Northern Ireland Assembly

# Research and Information Service Research Paper

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**Des McKibbin**

# Price Cap Regulation in the UK Water Industry

**NIAR 790-12**

The Northern Ireland utility regulator has published its draft price control determination for its second price control period (PC13). This paper examines the approach the regulator takes to set the price limit and compares experiences of this form of price cap regulation across the United Kingdom.

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# Key Points

- NI Water is dependent for approximately 76% of its revenue from public expenditure which has resulted in NI Water being reclassified as a Non Departmental Public Body (NDPB).
- NI Water is regulated by the Northern Ireland Authority for Utility Regulation (UREGNI). UREGNI took responsibility for regulating standards of service from 2007, and began regulating charges from 2010.
- NI Water was successful in meeting many of the challenges set by UREGNI in its first price control period and the draft determination for the second period has now been published.
- UREGNI follows a Price Cap Regulation (PCR) methodology which was developed as a mechanism to control monopoly power in the privatised UK utility sector in the 1980s; this type of regulation works by effectively mimicking a competitive environment.
- PCR is used by the three regulators in the UK water industry. These regulators have sole responsibility for setting limits on the prices water and sewerage companies can charge to customers.
- In order to set an equitable price cap the regulator requires information about the company's efficient levels of operational expenditure (OPEX) and capital expenditure (CAPEX).
- PCR incentivises companies to be forthcoming with this information over time.
- The Scottish Water regulator has put in place a clear framework to strengthen the governance of the publically owned Scottish Water and create appropriate organisational incentives to put continuous pressure on Scottish Water to improve its performance.
- These incentives, which include the ability to keep financial reserves has enabled Scottish Water to become one of best performing and efficient water and sewerage service providers in the UK , over a relatively short eight year period.
- NI Water which is also publically owned does not enjoy the same financial incentives due to its hybrid status (as an NDPB and a GoCo) and it remains the most inefficient water and sewerage company.
- Benchmarking is another vital part of the Price Control process which the Utility Regulator uses to set efficiency targets.
- Scottish Water has reduced its operating costs (OPEX) by 35% in ten years.
- NI Water was successful in exceeding efficiency targets set for it in PC10 however their PC13 business plan indicates that the rate at which it will now be able to close the efficiency gap is greatly reduced due to among other things, its hybrid status.
- This position is not accepted by the utility regulator

# Contents

# 1 Background and context

NI Water was established as a government-owned company (GoCo) on 1st April 2007 to replace DRD's Water Service as the sole water and sewerage service provider for Northern Ireland. It is governed by the Water and Sewerage Services (NI) Order 2006 and operates under its Instrument of Appointment – its 'licence'.

When the NI Water GoCo was devised by direct rule ministers in 2004 it was envisaged that all households in Northern Ireland would be required to pay a direct water charge, with the aim of making NI Water a self-financing public corporation.

## 1.1 Uncertainty over charges

NI Water currently obtains revenue from a combination of direct charges to non-domestic customers, direct charges to Roads Service for road drainage costs, and various charges made for new connections and other direct services provided by the company. However, as direct charges to domestic customers have been continually deferred by the NI Executive, NI Water remains dependent for approximately 76% of its revenue from public expenditure.[1]

This has resulted in NI Water being reclassified as a Non Departmental Public Body (NDPB) by the Office of National Statistics for public expenditure (PE), national accounts, administration and policy purposes. In short, NI Water generates an insufficient amount of its income from charges for it to be considered self-financing.

The formal GoCo status also remains with the affect that NI Water operates under a hybrid model. This has required different governance arrangements to be put in place than those envisaged in 2007 with the company's commercial freedoms restricted by the constraints of the PE system.[2]

## 1.2 The Regulator

Since April 2007, water and sewerage services in Northern Ireland have been regulated by the Northern Ireland Authority for Utility Regulation (UREGNI). This is the same body that has regulated energy in Northern Ireland for many years. The Authority took responsibility for standards of service from 2007, and began regulating charges from 2010.

In setting efficiency targets for NI Water, UREGNI must consider the constraints and implications of the company's classification as a NDPB, including:

- Northern Irelands block grant allocation ultimately determines the level of capital available for investment, rather than what is needed or determined by the regulator;
- There is a need to 'fit' the capital programme to allowed funding within individual financial years, rather than delivery over the price control period;

- No 'End of Year flexibility' - This in effect means that the budget allocation for a specific year must be spent in that year as it cannot be carried forward but is lost;
- Uncertainty of PE budget – The public expenditure process operates a number of monitoring rounds during the financial year. At each monitoring round, Departments are required to assess spend and as necessary surrender excess funds. There is also the potential for funding levels to be cut or indeed increased depending on pressures or surpluses elsewhere in the Department or Executive budgets.[3]

## 1.3 PC10

PC10 was the first determination of price limits for NI Water for the three year period 2010-13. PC10 set out the allowed price limits, associated efficiency targets and key performance indicators (KPIs) for the company.[16]

PC10 runs to April 2013, however, throughout the price control period, UREGNI monitors NI Water's performance and publishes the results, of its analysis, in a Cost & Performance Report. The most recent Cost & Performance Report showed the following outcomes:

### 1.3.1 Operational Savings

- NI Water outperformed its operational efficiency objective for 2010-11, delivering savings of £6.1 million more than projected.
- NI Water exceeded its operational efficiency targets, and as a result has reduced the gap with comparative water companies in England and Wales from 49% in the PC10 base year to 38% for the PC13 base year – this means that instead of spending £1.96 (2007-08 PC10 base year) for every £1 spent by its comparative companies, NI Water now spend £1.62 (2010-11 PC13 base year);
- While NI Water successfully reduced its costs, a significant challenge remains to reduce its efficiency gap further.

### 1.3.2 Capital Delivery

- Overall, there was a net underspend, relative to PC10 assumptions for 2010-11 of £31 million (in nominal terms). NI Water's classification as a Non-Departmental Public Body (NDPB) means it cannot carry unused budget from year-to-year.
- While it has been difficult to assess capital efficiency, NI Water reports that its status as an NDPB has impacted on both the means and approval processes for capital procurement.
- Given the reductions in the public expenditure capital budget allocation for NI Water, UREGNI had to reassess outputs and agree a revised monitoring plan for years 2 and 3 of PC10.

### 1.3.3 Key Performance Indicators (KPIs)

- Nine of the nineteen service KPIs in 2010-11 were not achieved, with a number of these relating to interruptions to supply and consumer response measures being negatively impacted by the extreme winter weather.
- NI Water performed favourably against sewage quality outputs, achieving all five targets.
- Drinking water quality is at a historically high level and in the first year exceeded the target set in the Social and Environmental guidance.
- KPI performance is enhanced in 2011-12, with all but one of the service level targets being achieved.

### 1.3.4 Overall Performance Assessment (OPA)

NI Water's OPA score combines 11 individual service measures which consumers consider to be important (e.g. how quickly water supply is restored after an interruption). Key findings include:

- While NI Water did not attain the 2010-11target score of 142, there was a general improvement in performance with the score increasing from 121 to 131;
- OPA scores have increased to 184 in 2011-12, reflecting improvements in unplanned interruptions and wastewater treatment works compliance;
- The average score for English and Welsh water companies in 2009-10 was 290, which illustrates the challenge and opportunity for further improvement.

## 1.4 PC13

The second price control by UREGNI will cover a two year period from 2013 to 2015. Due to the short two-year period 2013 to 2015 of this price review, referred to as PC13. The regulator states that it has taken a proportionate approach, employing the same methodology used for PC10 and it has reduced formal information requirements.[1]

The draft determination indicates that:

- NI Water requires £691 million of revenue over this period;
- NI Water must deliver a saving of £70 million in two years, compared to £91 million over the 3 year PC10 period;
- Charges will fall by an overall average of 7% below inflation;
- £336 million is allowed for prioritised and targeted investment, however this is not guaranteed;
- The OPA score will rise to 215 by the close of PC13

### 1.4.1 PC13 Timetable

- 13th September PC13 Draft Determination published;
- 11th October PC15 Approach published;
- 8th November PC13 consultation closed;
- 14th December PC13 final determination published;
- April 2013 PC13 new charges come into effect;
- June 2014 PC15 consultation begins

# 2 Approaches to Regulation

The privatisation of British utilities such as telecommunications, gas, electricity and water since the 1980s had the effect of creating natural monopolies, whereby one company, such as British Telecom or British Gas controlled their respective markets.

Unlike a company operating in a competitive market environment, where the price of goods and services is determined by demand and supply and success is based on establishing market share, a monopoly supplier has no real incentive to improve service or keep prices down. Price Cap Regulation (PCR) was developed as a mechanism to control monopoly power in UK utility companies by effectively mimicking a competitive environment.

PCR was first developed for the regulation of British Telecom, following its privatisation in 1984[4] and it has subsequently been adapted and applied for use in all British utility markets. PCR works by controlling prices and setting and enforcing certain service standards.

## 2.1 RPI-X

Price control regulation is based on the formula RPI - X, whereby RPI is the Retail Price Index measure of inflation; and X represents the efficiencies. What this means is that companies regulated this way can increase their price at or below the rate of inflation, less efficiencies determined by the regulator.

This has been found to be effective at lowering prices and bringing higher levels of service for customers.[5] For example, the Comptroller and Auditor General commenting on 10 April 2002 on the publication of his report "Pipes and Wires" said:

> *"The way that the regulators have used their price reviews to drive down the costs of the major utility networks while the quality of the service delivered has improved, represents a great success story".*[6]

The England and Welsh water industry was the first to be subjected to this form of economic regulation, following privatisation in 1989, However the RPI-X model was

also adopted later in both Scotland and Northern Ireland where water services are controlled by Government.

# 3 Regulation of water and sewerage services

The water industry was fundamentally different from the gas, electricity and telecoms industries in that there was no national distribution system, with services delivered regionally by ten water and sewerage companies and a number of water only companies. At the same time the water and sewerage industry faced strict rules around the protection of the environment which these other industries did not have.[7]

The water and sewerage industry is now regulated on four fronts:

1. Economic regulation is the responsibility of Ofwat (England and Wales); the Water Industry Commission for Scotland (WICS); and UREGNI (Northern Ireland);
2. The Drinking Water Inspectorate (DWI) is responsible for regulating drinking water quality with standards derived from EU legislation (England, Wales and NI). The quality of drinking water in Scotland is regulated by the Drinking Water Quality Regulator for Scotland (DWQR).
3. The Environment Agency (EA) is responsible for monitoring environmental compliance, with standards also derived from EU legislation.
4. Given the complex and arguably conflicting role of the regulator, consumers' interests are further represented by an independent consumer representative:

- the Consumer Council for Water in England and Wales;
- Consumer Focus Scotland; and
- The Consumer Council for Northern Ireland.

## 3.1 Economic Regulation - RPI +/- K

The economic regulators have sole responsibility for setting limits on the prices water and sewerage companies can charge to customers.

- Ofwat has undertaken four price reviews (PRs), each of which has set price limits for each company for five years. These reviews are commonly referred to as PR94, PR99, PR04 and PR09, reflecting the year in which the review was completed; PR09 set price limits for 2010-15.
- There have been three price reviews in Scotland: 2002-06; 2006-10; and 2010-15; and
- UREGNI is close to completing its second price review (PC13); the first one (PC10) will run until April 2013.

Price limits must attempt to balance the needs of the consumer (quality product at low prices) with the needs of the water companies (capital to invest and ability to make a return on capital).

The water industry, by its very nature, requires large scale capital investment, both to ensure a high standard of service for customers and the requirement to comply with new EU regulations and maintain public health. The regulator has therefore had to modify the typical RPI-X formula to ensure consideration is given to how much revenue a company will need to generate, in order to finance this investment. Price limits in the water industry are therefore set on the basis of:

Prices in the last year of the previous five-year control period;

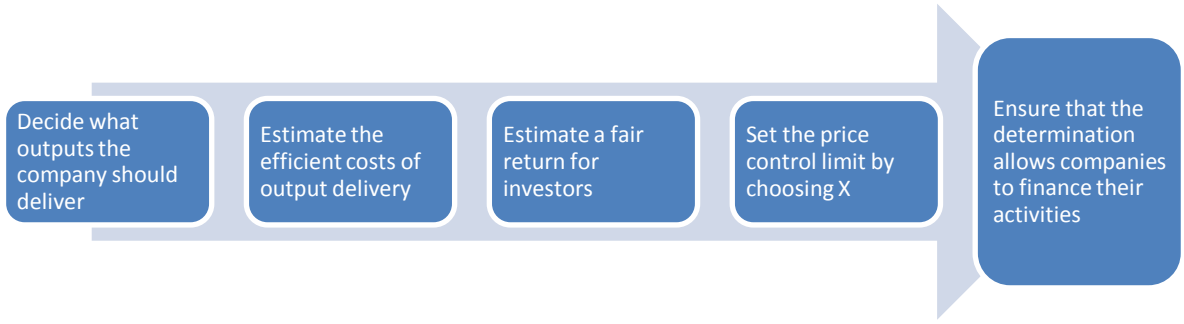
- plus RPI (the Retail Price Index), which allows prices to rise (or fall) in line with inflation;
- minus X, which reflects the efficiencies the companies are expected to achieve over the five-year control period (the combined effect of the RPI adjustment and the gross efficiency adjustment is a real terms efficiency adjustment); and
- plus Q, which reflects the changes in outputs (or outcomes) the companies are expected to deliver over the five-year control period.

This is expressed as RPI+/-K, where K (short for K factor) is the price limit that represents the net adjustment, taking into account both expected efficiencies and changes in outputs or outcomes to be delivered through investment.[8]

## 3.2 The price control process

There are five main stages in the price control process, these are presented in figure one:

**Figure 1: illustration of the price control setting process**




**Source: National Audit Office**

## 3.3 Outputs

The starting point of the price control process is for water companies to submit a business plan to the regulator which sets out its proposals for outputs, what it will cost

to produce these and the impact this will have on price.[9] This is the basis for establishing the funding and performance targets for the organisation for the subsequent period of price control.[10]

## 3.4 Information advantage/disadvantage

In order to set an equitable price cap the regulator requires information about the company's efficient levels of OPEX and CAPEX. This puts the regulator at an immediate disadvantage as it relies on the regulated company to provide them with information on which to base their determination. In theory, the regulated company can use its 'information advantage' strategically to increase its profits or to pursue other managerial goals, to the disadvantage of consumers.[11]

Indeed, an academic review of the price control process suggests this is what happens:

> *"There is strong evidence that OFWAT has been unable to deal with active and persistent 'gaming' by the companies in order to gain higher profit margins. This gaming happens around the price caps set by OFWAT in the price reviews, which effectively set the level of water prices in England 5 years in advance. The companies submit their projections of expenditure and claim that they need to increase prices to cover this spending. OFWAT then has to try and make its own assessment of the accuracy of these forecasts, and then set the prices. The companies have every incentive to mislead the regulator, by exaggerating the capital expenditure necessary – then they get allowed to charge higher prices, but the real expenditure is lower, and so they can pocket the difference as increased profit. The whole process is in effect a game between the regulator and the companies".*[8]

The National Audit Office has however concluded that one of the strengths of the RPI-X model is that it provides sufficient incentives that encourage companies to reveal, over time, the efficient level of costs. It recognises that large efficiency gains made by companies in earlier years of regulation produce significant returns to operators however, the regulator has now accumulated enough experience to more accurately assess the outputs and investment required and as a result it has set more challenging targets in recent reviews.[3]

## 3.5 Incentives

Economic regulation and an RPI-X (retail price index minus a price limit factor) regulatory framework drive efficiency by incentivising the company to outperform targets. Many of these incentives are absent from the Northern Ireland regulatory regime.[12]

The primary incentive for a regulated company to achieve, at least the efficiencies anticipated by the regulator, is that if it fails to do so it will not recover its costs.[6] The

English, Welsh and Scottish water companies are incentivised further to deliver the services at a lower cost than anticipated by the regulator, because this way they keep the consequent additional profits until the regulator next reviews the price cap.[3] [13] These savings can then be passed on to consumers through lower prices or improved services in subsequent periods.

According to Ofwat:

> *"…incentives are the most important tool available to us. We must use them effectively if we are to achieve our aim of delivering sustainable water and sewerage services to customers and the environment over the long term."*[14]

In addition to the **financial** incentives discussed, there are two other broad categories of incentive:

- **reputational:** where the reputation of the company and managers is enhanced or damaged depending on whether, and to what extent, they deliver the outcomes sought – 'naming and shaming'; and
- **procedural:** where companies are subject to more or less procedural burden – such as more onerous business plan reviews – depending on whether, and to what extent, they deliver the outcomes sought. In turn, this may result in the companies making financial gains or losses, or having their reputation enhanced or damaged.[11]

### 3.5.1 Scottish Water's Incentive and Governance Framework

Scottish Water is a public sector company which has achieved an accelerated passage from one of the most inefficient water and sewerage providers, to one of the most efficient. According to the Scottish regulator, the Water Industry Commission for Scotland (WICS), *"…these performance improvements are due, at least in part, to the governance and incentive regime in which Scottish Water operates."*[15]

At the 2006-2010 Strategic Review of Charges, Scottish Water put in place a clear framework to strengthen the governance of Scottish Water and create appropriate organisational incentives to put continuous pressure on Scottish Water to improve its performance, thereby benefiting customers. These involved:

- Hard budget constraints – Scottish water has to operate within the resources allowed for in the determination – if managers fail to meet expectations, costs are met from public expenditure, not from customers;
- a temporary loan facility (£50 million until 2010) to cover unexpected costs such as emergencies or changes in legal obligations, but not the costs of management failure;
- a growing savings account (a 'financial reserve' and potentially 'gilts buffer'), financed by outperformance of regulators targets ;

- transfer of savings to customers after four years, keeping bills down;
- bonuses to Scottish Water's management that can only be paid when our regulators expectations are beaten; and
- formal scrutiny every three months of Scottish Water's delivery of the investment benefits required by Scottish Ministers.

According to the regulator (WICS) this framework has worked well to date, and it is imperative that it is maintained going forward.

The financial reserve is especially important, as it allows Scottish Water flexibility to manage its business effectively over a full regulatory control period, and to benefit from outperforming regulatory expectations. If Scottish Water performs better than expected on its costs from year to year, it builds up a reserve of cash. The reserve (or buffer) could serve in part as a shock absorber between the necessary multi-year planning horizon of Scottish Water and the shorter term public expenditure framework. It can also serve as a contingency to cover costs outside the control of management that may otherwise have led to an interim determination.

If Scottish Water sustains its outperformance on costs to the end of the regulatory control period, any resulting reserve can be invested in index-linked, gilt-edged securities. This buffer is an important mechanism to protect customers against risks and uncertainties, and is accessible to Scottish Water only with the agreement of Ministers. In addition to providing financial security, the gilts buffer could potentially be used to return a dividend to customers, thereby reducing charges, as is done within the Welsh mutualised model.

### 3.5.2 NI Water Incentive and Governance Framework

According to the regulator NI Water's hybrid status adds a layer of complexity to the company's governance framework particularly as there are no financial incentives to outperform. Indeed, as the public expenditure regime's focus is spending to budget, NI Water had to return £31m to the DRD, which was the result of an underspend from the Capital Work budget. This is a lost opportunity to invest in improvements to water and sewerage services which under the GoCo accounting regime would not have had to be returned.

# 4 Relative efficiency

Benchmarking or yardstick competition, as it is sometimes referred to as, is a key resource for the regulator. As there a large number of water companies in the UK, regulators have access to a large body of data on which it can determine a company's efficient CAPEX and OPEX requirements. Benchmarking enables the regulator to estimate the level of costs that a particular company might reasonably be expected to incur, given the conditions in which it operates, and its corresponding efficiency based

on information about the costs of other companies.[16] This limits the scope for companies to submit 'strategic' or 'misleading' information to the regulator.

In addition to CAPEX and OPEX, regulators use benchmarking to make comparisons between each of the water and sewerage companies and water only companies in England and Wales in terms of bills, service levels, quality compliance, leakage, relative efficiency, network activity and financial performance.[17]

The established methodology for assessing economic efficiency within the UK water industry involves a top-down comparison of companies based on linear regressions and unit costs. Figure 2 provides details of the step-by-step methodology followed by UREGNI; there are 7 main steps:

1. Establish actual costs and check consistency with regulatory accounts;
2. Run regressions to determine average predicted costs;
3. Adjust actual expenditure by special factors and atypical expenditure;
4. Modify predicted costs by residual adjustments;
5. Undertake frontier adjustment – calculate additional gap to benchmark company;
6. Calculate efficiency gap; and
7. Recalculate gap excluding business activities.

## 4.1 Relative efficiency gap and catch-up

As part of the Price Control process the Utility Regulator has the responsibility of setting efficiency targets. These targets are generated on the basis of:

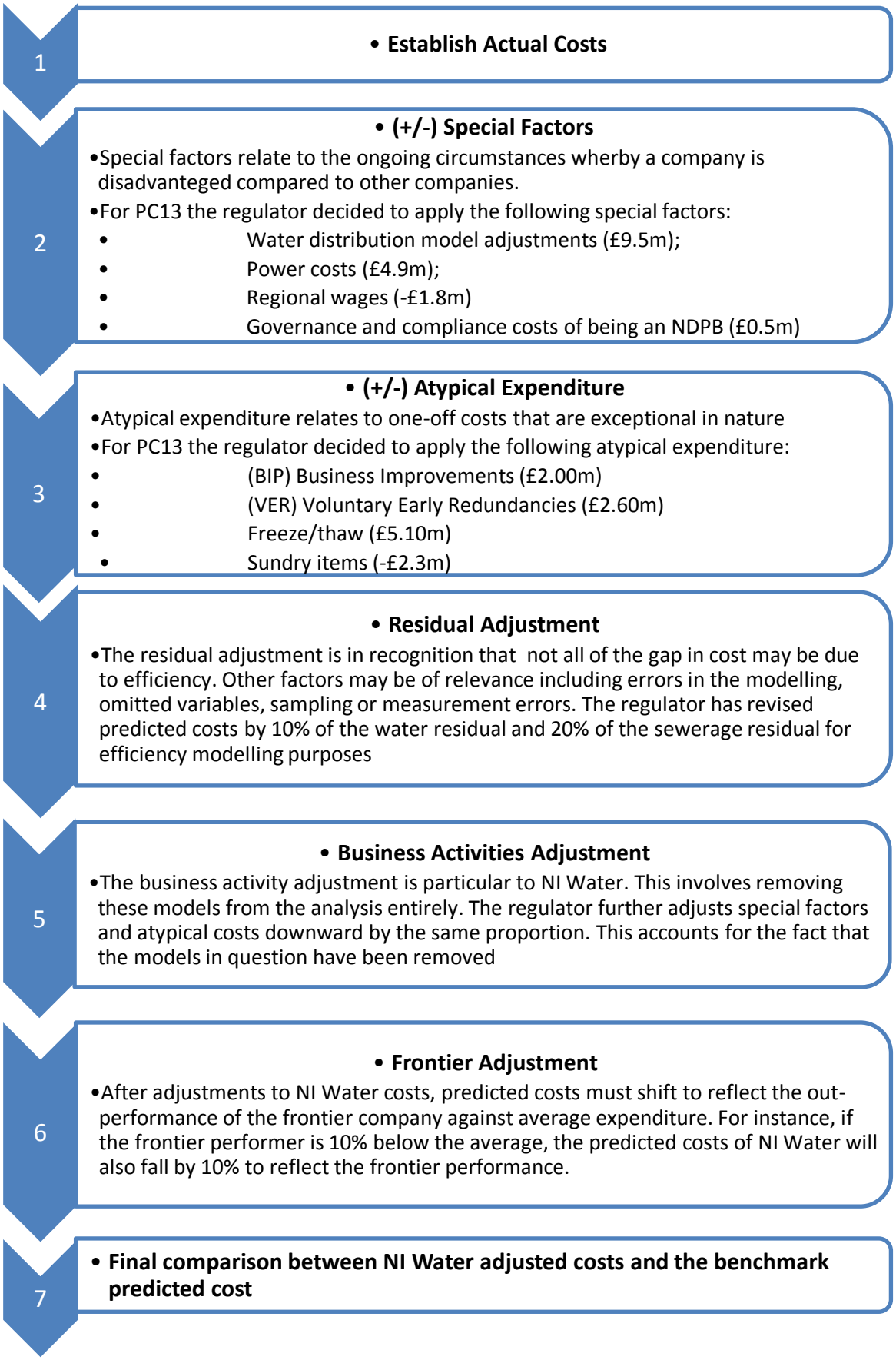
a) The efficiency gap between NI Water and the frontier companies;
b) The rate of catch-up which is deemed achievable; and
c) Efficiency improvements previously recorded and/or expected of benchmark performers.

NI Water's efficiency gap has fallen from 49% in 2007-08, to 38% in 2010/11. In money terms this means that in 2007-08 NI Water spent £1.96 for every £1 spent by the benchmark company whereas in 2010-11 the gap equates to a £1.62 operational spend for every £1 spent by its peers.

According to UREGNI, NI Water remains inefficient and it operates at the lowest possible band – E. This band E refers to the degree by which NI Water trails behind the frontier company, there are five bands in all:

1. A Within 5% of benchmark
2. B Between 5% and 15% of benchmark
3. C Between 15% and 25% of benchmark
4. D Between 25% and 35% of benchmark
5. E Greater than 35% of benchmark

**Figure 2: Flowchart for establishing the efficiency gap**



The regulator has set a catch-up efficiency rate of 6% per annum for PC13, which it describes as "…*a robust and reasonable challenge in the interests of consumers (and taxpayers)".* The annual catch-up rate for NI Water during PC10 was 6.95% per annum. [18]

In its PC13 draft determination, UREGNI states:

> *"This view takes into account what the company has shown it is capable of delivering, the significant efficiency gap that remains, and the efficiencies that other regulated utilities have managed to deliver. Of particular note is the performance of Scottish Water, a company that is also operating in the public sector (albeit a different model). Scottish Water reduced its operating expenditure by 40% between 2002-03 (when it was formed from the three former water authorities) and 2007-08."*

## 4.2 Scottish Water OPEX efficiencies

Scottish Water is a public corporation established in April 2002 from a merger of the three previous water authorities. As such, it is expected to behave as a commercial enterprise in that it should cover its costs from charges levied, but it has no shareholders and does not pay a dividend in the way that a private sector company would.

The principal benefits anticipated from the creation of Scottish Water were to:

- make the Scottish water industry more efficient and competitive;
- improve value for money as a result of economies of scale; and
- harmonise charges across Scotland;[19]

In its 2002-06 price control, WICS set an efficiency assumption equal to an average of approximately 9.2% per annum, in compound terms over 4 years. Excluding the merger benefits, the annually efficiency target was equivalents to 7.6%. This relatively large efficiency assumption reflected the "easy win" efficiencies available at the time:

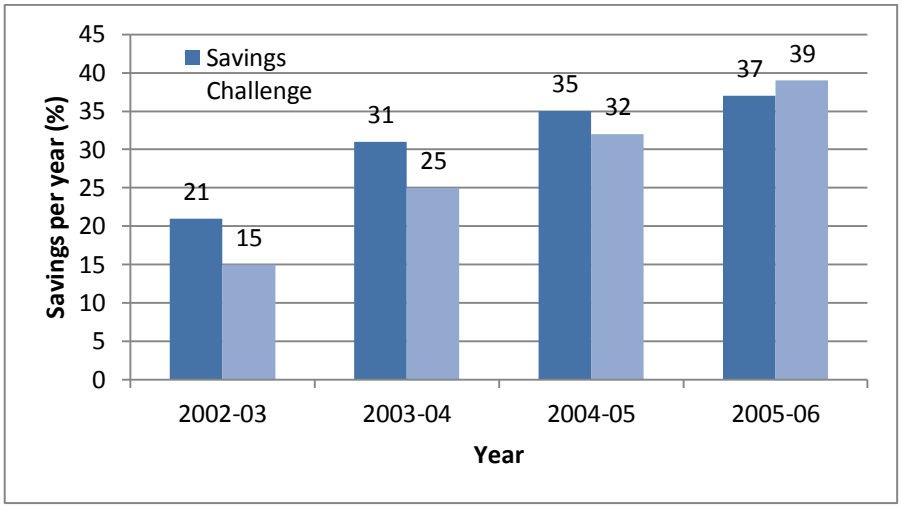
- The merger of three companies;
- The incentives for efficient performance under the regulatory regime; and
- The existing poor level of efficiency at that time.[16]

The WICS justified these targets given that comparator companies were good but not the best performers. It further suggested that Scottish Water had an advantage in that it could learn from the experiences of regulated companies in England and Wales while certain targets companies under this regime had to meet, such as leakage targets and metering did not apply in Scotland.

In its 2006 Performance Report, the WICS presented the OPEX efficiency improvements delivered by Scottish Water over its first price review period (see figure three). This compares the actual costs savings achieved by Scottish Water with the

efficiency targets set. This shows that in 2002-03 actual performance was lower than expected performance. However, by 2005-06, Scottish Water had exceeded its cumulative efficiency targets by 2% overall.

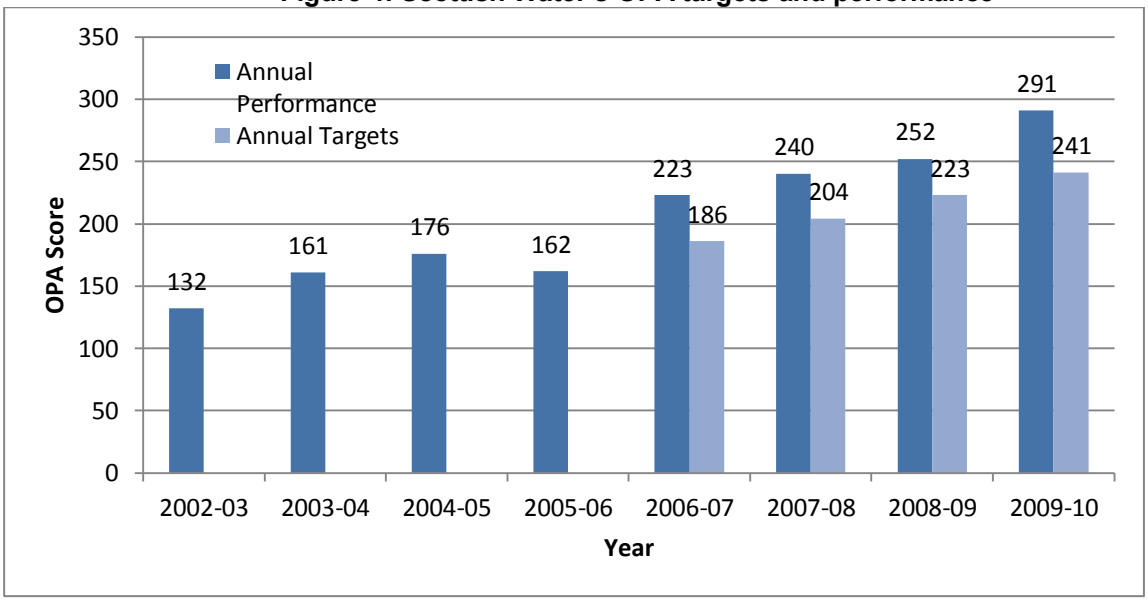
**Figure 3: Operating cost efficiency improvements delivered by Scottish Water[20]**




By 2010 Scottish Water's operating costs were 35% lower than they were in 2002-03 whereas over the same period the water industry in England and Wales has seen its operating costs increase by 13%.[21]

In addition to becoming economically efficient, Scottish Water has also been able to significantly improve it overall performance assessment (OPA) score. NI Water's OPA score is currently 131, a level similar to where Scottish Water started in 2002.[1] Scottish Water is now on par with the English and Welsh average of 290.

**Figure 4: Scottish Water's OPA targets and performance[20]**




[1] It should be noted that the Scottish Water and NI Water OPA scores are not directly comparable due to different input measures.

## 4.3 NI Water's OPEX efficiency

Independent consultants, LECG, were appointed by UREGNI to establish efficiency targets and future revenue requirements for NI Water. Their suggestion was that NI Water should have a similar scope for efficiency as Scottish Water.

The Independent Water review Panel (IWRP) echoed this finding stating that: *"in relation to Opex it is apparent that there is enormous scope for improvement by NIW".*[22] This conclusion was based on a series of factors:

- In its first price control, Scottish Water was required to bridge 80% of observed efficiency gaps;
- Scottish Water, a public owned organisation, has demonstrated that such levels of improvements can actually be achieved – even allowing for savings associated with the merger;
- Companies in England & Wales have demonstrated the ability to bridge (on average) 85% of observed gaps; and
- WICS evidence suggests that companies in England & Wales have demonstrated an equal ability to bridge large efficiency gaps compared to small gaps in efficiency;

### 4.3.1 PC13 OPEX

NI Water has claimed in its business plan that the effect of operating under the hybrid business model is that the rate in which it could have potentially delivered efficiencies has halved. However, in view of the remaining efficiency gap and NI Water's outperformance of operational efficiency targets in PC10, UREGNI does not agree.

**Figure 5: NI Water vs. Utility Regulator's proposed efficiency targets for PC13 Draft Determination**

| | 2011-12 | | 2012-13 | | 2013-14 | | 2014-15 | |
|---|---|---|---|---|---|---|---|---|
| | NI Water | UREGNI | NI Water | UREGNI | NI Water | UREGNI | NI Water | UREGNI |
| Catch-up Reduction – Annual profile (%) | 7.62% | 7.62% | 2.34% | 5.67% | 1.56% | 6.00% | 1.56% | 6.00% |
| Frontier Shift – Annual Profile (%) | 0.25% | 0.25% | 0.25% | 0.25% | 0.25% | -0.27% | 0.25% | 0.05% |
| Total Cumulative Efficiency (%) | 7.85% | **7.85%** | 10.22 % | **13.29%** | 11.85 % | **18.28%** | 13.44 % | **23.22%** |

Other reasons cited by NI Water for the "step down" in proposed efficiencies include:

- The two year price control constrains benefit realisation due to the time taken to plan and implement efficiency projects;
- Efficiency made in PC10 was due to "quick wins" which are not repeatable; and
- The company is faced with financial restrictions which limit the ability to achieve efficiency improvements.

In response the Utility Regulator states that:

- The 6% per annum catch-up does remains within the bounds of the 5% to 7.5% per annum central range as advised by independent consultants (LECG and NERA) at PC10;
- Scottish Water over a four year period managed to perform at 7.6% annual average (excluding merger gains).
- The efficiency catch-up target is a *"reasonable but challenging rate of catch-up for NI Water"* based on what other regulated utilities have managed to deliver;
- Evidence from evaluative studies of other utility price controls shows that bigger efficiency challenges are achievable from the 2nd rather than the 1st price control applying.

There is clearly a significant gap between the two parties with regards to potential efficiencies which are achievable. The literature does suggest that this is to be expected as regulated companies will often deny even the faintest possibility exists of them achieving a target, before they exceed it; this is evidenced by NI Water outperforming its PC10 targets.

# 5 Outcomes of Regulation

Since privatisation, the water industry in England and Wales has invested approximately £85 billion.[23] As a result water companies have been successful at improving drinking water quality and environmental standards, as well as improving customer service standards.[5]

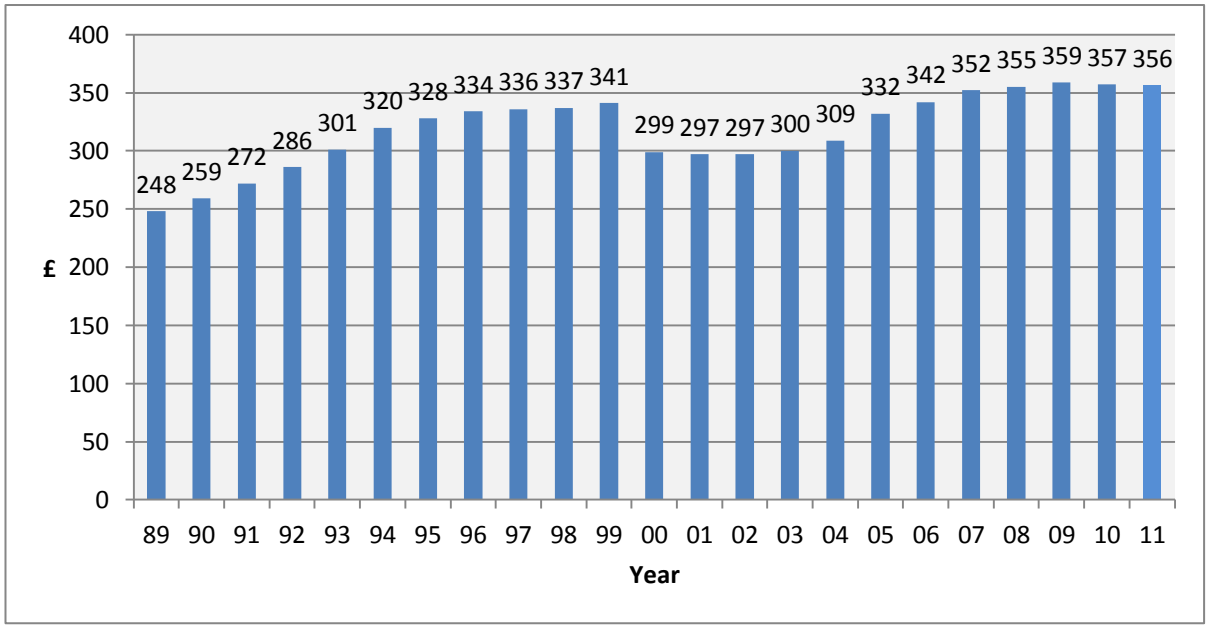
This investment required has, however, led to an inevitable increase in prices:[24]

- The average household bill for water and sewerage services has risen from £248 in 1989 to £356 in 2011;
- This represents is an increase (in real terms[ii]) of 44 per cent;
- According to Ofwat bills on average will be broadly stable over the PR09 price control, subject to inflation. However, individual bills will vary considerably between companies according to whether the customer has a meter.

[ii] These figures have been adjusted for inflation to 2011 – 21 prices.

- The average unmetered charge for water and sewerage is 2011 was £379 - £188 for water and £191 for sewerage;
- The average metered charge for water and sewerage was £325 - £154 for water and £171 for sewerage.
- The average water and waste water bill for households across Scotland in 2009/10 was £324 which is significantly lower than the UK average.
- The average notional charge for domestic users in Northern Ireland is £424 (2012-13). This is £68 (17%) higher than the English and Welsh average and £100 (24%) higher than Scotland.[iii]

**Figure 5: Average household bills 1989 to 2011 (in 2011-12 prices)**




**Source: Ofwat (2011)**

## 5.1 Burden of evidence

Many water companies believe the burden of regulation and compliance is onerous and costly. A report by Defra (2010) provided some examples of this:[25]

- Water UK stated that "Companies estimate they spent approximately £100 million in additional costs and directly employed additional labour equivalent to over 500 employee-years in order to comply with the regulatory requirements of PR09"
- Severn Trent Water stated that their "2,000-page Final Business Plan needed to be supplemented by responding to around 100 Ofwat queries and submitting a 500-page Draft Determination representation....Our total programme costs for PR09 were c. £20m. This excludes the indirect costs, such as employee time".

[iii] Figures have not been adjusted for inflation. NI figured should be deflated to make appropriate comparisons with Scotland and England.

- South West Water highlighted the increased length of the June Return: “As an example, SWW’s June Return for 2009/10 comprised 129 tables and 748 pages of commentary. This compares to the June Return submitted in 1993/94 which comprised 38 tables and 51 pages of commentary. The increase is therefore in the region of ten-fold”.
- Welsh Water stated that “completing and submitting the June Return has become a costly data exercise and now comprises 76 tables and around 1,000 data cells and takes some 250 man days to complete, more than twice what was required five years ago”.
- Ofwat reports that the cost of the reporter function (paid for by companies) is the equivalent of £1.5 million a year and about £6 million in a price review year

To some extent, the increasing demand for information is the consequence of a breakdown in trust where companies may have misreported information.[26] Ofwat’s Future Price Limits project is considering ways in which price reviews could be made substantially less onerous for companies that produce well-supported business plans.

### 5.1.1 PC13 evidence

According to UREGNI, *it is necessary to apply intensive and robust regulation to ensure efficiencies are achieved and the asymmetry of information between company and regulator is addressed.* However, the regulator emphasised its intent to take a proportionate approach to PC13.

Having taken account of the two year timeframe for PC13, UREGNI required approximately 25% of the number of formal business plan tables previously completed in PC10. This has meant the information requirements around the company’s Business Plan were at least halved.

Moving forward into PC15, the price control period will be extended to the more traditional five years, significantly reducing the burden placed on NI Water over the last two price control periods. UREGNI suggests a further opportunity to reduce the regulatory burden by taking advantage of one-to-one regulation. They propose aligning regulatory information requirements and internal company data systems and processes which inform the development of internal company business plans.

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