

# PC15 Capex ‘Minded To’ Methodology

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# Chapter 1 - Background

## 1.1. Context

- 1.1.1. The purpose of this document is to detail the expected approach for determining both the efficiency gaps and the PC15 capital efficiency targets for NI Water.
- 1.1.2. It is important to stress that the Regulator **cannot fetter its discretion** at this stage. This means that methodologies or decisions cannot be finalised until receipt of NI Water's PC15 submissions and our determinations. To do so may result in adopting a suboptimal approach. This could in turn have a harmful impact on either consumers or NI Water.
- 1.1.3. However, the Regulator does see benefit in providing detail to NI Water concerning the approaches under consideration for capital efficiency. We have taken into consideration NI Water's response to our paper setting out the UR initial thoughts on options to determine capital efficiencies.
- 1.1.4. This methodological note provides information on:
  - Calculating capital efficiencies (using the Cost Base and Frontier Shift plus possible analyses of procurement efficiencies);
  - Capital maintenance approach;
  - Setting targets;
  - Conclusions.
- 1.1.5. Although no final decisions are made, this 'minded to' document gives all stakeholders an idea of the PC15 approach to capex efficiency and target setting.

## Chapter 2 - Capex Efficiency

### 2.1. Cost Base

- 2.1.1. It is the Regulator's legal duty to promote economy and efficiency in NI Water. This is done by benchmarking the company against other relevant comparators. The analysis generates a measure of relative efficiency against which targets can be set.
- 2.1.2. The purpose of this section is to detail the expected process for assessing the capex catch-up efficiency.
- 2.1.3. Of the options considered (high level capital unit costs, TR61 and the Cost Base), the UR is 'minded to' adopt the Cost Base unit cost comparisons as one key part of the assessment. This involves comparing NI Water standard rates against both their own historic costs at PC10 and PC15 and E&W PR09 company figures. As a result, we are asking the company to provide a Cost Base submission using the final Cost Base guidance we adopted at PC10 (plus some additional tables comparing PC15 with PC10 standardised unit costs).
- 2.1.4. In completing the Cost Base, there are a variety of modelling decisions which will affect the final efficiency gap. For the purpose of completing this analysis the Regulator is 'minded to' adopt the following approach:
- **Regional adjustments** – Apply an updated regional price adjustment (RPA) to unit costs. This reflects the comparative advantage (or otherwise) of operating in a certain area. The proportion of costs to which the RPA will be applied is yet to be decided. We will provide the company with an indicative RPA number (including proportions to which it would be applied) by 2<sup>nd</sup> December 2013 to help facilitate the company's preparation of its final Cost Base (v2.0).
  - **Comparisons** – NI Water data will be compared against the real unit costs of the E&W companies at PR09. Their costs will be uplifted for construction inflation (COPI) to 2012-13 prices.
  - **Benchmarking** – Compare NI Water costs with upper quartile performance i.e. those companies with relatively efficient unit costs. Consideration may also be given to other comparators such as the median or the celtic fringe companies.
  - **Adjustments** – Apply symmetrical adjustments to unit costs. This means giving credit to areas where the company is efficient rather than simply taking account of inefficient unit costs.
  - **Special factors** – Consider any relevant factors identified as outside management control which are contributing to NI Water costs to a greater extent than other companies.

- 2.1.5. The Cost Base remains the principal approach. Further alternatives may be employed in an effort to improve the robustness of our findings.
- 2.1.6. We would expect the company to submit as part of its Business Plan its own view of where? and when? it would make further capital efficiencies across PC15, especially those derived from new and better procurement.
- 2.1.7. Post the company's PC15 Business Plan and final cost base (v2) submissions we shall consider the need or otherwise for the UR to conduct its own procurement efficiencies research, to inform its PC15 determinations in light of their own assessment of same.

## **2.2. Frontier Shift**

- 2.2.1. It is the intention of the Regulator to undertake its own analysis of frontier shift. This is likely to mirror the approach used for opex at PC13 (and intended for PC15). The assessment will consider inflation, real price effects and productivity.

## Chapter 3 - Capital Maintenance

### 3.1. Modelling Capital Maintenance

- 3.1.1. The Approach to Asset Maintenance paper detailed a variety of techniques which are intended to be used to assess capital maintenance. The Regulator is 'minded to' triangulate estimates using a combination of these models.
- 3.1.2. One such method is the use of the Capital Maintenance Econometric Return or "CMER" in order to generate an appropriate level of capital maintenance. Updating the models used in PC10 is the starting point of this analysis.
- 3.1.3. However, given the availability of data, other models will also be considered. This could include using different explanatory variables or testing total capex models, historic costs or different unit costs.
- 3.1.4. The aim of the models is not to establish relative efficiency. Rather, the analysis is intended to be used to determine the econometric prediction of levels of spend for NI Water. A number of adjustments will be required to complete the analysis. With respect to these decisions the Regulator is 'minded to':
- **Regional adjustments** – Apply the local RPA to predicted costs. The proportional application of this RPA to infrastructure and non-infrastructure spend is yet to be decided. We will provide the company with an indicative RPA number (including proportions to which it would be applied) by 2<sup>nd</sup> December 2013.
  - **Levels of spend** – Consider the use of frontier or upper quartile expenditure levels as the basis for NI Water predicted spend. In PC10 the maintenance allowance was based on average performance. The Regulator considers movement towards the frontier as a reasonable expectation as the company develops and improves efficiency.
  - **PPP** – Apply a PPP adjustment. This is likely to be required as PPP works will be included in the asset base which contribute to predicted costs. The corresponding cost however should not be included as this maintenance will be provided for through the opex unitary charge.
  - **Special factors and atypical** – Give consideration to any special factors and atypical events which will impact on NI Water capital spend in either a positive or negative fashion.
  - **Frontier shift** – Apply the frontier shift to predicted costs.
- 3.1.5. Alternative modelling has yet to be completed. This document does however give a steer on the issues mentioned above and the Regulator's intentions at this time. A procurement efficiency approach may also be relevant to capital maintenance.

## Chapter 4 - Setting Targets

### 4.1. Capital Enhancement Targets

- 4.1.1. The Cost Base is likely to be the primary method involved in determining the catch-up targets for capital enhancement. The Regulator will consider giving weight to alternative efficiency assessments. The weightings will depend upon the confidence in the robustness of both types of analyses.
- 4.1.2. In terms of setting targets the Regulator is minded to:
- **Rate and length of catch-up** – As a starting point we are minded to apply a 75% rate of catch-up to enhancement capex over a single year. That said, we shall consider further the reasonableness of such an approach given PC15's 6-year duration.
  - **Frontier shift** – Apply frontier shift targets based on the separate frontier assessment. Consideration may be given to a pain/gain mechanism for the application of this element of the target. In practice this would mean both the company and the customer would share in any projected costs or benefits.

### 4.2. Capital Maintenance

- 4.2.1. It is the intention of the Regulator to assess NI Water's capital maintenance plan using the CMER and other modelling techniques to determine the efficient level of expenditure. It is not anticipated that the Cost Base will be used to apply targets to capital maintenance. This option does however remain a possibility.
- 4.2.2. In the event that NI Water's maintenance costs are higher than projected spend, the Regulator is minded to:
- **Rate and length of catch-up** – As a starting point we are minded to apply a 50% rate of catch-up over 3 years based on regulatory precedent. That said, we shall consider further the reasonableness of such an approach and possible alternatives given PC15's 6-year duration.
  - **Frontier shift** – Apply frontier shift to maintenance spend in the same way as that applied to enhancement targets.

## Chapter 5 - Conclusions

- 5.1.1. This annex details the 'minded to' approach to capex efficiency at this early stage.
- 5.1.2. Whilst decisions remain to be made, our 'minded to' approach provides the company with information on options being considered and our intended methodology.