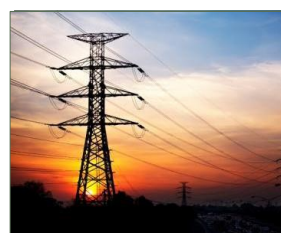


# Water and Sewerage Services

## Cost and Performance Report for 2016-17

An assessment of NI Water's costs and performance

March 2018



# About the Utility Regulator

The Utility Regulator is the independent non-ministerial government department responsible for regulating Northern Ireland's electricity, gas, water and sewerage industries, to promote the short and long-term interests of consumers.

We are not a policy-making department of government, but we make sure that the energy and water utility industries in Northern Ireland are regulated and developed within ministerial policy as set out in our statutory duties.

We are governed by a Board of Directors and are accountable to the Northern Ireland Assembly through financial and annual reporting obligations.

We are based at Queens House in the centre of Belfast. The Chief Executive leads a management team of directors representing each of the key functional areas in the organisation: Corporate Affairs; Electricity; Gas; Retail and Social; and Water. The staff team includes economists, engineers, accountants, utility specialists, legal advisors and administration professionals.

## Our Mission

Value and sustainability in energy and water.

## Our Vision

We will make a difference for consumers by listening, innovating and leading.

## Our Values

Be a best practice regulator: transparent, consistent, proportional, accountable, and targeted.

Be a united team.

Be collaborative and co-operative.

Be professional.

Listen and explain.

Make a difference.

Act with integrity.

## Abstract

We regulate the revenue NI Water receives through periodic price controls. Our proposals set an overall revenue requirement and identify the levels of capital and operational expenditure. This report reflects our assessment of NI Water's performance during the first two years of its third regulatory price control, PC15, covering the period from April 2015 to March 2021.

## Audience

Regulated utilities, regulatory community, industry, consumers and their representative bodies and statutory bodies.

## Consumer impact

This assessment provides consumers with an assessment on NI Water's performance to the end of 2016-17 in delivering the requirements of our price control and the associated commitments made to its consumers in its monitoring plan.

# Cost and Performance Report for 2016-17

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# Key Findings

The assessment of NI Water's performance undertaken for our 2016-17 Cost and Performance Report shows that in overall terms the company has largely delivered on their Monitoring Plan performance targets in the first two years of the PC15 price control period. The company outperformed its operational expenditure (opex) efficiency target, while at the same time continuing to deliver an improved overall level of service to consumers.

Our key findings are summarised by area below:

## Operating expenditure

NI Water's operating expenditure was £200.6m in 2016-17. This compares favourably to our regulatory allowance of £201.1m (in current prices), a difference of only £0.5m.

## Capital Investment

The company invested £154.3m of capital expenditure (capex) in 2016-17, contributing to a total investment of £298m in the first two years of the PC15 price control period. Capital investment in real terms has been constrained by the available public expenditure budget and we have worked with NI Water, DfI and other key stakeholders to ensure that the company delivers the best possible package of outputs within the funding available. We will continue to assess cumulative delivery over the medium term taking account of changes in budget, inflation and the delivery of capital efficiency.

## Outputs

We use an Overall Performance Assessment (OPA) score to assess NI Water's overall delivery of service to customers. This is a composite score which includes a broad range of measures covering service delivery in the areas of water supply, sewerage service, customer service and environmental performance. NI Water met our PC15 Overall Performance Assessment (OPA) target in 2016-17. Although performance was marginally lower than the company's highest ever OPA score in the previous year, we recognise that year on year improvements may no longer always be achievable due to the potential for the natural variability of some contributing data and environmental conditions to affect the overall score. We therefore consider this small drop in performance to be reflective of this and the scale of outperformance in 2015-16, rather than representing a cause for concern. Our final determination annual performance targets take account of this potential variability and therefore the company's ability to meet or outperform these targets remain our benchmark for successful delivery in the period, rather than year on year improvements.

The company met or exceeded planned delivery in all but three of the 45 Outputs set in the Monitoring Plan (see annex A). This includes 14 out of 15 consumer service measures and all of the water and sewerage quality outputs. NI Water delivered all of the nominated output targets and maintained stable serviceability.

Delivery of development objectives to improve planning capability in time to inform the business plan submission for PC21 is a key requirement for NI Water in PC15. In our PC15 mid-term review we considered progress on these outputs and expressed concern about whether NI Water could deliver them in time. In response, the company stated it still anticipated completing them in time to inform the PC21 business plan and we will assess delivery when reviewing PC15 outcomes in the PC21 price control determination process.

# 1.0 Introduction

## 1.1. Price Controls

- 1.1.1 Northern Ireland Water (NI Water) is responsible for providing water and sewerage services to consumers in Northern Ireland. Since NI Water is the sole provider of these services, the Utility Regulator (UR) regulates the amount of revenue the company receives. This ensures value for money for consumers. We therefore scrutinise the company's revenue requirements through periodic price controls.
- 1.1.2 NI Water is a government-owned provider of water and sewerage services. Financially, it is treated as a Non-Departmental Public Body (NDPB) since the majority of its income is from public funding. While domestic consumers do not directly pay for water charges, the cost of providing these services to commercial consumers is recovered through bills.
- 1.1.3 NI Water's third regulatory price control period of PC15 began on 1 April 2015 and will run for six years until 31 March 2021. It took account of a public expenditure capital budget provision of £990m, as indicated in the Department for Regional Development's (DRD's<sup>1</sup>) 2014 Social and Environmental Guidance, along with the UR's assessment of the efficient operational expenditure required.
- 1.1.4 Our [PC15 Final Determination](#), published in December 2014, set out the Revenue and output requirements for NI Water for the PC15 period. The company's public facing Monitoring Plan represents the company's commitment to deliver the outputs for consumers.
- 1.1.5 The next price control period (referred to as PC21) will commence in April 2021. We have started to develop our approach for PC21 and intend to publish our approach document in October 2018 following a period of engagement and consultation with all key stakeholders. Our approach for PC21 is likely to follow a similar model to that adopted for PC15 and expected to deliver a six year price control covering the period April 2021 to March 2027.

## 1.2. Cost and Performance Reports

- 1.2.1 We use Annual Information Returns and Cost and Performance Reports to assess and report on actual delivery against the requirements we set for the company in our price control final determinations. As a minimum our reports cover the key areas of costs and efficiency, operating expenditure, capital investment and delivery of KPIs (including our overall performance assessment score). However on occasions the reports may also be used to explain material issues or

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<sup>1</sup> The CPR makes reference to the Department for Regional Development (DRD). Under the Departments Act (Northern Ireland) 2016 and The Departments (Transfer of Functions) Order (Northern Ireland) 2016, the functions of DRD transferred to the Department for Infrastructure (DfI).

developments that have occurred during the reporting period. We produce and publish Cost and Performance Reports annually.

- 1.2.2 This report provides an assessment of company performance at the end of the second year (2016-17) of the 6 year PC15 price control period. In developing this report the Utility Regulator has adopted a proportionate approach consistent with the review of delivery in the first two years of longer delivery programme. It would be our intention to undertake more extensive assessments as the period progresses.
- 1.2.3 Performance has been assessed against the targets included in NI Water's Monitoring Plans for 2015-16 and 2016-17. These targets included adjustments agreed by stakeholders to account for public expenditure budget reductions in the first two years of the price control period and therefore differ slightly from those published in our final determination.
- 1.2.4 Our conclusion in overall terms, is that NI Water successfully delivered against the monitoring plan targets. The overall service provided to consumers continued to improve against a backdrop of budget reductions in nominal terms.

### **1.3. PC15 Mid-term Review**

- 1.3.1 In 2017 we also completed a [PC15 Mid-term Review](#), which was published on 14 February 2018.
- 1.3.2 In addition to considering performance to date, this review provided a forward look which considered the potential implications of ongoing cuts to NI Water's public expenditure budget allocation (in nominal terms) over the remainder of the PC15 period.
- 1.3.3 This concluded that NI Water should have sufficient funding to deliver all the outputs defined in the final determination if budget reductions over the remainder of the period were no more severe than they had been to date.
- 1.3.4 As a consequence we believe that the targets included in the final determination remain valid and intend to use these as the basis for reporting annual performance in future Cost and Performance reports.
- 1.3.5 Further details of some of the key conclusions relating to cost and performance reporting are provided in 'Section 6.0 - PC15 Mid-term review' below.

## 2.0 Costs and Efficiency

### 2.1. Overall Financial Performance

#### Turnover

- 2.1.1 The UR determines price limits (referred to as K factors) to be applied over the price control period. The K factors are the annual percentage increase or decrease in charges above or below inflation. An annual approval process is then operated to ensure tariffs are in line with the determination. The UR found the 2016-17 tariffs to be marginally lower than the permitted limit.
- 2.1.2 Actual turnover will vary from determination forecasts over time as inflation, volumes and accounting adjustments impact on the final reported turnover within the annual accounts. Actual turnover of £372.9m was lower than the PC15 forecast of £377.4m. However when adjusted for inflation it was c£9m more than anticipated, due to additional customer numbers and volumes.
- 2.1.3 We considered this matter further in our PC15 mid-term review and decided not to review tariffs. This is because we cannot be certain that the higher levels of revenue recovery will continue throughout the remainder of the PC15 period. We believe that PC21 is the most appropriate time to consider the need for any adjustments. This will allow us to take a balanced view of financial performance over the period and avoid making adjustments which prove to be inappropriate in the longer term. We therefore plan to adjust the RCV at the end of PC15 to reflect the over-recovery of revenue and return money to consumers. We also intend to actively consider a move to a revenue cap for PC21 in line with Northern Ireland Electricity Networks and the Gas Distribution Networks.

#### Operating Profit

- 2.1.4 The current cost operating profit of £56.9m was significantly higher than the PC15 forecast of £38.2m. The main reasons are lower current cost depreciation charges and operational expenditure offset by lower turnover as noted above. Depreciation allowances used in setting price limits are calculated on a different basis and therefore turnover and customer charges are unaffected by this differential. Operational expenditure is considered in more detail in 3.0 Operational Expenditure below.

#### Dividend

- 2.1.5 A dividend of £24.5m was paid to the company shareholder, the Department for Infrastructure, in respect of 2016-17. This level of dividend is marginally lower than projections in the PC15 final determination.

#### Loan Profile

- 2.1.6 Department for Infrastructure (DfI) loans increased to £1,013.6m from £983.6m but are lower compared to the PC15 projection of £1,095.0m. The difference can largely be explained by lower actual borrowings compared to forecast at the start of PC15 and lower capital expenditure during PC15 to date.



## Regulatory Capital Value

- 2.1.7 The Regulatory Capital Value (RCV) is the value of the appointed business on which NI Water earns a return at the determined weighted average cost of capital. The RCV is increased each year by investment in new assets and reduced by the value of assets that have been depreciated or sold off in the year. NI Water's RCV has grown steadily from the start of its first price control (PC10) and stands at £2.245 billion at the end of 2016-17. This is lower than the PC15 projection of £2.335 billion due to lower inflation than forecast and lower capital expenditure.
- 2.1.8 More detailed information on NI Water's financial information is set out in the company's statutory and regulatory accounts. These can be found in NI Water's annual report for each year which is published on its website<sup>2</sup>.

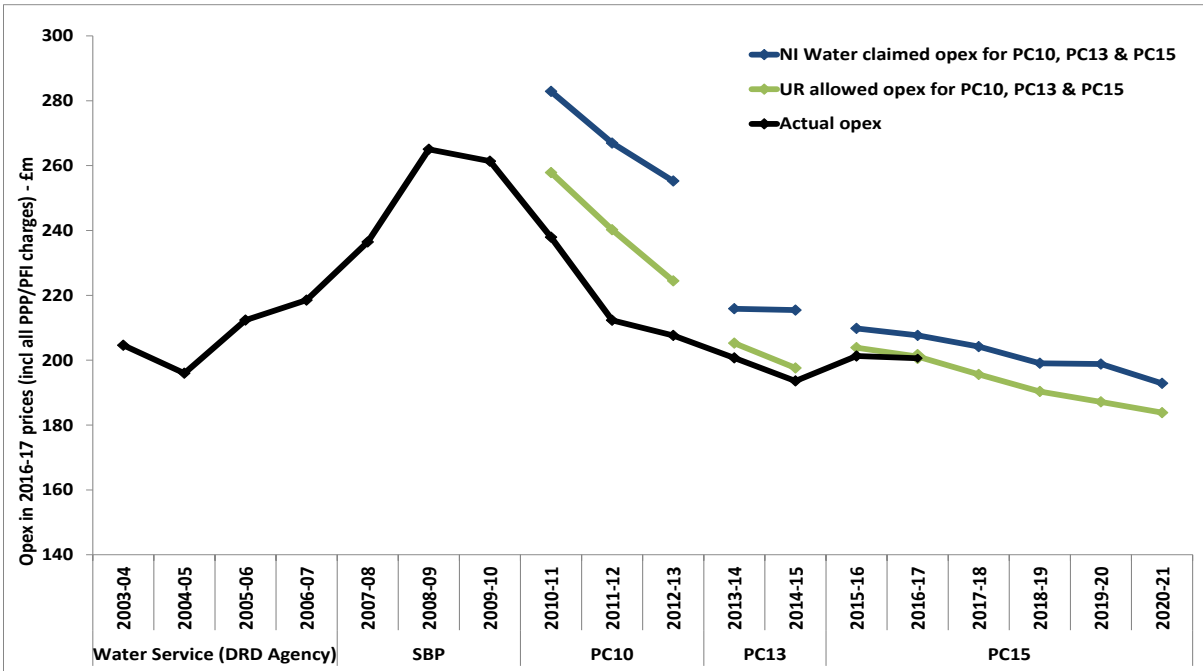
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<sup>2</sup> <https://www.niwater.com/publications/>

# 3.0 Operational Expenditure

- 3.1.1 NI Water’s operating costs (opex)<sup>3</sup> increased in nominal terms from £197.1m in 2015-16 to £200.6m in 2016-17. However, this £3.5m rise, translates into a 0.3% real terms reduction in the day-to-day running costs of the business over the year, once inflation is taken into account.
- 3.1.2 NI Water experienced real terms opex reductions in some expenditure items, such as power costs, but saw increases in other expenditure categories, such as hired & contracted services. Overall, this resulted in a slight real terms reduction in NI Water’s opex over the year.
- 3.1.3 NI Water’s £200.6m of opex spend in 2016-17 compares favourably to our regulatory allowance of £201.1m (in current prices), a difference of some £0.5m in-year.<sup>4</sup>
- 3.1.4 NI Water has so-far outperformed our regulatory allowance on opex during this PC15 period, as was the case in the previous price controls. This is shown in the figure below.<sup>5</sup>

**Figure 2.1 NI Water’s opex profile in real terms (2016-17 prices)**



<sup>3</sup> Operating costs also include PPP/PFI costs. PPP/PFI refers to Public Private Partnership / Private Finance Initiative schemes.

<sup>4</sup> This figure increases to £0.8m if Voluntary Early Retirement/Voluntary Severance (VER/VS) costs of £0.3m are excluded from actual spend. VER/VS was supported in principle by the Utility Regulator, but not funded through charges. Taking into account other expenditure items which could be classed as atypical in 2016-17 may increase opex outperformance further.

<sup>5</sup> The rise in NI Water’s opex in 2015-16 (first year of PC15) is primarily due to its rates bill increasing substantially over the year, driven by the LPS rating revaluation exercise.

## 3.2. Closing the Efficiency Gap

- 3.2.1 In previous Cost & Performance Reports, the UR compared NI Water's opex efficiency position with companies in England and Wales, on an annual basis. The estimates were derived using the UR's Corrected Ordinary Least Squares (COLS) econometric and unit cost models, as employed in the PC10, PC13 and PC15 determinations. These models were based on an Ofwat suite of models used for PR04 and PR09.
- 3.2.2 Over time our analysis showed a continuing improvement profile; however, a gap still remained to the best companies in England and Wales. According to our results NI Water closed their efficiency gap to the 'frontier', or best performing comparator company, from around 49% in 2007-08 to an estimated 13% in 2014-15 (our latest year of efficiency results).
- 3.2.3 The UR is currently developing a new methodology for the assessment of NI Water's efficiency gap. As comparator data becomes available we aim to update the efficiency gap estimates to inform the upcoming PC21 price control.

## 4.0 PC15 Performance

### 4.1. Performance against Monitoring Plan targets

- 4.1.1 Tables 2.1 and 2.2 report progress against the performance targets set in the company's Monitoring Plan. These targets include adjustments agreed by stakeholders to account for public expenditure budget reductions in the first two years of the price control period and therefore differ slightly from those published in our PC15 final determination. A consolidated summary is also included in Annex A.
- 4.1.2 Colour coding has been used to indicate whether NI Water has met or outperformed its target (green), is marginally behind target (amber) or is more significantly behind target (red). Where the company was required to deliver an annual target the shading is solid. Some targets are however set for PC15 as a whole and we report performance against these targets on a cumulative basis. In these cases the same colour coding has been used but the shading has been hatched.

#### Water Services Targets

**Table 2.1 – NI Water PC15 Key Outputs for Water Services**

Line description		2016-17 Target	2016-17 Actual	Comments
<b>A</b>	<b>Consumer Service Water</b>			
1	DG2 Properties at risk of low pressure removed from the risk register by company action	200	211	On track
2	DG2 Properties receiving pressure below the reference level at end of year	932	862	On track
3	DG3 Supply interruptions > 12hrs (unplanned and unwarned)	0.17%	0.06%	Target met
4	DG3 Supply interruptions (overall performance score)	1.05	0.66	Target met
5	DG6 % billing contacts dealt with within 5 working days	99.90%	99.98%	Target met
6	DG7 % written complaints dealt with within 10 working days	99.50%	100.00%	Target met
7	DG8 % metered customers received bill based on a meter reading	99.00%	99.52%	Target met
8	Call Handling Satisfaction score (1-5)	4.65	N/A	Target dropped
9	DG9 % calls not abandoned	99.00%	99.54%	Target met
10	DG9 % calls not receiving the engaged tone	99.90%	99.97%	Target met
11	Overall Performance Assessment (OPA) score (11 Measures)	221	228	Target met
12	Total Leakage (MI/d)	161	163	Marginally behind
13	Security of supply index	100	100	Target met
14	% NI Water's power usage derived from renewable sources	25.0%	35.5%	Target met
<b>B</b>	<b>Water Quality</b>			
15a	% overall compliance with drinking water regulations	99.79%	99.86%	Target met
15b	% compliance at consumers tap	99.69%	99.77%	Target met
16	% iron compliance at consumers tap	97.10%	98.66%	Target met
17	% Service Reservoirs with coliforms in >5% samples	0.00%	0.00%	Target met

<b>C</b>	<b>Water Outputs</b>			
<b>18</b>	Water mains activity - Length of new, renewed or relined mains (km)	237	289	On track
<b>19</b>	Completion of nominated trunk main schemes	3	3	On track
<b>20</b>	Completion of nominated water treatment works schemes	1	1	On track
<b>21</b>	Completion of nominated improvements to increase the capacity of service reservoirs and clear water tanks	0	0	No output yrs 1&2
<b>D</b>	<b>Serviceability</b>			
<b>22</b>	Water infrastructure serviceability	Stable	Stable	Target met
<b>23</b>	Water non-infrastructure serviceability	Stable	Stable	Target met
<b>E</b>	<b>New Output Measures</b>			
<b>24</b>	Number of Catchment Management Plans	10	10	On track
<b>25</b>	Number of lead communication pipes replaced under the proactive lead replacement programme	3,688	3,789	Target met
<b>26</b>	Number of school visits	352	534	Target met
<b>27</b>	Number of other education events	114	129	Target met
<b>28</b>	% Service Reservoirs where sample taps have been assessed and are to required standard	50%	0%	Behind target

4.1.3 NI Water met or outperformed almost all of the consumer service and water output objectives for 2016-17.

4.1.4 Use of the call handling satisfaction measure was discontinued in 2016-17 as agreed by the Consumer Engagement Oversight Group (CEOG), comprising of all key stakeholders. This is a consequence of the work undertaken by the group to develop more consumer focused metrics and 'actionable' measures of customer satisfaction during PC15, to inform and potentially set new KPIs for PC21.

4.1.5 The original survey is no longer used and has been replaced by a new unannounced survey of customers who have had need of contacting NI Water in the recent past. The new survey includes a new customer advocacy measure to compare NI Water to its peers both internationally and across other service providers as well as yearly Omnibus customer advocacy results from a representative sample of all NI Water consumers. Conducting the survey in PC15 allows consideration of whether any new targets ought to be introduced for PC21.

4.1.6 For the purposes of assessing overall performance in the remaining years of PC15, CEOG has agreed that a score of 4.65 (equivalent to NI Water's best ever performance for the discontinued survey) should be used to calculate the company's OPA score.

4.1.7 The company only fell below target in two areas:

- Leakage was slightly higher than the target figure. Whilst the level of exceedance is not considered material at this stage, we expect the company to take action to bring performance back on track as soon as possible.
- The company did not meet its adjusted monitoring plan target for the percentage of Service Reservoirs where sample taps have been assessed and are to the required standard. At the end of 2016-17 the company had not assessed any sample taps under this programme of work. The company's information return stated it proposed completing 70% of the programme by the

end of 2017-18 and all of the assessments (and any necessary upgrades) by the end of 2018-19. We expect this to be the case as this is necessary to address Drinking Water Inspectorate concerns in relation to unrepresentative samples and ensure that investment planning for PC21 is based on data which is as robust as possible.

## Sewerage Service Targets

**Table 2.2 – NI Water PC15 Key Outputs for Sewerage Services**

Line description		2016-17 Target	2016-17 Actual	Comments
<b>A</b>	<b>Consumer Service Sewerage</b>			
1	DG5 Properties at risk of flooding - number removed from 2 in 10, 1 in 10 and 1 in 20 risk register by company action.	14	14	On track
2	DG5 Properties on the 2 in 10, 1 in 10 and 1 in 20 risk register at the end of the year	158	156	On track
<b>B</b>	<b>Quality Sewerage</b>			
3	% of WwTWs discharges compliant with numeric consents	92.4%	93.6%	Target met
4	% of total p.e. served by WwTWs compliant with numeric consents excluding upper tier failures	98.26%	98.90%	Target met
5	Small WwTW compliance (works greater than or equal to 20p.e. but less than 250p.e.)	83.99%	83.99%	Target met
6	Number of high and medium pollution incidents attributable to NI Water	27	22	Target met
<b>C</b>	<b>Sewerage Outputs</b>			
7	Sewerage activity - Length of sewers replaced or renovated (km)	23	26	On track
8	Delivery of improvements to nominated UIDs as part of a defined programme of work	37	37	On track
9	Delivery of improvements to nominated WwTWs as part of a defined programme of work	5	5	On track
10	Small wastewater treatment works delivered as part of the rural wastewater investment programme	9	12	On track
<b>D</b>	<b>Serviceability</b>			
11	Sewerage infrastructure serviceability	Stable	Stable	Target met
12	Sewerage non-infrastructure serviceability	Stable	Stable	Target met
<b>E</b>	<b>New Output Measures</b>			
13	CSO and EO discharges at which event and duration monitoring equipment has been installed	58	0	Behind target
14	WwTWs upgraded to comply with PPC Regulations	0	0	No output for yrs 1&2
15	Impermeable surface water collection area removed from the combined sewerage network	57,000	83,424	On track
16	Number of sustainable WwTW solutions delivered (p.e. ≥ 250)	1	2	On track
17	Number of sustainable WwTW solutions delivered (p.e. < 250)	0	1	On track

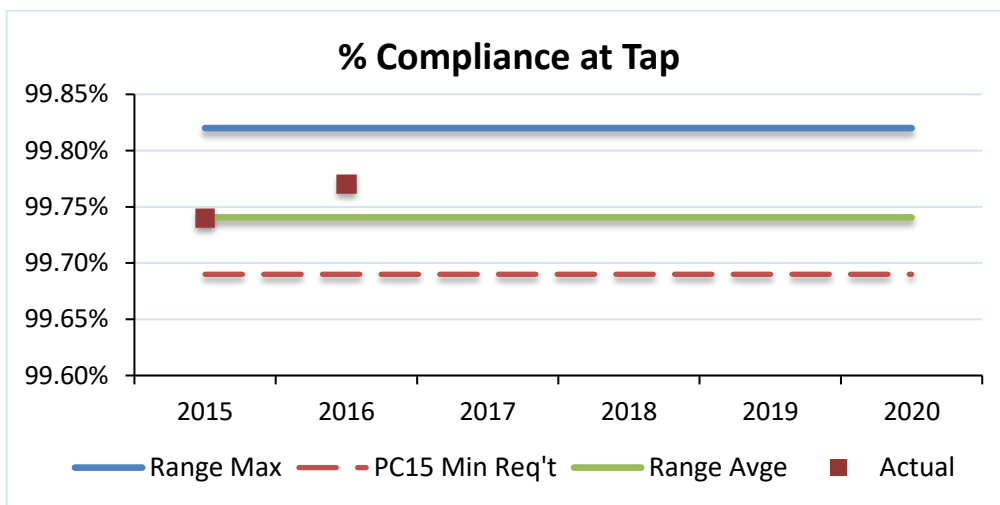
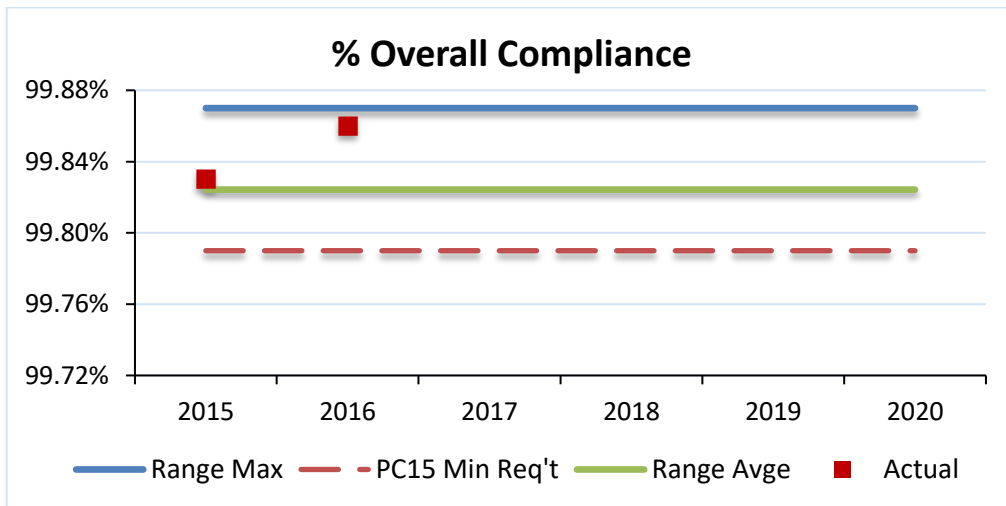
4.1.8 NI Water met or outperformed all but one of the sewerage service output objectives for 2016-17:

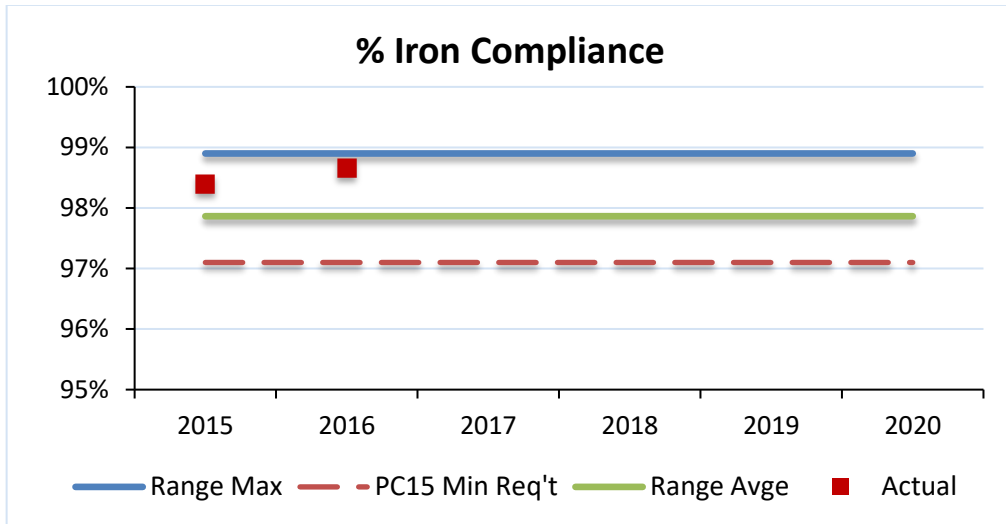
- The company did not meet its adjusted monitoring plan target for the number of discharges at which event and duration monitoring equipment has been installed. At the end of 2016-17 NI Water had not installed any equipment

under this programme of work. The company has indicated that it will have completed all of the planned installations by the end of PC15 period and will prioritise work associated with the strategic Living with Water Programme (LWWP). We expect the company to progress this work as quickly as possible as it is necessary to help inform investment planning for PC21 and the ecosystem modelling being undertaken for Living with Water.

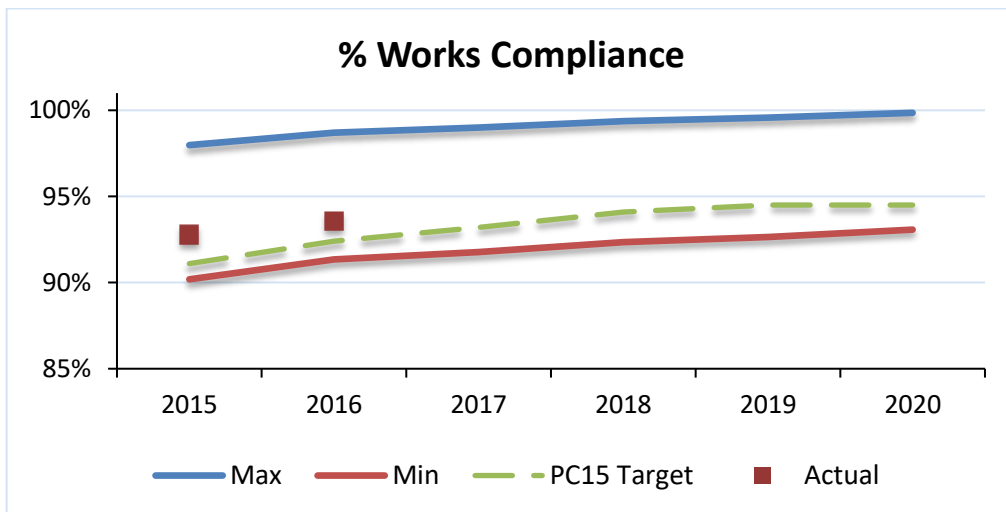
## Quality Compliance

- 4.1.9 Performance against some targets can be affected by things outside the company's control, such as the weather or sampling regimes. For PC15 we identified performance ranges for water and wastewater quality which reflected this inherent variability. The specific annual targets which were based on these ranges were all met in the 2016 calendar year as shown in Tables 2.1 and 2.2.
- 4.1.10 The PC15 water quality output targets were set just above the lower limits of the estimated performance ranges, with the company expected to outperform these consistently throughout the period. In 2016, performance for all these measures (overall water quality compliance, compliance at consumers' taps and iron compliance) lay well above the minimum compliance requirements in the upper half of the performance range as shown in the graphs below.



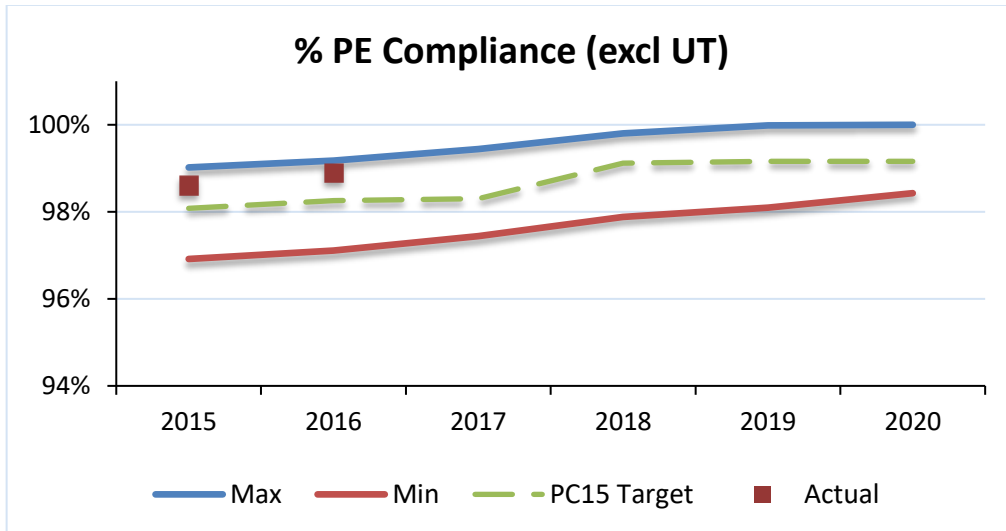


4.1.11 The PC15 targets for wastewater compliance, measured on the basis of the percentage of treatment works complying, were set at the lower end of our projected operating range. Although this was considered to represent a reasonable assessment of the operating risk, we noted in the final determination that we would expect the company to generally operate at or above this level during PC15. Performance in 2016 lay above this target, just below the midpoint of the range, as shown below.



4.1.12 The PC15 targets for wastewater compliance, measured on the basis of the population served, were set roughly at the mid-point of our projected operating range. Performance in 2016 lay well above target, towards the top of the range, as shown below.



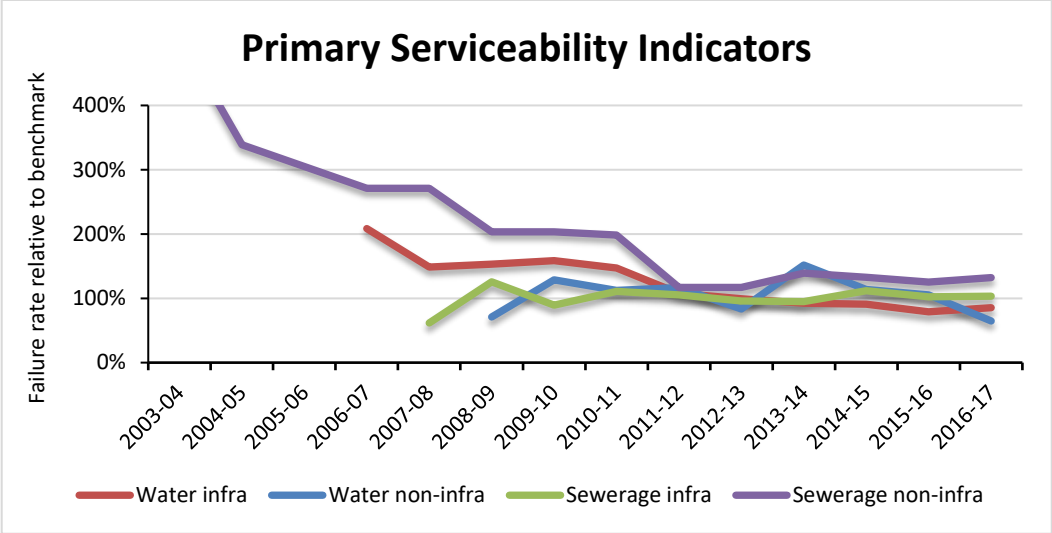


## Serviceability

- 4.1.13 We use trends for a range of primary and secondary serviceability indicators to assess how the company is maintaining its assets.
- 4.1.14 We have updated our PC15 final determination serviceability assessment for each primary and secondary indicator to include outturn data for 2015-16 and 2016-17. The updated trends of the primary indicators in the four service areas are shown below. All show stable (horizontal) or improving (reducing) trends and so we have concluded that serviceability remains stable overall.

Service	Primary service indicator
Water Infra	Mains bursts per 1,000km
Water Non-infra	Percentage of regulatory samples taken for Turbidity at WTWs which exceed 0.8 NTU
Sewerage Infra	Sewer collapses per 1,000km
Sewerage Non-infra	Number of WwTWs with one or more compliance sample result (BOD, SS or Ammonia) exceeding the numeric consent value

**Figure 4.1 – Primary serviceability indicator trends<sup>6</sup>**



- 4.1.15 While our current assessment is that serviceability remains stable overall, we note that a number of primary and secondary indicators, distributed across all service areas, have shown sustained improvement and have performance which is now better than predicted by the performance range.
- 4.1.16 The control limits for these indicators were reviewed in our PC15 Mid-term review where we concluded that we should wait until PC21 before any making adjustments. This approach aligns with normal regulatory practice and will allow the reassessment to benefit from additional years of performance data and confirmation of whether the improvements continue to be sustained.
- 4.1.17 We note that performance for the THM water quality secondary indicator has been deteriorating year on year since 2013-14 and now lies significantly above the upper control limit. We would have expected NI Water to have taken early action to address a sustained deterioration in performance for this key water quality parameter. NI Water has provided a copy of its action plan as evidence of how it is addressing this issue, however the content raises concerns over the timeliness of the company’s response. NI Water needs to determine the root cause of this deterioration quickly so that remedial action can be taken to restore performance to previously achieved levels as quickly as possible.

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<sup>6</sup> A score of 100% represents operation at the reference level benchmark and a horizontal trend around this benchmark is indicative of stable serviceability.

## 5.0 Capital Expenditure

5.1.1 NI Water invested £154m in 2016-17 to:

- Maintain its existing assets;
- Meet more demanding quality obligations;
- Provide extra capacity for growth; and
- Improve the levels of service it currently provides.

5.1.2 Due to reductions in public expenditure budgets, investment in the first two years of PC15 was £298m, £19m lower than the nominal figure of £317m included in the PC15 final determination. This has constrained NI Water's ability to deliver the PC15 outputs in real terms even after the benefits of lower than anticipated inflation is taken into account.

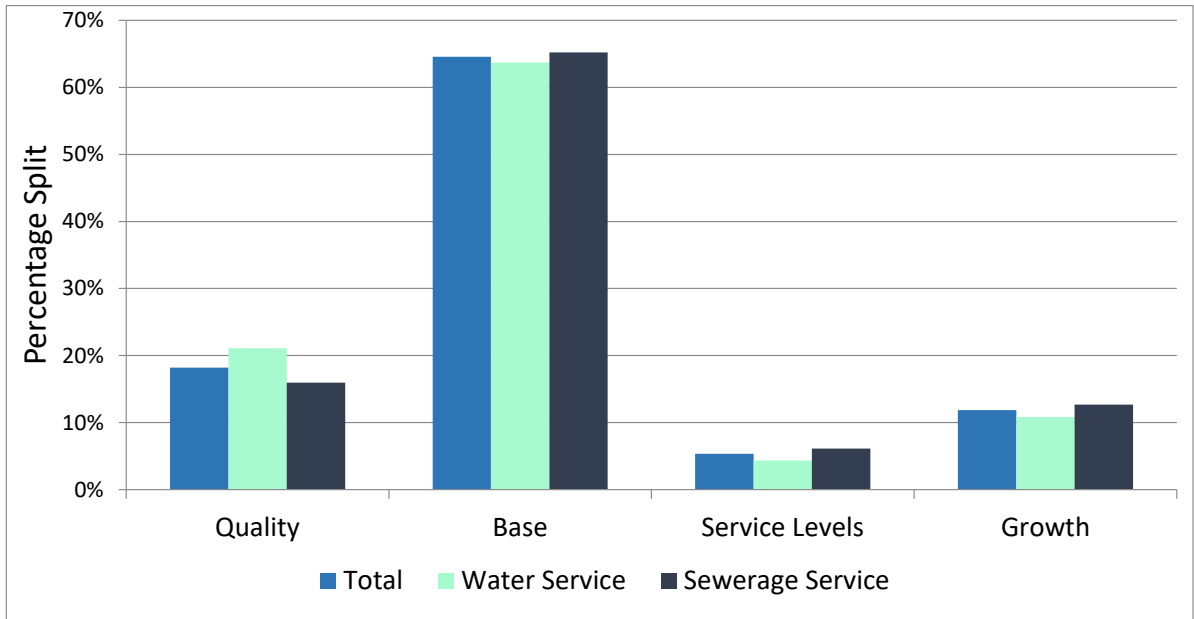
5.1.3 The reduction from the figures included in the PC15 final determination result from public expenditure capital budget allocations being lower than anticipated in the first two years of the price control. In line with the approach set out in our PC15 final determination, we have worked with NI Water, DfI and other key stakeholders to ensure that the company continues to deliver the best possible package of outputs within the funding available.

5.1.4 When assessing the impact of budget reductions on output delivery, we took account of the fact that inflation has been lower than we assumed in our final determination for PC15 and the capital efficiency challenge which forms an integral part of the final determination. Lower inflation and improved efficiency should allow the company to deliver more for less, and we expect the company to build these opportunities into its medium term plans.

5.1.5 Our review of delivery to the end of 2016-17 shows that some major sewerage projects, which deliver priority nominated outputs in PC15, continue to be subject to delay. We welcome the company's acknowledgement during our PC15 mid-term review that this should be recoverable, provided that inflation remains as projected and budget reductions in the future are no more severe than they have been in the past. NI Water should commit to the delivery of the nominated outputs identified in the final determination on this basis and ensure that it is able to accelerate other work if any programme delays occur so that this remains achievable.

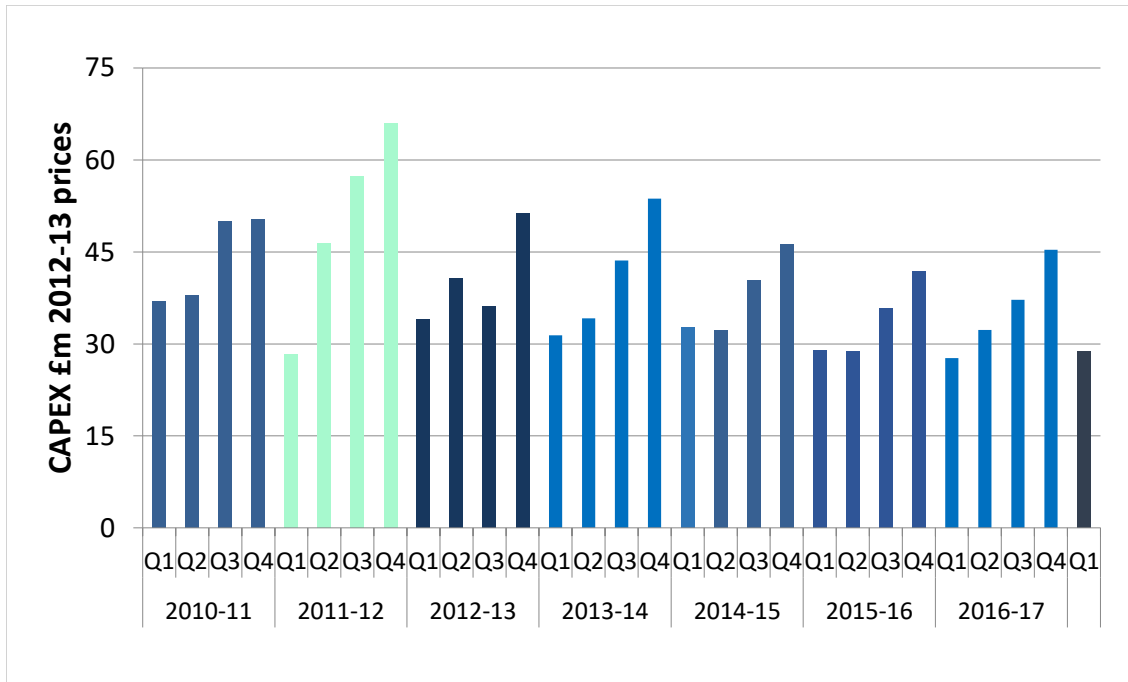
5.1.6 The allocation of investment by purpose in 2016-17 is shown in Figure 4.1 below. Investment to maintain existing assets (base maintenance expenditure) is 65% an increase of 6% from the previous year. The remaining 35% is allocated between improvements in quality, improved services to consumers and growth.

**Figure 4.1: Allocation of investment in 2016-17 by service and purpose**



- 5.1.7 The investment to maintain the company’s existing assets and the service they deliver is the largest element the company’s capital programme by proportion. In 2016-17, the company invested £100m in base maintenance contributing to an overall investment of £186m in the price control period to date. This is £12m higher than the allowance in the PC15 final determination in nominal terms.
- 5.1.8 However, because inflation has been lower than assumed in the final determination, we would have expected the company to have spent less maintaining serviceability. NI Water’s ability to deliver the outputs defined for the PC15 period will depend on it managing the balance between ‘base’ and ‘enhancement’ expenditure effectively over the period as a whole. This should take account of movements in inflation and be informed by associated performance, including serviceability trends. We will continue to monitor whether this occurs.
- 5.1.9 In previous Cost and Performance Reports, we have highlighted a consistent annual cycle of expenditure. Peak levels of investment occur in the winter months and expenditure is at its lowest level in the first quarter of each year. Figure 3.2 shows that this trend has continued throughout PC15 to date. This cycle of investment, driven by annual spending constraints, remains disruptive for the supply chain and detrimental to efficient delivery and could be assisted by longer term budget allocations and end of year flexibility.

**Figure 3.2: Capital investment from 2010-11 to 2017-18 Q1 by quarter**



5.1.10 Over the first two years of the PC15 six year price control, delivery has been constrained by a reduction in the public expenditure capital budget available to NI Water and it has had to respond to the challenges which come from project development and procurement. However work undertaken in our PC15 mid-term review indicates that all the outputs identified in the PC15 final determination should be deliverable over the period as a whole. We will continue to assess cumulative delivery over the remainder of PC15 on this basis, taking account of changes in budget, inflation and the delivery of capital efficiency.

# 6.0 Customer Service

## 6.1. How Customer Service is assessed

6.1.1 In order to fully assess how NI Water is performing, we have adopted the Overall Performance Assessment (OPA) framework. This monitors the overall level of service that NI Water provides to its customers.

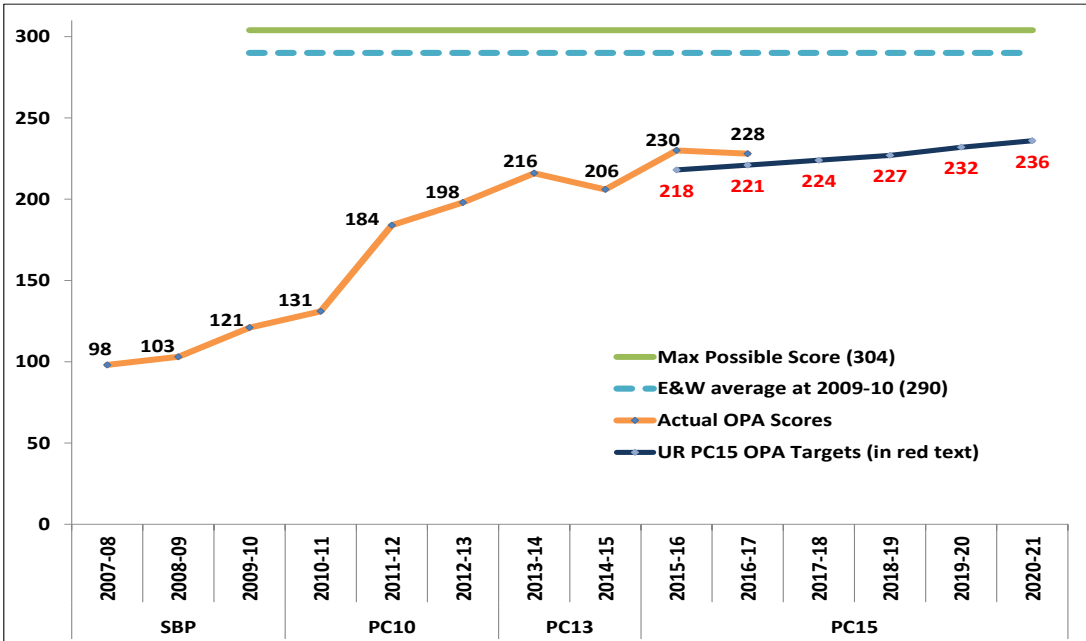
6.1.2 Our OPA combines 11 individual service measures and scores them against a reasonable range. Scores are then weighted in order of importance and combined to give an overall picture of service level performance.

## 6.2. OPA Performance

6.2.1 The chart below details NI Water’s actual OPA scores. Key messages include:

- With a score of 228, NI Water outperformed our PC15 OPA target (of 221) for 2016-17 by 7 points. Performance was down slightly on the previous year, from a score of 230.
- Over the 2016-17 year, service levels improved in the areas of risk of low pressure, unplanned interruptions, customer contact and sewage treatment works compliance. Service levels declined in the areas of drinking water quality and leakage assessment compared to the previous year.
- Although there is still a service gap with England and Wales (E&W) companies (who achieved an average score of 290 in 2009-10), the scale of the gap has been closed markedly by NI Water.

**Figure 5.1: NI Water’s OPA scores**



## 7.0 PC15 Mid-term review

### 7.1. PC15 Mid-term review process

7.1.1 In developing our approach for PC15 we introduced the concept of a planned midterm review (MTR) during PC15 in order to:

- Allow for managed changes in funding;
- Provide an opportunity to implement innovative and sustainable solutions that might develop from the strategic studies and pilot projects;
- Provide the opportunity to deal with material changes which might accumulate over a 6 year price control period and result in a stepped change in prices at the start of the next price control; and
- Avoid the regulatory burden associated with continuous change by introducing a single opportunity for re-opening the financial determination for PC15.

7.1.2 Section 7.4 of our PC15 final determination<sup>7</sup> developed on this concept further and set out our views on the potential extent and scope of the MTR along with an indicative timetable.

7.1.3 We published our [PC15 Mid-term Review Approach](#) document in May 2017, following a period of engagement with the company and other key stakeholders. The review was completed during 2017 and our [Final PC15 Mid-term Review Report](#) was published on 14 February 2018.

7.1.4 This review took a longer term view of the potential implications of ongoing cuts to NI Water's public expenditure budget allocation in nominal terms during the PC15 period and some key conclusions are provided below.

### 7.2. Conclusions on Output Delivery and Performance Monitoring

7.2.1 Our mid-term review concluded that NI Water should have sufficient funding to deliver all the outputs defined in the final determination if budget reductions over the remainder of the period are no more severe than they have been to date.

7.2.2 As a consequence we believe that the targets included in the final determination remain valid and intend to use these as the basis for reporting annual performance in future Cost and Performance reports. This will help avoid the confusion associated with the use of adjusted outputs and provide clarity to stakeholders and consumers in relation to the outputs that the company is expected to deliver.

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<sup>7</sup> [http://www.uregni.gov.uk/water/price\\_control/pc15/final\\_determination](http://www.uregni.gov.uk/water/price_control/pc15/final_determination)

- 7.2.3 In recognition of our decision to revert to the original final determination targets for ongoing cost and performance reporting, we have also included our assessment of performance to date when measured on this basis in Annex B to this report.
- 7.2.4 This shows that NI Water has performed well against the original customer service and water service targets. Performance for some of the sewerage service measures is lagging slightly behind target as a consequence of the impact of capital budget constraints in the first two years of PC15.
- 7.2.5 However NI Water agrees with our mid-term review conclusion that it should be able to recover this position and deliver all the PC15 requirements if the budgetary and inflationary projections assumed in the review remain valid.

### **7.3. Conclusions on Development Objectives and Preparation for PC21**

- 7.3.1 The promotion of long term planning was a key component of our approach to PC15. In Section 5.2 of our [2015-16 Cost and Performance Report](#) we noted concerns over progress on a number of the 18 key development objectives which were included and funded in PC15 and are considered critical to improving NI Water's planning capability and better informing investment planning for PC21.
- 7.3.2 The work undertaken in our PC15 mid-term review reinforced concerns over whether all the development work and preparatory work could be completed in time to deliver the anticipated improvements in the company's PC21 business plan.
- 7.3.3 In its response to our mid-term review, the company stated that it still anticipated delivering on these requirements in time to inform the PC21 business plan. In our opinion this will require a significant and concerted effort and we will check on delivery when assessing PC15 outcomes as part of the PC21 price control determination process.



## Annex A – Assessment of 2016-17 Performance against adjusted Monitoring Plan Targets

### NI Water PC15 Key Outputs for Water Services to end of 2016-17

Line description		2016-17 Target	2016-17 Actual	Comments
<b>A</b>	<b>Consumer Service Water</b>			
1	DG2 Properties at risk of low pressure removed from the risk register by company action	200	211	On track
2	DG2 Properties receiving pressure below the reference level at end of year	932	862	On track
3	DG3 Supply interruptions > 12hrs (unplanned and unwarned)	0.17%	0.06%	Target met
4	DG3 Supply interruptions (overall performance score)	1.05	0.66	Target met
5	DG6 % billing contacts dealt with within 5 working days	99.90%	99.98%	Target met
6	DG7 % written complaints dealt with within 10 working days	99.50%	100.00%	Target met
7	DG8 % metered customers received bill based on a meter reading	99.00%	99.52%	Target met
8	Call Handling Satisfaction score (1-5)	4.65	N/A	Target dropped
9	DG9 % calls not abandoned	99.00%	99.54%	Target met
10	DG9 % calls not receiving the engaged tone	99.90%	99.97%	Target met
11	Overall Performance Assessment (OPA) score (11 Measures)	221	228	Target met
12	Total Leakage (MI/d)	161	163	Marginally behind
13	Security of supply index	100	100	Target met
14	% NI Water's power usage derived from renewable sources	25.0%	35.5%	Target met
<b>B</b>	<b>Water Quality</b>			
15a	% overall compliance with drinking water regulations	99.79%	99.86%	Target met
15b	% compliance at consumers tap	99.69%	99.77%	Target met
16	% iron compliance at consumers tap	97.10%	98.66%	Target met
17	% Service Reservoirs with coliforms in >5% samples	0.00%	0.00%	Target met
<b>C</b>	<b>Water Outputs</b>			
18	Water mains activity - Length of new, renewed or relined mains (km)	237	289	On track
19	Completion of nominated trunk main schemes	3	3	On track
20	Completion of nominated water treatment works schemes	1	1	On track
21	Completion of nominated improvements to increase the capacity of service reservoirs and clear water tanks	0	0	No output yrs 1&2
<b>D</b>	<b>Serviceability</b>			
22	Water infrastructure serviceability	Stable	Stable	Target met
23	Water non-infrastructure serviceability	Stable	Stable	Target met
<b>E</b>	<b>New Output Measures</b>			
24	Number of Catchment Management Plans	10	10	On track
25	Number of lead communication pipes replaced under the proactive lead replacement programme	3,688	3,789	Target met
26	Number of school visits	352	534	Target met
27	Number of other education events	114	129	Target met
28	% Service Reservoirs where sample taps have been assessed and are to required standard	50%	0%	Behind target

## NI Water PC15 Key Outputs for Sewerage Services to end of 2016-17

Line description		2016-17 Target	2016-17 Actual	Comments
<b>A</b>	<b>Consumer Service Sewerage</b>			
1	DG5 Properties at risk of flooding - number removed from 2 in 10, 1 in 10 and 1 in 20 risk register by company action.	14	14	On track
2	DG5 Properties on the 2 in 10, 1 in 10 and 1 in 20 risk register at the end of the year	158	156	On track
<b>B</b>	<b>Quality Sewerage</b>			
3	% of WwTWs discharges compliant with numeric consents	92.4%	93.6%	Target met
4	% of total p.e. served by WwTWs compliant with numeric consents excluding upper tier failures	98.26%	98.90%	Target met
5	Small WwTW compliance (works greater than or equal to 20p.e. but less than 250p.e.)	83.99%	83.99%	Target met
6	Number of high and medium pollution incidents attributable to NI Water	27	22	Target met
<b>C</b>	<b>Sewerage Outputs</b>			
7	Sewerage activity - Length of sewers replaced or renovated (km)	23	26	On track
8	Delivery of improvements to nominated UIDs as part of a defined programme of work	37	37	On track
9	Delivery of improvements to nominated WwTWs as part of a defined programme of work	5	5	On track
10	Small wastewater treatment works delivered as part of the rural wastewater investment programme	9	12	On track
<b>D</b>	<b>Serviceability</b>			
11	Sewerage infrastructure serviceability	Stable	Stable	Target met
12	Sewerage non-infrastructure serviceability	Stable	Stable	Target met
<b>E</b>	<b>New Output Measures</b>			
13	CSO and EO discharges at which event and duration monitoring equipment has been installed	58	0	Behind target
14	WwTWs upgraded to comply with PPC Regulations	0	0	No output for yrs 1&2
15	Impermeable surface water collection area removed from the combined sewerage network	57,000	83,424	On track
16	Number of sustainable WwTW solutions delivered (p.e. ≥ 250)	1	2	On track
17	Number of sustainable WwTW solutions delivered (p.e. < 250)	0	1	On track

## Annex B – Assessment of Performance against original Final Determination Targets

### NI Water PC15 Key Outputs for Water Services to end of 2016-17

Line description		2016-17 FD Target	2016-17 Actual	Comments
<b>A</b>	<b>Consumer Service Water</b>			
1	DG2 Properties at risk of low pressure removed from the risk register by company action	200	211	On track
2	DG2 Properties receiving pressure below the reference level at end of year	932	862	On track
3	DG3 Supply interruptions > 12hrs (unplanned and unwarned)	0.17%	0.06%	Target met
4	DG3 Supply interruptions (overall performance score)	1.05	0.66	Target met
5	DG6 % billing contacts dealt with within 5 working days	99.90%	99.98%	Target met
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8	Call Handling Satisfaction score (1-5)	4.65	N/A	Target dropped
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12	Total Leakage (Ml/d)	161	163	Marginally behind
13	Security of supply index	100	100	Target met
14	% NI Water's power usage derived from renewable sources	25.0%	35.5%	Target met
<b>B</b>	<b>Water Quality</b>			
15a	% overall compliance with drinking water regulations	99.79%	99.86%	Target met
15b	% compliance at consumers tap	99.69%	99.77%	Target met
16	% iron compliance at consumers tap	97.10%	98.66%	Target met
17	% Service Reservoirs with coliforms in >5% samples	0.00%	0.00%	Target met
<b>C</b>	<b>Water Outputs</b>			
18	Water mains activity - Length of new, renewed or relined mains (km)	274	289	On track
19	Completion of nominated trunk main schemes	1	3	On track
20	Completion of nominated water treatment works schemes	1	1	On track
21	Completion of nominated improvements to increase the capacity of service reservoirs and clear water tanks	0	0	No output yrs 1&2
<b>D</b>	<b>Serviceability</b>			
22	Water infrastructure serviceability	Stable	Stable	Target met
23	Water non-infrastructure serviceability	Stable	Stable	Target met
<b>E</b>	<b>New Output Measures</b>			
24	Number of Catchment Management Plans	13	10	Marginally behind
25	Number of lead communication pipes replaced under the proactive lead replacement programme	3,688	3,789	Target met
26	Number of school visits	352	534	Target met
27	Number of other education events	114	129	Target met
28	% Service Reservoirs where sample taps have been assessed and are to required standard	100%	0%	Behind target

## NI Water PC15 Key Outputs for Sewerage Services to end of 2016-17

Line description		2016-17 Target	2016-17 Actual	Comments
<b>A</b>	<b>Consumer Service Sewerage</b>			
1	DG5 Properties at risk of flooding - number removed from 2 in 10, 1 in 10 and 1 in 20 risk register by company action.	16	14	Marginally behind
2	DG5 Properties on the 2 in 10, 1 in 10 and 1 in 20 risk register at the end of the year	146	156	Behind target
<b>B</b>	<b>Quality Sewerage</b>			
3	% of WwTWs discharges compliant with numeric consents	92.4%	93.6%	Target met
4	% of total p.e. served by WwTWs compliant with numeric consents excluding upper tier failures	98.26%	98.90%	Target met
5	Small WwTW compliance (works greater than or equal to 20p.e. but less than 250p.e.)	86.97%	83.99%	Behind target
6	Number of high and medium pollution incidents attributable to NI Water	27	22	Target met
<b>C</b>	<b>Sewerage Outputs</b>			
7	Sewerage activity - Length of sewers replaced or renovated (km)	23	26	On track
8	Delivery of improvements to nominated UIDs as part of a defined programme of work	43	37	Marginally behind
9	Delivery of improvements to nominated WwTWs as part of a defined programme of work	7	5	Marginally behind
10	Small wastewater treatment works delivered as part of the rural wastewater investment programme	15	12	Marginally behind
<b>D</b>	<b>Serviceability</b>			
11	Sewerage infrastructure serviceability	Stable	Stable	Target met
12	Sewerage non-infrastructure serviceability	Stable	Stable	Target met
<b>E</b>	<b>New Output Measures</b>			
13	CSO and EO discharges at which event and duration monitoring equipment has been installed	115	0	Behind target
14	WwTWs upgraded to comply with PPC Regulations	0	0	No output for yrs 1&2
15	Impermeable surface water collection area removed from the combined sewerage network	60,000	83,424	On track
16	Number of sustainable WwTW solutions delivered (p.e. ≥ 250)	1	2	On track
17	Number of sustainable WwTW solutions delivered (p.e. < 250)	0	1	On track