Response to the Draft Determination

Water and Sewerage Service
Price Control 2010-2013

Main Report
November 2009

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Executive Summary

This document sets out NI Water's response to the Utility Regulator's Draft Determination (DD) of the Water and Sewerage Service Price Control 2010-13.

NI Water does not agree with a number of proposals which are contained in the DD.

Operating Costs (Opex)

The most fundamental disagreement relates to the proposed level of opex allowed to sustain services.

- It is proposed that NI Water should reduce its operating costs in 2010/11 by 21% or £37 million (excluding Public Private Partnership opex). This substantial first year reduction would be followed by further reductions in years 2 and 3 of £13m (9%) and £10m (8%) respectively. In applying efficiency targets retrospectively, to new opex and to opex that NI Water considers to be largely outside of management's control, the DD proposes an implied rate of efficiency much higher than the headline rate of 6.9%. By proposing, on an unprecedented scale, to disallow opex that is already being incurred, the DD sets aside the established regulatory practice of a 'glide-path' towards cost reduction.

Furthermore the DD proposals disallow some invest to save expenditure set out in the PC10 Business Plan which has the impact of arresting the transition to an efficient, modern, regulated utility.

- In arriving at its proposals N I Water believes the Utility Regulator has not taken sufficient account of a number of special factors that differentiate NI Water from the comparator water utilities in England & Wales. For example, taking account of the cost of maintaining a water network which is 60% longer on the basis of connection density than the average network in England & Wales. This and other special factors should be more appropriately addressed in the FD than they were in the DD. This would go some way to addressing the inherent disadvantage of the comparative benchmarking contained in the DD.

- NI Water considers that the DD contains a number of misinterpretations, which, taken together, have the effect of disallowing £8.2m of opex per annum.

- The Utility Regulator proposes that NI Water should reduce its opex by 34% over the three years of the price control. The assertion from the DD is that NI Water is not being asked to do more than its peers have already done. The company does not agree with this conclusion. In its first price control the water regulator in Scotland set opex reduction targets of 35% for Scottish Water over a five year period. This was predicated upon the

fact that the three Scottish Water authorities, in existence at the time, would merge. The Scottish regulator stated that, absent the opportunities afforded by a merger, it would have set a reduction of only 22%, again over 5 years.

In England & Wales the fastest pace of cost efficiency achieved by the water utilities was in a range of between 4.1% and 6.6 % pa, delivered during the second regulatory period 1995 -1999. This followed a period of sustained investment.

NI Water notes that the Utility Regulator appears to have rejected the advice of its professional consultants who urge caution on the interpretation of the benchmarking results and the rate of efficiency catch-up applied[1].

Taken together, these proposals have the effect of disallowing £80m or 34% of NI Water's proposed opex across the three years of the price control. After careful consideration, NI Water has concluded that this proposal could not be delivered.

The pace of the proposed efficiencies is deeply concerning, in particular the substantial impact on revenues in the first year of the price control. The proposals would require NI Water to reduce manpower by a factor two to three times more than the company's own plans. The DD is silent on how this might be funded or the risk that such a reduction in headcount would introduce to service provision. The company believes the proposed pace would have significant adverse impacts on the provision of services to customer, including the risk of core process break down.

Capital Expenditure (Capex)

NI Water has specific concerns about the proposed changes to the scope and pricing of its capex programme. The DD suggests that it is 17% less expensive to deliver capital projects in Northern Ireland than in the rest of the UK. The company believes that this is based on a flawed and incomplete assessment and has submitted detailed evidence which shows that the actual savings available in Northern Ireland are closer to 7%.

NI Water also has concerns over the reduced scope of watermains refurbishment proposed within the DD. This would leave the levels of refurbishment activity well below those of other comparative UK water companies. The proposal does not represent a sustainable longer-term

[1] NERA Economic Consulting, NIW Comparative Efficiency: An Econometric Analysis Using Panel Data. A Report for NIAUR. March 2009

position and risks undermining the company's efforts to address important areas such as leakage and water pressure.

Future cost uncertainty and financial reserves

The final area, covered in detail by Section 11, concerns the proposals for dealing with future cost uncertainty and the treatment of financial reserves. The DD suggests that the risks faced by NI Water are the same as for other water companies and rejects all but one of the proposed mechanisms to manage uncertainty over costs outside NI Water's control. In fact, since NI Water does not have sufficient financial reserves, the impact of cost uncertainty is potentially greater than for other water companies. The company asks that this strategically critical issue is addressed in the Final Determination.

1. INTRODUCTION

1.1 Background to the PC10 Process

On 15 June 2009 NI Water submitted, to the Utility Regulator, its proposed Business Plan for the PC10 period (2010 to 2013).

On 18 September 2009, the Utility Regulator published its Draft Determination (DD) for proposed price caps for the PC10 period. The DD followed a review by the Utility Regulator of NI Water's Business Plan.

This document sets out NI Water's response to the Utility Regulator's DD.

The strategic direction of NI Water has been shaped by:

- a desire to prioritise customers;
- emerging government policy, most notably the then Draft Social and Environmental Guidance (S&EG) issued by the Department for Regional Development (DRD).
- the necessity for regulatory quality and environmental compliance for water and wastewater.

In developing its Business Plan NI Water consulted extensively with all its key stakeholders. In the DD the Utility Regulator has recognised that stakeholders were agreed that the Business Plan was a reasonable reflection of consumers' priorities and consistent with the S&EG issued by DRD.

The Reporter also plays an important role in the process. The Reporter is an independent assessor who challenges the company to explain the basis for its plans and also provides comments to the Utility Regulator on the appropriateness of the company's plans, methodologies and approach. NI Water engaged with the Reporter in developing its Business Plan and has continued to do so in the evaluation of the company's response to the DD.

In conducting the Price Control process, the 2006 Order requires the Utility Regulator to make its determination in the manner it considers best calculated:

- to protect the interests of consumers in relation to the supply of water and the provision of sewerage services in Northern Ireland;
- to secure that the functions of NI Water are properly carried out as respects every area of Northern Ireland; and

- to ensure that NI Water is able, by securing reasonable returns on its capital, to finance the proper carrying out of its functions.

In addition to these primary duties, the Utility Regulator has to consider a secondary set of statutory duties including the promotion of economy and efficiency and the achievement of sustainable development. The Utility Regulator must also have regard to the principles of best regulatory practice (including the principles under which the activities of the Utility Regulator should be transparent, proportionate, consistent, accountable and targeted) when conducting the PC10 process.

NI Water is keen to work with the Utility Regulator to achieve an outcome for PC10 which is challenging and also capable of being delivered.

1.2 Response Structure

The response is in two parts.

- The core response, including general comments, an overview of key concerns, and responses to the individual sections of the Main Report of the DD.

- The appendices, containing supporting further evidence and technical papers that provide the detailed analysis of specific areas within the DD.

NI water complied with the PC10 Reporting Requirements when preparing the Business Plan. Where the DD has requested that further additional evidence be provided, NI Water has sought to provide this evidence as Appendices to this response. Where possible, elements of this 'further information' have been provided to the Utility Regulator and to the Reporter in draft format in the period between 21 September and 5 November 2009 to facilitate discussions at the query workshops.

Note that all costs quoted in this document (unless noted otherwise) are in 2007/08 prices in accordance with the PC10 Reporting Requirements.

2. ABOUT NI WATER

NI Water has an ambitious vision for the PC10 period and beyond. It seeks to continue to transform itself towards delivering improved levels of service. Much has been achieved in the last three years. NI Water is now delivering:

- Northern Ireland's best ever drinking water quality;
- Northern Ireland's best ever wastewater treatment compliance;
- These services to customers with a workforce that has been reduced from 1,673 to 1,462.

Major components of Northern Ireland's water infrastructure are still 20 years or more behind that of England and Wales in terms of investment and renewal. NI Water inherited a legacy of poor quality data and internal systems, and has considerable ground to cover before it will be in a position to provide service levels equivalent to those provided by the leading water companies in England and Wales.

The safe and reliable delivery of quality water and wastewater services to more than 735,000 customers throughout Northern Ireland is of vital importance to NI Water. NI Water's operating area is predominately rural in nature with an extensive coastline. Most of the raw water treated for supply is from surface water sources.

NI Water is a Government-Owned Company (GoCo) licensed under the Water and Sewerage Services (NI) Order 2006 (the 2006 Order). The Company was formed on 01 April 2007. The 2006 Order and Condition B of NI Water's Instrument of Appointment (Licence) provide the legal and regulatory framework for the setting of price caps for the PC10 period.

3. OVERVIEW OF KEY ISSUES FROM NI WATER'S PERSPECTIVE:

In this section NI Water summarises its key concerns, each of which is further expanded and evidenced in the following sections and appendices.

3.1 Overview

Whilst the DD headlines appear to be seductive, our detailed review of the proposals has identified serious issues that will be of major concern to a wide range of stakeholders.

- NI Water notes that the methodology adopted by the Utility Regulator to calculate the company's revenue requirement for the PC10 period has been set using the 'Building Blocks' approach applied by other economic regulators. However the DD contains a number of areas where generally recognised regulatory principles and practice appear not to have been followed.
- Our bottom-up analysis of the combined effect of the disparate proposals which make up the DD has concluded that it would result in unsustainable pressures if applied.
- After careful consideration, NI Water believes that areas of the Business Plan have been misunderstood or misinterpreted, leading to errors in the DD.
- NI Water is concerned that some of the views of the Reporter, as expressed in the PC10 Reporter Commentaries, do not appear to have yet been given due consideration.
- NI Water has made a positive start on its journey of transformation, but is concerned that the Utility Regulator is asking too much in this first limited 3-year Price Control period. Both the pace of change and the scale of the efficiencies being sought in the DD are unprecedented. The model for provision of water services in Northern Ireland is new and not yet robust; there is a significant risk that it will not survive the severe approach proposed.
- The DD proposals draw heavily on econometric benchmarking as a method for setting its proposed price limits. However the particular political, economic, social, commercial, regulatory, legacy issues and physical environment in which NI Water operates are all critical factors which must be carefully and fully considered to allow appropriate benchmarking with other water and sewerage companies. NI Water is concerned that the proposals contained in the DD do not reflect these local factors. This theme emerges in several areas of the DD, including the proposals for disallowed costs, special local cost factors, the pace of capital and operational cost efficiencies,

mechanisms for dealing with uncertainty, and the approach to Overall Performance Assessment (OPA).

After all of these issues have been reviewed, it is the considered view of the company that the DD would seriously compromise NI Water's ability to deliver essential water and sewerage services to customers in Northern Ireland, both over the PC10 period and over the longer term. The DD would introduce a level of risk to the delivery of these services during the PC10 period not seen since before the introduction of the water reform process.

Such an outcome would neither protect the interests of consumers, nor secure the provision of efficient and affordable water and sewerage services in Northern Ireland.

The quality and reliability of those core services must not be compromised by over-ambitious economic regulation.

3.2 Key Themes Contained In Section 4 'Operating Expenditure'

Sections 6.2 - 6.5 of the DD Main Report set out the Utility Regulator's proposals for allowed operating expenditure for the business over the PC10 period.

During the Strategic Business Plan (SBP) period, NI Water has delivered efficiencies and improved quality standards while bearing new Public Private Partnerships (PPP) costs, higher power costs and the costs associated with new functionality. NI Water is concerned that the challenges presented by this ongoing process appear to have been underestimated by the Utility Regulator.

During the period from 2007/08 to 2009/10, NI Water embarked upon the transformation required to create the capabilities and operating processes necessary to support the delivery of the compliance targets and customer services rightly required of a modern water utility. The company achieved this through the efficient deployment of the resources made available to it.

A number of significant changes have occurred since 2007/08, with the overall effect that 2007/08 is anything but the stable base that the Utility Regulator has recognised is required. The choice of the baseline period follows the usual convention for UK price controls, with a baseline two clear years before the start of the new control period. However, this convention fails to recognise the unique circumstances under which NI Water was operating prior to its incorporation as a Government owned company and hence the very significant changes that were necessary between 2007/08 and 2009/10.

The approach followed in the DD has largely failed to make the corrections necessary to take account of these changes.

The overall result is that the DD contains an unprecedented level of cost disallowance at the start of a new price control period, many of which are retrospective in nature. The issue here is not whether NI Water can respond to a challenge to improve future operational efficiency beyond what NI Water itself proposed, but that the DD requires that costs currently being incurred in operating the business cease to be incurred in less than five months time.

These costs include substantial elements that are a) already under contract such as Information Communication Technology (ICT) licences, b) dominated by exogenous influences and c) where the only possible alternative would be for NI Water to effect headcount reductions to dismantle the capabilities developed during the last three years. Notwithstanding the contractual difficulties of making headcount reductions in such short order, attempting to do so would create a major risk of business disruption and compliance failures.

In summary NI Water cannot support or accept the 'disallowed opex' proposed in the DD as it runs counter to the process and purpose of transformation from Water Service to NI Water. Further, the company believes that the proposals within the DD will fundamentally impact the deliverability of water and wastewater services in Northern Ireland and the ability to meet regulatory reporting requirements.

3.3 Key Themes Contained In Section 5 'Operating Efficiency'

The Utility Regulator has stated that the DD proposes efficiency targets that are both challenging and realistically achievable, based on what has been achieved by others. NI Water does not agree and considers the targets to be overly ambitious and unachievable.

In its Business Plan NI Water accepts that there is scope to significantly improve the company's efficiency. However, conscious of NI Water's statutory responsibilities to provide safe and reliable water and sewage services, the company adopted a risk based approach to propose what it firmly believes to be challenging cost reduction targets over the three year period. That approach is reasonable and consistent with regulatory practice. In that regard, NI Water would emphasise the significant caveat outlined by the Utility Regulator's advisors NERA in their report on which was included as Annex E of the DD:

> *'Whilst the conclusion from our analysis is that by any definition NIW's operating cost performance is clearly inefficient compared to that of E&W companies,* ***we would caution against the inference that all of this assessed inefficiency can be caught-up, especially over a small number of years****..... In particular very large gaps to the efficiency frontier should be treated with some care. They may be the result of factors outside of*

managerial control or perhaps the steps necessary to resolve the assessed inefficiency may in fact not be optimal in the overall context of the company's operations[2].

The DD disregards this unequivocal warning from the Utility Regulator's own economic advisers.

Of particular concern to NI Water is how the DD proposes to apply this efficiency target:

- Applying the target retrospectively to 2008/09 and 2009/10. In consequence, NI Water is effectively being asked to make a much more significant reduction in costs in 2010/11 in order to achieve the Utility Regulator's assumptions for prior years. This approach is not in line with normal regulatory methodologies.

- Applying the same efficiency targets to new opex and opex from capex also raises concerns. It effectively assumes that NI Water is as inefficient with regard to its new activities as it is with its previously committed expenditure.

- Applying the target to non-modelled opex. Non-modelled opex includes significant elements of opex, such as property rates and regulatory costs. It also includes elements of opex that have been identified as Special Factors. These elements are outside the company's control, at least in the short to medium-term. The scope to reduce these costs during PC10 is limited.

NI Water is also concerned about the approach undertaken during the review of the Special Factors that are proposed in the DD and in particular how the DD proposes to arbitrarily account for the significant disparity between the two estimates. In addition the Utility Regulator has proposed to apply a regional salary scope adjustment on the basis of incomplete analysis.

3.3.1 Opex efficiency – Implied Rate

NI Water is concerned that there are flaws in the DD proposed approach to applying efficiency targets. In particular these relate to the application of:

- efficiency targets to the operating costs for the two years preceding the price control period

[2] NI Water Comparative Efficiency: An Econometric Analysis Using Panel Data A Report for NIAUR by NERA Economic Consulting, London, 18 March 2009

- the cumulative efficiency target, to 'new' already efficiently incurred opex and to the additional opex that will result from capital investment ('opex from capex')

- the efficiency target at the same rate to non-modelled opex

The cumulative effect of these flawed features, result in the DD effectively proposing greatly increased targets on the elements of opex that are within its control during the PC10 period as demonstrated by the table below.

Table 3.1: Implied Efficiency Target

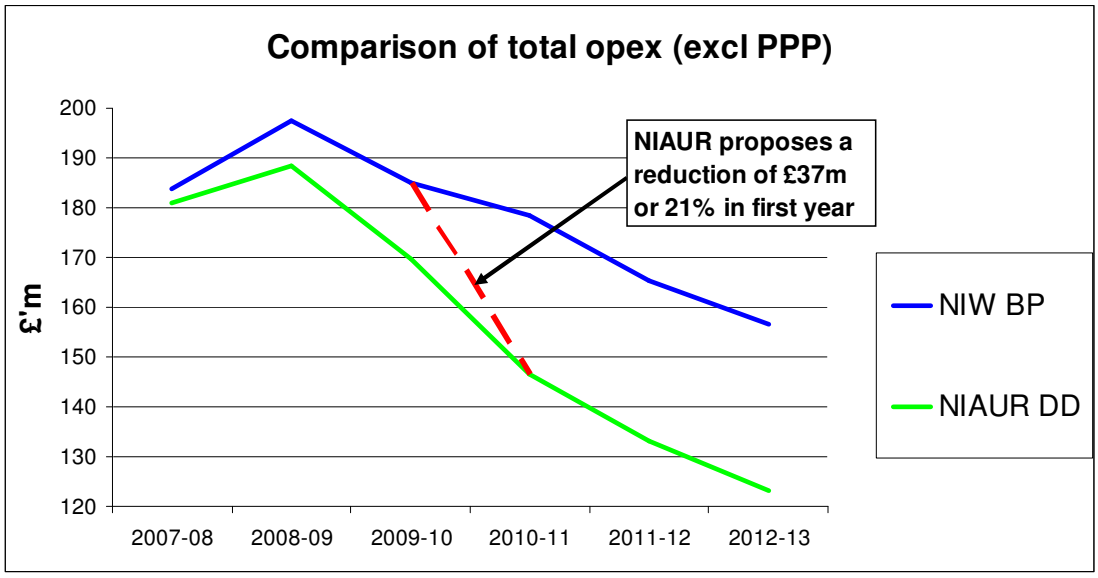
Opex	2010/11	2011/12	2012/13
Additional savings assumed 2009/10	£0.89m		
Additional efficiency assumed from new opex and opex from capex	£3.13m	£2.66m	£3.40m
Additional efficiency assumed from non-modelled opex	£3.87m	£5.03m	£6.03m
Total additional efficiencies required from baseline (excluding non-modelled)	**£7.89m**	**£7.68m**	**£9.43m**
Implied efficiency target	**14.9%**	**8.6%**	**10.9%**

Our analysis has concluded that the implied rate proposed in the DD is between 10.7% and 11.5% per annum, which is significantly higher than the 6.9% headline figure proposed. This proposed implied rate is unachievable without significant consequences as outlined in Section 7

3.4 Key Themes Contained In Section 6 'The Combined Effect of Disallowed Opex and the Proposed Efficiency Targets'

Through a combination of higher efficiency targets and disallowing large amounts of opex (which the company challenge in Section 4) the Utility Regulator is proposing to reduce NI Water opex by 21% or £37m in the first year of the price control period, followed by a further reduction of 16% over the next two years. This is both unprecedented and unachievable. The combined effect is illustrated in Figure 3.1 below:

Figure 3.1: Total opex comparison - Business Plan and Draft Determination



The closest relevant example would be that of the price control for Scottish Water covering the period 2002/03 to 2005/06. The Water Industry Commission for Scotland (WICS), concluded that Scottish Water's opex would have to reduce by 35% over 5 years, however WICS assumed that some of the required saving would come from the proposed merger of the 3 previously separate water companies and that if the merger did not go ahead, a reduction in opex of 22% over the 5 years would be more realistic. It is worth noting that Scottish Water did not achieve the targets in the earlier years and only managed to achieve the targets by the end of the price control period.

NI Water has completed a detailed bottom up analysis of implications of the combined effect of the DD proposals for disallowed opex and the application of operational cost efficiency targets. This has concluded that NI Water would be faced with no option other than to reduce the headcount by a factor of two to three times higher than allowed for in the Business Plan. The key risk associated with this pace is process breakdown, which would have catastrophic impacts on risks to public health and the environment.

3.5 Key Themes Contained In Section 7 'Capital Programme'

Section 4 of the DD Main Report sets out the Utility Regulator's proposals on investment in services.

The DD proposes substantial changes to the scope and deliverability of the capital programme detailed in NI Water's business plan.

The DD proposes to adjust NI Water's proposed investment plans for the PC10 period despite recognising that planned outputs were consistent with the S&EG issued by the Minister. That Guidance reflects the conclusions of the working groups established to develop the outputs for the PC10 period.

The DD proposals to re-allocate £38m to be invested in additional outputs to be agreed with key stakeholders represents an unusual and, NI Water would suggest, inappropriate interference in the management decisions properly to be taken by the company.

NI Water believes there is an over-reliance within the DD on three alternative approaches for assessing the capital maintenance expenditure required to maintain the existing and current levels of service.

3.6 Key Themes Contained In Section 8 'Capital Efficiency'

Section 5 of the DD on Main Report sets out the Utility Regulator's proposals on capital efficiencies.

The DD fails to take adequate account of NI Water's specific position when applying a standard cost base approach to compare the company's relative capital efficiency with that of similar companies in England and Wales.

The DD assumes that it is 17% less expensive to deliver capital projects in NI Water than it is in the rest of the UK. However, the evidence available to NI Water demonstrates that, the actual cost is circa 7% lower.

3.7 Key Themes Contained In Section 9 'Outputs and Overall Performance Assessment'

Section 3 of the DD Main report sets out the Utility Regulator's proposals on maintaining and improving services.

The NI Water Business Plan was designed to deliver quality improvements reflecting the priorities and expectations of customers and stakeholders. However, the proposed cuts contained within the DD effectively remove the company's ability to deliver these.

NI Water's analysis of the impact on operational capability that would be caused if the DD proposals were implemented, seeks to demonstrate the scale and seriousness of the risk to quality of output and service.

The DD has proposed a level of cost-cutting that is unprecedented in any utility anywhere in the UK. As such, it introduces unprecedented levels of risk to the safe delivery of Northern Ireland's most essential public service.

Failure to deliver the improved outputs outlined in NI Water's Business Plan, which would be inevitable were the DD to be implemented in its current format, would have a detrimental effect on public confidence and seriously undermine Northern Ireland's water reform process.

Comparison between NI Water and GB water companies by means of Overall Performance Assessment (OPA) parameters is becoming increasingly important to stakeholders and the Northern Ireland public. NI Water is concerned that the comparisons contained within the DD are neither accurate nor appropriate.

There is some concern at the level of understanding that has been brought to bear on technical questions of water and wastewater treatment within the DD.

3.8 Key Themes Contained In Section 10 'Financial Parameters'

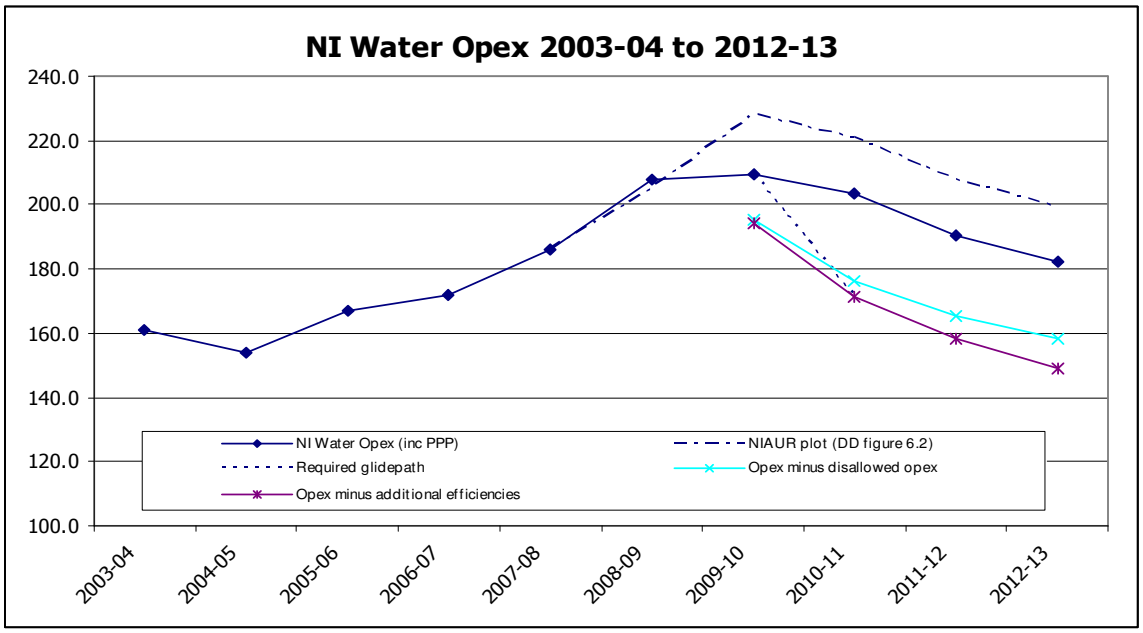
Section 3 of the DD Main Report sets out the Utility Regulator's proposals on financing investment.

NI Water welcomes the Weighted Average Cost of Credit (WACC) for the PC10 period proposed in the DD. However NI Water is concerned that the DD proposes to adjust the opening Regulated Capital Value (RCV) to achieve financing targets for PC10 and PC13, this is an approach that should be reconsidered by the Utility Regulator.

Analytical errors in the DD identified by NI Water

NI Water has identified a number of fundamental errors made by the Utility Regulator when deriving the NI Water forecast opex. This has resulted in the DD overstating opex from 2009/10 onwards by c£20m per annum, as illustrated on the chart below.

Figure 3.2: Comparison of Opex Projections



In addition, NI Water has identified a number of flaws in the Utility Regulators calculation of our performance in the three years preceding PC10. When the methodology has been correctly applied this will illustrate that NI Water has, to date, achieved the SBP opex efficiency targets. NI Water is concerned that the DD proposals are based upon conclusions made on the basis of flawed analysis.

3.9 Key Themes Contained In Section 11 'Dealing with Uncertainty'

Section 9 of the DD sets out the proposals for dealing with cost uncertainty.

The limited 3-year regulatory period of PC10 means that the standard regulatory mechanisms for interim determinations are of limited value in terms of protecting NI Water from short-term unforeseen increases in costs not accounted for in the Final Determination. Moreover, DRD has stated that the SBP period Revolving Credit Facility does not provide NI Water the protection assumed by the DD against non-forecasted cost shocks. NI Water's review of the DD has confirmed that there remains an urgent need for the development of a pragmatic policy and procedures for addressing the cost risks faced by NI Water within the PC10 period. This must address the unique ownership and funding arrangements of NI Water and the economic climate in which NI Water will operate during the PC10 period.

4. OPERATING EXPENDITURE

4.1 Introduction

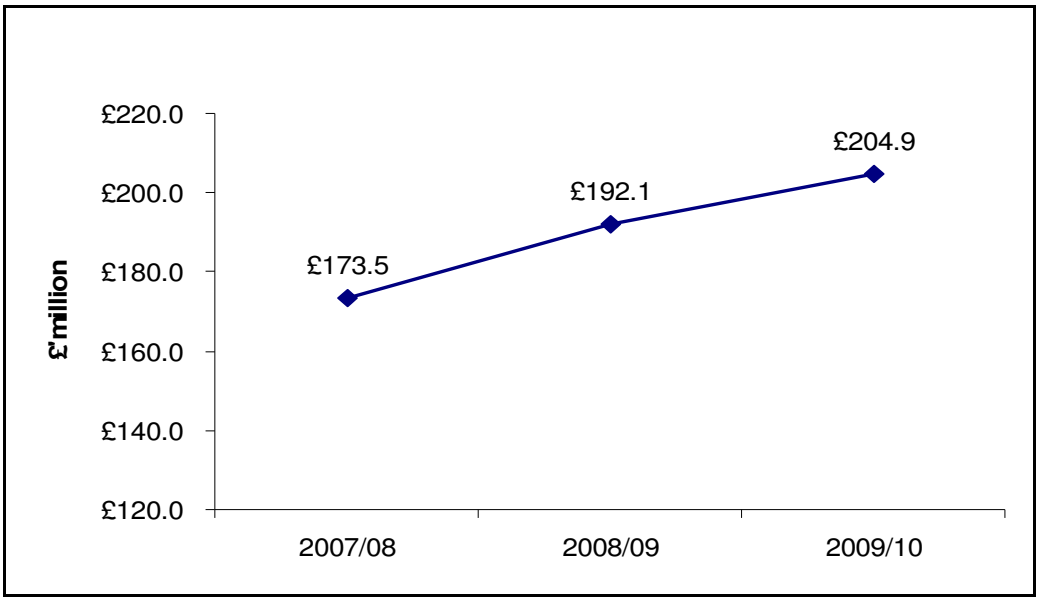
In the DD Main Report, the Utility Regulator sets out its rationale for proposing to disallow £60.4m of NI Water's claimed operating expenditure in the PC10 period. The DD Main Report, Table 6.3 sets out a series of proposed disallowances based on applying regulatory tests for 'newness' and exogeneity' to specific movements in costs compared to the 2007/08 baseline.

NI Water has a number of fundamental objections to the approach followed in the DD. The choice of the baseline period follows the usual convention for UK price controls, with a baseline two clear years before the start of the new control period. However, this convention does not allow for an organisation in very significant transition as was the case for NI Water between 2007/08 and 2009/10.

4.2 SBP Period Costs

In the SBP period, NI Water operating expenditure increased significantly, predominantly due to the introduction of the PPP contracts and the increased cost of power in the period. This is illustrated in Figure 4.1.

Figure 4.1: SBP Period Operating Expenditure (excluding VER/VS & BI)



- Alpha & Omega PPP contracts commenced in 2008/09 and 2009/10 equating to a net increase in 2009/10 operating costs of £22.6m (including reductions to

baseline). These contracts were entered into during the Water Reform process to provide improved drinking water quality and accelerate the programme of compliance with European Directives. This significant additional investment is helping to redress the legacy of historic underinvestment in Northern Ireland's water and sewerage services.

- The cost of power also increased dramatically in this period, by £16.9m by 2009/10 due to the inflationary power market. This is an exogenous increase which, as the Utility Regulator will be aware, is beyond the control of NI Water.

In the same period, NI Water began the implementation of the transformation of the company. Such transformational change was required to create the efficient organisational capabilities and operating processes that will support the delivery of the compliance targets and customer services rightly required of a modern water utility.

Table 4.2 below summarises the net increase in costs from 2007/08 baseline:

Table 4.2: Net Increase in costs from 2007/08 baseline

Main Increases	**07/08 - 08/09**	**08/09 - 09/10**
PPP Costs (net of transfer costs)	£10.8m	£11.8m
Power	£9.8m	£7.1m
New Functions, Exogenous and Other Costs	£15.5m	(£0.7m)
Efficiencies	(£17.5m)	(£5.4m)
Total OpEx Increase	£18.6m	£12.8m

Some of the numbers may not add up due to rounding

- In 2008/09, NI Water delivered £17.5m of opex efficiencies; this increased by £5.4m to £22.9m in 2009/10. Efficiencies were realised as a result of depot closures, people reduction programmes and better procurement practices. The increase in costs of new functions, exogenous and other costs required to achieve this transformation have been more than off-set by the significant efficiencies and cost reductions made in the same period.

- The increase in costs, excluding the PPP contracts and the increased cost of power explained above, amounted to £15.5m in 2008/09 and £14.8m in 2009/10. The key reasons for the cost increases include:

(i) Other exogenous pressures such as sludge transportation, Regulator/ Reporter costs, additional chemical costs driven by the Northern Ireland Environment Agency (NIEA) and other requirements;

(ii) New activities/functions in Finance & Regulation, Asset Management, Commercial and Customer Services, and Corporate Affairs to build capability that did not exist in 2007/08 and which is essential to operate a regulated water company in the Northern Ireland context.

As stated throughout the PC10 Business Plan and this DD response, the change in cost base between 2007/08 and 2009/10 represents the transition of Water Service, an agency of DRD, to NI Water, an improved organisation with better information, a workforce with skills in the appropriate areas, and equipped to commence on the journey to a more efficient organisation.

The overall effect of these changes has been to make the period from 2007/08 onwards one of very significant transformation. As a result, 2007/08 has not been the stable base year that the Utility Regulator itself recognises is required[3]. The established regulatory apparatus recognises that some changes to costs or atypical items may occur after the base year and, at least in principle, is capable of correcting for these. However, NI Water believes that the approach followed in the DD has largely failed to make the necessary corrections.

This sub-section has focused on the cost increases incurred in the SBP period, however in the PC10 period the cost base is decreasing and significant efficiencies have been identified as detailed in Section 5 of this report.

4.3 Operational Costs Prior to 2007/08

4.3.1 Background

At the NI Water to Utility Regulator Water Board Advisory Group (WBAG) meeting on 3 November 2009 the Utility Regulator implied that the DD proposed pace of efficiency is in some way justified by an opinion that *"a culture of cost control was not embedded"* in DRD Water Service, with a specific reference to the profile of operational costs before NI Water was formed on 1st April 2007.

[3] Draft Determination, Main Report, Para 6.2.4.

NI Water comments that:

- the Utility Regulator's PC10 Reporting Requirements do not include any requirement to present information on operational costs before 2007/8.
- a comprehensive operational expenditure submission, which included detailed operational costs for this period, was provided by NI Water to the Utility Regulator on 4 January 2008.
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Notwithstanding, the above in this section we aim to set out briefly how and why costs increased prior to 2007/8.

4.3.2 Overview of Changes in Quality and Compliance

Figure 6.2 in Section 6 illustrates the profile of headcount from 1996 to 2007, and figure 7.1 in Section 7 illustrates the profile of capital investment in water services for Northern Ireland. In the late 1990's and early new millennium the priority for the limited investment available was to improve drinking water quality through improved treatment. At 2001/02 there were over 260 larger wastewater treatment works serving populations greater than 250, many of which were in poor condition, lacked automation, and were delivering poor compliance.

Table 4.3 below illustrates that these assets, and a Water Service staff of 2,153, were delivering 61% compliance against registered discharged standards for wastewater treatment, and 98.38% compliance against drinking water standards. In addition, of the 13 sites in the UK facing EU Court infraction proceedings for failure to comply with the Urban Wastewater Treatment Directive, 9 of these locations were in Northern Ireland.

In contrast by 2007/08, after a period of increased capital and operational expenditure investment the staff of 1,673 were delivering 84% compliance against more stringent registered discharge standards for wastewater treatment, and 99.30% compliance against more stringent drinking water standards. This required more power to run the new treatment works and generated significantly more sludge which had to be disposed of.

Table 4.3: Key Changes in Operational Metrics between 2000/01-2007/08

	Parameter	Unit	2000/01	2007/8	% Diff	Source
1	Wastewater Sludge Production	ttds / annum	26.5	38.4	45	JR/AIR Tables
2	Electricity Consumption	Gwh / annum	200	249	24.5	WS Records
3	Headcount	FTE	2,153	1,673	(22.3)	Annual Reports
4	Wastewater Quality (compliance with discharge standards)	% number of works	61*	84.23*	38	Annual Reports
5	Drinking Water Quality Standards Compliance	% samples	98.38*	99.30*	0.9	Annual Reports

*Wastewater and drinking water standards are for calendar years 2001 & 2007

4.3.3 Wastewater Treatment Investment

The shift from the basic to the more complex wastewater treatment processes is demonstrated in Table 4.4 below, which illustrates the figures for thirteen of the WwTWs upgraded during this period. These serve over 30% of the population of Northern Ireland. For example the treatment process at Larne now incorporates a tertiary treatment process and full odour control. Prior to this investment there was only an unscreened gravity outfall which discharged raw sewage. For the works identified this has resulted in Opex costs increasing by a factor of 3.3 from £1.4m in 2000/1 to £4.6m per annum in 2007/08 (excl. labour and sludge disposal).

Table 4.4 Upgraded Wastewater Treatment Works

WwTW Name	Population Served in 2008 (PE)	Level of Treatment Prior to Investment	Level of Treatment After Investment	Completion Date of Investment
Carrickfergus	32,030	Primary	Secondary	Oct-07
Larne	28,571	None	Tertiary	Mar-06
Whitehouse	88,098	Part Secondary	Secondary	Aug-08
Ballyclare	18,703	Part Secondary	Tertiary	Jun-06
Cookstown	20,822	Part Secondary	Secondary	Nov-07
Ballymena	119,184	Secondary	Tertiary	Jan-05
Banbridge	21,730	Secondary	Secondary	Mar-03
Newry	70,464	Primary	Tertiary	Sep-04
Omagh	49,851	Secondary	Secondary	Mar-07
Culmore	137,951	Primary	Secondary	May-06
Lisnaskea	6,394	Secondary	Secondary	Jan-03
Strabane	22,606	Primary	Secondary	Jun-06
North Coast	76,651	30% Preliminary 70% Secondary	Secondary	Feb-08

4.3.4 Water Treatment Investment

The main treatment processes at water treatment works in 2000/01 were slow sand filters and rapid gravity filters. Whilst both of these processes have low opex costs, neither is capable of delivering the high quality required by current drinking water quality standards. To comply, between 2000/01 and 2007/08 there was a significant necessary move to full chemical treatment, and to provide increased capacity as illustrated in Table 4.5. For the works identified this has resulted in opex costs increasing by a factor of 2.4 from £1.1m in 2000/1, to £2.5m per annum in 2007/08 (excl. cost for labour and sludge disposal).

Table 4.5: Upgraded Water Treatment Works

WTW Name	2001/02 Capacity (Ml/d)	2007/08 Capacity (Ml/d)	Investment Complete
Derg	13.6	26.4	2002
Lough Macrory	12	18	2003
Clay Lake	4.5	4.5	2006
Foffany	36	52	2005
Drumaroad	0	155	2004

4.3.5 Overall Operational Cost Impact of Capital Investments

The overall impact of this quality and capacity driven investment has been that from 2000/01 to 2007/08 electricity usage has increased by 24.5%, and wastewater sludge production increased by 45%. This increase in sludge production also coincided with the loss of the low cost disposal route of spreading to pasture or latterly the forced cessation of recycling of over 50% of sewage sludge to forestry.

4.3.6 Analysis of NI Water Operational Costs From 2003/04 to 2007/08

Table 4.6 below sets out Water Service / NI Water opex over the period 2003/04 to 2007/08. This shows an overall increase of c£46m in 2007/08 compared to 2003/04. NI Water has analysed this gap and found it to be made up as follows:

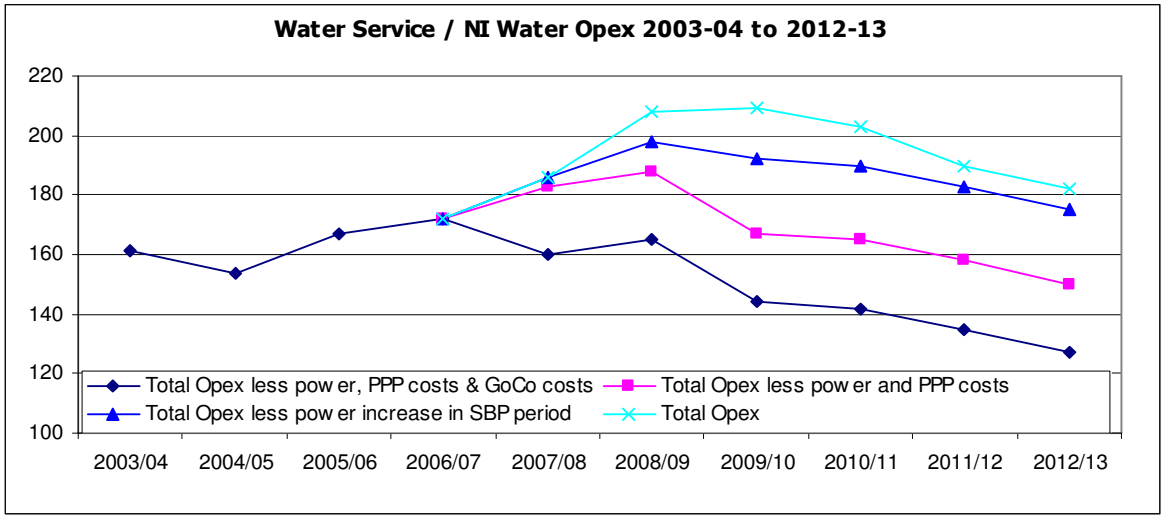
- General inflation over the period is estimated to account for approximately £20m of the gap. This has been calculated by uplifting the total opex cost in 2003/04 to 2007/08 prices using the RPI factor over the period. This increases the 2003/04 opex figure of £141m to approximately £161m.
- In moving from 2006/07 to 2007/08, NI Water experienced a number of additional costs known previously as 'GoCo' costs. NI Water previously estimated this as £23m (not including costs which were previously notional and became hard charged). This includes additional pension costs, costs of billing, insurance and economic and environmental regulation costs.
- Costs of running the business has also increased substantially over the period including power costs which increased by c48% over the period. This was due to both increases in unit rate and also increased usage as new assets came online.

Table 4.6: Water Service / NI Water Opex 2003/04 – 2007/08

	2003/04 £m	2004/05 £m	2005/06 £m	2006/07 £m	2007/08 £m
Staff costs					
Salaries and wages	48.4	46.9	47.7	45.3	45.5
Social security costs	3.7	3.6	3.5	3.3	3.3
Superannuation	5.5	5.2	7.1	6.6	14.5
less staff costs capitalised	-5.1	-5.8	-3.3	-5.2	-6.2
Total staff costs	**52.4**	**49.9**	**55.0**	**50.0**	**57.1**
Operating costs					
Power	14.8	16.4	17.6	22.5	21.9
Rates	9.8	10.3	10.6	11.0	11.7
Materials and consumables	12.5	12.1	14.8	13.8	14.7
Other Operating Costs (H&C)	45.0	44.8	49.9	61.1	80.8
Notional costs	4.6	4.2	5.3	4.8	0.0
Profit and loss on disposal	-0.4	0.2	-0.1	-0.2	0.0
Other costs of employment	1.9	1.5	1.5	1.9	0.0
Total Operating costs	**88.2**	**89.5**	**99.6**	**115.0**	**129.1**
TOTAL OPEX (nominal)	**140.5**	**139.4**	**154.6**	**165.0**	**186.1**
Indexation to 2007/08 prices	*0.871*	*0.901*	*0.923*	*0.959*	*1.000*
TOTAL OPEX (2007/08 prices)	**161.3**	**154.6**	**167.5**	**172.0**	**186.1**

The graph below shows Water Service/NI Water opex over the period from 2003/04 to 2012/13 in 2007/08 prices. The top line represents total opex incurred by the business including PPP opex. The remaining lines represent the effect of removing the additional power costs identified from the 2007/08 baseline, the additional PPP costs and the additional GoCo costs mentioned above.

Figure 4.2: Water Service / NI Water Opex 2003/04 – 2012/13



The result shows that the underlying opex is reducing significantly, falling from c£172m in 2006/07 (last year of Water Service) to c£127m in 2012/13, a very substantial 26% decrease.

This analysis demonstrates that despite a period of significant enhancement driven capital investment which added considerably increased operational cost obligations, headcount reductions were achieved and funded, at the same time as the underlying baseline operational costs were reduced.

4.4 PC10 Period Expenditure

NI Water believes that the DD has misunderstood the reality of NI Water's situation in its treatment of each of the areas below. The DD:

- incorrectly proposed removing Kinnegar PPP costs on the erroneous assumption that NI Water has 'double counted' this cost both in the operating expenses line and the PPP line;
- fails to recognise that NI Water has only very limited influence over the costs of power and chemicals;
- suggests that new and entirely necessary functional processes can somehow be disallowed because these have been recognised as business-as-usual costs,
- has proposed disallowing the costs associated with the Business Improvement Programme whilst at the same time continuing to capture the benefits realised in terms of improved performance or reduced costs.

In order to assist the Utility Regulator to identify the required changes to the DD, the additional clarifications and evidence presented in this section follow the structure of the DD Main Report, Table 6.3 as closely as possible.

4.5 Response to DD, Main Report Table 6.3 – NI Water's Claimed and Allowed Additional Opex

There are a number of key areas of expenditure which the DD proposes to disallow. These are summarised below together with an overview of the rationale as to why this expenditure should be allowed. These issues have been the subject of verbal and written interaction with the Utility Regulator since the DD was published.

In addition, further details are provided in respect of each of these areas in the attached appendices. Appendices relating to allowed expenditure are also attached.

4.5.1 Power

Energy Prices and volumes

NI Water requested £27.5m of additional opex for power in the PC10 period over the 2007/08 baseline (now estimated at £37.2m as detailed in appendix 15), of which £8.9m has been disallowed. There are a number of issues in respect of the disallowed power costs as discussed below:

- **2% efficiency (£1.4m disallowed)** – although this is only applied to the increase in consumption, its application just prior to the implementation of the major PPP facilities is particularly disadvantageous to NI Water. The PPP facilities make up approximately 90% of the increase in usage between 2007/08 and the start of the PC10 period and these facilities are significantly more power intensive than the facilities they replaced. Furthermore the PPP power usage estimates in the PC10 period are based on outturn information now available at these facilities;

- **Deflating PC10 Power Costs (£5.5m disallowed)** – the costs for the PC10 period were stated in 2009/10 prices in the Business Plan and therefore applying a compounding deflator in each of the PC10 years is inappropriate;

- **Disallowed uplift in Other Fuels (£2 million disallowed) –** on subsequent review, NI Water has discovered a classification error which understated the cost of Other Fuels and overstated the cost of Electricity in 2007/08 (this does not impact the total

cost of power in the year). The correction removes most of the perceived increase in the cost of other fuel from the base year. NI Water has discussed this re-classification with the Utility Regulator in a 'clinic' on the 22nd October 2009.

It is NI Water's strong view that the £8.9m of disallowed power costs should not be disallowed.

Refer to Appendix 2.1.1 – 'Energy Prices and Volumes' and Appendix 15 – 'PC10 Period Energy Price Review' for further details.

4.5.2 Environmental Compliance & Regulation

Sludge Transportation

Following instruction from the NIEA, NI Water has been required to identify new routes for the disposal of waste water and water supply sludge. These additional costs total £4m per annum, of which £3.4m per annum has been incurred from 2008/09 and £600k from January 2010. However this additional waste water sludge expenditure (£3.4m p.a.) does not extend into the PC10 period, because it will be taken to the PPP operated incinerator when it becomes operational. Hence it has not been requested as funding by NI Water. The associated reduction in transportation and disposal costs has also been included within the PC10 Business Plan, both as an identified cost and a subsequent cost saving.

Therefore, there are two specific issues which should result in this expenditure not being disallowed:

- **Expenditure has already been deducted by NI Water (£10.2m)** – as part of the transfer to PPP, NI Water identified in the PC10 Business Plan a number of cost reductions in other areas of the business. One such area was in respect of the waste water sludge transportation and disposal. Therefore, the DD proposes to disallow expenditure which NI Water has already excluded.

- **Costs incurred due to exogenous circumstances (£1.8m)** – NIEA no longer permits NI Water to dispose of waste water sludge in privately owned NI forestry land and as of January 2010 water supply sludge must be disposed at a licensed landfill site;

It is therefore NI Water's strong view that this expenditure should not be disallowed.

Refer to Appendix 2.2.2 – 'Sludge Transportation' for further details.

4.5.3 Information & Communications Technology

Strategic Expenditure / ICT & other systems

NI Water included £12.6m of additional opex in the PC10 period for strategic ICT and other systems over the 2007/08 baseline, which the DD proposes to disallow. The annual opex requirement in the PC10 years is £4.2m per annum and is split as follows:

- **ICT systems (£3.0m per annum)** – NI Water has introduced a range of new IT systems since 2007/08 to improve the operation of the business. They include e-ordering/e-sourcing, Oracle, MWM, SCIM, UCD, Pearl, Diamond and Leakage Software.

- **Staff Costs (£1.2m per annum)** – The increase in IT staff costs is vital in order to provide the basic levels of competence and service required to support the new ICT systems introduced.

There are a number of key reasons for allowing this expenditure which is additional over the 2007/08 base year levels:

- Essential for improving data quality – NI Water recognised that its old (Water Service) information systems were not adequate to meet the requirements of a modern regulated utility company and as a result made a significant investment in improving the systems to support data quality. This is required to support both improved decision making and regulatory reporting requirements.

- Supports existing ICT systems – the maintenance, support and licence costs support ICT systems which have either been implemented or are in the process of being implemented. Of the £8.9m opex required to support new systems a significant proportion is already committed in order to maintain as fit-for-purpose the operation of these IT applications. This opex is a result of a combined capital investment of approximately £24.3m, of which £23m is already committed.

To disallow these costs would lead to a very serious risk of deteriorating data quality including regulatory non-compliance. In addition, the considerable investment made during the SBP period and the efficiencies already achieved would be reversed.

It is therefore NI Water's strong view that this expenditure should not be disallowed.

Refer to Appendix 2.3.1 – 'Strategic Expenditure ICT & other Systems' for further details.

4.5.4 New Organisational Functions

NI Water included £10.5m of additional opex in the PC10 period for new organisational functions over the 2007/08 baseline. The DD proposes disallowing all of this claimed expenditure.

It is NI Water's strong view that the £10.5m should not be disallowed. To aid explanation, Table B3.49 in the Business Plan has been reproduced below.

Table 4.7: New Function Cost Increases (Business Plan Table B3.49)

	2008/09 £'k	2009/10 £'k	2010/11 £'k	2011/12 £'k	2012/13 £'k	2013/14 £'k	4 years £'k
Asset Management	664	990	990	990	990	990	990
Commercial	474	974	974	974	974	974	974
Finance & Regulation	671	1,812	1,446	1,446	1,446	1,446	1,446
Customer Services Team	779	207	138	138	138	138	138
Total	2,588	3,983	3,548	3,548	3,548	3,548	3,548
Adj to 2007/08 Prices	**2,562**	**3,940**	**3,509**	**3,509**	**3,509**	**3,509**	**3,509**

NI Water included £3.5m additional operating expenditure in each of the PC10 years. The additional opex is employee costs less any associated reduction in staff substitutes and temporary support staff.

More than 70% of the cost of new functions (£2.56m) was incurred in 2008/09 rising to £3.9m being incurred in 2009/10. The cost of new functions is planned to reduce and stabilise at £3.5m in 2010/11 as the full complement of permanent staff is more cost effective than any remaining staff substitution arrangements.

The additional cost of new functions is as a result of the significant investment made to transform NI Water from Water Service to a stand-alone GoCo. As such, it represents 'new' expenditure which should therefore be allowed for in NI Water's costs. It is important to reiterate that these are employee costs and, in the main, relate to decisions taken in conjunction with NI Water's shareholder to add to its capability and depth in order to address its proper responsibilities as a stand-alone GoCo. Each is discussed briefly in turn:

These new functional areas are as follows:

- Asset Management (£2.97m) – this has been established to provide for the more effective operation of NI Water's assets;

- Commercial (£2.92m) – the Commercial function operates a number of significant new procurement streams and manages NI Water's PPP contracts which has delivered significant efficiencies since its establishment.
- Finance & Regulation (£4.3m) – represents the strengthening of the team to include the new Regulation team, a taxation capability, treasury management capability, a new Corporate Governance team and strengthening of the existing team.
- Customer Services Team (£0.4m) – delivers contract billing and collection, reporting and governance and improves customer usage and billing data

The new organisation costs are employee costs and they are already being incurred. To disallow the cost of new organisations will require significant headcount reductions over and above those already identified in the Business Plan. No account has been taken to the associated Voluntary Early Retirement (VER)/Voluntary Severance (VS) costs. In addition, the capability that NI Water has established in the last two years to operate a regulated utility and address the responsibilities of a stand-alone GoCo would be lost.

Refer to Appendices 2.5.1 to 2.5.4 -'New Organisation Function' for further details.

It is NI Water's strong view that the £10.5m of disallowed costs should not be disallowed. The choice of 2007/08 as the base year and the lack of roll forward of costs which were agreed in the SBP are the issues. Notwithstanding retrospective disallowance of costs is poor regulatory practice.

4.5.5 Corporate

NI Water included £14.3m of additional opex in its PC10 Business Plan for 'corporate costs' over the 2007/08 baseline, of which the Utility Regulator proposes to disallow £8.6 million.

Table 4.8: Corporate costs

£k	PC10 Total	Disallowed
Governance		
Non Exec Directors	399	399
Public awareness notices	450	450
Governance Total	849	849
Financial		
Revenue Assurance	420	420
Corporate Governance	600	600
Carbon Reduction Commitment	600	600
Financial Systems	919	919
Reduction	(387)	(387)
Financial Total	2,152	2,152
Accommodation	3,773	3,773
Legal	453	453
Bad Debt	7,108	1,422
Total Corporate	14.335	8,649

The following paragraphs provide an overview of the rationale for allowing these costs:

- Governance – the additional expenditure is in respect of Non-Executive Director (NED) expenses (£0.13m p.a.) which increases the number of NI Water NEDs to that of a comparable GB water utility. Additional expenditure has also been identified in respect of public awareness notices (£0.15m p.a.) which has been adopted in line with the more customer focused approach being taken by NI Water;

NI Water has not requested any additional Governance costs to those being efficiently incurred by the company in 2008/09 and 2009/10. NI Water is of the view that retrospective disallowance is poor regulatory practice.

Refer to Appendix 2.4.1 – 'Governance' for further details.

- Financial – additional expenditure of £0.14m p.a. has been identified for Revenue Assurance, linked to quality of customer billing and revenue data; £0.2m p.a. to improve corporate governance to comply with regulatory requirements and industry best practice; £0.2m p.a. to consider the impact of the Carbon Reduction Commitment (an exogenous item); and £0.3m to improve financial systems in the organisation as a result of the change in status.

All these costs represent the continued focus of the company to improve its systems and processes, and therefore improve data quality and efficiency.

Of the increase, £0.4m is being incurred on such activities in 2009/10. NI Water is of the view that retrospective disallowance is poor regulatory practice.

Refer to Appendix 2.4.2 – 'Financial' for further details.

- Accommodation – the PC10 Business Plan included costs for NI Water to move its office based employees from a number of separate offices across Northern Ireland to a single office in the Greater Belfast Area. Moving to the single office is regarded as a key enabler to removing the inefficiencies of a disparate office suite. NI Water is of the view that the timing of this move is critical to take advantage of the current relatively depressed market for rented property. Furthermore significant cost savings will be delivered over the period of the lease for the new office**.**

Refer to Appendix 2.4.3 – 'Accommodation' for further details.

- Legal (£0.15m p.a.) – the increase in legal costs since the 2007/08 baseline reflects legal support to facilitate strategic projects and other corporate and regulatory issues. This has resulted in spend of £0.2m above baseline in 2008/09 falling to £0.15m above baseline in 2009/10. No further increases were requested in the PC10 period. See Table B3.56 in the Business Plan.

The Utility Regulator has considered only the base year and not taken account of the costs which have been incurred efficiently in the two years between the base year and the start of the PC10 period. NI Water is of the view that retrospective disallowance is poor regulatory practice.

Refer to Appendix 2.4.4 – 'Legal' for further details.

- Bad Debt – the DD states '*% rate of bad debt assumed rather than 2.5% used in PC10 Business Plan'*. However, NI Water can confirm that the Bad Debt charge on non-domestic customers was modelled at 2% and this was reflected in the financial tables within our PC10 Business Plan. Within chapter B3, reference is made to a non-domestic bad debt charge of 2.5%. This is an error, within the text only, and should read 2.0%.

As a result, NI Water expect that the total expenditure of £7.1m should be allowable. Otherwise, the allowed expenditure for non-domestic bad debts would reduce to 1.6%. NI Water regards this as unsustainable in the current recession.

Refer to Appendix 2.4.5 – 'Bad Debt' for further details.

4.5.6 Chemicals

NI Water included £7.5m in respect of additional chemical costs in its PC10 Business Plan over the 2007/08 baseline. However, the DD proposes to disallow Chemical cost increases of £3.42m experienced between the base year and prior to the PC10 period. NI Water would argue strongly that it has no scope to influence chemical prices and has not experienced downward pressure on prices which are set in global markets. The Utility Regulator has indicated that exchange rate movements have been favourable to NI Water however the long term trend remains downward and no favourable change has been experienced.

It is important to note that NI Water has demonstrated significant efficiencies in the procurement of chemicals as demonstrated in the appendices.

Furthermore, amendments have been made to the chemicals costs and the additional amount requested has reduced to £7.1m (from £7.5m) and the total price increase has now been estimated at £2.7m (from £3.42m). These changes have been detailed to the Utility Regulator in a separate addendum.

Refer to Appendix 2.6.1 – 'NIEA / Environmental Requirements', Appendix 2.6.2 – 'Price increases' and Appendix 2.6.3 – 'Opex from Capex' for further details.

4.5.7 Regulatory advice and support costs in the PC10 period.

In the June 2009 Business Plan NI Water requested £3.2m of additional opex over the PC10 period for the provision of external expert advice and support on regulatory matters associated with PC13 and engaging in any prospective policy proposals that may emerge as part of the development of water economic regulation in Northern Ireland. The DD disallows these costs, however, the cost of undertaking the types of regulatory activities set out above were not included in the 2007/08 base year costs and therefore, these costs are both new (albeit business as usual moving forward) and should be funded.

It is normal practice for the costs incurred by a company in undertaking regulatory activities to be included in the operating costs of the company. Therefore, NI Water can see no reason why these specialist advice and support costs should not be included in the operating cost allowance for the PC10 period.

The regulatory framework in Northern Ireland continues to develop. It is the intention of NI Water to engage effectively in this process. To do so will require specialist advice and support costs in specific areas both to assist in the development of regulatory inputs and to contribute to the development of regulatory expertise in NI Water. If the costs in the PC10 Business Plan for undertaking such regulated activities in PC10 are not allowed NI Water will not be able to engage as effectively as wished in the PC13 regulatory review or in the further development of water economic regulation policy in Northern Ireland.

Refer to Appendix 2.2.8 – 'PC13 Support Disallowed Opex' for further details.

4.5.8 Rates

NI Water requested £1.34m of additional opex for rates in the PC10 period over the 2007/08 baseline. The DD has allowed £1.14m of this stating "*Query process discovered most of cost increases were additional to 2007/08 baseline*".

£0.2m was disallowed as it related to the New Head Office. This additional cost should be allowed on the same basis as the New Head Office above.

Refer to Appendix 2.7.1 – 'Local Authority Rates' for further details.

4.5.9 Business Improvement (BIP) Costs

Business Improvement costs are not included in the DD, Main Report, Table 6.3 'NI Water's Claimed and Allowed Additional opex' but are included in Table 6.9 'Reconciliation of PC10 Business Plan to DD'. NI Water provides an overview of the rationale as to why this expenditure should be allowed in this section. In addition, further detail is provided in relation to specific points made in the DD in Appendix 11, 'BI Programme – Further Information'.

NI Water requested £12.6m of opex in the PC10 period. The DD states '*we are not content to allow BIP funding at draft determination until such time as NI Water provide a fuller explanation and substantiation of the need for such expenditure set against our key regulatory tests*'.

The key points that NI Water seeks to make are: -

NI Water has consistently communicated to the Utility Regulator that atypical BIP investment would be required in both the SBP and the PC10 periods.

The One Programme (the title for NI Water's current Business Improvement Programme) is expected to out-perform its financial objectives in the SBP period. The expected investment cost has reduced from £82m to £62m, which is £20m less than initially forecast, whilst total opex and capex benefits are forecast at £114m which is an increase of £5m for the SBP period.

There are real risks to the stability of the business in meeting the efficiencies required by our PC10 Business Plan. NI Water cannot deliver these efficiencies by continually trying 'to squeeze' its existing organisational structures. There is a finite limit to the efficiencies that can be obtained from reducing the costs of contractors, chemicals and power. Once these are exhausted, headcount reductions are the only other means by which significant cuts in opex costs can be secured.

To implement the planned PC10 headcount reduction of circa 250 the company is planning a major organisational restructuring, in line with a review of its business operating model. This would result in NI Water aligning itself over three core business areas: -

- Business to Customer (B2C) function: designed to closely align/integrate customer facing and operational elements of the business;
- Business to Business (B2B) function: designed to closely align/integrate Asset Management, Engineering & Procurement and Commercial elements of the business; and
- Back Office function: comprised of a Shared/Transactional Services element centralised in a new HQ.

It is expected that these initiatives will identify more efficiencies and that potential alternative solutions such as market tested outsourcing may be considered. Great care must be taken to ensure that the radical changes required are balanced with the continuing need to ensure the ongoing provision of water and waste water services.

BIP investment is required to define the future processes, systems and structure of the company whilst ensuring that the pace of change is balanced with continuing service

delivery. Without this the headcount reductions required to meet the targets in our PC10 Business Plan will be sub-optimal with the risk of: -

- Compulsory redundancies – higher costs than if voluntary, risk of unfair dismissal claims and possible industrial action.
- Customer Service – deterioration in customer service, increased service failures, increased risks to public health and non-compliance with our DG obligations.
- Compliance – increased risk of prosecutions and regulatory fines.

A further period of investment is required in the PC10 period. If atypical BIP opex investment of £12.6m for BIP projects is not approved the consequences can be summarised at a high level as:

- Net opex and capex benefits of £80m will be lost [£124m benefits less investment of £44m];
- Lack of proper governance for Management & General capex projects with a value of £32m;
- Essential data quality work to comply with legal undertakings will not be completed; and
- NI Water will be unable to implement its new business operating model which directly underpins the efficiencies included in its PC10 Business Plan.

In light of the evidence supplied in Appendix 11, 'BI Programme - Further Information', NI Water requests that the Utility Regulator reconsiders and approves the £12.6m for BIP opex funding when making its Final Determination.

4.5.10 Specific misinterpretations identified

In reviewing the DD, NI Water has identified a number of further mis-interpretations not discussed in this section which it believes the Utility Regulator to have made in respect of operating expenditure, as detailed below:

- The Utility Regulator has incorrectly removed Kinnegar PPP costs on the assumption that NI Water has 'double counted' this cost both in operating expenses line and the PPP line. NI Water has informed the Utility Regulator of this, both in the Business Plan and in subsequent queries on this area. It is NI Water's

understanding that the Utility Regulator has accepted NI Water's view and that the costs in relation to Kinnegar will be reinstated in the Final Determination.

- The DD does not provide for unregulated costs within the operating cost baseline but the income is included in the non-tariff basket income, this is inconsistent. NI Water has informed the Utility Regulator of this.
- Capitalised Salaries – in the DD, there is an indication of an intention to make an 'opex deduction' from capitalised salaries and on-costs (a total of £3.5m). NI Water does not accept this adjustment because Capitalised salaries have been calculated in the PC10 years based on the Jacobs UK methodology; and through the query process (Query No 6), NI Water has outlined that this level of capitalisation is consistent with 2007/08 and the subsequent changes in the organisational structure.

Refer to Appendix 14 – 'Miscellaneous Information' for further details pertaining to Capitalisation.

4.6 Exogenous Changes since the Business Plan Submission

Since the Business Plan was submitted in June 2009 there have been a number of unforeseen material increases in baseline operational expenditure. NI Water asks that these increased costs be allowed fully in the Final Determination to avoid NI Water bearing unintended additional efficiency challenges.

These increased costs are outlined below:

4.6.1 Energy Unit Cost

Due to the cost changes and gas market movements since June 2009, the forecast for the Average Power Price Per Unit (APPU) has increased from the original £90.00 per MWh to a projected figure of £101.30 per MWh. This will result in an extra cost to the company of circa £3.6 million per year after its current electricity contracts expire in October 2010.

The company therefore requests that this increased cost is used when developing the allowed Operational Costs in the Final Determination. The change in the price of electricity is not something the company could have foreseen when preparing its PC10 Business Plan based on the forward curve in June 2009.

Refer to Appendix 2.1.1 – 'Energy Prices and Volumes' and Appendix 15 – 'PC10 Period Energy Unit Cost Review' for further details.

4.6.2 Rates

When the Business Plan was submitted, a best estimate of rates costs was used. Since then notification has been received from Land and Property Services (LPS) that they intend to issue invoices for additional waste water properties, which will have a significant impact on the PC10 years. An estimate of this additional cost is in the region of £1.0m per annum in the PC10 years. At present LPS is reviewing its records, and is due to inform the company of the proposed increase in the coming weeks.

Refer to Appendix 2.7.1 – 'Rates' for further details. Further information in the risk of further Rates increases is included in Appendix 8 'Review of Notified Items'.

4.6.3 Cost of Non Domestic Billing

The cost of Crystal Alliance was included in the PC10 Business Plan submission at £7.5m per annum in the PC10 years. This represented a significant reduction in costs from those incurred in the base year 2007/08, as highlighted in Table B3.69 of the Business Plan. However, NI Water now expects this cost to be in the region of £7.9m per annum and as a result the total level of funding requested must be increased (or more accurately the estimated cost reduction reduced) by £1.2m over the PC10 period.

The rationale for the increase is that NI Water had been over optimistic in the estimate of how much cost could be driven out of the customer service aspect of the Steria contract. The IT aspects have been transferred to Northgate and to internal NI Water resources, but the back office scope transferred to Echo, in particular the management of written communication, has proved to be a higher workload, and therefore higher cost, than expected.

The cost saving from Crystal Alliance are still substantial (approximately £2.350 million per annum) but around £400k less than originally anticipated.

4.7 Summary and Implications

In summary NI Water cannot support the 'disallowed opex' outlined in the DD as it runs counter to the efficiently incurred costs which arose as a result of the transformation from Water Service to NI Water. NI Water is firmly of the view that the proposed disallowances will fundamentally impact the deliverability of water and wastewater services in Northern Ireland and the ability to meet regulatory reporting requirements.

The disallowances can be summarised as follows:

- Inadequate power to run all facilities;
- Inadequate chemicals to service all facilities;
- Unable to dispose of all sludge;
- Increase significantly the risk of major data quality issues both for internal decision making and regulatory reporting;
- Withdraw from best practice corporate governance;
- Unable to engage adequately in PC13;
- Unable to deliver efficiencies dependent on PC10 Business Improvement projects.

Set out below is a summary of the impact of the proposed disallowances:

- Deteriorating customer service levels and service failure;
- Non-compliance with wastewater and drinking water quality standards;
- Termination of community / educational work;
- Risk of public prosecution and regulatory fines;
- Compulsory redundancies;
- Operational Health & Safety risks;
- Risk to financial stability of the company.

5. OPERATING EFFICIENCY

5.1 Pace

In its Business Plan NI Water fully accepted that there is scope to significantly improve the company's efficiency, however conscious of our role as a guardian of public health, NI Water adopted a risk based approach to proposed challenging cost reduction targets over the three year period. NI Water therefore welcome the significant caveat outlined by the Utility Regulator's advisors NERA :

'Whilst the conclusion from our analysis is that by any definition NIW's operating cost performance is clearly inefficient compared to that of E&W companies, **we would caution against the inference that all of this assessed inefficiency can be caught-up, especially over a small number of years.** Any efficiency comparison is limited to an extent by the available data and the statistical techniques which can be brought to bear on the problem. **It is likely that there will be significant unobserved factors which cause heterogeneity in companies' costs, and it is the case that the potential complications that these factors can have for efficiency comparisons cannot be completely resolved by the available statistical techniques. In particular very large gaps to the efficiency frontier should be treated with some care. They may be the result of factors outside of managerial control or perhaps the steps necessary to resolve the assessed inefficiency may in fact not be optimal in the overall context of the company's operations'[4].**

The Utility Regulator has provisionally determined that an annual efficiency target of 6.9% (a catch-up factor of 6.68% and a frontier shift of 0.25%) is appropriate. The following table shows the effective rates proposed by the Utility Regulator:

[4] NI Water Comparative Efficiency: An Econometric Analysis Using Panel Data A Report for Utility Regulator by NERA Economic Consulting, London, 18 March 2009 (Bold – NI Water emphasis)

Table 5.1: Annual Efficiency Rates

	2008/09	2009/10	2010/11	2011/12	2012/13
Annual efficiency target	6.91%	6.91%	6.91%	6.91%	6.91%
Cumulative efficiency target	6.91%	13.35%	19.34%	24.92%	30.11%

(Source: The Utility Regulator)

Whilst NI Water note that this target sits within the range recommended to the Utility Regulator by LECG[5], albeit towards the top, the company is extremely concerned with how the Utility Regulator proposes to apply this target. NI Water believes that features of the approach adopted to applying efficiency targets are flawed, in particular

- Application of efficiency targets to the operating costs for the two years preceding the price control period;
- Application of the cumulative efficiency target, to new opex and opex from capex; and
- Application of the efficiency target at the same rate to non-modelled opex.

The cumulative effect of these flawed features, result in the DD effectively proposing greatly increased targets on the elements of opex that are within its control during the PC10 period as demonstrated in the table below.

Table 5.2: Implied Efficiency Targets

Opex	**2010/11**	**2011/12**	**2012/13**
Additional savings assumed 2009/10	£0.89m		
Additional efficiency assumed from new opex and opex from capex	£3.13m	£2.66m	£3.40m
Additional efficiency assumed from non-modelled opex	£3.87m	£5.03m	£6.03m
Total additional efficiencies required from baseline (excluding non-modelled)	**£7.89m**	**£7.68m**	**£9.43m**
Implied efficiency target	**14.9%**	**8.6%**	**10.9%**

Source: Frontier Economics

[5] Top-down analysis of efficiency assumptions in the UK regulated sector by LECG, 22 January 2008.

NI Water believe the average implied rate proposed in the DD is between 10.7% and 11.5% per annum significantly higher than the 6.9% headline figure suggested. NI Water therefore conclude that this imposes a significant risk that the overall efficiency target for NI Water is unachievable. The basis for our conclusions are set out in the following paragraphs. NI Water have also attached a detailed analysis[6] by our advisors Frontier Economics of the approach proposed in the DD.

5.2 Retrospective application

Applying the target to 2008/09 and 2009/10 is, in effect, a retrospective adjustment. The assumed opex in the DD for these years is below the level that the company has, or will, incur. This is despite the fact that for that period, NI Water has achieved the efficiency targets included in the SBP and also the additional efficiency targets imposed by the Minister in the SBP period. Clearly NI Water has no ability to influence the out-turn for 2008/09 and only very limited ability to influence the out-turn for 2009/10, given that only five months remain of this year.

In consequence, NI Water is effectively being asked to make a much more significant reduction in costs in 2010/11, which NI Water estimate as a further £3.2m or a further 1.8%, in order to achieve the DD's assumptions for prior years. It should also be noted that if the Utility Regulator accepts the company's arguments with regard to 2009/10 opex disallowed in the DD, then the target for 2010/11 would increase even further i.e. by 13.35% of the total value, compounding the issue.

This approach is not in line with normal regulatory methodologies. In Ofwat's price control determination (including PR09) the estimated efficiency target applies from the first year of the five year price control. This is the case even though the efficiency assessment is carried out on data that typically corresponds to year 3 or year 4 of the previous price control. Ofwat assumes that the efficiency performance for the last year of the previous price control period follows the assumptions that had been made for that period. In Scotland the 2002 determination followed a slightly different approach. The Water Industry Commission for Scotland (WICS) applied an efficiency target for 2001/02, the year before the price control. However, this target was relatively small (around 4% of opex) and less than the 6.9% proposed in the DD. NI Water also understand that the three Scottish water authorities were informed of the target for 2001/02 before the start of that year.

[6] Application of efficiency targets to operating expenditure. A response to Utility Regulator's Draft Determination. Frontier Economics October 2009.

5.3 Application to new opex and opex from capex

The DD also proposes application of efficiency targets to opex arising from new functions or requirements and to additional opex arising from capital expenditure programmes (e.g. upgraded treatment works). This proposed approach effectively assumes that NI Water is as inefficient with regard to its new activities as it is with its existing expenditure. NI Water notes the DD presents no evidence to support this assumption.

The other important point relates to the cumulative nature of efficiency savings. The figures on additional opex and opex from capex were part of the Business Plan submission in June 2009. It reflected the most up-to-date information available to the company. However the DD assumes that any new opex in 2010/11 could immediately be reduced by 19.3% (the impact of which will also result in significant increases in efficiency targets from 2010-11 onwards if the Utility Regulator accepts the company's arguments with regard to disallowed opex). Not only has the DD assumed that NI Water is as inefficient with new opex as with baseline opex but was equally inefficient as measured in 2007/08. There appears to be no basis for the Utility Regulator adopting this position.

5.4 Application to non modelled opex.

A similar argument applies to extending the target to non-modelled opex. Non-modelled opex includes significant elements of opex, such as property rates and regulatory costs. It also includes elements of opex that have been identified as special factors. These elements are outside of the company's control, at least in the short to medium-term therefore the scope to reduce these costs during PC10 is limited. Whilst NI Water accept that Ofwat adopt a similar approach, the company believe in the case of NI Water it is not appropriate as the rate of catch up is much higher than that in England and Wales and because the price review period is much shorter. Under Ofwat's approach the highest efficiency target will be around 2.75% per year (at PR09). This would imply a 13.0% reduction at the end of five years.

A similar argument applies to the treatment of special factor adjustments. The Utility Regulator has assumed that efficiency targets also apply to the elements of opex that are identified as special factors. This treatment may not be appropriate depending on the nature of special factor.

The Utility Regulator's approach for NI Water implies the same reduction by 2012/13, ie. 30.1%, from controllable as from uncontrollable costs. As the table below demonstrates, NI Water estimate the implied reduction from uncontrollable costs alone is £6m by 2012/13.

Table 5.3: Required Efficiency Savings

Opex	2010/11	2011/12	2012/13
Property rates	£12.13m	£12.21m	£12.07m
Costs of regulation	£5.22m	£5.29m	£5.29m
Power cost special factor	£2.67m	£2.67m	£2.67m
Total non-modelled opex included	**£20.02m**	**£20.17m**	**£20.03m**
Cumulative efficiency target	19.3%	24.9%	30.1%
Efficiency saving required	**£3.87m**	**£5.03m**	**£6.03m**

5.5 Special factors

In coming to the proposed catch up of 6.7% per annum, the Utility Regulator has proposed a water distribution special factor which is £15m lower than NI Water's assessment, and has also imposed a negative regional wage scope adjustment of £5.6m. Frontier Economics has reviewed this approach to assessing special factors, and have identified several weaknesses in the analysis and in particular with the conclusions reached. The Frontier Economics report[7] is attached as Appendix 20.

On water distribution, Frontier Economics contest NERA's view that there is no U-shaped relationship between density and costs on the grounds that NERA's analysis does not appear to:

- address issues associated with the presence of outliers in the sample; or
- give consideration to the functional form of any relationship between connection density and opex (although they highlight this as a constraint).

Furthermore, other uncertainties exist that should feed into any decision regarding the water distribution special factor. These relate to:

- the consistency of NI Water's financial or physical data with that of comparator English and Welsh companies; and
- the likely presence of a Special Factor in relation to wastewater distribution costs for which a claim has not been made (given wastewater networks track water distribution networks).

With regard to the proposed negative Special Factor within the DD of £5.6m, our advisors have concluded that there are several flaws in the analysis carried out by the Utility Regulator. These are:

[7] Review of NI Water's special factor assessment – response to Utility Regulator's Draft Determination. Frontier Economics October 2009.

- NI Water's wage costs in 2007/08 reflected the fact that it had just emerged from the Civil Service. Research shows that public sector wage rates in Northern Ireland are close to the UK average and are higher than those in the private sector. The use of a private sector comparison of wage levels in the DD does not take account of the fact that, by necessity, it is taking time to migrate employees onto the revised terms and conditions that are equivalent to those in comparative water companies. It should be noted that the new pay and grading scales were agreed with the Trade Unions in September 2009.
- Based on analysis carried out of the 2007/08 audited accounts of water and sewerage companies in England and Wales, NI Water's wage rates are not materially different from the UK average for water companies.
- Neither WICS nor Ofwat have applied negative wage adjustments in setting opex efficiency targets.
- The differential in private sector wages estimated in the DD is based on inappropriate data. Using better data shows that the differential is lower.

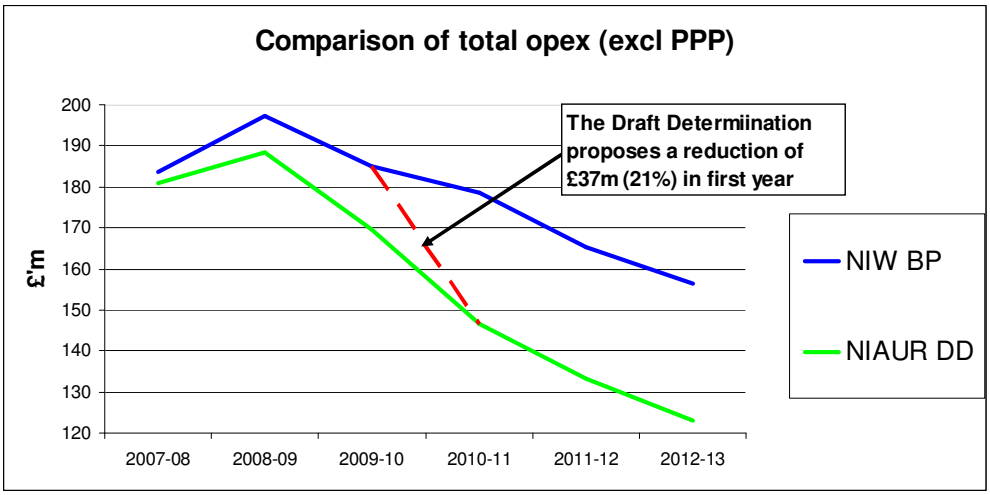
NI Water welcomes the acknowledgement from the Utility Regulator that Ofwat's current water distribution model (based on network size and connection density driving distribution opex) does not satisfactorily account for what drives NI Water's opex. However, despite the analysis carried out on this area by both Frontier Economics and NERA there remains significant uncertainty over the value of a Special Factor. NI Water remain concerned over the arbitrary nature of the DD proposed approach to accounting for this uncertainty especially given the disparity between both estimates. In the interests of ensuring targets are realistic, NI Water would request that a more balanced approach is adopted in the Final Determination. NI Water is also concerned that the Utility Regulator has chosen to apply a regional salary scope adjustment on the basis of a less than robust analysis.

6. THE COMBINED EFFECT OF DISALLOWED OPEX AND THE PROPOSED EFFICIENCY TARGETS.

6.1 Impact of DD proposals

The DD is proposing to reduce NI Water's opex by 21% or £37m in the first year of the price review alone, followed by a further reduction of 16% over the next two years.

Figure 6.1: Comparison of Business Plan and Draft Determination



This cut in opex is a result of a combination of the following:

- disallowed opex in the preceding period;
- the disallowance of opex of approximately £80m (over the PC10 period) of which 87% is already being incurred.
- the application of more stringent efficiency targets, including to the operating costs for the two preceding years of the price control period (2008-09 and 2009-10); to both additional opex and opex arising from new capex projects and uncontrollable costs.

NI Water believes that the proposals contained within the DD are both unachievable and unprecedented.

Ofwat has never applied a P0 cut to opex of the form proposed in the DD. Ofwat's previous determinations have proposed first period opex levels broadly in line with the English and Welsh companies' actual expenditure in the preceding year. In addition the DD has the effect of disallowing opex that has already been incurred on a scale that appears unprecedented in GB utility regulation.

The closest relevant example would be that of the price control for Scottish Water covering the period 2002/03 to 2005/06. WICS concluded that Scottish Water's opex would have to reduce by 35% over 5 years, however WICS highlighted that some of the required saving would come

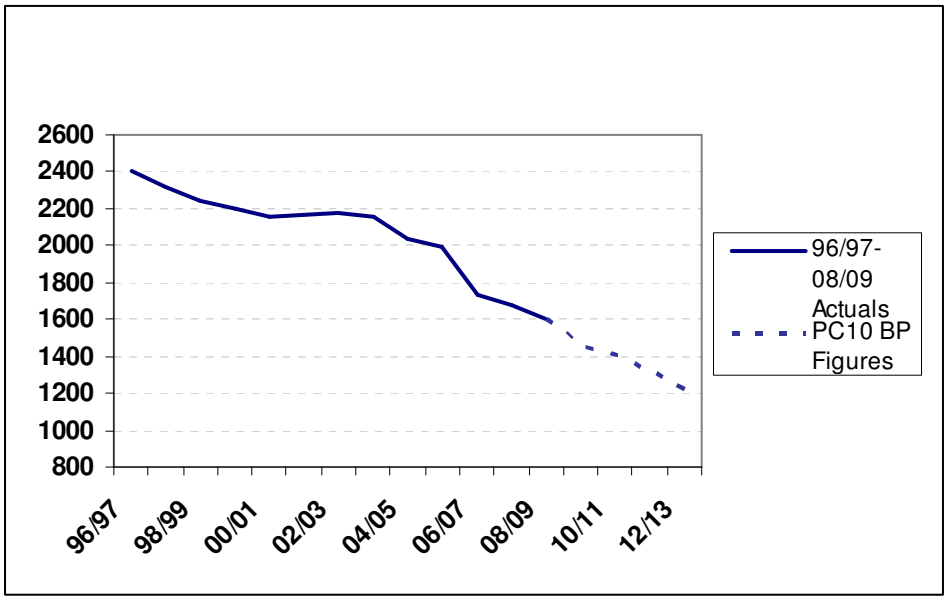
from the proposed merger of the previously separate water authorities and concluded that if the merger did not proceed then the efficiency savings should be scaled back. The revised targets would have been a 50% closure of the efficiency gap, or a 22% reduction in costs. It is worth noting that Scottish Water did not achieve the targets in the earlier years and only managed to exceed the cumulative targets by the end of the price control period. It should also be noted that WICS applied an efficiency target in the year before the price control. However, this target was relatively small (around 4% of opex) and less than the 6.9% the DD proposes to apply in the two years prior to the price control. NI Water also understands that the Scottish authorities were informed of target for 2001/02 before the start of that year.

6.2 Combined Effect on Headcount and Operational Risk

The NI Water Business Plan includes proposals to restructure the company through the implementation phase of the NI Water Business Operating Model (BOM) project. This commenced in early 2009 and by June the diagnostic phase of this project had identified that it should be possible, with appropriate investment in processes, technology, and through careful change management, to reduce NI Water staffing by approximately 250 full-time equivalents during the PC10 period. The pace of this headcount reduction would be such that the business could sustain current service levels and stakeholder confidence. In summary, challenging efficiencies being delivered in a sustainable manner.

NI Water has subsequently completed a detailed bottom up analysis of implications of the combined effect of the DD proposals for disallowed opex and the application of operational cost efficiency targets. This has concluded that NI Water would be faced with no option other than to reduce the headcount by a factor of two to three times higher than allowed for in the Business Plan. This would also have to occur mostly in the early stages of the PC10 period. The number of NI Water employees would reduce from circa 1460 at the end of the SBP period to 860 as illustrated on the figure below.

Figure 6.2 NI Water Headcount 1996/97 to 2012/13



Notes: Headcount figures are annual averages from the DRD Water Service and NI Water Annual Reports.

- Figures for the years 03/04-06/07 & 09/10-12/13 do not include agency, temporary and contract staff.
- It has been assumed that for the years 96/97-02/03 & 07/08-08/09 the figures do not to include agency, temporary and contract staff.
- The figure of 860 assumes a reduction of 2.5 times 240, applied to the projected average headcount for 2009/10

The key risk associated with this pace of headcount reduction is process breakdown, simply not having enough people to do the required jobs. Such a breakdown in processes would have catastrophic impacts, including risks of:

- deteriorating customer service levels (including flooding incidents, low pressure, and supply interruptions)
- deteriorating drinking water quality
- wastewater treatment discharge standard failure – resulting in pollution incidents
- sewerage network pollution incidents

It would only be possible to deliver these reductions by changing entirely the current relationship that NI Water has with the Trade Unions. This pace would require compulsory

redundancy programmes. It should be noted that the DD do not include the necessary funding for such severance programmes at this level.

7. CAPITAL PROGRAMME

7.1 Introduction and Key Themes

NI Water welcomes the confirmation in the DD that the proposed capital investment programme is 'broadly reasonable' in meeting the requirements of the S&EG. Stakeholders confirm that the outputs align with customer views and will deliver the necessary statutory obligations. The NI Water Business Plan capital investment was prepared with a view to maintaining, and where appropriate, improving service to customers both now and into the future. It is, therefore, disappointing that the cuts to the scope of the programme, especially to the important area of capital maintenance, will increase the risk to service for customers.

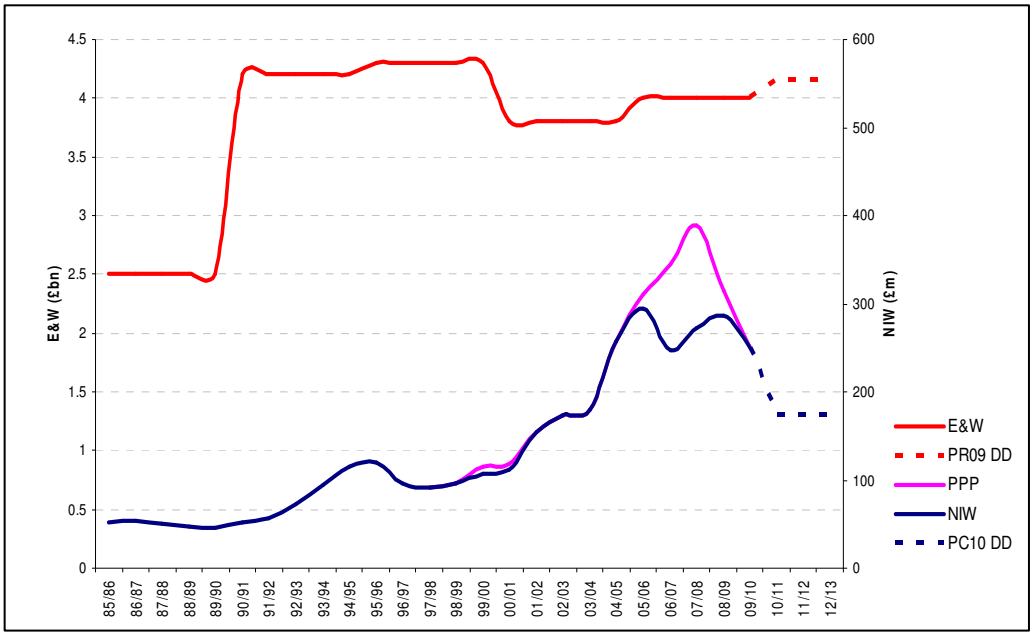
The DD requires NI Water to deliver or exceed the outputs priced in its Business Plan at £586m, by delivering these for £483m, a £103m or 17.6% reduction. This includes a reduction in the scope of the water mains rehabilitation programme from 1,067km to 900km of replacement mains. This proposal represents a major reduction in investment. It is noted that this level of reduction was not supported by the independent Reporter who scrutinised the Business Plan on behalf of the Utility Regulator and remarked that in his opinion*: "Apart from several identified areas of uncertainty, we believe it to be a well founded,* ***reasonably costed*** *and adequately financed Business Plan."* (NI Water emphasis added).

NI Water is particularly concerned that the DD proposes reducing funding for basic services, particularly the proposed cut in funding for maintenance and the reduced rate of water mains replacement. This increases the risk of insufficient funding to maintain a fundamental public service during the PC10 period with the associated increased risk to public health and the environment.

Whilst significant progress has been made, there is still a legacy of underperforming assets due to historic under-investment. Overall the proposals in the DD do not allow for 'catch-up'. Figure 7.1 below compares the level of capital investment in England and Wales with that of Northern Ireland. While investment levels in England and Wales have remained relatively consistent, Northern Ireland has experienced a significant increase in investment since 2000, enhanced by the private sector capital funding for the PPP projects. This investment was required to deal with the sustained period of under-investment in Northern Ireland before 2000.

The proposals contained in the DD for future capital investment are shown as a dotted line in Figure 7.1. Ofwat has recognised the continued need to invest in the maintenance of the assets whilst the DD proposes to reduce the level of investment allowed, both for maintenance and in some areas of service improvement.

Figure 7.1: Comparison of relative investment in NI & E&W



NI Water's most fundamental concern in relation to capital expenditure is the application of a Regional Price Adjustment to the whole capital investment programme using a very limited analysis of water sector costs in Northern Ireland. This is examined in detail in Section 8 'Capital Efficiency' but it has a significant impact on the deliverability and sustainability of the PC10 capital programme. Again, the Reporter in his review of NI Water's approach to capital efficiency stated that, *"We have reviewed NI Water's proposed efficiency initiatives and believe they are challenging."*

After a long period of under-investment in water and sewerage services, it is important now that levels of service are maintained so that future customers do not have to carry additional costs. In most cases it is more efficient to undertake a properly funded programme of maintenance, including planned maintenance, than to wait until assets fail. Therefore, NI Water is concerned that reductions in the level of capital maintenance proposed in the DD may be unsustainable and will increase costs to future customers. This is particularly stark in the unusual treatment of infrastructure renewals funding set out below.

The combined effect of reductions in the scope of the water mains programme and the undeliverable efficiency targets applied to capital and operational funding will impact on service to customers. NI Water has estimated the increased impact of this reduction to service in Appendix 9. There will be significantly more properties with low pressure (DG2), more customers with interruptions to supply, increased leakage, more pollution incidents, increased numbers of failing wastewater treatment works and overall a reduction in service to customers as a result of the proposed DD.

More importantly, the risk to service would increase significantly and therefore the risk to public health and the environment. The pace of efficiency cuts proposed in the DD would undermine morale as well as reduce the number of staff who are available to deal with incidents. A public health incident similar to the Cryptosporidiosis outbreaks which affected Northern Ireland around the year 2000 would have serious implications for all stakeholders and undermine the current model for delivery of water and wastewater services.

In summary, NI Water believe that the DD, with a reduced maintenance allowance combined with unprecedented cuts in operational funding will significantly increase the risks of service failure to current and future customers.

7.2 Maintenance of Existing Assets and Services

Capital (or base) maintenance is the investment to replace existing assets which have reached the end of their useful lives. This should ensure the existing asset base and levels of service are maintained for current and future customers. It is inevitable that the failure to invest at a sufficient level will increase the risk of service failure, increase operational maintenance costs and transfer the costs of increased failure to future customers.

The DD proposes to reduce the level of capital maintenance investment for the three years of PC10 from £252m to £224m, a £28m or 11% reduction, based on a different approach to estimating the correct level of maintenance. NI Water commissioned an independent review of this methodology by ICS, which specialises in asset management and the approaches to estimating capital maintenance.[8]

The ICS report, Appendix 6.1, states in the summary of findings that the Utility Regulator's:

- Approach to capital efficiency catch-up lacks precedence, appears excessive and is out of step with other water regulators.

[8] "An assessment of NIAUR's approach to capital maintenance in its Draft Determination for NI Water", ICS, 2009. [Appendix 6.1]

- Approach has been inconsistent in the levels of catch-up which should be applied to base maintenance.
- Weightings are not consistent with other regulators to the Cost Base in assessing capital maintenance.
- Timescale for delivering catch-ups represents a real challenge compared to other regulatory determinations.

In summary, NI Water does not agree that the proposed approach in the DD to estimating future capital maintenance and setting efficiency targets is either robust or reliable. However, the fundamental difference between NI Water's approach and that of the Utility Regulator is in the unprecedented levels of capital efficiency proposed in the DD through a Regional Price Adjustment. This is not sustainable.

7.3 Accounting for Capital Maintenance – Underground Assets

The Utility Regulator has taken a different approach to accounting for the cost of maintaining underground assets than water regulators in GB. The Ofwat approach has been to average the estimated investment on maintaining underground assets, typically over 15 years (5 years historic data and 10 years future estimates) and set this as the Infrastructure Renewals Charge (IRC). The actual annual expenditure on maintenance, the Infrastructure Renewals Expenditure (IRE), will be above or below the IRC on an annual basis but should match the IRC over a longer period. The level of IRC and IRE are reviewed at each periodic review and adjusted to reflect future trends in maintenance and level of serviceability.

This approach acknowledges the variability of actual expenditure on maintenance on an annual basis. It tries to avoid abrupt changes in funding for maintenance between regulatory periods. These would give price shocks to customers, or funders. NI Water adopted this approach in preparing the PC10 Business Plan and estimated capital maintenance over a 10 year period.

The DD Main Report, Table 4.9 uses Capital Maintenance Econometrics (CME) to derive the figures for IRE. An upward adjustment of £10m to Water Infrastructure maintenance funding has then been applied to reconcile the CME output with bottom up approach of the DD. The DD proposes to match the expenditure on maintenance with the charge on an annual basis, i.e. IRE = IRC annually. The IRC proposed by the DD was £76.5m for the 3 years of PC10. This compares with NI Water's Business Plan estimate of £121m, or £105.9m excluding COPI inflation, a £29.4m or 28% reduction (2007/08 price base).

The historic allocation to infrastructure maintenance has not been included in the DD and the PC10 view is based solely on CME. NI Water accepts that the accounting treatment for

infrastructure renewals was different in Water Service and the allocation to IRE before 2007-08 was an estimate. However, the actual IRE figures for 2007/08 and 2008/09 were prepared according to Regulatory Accounting Guidelines and at least these 2 years should be considered when estimating future capital maintenance.

Also, the allocation to infrastructure maintenance in the PC10 Business Plan for 2007/08 and 2008/09 did not include the maintenance allocation to Backlog Base. This Backlog Base maintenance was treated differently in Northern Ireland, as it was recognised that additional maintenance (i.e. backlog) was required to deal with the legacy of under-investment in the assets. The NI Water Business Plan submission was consistent with the SBP reporting and therefore under-estimated the full allocation to maintenance in the SBP.

NI Water recognises that this is new information to the Utility Regulator and has set out a comparison of the NI Water Business Plan, the DD and the company's revised figures including Backlog Base as a table in Appendix 6.3. This shows that the approach in the DD under-estimates the level of IRC. Using the CME approach and actual and estimated IRE figures for 2007-10, a charge of £96.0m for the PC10 period is more appropriate.

7.4 Risk and contingency allowance for Capital Projects

It is recognised that capital projects carry an element of risk. Novel approaches or major tunnelling projects traditionally carry the highest risk premium. Routine, well established techniques will usually have well understood costs and relatively low risks.

NI Water has a relatively wide risk profile of projects in PC10. It has a well established, repetitive mains rehabilitation programme. This has well understood risks and NI Water is aware it will carry out more rehabilitation work in built-up areas in PC10. This will have the effect that the unit cost rates, for this work, will be higher than in the SBP period. However NI Water also has complex and technically challenging water and wastewater treatment works where issues such as ground conditions will not be finalised until later.

Overall NI Water included a 10% risk and contingency allowance for new capital projects when working up the potential costs. This is a common approach to building up the cost of projects. The actual contingency allowance used in the SBP period was circa 14% of the cost of new capital works projects. A derivation of this 14% risk factor is attached at Appendix 6.2 – 'Reduction of Capital Contingency' from 10% to 5%. The Reporter comments on the Business plan: *"For the PC10 estimates, a relatively modest contingency of 10% has been assumed (on non-infrastructure estimates)".* The proposals in the DD reduce this allowance from 10% to 5% for most enhancement projects.

Whilst there is no 'industry standard' answer, the appropriate level of risk will vary between programmes and even with the type of procurement approach used. However, an instant reduction from the recent, actual levels of contingency of 14% to 5% equates to nearly £7m of additional efficiency challenge for PC 10 and increases the risk of funding shortfall. NI Water has limited reserves to deal with this risk. NI Water requests that the reduction in risk allowance is reviewed for the Final Determination taking into consideration the new information provided by NI Water.

7.5 Capital Maintenance Adjustment for Alpha and Omega PPP – 4.4.20

The DD proposes to make a significant adjustment of £18m to the capital maintenance allowance for the PC10 period. NI Water agree that an adjustment is necessary to recognise that capital maintenance previously carried out by NI Water on assets is now transferred to PPP organisations. This principle had been accounted for in the PC10 Business Plan. A reduced level of capital maintenance was included based on the level of maintenance carried out historically at these sites.

The DD also proposes an alternative approach which significantly increases the level of capital maintenance allocated to the PPP sites and correspondingly reduces the level of maintenance allocated to NI Water sites. Whilst this analysis could be completed in a number of ways to give different answers, NI Water proposes that the Utility Regulator's approach to PC10 is adapted to recognise the element of underground (infrastructure) assets within the project. NI Water has reviewed the approach taken in the DD and includes a summary of the proposed allocation to underground assets in Appendix 6.3. It is requested that this revision to the DD approach be used in the Final Determination.

7.6 Impact of the reduction in scope and rates of water mains renovation on outputs

The DD proposes to reduce the scope of the water mains renovation programme from circa 1,067km proposed in the Business Plan to 900km, a reduction of 167km or 15.6%. At the same time the funding for this work has been reduced from £128.3m (i.e. £119.6m plus £8.7m allowance for salaries and overheads) to £85.4m, a reduction of £42.8m or 33%.

This would reduce the rate at which the 26,500 km of water mains in Northern Ireland is renovated to about 1.1% per annum. This equates to an age replacement rate of 90 years for an already aged system. We note that the average replacement rate for comparable companies in England and Wales has been about 1.7% since the 1990's. This is a replacement rate of 50% higher than is proposed in the DD.

As justification, the Utility Regulator points to the similar level of mains bursts per kilometre of water main in Northern Ireland compared with England and Wales. This is true but, due to its relatively disperse population, Northern Ireland has about twice the average length of water main per property, compared with England and Wales. This can affect service to customers due to more frequent interruptions to supply and associated water quality issues associated with burst mains if operational measures are not taken.

Perversely, at the same time as reducing the length of mains to be renovated in the PC10 period, the DD proposes to significantly increase the target for water mains serviceability (OPITIM) from 99.10% to 99.30% during the PC10 period. This is not a consistent or holistic approach. OPITIM is currently trending at less than 99% for 2009 and acceptance of the target would require a rate of mains replacement significantly higher than the normal rate of deterioration of the mains in order to achieve it.

To be clear, NI Water does not accept that there will be an improvement in mains serviceability during PC10 and suggest that the Utility Regulator's target is unrealistic.

The Utility Regulator and NI Water have had a useful engagement since the publication of the Draft Determination on both the scope and unit rates used for mains replacement. This is a complex issue and our approach has been summarised in a paper attached at Appendix 6.4. NI Water has acknowledged an error in its Business Plan relating to the calculation of the funding for mains rehabilitation. The Business Plan funding of £128.3m did not include an allowance for construction and supervisory costs of £8.7m. This is set out in more detail in the paper and we request that this allowance be included within the Final Determination.

7.7 Likely Effect of the Draft Determination

NI Water has set out the likely effect of the DD on service to customers in Appendix 9. This takes account of the reductions in both capital and operational funding proposed in the DD. The effect on specific key outputs has been estimated, leading to the general conclusion of a significantly increased risk to public health and the environment due to the unprecedented rate of efficiency reductions. This is harder to quantify but it is clear that there will be a severe adverse effect on morale and risks to the operation of the business, due to this speed of change. The Utility Regulator should not underestimate the increased risk to the model for water and wastewater provision resulting from the proposals within the DD.

7.8 Increase in risk due to re-allocation of investment from enhancement to capital maintenance

In addition to the proposed reduction in the level of capital maintenance in the DD, there is also a significant re-allocation of investment from enhancement categories to capital maintenance. This increases the strain on capital maintenance funding and has the effect of increasing the risk that NI Water will fail to meet existing or improved serviceability targets. Details are provided in Appendix 6.5.

7.9 Response to the extra £38m of Capital Funding.

The DD has proposed an extra £38m of capital expenditure for additional outputs. These outputs are Wastewater Treatment Works (WwTW) projects to address development constraints and funding to bring forward the upgrading of Killylane WTW from PC13. We understand that this £38m includes capitalised salaries and associated maintenance costs associated with these projects. From the response to NI Water's Query 0011, it is also understood that operational costs associated from these additional outputs will be taken into account in the Final Determination. Further discussions will be required with the Utility Regulator, the Northern Ireland Environment Agency and the Drinking Water Inspectorate to agree the prioritised list of works to be brought forward.

7.10 Management & General (M&G)

NI Water welcomes the fact that the Utility Regulator has generally accepted the scope and cost M&G programme. NI Water also welcomes the progressive approach taken by the Utility Regulator to promote sustainability issues by supporting the development of wind power linked to local NI Water demand.

In developing the M&G programme NI Water had applied an efficiency challenge to projects of between 10% and 25% which reduced the overall programme from £64 million to £58 million. The DD applies a further efficiency challenge reducing the £58 million to £52 million. This is based on the Utility Regulator's overall approach to efficiency. As set out in Section 8, NI Water disagrees with this approach linked to the Regional Price Adjustment (RPA) and the efficiency arguments are equally valid for the M&G programme.

8. CAPITAL EFFICIENCY

8.1 Overall Approach to Capital Efficiency

NI Water is concerned at the level of capital efficiency proposed in the DD and the £80m of scope and cost challenge included beyond the efficiency targets. NI Water does not agree a proposed Regional Price Adjustment (RPA) of 83% should be applied to its capital expenditure. Essentially, the DD proposals suggest that the capital programme in Northern Ireland can be delivered for 17% lower cost than in the average company in England and Wales. NI Water has shared its own information in this area with the Utility Regulator and the Reporter for consideration in arriving at a Final Determination.

The Cost Base submitted by NI Water to the Utility Regulator has been independently audited by the Reporter. NI Water also note the following comments in the DD Main Report – Annex B Capital Maintenance Assessment September 2009:

> '*…the Utility Regulator has been impressed with the quality of the return provided. This has been borne out by audits completed by the Reporter and an independent comparability & consistency check (to the England and Wales industry) undertaken by Mott McDonald. The Regulator is therefore content that the relative efficiency percentages based on cost base are robust enough to set efficiency targets.'*

As the Utility Regulator has recognised the NI Water submission as 'sound', the company does not understand why proposed alternative approaches to efficiency are being introduced in the DD. NI Water believes the Cost Base approach is the most robust approach available and the efficiency calculations should be made using this approach.

NI Water is disappointed at the level of formal policy development and consultation by the Utility Regulator on capital efficiency for this review. NI Water's robust top down and bottom up processes set challenging efficiency targets of an average of 5.8% for the PC10 period. The adjustments in the DD for unit rates push the headline capital efficiency figure from 10.9% to over 13.8% before reducing any scope or reduction in outputs. NI Water is also concerned at the very significant reduction in capital maintenance investment based on limited econometric analysis (which is largely driven by RPA).

8.2 Regional Price Adjustment – Efficiency

A RPA is used throughout the Utility Regulator's efficiency calculations and in its calculation of Capital Maintenance. RPA is used to increase efficiency levels (and reduce allocation to Capital Maintenance) on the premise that it is significantly cheaper, on average, to construct assets in Northern Ireland compared to the rest of the UK. In the DD, the factor quoted is 0.83, i.e. it is 17% cheaper to build large, capital intensive facilities in Northern Ireland. The Utility Regulator subsequently provided a Mott MacDonald report 'Location Factor Study' which was the basis of this figure.

NI Water agrees that certain elements of water & wastewater construction are cheaper to carry out in Northern Ireland. However, it strongly refutes the scale of the difference and maintains that the RPA figure of 0.93 presented in its Business Plan (as opposed to the figure of 0.83 in the DD) is appropriate i.e. it is only 7% less expensive to build in Northern Ireland. This is based on the following 4 points:-

(i) Further sensitivity analysis on NI Water model

NI Water has carried out further sensitivity analysis on its calculation of RPA. This evidence is provided in Appendix 7.1 and Appendix 7.1.1[9] supports the NI Water position that 0.93 is an appropriate figure for RPA.

(ii) Sensitivity analysis on the Utility Regulator's model

NI Water has recreated the models prepared by Mott MacDonald to estimate the RPA. These were used to test the sensitivity of the estimates using a series of factors. Details are provided in Appendix 7.2 and again this clearly shows the Utility Regulator's RPA figure of 0.83 is too low and is not appropriate.

(iii) Suitability of the Building Cost Information Service (BCIS) approach

NI Water considers the BCIS approach to be unrepresentative of civil engineering costs in NI due to the small statistical sample. Details of the reasoning behind our opinion are presented in Appendix 7.3. NI Water considers the resultant RPA factor calculated from the BCIS Index to be unsound.

(iv) Assessment of the Mott MacDonald approach

Furthermore, having examined the Mott MacDonald report 'Location Factor Study', NI Water does not believe the report adequately addresses significant factors which effect water and wastewater construction in Northern Ireland. As set out in Appendix 7.4 and also Appendix 7.1.1 insufficient allowance has been made for a number of factors where NI Water relies heavily on national prices. NI Water therefore believes the RPA

[9] Appendix 7.1 (Regional Price Adjustment & Sensitivity) and Appendix 7.1.1 (MEICA Relative Cost Factor Report)

factor of 0.83 developed by the Utility Regulator is not robust and the incomplete assessment of relevant factors leads to an unduly low calculation of RPA.

On the evidence provided in (i) to (iv) above NI Water has demonstrated that the RPA should be adjusted from 0.83 to 0.93 (17% to 7%) and as a result the capital efficiencies applied in the DD should be reduced accordingly.

In the query clinics the Utility Regulator had suggested that increased costs for MEICA may be considered to be a Special Factor. NI Water considers regional variations in prices to be addressed through the RPA and not through a Special Factors claim. In addition the adjustment made in the reduction in Base Maintenance as a result of RPA as outlined in Section 7 of this document should be reversed.

8.3 Regional Price Adjustment – Catch Up

In addition to the direct effect of RPA on efficiency calculation outlined above, the application of RPA at 83% has resulted in the Utility Regulator drawing the conclusion that NI Water is significantly inefficient in relation to capital expenditure. The Utility Regulator has noted that because there is a significant efficiency gap there is therefore greater opportunity or potential for catch up. Consequently the Utility Regulator believes that NI Water can catch up more quickly and this has led to the DD proposing unprecedented rates of catch up for capital maintenance and a 75% immediate catch up for enhancement projects.

This basic premise is flawed. With the application of an appropriate RPA, NI Water is not significantly inefficient, the gap is therefore not substantial and the company does not have the opportunity to catch up more quickly. We note Chapter B2, Section 3.10.2 of the PC10 Business Plan where, based on the Cost Base submission, NI Water is a 'Band A' company, being within 10% of the Median, and indeed consistently below this Benchmark. This demonstrates, based on the Cost Base regulatory return, that NI Water is an efficient company in relation to capital expenditure, comparable to its E&W counterparts.

Reference is made by the Utility Regulator to the approach adopted by WICS for the Scottish Water Strategic Review of Charges 2002-6. It should be noted that at that time Scottish Water was out of synchronisation with the England and Wales companies and that the subsequent methodologies for PR04 and PR09 were not available. NI Water requests that, taking into account the new information provided, the approach to setting capital efficiency is revised for the Final Determination.

8.4 Catch-up in first year

As noted earlier, NI Water is a Band A company and the efficiency gap is considerably less than that stated in the DD. The DD adopts the single year 75% catch-up for Enhancement based on the upper quartile. This is inconsistent with industry practice and Ofwat now requires catch-up based on the Median.

These high levels of catch up have previously been rejected by the Competition Commission and indeed the first year efficiency is unrealistic given the high proportion of committed carry-over projects from the SBP period into year 1 of PC10. Currently 32% of the capex programme (£63.9m of £198.8m) is committed in year 1 of PC10. As these are already committed contracts further efficiencies cannot be generated meaning the Utility Regulator's Year 1 efficiency of 16.1% must be generated on the remaining 68% of the programme. This would equate to a year 1 efficiency of approximately 23.7%.

The SBP recognised the need for a phased approach to efficiency and a glide path of efficiency targets were set at 2.1%, 8.3% and 17% over the 3 year SBP period.

NI Water proposals recognise the practicality of delivering efficiencies and outlined a similar glide path for efficiency which recognised the tools available to deliver the efficiency. The proposed large DD efficiency target to be achieved in the first year of PC10 (the P0 efficiency target) is clearly excessive and not deliverable.

8.5 Rate of catch up

NI Water in its approach, as detailed in the Business Plan, Chapter B2, considered not only the efficiency gap, but also how this may be closed. NI Water is moving towards an Alliance approach for the delivery of the capital programme, based on similar approaches adopted in England and Wales companies. This is a practical approach and considers how the company will rise to the challenge. As this approach is a relationship based approach, the benefits are maximised through the closer working relationships between the partners in the Alliance. The benefits are unlikely to be realised in the first year, especially due to the amount of carry over from the SBP, being delivered under existing arrangements as set out in Section 7 above. NI Water's approach recognises the rate of catch-up for the entire capital programme and that the benefits are realised with time and as processes, standards etc evolve under the Alliance arrangement.

In addition, the programme for delivery is a blended one, where the capital maintenance and enhancement elements are procured together. This approach is adopted on the basis of

efficiency in the delivery of the projects/ outputs. The company therefore considers that the rate of catch-up should be over the full 3 year PC10 period.

8.6 WwTW scope challenge

The DD proposes a number of cuts on the overall investment which are considered to be reductions based upon efficiency but are applied by the Utility Regulator on top of the efficiency cuts already proposed in the DD. This, for example, includes a value engineering reduction of 15% for the WwTWs (new starts). NI Water has carried out a scope assessment process and details are provided in Appendix 7.5. NI Water has therefore, already applied a scope challenge and believes the 15% challenge within the DD is inappropriate. If a value engineering challenge was to be applied the level of 15% at which it is set is high for savings generated from value engineering. NI Water has requested the Utility Regulator to provide the basis for the 15% figure.

If the 15% reduction is applied to the WwTWs this reduction will present NI Water with great difficulties in delivering the programme of 13 projects, and consequently will put NI Water at severe risk of not achieving compliance targets, as stated in the NI Water's Business Plan.

8.7 Conclusion

The DD contains a number of proposals for efficiency and scope/cost cuts on the overall investment as set out in the table below.

Table 8.1: Proposed Capital Efficiencies

Capex	NI Water Business Plan	Utility Regulator Draft Determination
	£m	£m
Pre adjustments	622	622
Utility Regulator challenge	-	(80)
Efficiency	(36)	(59)
Sub Total	586	483
Additional outputs	N/A	+38
Final Total	586*	520*

* These figures cannot be directly compared as the outputs differ significantly with the addition of £38m of requested additional outputs

While the overall funding has been drastically reduced (£586 to £483m) the outputs proposed in the DD remain substantially the same. However, these outputs cannot be delivered for the funding proposed. This is further detailed in Section 9 Outputs and OPA.

9. OUTPUTS AND OVERALL PERFORMANCE ASSESSMENT

9.1 Key Themes

- The NI Water Business Plan was designed to deliver quality improvements reflecting the priorities and expectations of customers and stakeholders. However, the proposed cuts contained within the DD effectively remove the company's ability to deliver these.
- NI Water's analysis of the impact on operational capability that would be caused if the proposals within the DD were implemented. This seeks to demonstrate the scale and seriousness of the risk to quality of output and service.
- The DD has proposed a level of cost-cutting that is unprecedented in any utility anywhere in the UK. As such, it introduces unprecedented levels of risk to the safe delivery of Northern Ireland's most essential public service.
- Failure to deliver the improved outputs outlined in NI Water's Business Plan, which would be inevitable were the DD to be implemented in its current format, would have a detrimental effect on public confidence and seriously undermine Northern Ireland's water reform process and the regulatory system.
- Comparison between NI Water and the English and Welsh water companies by means of OPA parameters is becoming increasingly important to stakeholders and the Northern Ireland public. NI Water is concerned that the comparisons contained within the DD are often not appropriate.
- NI Water has concerns regarding the holistic operational impact of the DD and an apparent absence of recognition of the aggregated consequences of the efficiencies proposed in the DD.

9.2 Introduction to Section 9

'Prioritising Customers' is the core theme of NI Water's business plan and is at the centre of the company's whole approach to the PC10 process. In addition to further enhancements in areas governed by statutory requirements, the company also proposed to make significant progress in other areas which would directly improve the experience of NI Water customers all over Northern Ireland. These proposed improvements were a reflection of NI Water's customers' priorities, the objectives set out in the S&EG and the outcome of the PC10 Working Groups. The Utility Regulator acknowledges in the DD that this is the case.

While the Utility Regulator and NI Water agree that the Business Plan outputs would provide the majority of the customer and S&EG priorities, the fundamental point of disagreement is that achievement of these outputs requires the company to be appropriately funded. Such is the proposed reduction in the allowed opex and capex within the DD that NI Water does not believe that the proposed improvements in outputs would be achievable. Further, the company believes that the DD, were it to be implemented, would cause an increase in the level of risk and reduction in the level of service, seriously undermining the water reform process.

NI Water emphasises that the combined effect of the proposed Year 1 efficiencies would result in an unprecedented 21% reduction in opex. If the DD proposals remain unaltered within the Final Determination it would introduce unprecedented levels of risk into NI Water's business and have unprecedented negative impacts on the quality of the company's outputs.

However, for the purposes of this response, NI Water has assumed and applied a uniform illustrative, annual efficiency challenge of 6.9% across the company. Given the scale of such an efficiency target and the short timeframe within which it must respond to the DD, NI Water has not been in a position to fully quantify the impact on outputs in the level of detail it and stakeholders might like. However, based on this high level assumption alone, the company has been able to provide a level of detail which clearly shows the scale and seriousness of the negative impact of the DD on the service provided to customers between 2010 - 2013.

Details of the projected impact of the DD on each output are given in Appendix 9.

When read in general terms, the outputs from Section 3 of the DD are aligned with NI Water's Business Plan. However, it is important to note that NI Water did not predict or project an OPA score (DD Main Report, 3.12.4) in its Business Plan. In addition, the company is concerned that some elements of the OPA metrics do not permit direct comparison with water companies in England and Wales, while in other areas enhanced targets have been introduced in the DD without allowing the resources needed to deliver them. In NI Water's view, the combined effect of this means that unrealistic expectations are being set and a high profile and sensitive metric runs the risk of being compromised.

Detailed discussion of methodologies behind the calculation of the Utility Regulator's OPA score is to be found later in this document and in Appendix 10. NI Water believes that further discussion with the Utility Regulator in relation to the OPA is necessary and therefore welcomes the opportunities referred to within the DD to work with the regulatory bodies to

review the measures and output targets in a number of areas in order to provide meaningful, consistent measures supported by robust data.

The company has made strides in improving data quality and robustness but acknowledges that work remains to be done and will continue to prioritise this area.

9.3 Customer Services

9.3.1 Water Supply Pressure

The DD Main Report, Section 3.5 noted the better information that is available to the company for the assessment of properties on the DG2 Register (properties at risk of receiving low pressure). Following useful engagement with the Utility Regulator since the publication of the DD, it was agreed that NI Water would submit a revised proposal for funding levels linked to numbers of properties to be removed by 'Company Action'. This work is ongoing.

Over the last 2 years NI Water has made substantial progress in the establishment of the DG2 Register. In 2008/09 a very extensive field logging programme was commenced and is due for completion in 2009/10. Until the field logging process is completed, a variation in these figures of +/- 25% remains.

NI Water accepts the target of removing 200 properties from the 1:10 DG5 register due to investigations and capital projects. Work is also continuing on the development and maintenance of the DG5 Register of properties at risk of internal sewer flooding to provide the basis for future service targets.

9.3.2 Customer Contact Outputs

Paragraph 3.6.2 of the DD, Main Report, asks the company to introduce three new, additional customer response measures:

- Number and frequency of repeat complaints.
- Number and frequency of holding responses issued by the company.
- Number and frequency of sewer blockage clearance which exceeds 24 hours.

NI Water welcomes the introduction of these measures as a means of providing further transparency and assurance to customers. The company will seek to work closely with the Utility Regulator during the PC10 process to clarify and agree the definitions and parameters of these new measures and determine the value of setting targets in PC13.

Significant investment has been made since the beginning of the SBP period in transforming work methods in NI Water and improving the customer service experience. In order to fully leverage the value of this investment and continue NI Water's transformation, a number of additional customer service projects need to take place. For example, the company needs to introduce and upgrade those systems that enable it to script and route principal work streams correctly across the business.

However, the levels of funding being proposed in the DD actually reduce the number and scope of customer service projects/activities being planned. The company is concerned that if implemented, this will lead to deteriorating service levels with a direct, negative impact on customers and the reputation of the company. Additionally, it will lead to misunderstanding and mistrust about the investment which has taken place to date and further undermine the water reform process.

The reduction in allowed expenditure proposed within the DD will have an obvious and dramatic impact on staffing levels within NI Water. The rate of these reductions will have an obvious and negative effect on the company's ability to respond to customer issues quickly. NI Water is concerned that this will increase the impact of customers' problems, increasing the hardship suffered as the result of difficulties, extending the duration of events and eroding public trust in NI Water, water reform and the regulatory system.

9.4 Leakage

Leakage is an area of NI Water's business that generates significant public and political interest. The recent media coverage generated by the output of NI Water's work with the Utility Regulator improving water balance data and re-basing the leakage figure demonstrated this. In turn, NI Water and its stakeholders would like to prioritise improvements in this area and demonstrate a link between water reform and an ongoing reduction in leakage.

Whilst the funding to address leakage appears to have been allowed in the DD, NI Water is not in a position to confirm either the possibility of ring-fencing leakage activity in the context of unprecedented efficiency targets, or the extent of the impact of other operational efficiencies on the company's leakage figures.

The funding to address leakage requested in NI Water's Business Plan was based on achieving the natural rate of rise plus the achievement of the yearly leakage targets. The total detection costs required by the company to achieve the NRR (circa 87 Ml/d) plus the yearly targets (circa 4.0 Ml/d) are of the order of £3.3M per year. The reduction in this level of funding required by the opex cuts proposed within the DD will require a reduction in the level

of activity to reduce leakage. Applying the average 6.9% efficiency explained earlier in this chapter, the annual reductions in leakage would not be achievable. Indeed, provisional estimates point to a likely increase in leakage of somewhere in the region of 6 Ml/d.

Additionally, this analysis does not take into account the effect of reduced expenditure on NI Water's ability to repair leaks discovered through the leakage detection programme. Analysis shows that a 6.9% reduction in expenditure in this area would mean approximately 500 defects per year not being addressed, further exacerbating the increase in leakage.

A more detailed analysis of leakage and leakage targets is included in Appendix 9.

9.5 Water Quality

NI Water accepts the nominated outputs for water treatment and supply as outlined in the DD Main Report, Para. 3.8.6.

However, contrary to the aspiration for a gradual improvement in water quality (DD Main Report, Para. 3.8.1) the funding proposals of the DD are likely to result in water quality standards actually deteriorating over the PC10 period. If the proposed reduced levels of funding were to be applied, the risk to the quality and security of Northern Ireland's water network and supply would reach a level not seen since long before the water reform and investment process began. This will pose a major threat to the credibility of NI Water and its regulators.

The effect of the reduction in staffing levels required by the DD would be particularly pronounced in the area of water supply. Bearing in mind the effect of the operating cost reductions that have already taken place during the SBP period in this area, NI Water is concerned that the unrealistic level of further reductions proposed in the DD introduces the possibility of staffing levels falling to the point where water supply facilities no longer have the appropriate level of maintenance to operate effectively.

Equally worrying is the proposal within the DD to reduce the resource required to purchase chemicals. Further clarity on the proposal to cut spending on treatment chemicals has been sought by NI Water, but in the absence of such clarity the company believes that the current proposal will result in there being insufficient finance to procure the chemicals needed to safely treat Northern Ireland's drinking water supply to its current quality level.

Cumulatively, the result of the DD proposals is a likely lowering of quality of final water for homes and businesses.

Given these circumstances, the company's research suggests it is entirely possible that compliance will drop significantly below 99% MZC and 98.8% OPI (TIM), with the potential for lead failures compliance to fall from 98.6% to circa 94%.

A more detailed explanation of the likely impact of the DD on water quality measures, e.g. MZC, may be found in Appendix 9.

Regarding management of NI Water's water network, the reduction in staff and contractor availability which would be required by current DD proposals would lead directly to a detrimental impact on the company's response times in the event of bursts and other interruptions to supply, ultimately leading to a poorer level of service for customers. For example, NI Water's research shows that implementing the proposed levels of efficiencies in the PC10 timeframe could mean an increase of 20.5% of customers experiencing interruptions to supply of greater than 12 hours.

The impact of the DD on the mains rehabilitation programme and the consequences for bursts frequency are also significant and are discussed in detail in Appendix 6.4.

9.6 Wastewater

NI Water welcomes the proposal to invest a further £38m in wastewater treatment improvements (DD Main Report, paragraph 3.10.5). Work has begun to review the priority list and NI Water look forward to working with the Northern Ireland Environment Agency (NIEA) and the Utility Regulator to agree the programme.

However, the proposed reduction in investment sought elsewhere in the DD puts at risk other outputs, in an area of particular concern for customers. For example, the rate of proactive and reactive maintenance activity on the sewer network and the ability to address Unsatisfactory Intermittent Discharges (UIDs) (DD Main Report, section 3.9) will be reduced. This is explained further in Appendix 9.

NI Water is concerned that a 6.9% reduction in opex will also introduce a very high level of risk in the area of sewage treatment quality outputs outlined in section 3.10 of the DD Main Report. The required reduction in staffing levels is likely to result in reduced frequency of visitation of key sites and sub-optimal maintenance, impacting on works performance. There would also be a reduced frequency of de-sludging and sludge treatment impacting further on works performance and effluent quality.

The levels of mechanical and electrical maintenance, both planned and reactive, would also be impacted by the staffing reductions necessitated by implementation of the DD proposals,

exposing customers to an increased risk of plant breakdown, heightening the potential for increased pollution incidents and environmental non-compliance.

A further inevitable result of inappropriate cost reduction would be the lower profile but no less important problem of the degradation of NI Water's stock of spare parts for emergency use. This is likely to lead to increased delays in returning plant and equipment to service and in turn, a slower response to customer problems.

9.7 Asset Serviceability

NI Water welcomes the concept of asset serviceability as outlined in the DD, Main Report, paragraph 3.11.1 and recognises its potential value as a tool to judge whether the level of capital maintenance is sufficient. To facilitate the introduction of the concept, NI Water is continuing to improve the range and stability of data and will seek to work closely with the Utility Regulator to consider future serviceability measures that are relevant, meaningful and consistent.

9.8 Overall Performance Assessment (OPA)

Whilst NI Water recognises that the OPA metric provides a convenient method for comparing year-on-year improvements in company performance, the company strongly believes that a number of Ofwat's OPA comparators are unsuitable for making direct comparisons between NI Water and English and Welsh water companies. NI Water recommends that, as in Scotland, OPA measures which do not permit like-for-like comparison with English and Welsh water companies should be excluded from the suite of 17 OPA measures.

In the DD, OPA scores have been projected for the PC10 period by using NI Water's PC10 Business Plan submission data. However, a number of OPA data inputs simply cannot be deduced from the PC10 Business Plan submission. It appears to NI Water that a number of assumptions have been made within the DD in order to fill these gaps in input data and allow it to set OPA targets for the company.

NI Water is troubled by this approach for a number of reasons. Given the increasing status being given to OPA scores, the company feels it is critical to ensure that unrealistic expectations are not set for customers and stakeholders; that the targets being set and comparisons being made are appropriate for Northern Ireland and that assessments are made on the basis of accurate and contextualised data.

Therefore, NI Water is unable to confirm or accept the projected OPA scores contained in the DD, and will seek further opportunities to agree with the Utility Regulator the method of calculating projected OPA scores prior to their inclusion in the PC10 Monitoring Plan.

A full discussion of OPA is included in Appendix 10.

9.9 Conclusion

The water reform process in Northern Ireland has been an expensive, at times controversial, but at all times an essential element of public sector and public service reform. At its core has been recognition of the need to invest in improving the water and sewerage network and the need to deliver a better experience for customers. Within the SBP period this objective has been advanced by NI Water and its stakeholder partners. Much work remains to be done, particularly in the area of cost efficiency, and NI Water approached PC10 as the next step in this process – further improving the quality of outputs in line with stakeholder guidance, while at the same time offering significant further cost efficiencies.

Within its Business Plan, NI Water set out the resources required to deliver improved outputs and an efficiency target that was challenging, but also achievable and sustainable.

The company is concerned that the proposals contained within the DD are unachievable and unsustainable. It believes that if implemented, the DD proposals will actually deliver a reduction in the quality of outputs from NI Water and introduce an unacceptable level of risk into the provision of water and wastewater services in Northern Ireland.

Consequently, at a time of increased interest in water reform and increasing expectations on behalf of customers and stakeholders, the risk of service failure will actually increase. The impact on public trust and confidence in NI Water, water reform and the regulatory process is likely to be dramatic and negative.

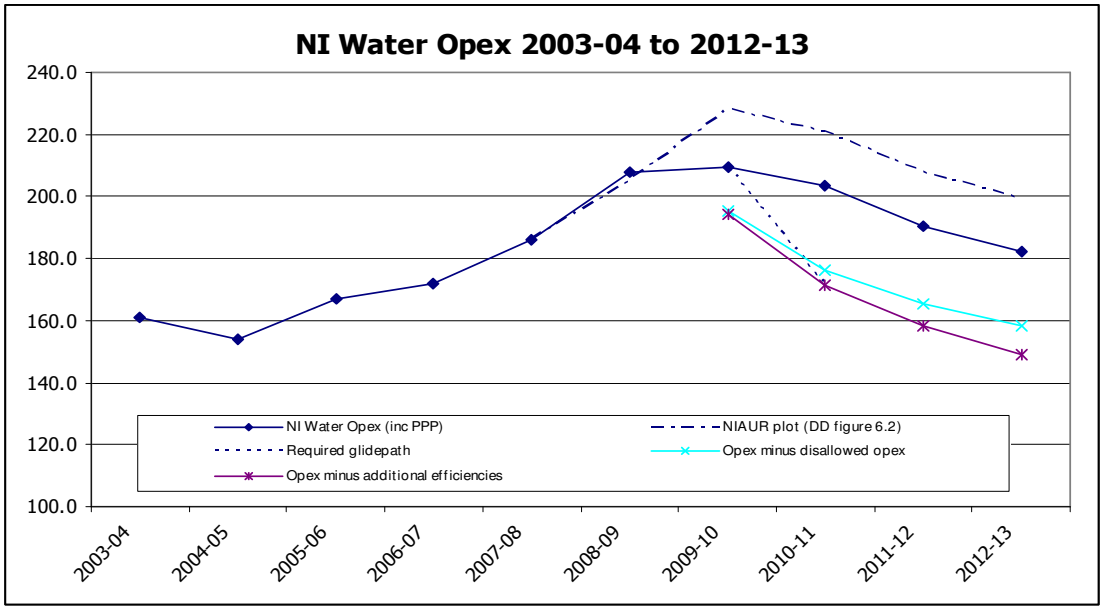
Outputs must be aligned with inputs. Were the proposed cuts within the DD to be implemented, NI Water would simply not have the capability to meet the targets. This is very disappointing given the PC10 theme of prioritising customers.

10. FINANCIAL PARAMETERS

10.1 Modelling errors by the Utility Regulator

The DD sets out NI Water's forecast opex in Table 6.11 and uses these figures to populate figure 6.2. NI Water has identified a number of errors made by the Utility Regulator in deriving our forecast opex which resulted in, amongst other things, the Utility Regulator forecasting an opex figure of £228 by 2009/10. When corrected our forecast is materially lower (c£20m PA) than the Utility Regulator's estimate, see chart below.

Table 10.1: Water Service / NI Water Opex 2003-2013



In addition, the DD makes a number of references to our performance against SBP efficiency including references in paragraphs 6.8.8 and 6.9.5 of the DD. NI Water has identified a number of flaws in the Utility Regulator's calculation of our performance in the three years preceding PC10. When the methodology has been correctly applied this will illustrate that NI Water has, to date, achieved the SBP opex efficiency targets. NI Water is concerned that the DD proposals are based upon conclusions made on the basis of flawed analysis.

Refer to Appendix 21.1 and Appendix 21.2 for further details.

10.2 Weighted Average Cost of Capital (WACC)

NI Water agrees with the DD proposal of a WACC of 4.8% for the PC10 period.

10.3 Regulatory Capital Value (RCV)

The DD proposes a £114m increase to the opening RCV for the PC10 period to achieve financing targets. Furthermore paragraph 7.1.7 of the DD states the "Utility Regulator expects to carry out further analysis on the RCV for PC13." Satisfying target financial ratios through adjusting the RCV is not an ideal approach as this creates uncertainty about the future level of RCV, with the possibility of further revisions to the methodology at PC13 adding further uncertainty. This proposal is not consistent with the principles of Financial Capital Maintenance (FCM) and is likely to have a detrimental impact on any future credit rating exercise or on investor perception should NI Water ever need to be permitted to access capital markets. For further information a short paper by Frontier Economics is attached as Appendix 18. In summary we ask that this approach to RVC be reconsidered in the Final Determination.

10.4 Customer Numbers

NI Water has included a revised set of customer numbers and volumes, along with detailed explanations of each change and the reconciliation to previous assumptions, in Appendix 19. It should be noted, that these changes (consumption and numbers) will result in a change to the current revenue allocation in the DD. The revisions do not include the results of the exercise to calculate the agreed average non-domestic unmeasured water consumption which NI Water is currently finalising. 'NI Water request that the Utility Regulator refer to these revised projections in the tariff basket and K-factor calculations for Final Determination'.

10.5 Financial Ratios

At present, the financial ratios per the financial model which supports the DD do not look significantly different than those submitted by NI Water.

10.6 Reserves

The DD proposals provide for NI Water to build reserves of £64m, compared to £44m in the NI Water PC10 Business Plan. NI Water would however record that this is the total build up by the

end of the PC10 period, and reserves are not cash that can be readily accessed to address cost increases.

10.7 Domestic Customer Bills

NI Water notes that the Utility Regulator has included a household bill as a key financial parameter in the DD. In accordance with Ministerial Guidance the NI Water PC10 Business Plan did not include any costs associated with domestic billing. These costs could include allowance for bad debt, working capital requirements, additional operating expenditure and capital expenditure. The indicative household bills quoted in the DD may therefore be significantly understated.

11. DEALING WITH UNCERTAINTY

11.1 Introduction

Whilst NI Water expects the Final Determination for the 3-year PC10 period to be challenging,NI Water also expect it to be based on an integrated approach and to be deliverable. Where the assumptions and methodologies supporting it lead to cost uncertainly, these costs need to be identified, with viable policies and mechanisms put in place.

The letter accompanying the Business Plan stated that reserves and the mechanisms for dealing with uncertainty are areas that require policy to be developed for the PC10 period. This review of the DD has confirmed that there remains an urgent need for multi-lateral working to develop a pragmatic policy for addressing the risks faced by NI Water in the unique ownership, funding and economic climate in which NI Water operates. NI Water's concerns, as relayed by NI Water to the Utility Regulator at a bi-lateral meeting on 22 October 2009, are set out below.

It is usual for regulated companies to be enabled to build up adequate reserves which can be used to reduce the impact of exogenous economic shocks. However, because NI Water does not yet have adequate reserves, it does not have the protection of this mechanism. The DD proposes to reject most of the Notified Items proposed in the Business Plan and also fails to provide a meaningful solution for the recognised cost risks NI Water faces in PC10. This approach is inconsistent with the Utility Regulator's precedents set with Phoenix Natural Gas. This approach fails to recognise that it is not just occurrence of such risk that matters, but also the impact of the risk. The DD approach would be likely to result in unwelcome future political, quality and economic regulatory issues due to NI Water being forced to reduce planned activities in the absence of adequate means of dealing with exogenous shocks.

11.2 Licence mechanisms for addressing uncertainty in PC10

It is recognised that regulated utilities can face costs during regulated periods which were not forecast or not sufficiently provided for when setting the price limits for that period.

Condition B of NI Water's Licence makes provision for three standard mechanisms to seek to address cost uncertainty during a regulated period through Interim Determinations of K (IDoKs). Relevant Items for the purposes of a standard IDoK are Relevant Changes of Circumstances (RCCs), Notified Items (NIs) or a Relevant Disposal of Land. In addition to these standard IDoKs, Condition B of the Licence also makes provision for an exceptional IDoK where any circumstance (other than an RCC) has occurred and has or will have a substantial

adverse (or favourable) effect on the delivery of water and sewerage services within the regulatory period. This separate IDoK process is commonly referred to as the "shipwreck clause".

A full discussion of the Notified Items proposed in our Business Plan, the proposals of the DD and the NI Water response to these are set out in Appendix 8.

The ability of NI Water to seek an IDoK is limited given the shortened 3-year PC10 regulatory period. This is because NI Water can only request an IDoK in respect of Relevant Items occurring during the first 18 months of the regulatory period. Under Condition B of the Licence, NI Water has to submit any IDoK request before 15 September in the year preceding the Charging Year for which the adjustment is sought. The last opportunity to submit an IDoK request is therefore 14 September 2011, which would be made in respect of an adjustment to K for the last year of the PC10 period (2012/13).

Therefore, even if the Utility Regulator were to approve all the Notified Items requested by NI Water it would still be exposed to a significant level of cost risk without the legitimate protection that regulation should provide. Moreover, even if an adjustment was agreed through the standard IDoK process NI Water has limited power to increase charges to customers, and in discussion NI Water has had with the DRD there is no guarantee that NI Water would be able to drawdown funds from the proposed Revolving Credit Facility.

11.3 Safeguards proposed by the Utility Regulator

11.3.1 £55m Revolving Credit Facility

In Paragraph 9.1.7 of the DD the Utility Regulator has indicated that it: *'…assumes the current revolving credit facility of £55m will remain in place for the PC10 period and could be accessed by NI Water…'*

Since the £55m revolving credit facility is a vehicle provided by the DRD we sought their guidance on the ability of the credit facility to address risk and uncertainty in PC10. The Director of DRD's Shareholder Unit, has stated[10] that:

> *"The potential use of the £55m Revolving Credit Facility, while a condition of the NIW Licence, would always have presented the Department with a problem in terms of securing budget cover to facilitate any drawdown (mainly because of the unplanned nature of the pressures requiring the drawdown). While the facility is now non-budget in public expenditure terms*

[10] E-mail from DRD to NI Water, 19 October 2009.

(as a result of NIW's reclassification to NDPB status), any utilisation of the facility would lead to an increase in NIW expenditure in excess of the company's approved budget (assuming the Regulator maintains its view on Notified Items). Because NIW's expenditure directly impacts on DRD's budget, this would present the Department with a budget pressure in the given year. In short, therefore, the Regulator cannot assume that NIW can cover the cost of the disallowed Notified Items in future years by simply drawing down from the Revolver Credit Facility. Given the current fiscal constraints across the public sector, there is a high risk that DRD would not be able to secure any additional budget cover through in-year monitoring (which would be the normal mechanism for securing additional resources in any given year). The Regulator was made aware of all this at meetings well in advance of the publication of the Draft Determination."

The above comments make it clear that the Revolving Credit Facility does not provide the protection to NI Water against non-forecasted cost shocks that are assumed by the Utility Regulator in the DD.

11.3.2 Logging up/down

NI Water welcomes the indication that the Utility Regulator will establish a mechanism for tracking the logging up/down of spend for consideration at subsequent reviews. However the logging up/down mechanism is typically most applicable to capital projects. Although, NI Water believes it could also be applied to discrete substantial elements of operating costs that had not been allowed for in the Final Determination but which the Utility Regulator agreed constituted value for money and longer term efficiencies.

Also whilst it is necessary to track the level of spend for future adjustment, this mechanism does not dynamically address the need for cash flow to meet costs that were not forecast and could not be avoided by management action.

11.3.3 Reserves

The DD proposals provide for NI Water to build reserves of £64m, compared to the £44m in the NI Water Business Plan. It should be noted though that this is the total build up by the end of the PC10 period, and reserves are not cash that can be readily be accessed to address cost increases.

In summary, these safeguards do not provide the necessary level of protection for NI Water and its customers in the event that the assumptions on which the Utility Regulator makes its Final Determination are found not to hold during the PC10 period.

NI Water welcome the comment in paragraph 9.1.4 of the DD that: “the regulatory framework needs to be able to respond in an effective and timely way to unexpected costs that could not have been avoided by prudent management action.”

However, NI Water is concerned that the proposals within the DD do not provide an effective and timely framework to address the significant risks to which the company is exposed.

11.4 Reserves - Contrast with approach in Scotland

The Water Industry for Scotland (WICS) assumes Scottish Water transfers unused funds to a reserve account which could, in part, be used as contingency funding – subject to agreement with WICS – to fund cost increases outside of control of management rather than seek IDoKs.

Scottish Water is not financed to pay dividends, so the need for funds to be available to Scottish Water to address unforeseen risk is an area of regulation that the Water Industry Commission for Scotland has been considering for sometime. At least two policies have been developed by WICS to enable Scottish Water to mitigate the risks it faces and provide the management of Scottish Water with options to deal with risks, at its discretion, without having to regularly revert to regulatory interim determinations. These are:

- A deliberate policy of enabling Scottish Water to build up reserves through establishing regulatory settlements which enable Scottish Water to build up reserves through out performance of the settlement, and;
- Reaching a regulatory settlement based on the commercial cost of borrowing in the knowledge that, in fact, Scottish Water can borrow at lower rates from the Scottish Government. Scottish Water is then allowed to keep the 'profit' from the difference in the cost of these debt arrangements as funds which are available to address external cost uncertainties in a regulated period.

11.5 Discussions are required to address uncertainty in PC10

In conclusion, NI Water’s review of the DD has confirmed that there remains an urgent need for multi-lateral discussions to develop a pragmatic policy for addressing the risks faced by NI Water in the unique ownership, funding and economic climate in which the company operate.

The model for building up reserves in Scotland and for addressing risks in other regulated industries in the UK[11], including those established by the Utility Regulator for the other regulated sectors in Northern Ireland, provide helpful starting points and precedents for mitigating risk. Agreed policies should to be incorporated in the Final Determination.

Such discussions should recognise that if extra funding is not available to address the impacts of risk then discussions on price and revenue adjustment mechanisms are secondary to actually considering how NI Water should manage the impact of significant but unforeseen cost increases.

The one-on-one regulatory environment in Northern Ireland should provide an opportunity to develop a pragmatic approach to dealing with uncertainty. In addition, the Utility Regulator is uniquely positioned in Northern Ireland to address the risk of energy prices faced by NI Water.

[11] Appendix16, "Regulatory Mechanisms for Addressing Risk"

12. FROM DRAFT TO FINAL DETERMINATION

12.1 Next Steps

NI Water has submitted this response on 6 November 2009 in accordance with the Consultation Process requirements. NI Water has made very considerable efforts to provide the further information requested by the Utility Regulator and also addressed the misperceptions that seem to have arisen around the SBP period and the changes after the base year. NI Water recognises that this response includes a considerable volume of material, and NI Water stands ready to assist the Utility Regulator in its further review process in whatever way requested of us.

NI Water recognises the value of independent regulation and the price control review process and is committed to working with the Utility Regulator to achieve a challenging but workable outcome that is in the best interests of consumers. However, that is not the future portrayed by the DD which would significantly prejudice delivery of service and compliance with essential health and quality targets and is simply not a sustainable proposal at this time.

At this stage there is a significant gap between the DD and what NI Water could even attempt to deliver. Nevertheless, NI Water trusts that the Utility Regulator will recognise and address the fundamental weaknesses of the DD and that in correcting for these weaknesses and the specific errors identified, it may yet be possible to achieve a workable outcome.

To allow all stakeholders, some of who may lack the specialist regulatory knowledge required, to understand the full implication of the Final Determination for NI Water, NI Water requests that the Final Determination states the combined financial effect of any disallowed opex and efficiency targets from the 2009/10 opex baseline to 2010/11, and for each subsequent year.

13. SCHEDULE OF APPENDICES

Table 13.1 – Schedule of Appendices

Topic	Appendices	Draft Determination Reference
NI Water Formal Response - Section 4 – Operating Expenditure		
BIP & VER/VS	Appendix 11 - BI Programme Further Information in Relation to Proposed BIP Opex Expenditure in the PC10 Period	Section 6.3.4 – 6.3.6
	Appendix 11.1 - BI Programme Further Information – Utility Regulator's template to show the position at end of March 2009	Section 6.3.4 – 6.3.6
	Appendix 11.2 - BI Programme Further Information – PC10 Projects	Section 6.3.4 – 6.3.6
	Appendix 11.3 - BI Programme Further Information – Financial Benefits	Section 6.3.4 – 6.3.6
	Appendix 11.4 - BI Programme Further Information – M&G Tracking Sheet	Section 6.3.4 – 6.3.6
	Appendix 11.5 - BI Programme Further Information – Scope and Role of CPO	Section 6.3.4 – 6.3.6
	Appendix 11.6 - BI Programme Further Information – Benefits of the One Programme	Section 6.3.4 – 6.3.6
	Appendix 13 – Opex Efficiency Impact Analysis and Risk to NI Water	
Power (2007/08 prices)		**Table 6.3 Item 1**
Energy prices and volumes	Appendix 15 – PC10 Period Energy Unit Cost Review	
	Appendix 2.1.1 – Energy Prices and Volumes	
Environmental Compliance & Regulation		**Table 6.3 Item 2**
Abstraction Licences (1) PPC Fees (2) Cryptosporidium Filters (3)	Appendix 2.2.1 – Abstraction Licences, PPC Fees, Cryptosporidium, Filters	
Sludge Transportation	Appendix 2.2.2 – Sludge Transportation	
Electrical Inspection Testing	Appendix 2.2.3 – Electrical Inspection Testing	
Moleseye Charge	Appendix 2.2.4 – Moleseye Charge	
Regulator/Reporter costs	Appendix 2.2.5 – Regulator/Reporter Costs	
Reporter PC13 Costs	Appendix 2.2.6 – Reporter PC13 Costs	
PC13 Support	Appendix 2.2.8 – Regulatory Advice and Support costs Required by NI Water in PC10	

Topic	Appendices	Draft Determination Reference
Information & Communications Technology		**Table 6.3 Item 3**
Strategic expenditure / ICT & other systems	Appendix 2.3.1 - Strategic Expenditure / ICT & other Systems	
Corporate		**Table 6.3 Item 4**
Governance	Appendix 2.4.1 - Governance	
Financial	Appendix 2.4.2 - Financial	
Accommodation	Appendix 2.4.3 - Accommodation	
Legal	Appendix 2.4.4 - Legal	
Bad debt	Appendix 2.4.5 - Bad debt	
New Organisational Functions		**Table 6.3 Item 5**
Asset management	Appendix 2.5.1 - Asset management	
Commercial	Appendix 2.5.2 - Commercial	
Finance & Regulation	Appendix 2.5.3 - Finance & Regulation	
Customer Services Team	Appendix 2.5.4 - Customer Services Team	
Chemicals		**Table 6.3 Item 6**
NIEA / Environmental requirements	Appendix 2.6.1 - NIEA / Environmental requirements	
Price increases	Appendix 2.6.2 - Price increases	
Opex from Capex	Appendix 2.6.3 - Opex from Capex	
Rates		**Table 6.3 Item 7**
Rates (2007-08 prices)	Appendix 2.7.1 – Local Authority Rates	
NI Water Formal Response - Section 5 – Operating Efficiency Expenditure		
Efficiency Models	Appendix 1 – Application of efficiency targets to operating expenditure	Section 6.6 & 6.7
Special Factors	Appendix 20 – Special Factors	Section 6.5
NI Water Formal Response - Section 6 – The combined effect of disallowed operating expenditure and the proposed efficiency targets		
	Appendix 2 – P0 Reductions and Disallowed Opex	Section 6.2
NI Water Formal Response - Section 7 – Capital Programme		
	Appendix 6.1 - Assessment of NIAUR's approach to capital maintenance efficiency	Section 4
	Appendix 6.2 - Reduction of Capital Contingency from 10% to 5%.	Section 5
	Appendix 6.3 - Impact of PPP on Capital Maintenance in Draft Determination	
	Appendix 6.4 - Review of Mains Rehabilitation Funding & Scope	Section 4
	Appendix 6.4.1 – Mains Rehabilitation Supporting Information on Unit Rate	Section 4
	Appendix 6.4.2 – Additional Information on DG2 Numbers	Section 3

Topic	Appendices	Draft Determination Reference
	Appendix 6.5 - Impact on Serviceability of Reduction in Capital Maintenance in Draft Determination	
	Appendix 12 – 20090916 L PJB to JA – PC10 E & SG Changes.doc	
NI Water Formal Response - Section 8 – Capital Efficiency		
	Appendix 7.1 - NIW Regional Price Adjustment Methodology & Sensitivity	
	Appendix 7.1.1 - MEICA Relative Cost Factor Report	
	Appendix 7.2 - Review of the sensitivity of the NIAUR RPA Model	
	Appendix 7.3 - Suitability of using the Building Cost Information Service to estimate the Regional Price Adjustment	
	Appendix 7.4 - Review of the Mott MacDonald Location Factor Study Approach	
	Appendix 7.5 - Process of challenging WwTW scope	
NI Water Formal Response - Section 9 – Outputs and Overall Performance Assessment		
PC10 Output Summary	Appendix 9 – Outputs Schedule – Potential Impact of the Draft Determination on targets	Section 2 & Section 3
Overall Performance Assessment	Appendix 10 – OPA Assessment	Section 3
NI Water Formal Response - Section 10 – Financial Parameters		
RCV (Regulatory Capital Value)	Appendix 18 – RCV Setting Review – Analysis and Response to the Draft Determination	Section 7.1
Sources of Revenue	Appendix 19 – Customer Numbers	Section 8
Claimed Operating Costs and SBP Efficiency	Appendix 21.1 – Financial Parameters - Misinterpretations in the Draft Determination – Claimed Operating Costs Appendix 21.2 – Financial Parameters - Misinterpretations in the Draft Determination – SBP Efficiency	Section 6
NI Water Formal Response - Section 11 – Dealing with Uncertainty		
Dealing with Uncertainty	Appendix 8 – Review of Notified Items	Section 9
	Appendix 16 – Regulatory Mechanisms for Addressing Risk	
NI Water Formal Response - Section 12 – From Draft to Final Determination - Next Steps		
	No Appendices.	
NI Water Formal Response - Section 13 – Miscellaneous Information		
	Appendix 14 – Miscellaneous Information	
Asset Management Data and Systems	▪ Asset Management Proposals (Data & Systems)	Annex N, Section 3.15.21
Unsatisfactory Intermittent Discharges	▪ East Belfast Unsatisfactory Intermittent Discharges (UID's)	Unsatisfactory Intermittent Discharges
Service Reservoirs and Clear Water Tanks	▪ Service Reservoirs Activity	Annex N, Section 3.7.15
Unsatisfactory Intermittent Discharges	▪ Identification of Unsatisfactory Intermittent Discharges (UID's)	Section 4.3.30

Topic	Appendices	Draft Determination Reference
Cost Base	▪ Details on Pipe Size within the NI Water Infrastructure	Section 5.3.7
Sewage Treatment Quality Outputs Investing in Services	▪ Additional £38M Outputs	Section 3.10.5 Section 4.1.10
WwTWs	▪ PC10 WWTW (New Starts) Challenge Workshops	
WwTWs	▪ Design Horizon for PC10 WWTW (New Starts)	
CIM Table	▪ Reconciliation between the C5-1 and B Chapters	
Capitalised Salaries	▪ Capitalised Salaries	Annex N Section 3.2.10
Leakage	▪ Leakage	
Efficiency Challenge	▪ 2010/11 Efficiency Challenge	