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Capital Maintenance

Introduction

This is the fifth in a series of 2018 Decision Papers that the Water Industry Commission will publish for the Strategic Review of Charges 2021-27. The Commission published thirteen Initial Decision Papers during 2017. The Commission will issue further Decision Papers throughout 2018. These papers will update customers and stakeholders on the Commission's latest views and decisions for the Strategic Review of Charges 2021-27.

The 2018 Decision Papers provide the Commission's views on:

- Strategic issues facing the industry that will impact levels of service beyond the next regulatory control period;
- The prospects for customers' charges during the next regulatory control period;
- Issues that directly and materially impact the charges that customers will pay in the next regulatory control period; and
- The potential for Scottish Water to engage even more effectively with its customers.

The clarity of the governance framework for the water industry in Scotland is a significant strength. The role of the Scottish Government as policy maker, owner and banker is well defined and recognised. The objectives and principles of charging set the boundaries for the Strategic Review of Charges. As such, discussion about approaches to asset replacement, planning and prioritisation of investment and compliance with European Union Directives takes place within the policy for the industry set out by the Scottish Ministers.

The Commission has adopted the principles of Ethical Based Regulation and intends to conduct a transparent and collaborative price review, taking account of all the evidence available to it in coming to the views set out in these Decision Papers. The final section of this paper sets out the framework for the key performance indicators that we will use to oversee the delivery of the changes to the regulatory framework.

In line with the Cooperation Agreement signed with Scottish Water and Citizens Advice Scotland, the Commission would be minded to adopt a Strategic Plan that is consistent with the Commission's Final Decision Papers and agreed with the Customer Forum as its Draft Determination.

This fifth 2018 Decision Paper sets out the Commission's thoughts on capital maintenance: the investment needed for asset repair and replacement to maintain current levels of service. The long-term investment requirement for the water industry in Scotland is not well understood. Scottish Water has much to do to build confidence among stakeholders that it can effectively and efficiently deliver the investment needed to address asset replacement over the long-term. The Commission will support Scottish Water in developing plans and approaches that will focus on ensuring customers receive value for money from capital maintenance investment.

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The Commission's Expectations

In its methodology for the Strategic Review of Charges 2021-27, the Commission set out its expectations for future proofing the water industry for customers. Scottish Water should:

1. Develop a clear strategy, maximise the opportunities available to it and provide clear evidence for its approach. Stakeholders will expect to be able to scrutinise the evidence provided.
2. Adopt behaviours that build trust and make progress in instilling pride among its customers and within the communities that it serves.
3. Ensure its asset management allows it to evidence the resources that it will need to improve its performance. Develop the asset information, which will underpin effective, efficient and timely replacement of its assets.
4. Improve its efficiency and, where appropriate, take advantage of innovation to ensure that prices are kept as low as is consistent with a sustainable industry for future generations.
5. Work collaboratively and constructively with regulators and other stakeholders to identify and implement the most effective and efficient solutions.
6. Improve the transparency and frequency of its reporting on performance.

The Commission considers that there are three key building blocks of this Strategic Review of Charges:

- *Evidencing the asset replacement challenge and developing an appropriate, efficient and effective response.* The Commission is working closely with Scottish Water and other stakeholders to establish an approach to long-term asset replacement. It expects Scottish Water to develop a common understanding amongst its stakeholders of the resources that it will require in order that an appropriate transition to a sustainable level of annual investment can be put in place. Such a transition should be fair to both current and future generations. The Commission will set out its latest thinking on this issue in 2018 Decision Paper 5.
- *The introduction of a rigorous investment planning and prioritisation process.* Scottish Water will set out succinct, yet comprehensive investment appraisals that will allow stakeholders to provide an informed view on Scottish Water's proposals. Such appraisals should cover the impacts on, and views of, customers and communities. The Commission sets out its initial views in 2018 Decision Paper 3.
- *The process for evidencing financial, service level and water and environmental compliance in the coming regulatory period and beyond.* The Commission will set out its initial thinking on monitoring performance in 2018 Decision Paper 6.

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Overview

In Initial Decision Paper 7, the Commission set out its view that the current regulatory framework has not focused sufficiently on a strategy for the long-term replacement of its assets. The Commission recognised that it was highly likely that there would need to be increased expenditure on asset replacement: not necessarily immediately, but in the medium to long-term. However, the long-run need for such investment makes it prudent to take the first steps towards ensuring that Scottish Water is well placed to meet its need for investment in this area.

The Commission recognises that it will take time for Scottish Water to develop a full understanding of asset replacement needs – and to demonstrate to customers, communities and stakeholders that increased investment in this area could be spent effectively and efficiently.

The Commission recognises that it is easier to establish how much needs to be spent in broad terms than how and when the industry could efficiently and effectively commit available resources. The Commission has noted the similarities between the long-term commitments of defined benefit pension schemes – where the ‘inputs’ from contributions need to match the ‘outputs’ to pensioners over the long-term – and the need to make adequate long-term provision for asset replacement. Establishing a robust approach will ensure that future customers are not unfairly faced with higher charges or reduced service levels. The ongoing customer research, including the work on Behavioural Insights, will help identify customer views in this important area.

The Commission’s work with Scottish Water on asset replacement – supported by an Advisory Group of experts – has indicated that, while the long-run need is indisputable, Scottish Water will have to work hard to evidence the detail of its needs. Scottish Water will need to build the trust of stakeholders by evidencing the required level of resources to maintain and replace its assets in a sustainable way. This will require a comprehensive work plan with clear actions and milestones, with progress reported through the performance monitoring regime (which will be discussed further in 2018 Decision Paper 6). Scottish Water should recognise that a proportion of its allowed for revenues should be available only if it makes sufficient, verified progress against an agreed work plan to develop a full understanding of the need to replace assets and an appropriate programme of communication and evidencing.

All proposed investment on asset replacement will be subject to the investment planning and prioritisation process (as discussed in 2018 Decision Paper 3) where stakeholders will be able to provide input on Scottish Water’s proposals. The investment planning and prioritisation process will help to increase customers, communities and stakeholders trust in Scottish Water’s asset management capabilities.

We have captured our current views in the following bullet points.

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The Commission's thinking as it began the Strategic Review of Charges 2021-27...

- Scottish Water has markedly improved service levels to its customers since 2002.
- In common with other water companies, Scottish Water has focused on improving its understanding of the performance of its assets. However, the water industry generally may not have focused sufficiently on a strategy for the long-term replacement of its assets.
- The Commission identified that Scottish Water was likely to need increased levels of capital maintenance both to maintain levels of service and replace ageing assets.
- The Commission recognised it would take time for Scottish Water to develop a full understanding of its assets: replacement costs, asset lives, how to best prioritise interventions, manage risks and monitor condition.
- The Commission identified three potential approaches to ensuring that appropriate resources are made available:
 - Continue to make allowances consistent with demonstrated need ('pay as you go');
 - Make financial provision for future asset replacement ('pay the underlying long-run annual economic cost'); and
 - Adopt 'a project financing approach'. Under such an approach, the Scottish Government would lend to Scottish Water to finance specific assets or outcomes. It would then expect to be repaid during the life of that asset. Subject to the availability of lending from the Scottish Government, Scottish Water could sustainably fund the replacement of its assets over the long-term.

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The Commission's joint working with stakeholders has allowed its thinking to advance both more quickly and more productively...

- The Commission's analysis suggests that providing the evidence of the asset replacement liability is challenging.
 - What is Scottish Water's work plan to provide this evidence?
 - How much will it need to spend?
 - How and when will it spend it?
 - Does Scottish Water have the capability to spend additional capital maintenance expenditure efficiently and effectively?
 - How effectively will the supply chain be able to respond?
- The Commission sees similarities between a defined benefit pension scheme and the asset replacement challenge. In both cases, there is a liability which will only fully crystallise over time. Likewise, it is essential that resources will be available when required in both cases if trust and confidence are to be maintained.
 - Scottish Water has promised, as a minimum, to maintain service levels. The approach to funding a defined benefit pension scheme should allow this to be delivered if it commits available resources effectively and efficiently.
 - Alternative approaches would be more similar to the recent moves towards defined contribution pension schemes. Future customers would have to accept reduced (even if still compliant) service levels or higher charges.
- There is a clear intergenerational trade-off between charges, reliability of services and environmental and water quality resilience.

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The Commission is very pleased that Scottish Water and its stakeholders have engaged so regularly...

- The Commission recognises that it is easier to establish how much needs to be spent in broad terms than how and when the industry could efficiently and effectively commit available resources.
- Scottish Water explained in its Strategic Projections that it has to continue to improve its asset management capability; particularly if it is to deliver a significant increase in capital expenditure and maintain the trust and confidence of customers and communities and other stakeholders.
- Scottish Government, the Commission and other stakeholders will need compelling evidence on Scottish Water's approach to asset replacement. In particular, stakeholders want to understand the interaction between maintenance, enhancement (meeting compliance standards, improving levels of service and resilience) and growth investment.
- Scottish Water will have to consider how it puts in place a long-term asset replacement plan that will build and maintain the trust of its stakeholders. It should consider offering to ring fence some proportion of its allowed for revenue and propose external verification of its approach to understanding and evidencing its need for asset replacement.
- Scottish Water has begun to analyse and quantify the likely total extent of its asset replacement challenge. Further work is likely to be required, beyond the Strategic Plan, to understand the timeframe and appropriate approach to effective and efficient asset replacement.
- Increased funding for asset replacement would be released from the ring fence when Scottish Water can:
 - Establish a consensus on the amount that will need to be spent;
 - Show progress in line with the advice of the independent expert on asset information and asset management; and
 - Evidence how it proposes to spend the resources available.
- The investment planning and prioritisation process will play an essential role in building customers', communities' and other stakeholders' confidence in the evidence.

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As the Commission is at an early stage of the Strategic Review of Charges, there are a number of outstanding issues...

- Will Scottish Water be able to:
 - Set out clear commitments and milestones that explain how it will evidence and address the asset replacement challenge?
 - Set out its assumptions on asset replacement and why it believes these assumptions remain prudent but achieve a sensible balance of risk?
 - Evidence the appropriate proportion of its allowed for funding that should be ring-fenced?
 - Build stakeholder trust and confidence in its approach to improving its asset management capability and capacity?
 - Set out in its Strategic Plan the clear actions and milestones required to build and maintain the confidence of stakeholders?
 - Demonstrate that its proposed expenditures take account of whole life cost, risks and opportunities for optimisation (including optimised refurbishment) are appropriately prioritised?
 - Facilitate the investment planning and prioritisation process?
- How might Scottish Government's, customers', communities' and other stakeholders' views on the appropriate level of asset maintenance and replacement be influenced by the inevitable impact on charges?
- What lessons will stakeholders learn from their work on Behavioural Insights in this area?
- What insights will stakeholders gain from the ongoing work of the Advisory Group on asset replacement?
- Could it be in the interests of customers and communities to appoint an independent expert of matters pertaining to asset condition and asset replacement?

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The Strategic Review of Charges process is at an early stage. The principal next steps for the Commission include...

- Continuing to work with the Advisory Group to develop a fuller understanding of the appropriate approach to long-term asset replacement.
- Working with Scottish Government, customers, communities and other stakeholders to build a common understanding of the asset replacement challenge and the need to develop a long-term approach.
- Working with the Scottish Government, Scottish Water and other stakeholders to consider how customers and stakeholders should allow for ongoing maintenance expenditure such as asset repairs. The appropriate approaches for maintenance and replacement expenditure are likely to be quite different.
- Supporting Scottish Water as it:
 - develops an appropriate work plan;
 - quantifies the problem;
 - builds confidence in how it would spend the additional resources; and
 - develops the capability and capacity of its asset management.
- Taking account of the lessons from the Behavioural Insights work.
- Revising the economic regulatory framework such that the disciplines of the previous arrangements are maintained or strengthened.
- Working with the OECD to build an understanding amongst all stakeholders of the lessons that can be learnt from other sectors.

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Timetable for 2018 Decision Papers

The Commission sets out its current timetable for the publication of its 2018 Decision Papers in the following table.

2018 Decision Paper	Topic	Publication date
1	Scottish Water's Strategic Projections: A summary of our current thinking	25 July 2018
2	Assumptions on macroeconomic inputs and customer base growth	25 July 2018
3	Investment planning and prioritisation	25 July 2018
4	Meeting long-term investment needs	26 September 2018
5	Capital maintenance	26 September 2018
6	Performance monitoring	21 November 2018
7	Financial tramlines	21 November 2018
8	Prospects for prices	21 November 2018

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Regulatory framework: Key Performance Indicators

Ethical Based Regulation requires a defined framework in which a regulated company is expected to operate. It offers clear benefits to a regulated company that meets and exceeds the expectations that underpin the framework. It envisions a more collaborative approach – not necessarily always working jointly on issues – that will take more informed and better evidenced decisions and build the trust and confidence of customers and communities. The Commission set out its expectations of such a ‘paradigm shift’ in its methodology for the current Strategic Review of Charges.

The Commission’s framework for economic regulation seeks to ensure improved and sustainable outcomes for customers and communities. If it is working effectively, Scottish Water should be demonstrably making progress towards such improved outcomes.

The Commission has been developing key performance indicators for monitoring, and reporting on, the revised framework for economic regulation. In consultation with Scottish Water and other stakeholders, the Commission has set up an EBR Review Group, which includes independent and international experts who have senior level experience in other sectors or countries. The members of this group are:

- Carlos de Regules who set up and led the National Agency for Safety, Energy and Environment for Mexico (ASEA). He was previously a Director at the Mexican Petroleum Company (Pemex).
- Steve Johnson who was previously Chief Executive Officer at Electricity North West (ENW) and has held several executive roles within the water sector.
- Jean-Yves Ollier who is a member of the French Council of State. He was previously Chief Executive of the French Regulatory Commission of Energy (CRE).

The members of this group will work with stakeholders to refine these performance indicators. Once agreed, these indicators should apply during the current Strategic Review of Charges and in future regulatory control periods. They will test whether the framework for economic regulation is meeting the expectations of stakeholders and that the Scottish industry is making appropriate progress.

The performance indicators will likely be closely linked to key delivery milestones included in Scottish Water’s Strategic Plan. There may also be a range of qualitative assessments that all stakeholders should address regularly. The aim of these regular assessments is to ensure that there is a useful common understanding of whether the regulatory framework is working for customers and communities. Doubtless, such assessments may also identify areas for improvement.

The Commission intends that the EBR Review Group meets regularly with all stakeholders throughout the period of the implementation of the new regulatory framework. They will also work closely with the OECD.

¹ The Commission’s expectations are set out in its methodology document, ‘Innovation and Collaboration’.

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The draft framework for the key performance indicators is set out in the chart on page 11 and reflects six key building blocks outlined in the methodology. The key expectation is that Scottish Water takes full ownership of its strategy.

The Commission trusts that the EBR Review Group will provide a useful and continuing perspective on the performance of the economic regulatory framework. It looks forward to discussing with the Group and other stakeholders the final framework.

Chart 1 – Framework for key performance indicators

