

Strategic Review of Charges 2015-21: **Innovation and choice**

Contents

Introduction	3
--------------	---

Executive summary

Introduction	7
Owning decisions	10
Involving customers	12
Appraising alternatives	14
Financing improvements	16

Main report

Chapter 1: Owning decisions	18
Chapter 2: Involving customers	26
Chapter 3: Appraising alternatives	42
Chapter 4: Financing improvements	53

Introduction

About this document

One of the main ways in which we promote the interests of customers is by setting limits on the prices they pay for water and sewerage services. This process is called a Strategic Review of Charges (or price review).

This document outlines our approach at the next Strategic Review of Charges, which covers the six-year period 2015-21. In particular it explains the changes that have been put in place to ensure that the Scottish water industry is equipped to face the challenges of the future and continues to provide high-quality services at the best value price.

Many of these changes build on developments initiated at the last price review in 2009¹. They were developed through consultation with Scottish Water, the Scottish Government, Consumer Focus Scotland (CFS), the Scottish Environment Protection Agency (SEPA) and the Drinking Water Quality Regulator (DWQR).

The focus has been on the steps that needed to be taken to ensure that Scottish Water could deliver a number of key aspirations. This document examines each of these in turn, outlining:

- why the aspiration is important for customers and the environment;
- the changes that have been made to enable Scottish Water to deliver these aspirations;
- the overall impact of these changes; and
- the timetable for implementation.

The document focuses on new developments in the approach to setting prices, as distinct from our work in monitoring Scottish Water's performance.

It also concerns Scottish Water's core activities of providing water and sewerage services. We recognise the opportunities that are available for the company to develop new business, outside of its core activities (and as outlined in the Scottish Government's 'Hydro Nation' proposals). We support such initiatives while also noting the importance of ensuring that the interests of customers of the core business are protected at all times.

It should be noted that examples given in this document (including illustrations of innovative solutions) are provided as examples only. Scottish Water and other stakeholders may adopt alternative approaches.

1. The Strategic Review of Charges 2010-15: The final determination, Water Industry Commission for Scotland, November 2009.

Overview of the regulatory framework in Scotland

As the economic regulator, the work that we do is part of the wider regulatory framework that governs the water and sewerage industry in Scotland². This document outlines our methodology for the Strategic Review of Charges, which will cover the six-year period from 2015 to 2021. In particular it explains the role of the Customer Forum, which is to discuss the lowest reasonable overall cost of delivering the Scottish Government's objectives for the industry. The Customer Forum will do so within the policy framework set by the Scottish Government and having taken account of the Commission's thoughts on the level of costs proposed by Scottish Water. As such, the changes that are outlined in this document do not impact on the wider framework or on other stakeholders' roles and responsibilities. These roles and responsibilities are summarised as follows:

The Scottish Ministers

As the owners of Scottish Water, Scottish Ministers set the overall context for the Strategic Review of Charges process, and are responsible for the policy framework governing the water and sewerage industry.

Scottish Ministers set the frequency and timetable for each Strategic Review of Charges. They also determine the high-level environmental, quality and customer service objectives that Scottish Water must deliver through the 'Quality and Standards' process³. The Commission is then required to establish the lowest reasonable overall cost at which these objectives should be delivered.

Scottish Ministers set out the charging principles that should be followed in deciding the tariffs paid by customer groups for specific services and determine whether or not cross-subsidies should exist between groups of customers (and, if so, at what level). Ministers also identify the amount of borrowing that will be made available to the industry.

The Scottish Government plays a central role in setting the policy and vision for the water industry and water environment in Scotland. There should be no doubt about what has to be achieved by different stakeholders.

The Water Industry Commission for Scotland (the Commission)

As the economic regulator, we have a statutory duty to promote the interests of customers. We do this by setting prices for water and sewerage services that deliver Ministers' quality, environmental and customer service objectives for the water industry at the lowest reasonable overall cost. We also facilitate competition in the Scottish water industry; in so doing, however, we must ensure that no detriment is done to the core business of Scottish Water.

Scottish Water

Scottish Water is a publicly-owned business, answerable through the Scottish Ministers to the Scottish Parliament and to the people of Scotland. It provides water and wastewater services to household customers across Scotland and operates the network of pipes, water sources and treatment works. Scottish Water also acts as the wholesaler of water and wastewater services in the competitive market for businesses, public sector bodies, and charitable and not-for-profit organisations.

2. The governance framework for the water and sewerage industry in Scotland was established by the Water Services etc. (Scotland) Act 2005.

3. The Quality and Standards process for 2015-21 is described on the Scottish Government's website at <http://www.scotland.gov.uk/Publications/2012/06/3533/downloads>

The Scottish Environment Protection Agency (SEPA)

SEPA is a non-departmental public body, accountable through Scottish Ministers to the Scottish Parliament. SEPA's role is to protect the environment and human health, to make sure that our natural resources and services are used as sustainably as possible, and to contribute to the ministerial goal of sustainable economic growth.

As the statutory environmental regulator, SEPA works with the Scottish Government and Scottish Water to establish the requirement for future investment in the water industry to meet environmental standards. SEPA also works with other industry stakeholders to monitor Scottish Water's delivery of the objectives set by Ministers, as well as carrying out day-to-day monitoring of Scottish Water's activities (such as discharges to both groundwater and surface water, and water abstractions).

The Drinking Water Quality Regulator (DWQR)

The DWQR is the statutory regulator for drinking water quality in Scotland. It provides an independent check that Scottish Water is complying with the legal standards for drinking water, as set out in regulations. The DWQR has extensive powers to acquire information, conduct investigations and take enforcement action should this prove necessary.

The DWQR also works with the Scottish Government and Scottish Water to establish the requirement for future investment in the water industry to meet current and future drinking water standards. It works with other industry stakeholders to monitor Scottish Water's delivery of the ministerial objectives.

In the Strategic Review process, both the DWQR and SEPA have an important role in working with Scottish Water, the Customer Forum and the Commission to define the work that is required to achieve the ministerial objectives.

Consumer Focus Scotland (CFS)

CFS became the advocate for water consumers in Scotland in August 2011. CFS has a range of statutory powers and duties to enable it to act on behalf of consumers. This means a number of organisations (including Scottish Ministers, the Commission, Scottish Water, the DWQR and SEPA) must consult with CFS and consider its representations on behalf of consumers on water issues.

In addition to its representative function, CFS has research and information functions relating to consumer matters, and has powers of investigation for certain categories of complaint.

When setting charges, the Commission must consult CFS and have regard to any representations it makes.

The Outputs Monitoring Group

Scottish Water's performance in delivering outputs is monitored jointly by the Outputs Monitoring Group. This comprises representatives from the Scottish Government, Scottish Water, SEPA, the DWQR, CFS and the Commission. The group increases transparency for customers and stakeholders and ensures that Scottish Water is accountable for delivering the required outputs.

The group meets every three months to review progress against ministerial objectives (which are set out in an agreed programme of works) and against interim milestones for output delivery (set out in Scottish Water's agreed Delivery Plan). The group also oversees the process by which changes are made to the programme as a result of better information or revised priorities.

Establishing the Customer Forum

A new body, the Customer Forum, was established as an independent entity in November 2011 by a cooperation agreement between Scottish Water, the Commission and CFS⁴. The Forum has a specific role to play in injecting customers' priorities and preferences into the Strategic Review process by:

- working with Scottish Water on a programme of quantitative and qualitative research to establish customers' priorities for service level improvement and expectations in terms of the level of charges;
- understanding and representing to the Commission and to Scottish Water the priorities and preferences of customers (as a whole) in the Strategic Review process as identified through customer research; and
- seeking to agree the most appropriate outcome for customers (as a whole) based on those priorities and preferences.

The partners will review whether the role of the Customer Forum has been as effective as expected once the Strategic Review process has been completed. In this document we refer to discussions and processes that will only take place once Scottish Water begins to deliver the objectives required after April 2015. These discussions and processes would have been coordinated by the Commission had the Forum, as currently constituted, not been in existence.

4. The cooperation agreement is available on the Commission's website (see Publications/Price setting 2015-21/Customer Forum).

Executive summary

Introduction

It is now more than 13 years since economic regulation of the water and sewerage industry in Scotland was established. During that time the industry has undergone a significant transformation.

- Bill increases have been kept below the rate of inflation and Scottish Water is now in a much more financially stable position⁵.
- More than £5.5 billion has been invested in maintaining the assets and improving drinking water quality and environmental performance.
- Customer service levels, as measured by the 'overall performance assessment' (OPA)⁶, have more than doubled, and are now on a par with those provided by the companies in England and Wales.
- Over two-thirds of the businesses and public sector organisations in Scotland are getting lower prices and/or better customer service as a result of the introduction of retail competition.

These material benefits have been delivered thanks to the committed response of Scottish Water's management to what we believe has been effective economic and public health/environmental regulation.

The need for change

The framework for economic regulation that we began to implement in 1999 was primarily designed around the most pressing needs at that time. These were to improve the industry's efficiency and allow for the timely and effective delivery of improvements to the quality of drinking water and the water environment (much of these driven by national and international legislation).

The framework was also largely based on that which had been in operation south of the border since the water and sewerage companies were privatised in 1989.

While this framework has been very effective and Scottish Water has substantially improved its performance in all areas, it is becoming clear that the water industry is entering a new era and that the framework and associated regulatory tools may no longer be entirely satisfactory.

Different challenges are replacing those of the past decade – including:

- the need to adapt to and mitigate the impacts of climate change, population growth and migration;
- customer demands for more tailored services; and
- tougher financial and economic circumstances, with less government borrowing available for capital investment.

5. Scottish Water has moved from having one of the weakest balance sheets of the water companies, to having one of the strongest.

6. The OPA combines performance levels over a wide range of services into a single score.

- While some of the challenges are becoming clearer (such as the likely higher levels of maintenance needed in future) some are much less clear. What is known, however, is that capital expenditure alone will no longer provide all of the solutions.
- Increasing customer expectations and continuing environmental challenges could place a substantial upward pressure on bills if the industry, as a whole, does not change the way it does things. Scottish Water is likely to have less scope to make further large efficiency gains, as the days of dramatic cost reduction are over. But the industry can be more efficient in how it delivers the outcomes that customers and society want.
- At the same time, it will be increasingly important for customers to be willing to pay for further improvements and have a choice on the key service and price priorities they are prepared to pay for, as well as the levels of risk they would like Scottish Water to accept on their behalf. We consider that this idea of 'customer legitimacy' will become increasingly important in future.
- Comparative benchmarking with the companies in England and Wales using econometric models – which has proved so useful in the past to drive improvements in Scotland – is no longer entirely adequate. The scale of Scottish Water's improvement means that we would have to use more intrusive approaches to identify and measure gaps in performance. Ofwat, the economic regulator of the water sector in England and Wales, also appears to be moving away from its historical approach to econometric modelling.
- It has become apparent that improvements in the quality of drinking water and the water environment will continue to be required, rather than being the once and for all challenge originally envisaged.
- The relationship between us as the economic regulator and Scottish Water has matured. Scottish Water is now much more pro-active in recognising the scope for improvement, and has set itself an ambition to become Scotland's most trusted business. Our role needs to change to reflect these developments, moving away from a 'parent-child' relationship and adopting a 'trust but verify' approach. This changing role, combined with the reduced reliance on benchmarking, will change the nature and extent of information we need to collect (although will not reduce the rigour with which we monitor performance).

So, while existing regulatory techniques have had significant success in the past, we must not rest on our laurels. Without change, we may not get the same value for money in the future that we have come to expect.

The work we have undertaken

We began considering the case for reform immediately after we published our Strategic Review of Charges 2010-15 in 2009. Since then, we have worked closely with water industry stakeholders and technical experts to examine the many and wide-ranging aspects of economic regulation, under a project called 'Incentives, innovation and involvement'.

Much of the thinking was informed by our experience in introducing retail competition into the water and sewerage market in Scotland in 2008 and the market's development since then. We have seen that customers can behave differently when they have choice and that as the economic regulator we may not be best placed to make decisions on the trade-offs between customers' preferences. It also became clear that, if there is space to innovate, an empowered and pro-active company is more likely to seek out the benefits that are available. The retail suppliers have done just that, seeking to understand customers' priorities and providing bespoke services.

It is important that we make sure that what we are doing (or, indeed, not doing) does not get in the way of a well managed Scottish Water. As such, we are focussing on the steps we must take to help Scottish Water deliver the following aspirations:

- owning decisions,
- involving customers,
- appraising alternatives, and
- financing improvements.

The changes we outline in this document are intended to equip Scottish Water to continue to deliver high-quality, good value services into the 21st century. Success in all four areas will be crucial to keeping bills down, minimising borrowing needs and delivering the services and value for money that customers want.

Owning decisions

Scottish Water should be empowered to take full ownership of its decisions – both in its business planning and in its delivery of that plan for customers. Changes to the price setting process and the way we regulate Scottish Water should allow this. As Scottish Water would then be immediately accountable for its performance, good decision making provides an opportunity for the company to protect and enhance its reputation.

Although the current regulatory framework has served customers and the environment well to date, the price setting process has tended to mean that we as the economic regulator have, in effect, taken a number of strategic decisions. And while Scottish Water has had the right of appeal against our decisions to the Competition Commission, this is not the same as being fully empowered to deliver for its customers. The result has been a blurring in accountability for both the process and extent of outcome delivery for customers.

Furthermore there has been a lack of transparency both in the way Scottish Water makes decisions internally in preparing its business plan and in the way we interpret this in coming to our draft decisions on price limits. Clearly those outside the process, particularly customers, will not know, at either stage, the full thinking behind decisions (including options that were discounted, trade-offs that have been made, and any cost-benefit analysis that has been undertaken).

We want to see a situation where the company puts forward proposals and justifies its decisions to customers, the customer representatives (CFS and the Customer Forum), the Scottish Government (as owner), and the economic and quality regulators based on a robust evidence base. Indeed, the best outcomes for customers and the environment are more likely to be delivered in a situation where Scottish Water takes full responsibility for its strategic direction. Such a shift is now possible given the more business-like relationship that the company has with the Commission.

We have considered changes in the way we regulate Scottish Water that will allow it to take full ownership of decisions. They relate to both the price review process and the form of information collected to set price limits and monitor performance.

At the next price review we will expect Scottish Water to develop a long-term strategy that extends beyond the current price setting period, and against which both its business plan and the individual projects within that plan can be compared.

We no longer intend to publish detailed business plan guidance and reporting requirements. In our view, Scottish Water is unlikely to take full ownership of a business plan when we have prescribed, in detail, the information to be included in that plan.

The volume of business planning information we have collected in the past is inconsistent with our new 'trust, but verify' approach. Instead, we will issue guidance in the form of basic planning assumptions. These assumptions will be agreed with Scottish Water before it begins to write its business plan (the high-level objectives that underpin this business plan having already been set by Scottish Ministers).

We would expect any significant deviation from these assumptions to have been agreed with the Customer Forum. As the business plan will be written and owned by Scottish Water and discussed with customers, the resulting charges should have much greater legitimacy.

We will agree the scope and definition of any information that we want to see included either in, or as a supplement to, the business plan. We will only request such information as we believe to be necessary in order to inform us, and, ultimately, the Customer Forum on the value for money of what is being proposed.

We will comment on how Scottish Water's business plan meets the needs of its customers, whether the outcomes are sufficiently well defined and can be monitored objectively, and whether the plan represents value for money. In effect, we will therefore be commenting on the strengths and weaknesses of the business plan and of Scottish Water's implementation of the plan. This should aid the Customer Forum's understanding of and engagement with Scottish Water's business planning process.

We would expect to reduce the amount of monitoring information that we collect, focussing on key outcome-based measures of performance that have been agreed between the Customer Forum and Scottish Water (this assumes, of course, that this agreement is in line with the guidance on 'lowest overall cost' that we will provide to the Customer Forum and to Scottish Water). This should reduce regulatory bureaucracy and allow Scottish Water to concentrate on the information it needs to run its business most effectively. We have reduced our own operating costs accordingly.

Our role becomes one of verifying that the company has delivered the outputs it said it would, with safeguards in place to protect customers and with clear consequences for any performance failure by Scottish Water.

Key changes to the regulatory framework:

- **Scottish Water is tasked with preparing its long-term strategic vision – a document it will have ownership of and will maintain and update as appropriate.**
- **We will comment on how Scottish Water's business plan meets the needs of its customers, whether the outcomes are sufficiently well defined and can be monitored objectively, and whether the plan represents value for money.**
- **We will focus on outcome-based measures of performance. This will reduce the amount of information collected, reducing regulatory bureaucracy and allowing Scottish Water to collect the information it needs to run an efficient business.**

Involving customers

The newly established Customer Forum is well placed to gather and synthesise the views of customers. It will engage with Scottish Water to agree the delivery of appropriate service levels within the policy framework that the Scottish Government sets.

With challenging times ahead for the water industry it is essential that customers understand the choices available and their impacts on prices, levels of service and the environment. Unless the rationale for public health and environmental improvements has been communicated effectively, there is a risk that customers will become increasingly reluctant to pay for further improvements.

Customers must also be provided with meaningful opportunities to be involved in decisions – particularly where there are choices about how and when improvements are made. For example, they may have a view on the trade-off between lower carbon, cheaper, but potentially more uncertain solutions to environmental problems and more conservative options.

The current framework includes a number of barriers to effective customer participation:

- The price setting process is complex, technical and data-intensive. Customers do not have access to the information they need to understand fully the choices to be made, nor are mechanisms in place to allow them to influence decisions where they may do so.
- To date, customer contact in the price control has focused on consulting on draft decisions, rather than presenting options early in the process and involving customers in decisions (as opposed to consulting or surveying them).
- Similarly, the way the process is set up encourages Scottish Water to prepare its business plans with the economic and quality regulators in mind, rather than being based on detailed discussions with customers of the potential trade-offs resulting from quantitative and qualitative analysis of customers' priorities.

As a result, decisions have tended to be made on behalf of customers. They may have been consulted, but have they been truly involved in the decision-making process?

We thought long and hard about how best to involve customers and as a result have developed new arrangements for setting price limits. These allow customers the opportunity to engage directly with Scottish Water to make the trade-offs that are best for customers where there are choices on key service and price priorities.

Central to this is the establishment of the Customer Forum, which includes representatives of household customers, non-household stakeholders and the retail suppliers. The Forum is responsible for:

- identifying and understanding from quantitative and qualitative research (with Scottish Water) customers' priorities; and
- seeking to get the best outcome for customers (as a whole) based on those priorities and preferences within the broad policy framework agreed by the Scottish Government.

At the same time, we are taking steps to set out the choices that are open to customers. We will comment on Scottish Water's business plan and identify:

- whether the outcomes are sufficiently well defined and can be monitored objectively and whether the plan represents value for money (in other words, the strengths and weaknesses of the plan);
- areas where there may be scope for customers to decide on trade-offs; and
- quantified price impacts of different approaches included (or omitted) from the business plan.

This will facilitate the Customer Forum's involvement and ensure that the process is as transparent and easy to understand as possible. We have also adjusted the timetable for price setting to give more time, at an earlier stage, for more meaningful engagement.

Overall, the arrangements will reveal customer views and input on all areas of the price review before the first draft decision on price limits is published. Our expectation is that through direct engagement with Scottish Water, the Customer Forum will be able to agree on the trade-offs required in any business plan. This should result in their endorsement of an overall package of service improvements and price limits that fit within the Commission's guidance on lowest overall cost and the legal constraints placed on the industry. This should ensure that it is relatively straightforward for the Commission to agree that the agreement between Scottish Water and the Customer Forum reflects the 'lowest reasonable overall cost' of delivering the ministerial objectives.

If, however, Scottish Water and the Customer Forum are not able to reach an agreement, then it will be up to the Commission to determine the overall price limits in the Strategic Review of Charges (in a way that is similar to the approach to price setting in the past). Under these circumstances more detailed scrutiny may be appropriate. This could include reviewing Scottish Water's business planning processes, the planning options that have been considered, their cost estimates and the trade-offs that are proposed between cost and service to customers. Price limits would then be based on the results of our analysis and any expert scrutiny.

Key changes to the regulatory framework:

- **The creation of the Customer Forum to engage directly with Scottish Water to agree on key service and price priorities, within the broad policy framework agreed by the Scottish Government.**
- **Setting out working ranges for key inputs to Scottish Water's business plan.**
- **The introduction of a revised process (including earlier commentary by the Commission on Scottish Water's business plan) and a timeline to allow opportunities for meaningful customer engagement at the next review.**

Appraising alternatives

Scottish Water should be empowered to consider and assess properly all viable, alternative and/or innovative investment options that are in the best interests of customers and the environment.

Substantial improvements in the quality of drinking water and the water environment have been delivered in the past decade. This required a rapid and capital-intensive investment programme. This approach was appropriate at the time as the challenge for Scottish Water was to deliver improvements required to meet national and international standards. Investment needs were clearly known and comprehensive plans became the norm, with detailed project-by-project monitoring.

The solutions adopted were almost always conventional and capital based. Opportunities to explore more innovative or more sustainable alternatives (such as sustainable land management) may not have been as widely considered in the urgency to secure compliance with the appropriate standards.

We think that in future Scottish Water should have greater opportunities to consider alternative, more innovative solutions for new investment, even if these span numerous regulatory control periods. Although these can require greater collaboration, and may take longer to be delivered, they are often in the best interests of customers and the environment. This is particularly the case when factors such as the overall carbon impact are taken into account.

They are also likely to come to the fore in response to future challenges such as climate change and the Water Framework Directive, where Scottish Water may not be able to rely on tried and tested solutions.

Scottish Water should be able to appraise and pursue any legitimate intervention that is in the clear interests of customers or the environment. We are making a number of changes to the regulatory framework to make sure that it can do so.

- We are removing the bias towards capital solutions and will provide incentives for the business to commit to appropriate operating expenditure solutions and alternative approaches (even if and when these entail potentially higher but reasonable and manageable risk).
- We are removing the need for Scottish Water's investment plan to be fully specified for the duration of the next regulatory control period to avoid 'locking in' solutions and constraining innovation. We will, however, expect Scottish Water to set out clear service improvement reports for delivery of the improvements it has agreed with the Scottish Government, SEPA, the DWQR and the customer representatives. These should include the role for operating as opposed to capital expenditure. Scottish Water should also make it clear where solutions are tried and tested and where there are uncertainties or challenges that may go beyond the best technologies currently available. It may be that delivering effectively for customers will require a greater role for non-capital intensive solutions or more inventive or longer term approaches, such as the continuing rationalisation of the current asset base.

- We will encourage an investment planning approach that has greater flexibility. Scottish Water's business plan should include studies in the early years to further investigate solutions to problems that could be resolved in the latter half or beyond. Investment plans should be updated on a 'rolling' basis from then on. This approach allows a more stable investment profile to be developed, with the prospect of continuous investment period to period.
- We recognise that if Scottish Water is to be fully accountable for its actions and is to be monitored against outcomes (as opposed to outputs), then we need to accept that some solutions, which are cheaper overall on a whole life cost basis, may be more risky than others and may require a greater return.

The focus on outcomes will change our regulatory approach away from the monitoring of inputs and the process of delivery. This will involve less bureaucracy and should empower Scottish Water to take full responsibility for its delivery. Scottish Water will have full ownership of its investment proposals. It will be accountable to the Scottish Government, as its owner, to ensure that there is no overall increase in the risk of delivering the ministerial objectives and will continue to answer to the Outputs Monitoring Group (comprising the Scottish Government, the quality regulators, customer representatives and the Commission) for the delivery of the required outcomes.

Key changes to the regulatory framework:

- **We are removing barriers that may have discouraged Scottish Water from pursuing the most cost-effective, sustainable and affordable water and wastewater services. This includes supporting investment planning and delivery over the long term.**
- **The focus will be on desired outcomes – with an investment planning approach that is less prescriptive and more adaptive.**
- **Reflecting Scottish Water's greater ownership and accountability, we will monitor performance in delivering outcomes (not the process or use of inputs).**
- **We accept that some solutions that are cheaper overall on a whole life cost basis may be more risky than others and may require a greater return.**

Financing improvements

We want to ensure that Scottish Water has secure access to finance on reasonable terms in order to finance improvements in the face of potentially more limited public expenditure. Changes to the regulatory framework should reflect the importance of Scottish Water remaining financially sustainable.

Scottish Water currently relies on borrowing for around half of its expenditure to pay for new (enhancement) investment⁷. The majority of this investment is to achieve compliance with legally enforceable standards, including EU directives.

In future, access to borrowing may be limited as a result of constraints on public expenditure. This could lead to a number of potentially undesirable responses, including delaying or reducing the investment programme, reducing Scottish Water's ability to respond to adverse cost shocks, and placing an upward pressure on customers' bills.

Alternatively, as was the case with the three former regional water authorities, if Scottish Water is able to borrow too freely, this could keep prices down in the short to medium term but could weaken its financial strength. This in turn could compromise the company's ability to finance improvements to customers in future.

Neither of these alternatives is attractive from the customer's perspective.

We want to make sure that the regulatory framework ensures that Scottish Water is financed sustainably. This is, we believe, in the interests of both current and future customers. It should, for example, ensure that Scottish Water is better placed to deal with any operational shock that might arise in future but which is wholly outside the company's control.

We will do this by adopting a long-term view of the acceptable range for the cash financial strength that Scottish Water requires. We will build on the commitment we made at the last Strategic Review of Charges and continue our commitment to maintain appropriate cash financial strength. It will therefore no longer be necessary to reassess financial strength at every price review unless there is a shift in the market view of financeability. We call this range for financial strength the 'financial tramlines'.

In the event that there has been no material change in the market view of financeability, at each price review we would simply expect Scottish Water to be resourced such that, if it performs in line with its regulatory contract (delivering all of the agreed outcomes), it would end up at the mid-point of the tramlines at the end of the regulatory control period.

7. That is, investment not including maintenance and replacement of its existing assets (capital maintenance).

Introducing financial tramlines should allow us to ensure that Scottish Water remains financially sustainable in the long term. Having certainty on financial strength is important if Scottish Water is to be in a position to finance future improvements in the most efficient and cost-effective way. For example, it should allow Scottish Water to access debt markets on reasonable terms – should Ministers decide to proceed down such a course – without bills having to increase as a result.

We have also looked at the current incentives in the regulatory framework to make sure that Scottish Water is able to get the 'best bang for buck' from the resources available to it. Our changes aim to give Scottish Water flexibility in how it uses its resources – without being directed to a particular course of action by the incentives inherent in the current regulatory framework.

Such flexibility is important if Scottish Water is to operate its business and deliver improvements in the most cost-effective way. To achieve this outcome we are taking out of the current framework features that might lead the company to avoid initiatives that take longer than the six-year period for which price limits are set to pay back the upfront cost, or to favour capital-based solutions when other approaches may be economically more efficient.

Key changes to the regulatory framework:

- **We will introduce financial tramlines to give certainty that Scottish Water will have the financial strength needed to finance future improvements effectively.**
- **We will remove the barriers inherent in the current regulatory framework that may prevent Scottish Water achieving 'best bang for buck' from the financial resources it has available.**

Main report

Chapter 1: Owning decisions

This chapter explores what is meant by Scottish Water ‘owning its decisions’, why we consider that this is important, and the ways in which our approach is evolving to reflect this shift.

Before considering these issues, however, we first explain how the current framework has developed.

Overview of the initial framework

When the initial regulatory framework in Scotland was established in 1999 there were two clear challenges – to catch up with the efficiency of the privatised companies in England and Wales, and to meet nationally and internationally required quality standards.

The Scottish framework took as its basis the regulatory regime that had been developed for the private water and sewerage companies in England and Wales. This was geared towards improving the industry’s efficiency and enabling the timely delivery of improvements to the quality of drinking water and the water environment. Features such as the specification and collection of regulatory information, performance benchmarking and monitoring, and the publication of performance comparisons followed the established model. However, in Scotland the economic regulator could only advise Ministers on charging. This was a quite different role from that of the other economic regulators in Great Britain who had the power to determine charges.

In 2002, Scottish Water was created through the merger of the three regional water authorities. The framework continued to be effective in improving efficiency, generating a rapid improvement in Scottish Water’s performance by 2005.

The framework from 2005

The initial framework was strengthened significantly in 2005 by four new provisions:

- appointing a Commission to act independently of government;
- giving the Commission power to determine charges;
- allowing Scottish Water a right of appeal of these charges to the UK Competition Commission; and
- enabling the development of incentive-based regulation, where Scottish Water’s employees and directors could benefit from outperforming regulatory performance targets.

Customer representation had been separated from the Water Industry Commissioner in 2002 to create an independent organisation, now CFS.

The new framework comprised the following key elements:

- The Commission advised Ministers on a range for the size of capital investment programme that was affordable and could be delivered efficiently by Scottish Water.
- Scottish Water, CFS (originally Waterwatch Scotland), the quality regulators (the DWQR and SEPA) and other stakeholders advised Ministers on improvements necessary to meet national and international quality standards.
- Ministers set objectives for the next price control period based on the advice they had received.
- We issued detailed guidance for Scottish Water to use in preparing its business plan.
- The business plan outlined what the company would do to deliver Ministers' objectives, how much this would cost, and the resulting impacts on charges.
- We scrutinised the plan to make sure that it represented value for money by:
 - assessing baseline running costs, claims for additional running costs and new running costs arising from the capital enhancement programme;
 - comparing Scottish Water's adjusted unit costs against those of the companies south of the border to understand the scope for future savings in running costs;
 - reviewing Scottish Water's proposals to improve the levels of service provided to customers;
 - reviewing the scope of solutions proposed, including revenue-based solutions; and
 - scrutinising the efficiency with which Scottish Water proposed to deliver those solutions.
- We issued a draft determination for consultation (including the customer representative organisation as a statutory consultee), followed by our final determination.

This framework proved effective given the position the industry was in and the challenges it faced. The gap in efficiency (on both operating costs and levels of service) between Scottish Water and the companies in England and Wales was considerable. It was therefore necessary for us to clarify the improvements demanded of the company and ensure that these were achieved.

Scottish Water was a newly established business, with rapid and significant improvements to deliver, so it was appropriate to use a combination of both 'carrot' and 'stick', with detailed targets and close monitoring. It is also the case that at that time the company was probably not quite ready to take full ownership of its strategy or decisions.

How Scottish Water has evolved

It is now more than a decade since Scottish Water was established. In that time the company has transformed itself as an organisation. It has caught up with the top performing companies in England and Wales on cost efficiency and levels of service and has regularly reached – and outperformed – its targets. The transformation is such that Scottish Water has set itself the goal of being 'Scotland's most valued and trusted business'.

The company's relationship with us too has evolved, moving from one where we 'praise or scold' according to performance against our targets, to one where appropriate challenges for the company can be explored through constructive dialogue.

Limitations of the current framework

There are a number of limitations associated with the current framework: it can lead to a blurring of accountability that is not in customers' interests; it encourages the company to be accountable to us as the economic regulator, rather than direct to its customers; and it has the potential to create a situation where Scottish Water could hide behind the decisions of others.

The way in which the business plan was prepared, for example, lacked transparency – both in the way Scottish Water made its decisions when preparing the business plan and in the changes we made in preparing our draft determination. Those outside the process were not party, at either stage, to the thinking behind decisions.

In the past the Scottish water industry has been able to use the lack of transparency as a way to carry out necessary, but unpopular, decisions. For example, we set above-inflation price increases at the 1999 and 2001 price reviews. This was necessary because the industry had to move to a more financially sustainable position and we had to unwind cross-subsidies that existed between different classes of customer. The industry was able to point to us as economic regulator as being the organisation responsible for the decision.

The blurring of accountability becomes particularly critical in situations where a decision has caused an unsatisfactory outcome for customers. It is not clear who should take responsibility and, if appropriate, offer a remedy. For example, if an improvement project such as a new sewage treatment works has not worked out as planned (ie the quality of a particular water course has not improved) under the current framework it would not necessarily be clear how the decision to proceed with that particular solution was arrived at. Was it the responsibility of the company for falling short of expectations in some way, was it the economic regulator that challenged the scope of solution when setting price limits, was it the quality regulators that provided advice to Ministers on what needed to be delivered, or was it the responsibility of Ministers who set the objectives?

In regulation by comparative competition, relative performance on unit costs and levels of service is compared across the industry then targets are set for each company. To enable comparisons between Scottish Water and the companies in England and Wales, we had to treat Scottish Water in the same way as these companies; it was therefore necessary to require Scottish Water to report information in a way that was consistent with these companies. Similarly, the targets set for Scottish Water related to the same areas covered by targets south of the border. This again had the effect of pre-determining the areas of focus for Scottish Water's management.

The fact that we were making comparisons of Scottish Water's running costs may also have dissuaded it from pursuing operating cost-based solutions. This is because a company that adopts operating solutions will look relatively inefficient when compared with its peers. Under the current framework that company would be subject to an additional cost challenge when the relative efficiency comparisons feed through to price limits. This may have reduced Scottish Water's freedom to take the most effective business decisions.

The current framework was set up to provide the companies with a clear understanding of the improvements required then to direct their activities to deliver such improvements. This was necessary at a time when the priority was to deliver national and international standards. However, this prescriptive approach has meant that Scottish Water is just one of a number of players making decisions about its overall strategy, rather than taking the lead.

In the past the Commission in particular has had a strong influence on many key aspects of the business, particularly through our monitoring of performance. This may have had the unintended consequence of making Scottish Water feel compelled to pursue a specific solution even when a better alternative may have been available.

Finally, the types of decisions that will need to be made are changing. The focus is no longer about closing the efficiency gap with the companies south of the border. Instead it is about Scottish Water understanding customers' priorities and developing a strategy that delivers those priorities along with the statutory duties set out in Ministers' objectives and agreed with the quality regulators. Decisions will be much more nuanced, involving trade-offs to which there may be no right or wrong answer.

Future choices are likely to concern, for example:

- the options available for different packages of charge levels and discretionary improvements;
- the priority with which those discretionary improvements are addressed; and
- how and when improvements to meet mandatory standards are made.

Why it is important that Scottish Water owns its decisions

A number of problems can arise if a business does not fully own its decisions – all of which may lead to poorer outcomes for customers.

- If something goes wrong there needs to be a clear means of redress. This only happens if the company that is providing the service is fully accountable and takes full responsibility for its business.
- Unless Scottish Water has generated ideas and solutions itself it may not believe that what is being imposed is the most effective solution for the company or its customers. It may also be less likely to see a particular initiative through to successful completion.
- There is a risk that the company focuses on delivering what the Commission has specified, rather than delivering what the company believes would best meet customers' needs. Yet as the economic regulator, we are not best placed to determine what customers want or how best to deliver this.

If the company knows it can hide behind the Commission's decision on price limits, it may be more likely to propose price limits that are higher than they ought to be. More preferable is a situation where the company has to propose, justify and agree on the future level of price limits with its customers.

Scottish Water should have the freedom to run its business within the context of its statutory duties; the company has the most relevant skills and expertise necessary to run a major business encompassing engineering, customer service, resource management and procurement. Our remit, as economic regulator, should by definition be more limited. We should establish appropriate ground rules then allow Scottish Water the freedom to run its business in the most efficient way – with us stepping in only if absolutely necessary in the interests of customers.

What will success look like?

We consider the following features would characterise effective regulation in the future:

- Scottish Water owns its decisions, has agreed them with the customer representatives and is able to explain why it is taking the action it is taking. Our role has become one of ensuring that these decisions are not to the detriment of present and future customers.
- Customers are confident that Scottish Water is more immediately accountable to them for its decisions. The company is able to explain why it has chosen the solutions it has, and can base this on clear evidence from the customer engagement process.
- The company has the opportunity to protect and enhance its reputation through good decision-making. This aspiration permeates the culture of the organisation.

What we are taking out of the current regime

We are removing elements of the price setting process that would hinder or prevent Scottish Water from engaging in constructive dialogue with customers (and their representatives) about what they want and are prepared to pay for.

First, we will no longer specify, in detail, what Scottish Water is to include in its business plan. This means we will no longer provide detailed guidance and templates for Scottish Water to complete in its business planning. Removing the requirement for a very long and detailed, and arguably un-actionable, business plan will allow Scottish Water the freedom to produce a more strategic, customer-oriented business plan.

Secondly, we will no longer apply the technical tools in the same way as we have at past price reviews. Such tools may, inadvertently, have restricted the options available to Scottish Water. The operating cost econometric models, for example, are likely to penalise a company that has adopted an operating cost solution.

Thirdly, we will remove elements of the process that involve us imposing a decision on Scottish Water at the Strategic Review of Charges.

What we are putting in its place

We are opening up the price setting process by empowering Scottish Water so that it takes full responsibility for writing its business plan, and negotiating with the customer representatives and the quality regulators, in the context of its 25-year strategic vision. This vision should itself be consistent with the best available understanding of the Scottish Government's likely objectives for the industry. The Scottish Government maintains an active dialogue with Scottish Water, the Commission, SEPA, the DWQR and CFS about the future of all aspects of water policy.

The Strategic Review of Charges will be based on decisions arising from engagement between Scottish Water and its customers. Scottish Water should own the outcome in terms of the final price limits and the improvements to be made. There should also be much greater transparency about how key decisions have come about.

The main features of the new process are as follows:

- We will provide outline guidance in the form of indicative ranges to help inform the engagement around Scottish Water's 25-year strategic vision and business plan. We will also agree the scope and definition of any information that we want to see included either in, or as a supplement to, the business plan. We will only request such information as we believe to be necessary in order to inform us, and, ultimately, the Customer Forum on the value for money of what is being proposed.
- Much more time will be allowed early on in the price review process for dialogue between Scottish Water and the customer representatives ahead of the 25-year strategic vision and business plan.
- Scottish Water will publish its proposals for public comment in the 25-year strategic vision.
- There will be a period of engagement between Scottish Water and the customer representatives, with the involvement of both SEPA and the DWQR, to agree and finalise the proposals included in the business plan and any other proposals put forward.
- The draft determination will highlight the main areas of agreement and invite comment from interested customers and other stakeholders.

Each of these developments is now discussed in greater detail.

We will provide outline guidance in the form of indicative ranges for the most material assumptions in price setting. This guidance will be agreed with Scottish Water before it begins to write its business plan. It will include ranges for:

- levels of cash expenditure,
- our expectations for future efficiency savings,
- our expectations for levels of service, and
- the financial tramline parameters (see Chapter 4).

Essentially the purpose of the guidance will be to establish overall boundaries within which Scottish Water will be able – in agreement with customers – to make its own decisions. The guidance will set ranges of performance, which, in the Commission's view, are consistent with the 'lowest overall cost' of Scottish Water delivering the ministerial objectives. The role of the Customer Forum is to engage in a constructive dialogue with Scottish Water to identify a 'reasonable' price and service level combination consistent with the lowest overall cost.

Scottish Water will then prepare a 25-year strategic vision, in dialogue with the customer representatives, and with SEPA and the DWQR, to cover the following areas:

- the financial resources required over the next 25 years, taking account of customers' views on an acceptable price profile;
- the financial resources available to make the broad improvements necessary to achieve national and international required standards and other discretionary improvements;

- how and when the broad improvements to achieve national and international required standards will be met;
- the route map to close the gap between the desired levels of service, as identified from the customer research, and the levels of service currently provided; and
- the company's response to our indicative ranges.

The strategic vision will provide a rolling 25-year outlook that is updated each time prices are set. As the strategic vision will include the resources Scottish Water considers it needs over the 25-year period this should provide greater foresight of the prospects for charges. It would also allow Scottish Water to smooth the price impact of future improvements over time, rather than paying for a step-function increase in charges when the improvement is required.

Scottish Water will develop a business plan that fits within its own long-term strategic vision. The company will have discussed any significant deviation from the input ranges with the Customer Forum. As the business plan will be written and owned by Scottish Water and discussed with customers and their representatives, the resulting charges should have much greater legitimacy in the eyes of customers.

We will comment on what we see as the strengths and weaknesses of the business plan in relation to the company's response to customers' needs and expectations. We may use comparisons with the companies in England and Wales to inform our comments. Our comments are likely to be about whether or not Scottish Water's proposals offer reasonable value for money. Our input at this stage will be provided in response to requests from the Customer Forum during the business planning process.

The Commission's draft determination is expected to confirm the agreement reached between Scottish Water and customers. It will highlight areas of agreement and invite comment from interested stakeholders, including wider customer groups and other stakeholders.

Overall regulatory impact

The changes to the regulatory framework that we have outlined above will place much greater onus on Scottish Water to demonstrate how its proposals provide value for money to customers.

We envisage a more facilitative role for ourselves in future price reviews. We will no longer put ourselves at the centre of the price setting process, but will assist engagement between Scottish Water and its customers.

Once we have set the indicative ranges Scottish Water will take the lead in preparing its strategic vision and business plan in dialogue and negotiation with its customers.

We will provide technical advice or comment on the finer details of the business plan. For example, we may comment on the efficiency with which Scottish Water proposes to procure its investment programme or the efficiency assumed within Scottish Water's running costs. We could also, if appropriate, highlight areas where we consider customers could receive further discretionary improvements. The aim of the support we provide will be to ensure that customers receive best value for money from the financial resources Scottish Water has available.

The Customer Forum will be able to ask us for advice on a particular area and/or seek information and advice from the independent assessor⁸ or from any other third party expert where this would be helpful to the Forum.

We expect our draft determination to be in the form of a letter that accompanies the agreement between Scottish Water and its customers. It will highlight the main areas of agreement and invite representations from all stakeholders, including those from wider customer groups.

Safeguards for customers

If Scottish Water and the Customer Forum are not able to reach an agreement, then it will be up to the Commission to determine the overall price limits in the Strategic Review of Charges (in a way that is similar to the approach to price setting in the past).

Under these circumstances more detailed scrutiny may be appropriate. This could include reviewing Scottish Water's business planning processes, the planning options that have been considered, their cost estimates and the trade-offs that are proposed between cost and service to customers. Price limits would then be based on the results of our analysis and any expert scrutiny.

We hope that it will not be necessary to proceed down such a route given that it would indicate that the negotiation process has failed.

Conclusion

Much of the shift we have described in this chapter requires a change in culture within both Scottish Water and the Commission. It would be an easy option to continue to set prices using the approach we have followed in the past. However, this would not be in the best interests of customers. In our view customers would be much better served if Scottish Water takes full ownership of its decisions and customers are the counterparty to these decisions. The next chapter explains our proposals to ensure customer engagement in the decision-making process.

8. We introduced the role of Independent Assessor in 2011 as part of the 'Incentives, innovation and involvement' project. The role replaced the Regulatory Reporter role that we used in the past. It involves carrying out audits or assessments of elements of Scottish Water's business processes, plans or performance. Areas of audit or assessment can be identified by the Commission or by Scottish Water.

Chapter 2: Involving customers

This chapter explains the changes that are taking place to ensure that customers are genuinely engaged in decision-making. In our view, customers should be empowered to decide their priorities and agree with Scottish Water what they consider constitutes reasonable value for money amongst those options, consistent with the lowest overall cost of delivering the ministerial objectives for the next price review.

This will be a dynamic, two-way process between customers and Scottish Water, which is substantially different from the consultation that has taken place before.

What is true customer engagement?

Before discussing the new arrangements we first explain how they differ from standard consultation, the arrangements that were in place at the previous price review, and best practice elsewhere.

Organisations commonly use consultation to involve those outside the organisation in decision-making. It usually involves proposing a course of action or offering a choice, and inviting stakeholders to respond. This approach has a number of limitations:

- Those who respond are often stakeholders with a strong view for or against the proposals, or with a specialist interest in the matter.
- Those who are content with the proposals (or who do not think the proposals are relevant to them) tend not to make their views known.
- It is often the same individuals or organisations who respond, leading to predictable responses and inherent bias.

Given these limitations, there is a risk that consultations do not always manage to capture the views of the generality of customers. In response over recent years there has been a move away from 'consultation' towards what is felt to be a more interactive process of 'engagement'. In spite of this stated intention, however, the fundamental arrangements have remained largely the same, with processes remaining essentially consultative.

In our view, two key features must be present for true customer engagement:

First, the engagement process should be dynamic, involving a close and iterative dialogue through which proposals are developed over time.

Secondly, customers must be empowered, through the engagement process, to negotiate on behalf of the generality of customers and to make decisions that hold sway about the 'reasonable' trade-offs consistent with the lowest overall cost of delivering the ministerial objectives.

Anything short of this is simply enhanced consultation which is unlikely to achieve the desired levels of customer 'buy in' that are increasingly important. Unless the rationale for public health and environmental improvements has been communicated effectively, there is a risk that customers will become increasingly reluctant to pay for further improvements.

Overview of the arrangements at previous reviews

Over the past several years we have undertaken a project to develop a better way to engage customers. As part of this we looked at best practice elsewhere and worked closely with experts in the field of customer engagement in regulated industries.

First, however, we outline the arrangements that were in place at the 2009 price review. At that time our approach primarily involved consulting with stakeholders on our overall methodology at the review and on the draft determination. The steps we took in this regard are summarised below:

- We consulted stakeholders, including customers and their representatives, on the approach we proposed to take.
- Scottish Water and the former customer representative body, WWS, conducted research into customer priorities⁹.
- Scottish Water prepared its business plan, incorporating the results of the customer research, then submitted the plan to us.
- We held stakeholder workshops in order to explain our current thinking and seek views ahead of the draft determination.
- We published our draft determination for consultation. Stakeholders, including customers, were invited to respond.
- We considered these responses in coming to our final decisions.

Although we made efforts to involve customers the process was not as effective as it might have been. The stakeholder workshops that we held tended to be technical in nature and were prepared primarily with water industry specialists in mind (rather than customers or their representatives). It was therefore difficult for customers and their representatives to respond in any meaningful way.

Similarly, although we tried to ensure that our consultation documents were written in plain English, the proposals and choices had little real relevance to most customers. We were asking customers to comment yet it was not clear how decisions would impact on their services or charges.

9. Under the Public Services Reform (Scotland) Act 2010, in August 2011 the consumer advocacy and policy work of Waterwatch Scotland was transferred to Consumer Focus Scotland while the Scottish Public Services Ombudsman took over responsibility for customer complaints.

At the last review there was also a problem in relation to the involvement of the customer representative body, WWS. This stemmed from the fact that its remit included a number of different responsibilities: government policy; second-tier complaints¹⁰; and customer priorities in price review matters. It was sometimes difficult for WWS to separate out each of its three distinct functions when interacting with us, particularly when there was scope for some conflicting priorities.

As a result some of its representations concerned areas of government policy that crowded out the more general customer priorities and which, in any case, we could not address (as policy was not within our remit). Since the last price review WWS has been disbanded, and its functions have been transferred to other bodies under the Public Services Reform (Scotland) Act 2010:

- CFS is now responsible for customer advocacy on areas of government policy across all aspects of the Scottish water industry; and
- second-tier complaints now come under the remit of the Scottish Public Services Ombudsman (SPSO).

Customer engagement elsewhere

When thinking about how best to engage customers in the price review process we drew on the work of the leading regulatory economist Professor Stephen Littlechild. Professor Littlechild was responsible for developing the principles that underpin the price-cap (RPI-X) model which remains the basis of most of the economic regulation of the monopoly companies in the UK. One of the attractions of this model was that it was seen as a simple, light touch way to regulate monopolies, especially when compared with approaches to monopoly regulation in the US at the time¹¹.

Professor Littlechild recently reviewed the model. He acknowledged that, while RPI-X regulation had delivered good results for customers, it was no longer as simple or as 'light handed' as originally envisaged. Professor Littlechild identified a number of other limitations including that:

- customers have become marginalised, with regulators approving service improvements without being fully aware of customer preferences; and
- innovation on the part of the company is discouraged, as regulators have become increasingly prescriptive about investment priorities and how improvements should be delivered.

Professor Littlechild and others researched models elsewhere and found that negotiated settlements, which are popular in the US, Canada and Australia, could have practical applications in the UK. These are agreements between monopolies and their customers on what is an appropriate charge and level of service. A third party, such as a regulator or price commission, is in place to help facilitate the agreement or provide arbitration in the event that no agreement can be reached. According to the research, negotiated settlements can:

- bring customers into the price review process, which in itself leads to other benefits;
- reduce unnecessary bureaucracy and increase flexibility, and allow outcomes that would not otherwise be possible;

10. Second-tier complaints, in this case, were complaints referred to WWS. This would happen if a customer were unhappy with the outcome of the original complaint made to Scottish Water. WWS would decide whether to investigate the complaint further on the customer's behalf.

11. Littlechild S. (2011), 'Regulation, customer protection and customer engagement', available at <http://www.econ.cam.ac.uk/dae/repec/cam/pdf/cwpe1142.pdf>.

- encourage innovation on the part of the company; and
- deliver value for money for customers.

In the light of these features, Professor Littlechild has recommended the introduction of negotiated settlements to the UK regulatory framework, to sit alongside the principles underpinning RPI-X regulation.

At the same time, other UK regulators have moved towards increasing the role of customers in the price review process. The Civil Aviation Authority (CAA) has made the greatest strides in this regard by introducing a process of constructive engagement between airports and airlines. This approach has had positive overall outcomes for the Heathrow and Gatwick airport price controls. The Competition Commission saw merits in the approach, concluding that it should become a permanent feature of a price review¹². The CAA adopted a similar and further refined process in relation to its setting charges for NATS, the air traffic control organisation.

Ofgem, the economic regulator for the energy industry, has adopted a model of 'enhanced engagement' in which it seeks customers' views on areas of the price control¹³. However, it has stopped short of allowing customers to decide on areas of the price control as it considers that customer representatives would be unwilling and unable to reflect adequately the interests of current and future customers¹⁴.

Learning points for customer engagement

When considering arrangements in Scotland for future price reviews we took account of a number of useful learning points from customer engagement elsewhere:

- **Customers need the incentive to participate.** Customers may not put full effort into negotiations if the economic regulator is likely to ignore the agreement reached and issue its own determination. If customers understand that the outcomes they negotiate will be respected then participation becomes an attractive prospect.
- **Areas of engagement should not be set in stone.** The economic regulator should allow flexibility in the way issues of engagement evolve. The danger otherwise is that the regulator prescribes too narrow or too broad a set of issues for engagement. (It goes without saying that to avoid duplication of effort this freedom to evolve is constrained by reference to the remits of other statutory bodies.)
- **The regulator has a significant role in the process.** A key principle of the approach to negotiated settlements is to "shift the emphasis of regulation (to a greater or lesser degree), not to abandon regulation"¹⁵. The regulator has an important role in facilitating the engagement in order to help the company and its customers reach agreement and, if agreement cannot be reached, in setting price limits.

12. The CAA took these reflections on board for the NATS price control and encouraged customers to take an overall view on the package proposed by NATS, Littlechild (2011).

13. Ofgem has a consumer challenge group that includes organisations that are in place to represent consumers' interests on regulatory policy decisions. It also has a Consumer First panel (a panel of 100 customers from across GB) that discusses key energy-related issues.

14. Littlechild S., (2011), 'Regulation, customer protection and customer engagement', available at <http://www.econ.cam.ac.uk/dae/repec/cam/pdf/cwpe1142.pdf>.

15. Littlechild S., (2010), 'A customer consultation process for the water and sewerage sectors - a paper for Ofwat'.

- **Respect the roles and responsibilities of the organisations involved.** In Scotland, final decisions and responsibility in a legal sense will always remain with us as the economic regulator¹⁶. However, if agreement can be reached by the parties, this would be our preferred outcome.
- **Ensure that the interests of all parties, including government, are taken into account in the engagement.** In order to make sure this happens, the process of constructive engagement should be adapted for the overall policy framework that underpins the price review process.

These learning points helped us define what we mean by engaging customers.

Why it is important that customers are engaged

As we discussed in the previous chapter, if Scottish Water is to own its decisions and be fully accountable to customers then it must have a direct relationship with them. This can best be achieved if Scottish Water prepares its business plan in close dialogue with its customers and if price limits are based on an agreement reached between them and Scottish Water through an iterative process.

There are other reasons why customers should be fully involved in the price review process. Improvements to comply with legislation represent a significant proportion of their bills, so it is important that customers are involved in decisions about these improvements.

Although customers cannot challenge a legal outcome itself (for example, to increase the quality of drinking water in a particular area), they still have a role to play. In particular, they will want assurance that Scottish Water has challenged the quality regulators appropriately on the inclusion of the outcome in Ministers' objectives. In other words, customers will want to be sure that the improvement is indeed mandatory.

Similarly, customers may in some instances have a view on when the outcome is delivered and the solution that is being adopted. Our new approach should enable customers to understand fully why an improvement is necessary and will be reassured that Scottish Water, in discussions with the quality regulators, is delivering the improvement in the most cost-efficient and sustainable ways.

There could be a number of adverse consequences if customers are not fully engaged with decisions and do not understand why further improvements are necessary.

- They may become increasingly frustrated by the water industry, especially if bills are increasing by inflation or more than inflation at a time when average household incomes are falling, unchanged or even increasing (although at a lower rate).
- Pressure on the company or the Scottish Government, as owner, to respond may lead to short-term actions that are not in the long-term interests of customers. These may include reducing expenditure on maintaining the assets. Over time this is likely to lead to deterioration in the service customers receive with, for example, a larger number of interruptions to supply.
- There may be a temptation to delay the improvements needed to comply with legal standards, bringing a greater risk of infraction and financial penalty.

16. Littlechild S., *ibid.*

Customer engagement should, in theory, allow customers to understand why the improvements required by national and international legislation are necessary and how these align with customers' priorities. It should also let them influence how and when the improvements are made. As a result, their perception of the value for money that is being provided should improve, with the water and sewerage company continuing to have legitimacy in customers' eyes.

It should be noted, of course, that compliance with national and international legislation is not optional. However, there will be scope for discussion about, for example, the scope and efficacy of approach set out in Scottish Water's Service Improvement Reports and, in certain circumstances, the timing of delivery. The Customer Forum might also wish to explore the scope for delivering enhanced or additional objectives while remaining within the principles of charging and the financial tramlines.

The need for a new customer representative body

A key aspect of our discussions about how best to engage customers concerned the nature and role of the customer representative body.

After detailed consideration we decided that CFS would not necessarily be best placed to fulfil this role. Within the water industry, CFS is responsible for representing customers on broad areas of government policy, for example challenging the status-quo or representing the views of a particular class of customer with regard to all aspects of government policy for the Scottish water industry.

The role of representing customer priorities in the price review process is different. It involves accepting the policy decisions of government and looking to secure the best deal for customers with respect to those policy decisions. It could be difficult for one organisation to fulfil both roles, as this could lead to potential conflicts of interest. Setting up the Customer Forum was an innovative attempt to provide a solution to this potential conflict of interest.

Some may consider that the economic regulator is best placed to represent customers in the price review process. Indeed, our role is to promote the interests of customers in the price review through determining the 'lowest reasonable overall cost' of delivering the improvements required by Ministers. Some may consider the customer interest is best served by keeping prices as low as possible. But it is equally in the customer interest that Scottish Water is sustainably financed and has appropriate incentives to outperform.

It may also be in customers' interests to implement initiatives that may have a high upfront cost, and are expensive when looked at over the regulatory control period, but deliver considerable savings in the long run. These are just some of the considerations and areas of judgment that are accounted for by the 'reasonable' in 'lowest reasonable overall cost'.

But customers are best placed to make such judgements and agree what they consider as 'reasonable'. Our role should be to help them understand the 'lowest overall cost' in a particular area or for a particular initiative, while making sure that broader objectives (for example, that Scottish Water continues to be financed sustainably) are met.

As the Customer Forum's input will be in aspects of the Strategic Review that were previously undertaken by the Commission, the Forum is essentially helping the Commission to fulfil its statutory duty in a way that will be much more transparent and accountable. The Customer Forum will not be duplicating or overlapping the role of any other organisation, including CFS, and CFS will continue to fulfil its statutory duties in relation to the price setting process.

What will success look like?

The new arrangements will be a success if Scottish Water and the customer counterparty are ultimately able to agree on the price limits to apply over the regulatory control period, the overall levels of service, and the improvements to be made over the period. Other key indicators of success are as follows:

- It is clear that the customer counterparty has done its preparation ahead of the negotiations.
- The customer counterparty has a clear negotiating position at the beginning of the process – the position reflects the synthesised views of customers (as a whole).
- Any material differences in Scottish Water's position and that of the customer counterparty are resolved by our facilitation of the negotiation – allowing agreement to be reached.
- Customer engagement becomes an ongoing feature of Scottish Water's regulation and is subject to continuous improvement review to maximise efficiency and impact.

What we are taking out of the current regime

As outlined in the previous chapter, we are removing ourselves from the relationship between Scottish Water and its customers so that Scottish Water is fully accountable for its decisions and customers are fully involved in decisions.

We will remove the elements of the process whereby we, in effect, rewrote Scottish Water's business plan when issuing our draft determination. This 'interference' reduced Scottish Water's ownership of its plan and got in the way of full customer participation. There was little incentive for customers to try to understand the choices available then make decisions if we as economic regulator could simply disregard the outcome of the engagement and set the price limits we thought should apply.

What we are putting in its place

A new customer representative body

Recognising that customer engagement is a specialist area we sought to benefit from experience elsewhere and looked at a number of different models. These included Ofgem's Consumer Challenge Group, the tri-partite process introduced at the 2009 price review in England and Wales, the engagement process administered by the CAA, and the negotiated settlements that are used in utility regulation in the United States, Canada and Australia.

We also discussed models with Professor Stephen Littlechild, with a particular focus on the use of negotiated settlements.

We then discussed possible approaches to customer engagement with a stakeholder group that included CFS, Scottish Water, the Scottish Government and the quality regulators over a series of meetings.

The group concluded that a forum of individuals to include representatives of household and non-household customers would be an effective counterparty to Scottish Water. The individuals on the Customer Forum are expected to represent the interests of household and non-household customers, not the organisations that have appointed them. This is a similar role to that of the individuals who are part of Ofgem's Consumer Challenge Group.

The role and remit of the Customer Forum, however, goes one stage further. It is able to reach agreement on areas of price setting rather than simply providing advice to us (as is the case in the energy industry) or agreeing on a single aspect, such as the improvements to be delivered, without having oversight of the overall impact on price levels (as is the case in the airlines industry).

The discussions resulted in the decision to establish an independent customer representative body. This process was managed jointly by Scottish Water¹⁷, CFS and the Commission, through a cooperation agreement that set out the constitution and governance of the Forum and the roles and responsibilities of each of its founding members¹⁸.

The Customer Forum was established in November 2011. It is an independent entity that is responsible for identifying and understanding (with Scottish Water) customers' priorities and seeking to get the best outcome for customers.

The Forum's role is different from that of CFS, the organisation responsible for representing customers on broad areas of policy. By way of illustration, CFS would represent customers on the broad policy decisions made by Ministers in the principles of charging and objectives. By contrast, the Customer Forum would take these principles as given and seek to agree, with Scottish Water, the best package for customers within the broad policy framework set out by Ministers. CFS continues to have the opportunity to give its views on the draft determination, and all parties will be required to take these views into account in coming to a final answer.

The Customer Forum has an independent Chair, who was appointed following an open and transparent recruitment process led by CFS. The process was in line with best practice for the public sector. The interview panel was independently chaired by a recently retired senior civil servant and included CFS, Scottish Water, the Commission and an independent member. The appointment could only be made with the agreement of all parties.

In September 2011, Peter Peacock (former MSP and Minister in the Scottish Government) was appointed as the Chair of the Customer Forum.

17. Scottish Water's role was limited to the setting up of the Customer Forum. It has no role in the day-to-day operation of the Customer Forum.

18. The cooperation agreement between Scottish Water, the Commission and the National Consumer Council (now part of Consumer Focus) is available at: <http://www.watercommission.co.uk/UserFiles/Documents/11102011%20-%20Cooperation%20agreement%20WICS%20SW%20CF.pdf>

The Customer Forum includes eight other members:

- five nominated by CFS;
- one nominated by each of the two largest retailers (Business Stream and Osprey Water¹⁹); and
- one nominated by the Scottish Council of Development and Industry.

All members of the Customer Forum engage with Scottish Water. But only a sub-set of three members (the Chair and two other members) are responsible for engaging with Scottish Water after Scottish Water has submitted its draft business plan.

The members of the Customer Forum will provide the engagement team with the remit of an acceptable agreement. The engagement team will then need unanimously to agree a package with Scottish Water that is consistent with this remit. If they are unable to do so, the team will return to the Customer Forum for further guidance and approval.

The Customer Forum is empowered to negotiate and reach agreement on areas of price setting by engaging directly with Scottish Water, as distinct from simply providing advice to us. The Commission set out a remit for the Customer Forum. If Scottish Water and the Customer Forum propose a package that meets the expectations of the broader customer base (and there is strong evidence to support this) then it would not seem credible for us to overrule the package. The only exception would be if there is evidence that the Customer Forum has come to a view that is inconsistent with the Commission's statutory duties or does not meet the objectives set by Ministers.

Through direct engagement with Scottish Water, the Customer Forum will set out to agree the draft business plan. The Customer Forum may also have a view on how outperformance is measured and used to the benefit of customers in the financial tramlines.

In such an event, the agreement between Scottish Water and the Customer Forum would form the basis for the draft determination, on which we would then seek representations. The draft determination is likely to be in the form of a letter to stakeholders accompanying the agreement. The letter would draw out the areas of agreement and invite all stakeholders to provide their views.

A new engagement process

In addition to the establishment of the Customer Forum a number of other changes have been put in place to facilitate dialogue between Scottish Water and the Forum.

Our role will be to level the playing field, as far as possible, in negotiations between Scottish Water and the Forum. This will involve us commenting objectively on proposals that Scottish Water puts forward and on the expectations of the Forum.

In addition, much more time has been allowed at an early stage of the price setting process for engagement between Scottish Water and the Forum.

19. Business Stream and Osprey Water were the two largest retailers at the time the appointments were made (June 2011).

As a first stage, we will provide general reflections on the material assumptions likely to underpin price limits. This will include initial indicative ranges where appropriate, to provide the 'playing field' for engagement.

Scottish Water and the Customer Forum will then enter into close dialogue on customer priorities ahead of the publication of the draft strategic vision and final strategic vision and business plan.

The business plan will cover the initial period of the strategic vision (ie the length of the regulatory control period). Scottish Water would be expected to update its 25-year plan at each regulatory control period. As discussed in the previous chapter, the business plan is expected to be a simple document that is accessible to customers. The business plan would then be the starting point for engagement between Scottish Water and the Customer Forum.

We expect the process whereby Scottish Water agrees its business plan to be an iterative process. Scottish Water is currently producing its initial draft business plan and we envisage that this plan will be developed during the course of the Strategic Review process. The draft business plan would only be 'final' after the completion of the Strategic Review process.

We would comment on whether the outcomes are sufficiently well defined and can be monitored objectively, and whether the draft business plan represents value for money (in other words, the strengths and weaknesses of the plan).

The Customer Forum will be able to ask any questions that arise during its discussions with Scottish Water ahead of the business plan and during the engagement. For example, it may want an opinion on Scottish Water's proposed scope for future efficiency improvements. The Customer Forum will also be able to request technical assistance from the independent assessor or from another third party expert.

Scottish Water and the Customer Forum will be able to agree on the discretionary improvements to levels of service to customers (for example, those improvements that are not needed to be made to meet legally required standards such as sewer flooding and water pressure). The Forum will also engage on other aspects relating to the levels of service provided to customers (such as expectations on the OPA).

Subject to ensuring consistency with government policy (which in itself will have taken account of earlier representations from CFS), the Customer Forum will be able to comment on all other areas of the price review, including how and when the improvements to comply with national and international required standards are met. In this regard, the Commission and the quality regulators will join the Customer Forum and Scottish Water to form a quinti-partite group to discuss these improvements. This group will allow the Customer Forum to draw on the expertise of the quality regulators in understanding the statutory requirements placed on Scottish Water (through the ministerial objectives) in coming to its overall view on the acceptable level of price limits.

A new timetable

We have changed the timetable for setting price limits to allow much more time for full customer engagement at the start of the process. The timetable is set out on page 37.

Opportunities for consultation

It should be noted that there will be an ongoing opportunity for consultation at the next price review (as opposed to the customer engagement outlined above), in the following ways:

- The Customer Forum may consult with different groups of customers, including customers in different areas of Scotland, on their priorities in order to reach a synthesised view for engagement with Scottish Water.
- Scottish Water will consult on how it plans to achieve the outcomes it has been set. As well as the requirement to consult with key stakeholders such as SEPA and the DWQR there will be the opportunity for a wider range of groups such as the RSPB and NFU to provide their views.
- Those who have not been directly involved in the engagement will have an opportunity to provide their views on the draft determination (which is expected to reflect the agreement reached between Scottish Water and the Customer Forum).

This opportunity for wider consultation should allow a wider range of more informed participants, or participants with a specialist interest, to provide their views on the agreement negotiated between Scottish Water and the Customer Forum. Such views are important, but must not take precedence over those of the generality of customers.

Overview of the Strategic Review process

When	Description
September 2011	<p>The Commission, CFS, Scottish Water and the Scottish Government establish the Customer Forum (now complete)</p> <p>Scottish Water and the Customer Forum should engage in the Strategic Review process at an early stage. This will ensure that customers' interests are taken into account by Scottish Water as it develops its strategic vision and business plan.</p>
June - September 2012	<p>Scottish Government issues draft principles of charging and objectives (now complete)</p> <p>The Scottish Government consults on its broad investment objectives for the industry and the principles of charges in 'Investing in and paying for your water services from 2015'.</p>
October - November 2012	<p>The Commission provides a preliminary view on regulatory inputs (now complete)</p> <p>The regulatory inputs will include, for example: levels of cash expenditure; our expectations for future efficiency savings; our expectations for levels of service; and the financial tramline parameters.</p> <p>The preliminary view may take the form of general reflections to help guide the discussions between Scottish Water and the Customer Forum ahead of the business plan. The Commission would issue these reflections over a period of time following joint working with Scottish Water.</p>
November 2012	<p>Scottish Water issues its draft 25-year strategic vision (now complete)</p> <p>The strategic vision should include Scottish Water's views on what are acceptable levels of price and service and on the key regulatory inputs. Following discussions with the Customer Forum, Scottish Water would provide an analysis of the priority to be given to improvements in customer service. It would also set out its longer term ambitions for customer service and a transition plan detailing the resources and time necessary to deliver these.</p>

When	Description
February 2013	<p>Scottish Government, the Commission, Customer Forum, SEPA and the DWQR and all other interested stakeholders provide comment on Scottish Water’s 25-year strategic vision (now complete)</p> <p>During this period comments would be welcome from all interested stakeholders. Scottish Water will hold bilateral meetings with SEPA and the DWQR during this period and throughout the business plan development process to ensure that the statutory requirements set out in the ministerial objectives are met.</p>
October 2013	<p>Scottish Water issues final strategic vision and draft business plan</p> <p>The draft business plan should be presented as Scottish Water’s initial view on how best to proceed. It should deal with two aspects:</p> <ul style="list-style-type: none"> • The first should cover baseline levels of service (with an assumption that current levels of service and expenditure is a reasonable starting point) and statutory investment requirements. • The second should cover discretionary customer service improvements identified by Scottish Water and the Customer Forum (and based on the engagement process). <p>The draft business plan should also highlight any opportunities for innovation or for approaches that will require a higher return to implement, but are good value to customers.</p>
December 2013 - March 2014	<p>The Commission issues discussion papers</p> <p>These papers would cover aspects of Scottish Water’s draft business plan and would inform engagement between Scottish Water and the Customer Forum and the quinti-partite meetings between the Commission, Scottish Water, SEPA, the DWQR and customers.</p>

When	Description
December 2013	<p>The Commission, Scottish Water, the Customer Forum, SEPA and the DWQR start tri (quinti)-partite meetings</p> <p>Scottish Water, the Commission and the Customer Forum would participate in tri-partite meetings covering the first aspect of Scottish Water’s draft business plan. This is the section covering the cost of delivering baseline levels of service. There would be further meetings on the delivery of the statutory investment requirements that would involve the DWQR and SEPA.</p> <p>The meetings would not seek to question the required outcome but could consider, for example, the scope and efficacy of approach set out in the draft business plan and, in certain circumstances, the timing of delivery. They could also explore the scope for delivering enhanced or additional objectives while remaining within the principles of charging and the financial tramlines.</p> <p>Proposals to adopt innovative or longer term pay-back options would be discussed and agreed. The Commission would comment in a discussion paper on the approach taken by Scottish Water in realising the potential benefits of this change to the regulatory framework.</p>
December 2013	<p>Scottish Water and the Customer Forum start customer engagement</p> <p>Scottish Water and the Customer Forum would participate in discussions on the second aspect of Scottish Water’s draft business plan. At this stage, Scottish Water and the Customer Forum would finalise the level of resources as set out in the draft plan.</p> <p>Scottish Water and the Customer Forum will then provide further definition around the broad areas for customer improvements based on the customer research and the analysis of the gap between the current level of service across the country and the agreed targeted level of service. This should include both parties agreeing on the criteria for prioritisation of investment and the phasing of outcomes.</p> <p>The agreed draft business plan should be fully consistent with ministerial draft objectives and with the ranges the Commission has set out, unless there are demonstrable reasons for going outside those ranges to the benefit of customers. The Customer Forum may also wish to seek the views of the quality regulators on the impacts of Scottish Water’s proposals on customers and to agree with Scottish Water the scope for delivering enhanced or additional objectives.</p>

When	Description
March 2014	<p>The Commission, Scottish Water, the Customer Forum, SEPA and the DWQR end tri (quintil)-partite meetings and customer engagement</p> <p>At the end of this process, the Customer Forum and Scottish Water would jointly prepare a document that sets out the areas on which they had agreed and any remaining issues of difference. The Customer Forum and Scottish Water may choose either jointly or separately to set out why they have not been able to agree on a way forward. The Commission would take this/these document(s) into consideration in reaching its initial conclusions in its draft determination.</p>
April 2014	<p>The Commission publishes draft determination for consultation</p> <p>The Commission sets out its preliminary view of the price profile consistent with the lowest reasonable overall cost of delivering baseline levels of service, the statutory investment requirements, financially sustainable innovations and initiatives, and discretionary improvements to customer service.</p> <p>This draft determination will take the form of a letter that accompanies the agreement on the business plan between Scottish Water and the Customer Forum. In the event that there is no agreement, the Commission would publish its own view, based on the information provided in the letters from the Forum and from Scottish Water, Scottish Water’s provisionally agreed business plan and all of the Commission’s earlier comments during the Strategic Review.</p>
June 2014	<p>Scottish Government, Scottish Water, the Customer Forum and all other interested stakeholders provide representations on the draft determination</p> <p>During this period representations would be welcome from all interested stakeholders.</p>
June 2014	<p>Scottish Government publishes final objectives, principles of charging and technical expression</p> <p>Ministers decide on final objectives and principles of charging for the industry. In finalising the objectives, Ministers may wish to take account of the scope for delivering enhanced or additional objectives as identified through discussion between Scottish Water and the Customer Forum.</p>

When	Description
November 2014	<p>The Commission publishes final determination</p> <p>The Commission sets out its final view on the price profile consistent with the lowest reasonable overall cost of delivering baseline levels of service, the statutory investment requirements, financially sustainable innovations and initiatives, and discretionary improvements to customer service. This final determination will take the form of a letter that accompanies the agreement on the business plan between Scottish Water and the Customer Forum.</p> <p>In the event that there is no agreement, we would publish our own view, based on the information provided in the letters from the Forum and from Scottish Water, Scottish Water's business plan, the view of stakeholders and our work carried out during the Strategic Review.</p>
January 2015	<p>Scottish Water decides whether or not to accept final determination</p> <p>Scottish Water decides whether or not to accept the final determination or to require the Commission to refer the determination to the Competition Commission.</p>
March 2015	<p>Scottish Water publishes its delivery plan</p>

Chapter 3: Appraising alternatives

The previous chapter discussed how customers will be involved in decisions about investment priorities. This chapter explains why it is important that Scottish Water is able to consider and assess all viable, alternative and/or innovative investment options, and the elements of the process that are being changed to allow this to happen.

The chapter begins with an overview of the framework by which investment priorities are currently decided and financed in price limits.

Overview of current framework

As Chapter 1 explained, there is an established framework in place to determine the improvements that are necessary in order to meet national and international standards. Focusing on the part of the framework that relates to future investment priorities, this is as follows:

- We advise Ministers on a range for the size of the capital investment programme that is affordable and could be delivered efficiently by Scottish Water.
- Scottish Water, the quality regulators and other stakeholders advise Ministers on the improvements needed to meet national and international required standards.
- Ministers set draft objectives for the next price control period based on the advice they have received.
- Scottish Water prepares a business plan to outline what it would do to deliver Ministers' objectives, how much this would cost, and the resulting impacts on charges.
- We scrutinise the improvements proposed in the plan to make sure they represent value for money by:
 - reviewing the scope of the solutions proposed by Scottish Water; and
 - scrutinising the efficiency with which Scottish Water proposes to deliver those solutions.
- We issue our draft determination for consultation.
- The Scottish Ministers finalise their objectives.
- The Commission, based on representations received, issues its final determination.
- The improvements set out in the final determination are included in a technical expression – a project by project list of improvements Scottish Water has to deliver in the period.

Features of the current regulatory framework provide a number of 'carrots and sticks' that have encouraged Scottish Water to address two main challenges over the last ten years:

- To reduce costs and improve the levels of service provided to customers, so that both are brought into line with the levels achieved by the leading water companies in England and Wales.
- To deliver the most pressing improvements in the quality of the water environment and the quality of drinking water.

This chapter focuses on the features in place to encourage Scottish Water to meet the second challenge, although the approach we take in relation to the first challenge does have an indirect impact on how improvements are made.

Over the past decade the industry in both Scotland and in England and Wales has generally adopted a capital investment approach to meet the required improvements. There are a number of reasons why capital investment has dominated. Some relate to the nature of the problems that need to be resolved, some relate to the regulatory framework, while others relate to the predominant culture, which has both an engineering bias and is risk-averse. In many ways the features of the regulatory framework have contributed to this culture.

Bias in favour of capital in the current regulatory framework

A number of features of the current framework were specifically designed to encourage the water companies to invest in capital solutions. Capital was seen as the best way for a company to meet the standards required (delivering both higher drinking water quality and a better quality water environment) in the shortest timeframe possible.

When Scottish Water was established in 2002, it also needed this single-minded focus on delivery. So we adopted the framework from England and Wales and developed it with this in mind.

The fixed-term investment cycles tied to the regulatory control period had a number of useful properties. They provided clarity on what was to be delivered, provided a firm deadline for delivery, and set out the resources available to the company to finance the improvements.

We also included within the framework a 'technical expression'. This is a list of all of the improvements to be delivered (and that were financed in the Strategic Review of Charges), as well as a date for delivery.

The current framework suits capital-based solutions as it is easier to monitor the delivery, and success, of capital projects than operational solutions (which may be successful one year, but not the next).

In England and Wales, the way that companies are remunerated also leads them to invest in capital-based solutions. Companies earn a return (that is, a weighted average cost of capital, WACC) on their regulatory capital value (RCV)²⁰. All of the capital that is invested is added to the RCV, so companies earn more profit by investing in capital solutions. The RCV and WACC approach was introduced to provide companies with the financial incentive to invest in capital at a time when significant investment was needed. Capital solutions became the norm. When the time came for Scottish Water to deliver the improvements the companies in England and Wales were making, there was a natural tendency to use the capital solutions that had been shown to work south of the border.

The benchmarking tools that were used to identify the scope for operating cost reductions also had an unintended consequence, as they relied on comparisons of the companies' operating costs. A company could be penalised for adopting an operating cost solution, because it would appear inefficient by comparison with its peers. The company would then be subject to an additional efficiency challenge when prices were next set. The outcome of this bias was that operating-based solutions, or solutions with a high percentage of operating costs, were likely to be disregarded.

20. The product of the WACC and the RCV is broadly the profit before interest and taxes of a water company.

The regulatory framework that was put in place sought to encourage delivery and to minimise the risk of failure. This was appropriate as the focus was on delivering the required improvements as soon as possible. However, the consequence has been that longer-term and untried approaches have been discouraged.

For example, under the current framework, an output that may best have been delivered over an eight-year period could be artificially divided into discrete outputs of shorter term duration to fit in better with the length of the investment cycle and regulatory control period. Such a move may lead to losses in cost efficiencies (in strategic planning, procurement and delivery, for example) and other adverse consequences (the improvement may not be made as the projects are not as well integrated as expected, for example). This is clearly undesirable from a customer perspective – but it is also not the best approach to improving our environment or public health.

Water industry assets, including sewers, water mains, treatment works and reservoirs have long asset lives. It therefore makes sense to adopt a long-term approach when adding to or improving these assets. Yet the features outlined above have led to a tendency to favour capital-based solutions and a short-term approach. These tendencies have combined with a cultural bias that already exists in the industry which is to favour capital solutions. This is reinforced by the fact that the water industry is also risk-averse and closely regulated. This is understandable given the industry's potential impact on public health and the legal consequences for those who are responsible.

An example of the need for a long-term approach is the investment that is required to resolve Glasgow's drainage. Improving the drainage in Glasgow is important to the future of those who live in and around the city. The Metropolitan Glasgow Strategic Drainage Plan identified a clear set of improvements that will need to be delivered over the next 15 years or so. These improvements do not fit neatly into regulatory control periods. The Commission has expressed its willingness to ensure that the funding for these improvements will be available when it is required so that the optimal solution for Glasgow can be delivered. This also has the beneficial impact of minimising the costs of these improvements for the charge payers of Scottish Water. The key is to agree the overall funding envelope and fit improvements across Scotland into that envelope in the most efficient way, taking account of the Scottish Government's priorities.

Limitations of the current approach

The water industry faces a number of challenges that now have to be taken into consideration when deciding on the most appropriate solution to deliver each improvement. These include:

- the need to mitigate and adapt to the potential impacts of climate change; and
- the longer term, and less certain nature of future priorities.

Carbon mitigation and adapting to the potential impacts of climate change

The carbon impact of particular improvements is becoming an important consideration for Scottish Water. The Scottish Government has committed, through the Climate Change Scotland Act 2009, to reducing Scotland's carbon emissions by 42% by 2020 and by 80% by 2050. Scottish Water is a major user of energy, so will have a role to play in supporting (and being seen to be supporting) the achievement of these targets.

Scottish Water generates carbon from building capital solutions, including the carbon generated from the production of the raw material used (embedded carbon), then operating the assets, eg higher energy use etc. If Scottish Water is to reduce, or at least not increase, its carbon emissions then it is likely to have to consider other, non-capital based approaches for achieving improvements.

Scottish Water will also have to adapt to the potential implications of climate change. Although these are uncertain, they are likely to include incidents of extreme and unpredictable weather. The company must be able to cope in such conditions, as customers will not, by and large, tolerate interruptions to supplies of a service that they consider essential. Resilience in service delivery – both in water and waste water activities – is critical.

Scottish Water therefore has to ensure that its pipes and assets can cope in the full range of weather conditions that may be experienced. This may involve managing its pipes and assets in a different way. So, to prepare for heavy rainfall and risk of flooding, Scottish Water may opt to encourage customers to reduce the volume of rainwater that drains from their properties and into the sewerage system (from rainwater harvesting etc) rather than increasing the capacity of sewers. Scottish Water should be free to consider the full range of options in deciding how best to respond to the potential challenges posed by climate change.

Less certain and longer-term priorities

When Scottish Water was established in 2002, the most pressing priorities for investment were well understood. This meant that the process of defining priorities for the full regulatory control period worked well. The priorities were to achieve higher standards in the quality of drinking water and to improve the quality of the water environment. Looking ahead, however, there may be less certainty about the needs and the most cost-effective solutions to meet these needs. Scottish Water has therefore developed an approach with the quality regulators the DWQR and SEPA to study the improvement need in one period, and then make the improvement in the next period.

With such uncertainty about the improvements and solutions that may be required, the rationale for setting firm investment priorities for the full regulatory period becomes less clear.

We previously outlined the impact that artificial regulatory deadlines could have on efficiency. Uncertainty on what needs to be delivered can have a similar effect. Some improvements would be better defined over time and could likely be delivered more effectively over a longer period of time than the current regulatory control period. In these cases it does not make sense to segment the improvements into smaller projects, simply to fit the length of the regulatory control period. Such a move may lead to loss in the efficiencies that are possible.

The company may also identify opportunities for an upfront investment that has the potential to reduce costs in future years. Unless this investment can be added to the RCV, under the current regulatory arrangements such initiatives would only be implemented if the savings paid back the upfront cost within the regulatory control period. This, de facto, rules out operating cost solutions, which achieve pay back after the end of a regulatory control period. Otherwise the company would risk having the economic regulator pass the cost savings through to customers prematurely, ie before the cost savings had paid back the upfront cost, when prices are reset. This means that under the current regime long-term payback initiatives are less likely to be implemented.

Moreover, under the current framework there is a disincentive to implement any operating cost initiative (or even a capital investment solution) to save money if its marginal risk is higher than the allowed-for cost of capital. And this applies even if the NPV (even including the costs of remunerating any extra risk) is substantially positive.

What we are removing from the current framework

Bias towards capital expenditure

We will remove features of the current regulatory framework that have led the industry to favour capital solutions over alternatives including operating solutions. The aim is for Scottish Water to be neutral towards the range of options available to it, without regulatory pressures influencing it to adopt a particular type of solution.

As such we will no longer regulate operating costs and capital expenditure separately. We will also rely less heavily on the models we used in the past to determine the scope for future operating cost efficiency. These worked well to address the gap in performance between Scottish Water and the leading companies in England and Wales. However, in our view, any gaps that remain are now too small from which to draw definitive conclusions. The models led to a bias against operating based solutions as any additional operating costs incurred would make Scottish Water appear less efficient in the models. Relying less heavily on the models should remove the bias against operating solutions.

Although an RCV exists for Scottish Water, we have not used it directly for the purposes of setting prices, as is the case in England and Wales. Originally in England and Wales the RCV was intended to encourage capital investment, and has been successful in this regard. However, it also gave rise to a bias towards capital-based solutions. For this reason, we do not intend to move further towards the RCV and WACC approach as the basis of price setting and remunerating Scottish Water. However, we will continue to track Scottish Water's RCV and ex-post return on capital so that we can continue to make comparisons with the companies south of the border.

The rigidity of the investment planning framework

We will remove features of the current framework that reduce Scottish Water's flexibility to deliver improvements in the most effective and efficient way and to respond appropriately to the most pressing improvements. As we explained above, the fixed term investment cycle and regulatory control period appear likely to be an impediment in these areas.

We want to maintain incentives for Scottish Water to deliver the improvements it said it would with the resources it has available. However, we do not think the investment planning framework should drive the way improvements are delivered. Enforcing fixed-term investment cycles seems likely to lead the company to divide a particular solution in a sub-optimal way or to fail to take a long-term view.

We also want to remove the features of the current regulatory framework that restrict Scottish Water's flexibility to respond to the most pressing priorities. In the current framework, Scottish Water 'locks in' its improvements for the full regulatory control period when price limits are set. The list of requirements is included in the technical expression. Although this approach gives Scottish Water certainty to plan, and customers and regulators the certainty of what will be addressed, the lack of flexibility may have a number of unintended consequences.

For example, it may mean that improvements are included in the business plan that are subsequently found to be less of a priority or not required. The company or the quality regulators may include them though because the next opportunity to do so is five or six years later. Yet it is not in the best interests of customers to include a project before the need for the solution is confirmed.

Scottish Water should have the certainty it needs to plan the delivery of the improvements required and flexibility to respond to the most pressing priorities for improvements as these arise – it should not have to wait until the next regulatory control period.

Focus on the short term

Scottish Water should also be able to plan how best to deliver the improvements required with an eye on the long term. The current investment cycle, tied to the regulatory control period, may encourage Scottish Water to focus on the improvements needed over that period rather than on longer term priorities²¹. This is because the initial savings would be passed to customers prematurely (before the accumulated savings had paid back the upfront cost) in the form of lower prices when price limits are next set. We want the cheapest overall solutions to be implemented (even when that may mean that reserves against future risks may need to be built up).

Lack of customer engagement

Customer engagement gives customers the opportunity to provide their views about how and when improvements are made. Customers may, for example, be prepared to trade-off factors such as the potential cost of a particular solution against the likelihood that it will succeed. It also gives Scottish Water the opportunity to propose new and bespoke solutions. As Chapter 2 explained, customers have now been empowered to provide their views in such areas.

What we are putting in its place

A focus on total cash expenditure

Operating and capital expenditure will be regulated together as total cash expenditure. It will then be for Scottish Water to decide how best to meet the improvements agreed with the Customer Forum and set out in the ministerial objectives within the cash expenditure it has available. Regulation based on total cash expenditure means that the bias in favour of capital-based solutions that resulted from benchmarking of operating expenditure has been removed. As a result, Scottish Water should be neutral to the full range of options available.

The new approach will allow Scottish Water, where agreed with the Customer Forum, to cover the costs associated with the occasional failure of a novel solution, while allowing for innovative solutions to be implemented where appropriate. We expand on how we would foresee such issues being handled below.

21. It should be noted, however, that the Quality and Standards process does aim to provide Scottish Water with the improvements required over a ten-year period (ie over two investment cycles).

Return on operating solutions and innovation

In the event that Scottish Water and the Customer Forum agree on an operating-based solution, Scottish Water will be able to earn a return appropriate for that solution – as agreed with the Customer Forum. The return should reflect the uncertainty of the solution, ie the risk the improvement will not deliver the required improvement. In such an event, the return should be sufficient to allow Scottish Water to respond with an alternative approach.

The approach to innovative solutions could follow a portfolio-based approach. As such it could be expected that the return earned is sufficient to correct the percentage of the projects in the portfolio that are expected to fail.

We have no concerns about Scottish Water's ability to earn a higher return for less certain initiatives. This is provided, of course, that Scottish Water demonstrates that the total cost of the solution (including the return) is lower than that of the next best alternative and the Customer Forum has agreed to the initiative.

Flexibility in investment planning

Scottish Water has developed an approach for investment planning and delivery that should provide it with the flexibility needed to plan improvements in the most efficient way.

Scottish Water's proposed approach involves moving towards a six-year regulatory control period with an investment plan that is fully specified for the initial three years and, where longer term outputs have been clearly established, sets these out for the remainder of the regulatory period and into future periods. The plan will then be updated on a three-yearly cycle in line with the outputs from study programmes, effectively allowing for a 'rolling' programme which is fully populated three years ahead. Scottish Water would be able to define as much (or as little) of the later stages of the programme as appropriate.

Scottish Water would then update its investment plan on a rolling three-year basis. At the end of year three, the investment priorities for years four to six would be confirmed, while the priorities for years seven to nine would be defined in as much detail as is possible or desirable.

The approach seeks to achieve an appropriate balance between the clarity Scottish Water needs to plan and deliver the improvements required, and the flexibility it needs to respond both to priorities as these arise and to changing investment requirements as they are understood from studies. This is achieved because Scottish Water always has at least three to six years' forward visibility of the improvements it is required to make.

A focus on the long term

Scottish Water will prepare a 25-year strategic vision document to set out the improvements it considers necessary over the medium to long term. The first six years of Scottish Water's strategic vision will be set out in more detail in the near-term business plan.

The 25-year strategic vision will provide a long-term outlook of the improvements required, so will allow Scottish Water to profile the improvements in a way that best meets the expectations of customers with regard to the acceptable profile of price limits. The Customer Forum may, for example, want Scottish Water to profile the improvements so as to avoid a step-change increase in charges when a large improvement is required in a particular year.

Promotion of long-term payback initiatives

Scottish Water may wish to undertake long-term initiatives that generate cash savings that more than offset the upfront cost of the initiative over a period of time.

Initiatives that have the agreement of the Customer Forum would be implemented and Scottish Water would retain the savings until the initiative had paid back the full cost of the upfront investment. Customers benefit from a reduction in Scottish Water's cost base that could feed through to lower bills or enhanced levels of service or improved financial strength when appropriate (ie once the savings from the initiative have paid back the upfront cost).

This could include opportunities for a large-scale programme to rationalise the configuration of Scottish Water's assets such as sewers, water mains, and treatment works, which tend to have long asset lives. Scottish Water may, for example, identify opportunities to reduce the number of water treatment works or increase the interconnection of its water mains. Such initiatives could allow the company to reduce costs and/or improve the resilience of its assets.

Customer engagement

The revised customer engagement process should allow Scottish Water to explore, then implement, alternative solutions. It provides opportunities for Scottish Water to present the full range of options to customers. Such options could show, for example, different trade-offs that need to be made with regard to the cost of a particular solution, the certainty that it will achieve the required improvement, and its carbon impact. The timeline for the price review allows sufficient opportunities for these discussions to take place.

The Customer Forum is key to encouraging Scottish Water to identify the full range of solutions available. In considering what may represent reasonable solutions, the Customer Forum may wish to explore bespoke solutions in the following areas:

- operating based solutions;
- long-term payback initiatives in which Scottish Water is able to retain the cost savings until the upfront cost of the investment has been paid back, including the cost of capital;
- initiatives that are better delivered over a longer period of time than the length of the investment cycle, for example improvements to Glasgow's drainage system; and
- innovative solutions that have not yet been tried in the UK water industry.

Innovative solutions by definition are likely to have higher risk attached to them, but may provide opportunities to reduce costs and/or improve services to customers at lower cost than alternatives. In our view, and as set out above, Scottish Water should bring forward opportunities for innovation as a portfolio of individual projects. The portfolio approach helps to reduce overall risk to Scottish Water as the risks of individual projects are likely to offset one another.

Scottish Water will be accountable to the Scottish Government, as its owner, to ensure that there is no overall increase in the risk of delivering Ministers' objectives. The company will also continue to answer to the Outputs Monitoring Group (comprising the Scottish Government, the quality regulators, CFS and the Commission) for the delivery of the required outcomes.

The revised approach should allow Scottish Water to appraise the full range of options available and agree the best option with the Customer Forum.

Further information on how the approach will work in practice

Total cash expenditure

We will set out an expectation, in the form of a broad range, of the total cash available to Scottish Water over the period based on a number of key inputs and on a range for financial ratios (consistent with the 'financial tramlines', which are explained in detail in Chapter 4). It will then be for Scottish Water to set out, in discussion with customers, the total cash it considers necessary over the period. Scottish Water and the Customer Forum will then discuss the broad allocation of those resources over the next 25 years in its strategic vision document.

Scottish Water and the Customer Forum will have a dialogue with SEPA and the DWQR on how best to deliver the improvements required to meet the mandatory requirement in the first six years of the 25-year period (including, for example, whether a capital or operating based solution is appropriate).

In demonstrating to the Customer Forum that its proposals are efficient, Scottish Water will have to show that the comparisons it has made have not resulted in any unintended bias against a particular type of solution. Our approach to making comparisons is likely to focus on total expenditure to avoid any bias against operating based solutions.

Secure financing for novel or innovative initiatives that entail greater risk

We expect that the Customer Forum and Scottish Water may agree that it is reasonable to ring-fence the financing of novel and innovative approaches to delivering services that might not work as intended or may cost more than was originally budgeted. This approach will reassure Scottish Water, the Scottish Government (as owner) and the quality regulators that the company has the cash resources to see projects through to completion. We consider this to be very much in the interests of customers – provided the Customer Forum agrees to the initiative and Scottish Water can demonstrate that the project would reduce overall costs to customers, allowing for a level of failure.

In both cases, the engagement with the Customer Forum is the key for such opportunities to be adopted. Again, it is important to note that the boundaries of any such engagement, namely the overall policy framework, will already have been established by the Scottish Ministers following consultation with other stakeholders.

Rolling investment review

In the 25-year strategic vision document, Scottish Water would set out, in broad terms, the financial resources it considers are necessary over the period. In the near-term business plan, covering the immediate six years of the regulatory control period, Scottish Water would provide further definition on the improvements required. The six-year regulatory control period would comprise an investment plan that is defined for over six years with needs identified as uncertain to be updated on a three-yearly cycle in line with study programmes. Scottish Water would be able to define as much (or as little) of the programme as appropriate. Scottish Water would define the improvements required, in close dialogue with the Customer Forum, in the level of definition it considered appropriate.

Scottish Water would define the investment programmes on a rolling basis, so that at the end of year three Scottish Water would be finalising the improvements required for the next three years and then defining the improvements required three years beyond that.

The approach ensures that Scottish Water always has at least three to six years of forward visibility for future improvements, and has sufficient flexibility to make the most pressing improvements as priorities change. It also allows Scottish Water to allocate financial resources over a longer period should a longer term approach be more appropriate.

Long-term payback initiatives

Scottish Water and the Customer Forum could agree to long-term payback initiatives such as a large-scale programme to rationalise the company's assets. In such a case, the savings that arise from the initiative would be ring-fenced for the period of time until the accumulated savings had paid back the upfront cost of the initial investment (including an appropriate return) on a net present value basis. This could apply, as discussed above, to both operating costs and capital expenditure initiatives.

The Customer Forum would play a key role in encouraging Scottish Water to consider all available alternatives. Engagement with the Forum allows Scottish Water to propose solutions that may not have been possible in the past. It can now, for example, propose more uncertain operating-based solutions where customers view these as acceptable. Removing barriers and involving the Customer Forum should ensure that Scottish Water is able to appraise, and where appropriate, adopt alternative initiatives.

Overall regulatory impact

As outlined in earlier chapters it is our expectation that our role will change. We will no longer drive the Strategic Review of Charges process but will instead facilitate engagement and agreement between Scottish Water and the Customer Forum.

With regard to appraising alternatives, our role will be to help the Customer Forum satisfy itself that:

- Scottish Water has considered the full range of options; and
- the option chosen is in the best interests of the generality of customers.

At previous reviews, price limits were driven by the improvements required by the industry. Looking ahead, however, we consider that the improvements required by the industry should be driven by the price limits that are considered acceptable to customers. We took a step in this direction at the 2009 review and intend to pursue this approach further.

In particular, we will set out an indicative range for the investment programme that we consider affordable in the absence of more innovative approaches, ie with respect to maintaining stable price limits, and which can be delivered efficiently. We will also set out an indicative range for the efficiency with which Scottish Water procures its capital investment.

The ranges are intended to help inform the dialogue between Scottish Water and the Customer Forum ahead of the 25-year strategic vision and business plan.

Scottish Water and the Customer Forum are expected to agree how and when improvements to meet mandatory standards for drinking water quality and the quality of the water environment are made (in agreement with SEPA and the DWQR). At this time, Scottish Water and the Customer Forum will be expected to discuss the full range of options available and agree on the most appropriate solution. We expect Scottish Water to set out the options, in a format that is easy to understand, in its Service Improvement Reports.

The Customer Forum may ask us to provide comment on the solutions that Scottish Water proposes, including our view on whether or not the full range of options available has been considered. We may, for example, highlight particular initiatives that the companies in England and Wales have undertaken but have not yet been considered by Scottish Water.

Our comments would be expected to inform the Customer Forum's engagement with Scottish Water. As part of this process we may also comment on the efficiency with which Scottish Water proposes to deliver the improvements. If necessary, the opinions of other third party experts may also be sought.

We will be available throughout the engagement process to answer any questions the Customer Forum may have. The Forum will also be able to draw on consultant support or the independent technical assessor for verification or technical advice.

With regard to opportunities to implement an operating solution, an innovative approach or a long-term payback initiative, we will provide the Customer Forum with the technical assistance it may require to appraise the options available. For example, the Customer Forum may want advice on the financing of a particular initiative. Similarly, the Customer Forum may wish to consult with the DWQR and SEPA on the scope for, and potential effectiveness of, alternative solutions.

In summary, our role will be to facilitate the engagement between Scottish Water and the Customer Forum. Our objective in doing so is to ensure that the Customer Forum is able to get the best value from the chosen solutions and to protect the best interests of the generality of customers.

Chapter 4: Financing improvements

This chapter provides an overview of the arrangements we propose to put in place to ensure that Scottish Water is financed appropriately both now and in the long term.

The arrangements outlined here fit within the Scottish Ministers' decisions on the principles of charging and, in particular, their determination of the amount of borrowing that will be available to Scottish Water. These decisions, which will have been made following consultation with other stakeholders including CFS, are final and binding on all stakeholders.

As the economic regulator it falls to us to exercise our economic expertise and analytical skills in establishing how much of the available borrowing it is reasonable to use, given the need to maintain equity for both present and future customers.

Introduction

At present Scottish Water meets around half of the cost of new assets through borrowing from public expenditure; the remainder is paid for directly through customers' bills. Most of the investment in new assets is necessary to achieve compliance with standards that are legally enforceable, including EU directives.

When Scottish Water borrows money it is effectively spreading the cash costs of a new asset over the course of that asset's lifetime. So, future generations who benefit from the investment also contribute to the costs. As a result around 15%²² of a household customer's bill today is for interest on loans taken out in the 1980s, 1990s and 2000s to deliver improvements that are now being enjoyed. In addition, future generations continue to pay for maintaining and replacing these assets. Around a further 20% of a household customer's bill today pays for ongoing maintenance and replacement of assets that may be several decades old.

Decisions about the level of borrowing have a direct impact on customers.

- Too much borrowing, while keeping prices down in the short to medium term, eventually risks overextending the company's balance sheet. This could compromise a company's ability to deliver improvements to customers in the future and so leave customers exposed should there be any financial shocks.
- Too little borrowing could potentially mean a delay in improvements to service or, if improvements go ahead, then today's customers could potentially bear an unduly high share of their cost, given that future customers will also benefit.

The decision about the correct level of borrowing is complicated by the fact that pressures to keep improving the environment, water quality and customer service are unlikely to diminish in the foreseeable future. Importantly, this suggests that over the medium to long term more of these improvements should be paid for from revenue rather than from borrowing, in order to avoid an unsustainable build up of debt.

22. The figure is around 18% if the debt interest relating to Public Private Partnerships is included.

As well as the level of borrowing, access to financing and the terms on which this is made available are also key considerations. Scottish Water can only make good business decisions (and enter into contracts with suppliers) if it knows it has secure access to finance; in other words, that the finance will be available at all times, without undue notice and without unexpected conditions.

Finance should also be on reasonable terms. If it is too costly then Scottish Water may be forced to require customers to pay higher financing charges for several years.

The issue of Scottish Water's financing must be considered in the context of potential future constraints on public expenditure. If Scottish Water is not able to access the level of borrowing it requires to deliver the outcomes specified by government it may need to access the debt markets or scale back the pace of the improvements.

Changes in the regulatory framework

As the economic regulator it is not our role to question the ownership, governance or sources of non-revenue finance that are available to Scottish Water. Our role is to set price limits at a level that allows Scottish Water to maintain an appropriate level of financial strength. To maintain this appropriate level of financial strength, the level of borrowing relative to revenue may need to change over time.

An appropriate level of financial strength is important to maintaining broadly stable charges for customers. Stable charges could be adversely impacted by:

- Scottish Water facing unforeseen increases in costs (arising from internal or external pressures); or
- Ministers requiring Scottish Water to raise finance from external sources at a time when the company's balance sheet is weak.

We are proposing the following changes in the way in which Scottish Water's funding is set and monitored.

- We will introduce a binding range for Scottish Water's financial strength and creditworthiness.
- We will introduce initiatives that incorporate this binding range into the regulatory contract.
- We will put in place an arrangement that enables Scottish Water, engaging with the Customer Forum, to adopt the best value, most sustainable approach available.

We will discuss these changes in detail below.

Demonstrating Scottish Water's financial strength and creditworthiness: the financial tramlines

Introduction

We have introduced a transparent framework for ensuring that Scottish Water's financing remains sustainable over the longer term for customers, government and Scottish Water as a business. This approach is called the 'financial tramlines'.

The financial tramlines were introduced as a measure to monitor Scottish Water's financial strength for 2012-13 and are being used, on a trial basis, for the remainder of the current regulatory control period.

Maintaining financial strength within the financial tramlines will balance the need to finance Scottish Water sufficiently in order to avoid the creation of systematic risk²³, against making sure that customers benefit as quickly as possible from outperformance.

Our approach includes an important role for the Customer Forum in discussing with Scottish Water how customers might benefit from the proceeds of outperformance.

In our Strategic Review of Charges 2010-15, we set the following measures of financial strength²⁴.

Financial ratio	Our intention to maintain
FFO/debt	11% to 13%
RCF/debt	11% to 13%
Cash interest cover	Greater than 3
Cash interest cover I (capital charges: adjusted)	1.5 to 2.0
Cash interest cover II (actual capital maintenance expenditure)	2.0 to 2.5

We keep these ratios under review both in the light of market conditions and the relative financial strength of Scottish Water in comparison with the strongest of its peers. We plan on determining the precise ratios that we think appropriate for this regulatory control period before the end of 2013. In considering issues of financial strength, we have taken advice from our economic advisors²⁵.

The Scottish Government has stated that, if agreement can be reached with HM Treasury, it may choose to pursue a bond issue. This would enable Scottish Water to raise debt finance from the markets, rather than borrow from the Scottish Government as at present.

For Scottish Water to raise such finance in a cost-effective way for customers would require an appropriate investment grade credit rating. Credit rating agencies, which determine such ratings, will take into account the regulatory environment, the asset ownership model, business governance and management, and Scottish Water's financial metrics. We have taken expert advice on which credit rating would be appropriate to target, and the financial metrics that would help secure such a rating. We are considering carefully both the borrowing costs and the ease with which markets could be accessed as a result of maintaining different credit ratings.

Our financial tramlines will take account of this advice and subsequent developments in the markets. We are determined that by establishing the tramlines Scottish Water should be able to raise finance from the credit markets at relatively low cost.

23. Systematic risk (also known as un-diversifiable risk) is risk that is inherent to an entire market or market segment; as such it is risk that is beyond the control of any individual company management.

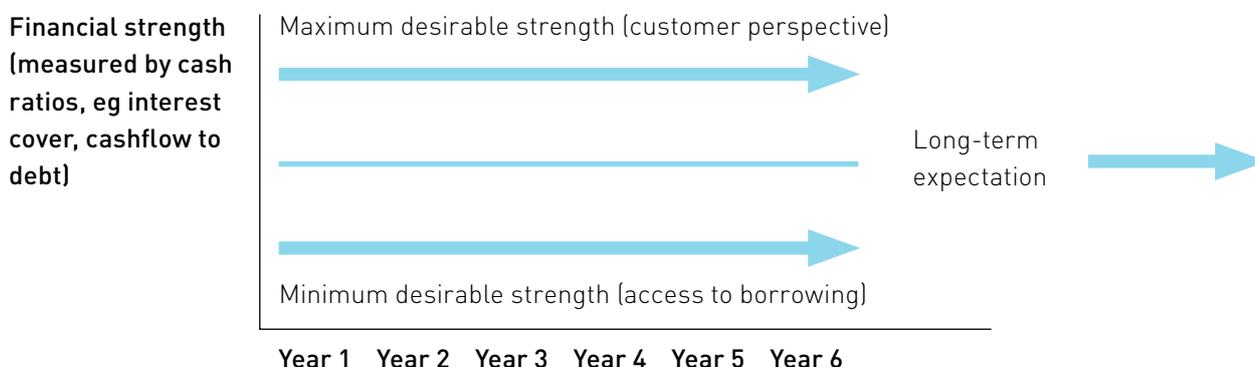
24. 'The Strategic Review of Charges 2010-15: The final determination', November 2009, page 11, Table 3.

25. 'Regulatory 'financial tramlines' for Scottish Water', Oxera, 2012. The report is available on the Commission's website at: Publications/Price setting 2015-21/Approach.

We have concluded that a relatively strong investment credit rating in comparison with the companies south of the border would balance appropriately the financial strength necessary to avoid the creation of systematic risk with customers paying no more than is appropriate.

We are minded to focus on gearing and adjusted interest cover. We recognise that for true comparability we will need to make some adjustments to the 'raw' Scottish Water ratios because Scottish Water does not have any index linked debt. Index linked debt makes interest cover ratios better but worsens (relatively) the gearing ratio. We will agree any such adjustments with Scottish Water and with the Scottish Government (as the ultimate owner).

The figure below illustrates the financial tramlines.



A clear set of rules for the financial tramlines

The financial tramlines will be introduced with clear rules about how we will: set prices initially; monitor performance (actual and forecast, acknowledging temporary fluctuations); and maintain financial strength at an appropriate level in the event of a shock or if Scottish Water were able to outperform.

We anticipate an active role for the Customer Forum in engaging with Scottish Water about how financial gains from outperformance from Scottish Water can be shared with current customers (price reductions or extra 'goodies') and/or future customers (through improved financial strength). The Forum may also wish to take an active role in discussing with Scottish Water how outperformance might relate to managerial incentives for the company.

The proposed rules would lead to an adjustment in Scottish Water's financial strength if it were to move outside of the tramlines. This might involve taking action to:

- recover financial strength in the event of adverse circumstances; and
- share outperformance and windfall benefits with customers, where these are forecast to continue to exceed an agreed level.

This approach should lead to greater transparency and certainty. It should also:

- strengthen the incentive for Scottish Water to outperform – if the company, rather than the regulator, delivers extra benefits for customers then its reputation will be enhanced;
- allow customers to share in any significant outperformance more quickly, rather than having to wait until the next time prices are set; and
- provide greater certainty on the financial resources that will be available – allowing for better long-term planning.

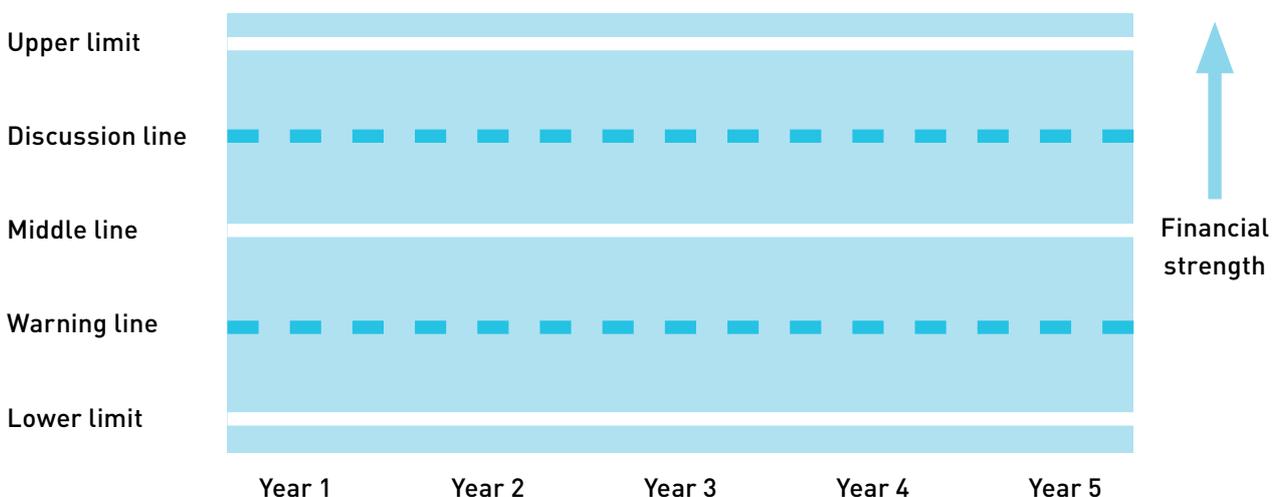
Overview of the tramline proposals

Under this tramline framework, financial performance is measured against an acceptable range for key measures of financial strength. These financial tramlines will complement the current suite of high-level performance indicators.

Scottish Water will have flexibility to perform between the upper and lower limits of these financial tramlines. We have built a number of checks into the system, for example to ensure that there is early warning of declining financial strength. Similarly, if current and forecast performance exceeds a particular level within the acceptable range, Scottish Water would be expected to start sharing the benefits of its outperformance with current or future customers. Similarly, below a particular level, management will set out in its Delivery Plan how and when performance will improve; this may involve an ‘interim determination of charges’, if appropriate.

The financial tramlines will be derived from cash-based financial ratios. They will be set at a level which will ensure that Scottish Water remains financially sustainable in the long term – irrespective of its precise position within the acceptable range.

As the figure below shows, the financial tramlines will be symmetrical around the middle line.



Based on the ratios that we targeted at the Strategic Review of Charges 2010-15, the tramlines would comprise the following limits.

Line	Cash interest cover II	Ratio of funds flow from operations to debt	Gearing
Upper limit	2.20	13.0%	50%
Discussion line	2.05	12.4%	
Middle line	1.90	11.75%	
Warning line	1.75	11.1%	
Lower limit	1.60	10.5%	55%

In cash terms, the range between the upper and lower solid lines represents around £100 million a year. However, as noted above, we intend to focus primarily on adjusted interest cover and gearing. When we confirm the tramline limits towards the end of this year, we would expect that there will be broadly the same difference – in cash terms – between the top and bottom lines and that the mid-point will be consistent with the financially strongest companies south of the border.

How the financial tramlines will work in practice

Scottish Water's financial performance in any given year, as indicated by its position in the tramlines, will determine if and when any action is required.

Middle line

In order to maintain relatively stable prices during the price control period, Scottish Water would be expected to begin the price control period with the actual position as at 31 March 2015 and exit the price control by 31 March 2021 on the middle line.

If its performance relative to the regulatory settlement improves, in other words if it is outperforming that settlement, its financial strength will increase towards the discussion line. It will be free to retain the savings that it generates whilst its financial strength lies between the middle line and the discussion line. Similarly, if it is underperforming but its financial strength remains above the warning line, then no action will be taken. This flexibility allows for reasonable fluctuations in financial performance.

Scottish Water would be performing in line with its commitments if it were between the discussion and warning lines, and if it is meeting expectations in other areas, including the OPA and OMD²⁶.

Discussion line

If Scottish Water's financial strength reaches this line, and is forecast to remain above this, on average, for the remainder of the price control period, the company would begin discussions with the Customer Forum to decide how the outperformance is used. It could be used, for example, to reduce charges, provide additional customer service improvements, improve the condition or performance of the assets in place, or build up its financial reserve.

26. OMD is the 'overall measure of delivery', which combines performance on completion of capital investment projects into a single score.

Outperformance would be shared at Scottish Water's discretion at this point, provided its financial strength did not exceed the upper limit.

Upper limit

If Scottish Water's financial strength reaches the upper limit, and is forecast to stay there for the remainder of the price control period, the company would use the proceeds of outperformance over that limit to the benefit of customers. At this point, the outperformance would automatically be shared with customers in ways such as those mentioned above.

In the event that performance declines rather than improves, Scottish Water's financial strength will decrease towards the warning line.

Warning line

The purpose of the warning line is to provide an early signal that Scottish Water may be at risk of underperforming against its regulatory contract. Scottish Water would explain in its Delivery Plan how and when performance will improve. This may involve an interim determination of charges, where appropriate. The intention of the Delivery Plan is to assure the Commission, the Scottish Government and the Customer Forum that performance will not worsen. The Commission would comment on the Delivery Plan.

Lower limit

We would review Scottish Water's performance and take appropriate action to ensure that the company is in an appropriate financial position in future. Such a response might entail, for example, a reduction in the capital investment programme, an increase in customer charges or potentially, in exceptional circumstances, even a revision to the position of the financial tramlines. In deciding what is appropriate, the Commission would be mindful of its duty to protect the interests of customers.

Scottish Water would have to breach both of our target ratios (ie cash interest cover II and the ratio of funds flow from operations to debt) for the responses outlined above to be triggered.

The Customer Forum's role in discussing how outperformance is to be shared

We expect that the Customer Forum might wish to engage with Scottish Water in the following areas:

- discussing with Scottish Water and the Scottish Government the processes by which outperformance will be shared if the upper limit is reached and is forecast to be sustained;
- discussing with Scottish Water and the Scottish Government the scope, if any, to share outperformance when financial strength reaches, and is forecast to remain above, the discussion line; and
- discussing the possible linkage of management incentives to the amount of outperformance gains that are shared with customers.

Incorporating the financial tramlines into the regulatory contract

Scottish Water's financial strength would be an important factor in any assessment of the credit rating agencies. However, other factors including a transparent and stable regulatory regime and governance framework are also important. We propose to take further steps, building on the financial tramlines, to ensure that Scottish Water could borrow from the credit markets at reasonable rates.

Building on the financial tramlines

Our economic advisors suggested additional initiatives to strengthen the current regulatory framework. These initiatives would provide additional reassurance to lenders in the event that the Scottish Government asks Scottish Water to issue a bond.

1. The regulatory contract that was first set out at the last price review should be developed further in order to provide clear understanding (between regulator, regulated company, the customer representatives and other stakeholders) of:
 - the respective roles of each participant;
 - the level of financial strength to be maintained; and
 - the requirements of Scottish Water's core business.
2. Following consultation, the Commission should set out:
 - its methodology;
 - how it plans to monitor and use the financial tramlines; and
 - how it would respond in the event that Scottish Water could not reach agreement with the Customer Forum.
3. All parties should recognise that the new arrangements will require time to be fully and successfully implemented. They will need to be explained carefully, and regulatory actions must be seen to be proportionate. The Commission, Scottish Water and the Customer Forum are currently in the process of developing a template in this regard.

Best value for money from the financial resources available

The tramlines will ensure Scottish Water's financial sustainability. It is also important to ensure that this certainty contributes to better outcomes for customers.

Our proposed approach

When considering the new arrangements we thought carefully about how to design a system that would allow Scottish Water to achieve best value for money from the financial resources it has available. As this work developed, it became clear that the most effective approach would be to remove features of the regulatory framework that could lead to sub-optimal outcomes, and to get back to the original simplicity of 'RPI-X' regulation. This includes removing the bias that exists towards capital expenditure. We discussed the steps we are taking in this regard in Chapter 3.

At the same time Scottish Water will set out the cost savings and benefits that would follow from delivering improvements using various approaches. In doing so, Scottish Water will consider the impact of alternative approaches on its costs, risks and levels of service and agree, with the Customer Forum, any savings from adopting alternative approaches to delivering the required outcomes.

The savings and any level of service implications would be reflected in the price limits agreed between Scottish Water and the Customer Forum.

How the approach would work in practice: choices for customers

This section sets out how this approach could work in practice. It will be for Scottish Water to develop a series of choices that it can discuss with the Customer Forum.

We will facilitate discussion between Scottish Water and the Customer Forum about the different types of solution that might be adopted, the cost of those solutions (compared with what might have been done had alternatives not been considered), the risks of particular approaches and the potential impact on outcomes.

Scottish Water may be able to offer a low cost, alternative solution that may bring benefits in the short to medium term. In such cases customers would understand and, by allowing for the accumulation of a risk reserve, accept that there could be a risk that the approach to delivering a particular outcome may not be a permanent solution and may need to be revisited at a later date.

If an alternative approach is agreed that delivers savings, the cost of the conventional, capital-based solution would act as a benchmark against which the savings are assessed.

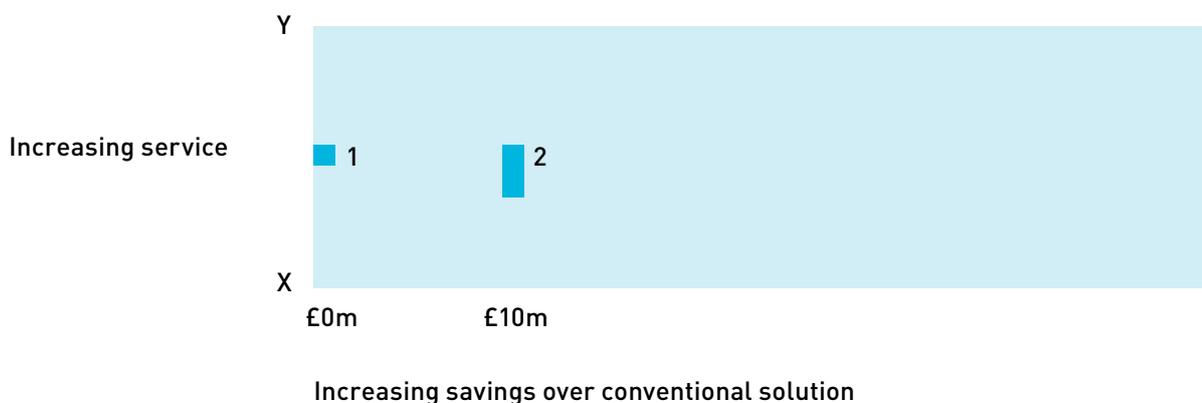
When we comment on Scottish Water's business plan, we will acknowledge efforts the company has made to being more innovative and responsive in its approach to customers.

An illustrative example

In this illustrative example, we have assumed that Ministers' objectives include an obligation to improve the quality of the water environment in a particular area. Scottish Water has completed a study in that area and has identified two options that it believes can deliver the objective: a conventional capital-based solution and an alternative operating-based solution. The alternative solution may be more risky and may not deliver the required outcome in all circumstances.

The conventional solution has a present value of £30 million, while the alternative solution has a present value of £20 million. This includes an allowance for the possibility that the solution will not work (which is a matter for Scottish Water to quantify, having agreed its approach with the Customer Forum).

Scottish Water could propose option 2, ie savings of £10 million, in NPV terms, but with a greater variability in the customer service than would have resulted had it chosen the more traditional approach (option 1). Scottish Water, the Customer Forum and the quality regulators (if appropriate) may consider that this is an acceptable trade-off and agree to the alternative approach.



The levels of service that Scottish Water delivers could be measured using the OPA or an adjusted OPA agreed between Scottish Water and its customers. As noted in Chapter 2, we would be happy to see adjustments to the OPA if Scottish Water and the Customer Forum agree that these better reflect customer priorities. These adjustments could include both areas of service performance and the weightings accorded to different areas of performance.

Scottish Water and the Customer Forum would discuss and agree a broad, and initial range, for the OPA.

Other themes for discussion

Compliance performance

The quality regulators, SEPA and the DWQR, set the standards for drinking water quality and environmental compliance. They also monitor Scottish Water’s compliance performance. Any new standards will have a set implementation date, either established in statute or through Ministers’ objectives. However, the Customer Forum could input to compliance performance in the following ways:

1. Establishing, in discussion with the quality regulators, whether or not Scottish Water’s proposals for meeting the standards are sufficiently innovative and have taken proper account of the full range of available operational and conventional solutions.
2. Discussing with Scottish Water and the quality regulators the scope for more strategic approaches to meeting the required compliance performance.
3. Reviewing whether customers’ views have been fully represented in establishing the pace of improvements, specifically in those situations where the quality regulators indicate that there is scope for more flexible delivery.

The third area would cover those savings that Scottish Water could achieve from delaying a particular improvement. This could include, for example, the timing of replacement of a treatment works that has reached the end of its useful life. The treatment works will have been depreciated (and paid for) in full.

As such, there is the potential for savings from extending the life of that works through operational approaches, rather than replacing it immediately (the conventional solution), provided the compliance risk can be properly managed. The Customer Forum could discuss such approaches with Scottish Water and the quality regulators to agree the approach that best meets customers' priorities, while ensuring an acceptable level of risk. (For the avoidance of doubt it should be noted that any regulatory decisions that are taken by SEPA and the DWQR in relation to compliance would be made independently of any such discussions.)

Customer service performance

In addition to compliance performance, a revised OPA would, no doubt, include several activities that have a direct impact on the service customers receive.

Scottish Water and the Customer Forum could engage on three areas:

1. The improvements to be made over the period (these would be expected to be in the same areas that customers wish to be included in the OPA).
2. How these improvements are made.
3. When the improvements are made.

The savings would be expected to arise from the second area, ie the present value of the savings from adopting an alternative approach (compared with the conventional approach) to deliver the improvements agreed with the Customer Forum.

How initiatives to reduce costs could be dealt with

There are likely to be other initiatives that have the potential to reduce the cost of the current levels of service provided to customers. Engagement between Scottish Water and the Customer Forum provides an opportunity for 'bespoke' initiatives of this type to be agreed. There is no need for us to set out a framework for such discussions at the start of the Strategic Review of Charges – not least because the scope and impact of such discussions could be wide ranging and not immediately predictable.

Secure financing for initiatives with long paybacks

Where the period required for a project to break even is longer than the six-year regulatory control cycle, Scottish Water and the Customer Forum could agree to ring-fence initiatives that generate savings. Such an agreement would mean that Scottish Water can be sure that it will be allowed to reach pay-back on any such project. Initiatives that fall into this category could include, for example, opportunities to rationalise the asset base.

We want to encourage a continuing focus on long-term asset rationalisation to reduce the future costs of delivering services, while maintaining or improving resilience. We would expect Scottish Water to show that the benefit of any such initiative is greater than its costs and to agree its approach with the Customer Forum.

Secure financing for novel or innovative initiatives that entail greater risk

It may be that Scottish Water and the Customer Forum agree to ring-fence the financing of novel and innovative approaches and the creation of a risk reserve such that Scottish Water is always able to deliver services even if some of the innovations or alternative approaches do not work as intended or cost more than was originally

budgeted. This approach will reassure Scottish Water that it has the cash resources to see projects through to completion.

This is very much in the interests of customers – provided the Customer Forum agrees to the initiative and Scottish Water can demonstrate that the project would reduce overall costs to customers, even after allowing for the creation of the risk reserve.

Incentives to declare the cost savings that are achievable

We believe that this approach should encourage Scottish Water to identify alternative approaches to deliver the required improvements. It also means that we do not have to second guess Scottish Water or get involved in estimating risk-adjusted rate of returns for alternative solutions. This is because we are only concerned that the total cost (in net present cost terms) of the solution is lower than that of the next best alternative (ie the conventional solution). It is up to Scottish Water to consider the return appropriate given the risk of the solution and agree this with the Customer Forum.

Scottish Water has a significant incentive to reveal the savings it considers are achievable. There are a number of reasons why Scottish Water should propose savings to the Customer Forum during the negotiation.

1. Credibility with the Customer Forum

Given that the engagement is an ongoing process (to decide how outperformance is best allocated to particular improvements) and is expected to be repeated in future price reviews, it is important that Scottish Water builds a relationship with, and is credible in the eyes of, the Customer Forum. This means that it is in Scottish Water's long-term interests to be open and honest about potential savings.

By offering at least some of the savings it considers are achievable, ex-ante, during the engagement with the Customer Forum, Scottish Water is acting in its long-term interest and building trust and credibility with the Customer Forum.

2. We comment on Scottish Water's proposals

The revised price review process requires us to comment objectively on Scottish Water's draft business plan. If it appears that Scottish Water has not considered the full range of options to deliver an improvement and make further savings (for example from observing the initiatives undertaken by other companies), we would be likely to bring this to the attention of Scottish Water and the Customer Forum.

The onus is therefore squarely on Scottish Water to demonstrate that it has considered all of the alternatives and all of the opportunities to achieve further savings.

3. We still issue a determination if agreement cannot be reached

Scottish Water and the Customer Forum may engage in good faith but be unable to reach agreement. In this instance, we would issue a determination based on the balance of evidence received from Scottish Water and the Customer Forum.

However, if we were to see that either Scottish Water or, indeed, the Customer Forum had not sought to find the best possible option for customers, we would have to intervene – in line with our statutory duty. We would not intervene in such a manner without having made it clear during the engagement process that we had concerns about the progress that was being made.

Water Industry Commission for Scotland

First Floor, Moray House, Forthside Way, Stirling FK8 1QZ

E: enquiries@watercommission.co.uk

T: +44(0) 1786 430200

www.watercommission.co.uk