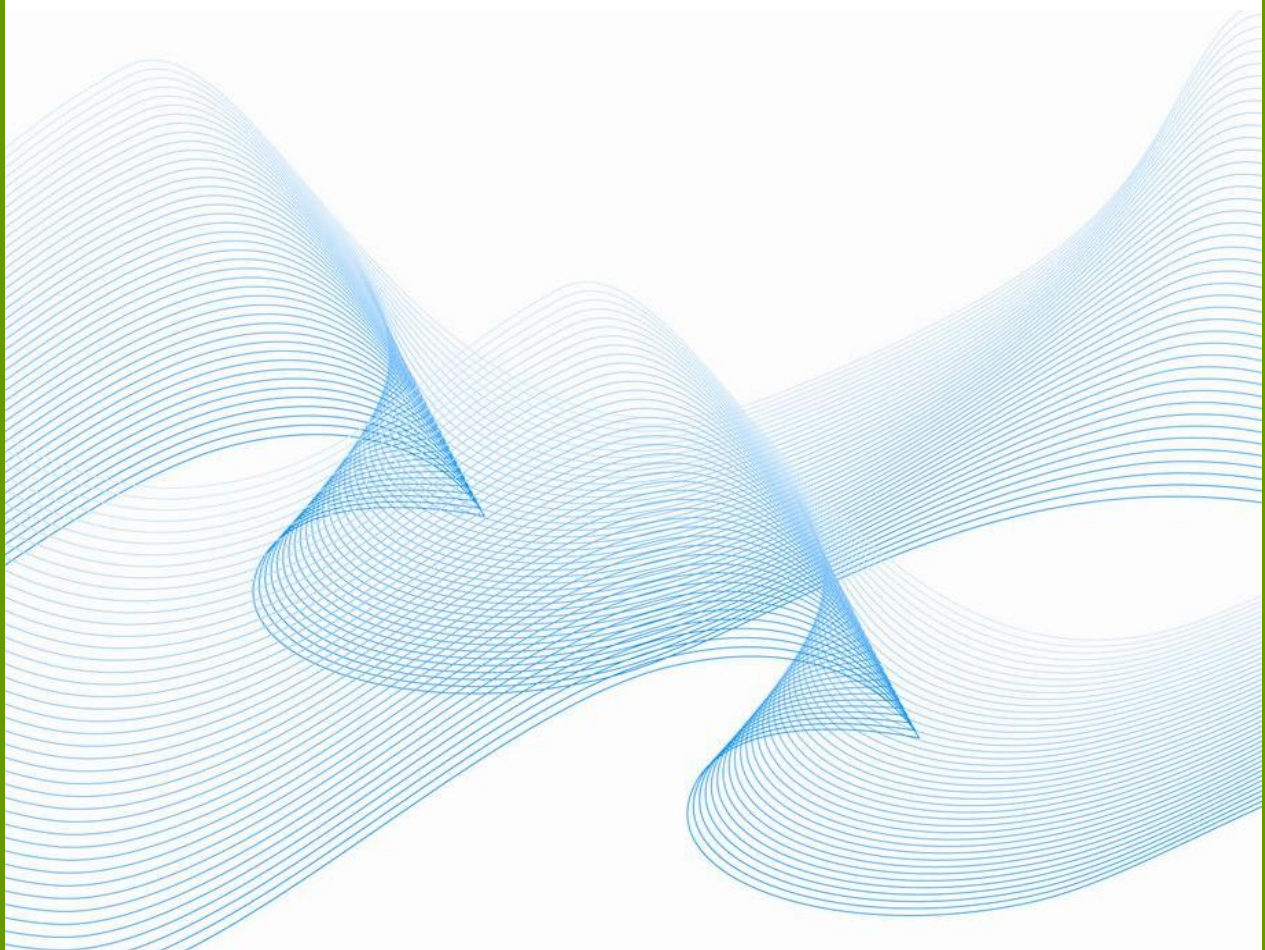




# Water and Sewerage Service Price Control 2010-13

Draft Determination Main Report - Annex A  
Overall Performance Assessment

September 2009



# Water and Sewerage Revenue and Charges Price Control 2010-2013

Draft Determination Main Report  
Annex A – OPA Methodology

## Contents

<b>A1. Overall Performance Assessment .....</b>	<b>3</b>
A1.1. Background .....	3
A1.2. Utility Regulator OPA.....	3
A1.3. PC10 – The Way Ahead.....	5
A1.4. Drinking Water Quality.....	11
A1.5. Conclusions.....	12

# A1. Overall Performance Assessment

## A1.1. Background

1.1.1. This section summarises the Utility Regulator's assessment of the levels of service that NI Water provides, as measured by the Overall Performance Assessment (OPA).

1.1.2. The OPA is a system of assessment that takes raw data on water services, sewerage services, customer service and environmental compliance, and scores companies on a scale of 0-50 points based on their performance.

1.1.3. This score out of 50 is then 'weighted' using information on consumers' views, to give a final OPA score for each company. These are then collated and published in league table format in Ofwat's annual Service and Performance Report.

1.1.4. The latest OPA conducted on NI Water was based on 2008/09 data when the company scored 105 out of a possible 304 points. (See 1.3.12)

1.1.5. Although this score compares poorly with the 2007/08 England and Wales average for the same measures (275) it should be set in the context of a newly regulated (and therefore newly challenged) company, an ageing asset network, and poor data quality.

## A1.2. Utility Regulator OPA

1.2.1. Since the Utility Regulator first conducted the OPA 2006/07, a review of service measurement has been ongoing involving the Utility Regulator, CCNI, NI Water and the local quality regulators.

1.2.2. WICS and Ofwat have also been consulted on various specific issues relating to the construction of a localised OPA.

1.2.3. The aim of these consultations was to gauge the practicality and / or usefulness of amending the OPA in order to make it more suitable to NI Water's current levels of service, and to take account of 'legacy' issues that remain from DRD Water Service.

1.2.4. Having considered a number of options, and taken advice from numerous stakeholders, the Utility Regulator resolved to continue using a conventional OPA model – i.e. one which closely mirrors the Ofwat OPA.

1.2.5. The weights, ranges and calculations are therefore exactly the same as the model used by Ofwat to assess water and sewerage companies in England and Wales.

1.2.6. By retaining the conventional OPA model the Utility Regulator ensures that NI Water can be benchmarked against the performance of companies in England and Wales, and that a consistent bank of local past scores is maintained and can be used to analyse NI Water's improvement from baseline and anticipated future performance.

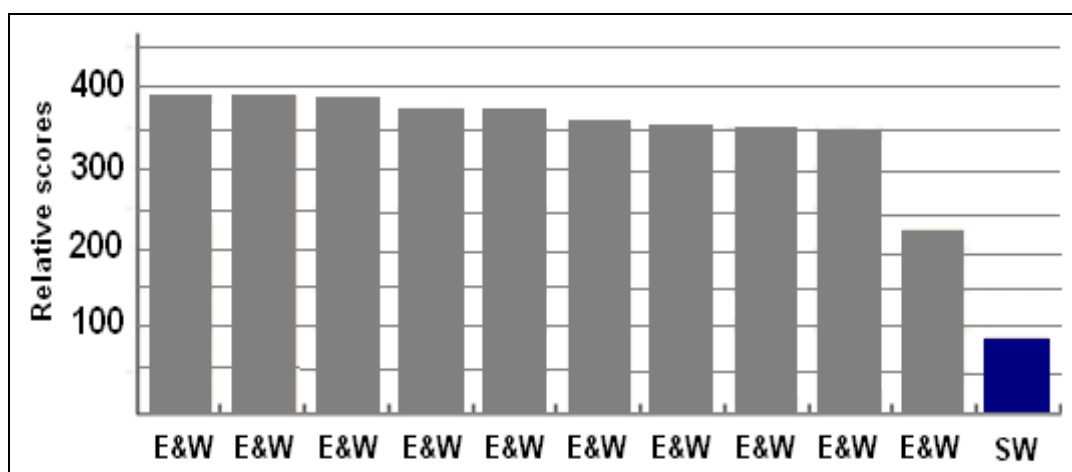
1.2.7. The Utility Regulator is aware of the disparity of service levels between NI Water and companies within the England and Wales industry, and acknowledges the challenges that NI Water will face over the coming years.

1.2.8. However, neither NI Water's current position, nor the challenge it faces is unprecedented.

1.2.9. The E&W companies, and latterly Scottish Water have all demonstrated that once initial efficiency gains are made, large scale improvement in the OPA is possible without increasing operating or capital expenditure.

1.2.10. By way of example, a snapshot of Scottish Water's early OPA position is shown below:

**Figure 1.1 – Scottish Water relative overall performance 2002-03**



Source: WICS Customer Service Report 2003-03 p6

## **A1.3. PC10 – The Way Ahead**

1.3.1. The key elements of NI Water's performance over the PC10 period are that it must deliver improvements to customer services, while ensuring that it operates within the limitations of allowed revenue.

1.3.2. In respect of improving service levels, we plan to continue to monitor NI Water's absolute and relative performance using the OPA, and compare its performance to the England and Wales industry.

1.3.3. As stated in section 1.2, we have not made any adjustments to the weights, ranges or calculations in the OPA to account for NI Water's (relatively) poor levels of service; such issues of disparity will be addressed in commentary.

1.3.4. The only adjustments made are aesthetic, and purely for reasons of localisation – e.g. the scale used to classify pollution incidents by DEFRA in England and Wales is 1, 2 & 3, whereas the corresponding scale used by NIEA is High, Medium and Low. The correspondence of the Northern Ireland scale to that used in England and Wales has been confirmed by local quality regulators.

1.3.5. The scope of the OPA throughout PC10 will depend upon the level and quality of information that NI Water is able to provide to the Utility Regulator, however NI Water has provided us with legally binding undertakings in respect of improving their information and systems quality. It is therefore our strong expectation that both the level and quality of the information NI Water provides to us will improve significantly over the PC10 period.

1.3.6. The Ofwat OPA includes the following measures; in 2007/08 the Utility Regulator OPA included most of these, while some were excluded due to absent or poor quality base data:

**Table 1.1 – Components of the 2007-08 OPA**

Measured assessed in England and Wales	Used by NIAUR	Reason for exclusion
DG2 – Properties at risk of low pressure	✓	N/A
DG3 – Properties subject to unplanned interruptions	✓	N/A
Population with hosepipe restrictions	✓	N/A
Drinking water quality	✓	N/A
Sewer flooding (Hydraulic incapacity)	✗	Data not complete / robust
Sewer flooding (Other causes)	✗	Data not complete / robust
Properties at risk of sewer flooding	✗	DG5 register not complete
Customer Service (Combined contact score)	✓	N/A
Customer Service (Assessed score)	✗	Data not requested
Category 1 & 2 pollution incidents (Sewerage)	✓	N/A
Category 3 pollution incidents (Sewerage)	✓	N/A
Category 1 pollution incidents (Water)	✓	N/A
Wastewater treatment works in breach of consents	✓	N/A
Sewage sludge disposal	✓	N/A
Leakage assessment	✓	N/A
Security of supply (Performance against target)	✗	Data not complete / robust
Security of supply (Absolute performance)	✗	Data not complete / robust

1.3.7. Based on performances in GB, and especially Scotland, it is our strong expectation that NI Water's OPA score can and will improve over the PC10 period.

1.3.8. NI Water itself predicts an increase of some 103 points (from a 2007/08 baseline) in its OPA score by the end of PC10, though our view is that this estimate is conservative.

1.3.9. NI Water's 2007/08 OPA scores are shown below, and as can be seen the company lags behind England and Wales by a significant margin:

**Table 1.2 – OPA Performance in 2007-08**

Measure	MAX OPA Score	E&W Max Collated	E&W Max Co.	E&W Average Co.	E&W Min Co.	E&W Min Collated	NI Water
DG2 Risk of low pressure	38	37	36	36	34	34	4
DG3 Unplanned Interruptions	38	37	36	31	4	4	22
DG4 Hosepipe Restrictions	13	13	13	13	13	13	13
Customer Service Combined Score	38	38	38	31	20	11	4
Drinking Water Quality	50	49	48	46	47	42	5
Sewage Sludge disposal	13	13	13	13	13	13	13
Leakage Assessment	13	13	13	13	11	11	13
Water Pollution Incidents (High & Med)	13	13	13	12	13	8	13
Sewerage Pollution Incidents (High & Med)	25	25	25	23	24	19	3
Sewerage Pollution Incidents (Low)	13	13	13	11	11	8	3
STW consent breaches	50	50	50	46	50	25	5
<b>TOTAL</b>	<b>304</b>	<b>301</b>	<b>298</b>	<b>275</b>	<b>240</b>	<b>188</b>	<b>98</b>

1.3.10. NI Water produced excellent performances in some measures, achieving full marks for Hosepipe Restrictions, Sewage Sludge disposal, and Water Pollution incidents.

1.3.11. Full marks were also achieved for leakage, though concerns remain about the robustness of NI Water's leakage target setting, and reported performances for 2007/08. Going forward, this will continue to be a keen area of focus for the Utility Regulator during PC10 and beyond.

1.3.12. Initial analysis of NI Water's 2008/09 Annual Information Return (AIR09) indicates an improvement of 7 points from the 2007/08 score which, while not exceptional, is within range of NI Water's next predicted milestone of 119 points by the end of the SBP period. (NB This is merely indicative analysis based on calculations and data which, as yet, has not been quality assured by the Utility Regulator. These figures are therefore subject to possible changes before the final determination.)

1.3.13. Achievement of NI Water's predicted performances in their PC10 Business Plan would yield the following OPA scores by the end of the SBP period (2009/10):

**Table 1.3 – England & Wales Water and Sewerage companies' OPA 2007-08 vs NI Water 2008-09 (See 1.3.12)**

Measure	MAX OPA Score	E&W Max Collated	E&W Max Co.	E&W Average Co.	E&W Min Co.	E&W Min Collated	NI Water
DG2 Risk of low pressure	38	37	36	36	34	34	4
DG3 Unplanned Interruptions	38	37	36	31	4	4	22
DG4 Hosepipe Restrictions	13	13	13	13	13	13	13
Customer Service Combined Score	38	38	38	31	20	11	18
Drinking Water Quality	50	49	48	46	47	42	5
Sewage Sludge disposal	13	13	13	13	13	13	13
Leakage Assessment	13	13	13	13	11	11	11
Water Pollution Incidents (High & Med)	13	13	13	12	13	8	6
Sewerage Pollution Incidents (High & Med)	25	25	25	23	24	19	3
Sewerage Pollution Incidents (Low)	13	13	13	11	11	8	5
STW consent breaches	50	50	50	46	50	25	5
<b>TOTAL</b>	<b>304</b>	<b>301</b>	<b>298</b>	<b>275</b>	<b>240</b>	<b>188</b>	<b>105</b>



1.3.14. By the end of the PC10 period (2012/13) NI Water predicts that its OPA scores will be as follows:

**Table 1.4 - England & Wales Water and Sewerage Company OPA 2007- 08 vs NI Water PC10 (Projected)**

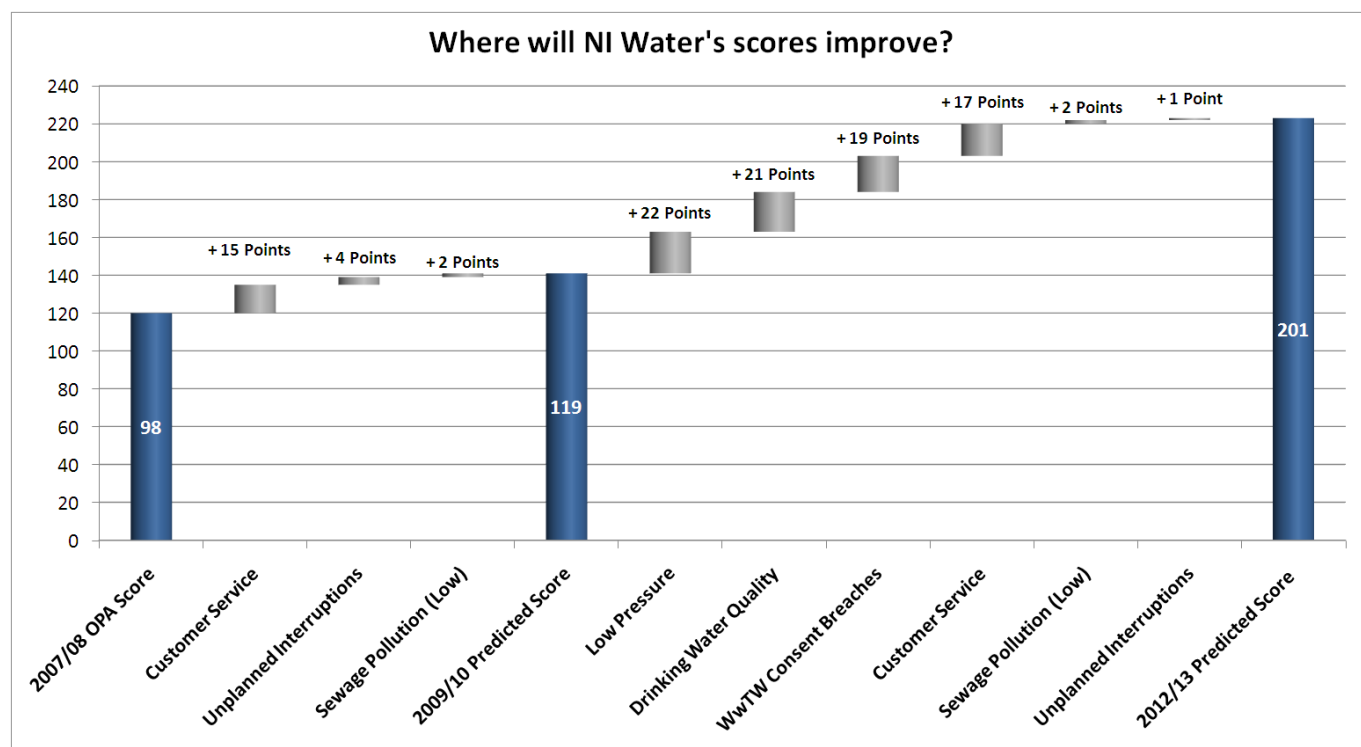
Measure	MAX OPA Score	E&W Max Collated	E&W Max Co.	E&W Average Co.	E&W Min Co.	E&W Min Collated	NI Water
DG2 Risk of low pressure	38	37	36	36	34	34	26
DG3 Unplanned Interruptions	38	37	36	31	4	4	27
DG4 Hosepipe Restrictions	13	13	13	13	13	13	13
Customer Service Combined Score	38	38	38	31	20	11	36
Drinking Water Quality	50	49	48	46	47	42	26
Sewage Sludge disposal	13	13	13	13	13	13	13
Leakage Assessment	13	13	13	13	11	11	13
Water Pollution Incidents (High & Med)	13	13	13	12	13	8	13
Sewerage Pollution Incidents (High & Med)	25	25	25	23	24	19	3
Sewerage Pollution Incidents (Low)	13	13	13	11	11	8	7
STW consent breaches	50	50	50	46	50	25	24
<b>TOTAL</b>	<b>304</b>	<b>301</b>	<b>298</b>	<b>275</b>	<b>240</b>	<b>188</b>	<b>201</b>

1.3.15. It should be noted that most, but not all of the measures in Tables 2 and 3 have been updated to reflect performance predictions from the SBP and PC10 Business Plan.

1.3.16. Where measures have not been updated the requisite data was either missing or questionable in NI Water's PC10 Business Plan.

1.3.17. The transition from 2007/08 to 2009/10 and on to 2012/13 (as predicted by NI Water) is summarised in the graph below:

**Figure 1.2 – Projected improvement to NI Water’s score**



1.3.18. As stated previously, these increases are considered by the Utility Regulator to be conservative estimates of NI Water’s improvement capability; the reasons for this are outlined below:

1.3.19. The Utility Regulator believes that NI Water has underestimated its ability to improve its OPA scores, that the performance outputs predicted for end of the PC10 period are insufficiently challenging and that they will be outperformed.

1.3.20. The current predicted increases are based solely on the OPA indicators used by the Utility Regulator in 2007/08. By the end of PC10 it is envisaged that the Utility Regulator OPA model will include more (if not all) of the OPA measures - it is predicted that this will also increase the company’s OPA score relative to England and Wales.

## A1.4. Drinking Water Quality

1.4.1. The issue of drinking water quality has been raised by NI Water as a particular point of concern in the OPA.

1.4.2. Although the drinking water supplied by NI Water is considered to be of high quality by the Northern Ireland Drinking Water Inspectorate, significant quality issues remain. These are mostly (but not exclusively) related to Trihalomethanes (THMs).

1.4.3. THMs are bi-products of the chlorination process and are particularly prevalent in water supplied from upland water sources and 'peaty' water catchment areas such as those in Northern Ireland.

1.4.4. Because NI Water has a particular problem with THMs, their six parameter Operational Performance Indicator (OPI 6) drinking water quality score (an average of 6 Mean Zonal Compliance figures) is lower than England and Wales. In 2007/08 NI Water's results for the OPI 6 measures were:

**Table 1.5 – NI Water MZC OPI 6 score 2007-08**

Measure	MZC %
Iron	98.89
Manganese	98.87
Faecal Coliforms	99.8
Turbidity	99.77
Aluminium	98.78
Trihalomethanes	79.37
Mean	95.91

1.4.5. The average score of 95.91 lies outside of the scoreable range of the OPA, and so in 2007/08 NI Water scored the minimum of 5 points, though NI Water predicts this will increase to 26 points by 2012/13.

1.4.6. When compared to the England and Wales average of 46 points this performance looks particularly concerning, though it should again be noted that unlike NI Water, the English and Welsh companies have benefited from twenty years of investment.

1.4.7. It is for this reason that NI Water raised drinking water quality as a particular area of concern in respect of the OPA.

1.4.8. It has been suggested that the Utility Regulator exclude the drinking water quality measure from the OPA.

1.4.9. The OPA implications of this are shown below:

**Table 1.6 – Predicted OPA performances**

	2007/08 OPA Score	Forecast OPA Score (2009/10)	Forecast OPA Score (2012/13)	OPA change 2007/08 to 2012/13	% Change 2007/08 to 2012/13	OPA change 2009/10 to 2012/13	% Change 2009/10 to 2012/13
Including Drinking Water Quality	98	119	201	+103	85%	+82	58%
Excluding Drinking Water Quality	93	115	192	+82	71%	+61	45%

1.4.10. As can be seen, NI Water stands to gain 82 OPA points, (an increase of 71% on the 2007/08 score) when the drinking water quality measure is removed, as opposed to an increase of 103 OPA points (or 85%) when drinking water quality is included.

1.4.11. The Utility Regulator, in keeping with the decision to use a conventional OPA model and following discussions with local quality regulators, has resolved to include the drinking water quality measure ‘as is’ in the OPA for PC10.

## A1.5. Conclusions

1.5.1. The Utility Regulator acknowledges the challenge that lies ahead of NI Water for the PC10 period and beyond.

1.5.2. We also welcome NI Water’s positive attitude to regulation, and its commitment to become ‘the number one Utility Company in the UK by 2014.’

1.5.3. We are encouraged by NI Water’s positive individual OPA performances to date, and the commitment to service that these represent.

1.5.4. However, the overall level of service provided is significantly lower than that provided by other companies in the industry which, while not without cause, is unacceptable for local consumers.

1.5.5. It is the Utility Regulator’s strong expectation that the foundation laid by NI Water’s unprecedented levels of capital spend to date, and its stated commitment to

service improvements going forward will increase their OPA scores vastly over PC10 and beyond.

1.5.6. Since a material degree of outperformance is expected against NI Water's own OPA projections we strongly recommend that the Department for Regional Development gives serious consideration to linking NI Water directors' bonuses to the company's OPA score, and set these based on more stringent expectations than those offered up in NI Water's PC10 Business Plan.