Our initial expectations:
Note 1 for the Customer Forum

water industry commission FOR SCOTLAND

Operating expenditure

This note gives an outline of Scottish Water's operating expenditure performance to date and our initial expectations for 2015-20.

Key messages

Over the past decade the water industry has faced upward cost pressures, and in England and Wales, operating expenditure has increased in real terms. Over the same period, Scottish Water has reduced its operating expenditure by around 40% in real terms, closing what had been a large efficiency gap.

At the last price review Scottish Water agreed to accept our challenge to match upper quartile performance of the industry before 2015. Scottish Water is restructuring its business and, to judge by latest figures, is on track to meet this challenge. We now consider it likely that Scottish Water's operating expenditure performance is on a par with that of the leading companies.

Looking beyond 2015, upward pressures on costs are likely to continue, driven in part by rising compliance standards and growth in the customer base. However these could be significantly offset by continuing improvements in efficiency. On this basis, we consider that a range for annual operating expenditure of between £320 million and £345 million (in 2011-12 prices) should be expected for the period 2015-20. This compares with £325 million in 2011-12, adjusted for one-off items.

Introduction

Operating expenditure is simply the amount a company spends on its day to day activities, as opposed to capital investment, other financing costs and taxes on profit. In order to monitor performance over time and make comparisons with water and sewerage companies on a like-for-like basis, we find it helpful to distinguish three broad categories of operating expenditure:

One-off
This is abnormal expenditure caused by factors that do not occur every year. Examples include severe weather, unusually high write-offs of unpaid customer bills, business reorganisation and redundancy costs. Sometimes the one-off impact is a saving rather than a cost, for example when there is an unusually low write-off of unpaid customer bills.

Controllable
This is normal expenditure over which companies' managers can exert direct control. Examples include salaries, energy, chemicals, communication costs, transport and office materials.

Outside direct control
Normal expenditure that is outside managers' direct control includes local authority business rates, costs incurred to divert mains or sewers at the request of highway authorities, and payments to environmental regulators for abstraction licences and effluent discharge consents.

Using these categories means that we have three versions of the expenditure figure:

- **reported** total operating expenditure – the 'headline' figure in the regulatory accounts[1];
- **underlying** operating expenditure – the reported figure less any one-off items, which is useful both for looking at trends over time and for establishing a baseline for the future; and
- **controllable** operating expenditure – the reported figure less one-off items less costs that are outside the direct control of management, which we use to level the playing field for our benchmarking with companies in England and Wales.

[1] Operating expenditure is reported in the annual audited regulatory accounts, with a detailed breakdown and commentary. There is a similar regulatory reporting and auditing regime north and south of the border.

Scottish Water's improving performance

We have tracked the performance of Scottish Water and its predecessors since 2000 and benchmarked it with the privatised water and sewerage companies in England and Wales.

When Scottish Water was created in 2002, our benchmarking showed that underlying operating expenditure was significantly higher than it needed to be. We set Scottish Water the challenge of reducing it by 37% by 2005-06. After a slow start, it nevertheless achieved a reduction of 39% by that year. We set a further challenge in our 2005 price review, which Scottish Water also outperformed. In 2009 we set Scottish Water the challenge of matching upper quartile performance of the private water and sewerage companies in England and Wales by 2015. Scottish Water accepted, and is now on track to meet, or possibly to outperform, this challenge.

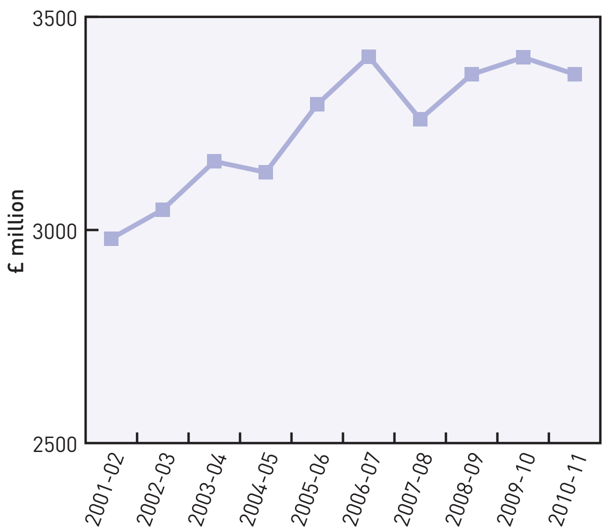
The industry as a whole has faced significant upward cost pressures, for example rising energy and bad debt costs. In England and Wales, such pressures have increased underlying operating expenditure by around 13% in real terms over the last decade.

Since 2010 Scottish Water has also faced a substantial increase in the business rates it must pay to local authorities, amounting to 6% of its annual operating expenditure. This cost is largely outside the company's scope to influence and is therefore one of the items we exclude when benchmarking.

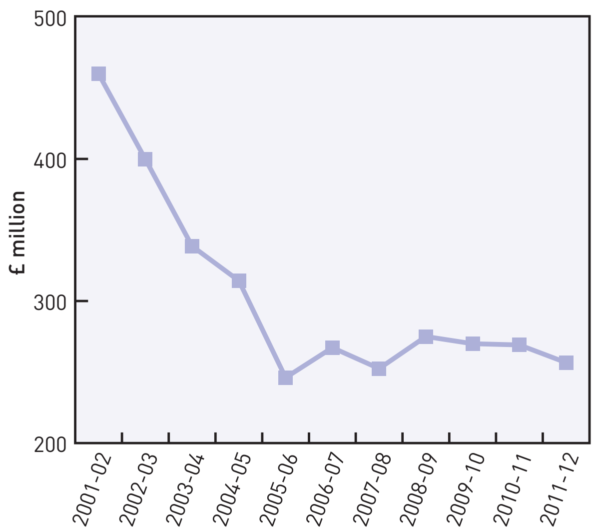
Scope for further improvement

We carried out extensive analysis of relative controllable operating expenditure for the 2009 price review, taking 2007-08 as our 'base year'. This involved detailed benchmarking using various econometric models. We identified a 10% efficiency gap between Scottish Water and upper quartile performance in England and Wales. This benchmarking process was a major exercise and has not been repeated. However, we can analyse expenditure trends since 2007-08 in order to estimate Scottish Water's current performance levels.

Controllable operating expenditure: England and Wales water and sewerage industry (2011-12 prices)



Controllable operating expenditure: Scottish Water (2011-12 prices)



In 2007-08 our analysis showed that Yorkshire Water was the best performing company for operating expenditure, followed by Wessex Water and Anglian Water. Recent trends in controllable expenditure indicate that these companies continued to be leading performers in 2011-12. Since 2007-08 many companies have reported substantial upward pressures on controllable operating expenditure, with the three leading companies in total reporting a 12% increase in real controllable operating expenditure. The comparable increase reported by Scottish Water is just 2%.

These recent figures can only provide a general indication of relative trends in operating expenditure efficiency. For example, companies in England and Wales became responsible for private sewers in October 2011, which may account for some of the reported increase in expenditure. Unfortunately, the companies are no longer required to submit annual regulatory returns (which explained material movements in expenditure) to Ofwat.

We consider that Scottish Water has managed its controllable operating costs and in doing so has reduced the 10% performance gap against upper quartile companies in England and Wales. Judging by these recent trends in controllable operating expenditure, we consider it unlikely that a material gap in performance still exists between Scottish Water and leading water and sewerage companies.

Prospects for operating expenditure 2015-20

Scottish Water has absorbed much of the impact of external shocks such as the increase in business rates and the effects of the severe winter weather in December 2010. It is using its strong cash position to restructure the regulated business, spending more than £25 million so far since 2009-10. Adjusting for these and other one-off costs, the company's current underlying annual operating expenditure in 2011-12 is around £325 million (in 2011-12 prices).

Scottish Water forecasts an increase in underlying operating expenditure before 2015, arising from the cost of:

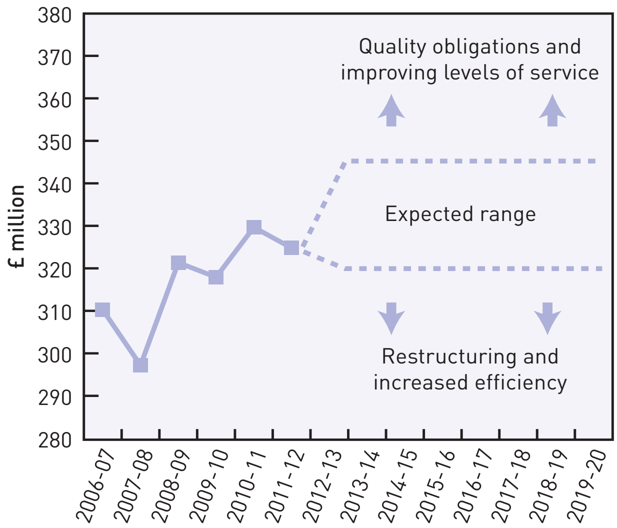
- achieving the levels of service performance score agreed for this regulatory control period[2];
- operating new assets such as treatment works that it is building to deliver its statutory obligations; and
- further inflationary increases in local authority rates and energy costs.

Taken together, these pressures could add up to around £20 million to annual underlying operating expenditure by 2015. However, we consider that by that time Scottish Water's current restructuring initiative should be delivering savings in underlying annual operating expenditure of at least £5 million, to warrant its cost in excess of £25 million. Such savings would therefore offset some of Scottish Water's forecast increase.

Beyond 2015, we consider that upward pressure on operating expenditure arising from increasing standards for purifying drinking water and waste water effluent is likely to ease slightly, so that they could be offset by continuing improvements in efficiency, albeit at a slower pace than before. As a major energy user, Scottish Water may well face additional long-term cost pressures from energy prices. However, it could mitigate some of these costs through further reductions in leakage and through developing its own energy production. Like other businesses, it may face rising labour costs, which may be offset by improvements in productivity. It will also need to provide services to a growing number of customers. In the round, we consider that these various upward pressures on costs could be significantly offset by continuing improvements in efficiency.

[2] Notes 2 and 3 will cover levels of service.

Initial expectations for operating expenditure



A water and sewerage business will always face unexpected one-off costs from time to time. However, it would be unusual for such costs to exceed £5 million to £10 million in any one year for a business the size of Scottish Water. On average, we would not expect such costs to be more than £5 million a year.

Taking these factors into account, and recognising that the balance between upward and downward cost pressures is uncertain, we consider that a range of between £320 million and £345 million (in 2011-12 prices) for annual total operating expenditure should be expected for the period 2015-20.

Points to be aware of

Our comments at this stage on the prospects for operating expenditure cannot take account of the extent to which Scottish Water chooses to implement operating cost solutions. We will outline our broad expectations in this area in Note 4.

The focus of the Commission will be on total cash outlay, not operating expenditure by itself.

Unless circumstances change, we do not propose to repeat previous detailed and time-consuming benchmarking exercises, as their strength is in identifying large performance gaps, which all current evidence points firmly against.

We consider that restructuring initiatives should be self-financing from outperformance savings, not financed directly by customers.

Increases in non-payment of bills by customers should be managed, as Scottish Water has done in the past. This will be helped by having the lowest average bills in Great Britain and stable charges.

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October 2012

Levels of service measurement

This note gives an outline of our framework for measuring Scottish Water's levels of service performance, and how this framework could be improved for 2015-20.

Key messages

Changes in Ofwat's approach to monitoring companies' levels of service performance mean that we can no longer use the 'overall performance assessment' (OPA) framework for benchmarking Scottish Water.

Nevertheless we wish to retain an objective, outcome-based measure that accurately reflects the service provided to customers and the environment in Scotland.

We therefore invite the Customer Forum and Scottish Water to propose improvements to the OPA framework, so that it better reflects customers' priorities in Scotland.

Introduction

We monitor the level of service that Scottish Water provides to its customers through a scoring system devised by Ofwat some 15 years ago called the OPA[1].

The OPA is calculated by weighting 17 individual performance measures that can be broken down into four categories: water supply levels of service, sewerage levels of service, customer service and environmental performance.

Ofwat no longer collects the data for calculating companies' OPA scores, so no further benchmarking with companies in England and Wales is possible. However, there is now an opportunity to develop the OPA framework so that its focus is to track performance in the areas that matter to customers in Scotland. The Commission is open to proposals jointly from the Customer Forum and from Scottish Water.

This note gives a brief overview of Scottish Water's performance trends, looks at the latest available comparative information from England and Wales, and outlines how the current OPA framework could be developed.

Changes to the OPA framework

The OPA was originally developed by Ofwat in the late 1990s to compare the customer service performance of the companies in England and Wales. It has been beneficial to date to use the same performance assessment framework as is used in England and Wales, allowing direct comparisons of Scottish Water's performance against that of the companies south of the border.

Ofwat recently retired the OPA framework; however we consider that there could still be significant benefits from using a similar framework, provided it objectively measures Scottish Water's performance and reflects the priorities of customers in Scotland. There are a number of ways in which the current framework could evolve to achieve this.

[1] For more information see Information Note 9, one of a series of summary notes available at http://www.watercommission.co.uk/view_Information_notes.aspx

1. The measurement of particular aspects of performance could be improved.

   Scottish Water has improved the accuracy and reliability of performance information. Nevertheless, further improvement appears possible. For example, according to the report by Black & Veatch on Scottish Water's OPA score for 2011-12, Scottish Water could:

   - initiate investigations to look for new low pressure areas, instead of only investigating after a customer complaint;
   - replace generic factors and assumptions with actual site data in the calculation of treatment works losses, raw water mains losses and outage data that are used in the assessment of security of supply to customers;
   - record the number of properties affected by sewer flooding, rather than the number of incidents as at present; and
   - improve the quality of data on external flooding (not currently part of the OPA).

   The report also noted that Scottish Water may be underestimating leakage from customers' supply pipes, and stated that an improved methodology is required before the next regulatory period.

2. Performance minima and maxima used to calculate OPA points could be updated.

   Rather than being set in relation to historical performance by companies, the Customer Forum could agree approaches where minima and maxima are based on:

   - recent performance ranges reported by companies (up until 2010-11);
   - projected ranges for levels of service negotiated between the parties; and
   - today's performance by Scottish Water (minima) and the Customer Forum's aspirations for the future (maxima).

3. Better account could be taken of external impacts on performance or of the underlying service provided to customers.

   Scottish Water may argue that some measures of performance are unduly sensitive to influences, such as extreme weather events, outside its direct control. Whilst recognising that Scottish Water should strive to insulate customers from such events, it may be that performance could be measured in ways that better reflect the underlying service provided to customers. It should be noted however that companies adopted Ofwat's performance measurements, even when these may have been sensitive to events outside companies' control.

4. Aspects of performance that are excluded from OPA could be included.

   The flooding from sewers of gardens, driveways, etc ('external sewer flooding') is not currently included in the OPA. This could be an example where the Customer Forum considers that the OPA needs to be widened. There may well be others.

5. Some aspects of OPA performance may no longer be considered relevant to customers in Scotland.

   We are not aware of any areas of OPA that are likely to come into this category, but the Customer Forum may consider that particular measures could be dropped.

6. The relative weights attributed to different aspects of performance could be reviewed and updated to reflect customers' priorities.

   The legitimacy of the OPA for customers would be increased if the Customer Forum were to review the relative weightings of performance areas within a revised OPA, using research evidence as appropriate.

7. There may be scope to develop regional OPA indices within Scotland.

   The OPA currently measures performance across the whole of Scotland. The Customer Forum may see merit in the use of regional OPA scores.

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October 2012

Levels of service performance

This note gives an outline of Scottish Water's levels of service performance to date and our initial expectations for 2015-20.

Key messages

Since 2002, Scottish Water's level of service performance has improved considerably, narrowing the substantial gap in performance between Scottish Water and companies south of the border.

At the last price review Scottish Water agreed to accept our challenge to match upper quartile performance of the industry before 2015, which would require it to score between 380 and 400 points on our 'overall performance assessment' (OPA) index. Scottish Water is on track to achieve this.

At the time that we set that challenge, the threshold of 380 points was significantly higher than the median score across the companies of 373. Since then the median has increased to around 380 points, suggesting that the lower threshold for Scottish Water should also be raised.

We therefore invite the Customer Forum and Scottish Water to reach agreement on the levels of service to be achieved during 2015-20.

Introduction

We monitor the level of service that Scottish Water provides to its customers through a scoring system devised by Ofwat some 15 years ago called the 'overall performance assessment' (OPA). For further details please see Note 2 which discusses measurement issues.

This note gives a brief overview of Scottish Water's performance trends, looks at the latest available comparative information from England and Wales and sets out our initial expectation for performance in 2015-20. This is not intended as a firm goal, but rather to assist the Customer Forum in its deliberations with Scottish Water.

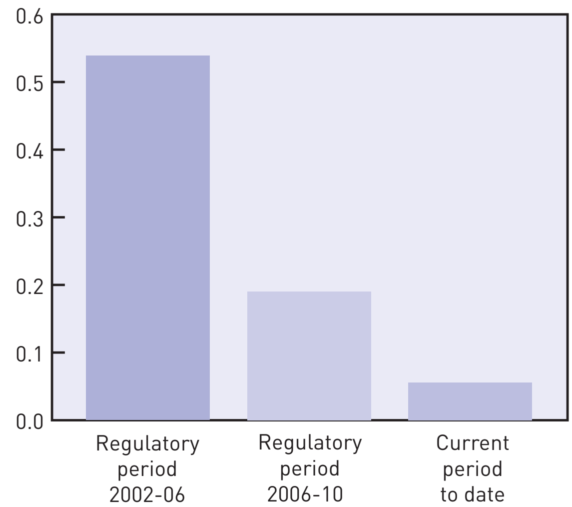
Scottish Water's improving performance

When Scottish Water formed in 2002 there was a substantial gap in customer service performance between Scottish Water and the companies in England and Wales, with Scottish Water lagging behind in most performance areas. Since then, regulatory targets and management incentives linked to the OPA score have stimulated substantial and sustained improvements in performance, supported by better methods of gathering, compiling and auditing technical information on levels of service.

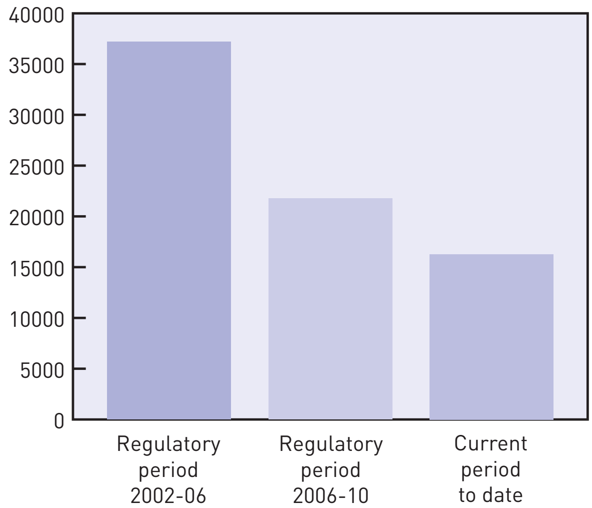
This is illustrated in the following figures, which show progress in a number of key performance areas over the past decade (the previous two regulatory periods and the first two years of the current period).

This drive towards improvement over the past ten years has meant that Scottish Water has narrowed the gap in overall customer service performance compared with leading English and Welsh companies.

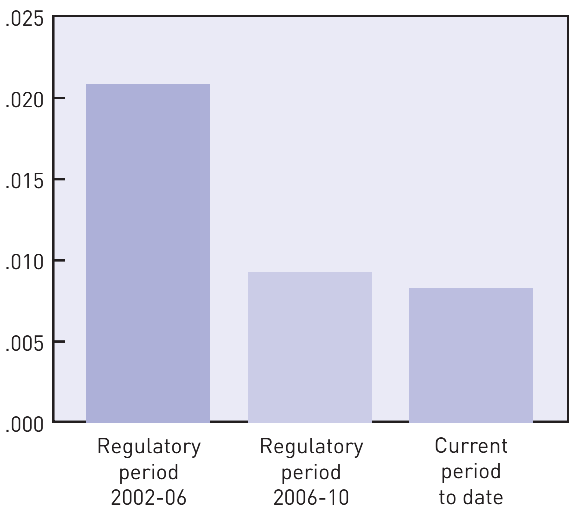
% of properties receiving inadequate pressure



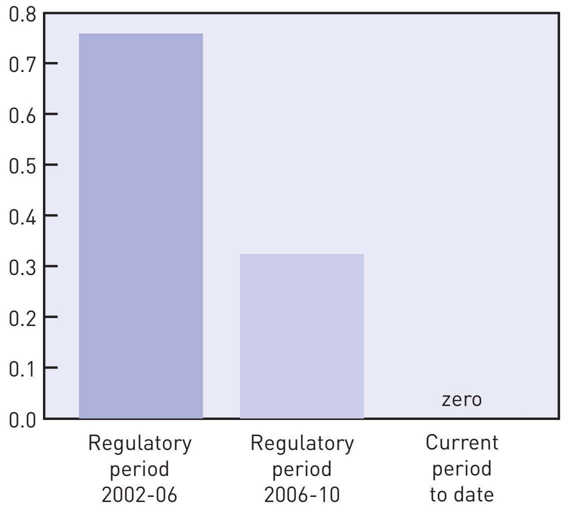
Number of properties experiencing unplanned interruptions not resolved within 6 hours



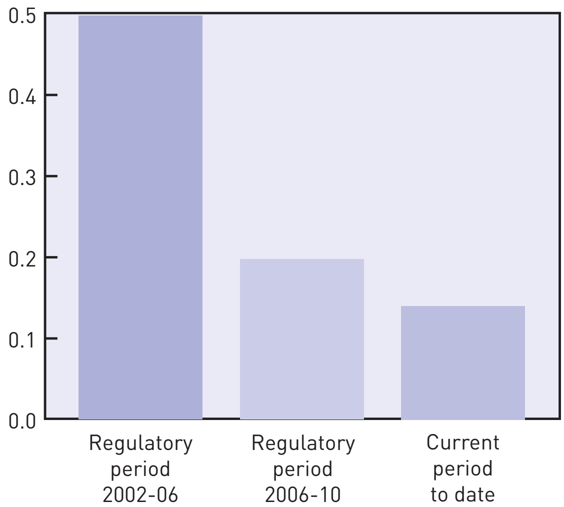
% of properties experiencing sewer flooding incidents



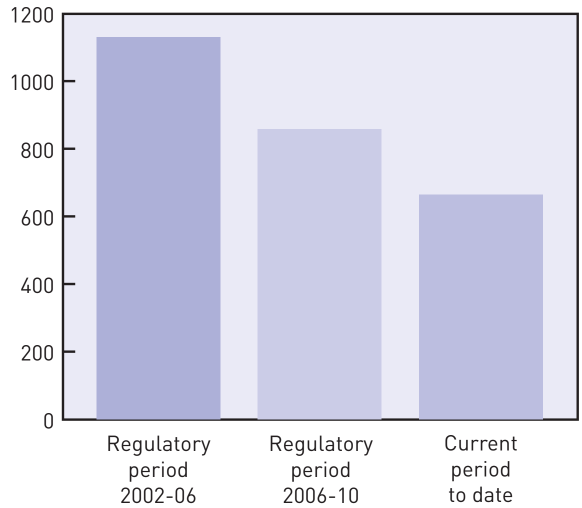
% of complaints not responded to within 10 days



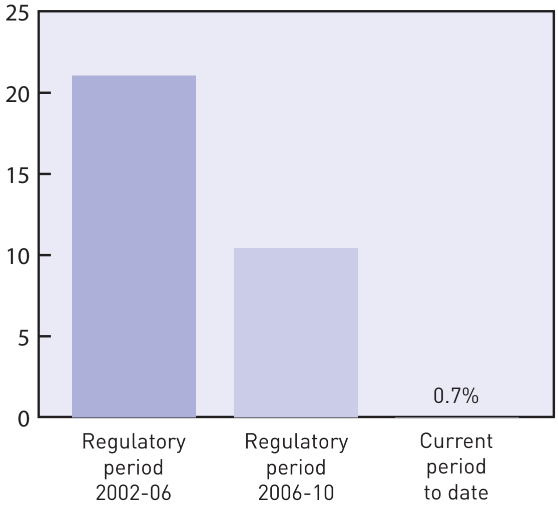
% of water samples failing to comply with drinking water standards



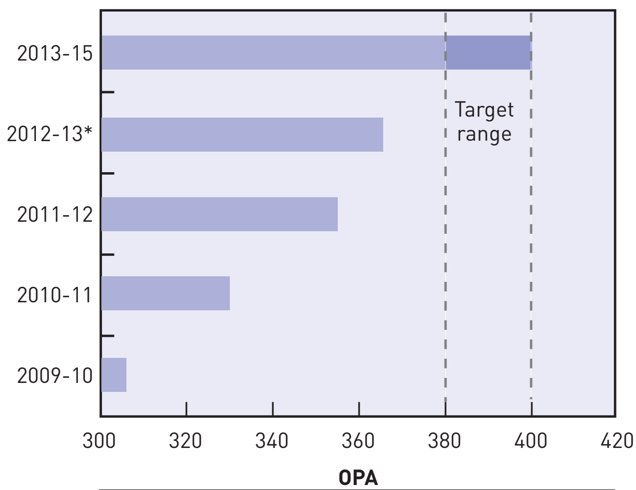
Total leakage (Ml/d)



% of population served by non-compliant wastewater treatment



Scottish Water's recent OPA performance



*The figure for 2012-13 is Scottish Water's latest projection.

Scope for improvement

During the last price review, we aimed to build on the progress made so far and sought an appropriate challenge to be achieved by 2013-14. It was agreed by us and Scottish Water that a target of 380-400 OPA points, to be achieved by 2013-14, was an appropriate target, representing upper quartile performance in England and Wales.

Scottish Water is on course to deliver this, but it remains a significant challenge. In 2011-12 its OPA score was 355 points, and there remain a number of areas with scope for improvement.

The table below shows how Scottish Water's current performance compares on each component of OPA against the English and Welsh companies in 2010-11 (the latest information available).

Scottish Water performance comparison with England and Wales

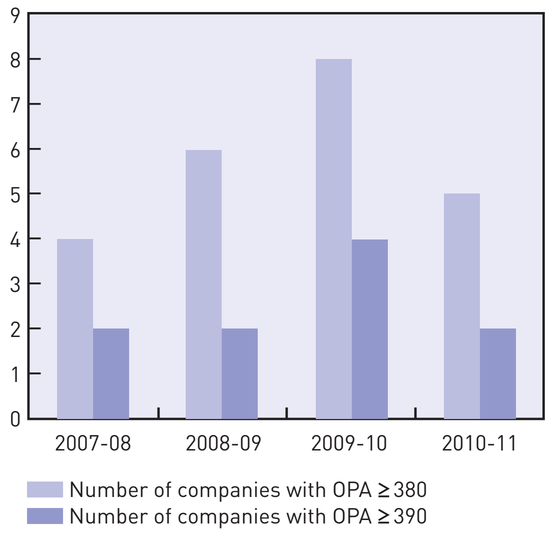
Component of OPA	Scottish Water exceeds the best in England & Wales	Scottish Water matches the best in England & Wales	Scottish Water is around the typical level compared to England & Wales	Scottish Water is below typical compared to England & Wales	Scottish Water trails the worst in England & Wales
Inadequate water pressure					■
Supply interruptions			■		
Hosepipe bans		■			
Drinking water compliance					■
Security of supply					■
Sewer flooding	■				
Customer contact	■				
Assessed customer service		■			
STW compliance				■	
Sludge disposal		■			
Achievement of leakage target		■			
Pollution incidents				■	

It is clear that there is still significant scope for Scottish Water to improve, and we expect Scottish Water to continue delivering improvements in customer service performance during the current regulatory period. We still consider that upper quartile performance would remain an appropriate target.

Taking account of recent performance by companies summarised in the figure on the right, it is apparent that a score threshold of 380 points no longer represents quite the same challenge as it did. We would therefore suggest increasing the lower threshold to 385 points.

At the upper threshold, little has changed in England and Wales. It should be noted that the maximum possible OPA score is 418, and the highest yet achieved in any year by an individual company is 411. Only one company (Wessex Water) has exceeded 400 points year on year, suggesting that 400 may remain a challenging upper threshold.

OPA performance: England and Wales



Points to be aware of

Occasionally events wholly or partially beyond a company's control have an impact on performance measures, resulting in adverse effects on the OPA score. An example of this is the effect that the extremely harsh weather in December 2010 had on some companies and their customers, leading to many interruptions to supplies. Yorkshire Water, generally one of the best performers, was one of the companies worst affected, and its performance on interruptions dipped significantly, accounting for the loss of 22 OPA points.

It may be appropriate to take this factor into account when reviewing Scottish Water's performance across a full price review period and when agreeing performance targets.

Conclusion

We would wish to retain a framework where there is an objective, measurable outcome that accurately reflects the service provided to customers and the environment. Note 2 sets out some ideas for how the current OPA framework could be developed, yet retain these features. Until such changes are proposed our suggested range for 2015-20 is between 385 and 400 OPA points.

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Our initial expectations: Note 4 for the Customer Forum

water industry commission FOR SCOTLAND

Improving services in times of constrained borrowing

This note gives an outline of our initial expectations of how Scottish Water can deliver improvements to services despite the likely constraints on its borrowing over the 2015-20 regulatory period.

Key messages

The average amount of borrowing that the Scottish Government makes available to Scottish Water in the current regulatory period has decreased from £140 million a year to around £85 million a year. In its recent consultation[1], the Scottish Government indicated that borrowing by Scottish Water over the next period, 2015-20, will be at a lower level than the amount that has been available for 2010-15, although no figures were proposed.

Scottish Water has managed the current reduction in borrowing without any shortfall to date in the delivery of the improvements required by Ministers. In large part it has achieved this by applying the cash surplus that it has generated through outperformance. A further reduction from 2015 may well prove more challenging.

We therefore expect Scottish Water to continue to seek out and pursue opportunities to generate additional cash from within the business. This may be, for example, through leasing or renting services rather than buying them, where this is cost effective.

We also expect Scottish Water to exploit actively the changes that we have made to our regulatory approach to encourage innovative solutions, in particular those that would allow improvements to be delivered with less initial cash outlay than with a more traditional engineering approach. We recognise that moving away from traditional approaches is a gradual process, but it should be sustained year on year.

Introduction

Scottish Water finances its delivery of improvements to services mainly through a combination of customers' charges and government borrowing. It also uses cash savings generated in the business. In that context, this note brings three issues to the attention of the Customer Forum:

- the potential impact of a likely reduction in the level of cash available to Scottish Water during the period 2015-20, due to constraints on new borrowing;
- the scope for Scottish Water to identify new sources of extra cash from within the business; and
- the opportunity for Scottish Water to find new ways to deliver improvements, such that they require less initial cash outlay.

This note outlines our understanding of the position regarding borrowing for the next regulatory period. It then explains our expectations on how Scottish Water could continue to deliver significant improvements despite this constraint. Our explanation touches on a number of complex areas, and so we remind the Customer Forum that we are available to provide further material and to answer questions.

The principal themes that we cover concern the importance of the business continuing to focus on cash, that decisions about the timing of investment are critical, and how changes we have made to the regulatory framework will encourage new approaches and over time will help reduce the requirement for borrowing.

[1] Scottish Government engagement paper 'Investing In and Paying for Your Water Services from 2015', June 2012.

Drivers for improvement

Scottish Ministers set the high-level objectives that Scottish Water must deliver during each regulatory period. As well as requiring Scottish Water to maintain current levels of drinking water quality, environmental performance and customer service, Ministers' objectives also set out expected improvements in service and the required timescales. These improvements can be driven by a range of factors including increased water quality or environmental performance standards resulting from EU or UK legislation, expectations of higher customer service levels (for example in tackling low water pressure or reducing odour) or Scottish Government policy in areas such as carbon reduction or facilitating growth. Typically, around half of Scottish Water's investment programme is focused on delivering such service improvements while the other half is focused on maintaining current levels of service.

Paying for improvements to service

Scottish Water has three sources of cash to pay for improvements to services:

- the cash it receives from customers, less what it spends to deliver the basic service;
- the cash it receives as new borrowing from the Scottish Government; and
- any cash savings that it can make through outperformance, property disposals and changes to how it procures services.

Looking at improvements over the last decade, we estimate that the relative overall contribution from these three sources – in very round percentage terms – amounts to some 55% from customers, 40% from borrowing and around 5% from outperformance etc.

These broad proportions were set to continue. In 2009 we set prices on the basis that Scottish Water would be able to borrow up to £140 million a year over the regulatory period 2010-15. However, the Scottish Government later reduced the available borrowing for the period, so that it is likely to average around £85 million a year. Fortunately, Scottish Water is able to make up the resulting shortfall in cash mainly from outperformance savings that it generated in the previous regulatory control period (2006 to 2010).

Scottish Water cannot necessarily rely on future outperformance savings continuing at the levels that were achieved previously, particularly as customer bills have increased by less than inflation for several years.

The Scottish Government has not yet indicated the scale of the reduction in borrowing beyond 2015. However, it would seem prudent to plan on the basis of borrowing being at most £60 million to £80 million a year. If Scottish Water focuses on value for money and new opportunities presented by changes to our regulatory approach, it should be able to continue to deliver improvements in spite of this lower level of borrowing.

Generating additional cash within the business

In the past Scottish Water has generated some additional cash from the sale of surplus property. We expect it to continue to pursue opportunities in this area.

Further opportunities to generate additional cash may well be available if Scottish Water is able to change the way in which it procures some services, for example by leasing or renting services instead of buying them. We would expect Scottish Water to highlight such initiatives in its business plan.

Reducing initial cash outlay

Where Scottish Water invests in traditional solutions to maintain or improve services, there is an initial cash outlay to pay for the design and construction work, and for the materials that are required. For example, in order to maintain existing services, Scottish Water may plan to replace assets such as water mains and treatment facilities that are nearing the end of their useful physical lives, and do so before the assets fail. Similarly, an improvement in drinking water quality or environmental performance would usually be made by building additional assets, for example to provide additional treatment processes. Where an improvement is directed at customer service, for example to reduce flooding of properties from sewers, this would often entail the provision of a new asset, such as a larger sewer. Indeed, the traditional approach in the water industry in the UK is to favour the building of new assets over less capital intensive approaches.

The initial cash outlay on new assets could, in some cases, and with the agreement of the Scottish Environmental Protection Agency (SEPA) or the Drinking Water Quality Regulator (DWQR), be either delayed or avoided, freeing up cash for other priorities. A delay would require Scottish Water to identify a temporary alternative solution that met the maintenance need or improvement required without having to replace or build a capital asset. Such a solution could be replaced by a permanent solution at a later date.

If an initial cash outlay is to be avoided rather than just delayed, it is likely that an innovative approach will be required. For example, improvements in the treatment of water or waste water could in some cases be helped, through working with land agents and farmers to achieve an operational, and more sustainable, solution. Although the industry has limited experience of these innovative approaches, there is increasing evidence from companies that they could generate significant cost savings and improved environmental performance. Such approaches may entail some increased financial risk, but the gains could be substantial and, over a portfolio of projects, these risks can be managed.

Where improvements are specified by SEPA or by DWQR, Scottish Water will need to seek the agreement of these organisations to any innovative solutions. However they have already shown that they are willing to engage in exploring opportunities of this type. There should in some cases be scope for a range of solutions that are acceptable to SEPA and DWQR, where the Customer Forum could negotiate with Scottish Water on the precise selection.

In other cases, for example where the improvement relates to a particular customer service not specified by SEPA or DWQR, such as reducing interruptions to supply or reducing flooding of properties from sewers, the Customer Forum should negotiate solutions directly with Scottish Water.

Our expectations for 2015-20

Under the proposed changes to the regulatory approach set out in our Methodology document[2], we aim to ensure that there is no bias in the current approach in favour of either operating or capital expenditure as a means of delivering improvements.

We also propose to ensure that Scottish Water has sufficient finance to allow for the risk that some of these alternative solutions will not deliver the required output and a more traditional solution will ultimately be required. Our aim in doing this is to remove any regulatory barriers to Scottish Water considering alternative solutions of the kind outlined above.

It will be for Scottish Water to propose in its Business Plan whether, when and how to consider opportunities to generate cash or to reduce cash outlay, based on detailed business information, and where appropriate, the requirements of SEPA and DWQR. As such, we are not in a position to indicate the scale of these opportunities. However, this note does indicate the potential scale of the challenge brought about by constraints on borrowing and the importance of Scottish Water more actively pursuing opportunities for novel approaches to delivering service improvements.

[2] For further details of these proposals, see Section 4 of the Executive Summary of our methodology.

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November 2012

Efficient use of capital investment expenditure

This note outlines our initial expectations of how Scottish Water will maximise the efficiency of its capital investment expenditure over the 2015-20 regulatory period.

Key messages

Scottish Water's current level of capital investment looks set to remain broadly constant for the foreseeable future, assuming that improvements in drinking water quality, environmental performance and services to customers continue at the current pace.

We endorse the Scottish Government's view that a level of capital investment of between £450 million and £500 million a year is likely to be most efficient.

There is strong evidence that Scottish Water has improved both its cost efficiency and delivery of capital investment over previous regulatory periods. Equally, we consider that Scottish Water should be able to make further efficiencies through more innovative solutions, a more strategic approach, and smarter procurement and delivery. These further efficiencies will allow Scottish Water to deliver both increased value for money for customers and additional water quality, environmental and customer service benefits.

Introduction

Capital investment expenditure is the amount a company spends on maintaining and improving its assets. Capital investment expenditure is generally for 'one-off' projects. It is therefore different from expenditure on ongoing, day to day activities (the subject of Note 1) or costs such as financing costs and taxes on profit.

We recognise two categories of capital investment expenditure: capital maintenance and capital enhancement.

Capital maintenance

This is expenditure to maintain or extend the operating life of an asset. It generally involves making significant repairs, or replacing part, or all, of the asset. For example, it would include expenditure to renew water mains and sewers or replace worn out pumping equipment. Without such expenditure, the assets would deteriorate, their performance would decline, and they would ultimately fail. This would be reflected in lower levels of service provided to customers. To protect against this, the Scottish Government sets targets for service performance that Scottish Water must maintain.

Considerable knowledge and expertise is required to assess the appropriate level of capital maintenance expenditure, and to target it towards the right assets at the right time.

Capital enhancement

This is expenditure either to extend existing assets (so they can serve new customers) or to provide new assets that provide an improvement in the service received, or both. Most of this expenditure is directed towards delivering public health, environmental and economic growth objectives set by the Scottish Government. It includes, for example, expenditure on new treatment works to improve water quality or environmental performance, or extensions to the water and wastewater networks to serve new customers.

Without such expenditure, any improvement to service would have to be obtained, where possible, through an operational solution (see Note 4), and in most situations major extensions of the water and sewerage service to accommodate new customers would not be possible. For a given level of capital investment expenditure, the challenge for Scottish Water is to ensure that it achieves the maximum possible benefit for customers in performance.

The size of Scottish Water's capital investment programme

In 2007 we commissioned research[1] into the size of investment programme that could be delivered efficiently in Scotland, by examining evidence from England and Wales. We commissioned the research because Scottish Water's investment programme at the time was one of the largest ever delivered in the UK water industry, and there were signs that it was proving too large to manage.

The Scottish Government recently acknowledged the findings of this research when it restated its intention[2] that Scottish Water's investment programme for the next regulatory period, 2015-20, should be between £450 million and £500 million a year. We fully endorse this range. For reference, the current investment programme for 2010-15 is also likely to be within this range.

Getting the size of programme right is critical to delivering a continuing reliable service, and to making improvements, in a way that is sustainable and does not put undue pressure on customers' bills. At present, the charges customers pay are sufficient to cover an annual investment programme of the desired size (providing sufficient borrowing is available to Scottish Water (see Note 4)).

While the evidence suggests that a programme size of between £450 million and £500 million is likely to be the most efficient, this certainly does not guarantee that a programme of this size will be delivered efficiently. This would require concerted management action by Scottish Water to ensure that value for money is achieved in delivering such a significant level of investment each year.

What we mean by efficient capital expenditure

Like all other water and sewerage companies, Scottish Water is a capital-intensive business. The size of its investment programme is determined largely by Ministers' objectives and by the need to maintain its assets and the services these provide. However, there are a number of steps in planning and delivering investment where there are significant opportunities to improve the value for money from this investment. We provide some examples of these opportunities below:

Strategic planning
Strategic planning helps the company to focus resources to best long-term advantage. This will mean that it invests in assets that fit well within the continuing long-term demands (political, legal, social, economic and customer driven) placed on the water industry.

Information
The company requires accurate and complete information about its assets. This includes the volumes of water and waste water that it processes and the nature and demand patterns of the customers it serves. This should enable an accurate assessment of the need for investment.

Appraising alternatives
The company must identify and appraise the full range of possible alternative ways to provide either the improvement that is needed or the maintenance that is identified as necessary, based on its strategic plan and good information.

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[1] LeCG report 'Factors to be considered when determining the appropriate size of the next capital programme for Scottish Water', 2007, http://www.watercommission.co.uk/UserFiles/Documents/SW%20Capital%20Programme%20-%20Summary%20Final.pdf

[2] Scottish Government's engagement paper 'Investing in and paying for your water services from 2015', June 2012.

Project scoping and design

The project that is selected on the basis of a full and wide-ranging appraisal must be scoped then designed in a cost-effective way. For example the designed capacity of a new asset may be too small or too large, or the process may exceed or fall short of the required improvement. It may also be that the design work itself is more expensive than is necessary.

Project procurement

Once properly designed, the project needs to be procured efficiently. This means that the company has achieved a good price for its construction and is not accepting an undue level of risk that could be borne by the contractor. This may happen, for example, where the company has not negotiated as effectively as it could with suppliers, or has not considered a sufficiently wide selection of suppliers.

Project delivery planning

The project delivery must be planned effectively. For example, foreseeable difficulties such as the need for planning permission, adverse weather or interaction with other projects must be properly factored in.

Project management

A well planned project still needs to be well managed. This includes, for example, ensuring the quality of workmanship and materials, as well as minimising opportunities for successful claims for extra costs by contractors.

In theory, the overall efficiency of capital investment is, quite literally, the product of how well the seven elements listed above are carried out. Purely as an illustration, just a 5% excess cost for each of these elements would result in overall investment costing over 40% more than it should[3].

Assessing Scottish Water's performance

A detailed assessment of Scottish Water's performance in the areas outlined above would require very intrusive regulatory investigation. We undertook such work in our 2005 price review, when we concluded that Scottish Water's projected costs were 56% higher than they needed to be. Our work at that time did not cover all of the areas listed above, but focused mainly on scoping and procurement.

Scottish Water accepted the reduced costs and subsequently delivered its investment programme for the regulatory period 2006-10 within the cost limit we had set. In doing so, it made a major step towards capital investment efficiency.

In our 2009 price review we focused on procurement efficiency. This is, arguably, the least difficult area to assess because standard water industry benchmarking tools are available. It is an area where we have been able to track progress against companies in England and Wales in a like-for-like way for several years.

In 2009 we found that Scottish Water's costs were higher than the level achieved by upper quartile companies in England and Wales. To address this difference, we set prices on the basis that Scottish Water would reduce its projected investment costs by 14.5% by 2015, while still delivering the improvements that had been agreed. Scottish Water appears to be making good progress towards achieving this, in that it is reporting that it has delivered improvements ahead of schedule, and that its costs are below those forecast. This suggests that Scottish Water is continuing to make progress in some or all of the areas discussed above.

[3] This illustrative example is calculated as 100% (an assumed efficient cost) increased by 5% seven times in succession (the seven elements listed above), which is around 141%.

This progress will undoubtedly have closed the gap between Scottish Water's performance on investment delivery and the historical performance of the companies in England and Wales. However, it is important to note that the overall performance of the companies south of the border continues to advance. Scottish Water cannot therefore 'rest on its laurels' and must continue to improve the efficiency with which it delivers its investment programme.

Our expectations for 2015-20

In Note 4 we outline our expectations with regard to Scottish Water's engagement with the Customer Forum to explore alternative approaches for delivering improvements, including the use of operational solutions. We consider these alternative approaches to be important opportunities to eke out the available cash resources, freeing up cash for capital investment. As we explain in Note 4, these opportunities arise from changes we are making to our regulatory approach[4].

We also expect these changes to provide strong incentives on Scottish Water to continue to improve its capital efficiency. In particular, the changes should allow Scottish Water much more flexibility when planning capital expenditure than before. This will reduce costs: for example through using this flexibility to plan more strategically and to react to changing circumstances.

We therefore expect Scottish Water to demonstrate the areas of its investment plan where it plans to:

- deliver investment projects across more than one regulatory period, where this is the most efficient way to improve service; and
- invest capital in strategic initiatives that reduce overall costs to customers over the medium to long term.

Scottish Water is best placed to examine in detail its current performance in the areas outlined in this note and to act on the results. We expect Scottish Water to provide evidence, in its business plan or in other engagement with the Customer Forum, of continuing management attention and performance improvement across the range of capital efficiency opportunities outlined in this note. Based on such evidence, Scottish Water should be able to set out clearly its ambitions for further capital efficiency improvement over 2015-20.

We will of course comment on the evidence that is presented, the conclusions Scottish Water draws from this and the extent of its ambitions for 2015-20.

[4] See Section 4 of the Executive Summary of our methodology for more details of these changes.

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Our initial expectations: Note 6 for the Customer Forum

Sustainable funding by customers

This note outlines areas where it may be possible for engagement between the Customer Forum and Scottish Water in agreeing improvements in services during the 2015-20 regulatory period. Any such decisions must be consistent with sustainable funding.

Key messages

There is likely to be considerable scope for engagement between the Customer Forum and Scottish Water in relation to two areas of service improvement. These are: the extent of discretionary service improvements that Scottish Water may make, and the approach that is used, or the timing, of some of the statutory improvements that it must deliver. In the latter case, there will only be room for manoeuvre in specific circumstances.

The extent of opportunities in this area will depend on relatively small changes in how improvements are delivered, trade-offs between service and price, and the pace of efficiency improvements.

Introduction

Scottish Ministers determine overall policy for the industry and high-level objectives for customer service, water quality and environmental improvement that Scottish Water must deliver. The Commission and Scottish Water then work within the limits set by these objectives, which shape the overall outcome of a price review.

In Note 4 we considered the limits that Ministers are likely to place on the level of annual borrowing that is available to Scottish Water. In Note 5 we touched on the upper and lower limits on the size of Scottish Water's investment programme.

In this note and the accompanying Note 7 (Financial tramlines) we consider a third requirement that Ministers have proposed. This is that charges for customers should ensure the sustainable funding of the water industry[1] in the long term.

Sustainable funding of improvements to services

Like all other water and sewerage companies, Scottish Water makes improvements to services year on year. Many, but not all of these improvements are driven by the need to comply with increasing statutory requirements in the quality of drinking water and the impact of the service on the environment.

Most improvements in services are delivered through capital investment. As we outlined in Note 4, slightly more than half of the cash that is required to pay for these improvements comes from revenue from customers.

If Scottish Water were not required to make such improvements, charges for customers would be lower, and would gradually decrease over time (relative to inflation). This is because the cost of delivering a static, baseline service would decline as efficiencies are found. In addition, as no new borrowing would be required, annual fixed interest payments would not grow year on year.

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[1] Ministers' proposed principles of charging are set out in *Investing in and Paying for Your Water Services from 2015*, The Scottish Government, 2012, (see page 12 regarding sustainable funding).

In broad terms, it follows that continuing improvements can be funded sustainably without increasing prices to customers above inflation, as long as the cost of financing the improvements is no greater than the annual efficiencies that can be found across the business.

For example, at the last price review we set overall charges to fall by 1% a year relative to RPI. This was sufficient to cover the costs of all of the improvements. Had there been no such statutory or other improvements to pay for, charges could have fallen by around 4% a year relative to RPI.

The next price review will need to consider the full range of new improvements to be paid for by customers to meet both statutory obligations and any non-statutory objectives that Ministers set. It is reasonable to assume that the impact of these improvements on prices will be similar to the last price review. In other words, prices may be 3% higher than they would otherwise have been were no improvements required. For this reason it is very important that customers' willingness to pay for these improvements has been properly tested, where appropriate.

The scope for engagement and trade-offs between service and price

In our view there is still significant scope for engagement between the Customer Forum and Scottish Water (and where appropriate, with the quality regulators SEPA and DWQR) in relation to Ministers' requirements. This concerns not only agreement on discretionary improvements but also, where there is more than one acceptable technical option, in relation to some of the mandatory improvements to be delivered (as we outline in Note 4). There are three important factors to consider:

1. In some cases Scottish Water will identify more than one technical option that is acceptable to SEPA or DWQR as to how a mandatory improvement is to be delivered, and consequently its cost and perhaps risk profile. These choices could have a direct impact on the amount of cash that then remains available for discretionary improvements.

   As a broad illustration, if the process of engagement in such cases were to reduce the overall cost of future mandatory improvements by just 2% over 2015-20, this could generate around £25 million of additional cash (in current prices). This extra cash could be used to provide further discretionary improvements in services, without affecting charges.

2. A small adjustment to charges can be sufficient to finance significant cash spend on improvements.

   For example, ½% added to charges every year over the period 2015-20 would generate around £75 million of extra cash (before tax).

3. The speed with which Scottish Water is able to make efficiency gains in its expenditure is a critical factor in determining the amount of cash that is freed up for improvements in services.

   Were Scottish Water to deliver an extra ½% a year of efficiency in its operating and capital expenditure over the period 2015-20, this would generate additional cash of around £60 million.

It is likely that these illustrative examples are conservative. Depending on both Scottish Water's financial strength and the availability of borrowing, it may be possible to use part of the cash savings in these three illustrations to cover the interest cost on new loans. Taking the third illustration, for example, if half of the cash savings from better efficiency were used to finance new loans, then Scottish Water could have around £200 million extra cash available for improvements to services over the period 2015-20, subject to available borrowing. All of this could be used to provide additional improvements.

Alternatively, again taking the example of the efficiency savings, these could be used to keep charges down rather than to pay for additional services. For example, an extra ½% a year efficiency in operating and capital expenditure would allow household charges to be around £5 a year lower by 2020 than they would have been.

Although these are only illustrations, they demonstrate that there is likely to be scope for the Customer Forum to influence a substantial amount of discretionary expenditure over the 2015-20 period through its choices on delivery solutions, price profiles and influencing the pace of Scottish Water's efficiency improvements.

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Our initial expectations: Note 7 for the Customer Forum

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Financial tramlines

This note gives an outline of our 'financial tramline' proposals for monitoring and sustaining Scottish Water's financial health, and our expectations for 2015-20.

Key messages

The financial tramlines are an essential feature of the new regulatory framework. They ensure that Scottish Water maintains an appropriate level of financial strength over the medium to long term.

The approach also ensures that customers benefit as quickly as possible when Scottish Water finds alternative ways to deliver the required improvements.

The Customer Forum should reach agreement with Scottish Water on how and when customers should benefit from outperformance by Scottish Water.

Introduction

This note outlines our proposals for ensuring that financing for Scottish Water remains sustainable over the longer term for customers, government and Scottish Water as a business.

Our proposals include an important role for the Customer Forum in reaching agreement with Scottish Water on how and when customers should benefit from the proceeds of outperformance.

Overview of the proposals

Scottish Water and the Commission are introducing a new framework for monitoring Scottish Water's financial performance. Under this 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.

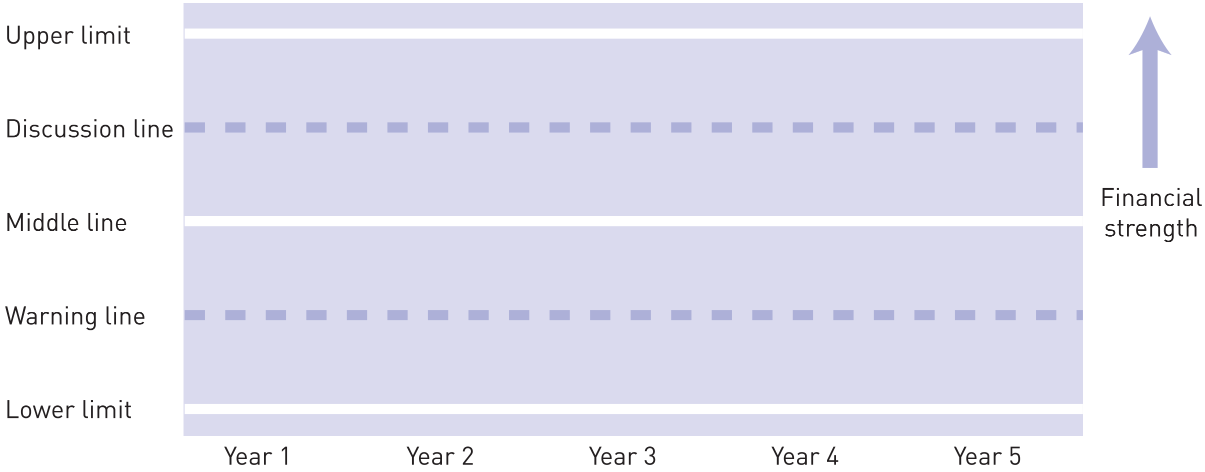
This approach to monitoring financial strength allows for year-on-year fluctuations in external economic circumstances. It is also consistent with the approach for monitoring performance in other areas, such as the Overall Performance Assessment (OPA).

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. Once current and forecast performance exceeds a particular level within the acceptable range, Scottish Water will be expected to start sharing the benefits of its outperformance with 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.

Note 7: Financial tramlines

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



We have agreed with Scottish Water the measures of financial strength that will be used. There will be two main measures, called 'cash interest cover II' and 'ratio of funds flow from operations to debt', and a secondary measure, called 'gearing'. These ratios are all used by credit rating agencies as indicators of financial health[1].

We have also provisionally agreed with Scottish Water the values that should be used for each of the lines shown on the figure above.

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.

[1] Further technical details can be found in our methodology.

How the tramlines work

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 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 outperforms 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 underperforms but its financial strength remains above the warning line, then no action will be taken.

Discussion line

If Scottish Water's financial strength reaches this line, and is forecast to remain above this 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 or build up the financial reserve.

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 remain 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. The formula for determining the proportion of any outperformance to be shared with customers will be agreed with the Customer Forum at the start of the price control period.

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 financial performance has declined. 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.

Scottish Water would have to breach two of the three financial ratios for the responses outlined above to be triggered.

The Customer Forum's role

We expect there to be three areas in which the Customer Forum could engage with Scottish Water:

- 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.

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Initial prospects for prices

This note outlines initial prospects for prices, taking account of the operating range set out in the Scottish Ministers' objectives for the industry. It also gives a preliminary indication of the scope for sustainable outcomes.

Key messages

Maintaining Scottish Water's future investment programme within the ranges proposed by Ministers – whilst also maintaining its financial strength – is likely to require prices that are close to current levels, in real terms.

This outcome would be consistent with Ministers' policy of charges rising by no more than the rate of inflation.

Ministers have recently signalled that there may be limitations on Scottish Water's future access to borrowing. These could act as a further constraint on the outcome of the 2014 price review.

Introduction

In previous notes we highlighted the factors that are likely to affect Scottish Water in the next regulatory period – including limitations on the level of borrowing and the size of the capital programme, and the need for sustainable funding from customers. We also outlined our expectations on how Scottish Water could mitigate the impact of these constraints, and the role of the Customer Forum in that process. This note provides an initial indication of the impact of these factors on future prices. Other than the expectation that less government borrowing may be available, these limiting factors have not changed substantially from previous price reviews.

Implications for charges

Together, these limiting factors determine the scope of outcomes for levels of investment, borrowing, financial health and customer charges.

The extent of sustainable outcomes in these four areas will become clearer as information emerges during the price review process. However, at this early stage, it is possible to set out preliminary assumptions about the factors that affect charges[1]. This allows us to establish an initial indication of the scope for outcomes for the 2014 price review.

We have indicated on the figure overleaf the combinations of annual charge increases and levels of borrowing that should result in both levels of investment and levels of financial strength that are within the broad ranges indicated by Ministers (based on our initial analysis in this area).

[1] For example operating expenditure, growth in the customer base, interest rates and tax.

Amber shading indicates borderline combinations where the limiting factors may, or may not, be achieved.

Red areas are as follows:

- upper left: there is a risk that the financial ratios that determine financial strength will be too weak, suggesting insufficient finance in the longer term and unstable charges;
- lower right: there is a risk that the financial ratios will too strong, suggesting that today's customers are paying too much;
- upper right: there is a risk that annual investment will be more than £500 million, which is beyond the Ministers' preferred range and may impact on the efficiency of delivery; and
- lower left: there is a risk that annual investment will be less than £450 million, which is beyond the Ministers' preferred range and may be insufficient to maintain and improve service.

The area bordered in black is where borrowing would not be less than the current level in real terms[2]. Ministers have indicated that they expect Scottish Water's public borrowing in the next regulatory period to be lower than the current level.

	Annual charge increase 2015-20, relative to inflation							
Annual borrowing 2015-20	**-1.25%**	**-1%**	**-0.75%**	**-0.5%**	**-0.25%**	**0%**	**+0.25%**	**+0.5%**
£140m								
£120m (current level)								
£100m								
£80m								
£60m								
£40m								

[2] It may become possible to consider outcomes inside the black area if Scottish Water is able to access the bond market or develop new models of project finance such as the Scottish Futures Trust's Non-Profit Distributing model.

This preliminary assessment suggests that Scottish Water should be able to propose improvements in service and in efficiency such that prices and borrowing fall within the combinations shaded green or amber in this figure and maintain appropriate financial strength.

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Assessing Scottish Water's overall service performance

This note provides guidance to the Customer Forum on how it might wish to approach its assessment of Scottish Water's overall service performance. It also outlines how this approach could be used in creating a regulatory contract for the period 2015-21.

Introduction

This note builds on earlier notes for the Customer Forum that we provided in October 2012.

Note 2 gave an outline of the current framework for measuring levels of service performance, and how this framework could be improved for 2015-21. It explained that although we could no longer use the 'overall performance assessment' (OPA) framework for benchmarking Scottish Water, we nevertheless wished to retain an objective, outcome-based measure that accurately reflects the service provided to customers and the environment. We therefore invited the Customer Forum and Scottish Water to propose improvements to the OPA framework, so that it better reflects customers' priorities.

Note 3 gave a brief overview of Scottish Water's performance trends, looked at the latest available comparative information from England and Wales and set out our initial expectations for performance in 2015-21. This was not intended as a firm goal, but rather to assist the Customer Forum in its deliberations with Scottish Water.

What do customers want from their water company?

This is an area where the Customer Forum will bring greater clarity on what customers value. Our experience to date suggests that, in the broadest of terms, customers expect:

- bills to represent value for money and any increases to be seen to be reasonable (potentially an important input from the Customer Forum);
- the water supply to meet all public health and environmental standards, to taste pleasant, and to be delivered without interruption or restriction;
- that the risk of flooding from water company assets will be kept to a minimum;
- that their waste water will receive the appropriate treatment before it is discharged into the environment;
- to be offered a 'one stop shop' approach to customer service, where queries and problems are resolved first time;
- the water companies to maintain assets for future generations and deliver services in a sustainable way.

Which measures are currently used?

Most, if not all, water companies already measure their performance against these broad outcomes. Many of the measures that are used are statutory requirements that are monitored by the quality regulators. Other measures have developed into standard reports to economic regulators, while others are common management practice.

Examples of the measures associated with each area of activity are as follows:

Area	Typical measure
Water supply	• Drinking water quality compliance • Number of taste and odour complaints • Customer hours without water • Customers affected by use restrictions
Waste water	• Flooding incidents from storms whose intensity is less than X • Number of pollution incidents • Population equivalent served by works meeting discharge consent standards
Customer service	• Number of contacts resolved first time • Speed of response • Customer satisfaction with response • Customer perception of value for money
Asset maintenance and sustainability	• Number of mains bursts • Proportion of sewers in poor condition • Number of days when a treatment works or reservoir suffers an unplanned outage • CO_2 tonnes emitted

It is important that any measure that is used is not only relevant to customers but also reported in a transparent and consistent way, preferably by independent regulators.

How may these measures be used?

Customers tend only to pay attention to water and sewerage services if they go wrong in some way or if there is a large or unexpected increase in their price. Consequently measures should be looked at together, but weighted to reflect their relative importance. In doing so it is possible to create an overall assessment of performance. This is what Ofwat did in England and Wales when it developed the original OPA. The OPA was the metric used to measure levels of service performance for the companies south of the border.

The original OPA is no longer directly reported across England and Wales, but it can still be measured. It is important that this continues to happen as it will allow performance to be assessed on a like-for-like basis through time, so retaining management focus.

There is evidence that some companies' performance on some measures of the OPA has deteriorated since Ofwat stopped monitoring and reporting on OPA performance. However, this need not preclude the Customer Forum from adding to the existing OPA by creating its own forward looking assessment of performance that can form part of a regulatory contract with Scottish Water.

There could still be significant benefits from using a similar framework, provided it objectively measures Scottish Water's performance and reflects the priorities of customers in Scotland. Customer Forum Note 2 set out a number of ways in which the current framework could evolve to achieve this.

It will be important to ensure that, in developing new measures, consideration is given to the full spectrum of customer requirements. The power of such measures to influence behaviour is significant and care is needed to ensure that an undue focus in one area does not adversely impact performance in other important areas. In this regard, it will be important that the Customer Forum works closely with the quality regulators, SEPA and DWQR, in developing the measure.

In outline the Customer Forum could:

- determine the outcomes that are important to customers;
- agree the metrics that best measure these outcomes;
- assign a score or points to each measure; and
- weight the measures to reflect customer priorities.

Any future index need not include the former OPA parameters, although an agreement between the Customer Forum and Scottish Water should allow for the collection of this information.

In doing so it could create an index whose current value is, say, 100. It could then target Scottish Water to achieve a score of X by date Y. Scottish Water's performance can then be evaluated against this target and in conjunction with its position in the financial tramlines.

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Note 10 for the Customer Forum

Maintaining base service

Introduction

This note summarises issues arising from Scottish Water's Service Improvement Report on capital maintenance. We will comment in more detail on Scottish Water's final proposals for capital maintenance which will be set out in its Strategic Business Plan (due to be published in October 2013).

Summary of the information provided in the report

Scottish Water's report explains the factors that define 'base service'; this includes levels of interruptions to supply, water quality issues, flooding incidents and pollution. The report indicates that, according to its research, customers do not want to see a reduction in any area of base service. Within the category of base service, drinking water quality was considered to be the highest priority.

The report provides information on capital maintenance investment levels since 2002, stating that actual investment has been around £240 million to £250 million a year. Scottish Water argues, however, that when efficiency improvements are taken into account there has been an underlying increase in activity over the past 10 years. This is attributed to the impact of higher standards of service (both in terms of drinking water quality and environmental performance) over the period and the addition of a large amount of new plant and equipment to meet these higher standards in recent years.

The report indicates that, in the next regulatory control period, significant increases in capital maintenance will be required in order to maintain the improvements in service, drinking water quality and environmental performance that have been delivered during the current (2010-15) period. Scottish Water further states that, while efficiency improvements have largely offset the cost of the increased investment to date, ongoing improvements in efficiency will only partially off-set further increases in future.

More specifically, the report notes that:

- the higher service levels require a lower risk of asset failure;
- the new above-ground assets that were installed between 1990 and 2005 (some £4 billion of investment) have increased the on-going maintenance requirement;
- many of these new above-ground assets are reaching their first major refurbishment requirement; and
- investment has been required in high technology assets that have shorter operating lives.

Scottish Water proposes that to maintain stable service levels in the next regulatory control period would require investment of around £270 million to £300 million a year. The level of investment during the current regulatory control period is estimated at around £235 million a year. As such the proposed investment represents an increase of around 15-30%.

Scottish Water's assessment is based on asset risk and asset stewardship modeling and on 'bottom up' activity reviews. To validate the output from these asset management models, a simple asset replacement model was used.

Scottish Water's report compares the increases it is forecasting with changes in capital maintenance levels in England and Wales (which have gone up by around 50% over the past ten years).

Issues arising

Scottish Water's claim for an increase in capital maintenance is not surprising. There has been a trend towards the use of telemetry and shorter-life assets more generally. This trend has been particularly marked over the last 15 years.

There is no way of being sure whether the proposed level of capital maintenance is too high, too low or just about right. This is because the expected level of capital maintenance relies on the predicted performance of Scottish Water's assets.

We need also to recognise that while Scottish Water's management should be risk-averse in its stewardship of its assets, there is a risk that customers may be asked to pay more than is reasonable.

So how do we make ourselves comfortable that the increase in capital maintenance is justified and should be being met by current customers?

In our view, the Customer Forum could reasonably:

1. Agree a profile for the expenditure of the allowance for capital maintenance, and require reporting from Scottish Water on the delivery of this allowance.
2. Seek to define clearly the additional improvements in customer service that will be delivered as a result of increased spending on maintenance.
3. Agree targets for the new Asset Health Indicator[1].

We will set out further guidance for the Customer Forum when we receive Scottish Water's draft Business Plan. This will include advice on the overall level of expenditure, the use of innovative approaches adopted by Scottish Water (to reduce costs or to improve performance), the efficiency of the proposed expenditure, and the extent to which it impacts on the prices customers will pay.

Monitoring capital maintenance expenditure

The Customer Forum could require reporting on actual expenditure of capital maintenance and on progress against planned expenditure by using the overall measure of delivery (OMD) tool that is being used in the current regulatory control period. It may seek to ascertain:

- the improvement in efficiency in the delivery of capital maintenance that Scottish Water has achieved over the past several years; and
- the improved asset performance that has resulted from investment in new assets and in the reduced levels of leakage that have been achieved.

These factors could reasonably be assumed to have reduced overall expenditure on capital maintenance. As such they should be quantified in order to assess whether or not the cost of enhanced customer service, reductions in operational risk and improvements in asset health are reasonable.

[1] We will provide the Customer Forum with a note on the Asset Health Indicator once its operation has been more fully developed.

Monitoring improvements in customer service

Higher expenditure should reduce risk, improve customer service and result in asset condition being better than it would otherwise have been. In addition to capturing the customer service improvements in a revised OPA, the Customer Forum may consider it appropriate to define how operational risks that could lead to service interruptions will have been reduced. These too could potentially be captured in a revised OPA.

It is likely to be important that Scottish Water defines clearly the service level improvements that will result from the proposed level of capital maintenance. There should not, of course, be any overlap with discretionary improvements to the level of customer service that are agreed with the Customer Forum.

Monitoring underlying asset health

Current customers benefit when Scottish Water borrows to cover some of the initial cost of service or environmental improvements. This is because the bill for these long-lived assets is being shared with future customers, who will also benefit. However, this increases the responsibility of current customers to ensure that the condition and performance of assets does not deteriorate under their stewardship. If they were to deteriorate, this would either increase the costs that have to be borne by future generations of customers or would reduce the level of service available to them.

Scottish Water is currently developing an Asset Health Indicator. This will use the best information available to Scottish Water on current performance and the condition of the assets and will model potential future condition and performance profiles under different scenarios. The Customer Forum may want to agree targets for the Asset Health Indicator with Scottish Water based on its agreement of the allowance for capital maintenance.

Agreeing the final package

We would suggest that the Customer Forum seeks to specify clearly the levels of expenditure, risk reduction, customer service enhancement and improvements to asset health that have been agreed with Scottish Water. This should encompass both the response to the increase in expenditure on capital maintenance, and any agreed discretionary expenditure on improving customer service. This information should then form part of the Customer Forum's agreement with Scottish Water.

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Note 11 for the Customer Forum

Measuring levels of service performance

Introduction

This note outlines approaches to measuring levels of service performance. This issue was discussed at a meeting between the Commission and the Customer Forum that took place in early July 2013.

How we currently measure levels of service performance

The Commission currently monitors the level of service that Scottish Water provides to its customers through the overall performance assessment (OPA). The OPA is calculated by scoring 17 individual performance measures, each weighted to reflect perceived importance, and aggregating each score to establish an overall index of service performance.

Scottish Water has significantly improved its OPA performance in recent years[1] and it is therefore important that this performance is maintained.

However, as performance has improved, and as Scottish Water has caught up with the service performance of companies in England and Wales, it also becomes reasonable to assess performance over a broader range of measures than the key measures that are included in the OPA alone. If the Customer Forum identifies further areas of service performance as being priorities for customers, then it is important that progress in these areas is measured and monitored. We also believe that Scottish Water's long-term ambition to become "Scotland's most valued and trusted business" could be encouraged by an additional measure that captures levels of customer satisfaction.

Developing this approach

In order to develop our approach further, and to reflect discussions with the Customer Forum and Scottish Water, we believe that there would be benefits for customers from moving towards a 'three pillar' approach to assessing Scottish Water's service performance:

- The OPA will be retained in its entirety. This will ensure that essential components of service performance will continue to be monitored and that recent improvements in performance will not be lost in the pursuit of new measures of performance. It would also allow accurate year on year comparisons to be made.
- Customer satisfaction will be measured and performance will be benchmarked against Scottish Water's peers and comparator sectors. Further information relating to the measurement of customer satisfaction is provided in Customer Forum note 12.
- Progress in areas that the Customer Forum identifies as being customer priorities will be monitored as a new service performance measure. This may include extensions of areas that are already measured within the OPA or completely new areas of performance which are not currently monitored.

This note is concerned with the new customer priority performance measure. It outlines the areas of service that the Customer Forum has identified as being priorities in its initial discussions with the Commission.

[1] See Note 3 for the Customer Forum.

Customer priorities

Based on their discussions and on customer research, the Customer Forum has identified the following areas as being priorities for customers:

- water pressure,
- external sewer flooding,
- internal sewer flooding relating to storms and severe weather,
- visible leakage,
- carbon targets,
- retailers' attitudes towards Scottish Water[2],
- new connections,
- taste and odour of water,
- the compensation process and guaranteed service standards,
- a charitable trust to assist vulnerable customers.

Most of these areas are not currently measured as part of Scottish Water's service performance assessment. As such, appropriate metrics and scoring mechanisms will need to be devised in each area to enable progress to be monitored. This will be done in collaboration with the Customer Forum, Scottish Water and any other relevant stakeholders.

Some areas, such as water pressure, are already measured as part of the OPA. In these cases the Customer Forum may wish to adopt measurement and scoring criteria that are different from those used in the OPA, so that the metric better reflects customer priorities in Scotland.

Once the individual metrics have been devised they will be aggregated and, if deemed desirable, weighted to give an overall measure of performance in areas of service that have been identified as customer priorities. This measure will be compared year on year to assess progress in service areas of customer priority, and will be used in conjunction with the OPA and the customer satisfaction metrics to assess Scottish Water's overall service performance.

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[1] Retailers are the licensed suppliers of water and wastewater services in the competitive market for non-household customers.

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Note 12 for the Customer Forum

Measuring customer satisfaction

Introduction

This note outlines approaches to measuring levels of customer satisfaction, both now and in future. This issue was discussed at a meeting between the Commission and the Customer Forum that took place in early July 2013.

Scottish Water's levels of service performance

Scottish Water has a long-term ambition to become "Scotland's most valued and trusted business". The Commission would suggest that if Scottish Water is to achieve this ambition, it has to start to understand what it needs to do to narrow the perceived gap in performance between its current performance and that of the most trusted and valued businesses in Scotland.

Scottish Water has improved its performance markedly over the past several years and, at the same time, has reduced its unit operating costs. While we recognise the performance improvements the company has made to date, it is important that these continue to be built upon. In particular, it will be important for Scottish Water to make sure that its performance in the core areas of the current overall performance assessment (OPA) are not allowed to slip in the pursuit of new measures of performance, even if it considers that these measures are more targeted.

As such, we consider that the OPA in its current form should be retained and should form part of the Customer Forum's agreement with Scottish Water. The measurement of customer satisfaction could sensibly form a second pillar and new priorities, identified in the Forum's discussions and research and discussed in Customer Forum note 11, could represent the third pillar.

Customer satisfaction

This note focuses on customer satisfaction. This has not previously been a focus for the Commission but the success of the service incentive mechanism (SIM) process in England suggests that adopting a similar measure in Scotland could bring benefits for customers.

How can it be measured?

In establishing potential sectors against which Scottish Water's performance on customer satisfaction could be compared, there seems to be three broad categories:

- the broad utility/government sector;
- the respected household brands (such as Tesco, Sainsbury's, Nationwide etc); and
- elite comparators such as John Lewis and Harvey Nichols.

In the absence of any objective measurement of relative performance at the current time, it would still seem reasonable to expect Scottish Water, by the end of the next regulatory control period, to be among the very best in class in the first group, broadly comparable with the second group, and have narrowed some of the gap with the final category.

First steps in measuring customer satisfaction

The SIM would represent a useful baseline for the Scottish water industry in the measurement of customer satisfaction. There is no obvious reason why Scottish Water could not measure satisfaction in the same way, subjecting its results to external audit, so that it is possible to make direct comparisons between Scottish Water's performance and that of the leading companies south of the border.

In our view Scottish Water should be able to achieve upper quartile performance by the end of the next regulatory control period in 2020-21.

The main difficulty when attempting to quantify customer satisfaction is that the view of any customer is, in large part, a function of that customer's expectations of performance. This suggests that a customer's satisfaction with a company from which they do not expect much will be higher than the same level of service from a company from which more was expected.

There is empirical evidence, for example, that even as levels of service got better at BT in the 1980s, the level of customer satisfaction declined. This is in part likely to have resulted from an increase in customers' expectations.

Other comparators

We consider that comparisons of customer satisfaction should not be limited to the water or wider utility industries. There is no intrinsic reason why we should not begin to compare levels of satisfaction among Scottish Water's customers with those of other companies that are recognised as leaders in serving customers.

We obviously understand that at the current time it would be difficult to set absolute performance targets, as there is no robust baseline. However, the Customer Forum could agree the priorities for measurement with Scottish Water before the end of the current financial year. The Forum could then measure performance and trends over the last year of the current regulatory control period and the first year of the next period (ie 2014-15 and 2015-16).

Once this information is available, Scottish Water and the Forum could discuss what additional improvements can realistically be achieved by the end of the period (ie by 2020-21). From the Commission's standpoint, we would suggest that measurement at the end of the period should be on the basis of a three year rolling average. The key indicator is less the absolute score than the progress that is being made towards the stretching benchmark.

Other considerations

Clearly, there are a number of additional issues that could be tested in any such continuing measurement of customer satisfaction. Potential areas for testing might include the following:

- How could we improve your view of our performance (relative to xxxx)?
- What differentiates xxxx from us?
- Why do you think you get better value for money from xxx?

Conclusion

It would be reasonable for the Customer Forum to maintain the OPA in its current form but at the same time to ask Scottish Water to do more to improve its customer service. Keeping the OPA as it is would also ensure that ongoing year-on-year comparisons continue to be robust.

The measurement of customer satisfaction will be an important area for discussion between the Customer Forum and Scottish Water in the coming months. In some instances, convenient and robust benchmarks may already exist and targets could be agreed as part of the price settlement. In other areas, work may need to be done over the next two years to determine appropriate baselines before the Customer Forum and Scottish Water could agree on targets.

In our view, the Customer Forum could reasonably expect Scottish Water to begin to measure its customers' expectations relative to those of the very best businesses in Scotland. Such measurement would be consistent with Scottish Water's ambition to become Scotland's most valued and trusted business.

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Note 13 for the Customer Forum

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Mandatory water quality and environmental improvement programme 2015-21

This note summarises issues arising from Scottish Water's Service Improvement Reports on the future capital investment required to meet mandatory drinking water and on environmental quality obligations[1]. We will comment in more detail on Scottish Water's proposals in these areas which will be set out in its draft Strategic Business Plan (due to be published in October 2013).

Introduction

The Scottish Government determines the high-level environmental, quality and customer service objectives that Scottish Water must deliver through the 'Quality and Standards' process. The Commission's role, and that of the Customer Forum, is to ensure that these objectives are delivered at a reasonable cost for consumers. The environmental and drinking water quality regulators, the Scottish Environment Protection Agency (SEPA) and the Drinking Water Quality Regulator (DWQR) advise the Government. They also monitor compliance with the required standards.

As such the Commission's role is to establish the efficiency of Scottish Water's proposed approach. This could include the timing and pace of the investment programme, the level of innovation, the use of revenue solutions (as opposed to capital expenditure) and the company's overall efficiency.

Summary of the information provided in the reports

In these reports Scottish Water provides a thorough review of:

- the directives that drive current and future investment, in particular the obligations that are imposed on water companies;
- the role of SEPA and the DWQR in monitoring and enforcing these obligations;
- Scottish Water's future requirements under these directives and, in particular, their impact on the investment programme; and
- the indicative solutions that could be employed to ensure compliance.

Scottish Water also sets out its broad assessment of the capital investment it considers will be necessary to meet the directives. In addition it outlines the key drivers for drinking water quality and environmental performance and sets out its view on the impact on customers if it does not meet the required standards. Finally, the reports outline the options the company has for meeting the standards.

The key points to note are set out below.

Drinking water quality

The report principally reviews improvements in drinking water quality achieved in the last several years. It appears less specific about future improvements, but sets out the non-compliance issues to be addressed and the future risks of non-compliance identified through Drinking Water Safety Plans.

[1] The relevant Service Improvement Reports are entitled 'Drinking Water Quality' and 'Improving the Water Environment' dated 12.12.12 and 21.01.13 respectively.

Performance achieved:

- Compliance has improved significantly over the past ten years: 99.28% of samples taken from consumers' taps achieved the standards in 2002, and this has now improved to 99.84% in 2011.
- Performance remains slightly below average performance in England and Wales (currently 99.96%).
- A small number of failures of drinking water standards at customers' taps (230 in 2011), particularly relating to Trihalomethanes (THMs) and cryptosporidium failures, still need to be addressed.

Proposals:

- Under Scottish Water's proposals the risk of failures would be significantly reduced.
- Customers have choices in terms of the extent and timing of the proposed risk reduction.

Environmental performance

Performance achieved:

- Scottish Water's current performance on key environmental legislation such as the Urban Wastewater Treatment Directive and the Water Framework Directive is broadly comparable with that of the water companies in England and Wales.
- Scottish Ministers have set an objective that by 2027, 97% of water bodies in Scotland should achieve 'good' status or higher (the forecast figure for 2015 is around 60%).
- By 2015 no bathing waters will remain where it would be possible to improve the bathing water classification further simply by improving Scottish Water's assets – for these bathing waters, issues such as diffuse pollution from other sources (eg agriculture and private septic tanks) also have an impact.

Proposals:

- Scottish Water is proposing further investment where there is scientific evidence confirming the impacts this investment will have, there is a clear cost benefit, and asset investment is the most sustainable way to meet the required outcome. As such it is proposing that further investment to improve shellfish waters and to improve bathing water quality should not take place until the impacts of that investment are better understood. In the case of bathing water quality this includes understanding the impacts of diffuse pollution.
- The proposals provide for tackling all confirmed discharges that do not comply with the Urban Wastewater Treatment Directive and for meeting Ministers' objectives under the Water Framework Directive.

Issues arising

The reports provide helpful background information on Scottish Water's proposals in these areas. The Commission intends to set out further guidance for the Customer Forum when we receive Scottish Water's draft Business Plan. This will include advice on:

- the overall level of expenditure;
- the use of innovative approaches adopted by Scottish Water (to reduce costs or to improve performance);

- the efficiency of the proposed expenditure; and
- the extent to which this expenditure will impact on customers' bills.

At the current time, the reports do not provide sufficient information for us to comment on the overall efficiency or effectiveness of Scottish Water's proposed approach. There is also very little information provided on how the use of solutions that are innovative and/or revenue based may reduce the resources required from customers. We would expect Scottish Water to provide further comment in these areas.

In our view the Customer Forum could reasonably expect more detail on the trade-offs that have been considered and discounted, the use of innovative solutions, and the improvement in the overall asset base that would result from the proposed enhancement investment.

The Forum may also wish to ask for information on the implications for future operating costs and capital maintenance expenditure of the selected options in order to reassure itself that these matters have been taken fully into account in Scottish Water's appraisals.

In our view, the Customer Forum could also reasonably:

- agree, and require reporting on, the delivery profile for enhancement investment; and
- seek to define clearly what additional improvements in customer service will be delivered as a result of increased spending on enhancement investment (as opposed to, and separate from, benefits accruing as a result of any increased capital maintenance).

Monitoring capital enhancement investment

The Customer Forum could require reporting on:

- the profile of expenditure for enhancement investment – this could be in the form of either additional operating costs or capital expenditure; and
- progress against planned expenditure – this would be by using the overall measure of delivery (OMD) tool that is being used in the current regulatory control period.

The Forum may also seek to ascertain the improvement in efficiency in the delivery of enhancement investment that Scottish Water has achieved over the past several years. The Forum could also seek to ensure that the company's proposals are genuinely incremental to the improved asset performance that has resulted from previous investment in new assets and from the lower levels of leakage that have been achieved.

Monitoring improvements in customer service

Further investment in improved environmental and water quality performance should reduce operational risk, improve customer service, and result in the overall average asset condition being better than it would otherwise have been. In addition to capturing any customer service improvements in a revised OPA, the Customer Forum may consider it appropriate to define how operational risks, which could lead to service interruptions, will have been reduced.

It is likely to be important that Scottish Water defines clearly the service level improvements that will result from its planned enhancement investment. There should not, of course, be any overlap with discretionary improvements in the level of customer service that are decided on by the Customer Forum.

Ensuring underlying asset health

Current customers benefit when Scottish Water borrows to cover some of the initial cost of service or environmental improvements. This is because the bill for these long-lived assets is being shared with future customers, who will also benefit. However, this increases the responsibility of current customers to ensure that the condition and performance of assets does not deteriorate under their stewardship.

If the assets were to deteriorate, this would either increase the costs that have to be borne by future generations of customers or would reduce the level of service available to them. On the other hand, investment should be committed only when it has been properly defined and appraised as to its need both in terms of actual required outcome and its deadline.

The Forum should consider carefully the evidence presented to it on what should be paid by current as opposed to future generations of customers.

Agreeing the final package

We suggest that the Customer Forum should seek to specify clearly the levels of expenditure, risk reduction and customer service enhancement that have been agreed with Scottish Water.

This information should clearly indicate the improvements in these areas that would result from the proposed enhancement investment, alongside but separate from any increase in expenditure on capital maintenance and any agreed discretionary expenditure on improving customer service. The agreed levels should form part of the Customer Forum's agreement with Scottish Water.

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Meeting demand from new customers

This note summarises issues arising from Scottish Water's Service Improvement Report on the future capital investment required to meet increased demand arising from new customers connecting to the water and wastewater networks[1]. We will comment in more detail on Scottish Water's proposals in these areas which will be set out in its draft Strategic Business Plan (due to be published in October 2013).

Introduction

Scottish Water has a statutory duty to provide water supplies to, and remove wastewater from, properties in Scotland. Growth in the number of properties connected to the network places investment requirements on Scottish Water in relation to:

- providing a contribution to the cost of the local network connection for the property; and
- developing the overall network to accommodate the demands from these new properties.

Summary of the information provided in the report

In its Service Improvement Report Scottish Water sets out the statutory framework and associated ministerial objectives that underpin the investment requirements in this area. It notes the requirement to take account of local authority development plans and the Government's population forecasts when identifying the requirement for new network capacity.

Scottish Water is required to provide additional capacity in support of committed development; it is not required to provide capacity for speculative or uncertain projects. This approach minimises the likelihood of redundant assets and should ensure that connections are made in a timely way.

Scottish Water reports that the number of properties served by the water and wastewater networks is forecast to continue to rise for the foreseeable future. It says that the number of properties served has grown by around 8% in the past ten years and is forecast to grow by a further 21% by 2035.

In assessing future demands in this area, Scottish Water has forecast that 97% of new water demand and 80% of new wastewater demand will be met by existing surplus network capacity.

Scottish Water has provisionally estimated that it expects to invest £214 million[2] over the 2015-21 period to connect new properties to the network. Of this total, it expects to fund around £32 million through receipts from the 'infrastructure charge' paid by new connecting properties. The net cost to customers would be an estimated £182 million.

Scottish Water has based its estimate on an assumption that 110,000 new properties will be connected over the period, and that it will provide:

- additional water treatment capacity for 5,600 people;
- additional wastewater treatment capacity for 44,000 people; and,
- strategic network capacity for 40,000 people.

[1] The relevant Service Improvement Report is entitled 'Meeting demand from new customers' dated 21.01.13.

[2] The text of the draft report provided to the Customer Forum mentions an estimated range of £150 million to £170 million of investment, with a further £20-£30 million financed from the infrastructure charge. We have confirmed with Scottish Water that the figures in the table at the back of the report, which suggest higher estimated investment, are those that should be used.

Around 40% of the investment is associated with providing a contribution to the cost of the local network connection for new properties. The remainder is associated with developing the overall network to accommodate increased demand (for example by increasing the size of pipes and treatment works).

Scottish Water's report outlines the historic volatility of investment in this area. During the five-year periods 2000-05, 2005-10 and 2010-15 there was total investment in growth of around £150 million, £320 million and a forecast £105 million.

Scottish Water proposes to 'ring-fence' investment in this area, as is the case in the current period. This means that at the end of the regulatory control period an adjustment is made to the proposed allowances for investment in future periods in order to reflect actual expenditure in the previous period.

Issues arising

The Customer Forum has a key decision to make, which is whether or not to agree to Scottish Water's proposal to ring fence investment in growth. There is uncertainty as to the level of investment that is required and ring fencing could be a sensible approach. Given the uncertainty that surrounded development in the aftermath of the financial crisis, the Commission considered that this was the most prudent approach when it set prices in 2009.

An alternative view is that the ring-fencing approach leaves two risks with the customer: how much expenditure is needed, and how efficiently the expenditure will be made. Scottish Water is best placed to control these two risks, accepting that the level of demand will be affected by external factors in the wider economy. There is scope for the efficiency of delivery to be determined through an audit process, for example by the Independent Assuror. Ring fencing is perhaps most beneficial if it keeps the amount that needs to be included in customers' bills immediately to a lower level and, as a result, frees up resources for projects that will be more valued by customers. The proposal to introduce a three-yearly 'rolling' update to the investment programme will assist by allowing a review of the size of the ring-fenced allowance in 2018 to take account of emerging circumstances.

In common with the other Service Improvement Reports, we consider that more specific and defined information on both outcomes and expenditure, of the type expected in the October business plan, is required before detailed comment is possible. There should be evidence about how Scottish Water has sought to innovate and to work with its retail partners to free up capacity in the water and waste water systems. There are existing incentives for such collaboration under Section 29E of the Water Services (Scotland) Act 2005.

We will review the information that Scottish Water provides in these areas in its Business Plan and will comment further at that time.

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Note 15 for the Customer Forum

Scottish Water's draft business plan: Overview of WICS notes for the Customer Forum

Introduction

Scottish Water published its draft business plan for the six-year period 2015-21 on 30 October 2013. The Commission is pleased to note the focus on the customer and increased focus on innovation. Scottish Water has set out how it intends to realise its vision of becoming "Scotland's most valued and trusted business".

The draft business plan sets out the company's proposals in a number of areas, including the amount of revenue required from customers, projected expenditure, levels of service, and the improvements required to the quality of drinking water and the environment.

Many aspects of the plan are well argued and Scottish Water has set itself some important challenges. This is to be welcomed. However, there are also some areas where the Customer Forum may wish to discuss some of the underlying options and their associated outcomes for customers.

In line with the Strategic Review of Charges timeline[1], the Commission will now publish a number of notes that will provide an objective assessment of the plan and will facilitate discussions between Scottish Water, the Customer Forum and other relevant stakeholders. The notes will highlight the strengths of the business plan and areas where the Customer Forum may wish to focus its discussions with the company. Although each note will focus on specific areas of the plan that are material to customers, final decisions should be taken 'in the round', reflecting the overall package of price and service levels agreed between the Customer Forum and Scottish Water.

The purpose of this paper is to confirm the areas that will be covered in each note and the current timeline for publishing them.

The content of the notes

The Commission intends to publish the following notes.

16. **Financial assumptions**: the financial assumptions that underpin the draft business plan, including both inflation and the interest rates related to new borrowing.
17. **Cash and financial strength**: an assessment of Scottish Water's proposals for the closing cash balances, and the level of financial strength over the period.
18. **Base expenditure and efficiency**: covering operating expenditure, capital maintenance expenditure and the level of cost efficiency proposed in the plan.
19. **Levels of service to customers**: covering the proposals for how levels of service performance are assessed and measured over the period.
20. **Additional customer service priorities**: covering additional priorities proposed by Scottish Water, including proposals for pilot studies and other such initiatives.
21. **Enhancement investment**: covering both the investment required to deliver Ministers' objectives and discretionary enhancement investment.
22. **Growth in the customer base**: covering the impact of growth in the customer base on revenues and investment levels.
23. **Chairman's strategic overview**

[1] The full timeline was published in the Commission's methodology document, 'Strategic Review of Charges 2015-21: Innovation and choice'.

Current timeline

We set out below the dates on which we intend to publish the notes. These dates may be subject to change as the Commission continues to review Scottish Water's draft business plan. It may also be the case that we provide additional notes to those listed below (if requested to do so by the Customer Forum, for example).

Notes	Finalised notes sent to the Customer Forum, and published on the WICS website
16 and 17	22 November
18, 19 and 20	29 November
21 and 22	6 December
23	12 December

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Note 16 for the Customer Forum

Scottish Water's draft business plan: Financial assumptions

Scottish Water published its draft business plan on 30 October 2013. This note is one of a series that the Commission is publishing to provide an objective assessment of the plan and to facilitate discussions between the Customer Forum, Scottish Water and other relevant stakeholders.

The Commission is aware that Scottish Water and the Customer Forum have been in regular and detailed discussion over many months. In drafting these notes the Commission has been briefed by the Customer Forum on its emerging thinking having seen the draft business plan as it was being developed. As such the notes contain advice on areas that the Customer Forum has identified as being important to it.

The notes highlight the strengths of the business plan and areas where the Customer Forum may wish to focus its discussions with the company. Although each note focuses on specific areas of the plan that are material to customers, final decisions should be taken 'in the round', reflecting the overall package of price and service levels agreed between the Customer Forum and Scottish Water.

Introduction

Inflation and other economic assumptions play an important role in forecasting future revenues, charges, costs and financial strength. The impact of these economic assumptions is even greater in Scotland than in England as Scottish Water's borrowing allowance is capped in nominal terms.

This note presents the Commission's view of the financial assumptions Scottish Water has used to underpin its draft business plan for the period 2015-21.

Overview of business plan proposals

Inflation

The measure of inflation that is currently used when calculating Scottish Water's charges for each financial year is the retail prices index (RPI). Having discussed the pros and cons of alternative measures of inflation with the Customer Forum, Scottish Water now proposes to use a different measure, the consumer price index (CPI).

In its draft business plan Scottish Water has assumed that CPI will be 2% for each year of the period 2015-21. This forecast has been set in line with the Bank of England's long-term target for CPI.

Table 1: Scottish Water's assumed consumer price inflation

2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
2%	2%	2%	2%	2%	2%

As at previous price reviews, Scottish Water has applied a forecast of RPI to its base year costs to derive outturn expenditure profiles in the business plan. Scottish Water is not proposing to index its capital costs to an alternative measure such as the Construction Output Price Index (COPI), as has historically been common practice elsewhere in the water industry.

Scottish Water has assumed that operating and capital expenditure will inflate by RPI. It assumes RPI will average 2.9% across the period 2015-21. The company has based this forecast on the historic differential between CPI and RPI and on research that the Office for Budget Responsibility has undertaken on the future RPI/CPI differential[1].

Table 2: Scottish Water's assumed retail price inflation

2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
2.9%	2.9%	2.9%	2.9%	2.9%	2.9%

Interest rates on new debt

Although inflation across the economy will affect most of Scottish Water's costs, it does not affect its cash interest payments. Interest payments are determined by the rate at which it can borrow money from the Scottish Government. Scottish Water has made the following assumptions in relation to its average interest rates on new debt for the period 2015-21.

Table 3: Scottish Water's assumed interest rate on new debt

2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
3.5%	3.75%	4%	4%	4%	4%	4%	4%

Our analysis and issues arising

Inflation

The Customer Forum has indicated that CPI is the inflation measure that is most recognised by customers, as it is the UK Government's official measure of inflation. It is also the inflation index that is used to adjust many pensions and benefits.

Our analysis indicates that Scottish Water's forecast CPI of 2% a year is a reasonable assumption. That said, it should be noted that CPI has been above 2% for much of the past ten years and is forecast to continue to remain higher in the near term. If this trend continues charges could ultimately be higher and financial strength potentially improved – but that will depend on how Scottish Water performs during the regulatory control period.

Scottish Water's forecast rate for RPI of 2.9% for each year of the review period is based on an estimated 0.9% difference between RPI and CPI. The gap between RPI and CPI has generally been smaller than this, in the region of 0.75%, in the past 15 years. However, Scottish Water notes that the difference may grow as a result of changes in the way in which prices for clothing are measured.

We note Scottish Water's position on this increase due to clothing prices. However, we think that it would be more appropriate to use the long-term historical average. We would therefore suggest that an assumed difference between RPI and CPI of 0.75% would be reasonable.

[1] The difference between RPI and CPI is due to the composition of the indices and the mathematical formulae that are used to calculate each inflation rate. These differences usually mean that CPI is lower than RPI.

Interest rates on new debt

Our analysis indicates that Scottish Water's assumptions for the average interest rate on new debt for the period 2015-21 is reasonable.

Established forecasts[2] indicate a steady rise in government gilt yields over the next few years which will increase the cost at which Scottish Water is able to finance new borrowing. The only note of caution is that as current rates are at historic lows there is more risk that borrowing costs will be above the forecast levels than there is that they will be below them.

Presentation of prices

Scottish Water's business plan recognises that household budgets remain under some pressure. Normal regulatory practice has been to link prices to RPI. When setting prices for private sector companies, RPI-based price caps help companies to access index-linked debt, which can reduce the current interest charges that have to be paid for by customers.

However, customers may be disappointed if a promised price reduction relative to RPI inflation turns out to be an increase when considered next to the main CPI index.

Scottish Water's suggestion to link prices to CPI inflation may reduce the risk that customers' expectations are not met. An alternative approach may be to set the actual prices (at least for the first few years) that customers will pay. This would ensure that household customers can plan their budgets more easily. Such an approach could fit within the approach that the Commission used at the last Strategic Review of Charges of setting an overall charge cap for the whole regulatory control period.

If the Customer Forum and Scottish Water were to see merit in this suggestion, they may wish to take account of the planned increase (in line with RPI) that is expected to take effect this coming April.

Conclusion

Overall we consider that the financial assumptions that Scottish Water has used to underpin its draft business plan for the period 2015-21 are reasonable. However, we would recommend using an assumed difference between RPI and CPI of 0.75% rather than Scottish Water's assumption of 0.9%.

[2] The National Institute of Economic and Social Research, EY Item Club.

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Scottish Water's draft business plan: Financial strength and closing cash

Scottish Water published its draft business plan on 30 October 2013. This note is one of a series that the Commission is publishing to provide an objective assessment of the plan and to facilitate discussions between the Customer Forum, Scottish Water and other relevant stakeholders.

The Commission is aware that Scottish Water and the Customer Forum have been in regular and detailed discussion over many months. In drafting these notes the Commission has been briefed by the Customer Forum on its emerging thinking having seen the draft business plan as it was being developed. As such the notes contain advice on areas that the Customer Forum has identified as being important to it.

The notes highlight the strengths of the business plan and areas where the Customer Forum may wish to focus its discussions with the company. Although each note focuses on specific areas of the plan that are material to customers, final decisions should be taken 'in the round', reflecting the overall package of price and service levels agreed between the Customer Forum and Scottish Water.

Introduction

The customer interest is best served by Scottish Water being a financially sustainable business. It is important that prices are predictable and stable across time. This is best achieved by allowing for consistency in financial strength; the Commission has therefore committed to the financial tramlines[1], which should ensure that the financing of Scottish Water is appropriate for customers of today and tomorrow.

In general terms, Scottish Water should maintain an appropriate level of financial strength to protect against unforeseen shocks in the future. However its financial strength should not be so high that customers are overpaying in the present. Our approach is broadly similar to that of Ofwat, which requires companies south of the border to maintain a strong investment grade credit rating.

This note outlines the Commission's view of the comments on financial strength that Scottish Water has made in its draft business plan.

Overview of Scottish Water's proposals

Scottish Water's business plan suggests that it will:

- achieve an average in interest cover of 1.6x and gearing of 54% over the period 2015-21;
- accumulate £115 million of cash, including £93 million of gilts reserve, by March 2021.

The target level of cash assumes that:

- the Scottish Government will provide £120 million a year of borrowing;

[1] As outlined in the Commission's methodology document, 'Strategic Review of Charges 2015-21: Innovation and choice', the financial tramlines are a measure to monitor and ensure Scottish Water's financial strength and creditworthiness.

- Scottish Water will enter this price control with c£248 million[2] of cash that will primarily be used to finance the capital enhancement programme that was started in the current price control period and will be carried over into the next.

Assessment of Scottish Water's proposals and issues arising

We consider that Scottish Water should maintain strong financial ratios that are broadly consistent with a shadow credit rating of A3/A-. Such strong financial ratios would be broadly consistent with the credit rating of those companies in England and Wales that are not within a securitised financial structure.

Companies not financed within a securitised structure will typically seek to satisfy Ofwat's requirement to maintain a strong investment grade rating in their core business by targeting gearing around 60-65% and cash interest cover of 1.6-1.8x. Unlike companies in England and Wales, Scottish Water has no access to index linked borrowing. As a consequence, in comparison with its peers, Scottish Water's gearing will appear strong while its interest cover will look weak.

It is therefore important to look at these financial ratios together rather than individually when assessing financial strength. Our approach is to set prices consistent with Scottish Water achieving the targeted financial strength at the end of the regulatory control period. Under the expected borrowing profile, Scottish Water should have the financial resources that it requires to deliver the ministerial objectives and the improvements that the Customer Forum would like to see. We therefore consider that Scottish Water is targeting an appropriate level of financial strength.

In outlining how we would apply the financial tramlines, we sought a balance between allowing for customers to benefit from any outperformance as early as possible and the potential for performance in any single year to be unrepresentative of Scottish Water's underlying performance.

Table 1: Credit ratings (as at October 2013)

Company	Ratings from Moody's
Anglian Water Services Ltd	Baa1
Northumbrian Water Ltd	Baa1
Severn Trent Water Ltd	A3
Southern Water Ltd	Baa2
Thames Water Utilities Ltd	Baa1
Dwr Cymru Welsh Water	A3
UU Water Plc	A3
Wessex Water Services Limited	A3
Yorkshire Water Service Limited	Baa1

[2] Based on the assumption that charges increase by RPI in 2014-15.

The borrowing available to Scottish Water is expected to be £120 million a year for each year of the six-year period 2015-16 to 2020-21. Scottish Water's draft business plan includes assumptions on:

- opening and closing cash balances; and
- operating cashflows.

Scottish Water's draft business plan sets out what it considers to be the most likely outcome, but there is also an equal chance of over- or underperformance. The Commission's tramlines approach provides assurance to Scottish Water that its financial strength will be maintained in the long term beyond this price review. Our view, therefore, is that a closing cash balance in the gilts buffer (assuming performance in line with the regulatory contract) should be in the range of £20-£40 million.

This suggests that between £75 and £95 million may be used to reduce customers' bills or to finance further service improvements for customers. A reduced cash balance at the end of the regulatory control period would imply lower prices and, as such, reduced financial strength (measured on a like for like basis). In our view, when financial strength is restated on a basis broadly comparable to financing of the companies south of the border, there is scope to reduce the closing cash balance. We would be happy to model scenarios for the Customer Forum. It is, of course, possible that the ending cash balance will be higher if Scottish Water outperforms its regulatory contract.

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Scottish Water's draft business plan: Base expenditure

Scottish Water published its draft business plan on 30 October 2013. This note is one of a series that the Commission is publishing to provide an objective assessment of the plan and to facilitate discussions between the Customer Forum, Scottish Water and other relevant stakeholders.

The Commission is aware that Scottish Water and the Customer Forum have been in regular and detailed discussion over many months. In drafting these notes the Commission has been briefed by the Customer Forum on its emerging thinking having seen the draft business plan as it was being developed. As such the notes contain advice on areas that the Customer Forum has identified as being important to it.

The notes highlight the strengths of the business plan and areas where the Customer Forum may wish to focus its discussions with the company. Although each note focuses on specific areas of the plan that are material to customers, final decisions should be taken 'in the round', reflecting the overall package of price and service levels agreed between the Customer Forum and Scottish Water.

Introduction

This note outlines the Commission's view on Scottish Water's operating and capital maintenance costs (together known as 'base expenditure'). In our view, the Customer Forum should consider these two areas of cost together because a company has quite significant discretion in how it allocates its expenditure between them. Base expenditure accounts for more than half of Scottish Water's annual expenditure, so is a key element of the price setting process.

Overview of Scottish Water's proposals

Scottish Water's proposals are set out in the following table:

£m, 2012-13 prices	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Capital maintenance expenditure	275	277	279	281	283	285
Total operating expenditure	506	508	506	504	503	503
PPP charges	152	152	152	152	152	152
Controllable operating expenditure	237	237	236	234	232	230
Non-controllable operating expenditure	107	107	107	107	107	107
Cost of new obligations	10	11	12	12	12	14

Capital maintenance

In our response to Scottish Water's Service Improvement Report on capital maintenance we said that there was scope for greater clarity on expenditure and the resulting service levels.

Turning to Scottish Water's draft business plan, we note that some expenditure (which Scottish Water classes as enhancement investment) could potentially be considered as capital maintenance expenditure. Scottish Water has since confirmed to us that this is expenditure to improve levels of service to the desired future level. Although we accept this explanation we consider that the Customer Forum should now seek to agree more detailed commitments from Scottish Water on the defined and observable improvement in levels of service[1] that will result from this additional expenditure.

Scottish Water is requesting an increase of around 12% on its average annual maintenance expenditure for the current regulatory control period (2010-15). The company's maintenance expenditure will have been higher than was allowed for in the last Strategic Review of Charges and has been on an upward trajectory. At that time we set an allowance for capital maintenance of £224 million in 2007-08 prices. These upward pressures on maintenance expenditure are also observable in England and Wales.

We consider that the proposed increase is reasonable, given that Scottish Water intends to provide higher levels of service and, in common with the companies in England and Wales, is making increased use of assets with shorter lives to comply with European public health and environmental standards. At our request, the Independent Assuror has also reviewed Scottish Water's capital maintenance proposals in detail[2]. The Assuror concluded that the increases do not appear unreasonable.

Predicted five-year average capital maintenance for 2010-15 (2012-13 prices)	£249m
Proposed average annual investment 2015-21 (2012-13 prices)	£280m
Increase	**12%**

Operating expenditure

Scottish Water's operating expenditure in 2012-13 was £499 million. Its operating expenditure can be divided into controllable costs and those costs over which the company has little control. Non-controllable costs include taxes, rates, PPP contract costs, licence fees and other similar items. Our analysis concludes that £243 million of the operating expenditure in 2012-13 should be regarded as controllable. Further information is attached at Appendix 1.

Assessing Scottish Water's relative service and base expenditure performance

In previous price reviews we used a suite of econometric models and a separate unit cost model to assess the operating expenditure and capital maintenance efficiency gaps that existed between Scottish Water and the leading companies south of the border. In 2009 we decided not to use the

[1] Improvements may manifest themselves in increases in absolute standards or reductions in the risk of achieving the accepted standard.

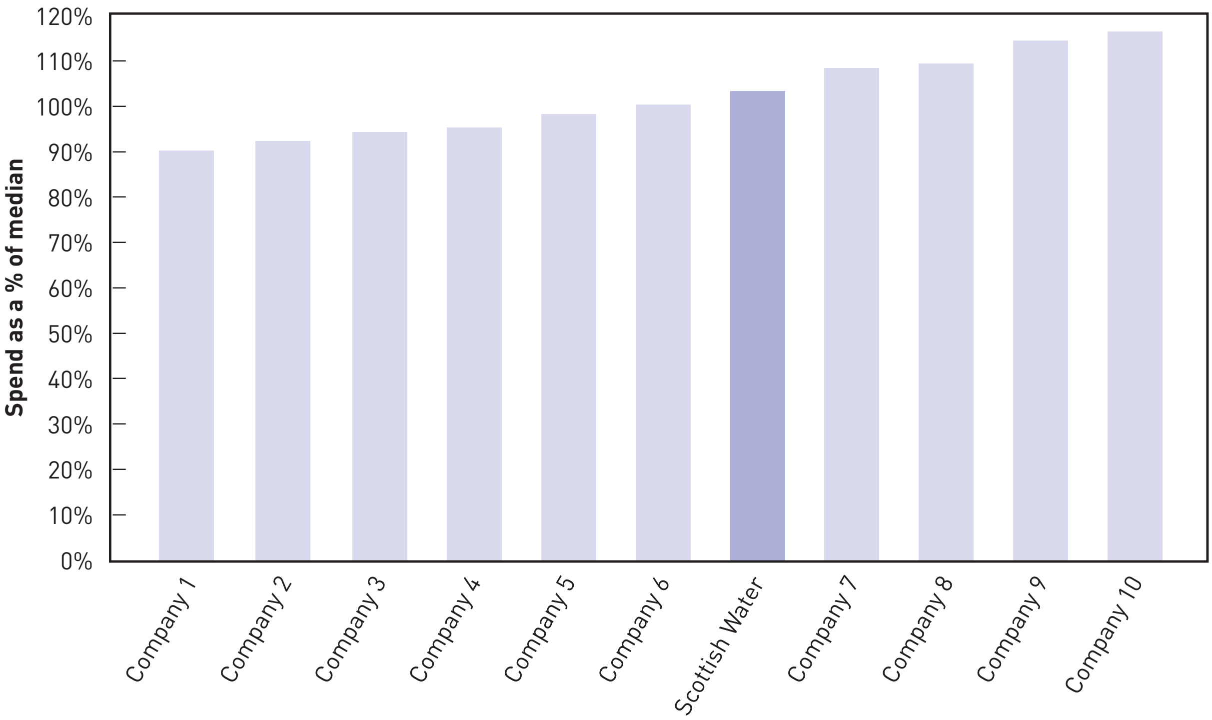
[2] The Independent Assuror's report 'Scottish Water's approach to capital maintenance – Report by the Independent Assuror' is available on our website.

results of these models but instead to require Scottish Water to hold its level of operating expenditure broadly flat after inflation. This required Scottish Water to improve services and meet the costs of operating new assets from its existing budget for operating expenditure.

In our view this was a more demanding challenge. It also required Scottish Water to save money from other budget areas if it needed to spend more on maintaining its assets. It appears that it was able to do so.

We believe that a similar challenge is appropriate for this price review. We have compared levels of unit costs and these show that Scottish Water has improved considerably. Although its unit costs are between 5% and 10% higher than the median for the companies in England and Wales, this is reasonable for a company that will be expected to deliver a high level of service given the asset base and rurality of much of its supply area.

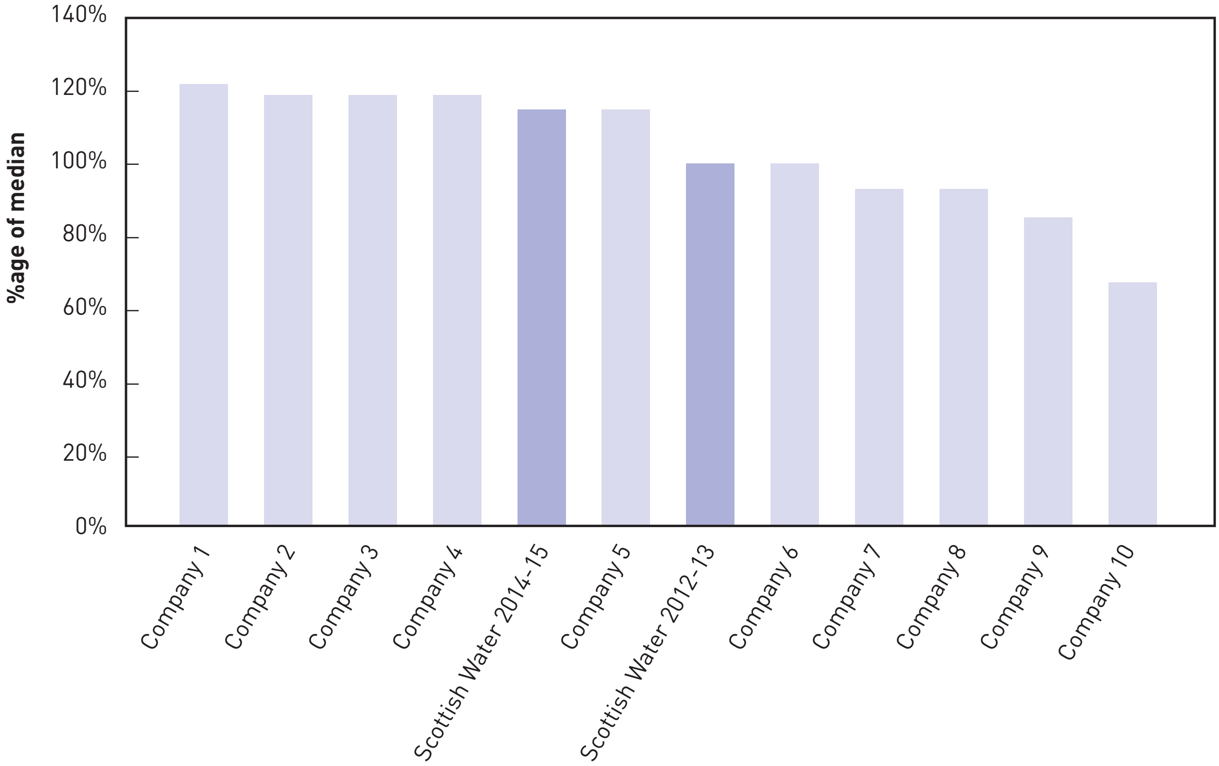
Comparison of total expenditure to operate and maintain assets with England and Wales water and sewerage companies



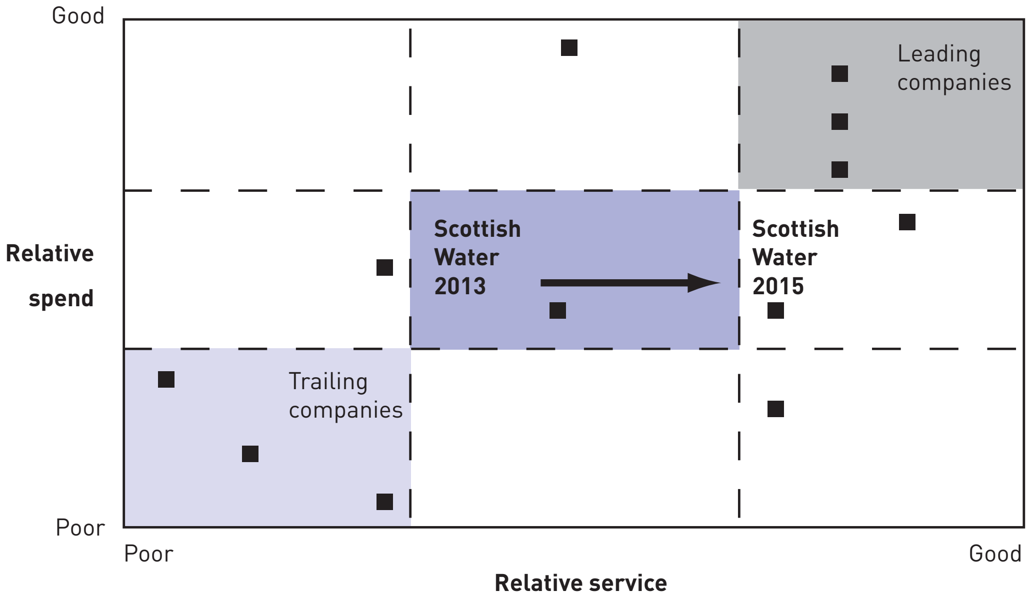
We have also carefully reviewed Scottish Water's levels of service. In our view, Scottish Water has some scope for further improvement given the proposed levels of cost to be incurred[3]. However, given that the scope for cost savings by Scottish Water over the period may only result in relatively modest downward adjustments, the Customer Forum may be better advised to focus on seeking defined and observable improvements in levels of service. In Customer Forum note 19 we set out some thoughts on levels of service.

[3] Its position on each indicator in 2012-13 is set out in Appendix 3.

Aggregated key performance indicators 2012-13 and Scottish Water's expected performance in 2014-15



Our analysis is summarised in the following figure. This sets out relative levels of service and relative unadjusted unit costs. It suggests that Scottish Water's performance is currently broadly in line with the average but that it is on an improving trend (indicated by the arrow in the performance matrix).



Conclusion

On balance, we consider that Scottish Water's proposals for its base expenditure in its draft business plan are broadly reasonable. They appear to be generally consistent with the ranges that we have previously set out for the Customer Forum.

However, Scottish Water has an opportunity to become unquestionably a leading company by the end of the next regulatory control period. There is still scope for cost reduction, however, if Scottish Water is to be among the very best performing companies at the end of this coming regulatory control period, it is likely that it will need to reduce its controllable operating expenditure by approaching 10% relative to that of its peers. Given both the uncertain nature of any cost saving projections and that Scottish Water's performance is already broadly in line with the average and on an improving trend, customers are likely to benefit most if Scottish Water focuses on improving its customer service and the resilience of its assets. We consider that the Customer Forum should therefore focus on seeking substantial and observable improvements in Scottish Water's levels of service and ensuring that these are as well defined as possible.

There is also scope for the Customer Forum to seek further improvements in the resilience of supplies to customers and to address some other potential priorities (such as improving supplies to rural areas) that are not explicitly covered in the plan. It should be possible to address these areas within an allowed for revenue consistent with lower prices, revised growth assumptions and a lower closing cash balance. In any trade-off with cost reduction, we believe the Customer Forum would be best advised to focus on customer service and the targeted level of resilience.

The financial tramlines will protect both customers and Scottish Water if these suggested trade-offs are not broadly balanced.

Appendix 1: Scottish Water's 2012-13 operating expenditure

Scottish Water’s operating expenditure 2012-13	£m
Total operating expenditure	**499**
PPP charges	
Operating costs	109
Financing charges	24
Loan repayments	16
Non-controllable operating expenditure	
Service charges SEPA	11
Local authority rates	61
Bad debt charge	28
Third party services	7
Controllable operating expenditure	243

Appendix 2: Scottish Water’s relative service performance

Measure	Performance 2012-13
Restrictions on water use	Upper quartile
Leakage relative to target	Upper middle quartile
Drinking water quality	Lower quartile
Interruptions to supply	Lower quartile
Internal flooding incidents	Upper middle quartile
Serious pollution incidents	Upper middle quartile
Sewage treatment works compliance	Lower middle quartile
Household retail performance	Upper middle quartile
Greenhouse gas emissions	Upper middle quartile
Satisfactory sludge disposal	Upper quartile

Appendix 3: Scottish Water's operating expenditure proposals

£m, 12-13 prices	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Total operating expenditure	**353**	**353**	**355**	**354**	**352**	**350**	**350**
Less uncontrollable operating expenditure:							
Service charges SEPA	11	11	11	11	11	11	11
Local authority rates	61	61	61	61	61	61	61
Bad debt charge	28	28	28	28	28	28	28
Third party services	7	7	7	7	7	7	7
New operating expenditure from service improvement and growth	6	10	11	12	12	12	14
Total controllable operating expenditure	**241**	**237**	**237**	**236**	**234**	**232**	**230**
Annual change in controllable operating expenditure	0.7%	-1.6%	0.2%	-0.7%	-0.8%	-0.8%	-0.8%

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Note 19 for the Customer Forum

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Scottish Water's draft business plan: Levels of Service

Scottish Water published its draft business plan on 30 October 2013. This note is one of a series that the Commission is publishing to provide an objective assessment of the plan and to facilitate discussions between the Customer Forum, Scottish Water and other relevant stakeholders.

The Commission is aware that Scottish Water and the Customer Forum have been in regular and detailed discussion over many months. In drafting these notes the Commission has been briefed by the Customer Forum on its emerging thinking having seen the draft business plan as it was being developed. As such the notes contain advice on areas that the Customer Forum has identified as being important to it.

The notes highlight the strengths of the business plan and areas where the Customer Forum may wish to focus its discussions with the company. Although each note focuses on specific areas of the plan that are material to customers, final decisions should be taken 'in the round', reflecting the overall package of price and service levels agreed between the Customer Forum and Scottish Water.

Introduction

This note presents the Commission's view on the monitoring and improvement of levels of service within Scottish Water's draft business plan for the period 2015-21. In our view this is an area on which the Customer Forum should focus in coming to its agreement with Scottish Water.

Household customers will expect to see Scottish Water build on the improvements in levels of service that have been seen in recent years. The move from a purely Scottish non-household retail market to an Anglo-Scottish market will further increase the expectations of retailers on Scottish Water's wholesale service levels.

Overview of business plan proposals

Scottish Water proposes that the level of service it provides to customers will be measured through the following four indicators:

1. Overall performance assessment (OPA)[1]

In line with its early promises to the Customer Forum, Scottish Water has proposed to retain the OPA with 17 measures, with only some minor adjustments to reflect agreements made with the Scottish Environment Protection Agency (SEPA) and the Drinking Water Quality Regulator (DWQR). Scottish Water expects to achieve a performance of 380-400 points by 2015 and to maintain this over the 2015-21 period.

[1] The OPA measures aspects of both operational performance (relevant to households and non-households) and customer-facing performance (relevant principally to households).

2. The Customer Experience Measure (CEM)[2]

Scottish Water proposes to introduce this new measure of customer satisfaction from 2015, when it will replace the current customer satisfaction measure. The CEM is broadly similar, but not identical, to the Service Incentive Mechanism (SIM) that is used in England and Wales.

The overall CEM score will be calculated from the sum of a quantitative measure and a qualitative measure, each evenly weighted at 50%.

The quantitative component will measure the number of unwanted contacts to Scottish Water from all channels of communication.

The qualitative component will be calculated from two measures: a Customer Experience Survey weighted at 80% and a Perception Survey weighted at 20%. The Customer Experience Survey will record the experiences and overall satisfaction of customers who have had to contact Scottish Water to resolve an issue. The Perception Survey will measure the overall satisfaction with Scottish Water's levels of service among customers who have not been in contact with Scottish Water.

Scottish Water proposes that it will continue to work with the Customer Forum and other stakeholders to develop the way in which the CEM will be calculated and to establish targets for improvement.

3. Wholesale key performance indicators (wholesale KPIs)

Scottish Water will continue to monitor the overall performance of its wholesale service to the licensed providers. The company reports that the overall measure takes account of wholesale services and responses to requests that relate to trade effluent, connections, disconnections, bylaws, metering and billing.

4. Additional measures[3]

Where they are not measured by existing performance measures, Scottish Water suggests that it will produce additional measures for areas of service that have been highlighted by the Customer Forum as customer priorities. These will include, but not be limited to, continued use of the Security of Supply Index until the new Resilience of Supply Index is implemented and the creation of a register of properties/areas at risk of external sewer flooding.

Outperformance

Scottish Water has committed to agreeing the allocation of outperformance when it arises with stakeholders and the Scottish Government.

Our analysis and issues arising

It is important that Scottish Water agrees performance indicators with the Customer Forum that reflect customers' priorities. There are a number of areas where there may be scope for increasing targets, improving the potential comparability with companies south of the border, and defining new areas where performance targets may be appropriate.

[2] This measure is likely to focus on household customer experience.

[3] These measures may measure both household and non-household experiences.

There is also an issue about facilitating customer interaction with Scottish Water. To that end the Forum may wish to consider the scope for Scottish Water's performance against all targets to be featured prominently on its website and in its annual report. The Customer Forum may also wish to consider whether the information on performance could be independently reviewed, and if so how this might be done.

1. Overall Performance Assessment

The Commission considers it important that there is a clear demonstration that service levels are being, at the very least, maintained against the principal performance indicators used in previous regulatory control periods. We would expect that this is also likely to be the Customer Forum's view.

The Commission set a target of 380-400 OPA points at the last price review and Scottish Water is on track to achieve this. As set out in Note 11 to the Customer Forum, the Commission supports the continued use of the OPA. It also considers that continuing to use the OPA will avoid the risk that standards might deteriorate if performance against the measures within the OPA were no longer monitored[4].

The Customer Forum may wish to explore whether the top end of the range should be increased to 410. This could be consistent with the higher levels of expenditure expected. However, the Customer Forum will also wish to be aware that no company has ever scored 410 and therefore that any score above 400 is likely to be 'best in class'.

2. The Customer Experience Measure

As set out in Notes 11 and 12 to the Customer Forum, the Commission supports the introduction of a new customer satisfaction measure and the CEM addresses this[5]. Scottish Water has assured the Commission that its CEM collects all of the information necessary for comparisons with the SIM scores south of the border to be carried out in a fully robust way.

The Customer Forum may wish to hear directly from Scottish Water that it will be possible to compare performance against the companies south of the border as measured by the SIM. It would also be reasonable to agree a performance improvement target during this regulatory control period.

3. Wholesale KPIs

The Commission believes that Scottish Water's wholesale performance is very important. As the retail market in Scotland continues to develop (and the market in England opens up), the demands on Scottish Water are likely to increase. This is an opportunity for Scottish Water to demonstrate what it has learnt from the earlier introduction of retail competition in Scotland.

We note that Scottish Water's business plan did not contain a great deal of information about these wholesale KPIs. We believe that Scottish Water should publish the measures it has been using and its performance against them.

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[4] Note 11 for the Customer Forum: "Measuring levels of service performance". Available at: http://www.watercommission.co.uk/UserFiles/documents/CustomerForumNote11(B).pdf

[5] Note 12 for the Customer Forum: "Measuring customer satisfaction". Available at: http://www.watercommission.co.uk/UserFiles/documents/CustomerForumNote12.pdf

In our view the Customer Forum should review these measures carefully, assess whether they are the most important criteria to retailers, and agree new measures and/or new target levels that would be consistent with the higher level of expenditure allowed for.

4. Additional measures

As set out in Note 11 to the Customer Forum, the Commission supports the introduction of new measures to monitor and incentivise improvement in areas of service recognised as customer priorities[6]. The Customer Forum should agree the additional service indicators to be measured. It will be important that they are initially defined as robustly as possible and that a process for finalising these measures and setting future levels of performance is agreed. The level of allowed for expenditure is consistent with a significant improvement in levels of service[7].

Outperformance

The Commission welcomes Scottish Water's proposal to agree on the allocation of outperformance with stakeholders.

A final thought

Scottish Water has set itself the clear objective of becoming Scotland's most valued and trusted business. This is a worthy aspiration that should be welcomed. However, the Customer Forum may wish to consider the very long-term aspirations for customer service that are consistent with its research and its expectations for the operational performance of Scottish Water.

There are potentially some important and interesting issues that could be discussed and defined:

- How will we know when Scottish Water is close to achieving its vision?
- Can the water system be made lead free by some future date?
- Can we eliminate (internal and external) sewer flooding (absent an act of God) by some future date?
- Can we eliminate water pressure problems by some future date?
- Can we ensure that no medical, care or school buildings are supplied by private supplies by some future date?

Agreeing final dates for these ambitions may require some careful study but that could be a cost worth allowing for in the discussions between the Customer Forum and Scottish Water. In our view, agreeing a way forward on these transformational changes should ensure that there remains a strong focus on the customer well into the future.

These aspirations should take the form of advice to the Scottish Ministers who would take a final decision on whether to amend their objectives for the current regulatory control period.

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[6] Note 11 for the Customer Forum: "Measuring levels of service performance". Available at: http://www.watercommission.co.uk/UserFiles/documents/CustomerForumNote11(B).pdf

[7] An improvement in levels of service may result either from an increase in the standard to be delivered or a reduction in the risk of a service failure happening.

Conclusion

This is an area where there remains much to be discussed between Scottish Water and the Customer Forum. We would be happy to assist in advising on defining performance indicators, or on the development of aggregate performance indicators, if the Customer Forum wished to pursue such an approach. A potential agreement on a long-term vision for improvements may represent a transformational change towards a uniquely customer-focused water industry in Scotland.

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Note 20 for the Customer Forum

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Scottish Water's draft business plan: Additional priorities for customers

Scottish Water published its draft business plan on 30 October 2013. This note is one of a series that the Commission is publishing to provide an objective assessment of the plan and to facilitate discussions between the Customer Forum, Scottish Water and other relevant stakeholders.

The Commission is aware that Scottish Water and the Customer Forum have been in regular and detailed discussion over many months. In drafting these notes the Commission has been briefed by the Customer Forum on its emerging thinking having seen the draft business plan as it was being developed. As such the notes contain advice on areas that the Customer Forum has identified as being important to it.

The notes highlight the strengths of the business plan and areas where the Customer Forum may wish to focus its discussions with the company. Although each note focuses on specific areas of the plan that are material to customers, final decisions should be taken 'in the round', reflecting the overall package of price and service levels agreed between the Customer Forum and Scottish Water.

Introduction

This note presents the Commission's view of some of the additional priorities that the Customer Forum may wish to consider for inclusion in Scottish Water's business plan for the period 2015-21, in discussion with the environmental regulator (SEPA), the drinking water quality regulator (DWQR) and the Scottish Government. Any additional priorities that are proposed would have to be included in the Scottish Ministers' final investment objectives.

Overview of business plan proposals

Scottish Water's business plan is based on delivering the draft objectives for customers, the environment and public health that the Scottish Government has issued[1].

We are aware that, in their ongoing discussions with Scottish Water, the Customer Forum and other stakeholders have identified potential scope for additional priorities to be included within the investment objectives. This note summarises some areas that it may be worthwhile considering further. The Customer Forum may identify other priorities as the dialogue continues.

Potential additional priorities

Priorities linked to further level of service improvements

In Customer Forum note 19 we noted the importance of some of the Customer Forum's thoughts about the long-term level of service that customers in Scotland will receive. In our view, Scottish Water's draft business plan could have gone further in this area. As such, the Customer Forum may

[2] See 'Investing in and Paying for Your Water Services from 2015', Annex D, issued by the Scottish Government in June 2012.

wish to consider how its additional priorities may contribute to a more resilient, more innovative and more sustainable water industry in Scotland. It may also wish to consider how rural communities in particular can be most sustainably served.

It will be important to allow for the relevant studies or trials to be carried out so that appropriate target dates are set for delivery of any new service levels. However, it is equally important that, while agreeing a grand vision for the industry with Scottish Water and the Scottish Government, small steps are taken towards these desired improvements.

For example, the lead pilot projects discussed below may be a first step towards a lead-free water network. Pilot projects in the delivery of services to rural areas may substantially improve the quality of life for these communities.

Private water supplies and sewerage provision to rural communities

In response to the Ministers' rural communities objective[2], the Scottish Government is taking forward work to consider how best to address issues in private water supplies and rural sewerage provision. Scottish Water's draft business plan does not currently include any provision for work arising from these studies.

The Customer Forum may wish to discuss with Scottish Water, the DWQR and the Scottish Government whether customers are content to see schools, hospitals and some reasonably large populations being served by private water supplies. It may be prudent to consider how such areas may be sustainably and safely supplied. This may be best achieved by financing some pilot projects during the 2015-21 period. These pilot projects could inform the future approach to making sure that private water supplies meet appropriate standards.

The Customer Forum may also wish to discuss with Scottish Water, SEPA and the Scottish Government the approach to rural sewerage services. We are aware that SEPA has recently written to the Scottish Government identifying six villages with public nuisance or environmental impact caused by the cumulative effect of private sewage discharges. A pilot project approach, similar to that being discussed for water, may also be appropriate for waste water services.

The Commission considers that given the high marginal cost of extending public service provision, the economic interests of customers are best served by encouraging innovative approaches that work with local communities. The Customer Forum may wish to consider whether this is a priority that should be included and, if so, how it is best tackled.

Lead pipe replacement pilot projects

At present around 4% of customers' water supply pipes and the associated 'communication' pipes[3] to properties are made of lead. Although there are potential operating cost savings and possible environmental and long-term health benefits from removing these pipes, there is significant uncertainty around the costs and benefits of replacing them entirely.

[2] As set out in section 1.3 of the Draft Objectives for the period 1 April 2015 – 31 March 2027 (See Appendix 3 of Scottish Water's October 2013 draft business plan).

[3] The 'communication' pipe is the section of pipe that connects the water main to the edge of the customer's property and is Scottish Water's responsibility. The water 'supply' pipe provides the remainder of the connection from the edge of the property to the main valve inside the property and is the customer's responsibility.

The Customer Forum may therefore wish to explore with Scottish Water and the DWQR whether it would be beneficial to carry out pilot projects in areas where Scottish Water already has to intervene to ensure compliance with water quality standards. Such pilot projects would improve our understanding of what should be done and the associated costs.

As highlighted in our note on levels of service, it may be appropriate to begin the process of agreeing a date by which Scottish Water's network would be lead free.

Further improvements in water and waste water supply resilience

Scottish Water's draft business plan outlines its proposals in this area. There appears to be little doubt that this is an important area for customers. The Customer Forum may wish to consider whether more progress on reducing the number of properties with low water pressure or at risk of sewer flooding should be considered.

Addressing household water service pipe issues

At present, it is the responsibility of property owners throughout the UK to manage water supply pipes on their property; as a result, some insurance companies are offering expensive cover to property owners.

Defra is currently consulting on the management of water supply pipes south of the border. While we do not know at this time what the outcome of the consultation might be, there may be merit in considering cost-effective mechanisms by which Scottish Water could take additional responsibility for maintaining and/or repairing supply pipes on behalf of customers.

The Customer Forum may wish to explore whether a pilot scheme may be appropriate to allow a better understanding of costs, customer acceptance and the practical considerations of addressing supply pipe issues. In doing so, it should be recognised that supply pipe repairs often involve disruption to people's driveways or gardens. In other words, drives would have patches, gardens would simply be returned to earth or turf, and plants and rockeries etc would not be replaced.

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21

Note 21 for the Customer Forum

Scottish Water's draft business plan: Enhancement expenditure

Scottish Water published its draft business plan on 30 October 2013. This note is one of a series that the Commission is publishing to provide an objective assessment of the plan and to facilitate discussions between the Customer Forum, Scottish Water and other relevant stakeholders.

The Commission is aware that Scottish Water and the Customer Forum have been in regular and detailed discussion over many months. In drafting these notes the Commission has been briefed by the Customer Forum on its emerging thinking having seen the draft business plan as it was being developed. As such the notes contain advice on areas that the Customer Forum has identified as being important to it.

The notes highlight the strengths of the business plan and areas where the Customer Forum may wish to focus its discussions with the company. Although each note focuses on specific areas of the plan that are material to customers, final decisions should be taken 'in the round', reflecting the overall package of price and service levels agreed between the Customer Forum and Scottish Water.

Introduction

As the Commission described in its methodology[1] the water and sewerage industry in Scotland is governed by a clear regulatory framework.

The Scottish Government sets out its high-level objectives[2] for the water industry. In setting these objectives, the Scottish Government takes into account its available borrowing, the likely affordability of charges and the level of investment that can be efficiently delivered. The Commission's role is to set charges that are consistent with the lowest reasonable overall cost of delivering these objectives. The charges it sets must also be consistent with the Scottish Government's 'principles of charging'.

The Scottish Environment Protection Agency (SEPA) and the Drinking Water Quality Regulator (DWQR) advise the Scottish Government on the improvements needed to achieve compliance with statutory standards and other measures they believe are required to maintain public health and the environment. They also monitor and report on Scottish Water's performance against these standards.

Scottish Water's business plan sets out its proposed investment to meet the Scottish Government's objectives for the 2015-21 period. This includes investment to deliver two categories of improvements:

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1 The Strategic Review of Charges 2015-21: Innovation and choice', May 2013.

2 The Scottish Government's draft objectives for the 2015-27 period are set out in Appendix 3 of Scottish Water's draft business plan and will be finalised in June 2014.

- The statutory requirements that are specified in the objectives and are overseen by SEPA, DWQR or the Scottish Government.
- Other improvements that are included within the ministerial objectives but are less clearly defined than the statutory improvements, such as improvements in resilience of supply, levels of service and actions to reduce sewer flooding.

In addition to the requirements that are set out in the Scottish Government's draft objectives, the Customer Forum, in consultation with Scottish Water and other stakeholders, may also propose other outcomes that are beneficial for customers and can be delivered within the principles of charging. The scope for these additional outcomes is discussed in Note 20 for the Customer Forum. The Forum and Scottish Water would invite the Scottish Government to incorporate any such agreed additional outcomes into their objectives for the regulatory control period.

In its discussions, the Customer Forum may wish to consider the timing and pace of the investment programme, the level of innovation, the use of revenue solutions (as opposed to capital expenditure) and the company's overall efficiency. It cannot question the need to meet statutory outcomes or deadlines, specified by the Government.

There are significant opportunities for innovation in delivering the enhancement programme, particularly in the non-statutory elements that are not subject to compliance deadlines. Scottish Water's business plan sets out its approach to innovation. The Innovation Panel may be able to help the Forum in its assessment of Scottish Water's plans.

During the regulatory control period industry stakeholders (the Scottish Government, Scottish Water, the Commission, SEPA, DWQR and Consumer Futures) meet quarterly to review Scottish Water's progress in delivering the agreed objectives.

Overview of business plan proposals

Investment in capital enhancement

Scottish Water proposes to invest a total of £1,089 million (in 2012-13 prices) on enhancing services over the period 2015-21 (or an average annual expenditure of £181.5 million). The six-year figure includes £182.8 million on investment to complete projects scheduled for delivery in 2010-15 but which will not be completed until the 2015-21 period. Scottish Water proposes that this completion expenditure is ring-fenced.

The breakdown is set out in the following table:

Scottish Water's proposed enhancement investment (£m) (2012-13 prices)

Category	Statutory	Scope for discussion	Scottish Water's proposed investment (£m) (2012-13 prices)
To improve water service	340.5	130	470.5
To improve the environment	196.4	166.2	362.6
To support communities	0	73.1	73.1
Total enhancement (exc. completion)	536.9	369.3	**906.2**
Completion	179.8	3	182.8
Total enhancement (inc. completion)	716.7	372.3	**1,089**

Impact of capital enhancement on operating expenditure

When Scottish Water invests in improving water quality or the environment, it will also incur additional operating expenditure. Scottish Water's draft business plan suggests that this additional operating expenditure will amount to £3 million[3] a year by the end of the regulatory control period. A large part of this expenditure is likely to include increased energy use: such expenditure may consequently increase faster than the general rate of inflation if recent trends were to continue.

Impact of capital efficiency

The cost of the enhancement programme will be influenced by the extent to which Scottish Water can continue to improve the efficiency of its planning and delivery mechanisms. Scottish Water has proposed an overall average capital efficiency target of around 16% in its plan.[4]

Our analysis and issues arising

Investment in capital enhancement

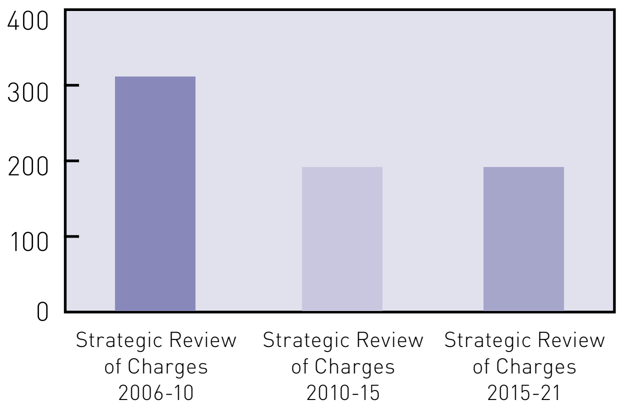
The graph below shows the average annual enhancement expenditure in 2006-10 and 2010-15[5] compared with the forecast enhancement expenditure for 2015-21.

[3] This figure is from Scottish Water's reported new operating costs in quality and service improvement. It excludes reductions in operational expenditure due to 'invest to save'.

[4] For the enhancement elements of the programme the average efficiency is around 12% or £151 million.

[5] Based on actual expenditure for 2010-13 and forecast expenditure for 2013-15.

Average enhancement investment per year including completion (£m) (2012-13 prices)



There was agreement among all stakeholders in Scotland that, although the improvements required in the 2002-06 programme were necessary, it required Scottish Water to deliver a very high level of investment per connected property. This level of investment could not reasonably be maintained as it was greater on a per connected property basis than that required of even the small water companies in England and Wales (who would normally be disadvantaged in this regard). As the levels of investment in maintenance also had to increase, it was necessary to deliver lower levels of enhancement investment to ensure the most effective delivery possible.

Investment in statutory enhancement

SEPA and DWQR have indicated that they are content that the statutory enhancement programme of improvements set out in the draft business plan will meet the requirements that the Scottish Ministers have set out in the draft objectives. SEPA and the Scottish Government have advised that the proposed deferral of improvements required under the Water Framework Directive will not meet the statutory compliance dates. Consequently, around £12 million of additional investment will need to be included in the 2015-21 period.

The Customer Forum may wish to confirm with SEPA and DWQR that the required statutory improvements are being delivered in a timely way; they may also wish to consider whether there has been sufficient regard to the use of innovative approaches.

Investment in other priorities included in the ministerial objectives

The proposed enhancement expenditure for 2015-21 includes a significant element – some 34% of the total – which is included to improve the resilience and/or quality of services provided to customers and to improve Scottish Water's performance against measures that are monitored by the quality regulators and by the Commission.

For its part, the Commission considers that there is scope for Scottish Water to set out more clearly what benefits customers, as well as other stakeholders, will receive from Scottish Water's proposed non-statutory investment. For example, the proposed investment in improved resilience of the network and in customer service needs to be carefully defined, with clear, measurable outcomes and progress milestones agreed. The Customer Forum may wish to understand better the views of SEPA and DWQR in the areas that they monitor.

Investment to support communities

This expenditure includes investment on energy efficiency, research, renewable generation, metering improvements, climate change and improvements to customer contacts where the Scottish Government's objectives allow for interpretation of the precise requirements. Again, the Customer Forum may wish to discuss with Scottish Water the precise nature of the benefits for customers in these areas and how the proposed improvements in performance can be properly assessed, as well as discussing the extent of desirable improvements in these areas with other stakeholders.

Possible duplications

In examining Scottish Water's detailed proposals, the Commission has noted that there may be some minor duplication of drivers in the water quality programme with requirements set out in previous investment periods. The Commission is discussing these elements with the DWQR and will notify the Customer Forum of the outcome of these discussions.

Impact of capital enhancement on operating expenditure

The stated impacts of Scottish Water's proposed investments on operating expenditure over the period 2015-21 amount to 2%[6] of the proposed investment in enhancement. In the Commission's view this is reasonable, albeit at the lower end of a typical range. It appears consistent with the overall view on operating costs that was discussed in Note 18 for the Customer Forum, although it will be important to ensure that good performance in this area is associated with efficient delivery rather than any over-reliance on capital solutions.

Scope for capital efficiency

The Commission has carefully scrutinised Scottish Water's proposed capital efficiency target. We believe that this target is in excess of the challenge that would have resulted from the traditional Ofwat approach to narrowing the gap and from the more challenging approach that we used in previous price reviews.

Clearly an efficiency requires that at least the same outcome (in terms of levels of service and risk) is delivered for no more than the amount of expenditure (current and future) that was previously required. In our view, this underlines the importance of setting defined levels of service targets, agreeing potential new metrics, and introducing milestones to monitor performance towards the agreed outcomes.

The Customer Forum may wish to emphasise the importance of customer service measures and milestones in providing continuing reassurance that Scottish Water is achieving the capital expenditure efficiency targets that it has set itself.

Carry-over investment

Scottish Water's proposed investment carry-over includes a significant element for on-going work on Glasgow's drainage system. There are also a number of other carry-over projects where the timescales for delivery were always expected to extend beyond the end of the current regulatory control period due to the requirement for detailed study work to determine the most cost-effective solution.

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[6] This figure is calculated from Scottish Water's reported new operating costs in quality and service improvement of £3 million a year over the period (total £18 million) as a percentage of the enhancement investment in quality and service improvement.

The Commission considers the proposed expenditure in these areas to be reasonable although the Customer Forum may wish to seek confirmation of the timescales for delivering the associated benefits to customers.

Measuring performance

The delivery of the enhancement programme is closely monitored through the multi-stakeholder Outputs Monitoring Group[7]. The monitoring mechanisms include a measure of overall performance and detailed assessment of performance against a range of delivery milestones. The Customer Forum may wish to provide recommendations to the Outputs Monitoring Group with regards to the monitoring regime for 2015-21 to ensure that it adequately captures delivery of all of the outputs that customers have financed for the period.

Levels of service monitoring also provides assurance that outcomes are being delivered. Note 19 for the Customer Forum sets out the Commission's views on the performance indicators that the Forum may wish to see established in this area. There is scope for the Customer Forum, when developing new measures in this area, to consider how the monitoring of output delivery might be linked more directly to the overall customer experience measures. The aim would be to ensure that there is a demonstrable customer benefit from all of the non-statutory elements of the enhancement programme.

Conclusion

The Commission broadly welcomes the proposed investment in capital enhancement within Scottish Water's draft business plan for the period 2015-21. We would highlight the importance of clear explanations from Scottish Water that set out in detail how and when customers and other stakeholders will benefit from this important element of the investment programme. There is undoubtedly scope for the Customer Forum to work with stakeholders to develop better measures in this area and for these to be incorporated into the ministerial objectives. The Commission would be happy to work with the Customer Forum to take work in this area forward with Scottish Water.

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[7] The Outputs Monitoring Group membership comprises SEPA, DWQR, the Commission, Consumer Futures, Scottish Government (which acts as the Chair) and Scottish Water. It meets quarterly and its reports are available on the Scottish Government's website.

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January 2014

Note 22 for the Customer Forum

Scottish Water's draft business plan: Growth

Scottish Water published its draft business plan on 30 October 2013. This note is one of a series that the Commission is publishing to provide an objective assessment of the plan and to facilitate discussions between the Customer Forum, Scottish Water and other relevant stakeholders.

The Commission is aware that Scottish Water and the Customer Forum have been in regular and detailed discussion over many months. In drafting these notes the Commission has been briefed by the Customer Forum on its emerging thinking having seen the draft business plan as it was being developed. As such the notes contain advice on areas that the Customer Forum has identified as being important to it.

The notes highlight the strengths of the business plan and areas where the Customer Forum may wish to focus its discussions with the company. Although each note focuses on specific areas of the plan that are material to customers, final decisions should be taken 'in the round', reflecting the overall package of price and service levels agreed between the Customer Forum and Scottish Water.

Introduction

This note presents the Commission's views on the levels of growth and associated costs included in Scottish Water's draft business plan. In our view this is an area where Scottish Water appears to have taken an overly cautious approach. It is therefore an area to which the Customer Forum may wish to pay particular attention. This note sets out the Commission's views on what might be a more appropriate estimate of likely growth, and a suggested approach to mitigate the risk of opting for higher growth rates.

In Scottish Water's business plan proposals, the impact of new customers on the network accounts for around 7% of proposed investment and provides additional income of around £17 million a year.

Overview of business plan proposals

Growth assumptions

Scottish Water assumes that the number of households paying charges will grow by 0.67% a year. As such, it is expecting to connect 99,000 new household properties over the period 2015-21.

In the non-household sector, Scottish Water highlights the risk from the steady reduction in volumes of non-household water demand since 2008, which may lead to under-recovery of costs in this area. However, the company believes that this contraction could be broadly offset by forthcoming changes in the wholesale charging arrangements, which are expected to increase the customer base.

Overall, Scottish Water would expect its revenues to remain flat in real terms over the period (ie growing by 0% per year) without any changes in the Government's policy on charging. The company recognises, however, that the proposed introduction of charges to vacant properties could be expected to increase revenue by £15 million a year from 2017-18.

Scottish Water suggests the use of a 'wholesale revenue cap' mechanism[1] for the non-household sector. This would protect household customers by ensuring that if growth is overstated, charges to non-household customers are increased to compensate. There would be no impact on household customers. Scottish Water also suggests that its proposed approach would provide a useful further incentive to licensed providers to identify properties that are not currently billed. This is because any additional income from these properties would reduce the wholesale tariffs that the licensed providers pay.

Investment and expenditure in growth

Scottish Water forecasts that it will invest £207 million over the period 2015-21 to meet additional demand for water and waste water services. Of this, £24 million will be for strategic infrastructure funded through the 'infrastructure charge', which is paid by those connecting to the network.

Table 1: Scottish Water's growth investment proposals

Programme	Forecast investment and expenditure £m (2012-13 prices)
'Reasonable cost' contributions	77.4
Treatment strategic capacity	68.4
Adoption of developer assets & non-domestic meters	23.5
Relocation of services for transport infrastructure projects	13.8
Total net investment	**183.1**
Strategic infrastructure	24.0
Total gross investment	**207.1**

Scottish Water expects 100% of new demand for water services and 63% for waste water services to be supplied from existing assets. The company is also proposing to ring-fence investments on growth and to review its proposals when it updates the capital expenditure programme planned for 2018.

Our analysis and issues arising

Growth assumptions

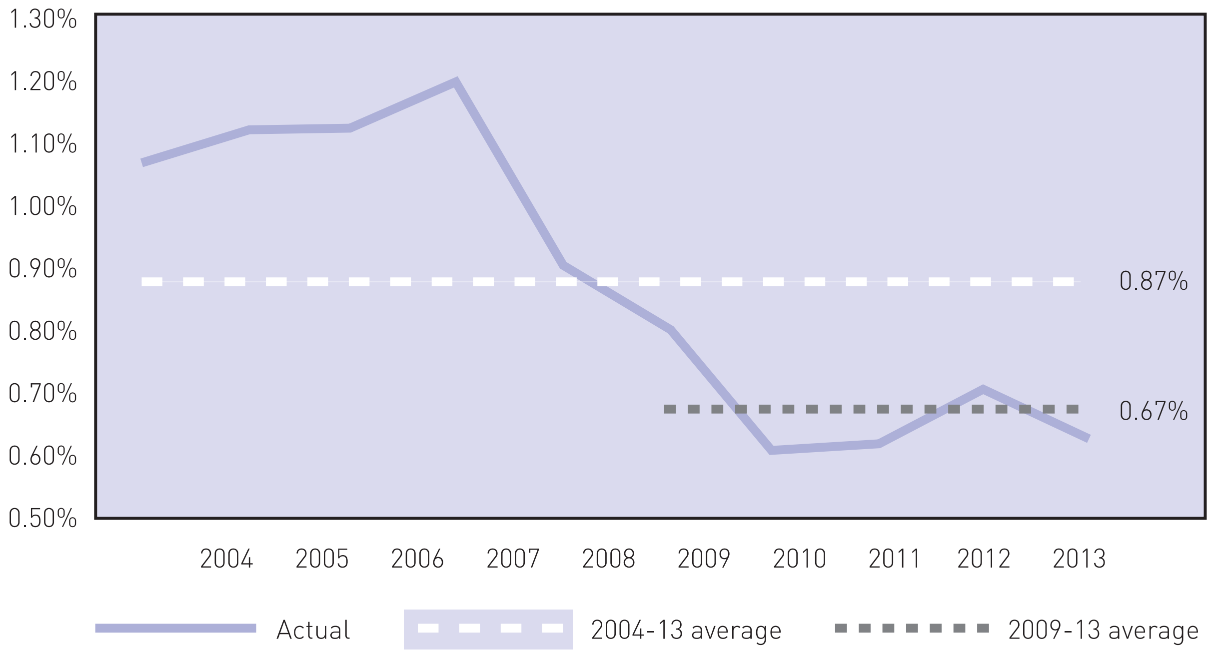
The household growth rate that Scottish Water is forecasting (of 0.67% a year) is in line with the average growth rate of Band D equivalent properties[2] over the last five years. We believe that this estimate is unduly cautious. It reflects a period when housing development has been significantly curtailed by both a relative paucity of bank finance and by the economic downturn.

[1] A wholesale revenue cap mechanism removes uncertainty from the revenues Scottish Water will earn from the non-household sector by fixing this income and adjusting the wholesale charges that the licensed providers pay. This mechanism has been employed in previous review periods.

[2] The concept of 'Band D equivalents' was developed to convert the number of households included in different tax bands, and therefore paying different bills, into a standard measure through the use of a set of weights (for example, a Band A property is weighted 6/9 relative to a Band D, while a Band H is weighted 18/9).

While we would not advocate switching back to the rate of new connections in the five years immediately preceding the banking crisis, a rate of connections around the ten-year average (or perhaps slightly higher) may be reasonable. It should be noted that new properties are, on average, allocated to higher bands; as a result the growth in 'Band D' equivalents will typically be slightly higher than the absolute number of properties connected.

Annual growth rate of water Band D equivalents (%)



As a result, for revenue purposes, we believe that it could be appropriate to assume household growth in the range of 0.8% to 1.0%. This range is consistent with the average over the last ten years. The Customer Forum should also be aware that more recent news from the housing sector has been much more positive than it has been in the past few years.

It is, of course, possible that the current perceived recovery in house building is a false dawn. In this eventuality, the review of investment in 2018 provides an appropriate point to reconsider assumptions on growth and any implications arising.

Scottish Water's forecast that there will be no change in the non-household customer base requires that the number of business customers will increase sufficiently to offset any decrease in the volume of water used by current business customers. We believe that this could be overly optimistic and, based on the historic weighted average of volumes and supply points of water and waste water over the past five years, we suggest that the Customer Forum looks to agree a decrease in the range of 0.5% to 0.75%.

Investment in growth

The Commission reviewed Scottish Water's proposal for investment and expenditure in meeting new demand for water and waste water services. Following an adjustment of £21 million to correct a miscalculation in relation to reasonable cost contributions, Scottish Water proposed a revised total for the gross investment requirement of £228 million.

Of this total, £167 million (£28 million a year) relates to reasonable cost contributions and investment in treatment strategic capacity which can be directly compared with the historic average expenditure in these areas between 2006 and 2013, as shown in Table 2.

Table 2: Historic comparison of growth investment

Expenditure on reasonable cost contributions and treatment strategic capacity (2012-13 prices)	
Average from 2006-07 to 2012-13	£39m per year
Forecast for the period 2015-2021	£28m per year

Our analysis suggests that Scottish Water's proposed expenditure in this area is lower than it has been historically. This appears consistent with the capacity in the network that has been created through leakage reduction and synergies with the ongoing capital enhancement programme. Further progress on leakage reduction in the 2015-21 period would help offset future growth expenditure requirements in future regulatory control periods.

We note that Scottish Water is forecasting that it will receive £7 million a year in infrastructure charge income from developers. Given that it is forecasting to connect 99,000 new household properties, we believe that this may underestimate the infrastructure charge income that Scottish Water will collect by around £3 to £4 million[3] a year.

We acknowledge that a higher growth rate may entail some additional investment from Scottish Water (most likely on the waste water service). Scottish Water would also face further reasonable cost contributions. However, in our view, Scottish Water could be expected to absorb these costs at least until the investment review in 2018.

The extra income from infrastructure charges along with the additional revenue from new customers may be sufficient to offset any additional investment required from Scottish Water. We also believe that there is further scope for Scottish Water to adopt innovative approaches to new connections and that this could reduce costs. We would expect to see progress in this regard over the next few years.

[3] We assume that Scottish Water will receive an average infrastructure charge payment of £630 from each of the 102,000 new connected properties (99,000 household and 3,000 non-household properties). This indicates that the company would collect £60 to £65 million in infrastructure charges over the period 2015-16 to 2020-21, about £20 million above its conservative estimate of £42 million.

Conclusion

Growth is an area where the Customer Forum should focus its attention. There is scope to increase the estimate of the level of growth in new household connections. At the same time, the proposed revenue profile expected from the non-household sector may be too optimistic.

The Forum may also wish to discuss with Scottish Water whether or not it is necessary to ring fence growth investment and expenditure given that a review of the investment required is planned for 2018 (which will provide an opportunity to adjust levels of allowed for expenditure). In our view this ring fence is not required.

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