shareholder, and customers and the media, on performance of senior leadership.

Sources: ESC 2016; KPMG 2018, p. iii

Regulators in the United Kingdom have adopted an approach to water, electricity and gas network regulation that is similar to PREMO. It is known as RIIO. A key element of RIIO and PREMO is that they require utility businesses to engage with customers and understand their preferences in relation to the delivery of water and sewerage, electricity or gas services.¹³⁰

In determining the level of ambition, the ESC (and Ofwat in the United Kingdom) adopt a benchmarking approach that uses information from other water businesses operating in the same jurisdiction. In the issues paper and draft report, the Commission noted that it may not be feasible to adopt this approach in the ACT because of the absence of suitable benchmarks in the ACT as Icon Water is the only water and sewerage services provider. In relation to whether a PREMO approach could be implemented in the ACT, benchmarks from other jurisdictions may not be sufficiently comparable because of different operating characteristics in the ACT, such as different geology, water quality and population density, that affect the costs of delivering services.

Submissions to the issues paper

Icon Water agreed that the Victorian PREMO framework may not be appropriate to adopt in the ACT, particularly given the smaller size of the ACT in both area and population, and Icon Water being the ACT’s only water and sewerage service provider.¹³¹ In addition, Icon Water stated that:

...a scheme such as PREMO would represent a fundamental shift in the overall regulatory approach, carrying significant risks and

¹³⁰ KPMG 2018, p. iii

¹³¹ Icon Water 2020, p. 13

implementation challenges. Given the high rates of customer satisfaction with ACT water and sewerage services, the potential benefits of PREMO are unclear.¹³²

The ACAT submitted that a Victorian style PREMO scheme would not be workable in the ACT, given the lack of comparable water and sewerage utilities.

Commission's draft decision

The Commission's draft decision was not to adopt a new PREMO-style incentive mechanism.

The Commission found that a key driver of the PREMO and RIIO frameworks was concerns about lack of incentives for water businesses to deliver services and outcomes that customers valued most as efficiently as possible.¹³³ The Commission considered that these drivers are less relevant in the ACT because the incentive mechanisms currently in place appear to have encouraged Icon Water to deliver services to customers efficiently and resulted in relatively high overall satisfaction levels.

The Commission also considered that there would be practical difficulties associated with implementing a PREMO scheme in the ACT. There is a lack of comparable benchmarks in the ACT, which has only one water business. In contrast, there are 17 water businesses in Victoria reporting under the PREMO framework. In the UK, there are 32 water utilities, eight gas distribution utilities and 14 electricity distribution utilities regulated under the RIIO framework.¹³⁴ The absence of suitable ACT benchmarks, and absence of potential competition among water businesses to achieve higher ratings than other businesses, would reduce the expected benefits, and increase the implementation challenges, of moving to a new regulatory approach like the Victorian PREMO framework.

In summary, the Commission considered that moving to a PREMO-style framework would represent a significant shift in the regulatory approach, which would carry a range of costs, risks and implementation challenges.

Submissions to the draft report

While there were no further submissions to the draft report related to the Victorian PREMO framework, Icon Water and the ACAT both supported the Commission's draft decisions to maintain its existing incentives mechanisms and did not support introducing new mechanisms.

¹³² Icon Water 2020, p. 13

¹³³ ESC 2016, p. 3 and Ofgem 2020b

¹³⁴ ESC 2019, p. ii, OFWAT 2020 and OFGEM 2020

3.4 Commission's final decision on other (non-expenditure) incentive mechanisms

The Commission uses a suite of incentive mechanisms to encourage Icon Water to find and implement efficiencies in its operating and capital expenditures and in its delivery of regulated services at standards of quality, safety, reliability and security that meet the needs of consumers and are in their long-term interests. These incentive mechanisms work together to achieve better outcomes for consumers.

In its Review, the Commission considered incentive mechanisms that are currently used by the Commission and by other economic regulators to promote greater efficiency in operating and capital expenditures (discussed in chapter 2). This chapter has considered incentive mechanisms for service standards and the form of price control, as well as the Victorian PREMO framework.

The Commission's final decision is to maintain its existing incentive mechanisms for service standards and the form of price control, and not to introduce new incentive mechanisms.

In reaching its final decision, the Commission considered submissions from stakeholders, and views expressed at the workshop, in evaluating the advantages and disadvantages of different incentive mechanisms. It used the assessment framework set out in section 1.2 (Table 1.2) of this report to assess and compare the incentive mechanisms discussed in this chapter; the Commission's final assessment is shown in Table 3.1 below.

The Commission has concluded that the current set of incentive mechanisms are both appropriate and effective in meeting the Commission's assessment criteria, which reflect its legislative objectives and statutory considerations. The Commission has also concluded that alternative mechanisms are likely to come with implementation challenges and costs that are unlikely to lead to net benefits for consumers.

Early evaluations of the effectiveness of the PREMO framework in Victoria indicated that it could potentially satisfy many of the Commission's assessment criteria in Table 3.1. However, there is significant uncertainty about the extent to which the same benefits would be achieved in the ACT, due to the significant implementation challenges. These challenges and complexities mean that the PREMO framework would be unlikely to satisfy the Commission's assessment criteria for cost-effectiveness, ease of implementation, transparency, or simplicity.

The Commission's conclusions are in line with submissions, which supported the continued use of the existing incentive mechanisms for service standards and form of price control. No submissions advocated for the introduction of new mechanisms, identifying significant costs and implementation challenges, particularly for the adoption of a PREMO framework in the ACT.

The Commission will continue to monitor the development of other incentive mechanisms adopted by other regulators to identify any mechanisms that may be suitable for consideration in a future period. The Commission has noted Icon Water's submission that there may be a case in future regulatory periods to revisit the 'deadband' threshold value of six per cent in the form of price control and its concerns about uneconomic bypass. The Commission will consider both issues again during its next water and sewerage services price investigation

Table 3.1 Commission’s assessment of incentive mechanisms for service standards, price control and performance

Criteria	Current service standards incentive mechanisms	Current price control mechanism	Victorian PREMO framework
Promotes efficient operations in providing regulated services for the long-term interests of consumers	✓	✓	?
Promotes efficient investment in, and use of, capital and other assets used to provide regulated services for the long-term interests of consumers	✓	✓	?
Promotes efficient and least cost planning in making investment and operating decisions	✓	✓	?
Encourages standards of quality, safety, reliability and security of regulated services that meet the needs of consumers and are in their long-term interests	✓	✓	?
Allows for the recovery of efficient and prudent costs		✓	✓
Is transparent and simple for consumers to understand	✓	✓	?
Is straightforward and cost effective for the regulator and utility to implement	✓	✓	

Appendix 1 Summary of submissions

Submissions to the issues paper

	Date received	Submitter	Key issues raised/information provided
1	28 February 2020	Icon Water	<p>Overarching comments and review process</p> <p>Icon Water supports the Commission’s current approach to incentive mechanism as they have been successful in achieving affordability and quality service.</p> <p>Regulators have been uncertain about the benefits of the efficiency sharing incentive schemes and have been reluctant to adopt them, particularly in the water and sewerage sector.</p> <p>Incentive-based regulation can recreate economic forces faced in a competitive market which can motivate a monopoly to innovate and be efficient.</p> <p>Both the economic and broader regulatory environment of Icon Water should be considered when assessing alternative incentive schemes.</p> <p>The existing regulatory requirements in the ACT ensure that Icon Water operates efficiently. Since Icon Water is wholly owned by the Government, it is publicly accountable for its performance.</p> <p>There is limited evidence on the benefits of new incentive mechanisms in the ACT, particularly compared with the additional regulatory and administrative costs that would be incurred.</p> <p>Any new incentive scheme should result in improvements to the current regulatory approach. The benefits of any change should be compared against additional costs and risks.</p> <p>Icon Water supports the Commission’s proposed approach and timeline for reviewing incentive mechanisms.</p> <p>Current incentive mechanisms</p> <p>Icon Water supports the Commission’s current approach to incentive mechanisms and considers</p>

Date received	Submitter	Key issues raised/information provided
		<p>the incentive mechanism framework has been effective in giving Icon Water incentives to ensure efficient expenditure.</p> <p>Minimum service standards rebates and reporting to the Commission on performance have been an effective financial incentive to improve customer service.</p> <p>Icon Water supports the Commission’s approach of having a hybrid price and revenue cap form of price control.</p> <p>However, the hybrid price and revenue cap approach can discourage Icon Water from offering discounts, potentially leading to uneconomic bypass decisions by some customers.</p> <p>Icon Water supports the Commission’s ‘deadband’ mechanism and suggests the Commission reconsider the current six per cent ‘deadband’ threshold for future regulatory periods.</p> <p>Potential incentive schemes</p> <p>Potential new incentive schemes are likely to be unsuitable for the ACT as they would provide limited benefits but impose significant costs.</p> <p>The Commission has previously investigated efficiency sharing schemes but, on each occasion, concluded the costs of any schemes outweighed potential benefits.</p> <p>Icon Water does not support the introduction of an operating expenditure incentive scheme.</p> <p>A capital expenditure incentive scheme may incentivise perverse outcomes by encouraging inefficient deferral of capital expenditure rather than genuine efficiency improvements.</p> <p>Icon Water does not support the introduction of a ‘totex’ framework. Implementing a ‘totex’ framework would have implementation challenges.</p> <p>Icon Water does not support the introduction of a new service standards incentive scheme.</p> <p>The costs associated with developing and maintaining a service standards incentive scheme are likely to be substantial compared to the benefits to customers.</p>

	Date received	Submitter	Key issues raised/information provided
			<p>A recent survey of Icon Water customers showed overall customer satisfaction with Icon Water’s services was in excess of 90 per cent.</p> <p>Icon Water does not support the introduction the introduction of a PREMO framework. A PREMO framework would be a fundamental shift in the regulatory approach used by the Commission.</p> <p>The ACT has only one water and sewerage service provider, which may make the benchmarking component of the PREMO framework difficult.</p>
2	17 April 2020	ACAT	<p>The ACAT agreed with the Icon Water Submission, for the reasons expressed by Icon Water, except for the following two issues.</p> <p>First, the ACAT does not accept Icon Water’s argument that the current structure of the Tier 2 price may create a risk of economic bypass and considers this part of Icon Water’s submission is out of scope for the Review.</p> <p>Second, the ACAT disagrees with Icon Water’s suggestion that customers may be encouraged to make frivolous complaints if a service incentive scheme includes as a factor the number of complaints against the utility. The ACAT does not support the introduction of a new service incentive scheme because the new approach to GSLs in the Consumer Protection Code commencing on 1 July 2020 might prove to be very effective in this regard.</p> <p>A Victorian style 'PREMO' scheme would not be workable in the ACT given the lack of comparable water and sewerage utilities in the ACT.</p>

	Date received	Submitter	Key issues raised/information provided
3	22 April 2020	ACTCOSS	<p>ACTCOSS supported the Commission’s legislative objectives and its pricing principles in balancing economic efficiency, environmental and social considerations. A fundamental strength of the Commission’s current approach is that it must take account of equity and other social impacts, including fair outcomes for low-income households.</p> <p>An equitable distribution of risk is important so that those exposed to risk to have the ability and incentive to manage it.</p> <p>The draft report should include an assessment of the strengths and weaknesses of current incentive mechanisms and if/how any other incentive mechanisms used by other regulators might address any weaknesses and be appropriate to the ACT’. This would ideally include evidence of the relative benefits and costs for consumers, including any anticipated price impacts, and benchmark performance against other jurisdictions.</p> <p>The Commission’s regulatory approach has been relatively successful in driving improvements to affordability and service quality for ACT water and sewerage customers. There is a risk with incentive mechanisms for operating and capital expenditure that efficiency may be pursued at the expense of service quality. But ACTCOSS is reasonably confident that this risk is effectively mitigated through the Commission’s service standard incentive mechanisms, specifically the guaranteed service levels (GSLs).</p>

Submissions to the draft report

	Date received	Submitter	Key issues raised/information provided
1	10 July 2020	Icon Water	<p>Supported the Commission's existing approaches to incentive mechanisms for operating and capital expenditure. It did not support the introduction of new expenditure incentive mechanisms.</p> <p>Supported the Commission's existing approaches to incentive mechanisms for service standards and form of price control, and did not support new incentive mechanisms.</p> <p>Agreed with the Commission's evidence on the effectiveness of the current incentive mechanisms on operating, investing and delivering services by Icon Water.</p> <p>Agreed that a full quantitative assessment of the costs and benefits of different incentive schemes used by other jurisdictions is challenging. Implementing new schemes have potential costs and risks and would not provide a net benefit to the customers.</p> <p>Supported the Commission's intention to continue monitoring the suitability of threshold value for six per cent 'deadband' and the issue of uneconomic bypass, but believes that 'any changes to tariffs for large non-residential customers must be weighed against the potential bill impacts for residential and small business customers'</p>
2	15 July 2020	ACAT	<p>Suggested that consistent with sections 7 and 20 of the ICRC Act, the Commission considers environmental objectives explicitly. Advocates recognising the increasing pressure on water resources in the Murray Darling Basin and the likely long-term impacts of climate change on water availability for the Canberra community.</p> <p>The ACT's overall water policies and pricing should: provide incentives for water conservation, with particular emphasis on large users; provide safety net pricing for basic household use to assist low income households; and ensure cultural flows for Traditional Custodians.</p>

Date received	Submitter	Key issues raised/information provided
		<p>Supported the Commission’s existing incentive mechanisms for operating and capital expenditure. Did not support new mechanisms. Supported the Commission’s ‘deadband’ approach to managing demand risk and did not support reduction in price for large customers to address ‘uneconomic bypass’.</p> <p>Supported the Commission’s existing incentive mechanisms for service standards and the form of price control and did not support new incentive mechanisms.</p>

Abbreviations and acronyms

ACAT	ACT Civil and Administrative Tribunal
ACT	Australian Capital Territory
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
Commission	Independent Competition and Regulatory Commission
ESC	Essential Services Commission
ESCOSA	Essential Services Commission of South Australia
GSL	Guaranteed service level
ICRC	Independent Competition and Regulatory Commission
ICRC Act	Independent Competition and Regulatory Commission Act 1997 (ACT)
IPART	Independent Pricing and Regulatory Tribunal of New South Wales
kL	Kilolitre
NSP	Network service provider
Ofgem	Office of Gas and Electricity Markets (for England and Wales)
Ofwat	Water Services Regulation Authority (for England and Wales)
PREMO	Performance, risk, engagement, management and outcomes
RIIO	Revenue = Incentives + Innovation + Outputs
Totex	Total expenditure
Utilities Act	Utilities Act 2000 (ACT)

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