

## Methodology Information Paper 22: Our proposed approach to determining the appropriate level of capital maintenance expenditure to allow for

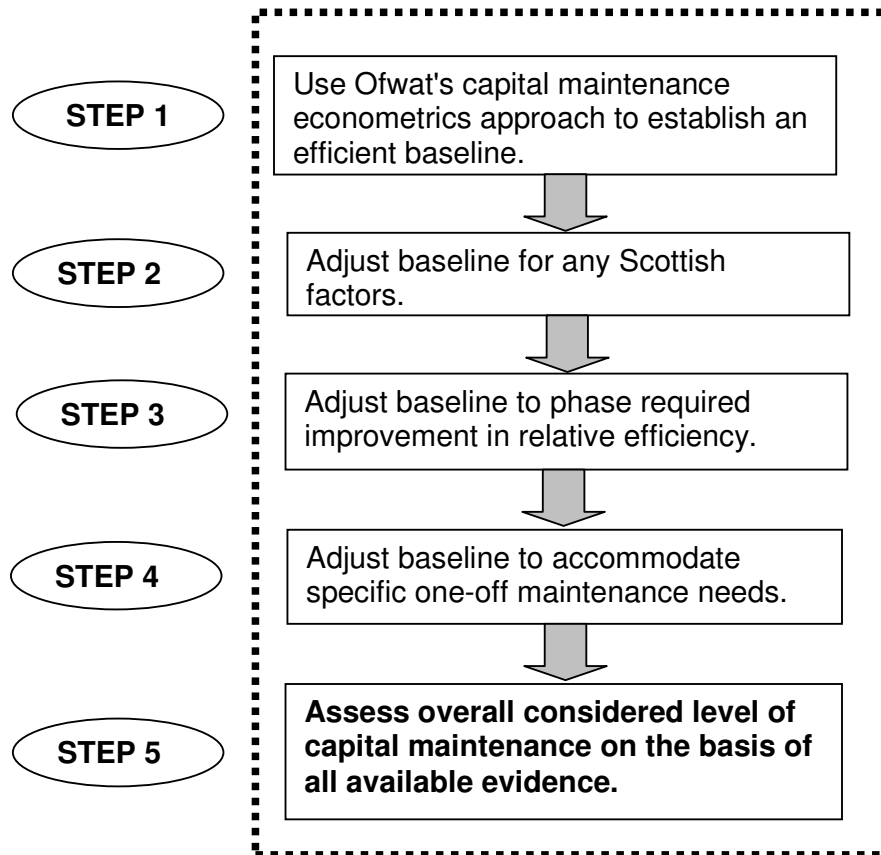
### Introduction

This information paper sets out how we propose to establish a level of capital maintenance expenditure that will deliver stable customer service levels during the 2010-14 regulatory control period.

### Overall approach

To assess capital maintenance expenditure in the Strategic Review of Charges 2010-14 we intend to build on the approach that we used in the 2006-10 Review. Our proposed approach is summarised in Figure 1.

**Figure 1:** Proposed approach to assessing Scottish Water’s capital maintenance requirements



## Step 1: Use Ofwat's capital maintenance econometrics approach to establish efficient baseline

To establish a baseline for capital maintenance, we consider two related factors:

- the reference level of serviceability to customers; and
- the expenditure on maintaining the base level.

### *Reference level of serviceability to customers*

In establishing the base level of serviceability to customers, we distinguish between:

- investment to maintain stable serviceability to customers of Scottish Water's assets; and
- investment to improve the level of serviceability of these assets to customers, deliver quality improvements and increase capacity.

To do this we establish a baseline level of the serviceability of Scottish Water's assets to its customers. Expenditure to maintain this level of serviceability would be classified as maintenance. Any expenditure to improve service beyond this level is classified as enhancement expenditure.

There are a number of approaches we could use to set a reference level of service. We could, for example:

- designate the level of customer service achieved by Scottish Water in a particular year;
- forecast levels of customer service allowed for in the regulatory settlement;
- benchmark against the level of customer service achieved by companies in England and Wales.

The ministerial objectives for the 2006-14 period established a defined minimum level of service to customers to be maintained throughout the period.

Regulators generally opt to define an actual level of service achieved in a base year as the level that is to be maintained. However, we consider that the ministerial objectives for 2006-14 also defined specific improvements to this baseline level of service on which Scottish Water was financed to deliver. As such these objectives should be used to define the baseline for the serviceability of assets to customers for the 2010-14 Strategic Review.

A number of technical adjustments may be required to convert the ministerial objectives to a workable definition of baseline serviceability. For example, information for some of the measures has improved and should be taken into account. In addition, a number of measures that were not specified in Ministers' objectives could also inform judgements about whether Scottish Water is at least maintaining a stable level of the serviceability of its assets to customers. We propose to take account of these factors.

#### *Expenditure on maintaining the base level*

We plan to use Ofwat's econometric modelling techniques to establish an initial estimate of the appropriate allowance for capital maintenance, consistent with a 2007-08 base year. These models are explained in Information Paper 23. We will revise the econometric models used by Ofwat to include information from Scottish Water.

We will also consider the practicality of updating these models for the Strategic Review of Charges 2010-14 in light of the latest available information from England and Wales and information in Scottish Water's business plans.

#### **Step 2: Adjust for any Scottish factors**

For an individual company, it is possible that there are additional factors that influence costs but which are not included in the models. These are known as 'special factors' because they may be relevant to just one or two companies' costs. Special factors can both increase or reduce costs. Perhaps not surprisingly, companies tend to concentrate on providing information about those factors that increase costs when explaining their efficiency to regulators.

As part of its business plan submissions, we will ask Scottish Water to submit its current view of the special factors that influence its costs. We propose only to take account of the special factors that are material and outside the control of management. We would then adjust the results of our models<sup>1</sup> to take account of these factors.

When considering special factors we expect to apply similar criteria to those used previously by the Commission and by Ofwat. For an adjustment to be valid, Scottish Water will have to provide a high standard of evidence in relation to the following questions:

- What are the special circumstances that produce a material difference from industry norms?

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<sup>1</sup> See page 173 of the Strategic Review of Charges 2006-10 for this assessment in that Review.

- What is the overall net impact of the special factors on Scottish Water's costs?
- What has Scottish Water done to manage the additional costs arising from the special factors and to limit their impact?
- Are there other special factors that reduce costs relative to industry norms? If so, have these been quantified and offset against the upward cost pressures?

We intend to seek confirmation of the evidence on the impact of these factors on Scottish Water's costs from the independent Reporter.

We will respond to Scottish Water's evidence on special factors that it provides in its first draft business plan. This will form part of our overall response to the first draft business plan, which we plan to publish on 31 July 2008. We will also hold a workshop with Scottish Water to discuss its evidence on special factors.

### **Step 3: Adjust baseline to phase required improvement in relative efficiency**

With determined management, Scottish Water could outperform our capital expenditure efficiency assumptions for the 2006-10 regulatory control period. However, it also seems likely that the water and sewerage companies in England and Wales will further improve their efficiency during the same period. As such, it is likely that Scottish Water will continue to be less efficient than the benchmark water and sewerage company in England and Wales for capital maintenance. We will therefore need to assess the level of this inefficiency and determine an appropriate target for improvement<sup>2</sup>.

We propose to use econometric and cost-base benchmarking techniques to assess Scottish Water's relative efficiency in its capital expenditure. We would assess capital maintenance efficiency relative to that of the leading water and sewerage companies south of the border in 2007-08. In our view Scottish Water should be challenged to deliver similarly stable serviceability of its assets to customers for an equivalent level of cost by the end of the 2010-14 regulatory control period.

### **Step 4: Adjust baseline to accommodate specific one-off maintenance needs**

Scottish Water's 'bottom up' assessment of its capital maintenance may identify instances where future expected expenditure is different from historical levels. In general, we would expect such

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<sup>2</sup> See page 242 of the Strategic Review of Charges 2006-10 for this assessment in that Review.

examples to be limited. There appears to be little reason to expect step changes in Scottish Water's requirement for capital maintenance. However exceptions may occur where there are significant one-off projects<sup>3</sup>.

It is worth noting that exceptional items may either increase or decrease costs. We would allow for such exceptional items in our modelling for the 2010-14 Review where Scottish Water can demonstrate that its claim:

- is based on reliable information;
- has been robustly costed, including external advice where necessary;
- has taken proper account of any offsetting factors;
- has withstood scrutiny by the Reporter;
- is not the result of economy-wide factors captured in inflation indices; and
- is not already accounted for in our benchmarking.

#### **Step 5: Assess overall considered level of capital maintenance on the basis of all available evidence**

From steps 1 to 4 of the process, we will be able to assess a level of capital maintenance expenditure required by Scottish Water to maintain stable serviceability of its assets to customers.

Our analysis would then compare our results against a range of other high-level approaches to assessing an appropriate allowance for capital maintenance<sup>4</sup>. This would include assessing whether there is any need to increase the level of spending in this area from the levels that have been seen since 2002.

There are a number of alternative information sources that may reveal high-level information about Scottish Water's capital maintenance requirements, including:

- comparisons of information from the industry on the age profile and failure rates of different classes of assets; and
- the views of other stakeholders, particularly the Scottish Environment Protection Agency and the Drinking Water Quality Regulator.

In our operating expenditure benchmarking, we have developed an alternative model that we use to check the results of our

<sup>3</sup> See page 239 of the Strategic Review of Charges 2006-10 for this assessment in that Review.

<sup>4</sup> See page 242 of the Strategic Review of Charges 2006-10 for this assessment in that Review.

## **Volume 4 supporting material: capital maintenance expenditure**

econometric benchmarking. We may be able to use some of the factors listed above to develop a similar alternative model for capital maintenance expenditure.

### **Related documents**

'The Strategic Review of Charges 2006-10: The draft determination', Volume 5, Water Industry Commissioner for Scotland, June 2005.

'The Strategic Review of Charges 2006-10: The final determination', Water Industry Commission for Scotland, November 2005.