

# Cost and Performance Report 2010-11

An assessment of NI Water's costs and performance



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## FOREWORD

The role of the Utility Regulator is to protect the short and long-term interests of consumers. Our focus is on ensuring that consumers receive value for money water and sewerage services.

This report reflects our assessment of NI Water's performance during 2010-11. A key development during the last year was our investigation of the freeze/thaw incident of late 2010/ early 2011. This incident led to severe disruption to the water supply across Northern Ireland and affected 450,000 consumers.

Our investigation report concluded that adverse weather - the worst in 100 years – and NI Water's inadequate response (poor executive leadership and customer communication in particular) were key factors affecting the customer experience. We made 53 recommendations for the company to act upon. Progress reports on action plan delivery have been published on our website and the NI Water website.

A significant finding from our investigation was that around 80% of the additional water demand caused by the freeze and rapid thaw leaked from domestic and business water pipes. It is therefore important that every effort is made to heighten consumer awareness of the need to take steps to protect their properties against adverse winter weather. In this regard, NI Water launched a winter preparations advertising campaign at the end of October.

In 2010-11 NI Water exceeded its operational efficiency targets by £6 million. Additionally, operating costs were further improved as additional savings were revealed and managed. NI Water's Overall Performance Assessment (OPA) score, a benchmark for comparing the performance of water companies in Great Britain, continued to improve. This improvement, alongside the reducing operational expenditure trend, is a positive sign of progress by NI Water.

While there undoubtedly has been progress, challenges remain. A significant gap still exists between NI Water in terms of efficiency and performance and other water companies in Great Britain. The 39% operating efficiency gap means that for every £1 spent by those companies operating to the industry benchmark, NI Water spends £1.64.

However, NI Water is subject to certain constraints as a result of the Government's public expenditure classification, which other water companies do not have to contend with. Such constraints, if not addressed, will impact on the speed with which NI Water closes the efficiency gap relative to other water companies. The under spend in capital this year, by £31 million, clearly points to a continuing need to improve project management of the capital programme.

Overall, NI Water has continued to make progress on improving its performance during 2010-11. It is imperative that the company continues to progress and meet the challenges associated with efficiency, management of capital programmes and its ability to meet the needs of its customers during adverse weather conditions.

**J Aston**  
**Director of Water Regulation**

# 1.0 EXECUTIVE SUMMARY

## 1.1 Introduction and Background

The Utility Regulator has been the independent economic regulator of the water and sewerage services industry in Northern Ireland since 1st April 2007. Northern Ireland Water (NI Water) was also established on 1st April 2007, and is the government-owned provider of water and sewerage services in Northern Ireland.

The Utility Regulator exists to protect consumers. We do this by ensuring that consumers receive value for money and that investment results in improvements to service.

Our Price Control 2010 (PC10) defined the requirements and outputs for NI Water over a three-year period 2010-11 to 2012-13. PC10 set out the allowed price limits, associated efficiency targets and key performance indicators (KPIs) for the company.

This Cost and Performance report outlines our independent assessment of how the company performed against the PC10 targets. Where appropriate, it compares NI Water's performance with water and sewerage companies in England, Scotland and Wales.

Specifically, this report examines the progress made by NI Water over the first year of the PC10 period.

## 1.2 Key Findings

Our analysis is based on an objective assessment of data and information. The key findings elaborated upon in the report are as follows.

### Freeze/Thaw 2010-11

Any assessment of NI Water's performance over the past year needs to reflect on the impact of the adverse weather conditions over the late 2010 early 2011 period. This led to severe disruption to the water supply, affecting 450,000 consumers across Northern Ireland.

We conducted an investigation into NI Water's management of the impact of the freeze/thaw incident. The overall conclusion was that the company's management of the incident was inadequate - particularly with regard to its service to, and communication with, consumers. Our investigation established the following:-

- Around 80% of the additional water demand caused by the freeze/thaw leaked from domestic and business water pipes.
- NI Water was not prepared for the exceptional (1 in 100 year) winter weather - and its execution of emergency planning was deficient, particularly in respect of communication with consumers.

- Executive leadership failed, however frontline operational teams worked effectively in very challenging weather conditions.
- Water mains in Northern Ireland are relatively new compared with other parts of the UK, and performed as well as could be expected. There is no need for an immediate change in the mains infrastructure investment levels.

The company is focused on delivering the many actions, including the 53 contained within our investigation report to mitigate the impact on consumers, should such an extreme weather event recur. A public information campaign, 'Don't wait insulate', has been initiated by NI Water to encourage consumers to take measures to prevent damage to water pipes within their homes and businesses.

### Operational Savings

- NI Water outperformed its operational efficiency objective for 2010-11, delivering savings of £6.1 million more than projected.
- NI Water marginally reduced the relative operational efficiency gap to benchmarked English and Welsh water companies - from 40% to 39%. This means that for every £1 spent by the benchmarked water companies, NI Water spends £1.64.
- While NI Water successfully reduced its costs, a significant challenge remains to reduce its efficiency gap further.

### 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, we have had to reassess outputs and agree a revised monitoring plan for years 2 and 3 of PC10.

### Key Performance Indicators (KPIs)

- Nine of the nineteen service KPIs 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 an historically high level and in the first year exceeded the target set in the Social and Environmental guidance.

## 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 for 2010-11 include:

- While NI Water did not attain the PC10 target score of 142, there was a general improvement in performance with the score increasing from 121 to 131.
- The average score for English and Welsh water companies in 2009-10 was 290<sup>1</sup>, which illustrates the challenge and opportunity for further improvement.

## Information and Data Integrity

- Weaknesses in the availability and integrity of data have been evident during recent years and this led to NI Water accepting legally binding data quality undertakings.
- Data improvements have been made and we continue to monitor delivery of the formal undertakings and related programme of work to improve data reliability, accuracy and consistency between data sources.
- We are pleased to see data improvements starting to be reflected in the Annual Information Returns and Capital Investment Monitoring submissions.

## 1.3 Conclusions

- NI Water has identified and is focused on addressing the many actions from the third party reviews of the freeze/thaw event of 2010-11. We, together with other principal stakeholders, are monitoring and reviewing the delivery of these actions.
- Despite the many challenges facing the company and the impact of the freeze/thaw incident, NI Water has still managed to exceed operational efficiency targets.
- Delivery on capital programmes in 2010-11 shows an underspend of some £31 million.
- Overall service performance, measured through the OPA score, shows an improving picture which is positive given the challenges of the freeze/thaw event and the achievement of operational efficiencies.
- There remains considerable scope for further improvement with a 39% operational efficiency gap and an OPA score well below the average comparator English and Welsh company scores.

<sup>1</sup> This relates to the same 11 measures used for NI Water. The England and Wales average is that of 2009-10 as Ofwat has stopped producing these figures.



## 2.0 CONTEXT

### 2.1 The Establishment of NI Water

NI Water was established as a government-owned company on 1st April 2007 to replace DRD 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 ('the Order') and operates under its Instrument of Appointment – its 'licence'.

However, in the absence of domestic water charges, NI Water is dependent for 70% of its income from public expenditure. This has resulted in it being classified as a Non Departmental Public Body (NDPB) and with this comes a number of restrictions. These include the need to 'fit' the capital programme to allowed funding within individual financial years, rather than delivery over the price control period. The absence of flexibility of expenditure between years may also have a negative impact on NI Water's ability to deliver strategic priorities and to maximise efficiencies. Consequently we have, along with NI Water, reviewed the outputs and monitoring plan for the three year PC10 price control period.

### 2.2 The Utility Regulator

The Utility Regulator was established as the economic regulator of Northern Ireland's water industry under the Order on the 1st April 2007. Our primary duties under legislation are to:

- Protect the interests of consumers;
- Ensure that NI Water carries out its functions properly in every area of Northern Ireland; and
- Ensure NI Water is able to finance its functions.

### 2.3 NI Water's Price Control PC10

The outputs to be delivered by NI Water in the PC10 period April 2010 to March 2013 and the funding required to deliver these outputs, are defined in our PC10 document. The full version of this report may be found on our website at:

[www.uregni.gov.uk/uploads/publications/Final\\_Main\\_Report\\_PC10\\_FD\\_-\\_Main\\_Report\\_0300\\_revised\\_web\\_version\\_1.pdf](http://www.uregni.gov.uk/uploads/publications/Final_Main_Report_PC10_FD_-_Main_Report_0300_revised_web_version_1.pdf).

In addition, a summary version may be found at:

[www.uregni.gov.uk/uploads/publications/Final\\_Summary\\_Report\\_PC10\\_NIAUR\\_FD\\_Feb\\_10\\_-\\_Doc01\\_-\\_Summary\\_Report\\_1.pdf](http://www.uregni.gov.uk/uploads/publications/Final_Summary_Report_PC10_NIAUR_FD_Feb_10_-_Doc01_-_Summary_Report_1.pdf)



## 2.4 Annual Information Returns

In support of our objective of ensuring that consumers receive value for money from NI Water, we monitor the company's performance against its PC10 objectives. This is done through the review of an Annual Information Return (AIR) submission from the company. The AIR submission enables us to:

- Monitor the company's progress;
- Ensure the company's standards of service are protected; and
- Compare the company's costs and performance with the rest of the UK water industry.

We aim to publish the results of our analysis annually in our Cost and Performance Report and at the end of a regulatory price control period.

## 3.0 FREEZE/THAW EVENT 2010-11

### 3.1 Background

During 2010-11 Northern Ireland experienced an extended period of exceptionally cold weather followed by a rapid thaw. This subjected water supply networks and consumers' pipe work to extremes of temperature not previously experienced. The resultant bursts on consumer pipes and water mains led to a significant increase in demand which the company could not meet.

The operational difficulties associated with this event had a massive impact on consumers. Around a quarter of the properties in Northern Ireland had their water supply interrupted and there were significant failures in the company's ability to communicate with consumers during the event.

The scale and extent of the event was such that it affected NI Water's performance in a broad range of areas. This Chapter provides an overview of the event, the key findings of our investigation and the ongoing work to address its recommendations. Further information on the impact on individual performance measures can be found in subsequent sections of the report.

### 3.2 UR Investigation Key Findings

The investigation identified that the event was caused by a period of exceptionally cold weather followed by a rapid thaw. December 2010 was found to be the coldest month in Northern Ireland for over 100 years. The widespread freezing conditions that developed on 17th December were followed by eight consecutive days of sub-zero temperatures and then a rapid thaw which started at midnight on 25th December.

The extremes of temperature experienced resulted in numerous bursts on consumer pipe work and water mains. As a consequence, the demand for water soared and at its peak exceeded the maximum capacity of the company's treatment works by approximately 20%. To conserve limited resources and maintain supply to critical sites, such as hospitals, NI Water introduced widespread rotation of the water supply on 27th December 2010. This remained in place until 6th January 2011 when the incident came to a close.

The investigation found that the majority of the additional demand occurred on consumer premises and not as a result of problems on the company's network. Available evidence indicated that consumer usage or bursts accounted for at least 80% of the additional short-term demand at the peak of the incident. Survey evidence indicated that more than 40,000 bursts had occurred on domestic and non-domestic consumer properties. These problems were exacerbated by the fact that commercial properties were closed during the holiday period and bursts went unnoticed and ran for longer.

Around 450,000 consumers in 215,000 properties across Northern Ireland experienced interruptions to their water supply as a consequence of bursts and the need to rotate water supplies. The investigation identified the need for NI Water to assess overall water resources and the interconnectivity of water supply and consider additional investment to improve resilience. We expect the Water Resource Management Plan to address these issues.

The operational response was found to have been reasonably effective with only a small backlog of burst mains developing during the incident. Front line operational teams appear to have worked effectively in very challenging weather conditions.

NI Water's response to the incident however exposed a lack of corporate ownership and consumer focus. The engagement of the Executive Team and communication with consumers were found to be inadequate. Insufficient resources were available in the call centre, customers were not given appropriate warning of the implementation of supply rotations and the website stopped working. Many consumers who succeeded in making contact with the company were provided with poor and inaccurate information.

A review of the performance of NI Water's network during the incident supports the view that the freeze/thaw incident was not exacerbated by any lack of investment in water mains. The investigation concluded that water mains in Northern Ireland are not at a greater risk of bursting than mains elsewhere in the UK. Key findings supporting this conclusion include:

- the average age of water mains in Northern Ireland is 29 years, compared with an average of 45 years in the rest of the UK; and
- the burst rate per length of main (one measure of asset condition) is lower in Northern Ireland than the average in Great Britain.

### **The Utility Regulator Investigation Recommendations**

Our investigation produced a recovery plan for NI Water. This is comprised of a list of 56 recommendations (53 to be taken forward by NI Water) that are aimed at improving NI Water's performance and the customer experience in future incidents.

Our recommendations complement those from a number of other internal and external investigations into the company's performance. Successful and timely delivery of our recovery plan and other recommendations by NI Water will improve the company's ability to respond more effectively to future incidents and minimise the impact on consumers.

### Monitoring Delivery of the Action Plan

Ensuring that the delivery of the recovery plan is being managed in an appropriate and timely manner by NI Water has been a key concern since its publication. As a consequence, we sought and obtained a formal commitment in relation to delivery from NI Water. This includes a schedule of the specific time - bounded commitments in relation to the provision of information and ongoing monitoring arrangements. This commitment has been published on both the NI Water<sup>2</sup> and UR websites<sup>3</sup>.

The deliverables within the schedule of commitments are now being used by us and the wider stakeholder group to monitor delivery. The commitment also ensures that the public are updated on progress as it requires NI Water to publish progress reports on its website.

In the approach to the winter period we and other stakeholders will pay particular attention to the following as a means of gaining additional assurance in relation to the successful delivery of the recovery plan.

- The outcome of the company's mock incident exercise. We will be looking to the independent report to demonstrate that the company's improved processes have been adequately tested and have operated successfully.
- The production of closure reports by the company to clearly demonstrate the success of the action taken in delivering benefits to the company and consumers.
- Improvements in the company's arrangements for communicating with customers, including:
  - call centre resourcing and contingency arrangements;
  - adequacy of the information provided through the company's web site; and
  - plans for deploying alternative supplies and managing the rotation of supplies.

While we and other stakeholders are monitoring delivery of the actions, NI Water remains solely responsible for ensuring that the measures taken are both appropriate and adequate. The responsibility for the successful management of any future incidents also rests with the company.

### Future Consumer Support

The investigation found that the majority of the additional demand during the incident was caused by loss of water from consumers' premises. Consumer preparation and action are therefore crucial if the impact of similar events is to be mitigated in the future. We therefore encourage consumers to make appropriate preparations for the forthcoming winter.

In this regard, NI Water has commenced a winter campaign to help support consumers and advise them of measures they can take to reduce the risk of their pipe work freezing and/or bursting. Further information can be found on NI Water's website at [www.niwater.com](http://www.niwater.com).

<sup>2</sup> <http://www.niwater.com/niwnewsarchivedisplay.asp?newsID=545>

<sup>3</sup> [http://www.uregni.gov.uk/uploads/publications/2011-07-06\\_SH\\_to\\_PM\\_re\\_Putting\\_Customers\\_First\\_Response\\_to\\_Freeze\\_Thaw\\_Incident.pdf](http://www.uregni.gov.uk/uploads/publications/2011-07-06_SH_to_PM_re_Putting_Customers_First_Response_to_Freeze_Thaw_Incident.pdf)  
[http://www.uregni.gov.uk/uploads/publications/Annex\\_NI\\_Water\\_Commitments.pdf](http://www.uregni.gov.uk/uploads/publications/Annex_NI_Water_Commitments.pdf)

## 4.0 COSTS AND EFFICIENCY

### 4.1 Overall Financial Performance

PC10 commenced on 1st April 2010 and will expire on 31st March 2013. It reflects NI Water's first regulatory price control period. We use Price Cap regulation (or RPI-X regulation) to set price limits for each of the three years within PC10. The price limits that we set for NI Water must balance the revenue that the company requires with the income it collects from charges and subsidy. This means that, as well as calculating the level of revenue required, there is a need to forecast the number, mix and type of customers that NI Water will be providing services to throughout the PC10 period.

#### Turnover

Actual turnover for the regulated business was £345.7 million compared to £357.9 million predicted in PC10. The main factor affecting this reduced figure is the state of the general economy with lower customer numbers and consumption levels reducing generated income.

#### Operating Profit

Operating profit, as measured by the balance of income and operating expenditure under the Historic Cost convention was £161.3 million as compared to £162.8 million predicted in PC10. This difference is largely due to reduced levels of income as noted above, partly offset by outperformance in operating expenditure. Operating expenditure is considered in more detail in section 4.2 below.

#### Dividend

During 2010-11, the company paid £36.0 million by way of a dividend to its shareholder (DRD) - of which £35.6 million related to regulated activities. This dividend related to the 2009-10 financial year and this level was in line with Strategic Business Plan (SBP) projections. The 2010-11 projected dividend of £26.0 million was approved by NI Water's board in July 2011 and was paid to DRD in August 2011. This level of dividend is consistent with NI Water's projections for 2010-11 within its Business Plan for PC10.

#### Loan Profile

The actual level of DRD loan for 2010-11 was £737.6 million; this reflected a lower loan drawdown profile as compared to the £783.7 million predicted in the PC10. The deviation is largely due to the reprofiling and underspend in the Capital Works Programme. The level of borrowing results in a 2010-11 level of gearing of 45.87% as compared to the PC10 prediction of 51.53%.

More detailed information on NI Water's financial information is set out in the company's statutory and regulatory accounts. These can be found in NI Water's annual report for each year which is published on its website. ([www.niwater.com/corporatereports.asp](http://www.niwater.com/corporatereports.asp))

## 4.2 Operational Expenditure (including all PPP charges)

NI Water's operating costs reduced in 2010-11 to £202.6 million, from £212.8 million the previous year. This is a welcome reduction (£10.2 million) in outturn costs, especially given that inflation was running at nearly 5%.

In 2010-11, PC10 allowed for opex costs of £203 million (2007-08 prices), which equates to £220.4 million at current prices. With respect to the PC10 opex budget, NI Water under spent by some £17.8 million. Table 4.1 provides a breakdown of costs against budget in some key areas.

**Table 4.1: NI Water allowed versus actual opex in 2010-11 (outturn prices in £ million)<sup>4</sup>**

	FD Allowance	Actual Spend	Saving (-) / Overspend
Opex	158.5	154.1	-4.3
PPP Unitary Charge	46.9	43.9	-2.9
BIP	4.5	2.0	-2.5
VER/VS	10.6	2.6	-8.0
<b>Total</b>	<b>220.4</b>	<b>202.6</b>	<b>-17.8</b>

*Figures may not sum due to rounding*

In overall terms, the company has comfortably spent within the required budget.

Many cost categories have reduced in the past year whilst other cost areas have fluctuated both in a positive and negative fashion. Where NI Water opex has decreased this is in part due to full-year operation of Public-Private Partnership (PPP) sites and the transfer of the incinerator to PPP. In totality, PPP charges have increased by £10.7 million since 2009-10.

The reduced expenditure on power, chemicals and consultancy/staff substitution reflecting active management intervention is noteworthy. NI Water has also absorbed the additional costs arising from the freeze/thaw incident which it assessed to be of the order of £5.1 million.

In general, cost increases are relatively small. The exception is the provision for bad debt allowance which grew by £1.75 million (158%). The company stated that this reflected an increase in historic debt write-off as well as a more prudent provision due to the current economic climate.

## 4.3 Meeting Operational Efficiency Targets

NI Water has achieved the operational efficiency targets set for the first year of PC10. The company has under spent against budget, reduced real costs since 2009-10, while improving service performance. The question is the degree to which NI Water has outperformed.

<sup>4</sup> The freeze/thaw also impacted on opex expenditure. The company has attributed £5.1m for these additional costs which would not have otherwise occurred.

Whilst NI Water costs are £17.8 million under budget, this does not purely reflect the impact of increased efficiency since technical efficiency is generally defined as “doing the same thing for less cost” or “doing more for the same cost”. Several specific elements are noteworthy:

1. Business Improvement Programme (BIP) costs are under budget by £2.5 million. This does not reflect efficiency improvement, merely an underspend on the programme. A concern is that the delivery of further efficiencies are not impacted by the non-delivery of this programme of work.
2. Voluntary Early Retirement/ Voluntary Severance (VER/VS) costs are £8.0 million lower than anticipated. Again, this simply reflects a lower activity level than the PC10 allowance.
3. PPP unitary charge is £2.9 million below budget. Fluctuations of the unitary charge have arisen for a variety of reasons, including: performance deductions, volumetric changes and a revision of the contract conditions.
4. Rates have decreased by £2.7 million due to a one-off credit from previous years.
5. NI Water has attributed opex of £5.1 million to the cost of dealing with the freeze/thaw incident. This represents an atypical cost they would not otherwise have incurred and which they absorbed in 2010-11.

On the basis of our analysis we have concluded that the company has met and outperformed the opex efficiency target by £6.1 million. This is detailed in the table below. This represents good performance for the first year of PC10.

**Table 4.2: Assessment of opex outperformance in 2010-11 (outturn prices in £ million)**

Cost Category	Saving (-) / Overspend	Reasoning
<b>Budget underspend</b>	<b>17.8</b>	
Less PPP Unitary Charge	-2.9	Underspend for reasons not attributable to efficiency
Less BIP	-2.5	Simple underspend
Less VER/VS	-8.0	Simple underspend
Less Rates	-2.7	One-off credit from past years
Less Pension credit	-0.7	Credit incorrectly allocated to operational costs
Less Freeze/thaw	+5.1	Atypical expenditure not normally incurred
<b>Total outperformance</b>	<b>6.1</b>	

*Figures may not sum due to rounding*



On a cautionary note we recognise the material under spend on Business Improvement Programme and Voluntary Early Redundancy. This opex provides the company scope to invest in efficiency schemes and transform the business. Under spend in these areas raises concerns regarding delivery of future operational efficiencies and the speed with which the company will be able to close the efficiency gap with benchmarked companies.

### Closing the Efficiency Gap

Another measure of performance and value is NI Water's efficiency position compared to companies in England and Wales. This is summarised in table 4.3:

**Table 4.3: Relative efficiency gap closure (%)**

Category	Efficiency gap 2007-08	Efficiency gap 2008-09	Efficiency gap 2009-10	Efficiency gap 2010-11 <sup>5</sup>
NI Water to England and Wales 'average'	42.6	39.5	33.3	32.3*
NI Water to benchmark or 'frontier'	48.7	43.2	39.7	39.1*

The **provisional results** indicate that there has been some 'catch-up' with respect to the average and frontier companies. However, the efficiency gap has only shifted relatively marginally in the last year. The table illustrates that NI Water would require a 39% fall in opex to become a frontier performer.

The result might be considered surprising given NI Water's outperformance of its efficiency target. What the analysis appears to indicate is that while NI Water has had some success in bearing down on costs, a cost reduction has also been observed in the water industry in England and Wales.

Another significant factor in explaining efficiencies as at 2010-11 is that much of NI Water's reduction in costs was focused on business activities. While this improvement is recognised in the expenditure profile, it is not included in the efficiency analysis. This is due to the fact that our models exclude business activities expenditure from analysis since comparison would not then be 'like-for-like' due to the absence of domestic billing.

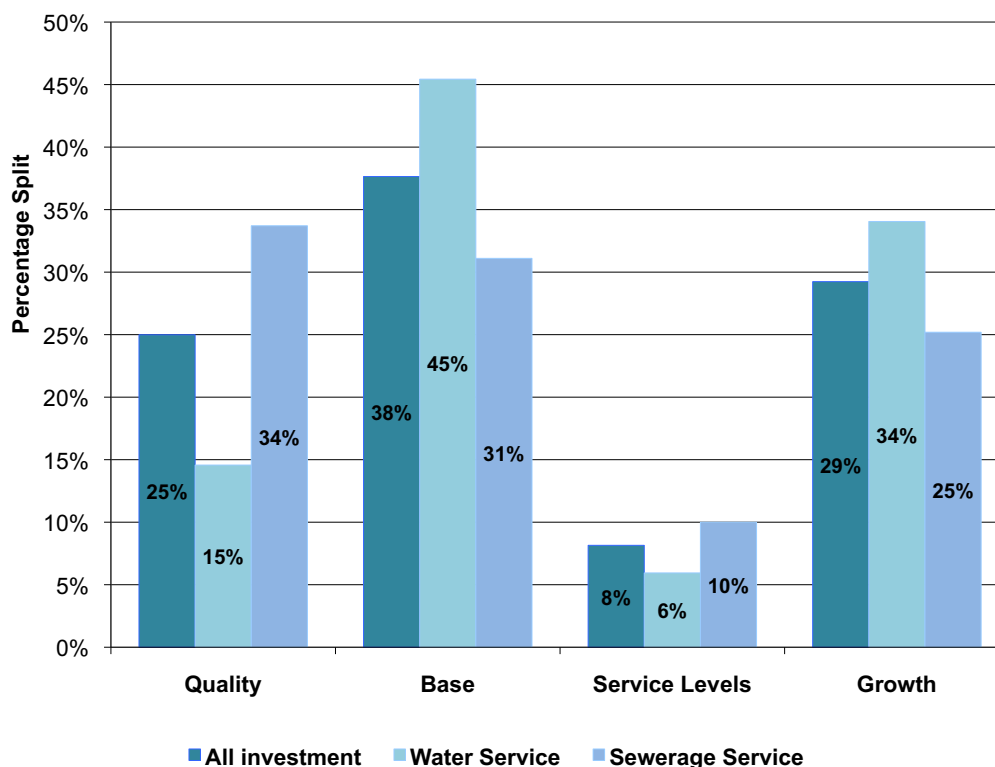
<sup>5</sup>\* The efficiency gap for 2010-11 is provisional in nature. It should be stressed that the figures are likely to change for the final analysis when updated data and our assessment of the company's special factor and atypical cost claims becomes available.

## 4.4 Capital Expenditure

In 2010-11 NI Water invested £162.2 million to maintain its existing assets; and, to create new assets to meet more demanding quality obligations, provide additional capacity for growth and development and improve the service it provides.

Investment is divided evenly between the water and sewerage services (46% water service and 54% sewerage service). The allocation of investment by purpose is shown on Figure 4.1.

**Figure 4.1: Allocation of investment in 2010-11 by service and purpose**



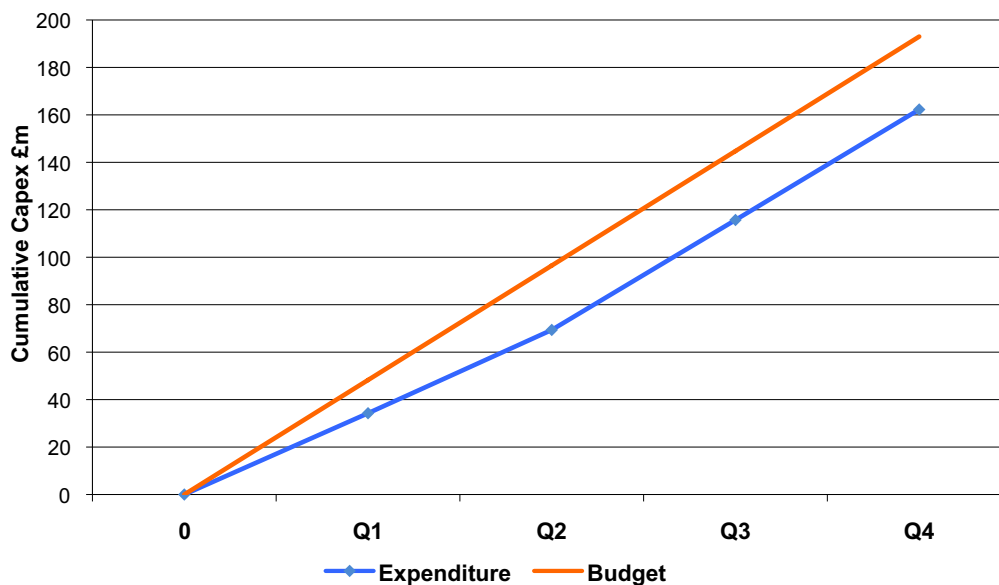
Investment in 2010-11 of £162.2 million was lower than the available budget of £193.4 million by £31.2 million (16.1%). Because the company is also a Non-Departmental Public Body for public expenditure budgetary purposes it cannot carry budget from year to year. As a result, the underspend in 2010-11 is a lost opportunity to invest in improvements to water and sewerage services.

We also monitor expenditure against PC10 in real terms using a common 2007-08 price base. This ensures that the company delivers planned investment in real terms as well as nominal terms. We convert capital expenditure to a common price base using the latest Construction Output Price Indices (COPI).

Since 2007-08 economic conditions have resulted in construction price deflation compared to slightly increasing prices assumed in PC10. As a result of construction price deflation, expenditure in 2010-11 was only 13% lower than the funding available in PC10. Since construction prices are declining we expect NI Water to be able to deliver additional outputs for the same nominal budget.

The profile of capital expenditure through 2010-11 is shown in Figure 4.2. The rate of spend was below the average budget rate in the early part of the year and the company was unable to recover this shortfall by year-end.

**Figure 4.2: Capital expenditure profile 2010-11**



Maintaining the rate of investment is a particular concern and area of focus. The under spend in 2010-11 and the inability to carry over budget between years emphasises the need for NI Water to continue to develop its project planning and approvals process. This will ensure that third party issues which can affect progress are taken into account as far as possible in the prioritisation and profiling of projects and that an adequate work bank is developed to allow flexibility as unforeseen delays are encountered.

**Impact of the Comprehensive Spending Review on PC10**

The comprehensive spending review (CSR) completed towards the end of 2010-11 reduced the level of capital investment available in the last year of PC10 (2012-13) below the level envisaged. The original and revised capital works budgets are shown in Table 4.4. Including the underspend in 2010-11, the PC10 budget has reduced by £73 million in nominal terms.

**Table 4.4: PC10 Capital works programme investment (£ million)**

	2010-11	2011-12	2012-13	Total
PC10 final determination budget	193	188	196	578
Revised actual and CSR budget	162	192	150	504
Variance from FD budget	-31	+4	-46	-73

Note 1: All figures are expressed in nominal terms

Note 2: The 2010-11 figure is actual expenditure in 2010-11 and CSR budget for subsequent years.

Note 3: Totals may not add due to rounding

In response to this change in budget, the Water Stakeholder Steering Group (which includes representatives from NI Water, the Utility Regulator, DRD, CCNI and NIEA) undertook a review of the outputs which could now be delivered during PC10. This review took account of the underspend, in 2010-11, the reduced budget available in 2012-13 and changes in construction inflation. At the conclusion of this review, a Monitoring Plan for PC10 was published setting out the planned investment and outputs for the period.

The impact of the change in investment and the change in outputs on prices is limited in the short-term. It was agreed that prices would not be adjusted in the last year of PC10 to reflect these changes. However, as part of the review process, we have signalled how we would treat these adjustments in subsequent price controls. This would ensure that non-domestic consumers, who pay directly for their water and sewerage services, do not pay for investment and outputs which have not been delivered.

The reduced level of capital investment will further limit the outputs it will be possible to deliver in PC10. Following discussion with stakeholders, most of the reduction has been in wastewater quality outputs. Investment to maintain the performance of the existing assets and maintain and secure drinking water quality has been maintained.

The reduction in wastewater quality investment carries an increased risk of infraction proceedings by the European Commission and ongoing investment will be required in PC13 and beyond to secure compliance with European standards to address this risk.

### **Delivering capital efficiencies**

For PC10, we made an assessment of relative efficiency of capital investment using Ofwat's cost base methodology (which assessed the efficiency gap using 2007-08 data). Using this approach we determined that the efficiency gap relative to water and sewerage companies in England and Wales was 4% compared to the median company and 17% compared to the frontier company. We set efficiency targets in PC10 to close this efficiency gap.

NI Water has highlighted its concern that it will not be able to deliver the full capital efficiencies of PC10. The company states that its status as an NDPB means that it is not able to procure the type of integrated capital delivery "alliance" structure which is credited with making a significant contribution to efficiency improvements in the water industry in Great Britain. Limitations on the company's flexibility to carry expenditure from year to year and choose optimal forms of procurement have an impact on efficient delivery of capital works which we will continue to monitor as PC10 is delivered.

## Capital output delivery

While it has been unable to spend its full budget, NI Water has continued to deliver planned improvements to its water and sewerage assets. For example:

- Activity on water mains including new and replacement mains was maintained at a rate of 300km in the year. This work maintained the water mains and contributed to improvements in water pressure and water quality.
- A new trunk main serving Dungannon was completed improving security of supply to the area and improving water quality. Work began on a further trunk main from Castor Bay to Newry to improve security of supply.
- Two further water treatment works were upgraded to achieve compliance with water quality standards.
- Planned improvements have been made to 20 wastewater treatment works serving an equivalent of population greater than 250 and 20 unsatisfactory intermittent discharges.
- Progress continues to be made on smaller programmes of work such as leakage control, small wastewater treatment works upgrades and service reservoir rehabilitation.

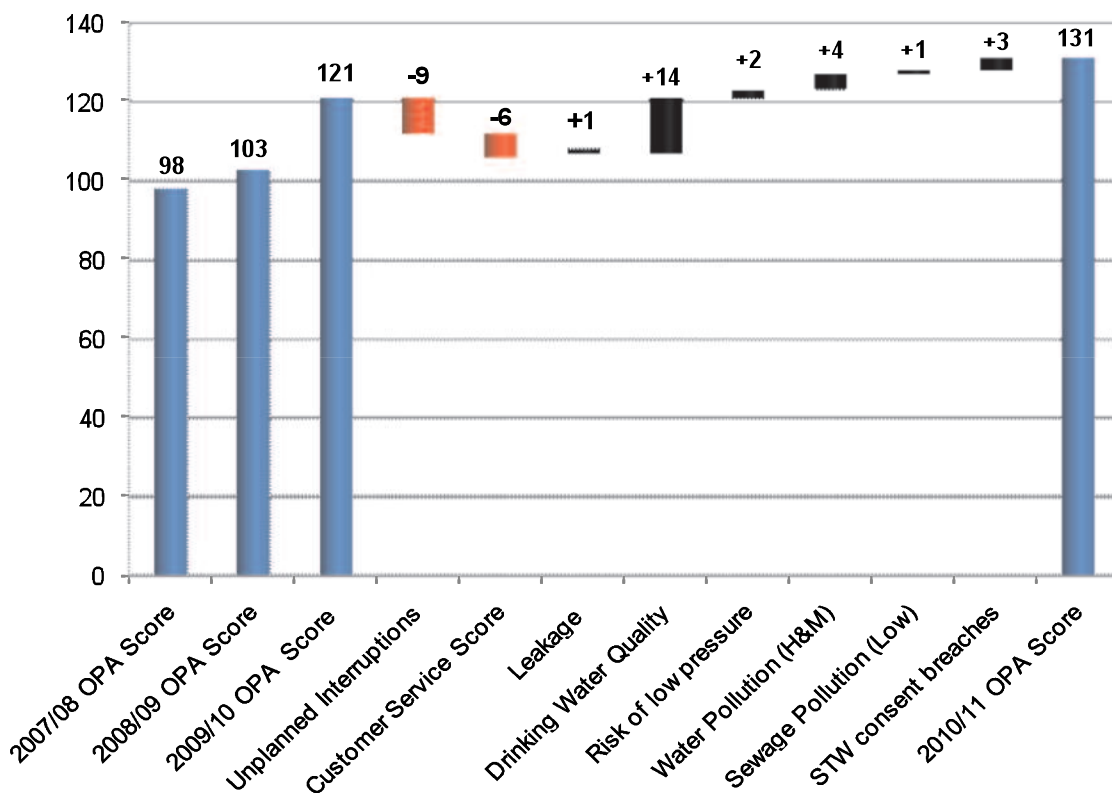
# 5.0 CUSTOMER SERVICE

## 5.1 How customer service is assessed

We adopted an Overall Performance Assessment (OPA) framework to monitor the level of service that NI Water provides to its consumers. The OPA combines individual service measures and scores them against a reasonable range. Scores are then weighted in order of importance and combined to give an overall picture of service level performance.

The chart below details OPA improvements and the score shift in the past year:

**Figure 5.1: OPA score movements in the last year for NI Water**



Key messages include:

- NI Water has continued to improve customer service, increasing the OPA score by 10 points;
- Despite improvement, the company was unable to attain the OPA target (142) by 11 points;

- The freeze/thaw event had a significant impact on underperformance, contributing to a fall in scores for both unplanned interruptions and the customer response times; and,
- Comparison with English and Welsh companies, whose average score is 290<sup>6</sup>, illustrates that much remains to be achieved. Continued focus on service performance is essential if the company is to close the gap with the wider industry.

## 5.2 Delivery of PC10 Key Performance Indicators

As part of the PC10 regulatory contract, we developed key service level outputs to reflect Ministerial Social and Environmental Guidance (see Annex A). A number of other general activity level targets i.e. mains replacement rates etc., were also set where it was difficult to establish a clear link between activity and service level changes.

- Performance against these KPIs in 2010-11 is summarised as follows:
- NI Water did not meet 9 of the 19 service level KPIs, indicating a variable level of performance;
- The extreme winter of 2010-11 contributed to the failure of some of these targets, particularly those related to telephone call handling;
- While the freeze/thaw had a major impact on unplanned interruptions, the company would still have had a concerning failure level in this service area had no event occurred;
- The company met the sewage treatment quality outputs; and
- Progress has been made against activity outputs but judgement will be reserved until the end of the PC10 period.

Actual performance against each PC10 KPI is set out in Annex A.

In the following sections we assess the company's performance against key targets and indicators.

## 5.3 Complaints

NI Water reported a significant increase in the number of written complaints during 2010-11 compared with the previous year. We agree with the company and the Reporter that this increase was due almost entirely to the freeze/thaw problems in the Winter, with almost half the complaints being received in December. Some 2,453 of the 4,327 written complaints received related to water service matters and in particular to lack of supply. The company did however improve its performance on the previous year by responding to 99.5% of written complaints within 10 working days.

<sup>6</sup> Figures for the England and Wales average refer to 2009-10 as the OPA system was discontinued by Ofwat from that reporting year onwards. However, it is unlikely that the averages would have seen much change in the subsequent period.



The Consumer Council for Northern Ireland (CCNI) dealt with some 300 enquiries about NI Water. CCNI's role is to assist the consumer in seeking a resolution with the company; and in the majority of cases it is able to do so.

However, where a resolution cannot be reached, certain complaints may be referred to us for a determination which is final and binding between the parties in dispute. During 2010-11 we addressed three disputes referred to us. The outcome of two of these disputes was determined later in 2011 and the third is in progress.

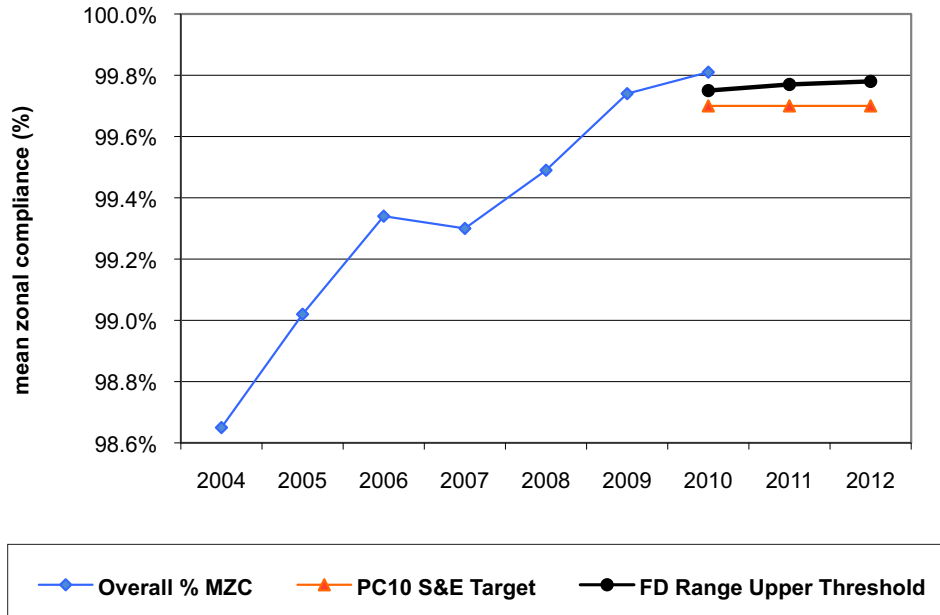
## 5.4 Water Supply

### Drinking Water Quality – Mean Zonal Compliance

Mean zonal compliance is used to assess overall drinking water quality at consumers' taps. It is the average performance for 40 water quality parameters which are sampled under the regulatory sampling programme. Mean zonal compliance is a measure of both the quality of water treatment and any deterioration that occurs in the distribution system used to transport water to consumers.

Figure 5.2 shows the trend in mean zonal compliance since 2004, along with the upper and lower boundaries of a performance range set for NI Water for the PC10 period.

**Figure 5.2: Overall mean zonal compliance (%)**



Improvements in compliance prior to PC10 reflected both the delivery of a planned programme of improvements at NI Water treatment works and improvements delivered through the Alpha PPP scheme. Continued improvement during 2010 reflects the ongoing investment at NI Water treatment works required to complete this programme of work. This has allowed the company to achieve a compliance figure of 99.81% for the calendar year 2010. This represents a significant outperformance when compared to the Ministerial target of 99.7% for PC10 as set out in the Social and Environmental Guidance.

Our Final Determination for PC10 stated that we expected this to occur. As a consequence, we quoted a performance range for PC10. This used the Ministerial target as the lower threshold. Performance in 2010 exceeded the upper threshold which we believed more accurately reflected the improvement expected from investment proposals. We commend the company for this outperformance and expect NI Water to maintain performance around this level throughout PC10. However, further significant improvements are not expected as the required programme of investment at water treatment works is nearing completion.

Once the main compliance issues at water treatment works have been addressed, targeted investment to address water quality issues in the distribution system will become increasingly important if further improvements in mean zonal compliance are to be achieved.

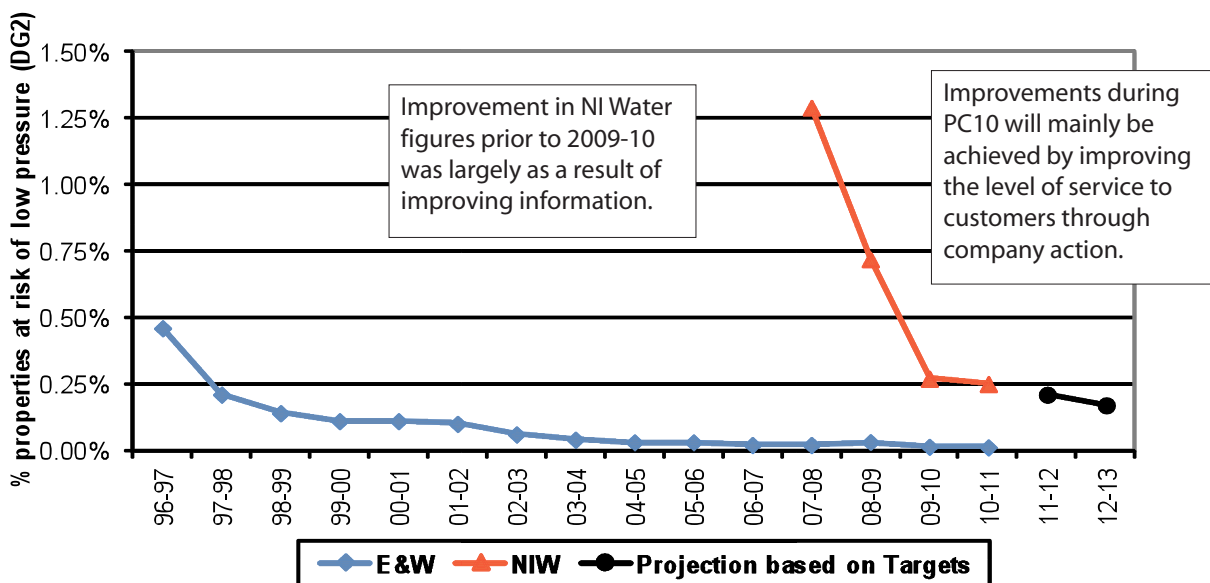
We therefore expect the company to continue to work with the Drinking Water Inspectorate (DWI) to develop a better understanding of such issues. NI Water should use this improved knowledge to inform priorities for ongoing water main rehabilitation work during PC10 and PC13 where possible and to develop a targeted programme for addressing water main water quality issues for PC15.

### Water Supply Pressure

We assess water supply pressure against a target of 10m pressure at a flow of 9 l/minute at the main stop tap<sup>7</sup>. A surrogate pressure of 15m is used where flow measurement is not possible. NI Water reported this data for the first time at the end of 2007-08.

Figure 5.3 shows data reported by NI Water since 2007-08 and projected performance based on targets for 2011-13. It also compares NI Water's performance with historical performance in England and Wales. Improvements in England and Wales occurred over a period of 20 years. NI Water should be capable of delivering similar levels of service subject to further investment based on sound data.

**Figure 5.3: Properties at risk of receiving low pressure**



<sup>7</sup> This will normally mean that it takes approximately 30 seconds to fill a 1 gallon bucket from a kitchen tap.

NI Water has made significant improvements in its ability to report low pressure data accurately in recent years by:

- relating water main distribution models to properties;
- undertaking pressure logging to confirm supply pressure; and
- general data cleansing and data management.

We expect the company to continue to build on this progress throughout the PC10 period and to improve its understanding of low pressure problems to help inform future investment proposals.

In light of data uncertainty during the SBP period we set targets for PC10 based on the number of properties receiving an improved level of service. This is because these targets can be attributed directly to NI Water action rather than data cleansing.

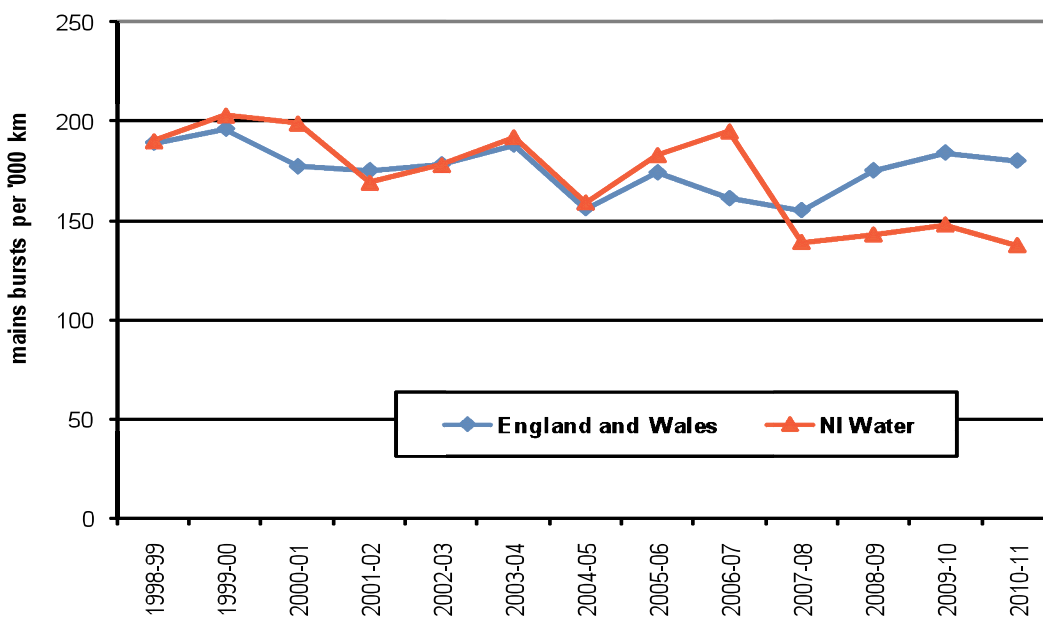
NI Water outperformed its target of removing 220 properties by company action in 2010-11, achieving a figure of 283 properties. As a result the total number of properties registered as receiving pressure below the reference level has reduced to around 2,000.

### Water Mains Bursts

The level of bursts provides an indication of the condition of the water mains operated by NI Water.

Figure 5.4 shows the number of mains bursts per thousand km of water main reported by NI Water. It compares this with similar long term data from England and Wales.<sup>8</sup>

**Figure 5.4: Water mains burst frequency**



<sup>8</sup> Excludes Thames Water which has burst rates that are approximately twice the average of other water and sewerage companies.

The frequency of water mains bursts in Northern Ireland has historically been similar to that in England and Wales suggesting that the overall condition and performance is similar to the average in England and Wales.

Following a general improvement up to 2007-08, NI Water's performance has remained relatively static. This could reflect the cold spells experienced during the winter in each of the following three years. These were more extreme than usual and may have offset any underlying improvements delivered through the ongoing water main rehabilitation programme.

It is noticeable that NI Water's performance improved slightly in 2010-11 despite the extreme weather experienced last winter and that performance in the past four years has been consistently better than the average in England and Wales. The key findings of the our investigation into the event, with regard to the performance of water mains and the cause of demand, help to explain these results<sup>9</sup> (see Chapter 3.0 for more details).

We will continue to monitor burst frequency as an indicator of the condition of local water mains and whether their serviceability is being maintained.

### Unplanned Interruptions to Supply

The number of bursts per km of main provides an indication of asset performance. However, the impact of the bursts on the level of service experienced by consumers is reflected by the extent and duration of the associated interruptions to supply.

The length of water main per property served by NI Water is twice the average of water and sewerage companies in Scotland, England and Wales. This is because NI Water's consumer base is distributed widely over small communities in a rural environment. A longer length of main per property contributes to the higher frequency of interruptions of supply per property in Northern Ireland.

For PC10, targets were set for interruptions lasting greater than 12hrs and an overall performance score.

**Table 5.1: Percentage of properties affected by unplanned interruptions to supply.**

Measure	Target 2010-11	Actual Performance 2010-11	Performance excluding Early Dec and Late Dec /Early Jan weather events
Greater than 12hrs	0.22%	26.57%	0.50%
Performance score	1.24	95.79	2.49

<sup>9</sup> Utility Regulator's report of the investigation into the Freeze/Thaw incident 2010-11

Two cold weather events affected NI Water's performance in 2010-11. The first occurred in early December 2010 and the second in late December 2010 and early January 2011. The latter was exceptional. It resulted in widespread operational problems for NI Water and extensive disruptions to water supplies, including those resulting from supply rotation. This had a significant impact on the extent and duration of interruptions experienced during 2010-11. As a result, failure against the targets was significant. Whilst the impact of these severe weather events is recognised, the figures in the table above show that NI Water would still not have met its targets even if their impact was excluded.

NI Water has indicated that this was mainly a result of a few burst mains in late January and early February which affected large numbers of properties for an extended period of time. It is evident that outside the extreme weather events a small number of significant incidents are having a disproportionate impact on underlying performance year on year.

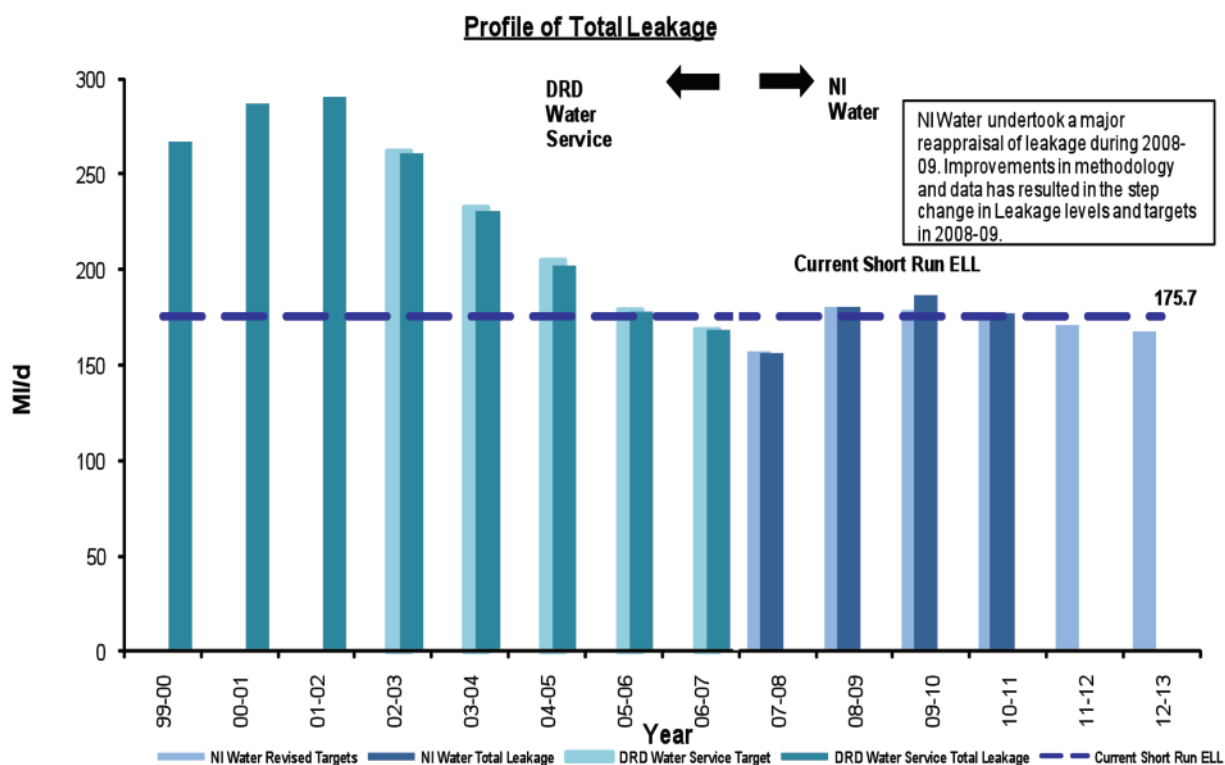
We expect NI Water to investigate the history of such incidents to try to improve its knowledge. The company should aim to identify whether changes to operational practices could be implemented to reduce their impact on consumers and whether there are any specific associated investment needs.

### Leakage

Some level of leakage is inherent in the operation of a pressurised water distribution network. Water companies aim to achieve an Economic Level of Leakage (ELL). This balances the costs of the production of water with the cost of activity to control the level of leakage.

Figure 5.5 shows the historic trend in reported leakage against targets since 1999-2000. The stepped increase in 2008-09 reflects a rebasing of reported leakage and leakage targets as opposed to a real increase in leakage. Rebasing was necessary to reflect work undertaken by NI Water to improve the data and methodologies used to estimate leakage. The completion of this work should improve the ability of the company to manage leakage and has established a more robust basis for setting targets and reporting data.

**Figure 5.5: Historic leakage performance**



It should be noted that the targets for PC10 had to be changed after the publication of our Final Determination as a result of the completion of this work. Targets were increased by 2 MI/d to reflect further improvements in the company’s methodology and the associated impact on the reported level of Leakage. Table 5.2 shows the original and final targets for the three years of PC10.

**Table 5.2: PC10 Leakage Targets (MI/d)**

Target	2010-11	2011-12	2012-13
Original - published in Final Determination	173	169	166
Final – revised post Final Determination	175	171	168

We have asked the company not to introduce any further changes resulting from improvements in methodology until the end of the current price control period. This will ensure that performance is measured on a consistent basis throughout PC10 and that the established targets remain appropriate.

The freeze/thaw event in December/January had a significant impact on the amount of water lost in 2010-11. The investigation into this event identified that ‘consumer demand’ accounted for a significant proportion of the losses.

NI Water has estimated the additional consumer demand resulting from the event as 5.02 MI/d and excluded this from its reported leakage figure for 2010-11. This provides a more appropriate figure for assessing NI Water’s year on year performance in reducing leakage.

The reported level of leakage in 2010-11, excluding the estimated consumer demand during the freeze/thaw event, was about 177 MI/d. This was around 2 MI/d above the company’s target of 175

MI/d. Failure to meet the target appears to have been a consequence of the increase in losses from the company's pipe work which occurred due to the freeze/thaw event. The Reporter has confirmed that the company was on course to meet its leakage target until this event occurred.

Reported leakage in 2010-11 represents about 28% of the total amount of water that NI Water puts into distribution. It is estimated that around 74% of the losses occur on the distribution network operated by the company. The remainder occurs on the supply pipes that are the responsibility of consumers.

Leakage figures in terms of percentage of distribution input are not used for assessing comparative performance as this can be misleading. For example, an increase in consumption because of a sustained hot, dry period, will appear to lead to an improvement in leakage levels while there has not been any reduction in the volume of water lost. Likewise, a successful campaign for the efficient use of water will reduce the amount of water put into supply and leakage will appear to increase. The water industry has therefore traditionally used two alternative measures to compare performance. These are:

- Leakage measured in terms of cubic metres of water lost per kilometre of company pipe work per day (i.e. m<sup>3</sup>/km/d).
- Leakage measured in terms of litres of water lost per property served per day (i.e. l/prop/d).

**Table 5.3: Comparative Leakage Performance in 2010-11**

	Leakage (m <sup>3</sup> /km/d)	Leakage (l/prop/d)
NI Water	6.7	219.5
Scottish Water*	15.6	287.1
England and Wales Max	21.4	183.4
England and Wales Average	9.9	136.1
England and Wales Min	5.0	67.7

\*Scottish Water data for 2009-10.

NI Water is currently reassessing its ELL. This is necessary in order to establish appropriate targets for the future and to inform investment planning. We expect it to complete this work by May 2012 to inform the company's business plan submission for PC13 and allow targets to be set for the next price control period. This should include the establishment of a sustainable long-term ELL which takes account of capital replacement costs and wider economic costs, including the cost of carbon and environmental impacts.

We expect the leakage reduction costs established through the ELL assessment to be used consistently in the company's Water Resource Management plan and its business plan submission.



## 5.5 Sewerage Services

### Sewerage Collapse and Blockage

The frequency of blockage and collapse are indicators of the condition and performance of the sewerage system. Table 5.4 compares sewer blockage and collapse data for NI Water in 2010-11 with the range of data reported for England, Wales and Scotland.

The fact that NI Water is responsible for lateral sewers and drains which are not yet the responsibility of water companies in England and Wales may explain the relatively high reported frequencies of blockage and collapse. NI Water is currently undertaking work to identify numbers of blockage and collapse on lateral sewers and drains.

**Table 5.4: Blockage and collapse frequency**

Company or group of companies	Blockage		Collapse	
	Per '000 km	Per '000 prop	Per '000 km	Per '000 prop
NI Water	1,760	40.3	85	1.94
Scottish Water	391	8.0	89	1.82
England and Wales maximum	793	9.9	30	0.40
England and Wales average	485	6.6	10	0.14
England and Wales minimum	199	2.6	4	0.05

*Frequencies based on length of main sewer. For Scottish Water only, this includes the length of laterals and drains which are owned by the company. Scottish Water data for 2009-10.*

### Sewer Flooding

Sewer flooding can occur when the sewer blocks, when equipment fails, or when the volume of rainfall entering the sewer exceeds its capacity. External flooding can be unpleasant but internal property flooding from the sewerage system is recognised as having the most extreme impact on consumers. Consumers have identified it as their highest priority for action (Source: 'Tapping into Consumer Views on Water' [www.consumercouncil.org.uk/filestore/documents/Web\\_report.pdf](http://www.consumercouncil.org.uk/filestore/documents/Web_report.pdf)).

NI Water has undertaken a wide ranging review of reported sewer flooding to improve the quality of data and its assessment of properties which are at risk from sewer flooding due to limited hydraulic capacity in the sewerage system.

An assessment of over 2,000 properties with some reported history of flooding has identified 220 properties where the cause of internal flooding is thought to be lack of hydraulic capacity. Further work is being carried out by NI Water on these properties to confirm the cause of flooding and, where necessary, make improvements to the sewer network to reduce the risk of repeat flooding.

## Pollution Incidents

Pollution incidents are recorded by Northern Ireland Environment Agency (NIEA) from reports from the public and its staff. They are classified by source, category, cause and severity. Severity is ranked as high, medium or low. NI Water's operations can sometimes lead to pollution incidents. Most common are those caused by discharges from overflows due to overloaded sewers or equipment failure.

The company set a target for percentage reduction in high and medium pollution incidents over the SBP period. The target baseline was established from the average number of pollution incidents during 2004-06. The company's performance is shown in table 5.5.

**Table 5.5: Pollution incident targets and performance**

Measure	2007-08	2008-09 <sup>10</sup>	2009-10	2010-11 <sup>11</sup>
Target: number of high and medium pollution incidents				54
Actual performance	60	56	55	46

The company has made progress in reducing pollution incidents and has outperformed the PC10 target. However, the overall level of pollution incidents remains high compared to performance by sewerage companies in England and Wales.

Further work by the company to improve its understanding of the underlying cause of pollution incidents and its response when they occur should allow further improvements in performance and the ability to establish more robust targets in the future.

## Sewage Treatment and Discharge

The NIEA sets standards for wastewater treatment and monitors compliance against these standards. The company is assessed on compliance for around 250 treatment works. These works have numeric and descriptive consents; and an equivalent population greater than 250. Figure 5.6 shows compliance of these works by number and by population equivalent.

Although in this report we review the performance of the company for the financial year 2010-11, wastewater consent compliance is based on calendar years, with the calendar year 2010 being the year in question.

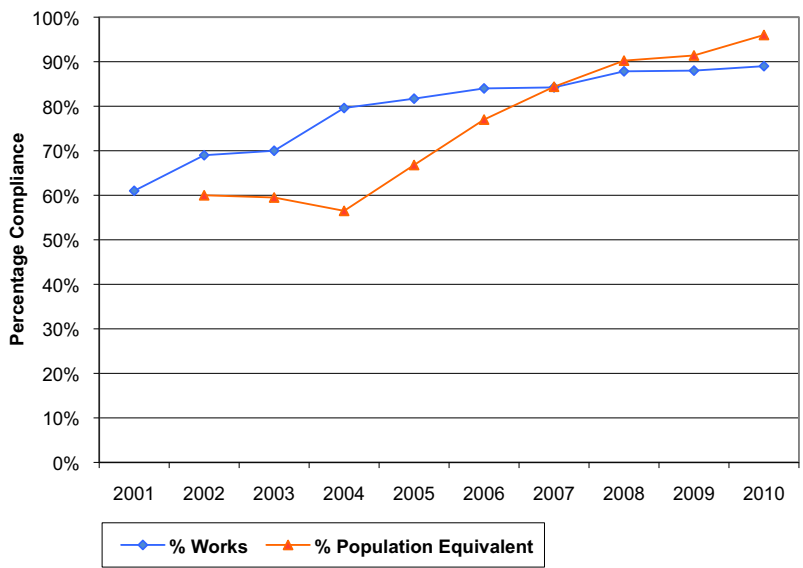
For 2010 the percentage of works complying with Water Order numeric consents was 88.7% compared with a target of 85%; and for population equivalent served, a performance of 95.6% against a target of 94.9%. The performance for 2010-11 is an improvement on the previous year.

However, since the PC10 targets were agreed, the available capital investment has been reduced. As a result, the wastewater treatment works compliance targets for 2011-12 and 2012-13 have been revised downwards to reflect the investment available.

<sup>10</sup> Targets were not set for 2008-09.

<sup>11</sup> Percentage reduction targets have not been set for PC10.

**Figure 5.6: Compliance with NIEA discharge standards**



## 5.6 Public-Private Partnerships (PPP)

Despite a number of deductions being made to payments to all three PPP contracts because the required level of service was not delivered at all times, the PPP schemes have contributed to improved service to NI Water’s consumers. Drinking water quality has improved and compliance with European directives at major WwTW’s has been achieved. NI Water’s water supply PPP schemes complied with the statutory water quality standards for most of the year, although two works had aluminium exceedences during the severe cold weather in December 2010.

During the winter freeze/thaw, two of the new PPP water treatment works suffered frost damage which restricted their output at a time when demand exceed supply, contributing to water shortages. As a consequence, deductions in payments were made by NI Water. In our report on the 2010-11 freeze/thaw we noted the need for NI Water to take the action available to it under the contract to address the restrictions in the PPP plant exposed by the severe cold weather to secure output should similar conditions occur in the future. We understand that remedial work has been undertaken and additional frost protection provided.

The NIEA has confirmed that all the wastewater treatment works complied with their respective consents and this has contributed to NI Water’s overall performance as the sewerage undertaker. The Omega PPP concession became responsible for sewage sludge treatment and disposal for NI Water at the start of 2010-11. The PPP concession has taken over an existing sludge incinerator in Belfast and constructed a second incinerator. However, the incineration plant had difficulty complying with emission standards and did not operate for a significant period of the year. As a result, only 16% of sludge was incinerated in 2010-11 with much of the sludge treated and recycled to agricultural land in accordance with current legislation.

NI Water has advised us that the PPP concessionaire has made improvements to the incinerators to secure compliance with air quality emission. Once this work is completed the incinerators will become the primary route for sludge disposal.

We will continue to monitor the performance of the PPP contracts and NI Water’s management of them to ensure continued value for money for the consumer.

## 6.0 INFORMATION AND DATA INTEGRITY

The regulatory regime has highlighted the need for good quality data, both for NI Water to deliver an efficient and effective service and for the Regulator to safeguard the interests of consumers.

### 6.1 Undertakings

Formal data undertakings were given to us by NI Water in January 2009 in relation to data consistency, accuracy and reliability issues around customer numbers and billing.

Although the programme of work has taken considerably longer than originally envisaged to deliver, three of the eight undertakings were released in May 2011. This mainly reflects the appropriate resourcing and governance arrangements which have been established, operating and independently verified.

We are currently discussing requirements for a submission from the company in relation to further undertakings release. This will mainly focus on progress in terms of improved data confidence grades as evidenced in annual reporting to us.

However it is clear that a wider long term data quality improvement programme must be maintained for data quality to remain a priority.

### 6.2 Procurement

Following procurement irregularities which came to light in 2009-10, investigations were conducted by the Public Accounts Committee and the Northern Ireland Audit Office in relation to :-

- Measuring the Performance of NI Water : and
- Procurement and Governance in NI Water.

These reports resulted in a number of recommendations being made, progress against which is being reported via the Department of Regional Development. The reports can be located at: [www.niassembly.gov.uk/public/2007mandate/pacreport07.htm](http://www.niassembly.gov.uk/public/2007mandate/pacreport07.htm)

## 7.0 THE WAY FORWARD

### 7.1 Approach for the Future

Progress continues to be made by NI Water in both improving its efficiency and overall service performance. However, the challenge to close the gap with UK water companies remains significant, with a 39% operational efficiency gap and a OPA score of 131 compared to an average score in England and Wales of 290.

Alongside this we appreciate the challenges and constraints facing NI Water. The following are seen as key areas of focus for both the company and the Utility Regulator.

1. The first year of PC10 has seen a reduction in operational costs of circa £10 million in outturn prices from 2009-10. This represents a good performance given the inflationary increase. We expect there to be further reductions in costs throughout PC10, PC13 and beyond as NI Water drives efficiencies throughout its business and continues to close the 39% operational efficiency gap.
2. NI Water's improvement in OPA scoring in 2010-11 has been by 10 points; however, we expect a more notable increase in scoring in the remaining two years of PC10. We expect NI Water to show a more marked convergence with other comparator companies in terms of relative efficiency and overall service level performance.
3. NI Water must focus on performance against output targets. We have clearly set out the outputs expected in PC10 along with our expectations for capital investment monitoring. This ensures we have a clear baseline for PC10 and clarity for all stakeholders regarding the monitoring and reporting of progress.
4. Capital investment in 2010-11 was lower than the available budget. We remained concerned about the pace of capital delivery in the first half of 2011-12. In an operating environment which does not allow transfer of unused budget between years, NI Water must focus on the development, planning and delivery of capital investment to ensure that it maintains its assets and delivers planned environmental and service improvements.
5. Data quality improvements are essential for both the company and the Utility Regulator. The company must show determination to achieve release from the remaining undertakings and as a priority continue to improve data. Particular areas of focus relate to the flood risk and low pressure register; data supporting water main investment and data related to pollution incidents.
6. PPP schemes must be monitored and managed by NI Water to deliver continuous improvement and efficiency. We will continue to develop our approach to assess the efficiency of these partnerships with the private sector which now forms a significant part of the business. We recognise the important improvements in drinking water quality and wastewater compliance since the introduction of the Alpha and Omega PPP schemes.

7. The extreme weather conditions experienced in Northern Ireland in the winter of 2010-11 represented a significant challenge for NI Water. The response to the incident exposed a lack of corporate ownership and consumer focus. We expect NI Water to learn from this event and implement improvements to mitigate against the impact of future major incidents on consumers. We will continue to monitor NI Water's progress in delivering our freeze/thaw recovery plan.

Governance and structure remain important issues. It will remain important for principal stakeholders to engage with any future Executive consultation on NI Water's operating model and associated funding stream.

# Annex A

## Performance against the PC10 KPIs

Table A lists NI Water’s key outputs as set out in the PC10 Monitoring Plan. Colour coding has been used to indicate whether NI Water met its target (green) or failed its target (red) by the end of the yearly period. The table also provides comments where applicable.

**Table A – NI Water PC10 key outputs**

Description	2010-11 PC10 Target - FD	2010-11 PC10 Target - Monitoring Plan	2010-11 Actual	Comments
<b>Customer Service Outputs</b>				
1 Properties confirmed at risk of receiving pressure below reference level (DG2) alleviated by company action	220	220	283	Target is for removal of 800 properties over PC10 period.
2 Interruptions to supply – composite score (DG3)	1.24	1.24	95.79	
3 Interruptions to supply >12 hrs (No. of properties) (DG3)	0.222%	1,750	26.57% 214,274 props	Target in FD expressed as a percentage of properties affected = 0.222%  This equated to 1750 properties which has been adopted for the Monitoring Plan
4 Properties at risk of flooding - number removed from the risk register by company action (DG5)	-	100	0	Target set as 200 over the three year period of PC10 in FD  Target revised to 143 over the three year period of PC10 in Monitoring Plan
<b>Consumer Response</b>				
5 Billing contacts dealt with within five working days (% billing contacts) (DG6)	99.9%	99.9%	98.9%	
6 Written complaints answered within 10 working days (% written complaints) (DG7)	98.5%	98.5%	99.5%	
7 Bills based on meter readings (% of total metered accounts) (DG8)	95.0%	95.0%	96.1%	
8 Call handling satisfaction score (1-5)	4.65	4.65	4.59	
9 Percentage of calls not abandoned (DG9)	99.0%	99.0%	88.2%	
10 Percentage of calls not all lines busy (DG9)	99.9%	99.9%	32.8%	

**Key:**  Pass against PC10 target  Fail against PC10 target

Description	2010-11 PC10 Target - FD	2010-11 PC10 Target - Monitoring Plan	2010-11 Actual	Comments
<b>Water Resources</b>				
11 Security of Supply index (maximum 100)	77	-	97	
12 Leakage (Ml/d)	173	175	176.97	Target revised since Final Determination to account for impact of methodology changes
13a Nominated outputs for trunk main schemes (4nr) including schemes carried over from SBP and carrying into PC13	-	2	2	Nominated output target is to be achieved over the three year period of PC10
13b One new abstraction	-	-	-	Nominated output target is to be achieved over the three year period of PC10
13c Completion of reservoir inspection engineer's recommendations.	-	-	-	Nominated output target is to be achieved over the three year period of PC10
13d Completion of the Water Resource Management Plan.	-	-	Ongoing	Nominated output target is to be achieved over the three year period of PC10
<b>Water Treatment and Distribution</b>				
14 Mean Zonal Compliance (MZC) water quality at tap (%)	99.70%	99.70%	99.81%	
15 Operational performance indicator (MZC turbidity, iron and manganese) (%)	99.10%	99.10%	99.08%	
16a Nominated outputs for water treatment works upgrades completed (2nr)	-	2	2	Nominated output target of 2Nr is to be achieved over the three year period of PC10  Unchanged in Monitoring Plan
16b Study to determine the upgrade for water treatment works (1nr)	-	-	-	Nominated output target to be achieved over the three year period of PC10
16c Trunk mains completion and starts (4nr)	-	2	2	Nominated output target of 4Nr is to be achieved over the three year period of PC10  Unchanged in Monitoring Plan
16d Completion and work to increase capacity at 13 service reservoirs or clear water tanks.	-	7	5	Nominated output targets to be achieved over the three year period of PC10  Target revised to 9Nr over the three year period of PC10 in the Monitoring Plan

**Key:**  Pass against PC10 target  Fail against PC10 target



Description	2010-11 PC10 Target - FD	2010-11 PC10 Target - Monitoring Plan	2010-11 Actual	Comments
17 Activity output of 900km of new, replaced or relined mains over PC10, excluding the trunk mains programme.	-	300	296 km of new or renewed mains	Activity output target set as 900km over the three year period of PC10
<b>Sewerage</b>				
18 Length of sewers replaced or renovated over PC10	-	24	26.7 km renovated or replaced	Activity output target set as 72km over the three year period of PC10 in FD  Target revised to 63.8 km over the three year period of PC10 in Monitoring Plan
19 Nominated outputs for improvements to Unsatisfactory Intermittent Discharges (UIDs)	-	16	20	Target set as 117Nr over the threeyear period of PC10 in FD  Target revised to 68Nr over the three year period of PC10 in Monitoring Plan
20 Number of high and medium pollution incidents attributed to NI Water	54	54	46	
<b>Sewage Quality Outputs</b>				
21 % of WwTWs compliant with (Water Order) numeric consents	85.0%	85.0%	88.7%	
22 % WwTWs compliant (UWWTD consents)	89.8%	89.8%	93.6%	
23 % of WwTW discharges complying with numeric consents	84.6%	84.6%	88.3%	
24 % of total pe served by WwTW complying with Water Order consents (LUT)	94.87%	94.87%	95.57%	
25 % of total pe served by WwTW complying with UWWTD consent (LUT)	95.73%	95.73%	96.58%	
26 Nominated outputs for improvements delivered by sewage treatment works schemes	-	20	20	Target set as 43Nr schemes over the three year period of PC10 in FD  Target revised to 42Nr schemes over the three year period of PC10 in Monitoring Plan
<b>Asset Serviceability</b>				
27 All asset areas	Stable	-	Not Assessed	
<b>Overall Performance Assessment</b>				
28 OPA score based on 11 service areas included in 2007-08 assessment	142	142	131	

Key:  Pass against PC10 target  Fail against PC10 target





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