

Final determination of in-period ODIs for 2016-17

About this document

This document is notice of our final determination of the level of change to the Price Controls for Anglian Water Services Limited, South West Water Limited and Severn Trent Water Limited in respect of the 2018-19 Charging Year. These changes are as a result of each company's performance against its in-period outcome delivery incentives (ODI). The specific changes and our reasoning for these is set out in full in this document.

Water companies provide vital public services on which we all depend. It is important that these services are provided to the standards that customers expect. Most customers in England and Wales cannot choose their water supplier, therefore to encourage companies to deliver more of what their customers need and want we introduced ODIs at the 2014 price review (PR14). ODIs result in companies being penalised if they fall short of their commitments to customers. When companies deliver more of what customers want and outperform their commitments, they can earn outperformance payments. As a result, ODIs encourage companies to deliver more of what matters to customers, such as lower leakage, fewer supply interruptions and fewer incidents of sewer flooding.

Most companies have ODIs that we will calculate at the 2019 price review (PR19) and which we will implement from 2020 onwards, affecting customer bills in the period 2020-2025 (we call these "end-of-period" ODIs). For the current price control period three companies adopted ODIs that see their performance reflected in payments within this control period (we call these "in-period" ODIs). The three companies are Anglian Water, South West Water and Severn Trent Water. In-period ODIs bring the financial impact of an ODI closer in time to the performance that generated it, focussing management on delivery and improving the accountability of companies to their customers. In-period ODIs also make it less likely that payments related to current performance are paid for, or received by, future customers.

This year Anglian Water has earned an outperformance payment for reducing the amount of water that leaks from its network beyond the commitment it made to its customers. Severn Trent Water has earned an outperformance payment for reducing internal sewer flooding, external sewer flooding and pollution incidents beyond the commitments it made to its customers. South West Water is incurring an underperformance penalty for not achieving its commitments to customers in relation to pollution incidents.

The appendices to this main document contain the specific final determinations for each of the three companies.

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1. Summary of the final determinations

The purpose of this document is to set out our final determination for the in-period ODIs of Anglian Water, Severn Trent Water and South West Water.

Table 1: Summary of final determinations

Table 1 below summarises the changes we are determining for the three companies' price controls for 2018-19.

	Anglian Water	South West Water	Severn Trent Water
Water	£2.575m	£1.081m	-£1.628
Wastewater	-	-£3.168m	£12.994
Total	£2.575m	-£2.087m	£11.366

Figures are in 2012-13 prices, net of tax.

Anglian Water

Appendix 1 contains the final determination for Anglian Water. Anglian Water has an in-period ODI for its wholesale water price control only. We are determining an increase in Anglian Water's wholesale water price control, applying a net outperformance payment of £2.575m (2012-13 prices, net of tax) to wholesale water bills in 2018-19 for one year only. Anglian Water estimates that its in-period ODI claim will result in an increase of £1.26 on the average annual household water bill in 2018-19.

Anglian Water's outperformance payment resulted from the company outperforming its leakage performance commitment in 2016-17. As a result, 6 million fewer litres of water are leaking from the company's network every day.

We are making no changes from our [draft determination](#) for Anglian Water that we published on 31 October 2017. We cover the consultation responses and how we have addressed them in Appendix 1.

South West Water

Appendix 2 contains the final determination for South West Water. We are determining an increase in South West Water's **wholesale water price control**, applying an outperformance payment of £1.081m (2012-13 prices, net of tax) to

wholesale water bills in 2018-19 for one year only. The payment reflects the company's performance in 2015-16 (£0.147m) and 2016-17 (£0.934m). South West Water estimates the ODI outperformance payment will increase its annual average household water bill by around £1.60 in 2018-19.

South West Water has earned a net outperformance payment of £1.081m for its water in-period ODIs primarily because its leakage was 2 million litres per day lower than its performance commitment, and it had resolved 95.5% of its operational customer contacts first time, which was higher than its commitment of 92% for 2016-17.

We are determining a decrease in South West Water's **wholesale wastewater price control**, applying an underperformance penalty of £3.168m (2012-13 prices, net of tax) to wholesale wastewater bills in 2018-19 for one year only, which will reduce customers' wastewater bills. The penalty reflects the company's performance in 2015-16 (£1.942m) and 2016-17 (£1.226m). South West Water estimates the ODI underperformance payment will reduce its annual average household wastewater bill by around £5.00 in 2018-19.

South West Water has incurred a net underperformance penalty of £3.168m for its wastewater ODIs this year primarily because it had four category 1 and 2 pollution incidents¹, rather than its commitment of zero incidents, and 252 category 3 and 4 pollution incidents, rather than its commitment of 228 incidents, in 2016-17. The underperformance penalty also reflects wastewater penalties from last year, which primarily related to category 1 and 2 pollution incidents.

We are making no changes from our [draft determination](#) for South West Water that we published on 31 October 2017. We cover the consultation responses and how we have addressed them in Appendix 2.

Severn Trent Water

Appendix 3 contains the final determination for Severn Trent Water. We are determining a decrease in Severn Trent Water's **wholesale water price control**, applying an underperformance penalty of £1.628m (2012-13 prices, net of tax) to wholesale water bills in 2018-19 for one year only. Severn Trent Water estimates the ODI underperformance payment will reduce its annual average household water bill by around £0.51 in 2018-19.

The company has incurred a net underperformance penalty of £1.628m for its water in-period ODIs primarily because its drinking water complaints were 31.5% higher

¹ The definition of pollution incident categories can be found on our [PR19 metrics webpage](#).

than its performance commitment and it achieved its target for speed of repairing leaks in only 33% of cases, below its commitment of 80% in 2016-17. The size of the penalty was offset, in particular, by Severn Trent Water achieving average supply interruptions to customers of 10 minutes, which is 2 minutes below its performance commitment to customers.

We are determining an increase in Severn Trent Water's **wholesale wastewater price control**, applying a net outperformance payment of £12.994m (2012-13 prices, net of tax) to bills in 2018-19 and deferring the remaining £27m to future years. Severn Trent Water estimates that incorporating its full ODI outperformance payment will increase its annual average household wastewater bill by around £12.85 in 2018-19. However, by accepting the company's proposal to defer £27m of its wastewater ODI payment this reduces the impacts on the annual average household wastewater bill to £2.67 in 2018-19.

The company has earned a net outperformance payment of £39.994m for its wastewater in-period ODIs primarily because its number of external sewer flooding incidents was 23% lower than its commitment to customers, its number of internal sewer flooding incidents was 9% lower than its commitment to customers, and its number of category 3 pollution incidents was 25% lower than its commitment to customers in 2016-17.

We are making no changes from our [draft determination](#) for Severn Trent Water that we published on 31 October 2017. We cover the consultation responses and how we have addressed them in Appendix 3.

2. The in-period ODI framework

Most customers in England and Wales cannot choose their water supplier. Therefore, to provide companies with incentives to deliver more of what their customers need and want, we introduced ODIs at the 2014 price review (PR14). Water companies² engaged with their customers and stakeholders to identify commitments to their customers (“performance commitments”) on the service levels they would deliver to them.

ODIs result in companies being penalised if they fall short of their commitments to customers. When companies deliver more of what customers want, and outperform their commitments, they can earn outperformance payments. As a result, ODIs encourage companies to deliver more of what matters to customers, such as lower leakage, fewer supply interruptions and fewer incidents of sewer flooding.

Most companies have ODIs that we will calculate at the 2019 price review (PR19) and which we implement from 2020 onwards, affecting customer bills in the period 2020-25 (we call these “end-of-period” ODIs). For the current price control period three companies adopted ODIs that see their performance reflected in payments within this control period (we call these “in-period” ODIs). The three companies are Anglian Water, South West Water and Severn Trent Water. In-period ODIs bring the financial impact of an ODI closer in time to the performance that generates it, focussing management on delivery and improving the accountability of companies to their customers. In-period ODIs also make it less likely that payments related to current performance are paid for, or received by, future customers.

In-period ODIs can result in payments being made in the form of adjustments to companies’ allowed revenues under their wholesale water and wastewater price controls for the next charging year. Payments relating to past and future performance levels reported from 2016-17 can be made in 2018-19. Payments can take the form of:

- An underperformance penalty paid by a company to customers for performance below the commitment it made to its customers; or
- An outperformance payment received by a company to reflect stretching levels of performance provided to customers, beyond the commitment it made to its customers.

² In this final determination we refer to water and sewerage undertakers, as defined in the Water Industry Act 1991, as water companies for simplicity.

In general, our in-period ODI determinations confirm what the net payment due to each company is based on its performance in the preceding year. We achieve this by determining what adjustments may be made to allowed revenues in the next charging year by changing a company's price controls. A payment can be spread over more than one year to reduce bill volatility, where this is in customers' interests. Companies can propose to smooth the impact on bills, and we make a determination taking account of the company's proposal and the evidence presented. Our decision on these annual determinations will take into account any payments that have been deferred from previous performance years.

There are a number of benefits from in-period ODIs. They sharpen incentives on companies' management to deliver what matters to their customers and are also fairer to customers, whose bills better reflect more recent service performance. There is a balance to be struck between linking incentives more closely in time to performance, and a smoother path of bill changes, year-on-year, to reduce bill volatility. In some cases it might be appropriate to apply the in-period ODIs over several years to smooth bills, while still capturing some of the benefits of bringing incentives closer in time to the performance that generated them.

The three companies with a licence allowing for in-period ODIs in 2015-20 proposed a package of both in-period and end-of-period ODIs for this price control period. The licence modification enabled the three companies to propose an approach to reconciling their ODIs which reflected their customers' views and which incentivised them appropriately.

Following our consultations on [outcomes](#) and [licence modifications](#) in autumn 2016, all companies have agreed to licence changes that enable them to have in-period ODIs from April 2020 onwards. In our [December 2017 final methodology statement](#) we made a number of decisions in relation to in-period ODIs, including:

- companies should adopt in-period ODIs as a default for all their ODIs;
- companies will need to justify why an in-period ODI is not appropriate if they are not proposing one; and
- companies will need to explain the overall balance between in-period and end-of-period ODIs in their business plans.

3. Our approach to assessing in-period ODIs

Three companies (Anglian Water, Severn Trent Water and South West Water) agreed to licence modifications which provide for in-period ODIs in 2015-20. Their PR14 final determination company-specific appendices include in-period ODIs. The licence allows the company to refer their in-period ODIs to us for determination provided they give notice to us no later than 15 September in the relevant year. We can also initiate the in-period ODI determination process if we see fit.

According to the terms of the licence:

- companies shall provide the information we reasonably require for making the determination;
- in making the determination we shall consider the company's performance in relation to its in-period ODIs in preceding years and, if relevant, its expected performance in the current and future years (not including the years covered by the next price review);
- we shall have regard to the terms of the in-period ODIs agreed at the price review; and
- we shall not make a determination later than 15 December in the relevant year.

We set out further details of the in-period ODI process in our information notice, [IN 17/05](#) on 14 June 2017. In particular, IN 17/05 included the details of the process set out in companies' licences, the information we require from companies for the determination process, and the adjustments to the application of in-period ODIs for inflation, tax and the weighted average cost of capital.

In the information notice we required companies to provide information in relation to the performance-related payment it considered appropriate for each in-period ODI, its supporting evidence, whether its request differed in any way from the automatic operation of the in-period ODIs and, if it did differ, why that was the case. We also required each company to explain what impact its claim for service performance would have on its customers' bills, and the engagement it had carried out, or would carry out, with customers and other stakeholders in relation to the bill impact. There were further requirements, including submitting completed ODI spreadsheets, K factor models (explained below), information on any difference between the claim and the company's annual performance report (APR), any ambiguities in the definitions of the in-period ODIs, and any mitigating factors applied. We also required

each company to explain what internal and external assurance it had obtained for its in-period ODI claim, including from its customer challenge group (CCG)³.

We require companies to publish APRs every year. In their APRs companies need to be transparent about their performance on delivering services for their customers. The APRs provide us, customers and other stakeholders with the information to challenge companies on their performance for customers. The APRs for the three companies with in-period ODIs are available at these links:

- [Anglian Water](#)
- [Severn Trent Water](#)
- [South West Water](#)

3.1 Process for determining the application of in-period ODIs: a risk-based approach

In making these final determinations, we have applied a series of risk-based tests to companies' proposals. In doing so, we were able to prioritise our assessment to focus on the areas that matter most for customers.

We initially reviewed the companies' submissions at a high level to ascertain whether all the required data was provided and whether sufficient assurance had been carried out. We then carried out a review of each in-period ODI, and deep-dives on particular in-period ODIs where potential issues were identified. Throughout our review process we made additional information requests from the companies when required.

The risk-based tests we applied to each company when assessing the in-period ODI claims are described below.

Provision of information

We initially applied checks on whether the company had submitted the required information. The required submissions were:

- information about what outperformance payment or underperformance penalty the company considers is appropriate for each in-period ODI, its supporting evidence, and whether its request differs in any way from the

³ Each company has a CCG. One aspect of a CCG's role is to provide independent challenge to a company and independent assurance to us on a company's performance. CCG membership includes the Consumer Council for Water, customer groups, environmental organisations and business organisations.

automatic operation of the in-period ODIs as set out in the company's PR14 final determination company-specific appendix;

- if a company is not claiming the full net outperformance payment or underperformance penalty implied by the automatic operation of its in-period ODIs, the company must provide all its evidence in support of this;
- separate completed ODI spreadsheets from the PR14 reconciliation rulebook for the price controls that have in-period ODIs;
- completed versions of our [K factor model](#), which is a spreadsheet that calculates the adjustment to wholesale price limits (the K factor), for each relevant price control based on the net outperformance payment or underperformance penalty we determine for each price control; and
- an explanation of:
 - any differences between the company's in-period ODIs and its APR;
 - any mitigating factors the company has applied and justification for them;
 - any ambiguity in the definition of each in-period ODI, and how the company has interpreted it;
 - any issues with past reported data, the impact of the issues, and how this affects the company's claim;
 - any changes to methodology for reporting performance; and
 - the causes of any significant changes to performance and expectations of performance in future years.

Ofwat cross-checking calculations

In our information notice, we set out that companies must submit a completed K factor model and ODI model spreadsheets. We applied checks to ensure that these had been correctly completed by the company. We compared the submitted spreadsheets against our own calculations based on the PR14 company-specific appendix, the reconciliation rulebook and APR information.

Assurance

It is important that companies provide high-quality assurance of information so that stakeholders can understand their performance, and hold them to account. This increases trust and confidence in the water sector. As such, in our information notice we required each company to:

- explain what internal and external assurance it had obtained, including from its CCG, on its in-period ODI claim;
- provide a summary of the outcome from any audit, including any issues that arose and actions taken;

- provide assurance that the information provided was accurate and complete;
- provide assurance on how any ambiguities in the definition of in-period ODI definitions had been interpreted; and
- provide assurance on how the company had applied any mitigating factors.

We assessed the extent of internal and external assurance that the company carried out. We cross-checked the information against the assurance analysis that we had carried out on the company's APR. We also looked in particular at companies' assurance around restatements of data.

Bill impacts and bill smoothing

Reflecting companies' performance on those services that really matter to customers in companies' revenues provides strong incentives for companies to improve their services to customers. It is important that companies understand the impact this could have on customers' bills and ensure that impact is dealt with sensitively. This is why we require each company to explain what impact its in-period ODI claim would have on its customers' bills including any customer groups that are likely to be particularly impacted. Companies must take into account our [Charges Scheme Rules](#), which require companies to "carry out a proportionate impact assessment whenever the nominal value of bills for a given customer type (assuming a constant level of consumption) is expected to increase by more than 5% from the previous year" (page 3).

We also required the company to explain its communication plan to engage with customers and other stakeholders about the bill impact from in-period ODIs in the context of the overall bill, and other changes to the bill (for example, inflation or the K factor agreed at PR14). This should include its plan to engage with any customer groups that are likely to be particularly impacted, customers in circumstances that make them vulnerable, those that are struggling to pay and any other water companies whose customers could be affected by the changes in bills.

We required the company to provide information on its consideration of bill smoothing, including what engagement it has done on bill smoothing and the outcome of this engagement.

We assessed the information provided by the company on bill impacts and its consideration of bill smoothing.

Deep dives on certain in-period ODIs

In the event that the claim for any specific in-period ODI was material⁴, or where we had concerns following our initial review of the information provided, we applied a deep dive assessment of the in-period ODI to ensure we had given sufficient scrutiny to those in-period ODIs to protect customers. The deep dive included requests for additional information and an in-depth inspection of the company's calculations and assurance.

Mitigating factors

In the information notice we required each company to explain whether and how any mitigating factors (such as for weather, third party actions or exceptional events) had been applied to its reported performance for each in-period ODI and its justification for applying these. In such cases, the company must provide assurance on its judgment that a mitigating factor is applicable and how it has been applied. We carried out this check to ensure that any mitigating factors were being applied in accordance with our final determination.

⁴ We used as a rule that the outperformance or underperformance payment for a specific in-period ODI was material if it was greater than £1m or if it constituted more than 25% of the total rewards or penalties being claimed.

4. Responses to the consultation on the draft determination

We consulted on our [draft determination of the in-period ODIs](#) between 31 October and 20 November 2017. We received responses from Anglian Water, Severn Trent Water, South West Water, Welsh Water and CCWater.

We summarise and address the responses relevant to each company's draft determination in the appropriate appendix below. In this section we address consultation responses relating to our overall policy and approach to ODIs.

Welsh Water commented about the potential cost and complexity of the in-period ODI determination process in 2020-25 when all companies will have in-period ODIs. This comment relates to the future in-period ODI framework and we have addressed it in our [PR19 final methodology statement](#).

CCWater commented that customers generally do not support the use of ODIs as a method of driving companies' improvements in service, and that ODI outperformance payments might be available for company performance which is not stretching. Our approach to ODIs for 2015-20 is settled policy that we have already consulted on. However, we address the issues of customer support for ODIs and ensuring performance commitments are stretching in our [PR19 final methodology statement](#).

CCWater raised a concern that ODI bill impacts are in addition to the effect of inflation-related increases in prices. Our [Information Notice on in-period ODIs](#) highlighted the importance of companies considering bill smoothing as part of their applications. As we describe in the appendices, companies considered bill smoothing as part of their applications as we required.

CCWater emphasised that the companies and we should focus on explaining to customers what they are getting in return for their outperformance payments. We agree with CCWater that it is important for companies to explain the link between their performance and their ODI payments – both outperformance payments and underperformance penalties. In the draft determination and in this final determination we have explained clearly the performance the in-period ODI payments relate to. The companies have to explain their performance and the related ODI payments each year in their annual performance reports (APRs).

In addressing these comments on our overall policy and approach to ODIs we have not needed to make any changes to our in-period ODI determinations. However, we have taken the comments into account for our PR19 methodology statement.

A1 Anglian Water final determination

Anglian Water is requesting an adjustment to its 2018-19 water wholesale price control to reflect its performance in 2016-17. Our final determination is set out in the table below.

Anglian Water earned a net outperformance payment of £2.575m because it outperformed its performance commitment by 3%. As a result, 6 million fewer litres of water are leaking from the company's network every day.

Table 2: Summary of final determination for Anglian Water

In-period ODI	Performance	Ofwat final determination £ million (2012-13 prices, net of tax)
W-D4: Leakage (three-year average)	Outperformed its performance commitment by 3%	2.575

The rest of this section describes how we arrived at this figure. Section A1.5 provides a more detailed breakdown of our calculations.

A1.1 Anglian Water's ODIs

Anglian Water has 39 performance commitments of which 22 have financial ODIs attached to them. Only one performance commitment (leakage) has an in-period ODI for the 2015-20 period.

As explained in the [PR14 final determination company-specific appendix for Anglian Water](#) (page 15), the company removed the expenditure associated with its planned reduction in leakage between its December 2013 business plan and its revised business plan. Instead the company proposed to deliver its planned reduction in leakage through in-period ODI payments instead.

Table 3: Summary of Anglian Water's financial ODIs

	Underperformance penalty only		Outperformance payment and underperformance penalty	
	In-period	End-of-period	In-period	End-of-period
Water	-	6	1	4

Wastewater	-	4	-	4
Retail	-	-	-	3
Total	-	10	1	11

A1.2 Summary of Anglian Water's request for 2016-17

Anglian Water submitted its application for an in-period ODI determination before the 15 September 2017 deadline.

The application explained how the company had outperformed its performance commitment level for leakage in 2016-17.

The application included an overview of the assurance that had been carried out on leakage performance by an external assurance provider within the context of the company's assurance framework. This included confirmation that Anglian Water's Board had approved the final reported leakage figure for 2016-17 at its meeting in May 2017.

The application provided details on the engagement the company had carried out on its leakage performance and the impact on customers' bills. Anglian Water also referenced the meetings that the company had held with its CCG, the Customer Engagement Forum (CEF), in January and May 2017, as well as a meeting with the Consumer Council for Water (CCWater) to discuss customers' bills in September 2017.

The company provided assurance regarding whether the leakage performance was exceptional, mitigating factors, ambiguity in ODI definitions, and whether there were any differences between the submission and its 2016-17 APR, as explained in the following paragraphs. The company attributes the reduction in leakage to the resources that it has devoted to leakage reduction since the start of 2015-16.

Anglian Water stated that its leakage performance in 2016-17 was not due to exceptional factors, but rather that it was consistent with what it expected as a result of its 2015-20 strategy and investment plan.

As Anglian Water uses a three-year average figure for its leakage performance commitment, it already acts as a form of mitigation by smoothing the impact of weather extremes. The company noted that while mild weather contributed favourably to leakage performance in 2015-16, in 2016-17 the weather was more typical, with periods of colder weather. Consequently it does not believe any mitigating factor is relevant to its application.

Anglian Water also stated that it did not consider there was any ambiguity in the definition of its leakage performance commitment.

The company's three-year average leakage performance to the end of 2016-17 is 6 MI/d below its performance commitment level. However, because the outperformance payment is capped at 5 MI/d below the performance commitment level the company considers that the appropriate outperformance payment is $5 \times 0.515 = \text{£}2.575\text{m}$, in 2012-13 prices, net of tax. This figure has to be uplifted for inflation and a marginal tax rate of 19%; we calculate the uplifted figure to be $\text{£}3.539\text{m}$, using the K factor model.

A1.3 Our assessment

Provision of information

Anglian Water completed the K factor model and the ODI model spreadsheets correctly. The company provided sufficient information for us to assess its claim for an outperformance payment for leakage.

Ofwat cross-checking calculations

The company's calculations matched our internal calculations based on the information provided in the APR.

Assurance

Anglian Water was in the 'targeted' category under our [Company Monitoring Framework \(CMF\)](#) at the time it submitted its in-period ODI claim and remains so following [our 2017 CMF assessment](#) on 30 November 2017.

The CMF helps us to make sure that water companies provide high-quality assurance on their reporting to customers. It also challenges water companies to put processes in place so that the underlying data can be trusted. The CMF reminds companies that their behaviour in-period matters and that engagement and accountability is a continuous process, not simply during price reviews. Ultimate responsibility for assurance lies with a company's board. The company provided details of its overall assurance framework in its APR.

We found that Anglian Water had provided a sufficient level of assurance with regard to its leakage performance and the methodology it had applied in its calculations.

Anglian Water explained in its application that the two pieces of assurance it carried out on its leakage performance are within the context of its assurance framework, which is available on its website:

- the first review examined the processes Anglian Water had in place for reporting leakage, considered whether they comply with reporting requirements, and reviewed the approach to managing risks to data quality; and
- the second review examined the reliability of Anglian Water's year-end reported leakage figure.

The external engineering consultants found no material issues, although they made some suggestions for improvements to the data sources Anglian Water used to derive customer supply pipe leakage, and the ways the company engaged with customers about leakage. Anglian Water's Board was content to approve the final reported leakage figure at its May 2017 meeting, in view of the assurance report findings.

We consider that the external assurance Anglian Water provided was sufficient to give us confidence that the leakage data provided by Anglian Water was accurate.

Bill impact

Anglian Water provided information on the bill impact of its in-period ODI claim. It will result in an increase in its average annual household water bill in 2018-19 of £1.26. In percentage terms, the PR14 final determination allows Anglian Water to increase its water bills in 2018-19 by 0.58% (the K factor) and the in-period ODI final determination increases this to 1.19%. Anglian Water can also increase bills in line with inflation (the change in RPI).

Bill smoothing

We agree with Anglian Water that there is no need to smooth the impact of the £1.26 average annual household water bill increase. In reaching this decision, we have taken into consideration the following factors. Firstly, the size of the bill impact is relatively small compared to Anglian Water's average bill. Secondly, Anglian Water reports that the CEF accepted without further challenge, and CCWater raised no objections to, their proposal to take the outperformance payment in full in 2018-19. Thirdly, Anglian Water expects to earn further outperformance payments in relation to its leakage in-period ODI in the rest of the price control period as it pursues its leakage reduction strategy. This means that delaying the £1.26 average bill impact would only serve to increase future bill increases rather than smooth bills.

Anglian Water has taken into account [Ofwat's Charges Scheme Rules](#), which require companies to consider the impact on any customer group if a bill is likely to increase by more than 5% in nominal terms.

Customer and stakeholder engagement

Anglian Water communicated its leakage position in its 2016-17 annual integrated report, of which its APR is a part. In its APR Anglian Water reported its leakage performance against its ODI in 2016-17, and stated that it was due an in-period outperformance payment of £2.575 million (before inflation and tax adjustments; £3.539 million after inflation and tax).

Anglian Water gave regular updates to the CEF on its performance, including leakage, in 2016-17. In the CEF meeting (January 2017) Anglian Water provided an estimate of its likely out-turn performance. In May 2017 Anglian Water confirmed its final performance on leakage for 2016-17, the associated outperformance payment, and an estimate of the impact on average bills. The CEF accepted Anglian Water's proposals without further challenge.

On 8 September Anglian Water discussed with CCWater its customer bills for 2018-19, including the impact of the ODI outperformance payment, as part of the normal charging cycle. Anglian Water explained the mechanics of the ODI mechanism along with its leakage performance for the year. CCWater accepted that Anglian Water would be claiming the full outperformance payment for its performance and raised no objections to the impact on customers' bills.

Anglian Water provided us with information on its communication plan regarding its 2018-19 bills as requested in the Information Notice.

Past and future expected performance

Anglian Water explained that its improved three-year average performance on leakage was due to the substantial resources it had devoted to leakage reduction. In its PR14 business plan, Anglian Water set out its intention to achieve a step-change reduction in leakage reflecting the importance attached to this outcome by its customers. The company's improved performance is consistent with its expected path for leakage reductions and the scale of its investment in leakage reduction. It does not regard its performance in 2016-17 (and thus the relevant three-year average) to have been due to exceptional factors or one-off events. Anglian Water expects to continue to outperform its leakage performance commitment in the remaining years of the period, consistent with its PR14 plan.

ODI definition (ambiguity)

Anglian Water stated that it did not consider there was any ambiguity in the definition of its ODI. The company provided information and assurance about how it had measured leakage and assessed its performance, which we detail above. We consider that the external assurance Anglian Water provided was sufficient to give us confidence that the leakage data provided by Anglian Water was accurate. We did, however, raise a query about how Anglian Water approached the rounding of decimal numbers in its annual, and three-year average, leakage calculations. Following Anglian Water's response to our query we concluded that its approach to rounding numbers was appropriate and does not adversely affect the accuracy of the reported data.

Mitigating factors

The company did not apply any additional mitigation factors to the claim. Last year, Anglian Water identified mild weather as being favourable to leakage performance; however for 2017 the weather was more typical. We agree that Anglian Water has applied no mitigation measures for its in-period leakage ODI.

A1.4 Responses to the consultation on the draft determination

We consulted on our [draft determination of the in-period ODIs](#) between 31 October and 20 November 2017. We received two responses in relation to our draft determination for Anglian Water.

Anglian Water responded to say it had no issues with any details in our draft determination, including the change to the price control we proposed.

CCWater commented that it had engaged with Anglian Water on its approach to leakage reduction as this was a customer priority at the 2014 price review. CCWater supported the improved performance that has led to the company exceeding its performance commitment. CCWater commented that it was important for Anglian Water to inform its customers about the extent to which the company had reduced leakage being the reason for the bill increase.

Taking into account the comments on the draft determination for Anglian Water we are making no changes for the final determination for Anglian Water.

A1.5 Our final determination

This section sets out our final determination for Anglian Water. This final determination reflects that the company outperformed its performance commitment by 3% in 2016-17. As a result, 6 million fewer litres of water are leaking from the company's network every day.

To put the amounts into context, Table 4 sets out the allowed revenue for Anglian Water's wholesale water price control for the 2015-20 period. This was included in the company's [PR14 final determination company-specific appendix](#) (tables A2.10). The table below uses 2012-13 prices which is the basis of ODIs in PR14.

Table 4: Anglian Water's wholesale water allowed revenue

Allowed revenue (PR14 FD, £m, 2012-13 prices)	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Wholesale water	411.7	414.8	418.0	421.3	424.4	2090.2

Note: totals may not add up due to rounding

In the tables below we set out the overall in-period ODI final determination for Anglian Water in £m for wholesale water. The first part of Table 5 uses 2012-13 prices, net of tax, which is the basis of ODIs in PR14. The second part of table 4 uses 2018-19 prices gross of tax.

Table 5: Our final determination for in-period ODIs for 2017 – price control totals

£ million in 2012-13 prices (the base year for PR14), net of tax	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water	2.575	2.575	0

£ million impact on the price control for 2018-19 (the figures in the table above uplifted by inflation and adjusted for tax)	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water	3.539	3.539	0

Notes

- marginal tax rate = 19%

We have used the K factor model to calculate the adjustment to Anglian Water's wholesale water price limits resulting from the application of its in-period ODI. The K factor model (applying the methodology used for the PR14 final determination models) uses the formula $(1 + \text{RPI}) * (1 + K) / 100$. The revised K factor is set out in Table 6 below.

Table 6: Revised K factor for the charging year beginning 1 April 2018

Wholesale price control	Final determination of price controls ⁵	Revised K
Water	0.58%	1.19%

In Section A1.6 below we set out our final determination of Anglian Water's in-period ODI based on performance in the financial year 2016-17. Equivalent details for Anglian Water's performance in the financial year 2015-16 are set out in our [final determination](#) of Anglian Water's in-period ODIs in 2016.

⁵ Our formal notification of the determination of price controls for Anglian Water's retail and wholesale activities was published on 12 December 2014. The wholesale K numbers for water are set out in Table 1 of the [Formal letter about our determination](#).

A1.6 Final determination for Anglian Water's in-period ODI for 2017

In-period ODI	2016-17 PC level ⁶	2016-17 actual	Payment due £ million	Company claim ⁷ £ million	Claim calculation	Ofwat final determination £ million	Difference £ million	Comments
W-D4: Leakage (three-year average)	192 MI/d	186 MI/d	2.575	2.575	2016-17 PC level met = Yes 2016-17 outperformance payment cap = 187 Outperformance incentive rate = £0.515 Outperformance payment: $192 - 187$ (cap) = $5 * 0.515 = £2.575m$	2.575	0	We propose to accept Anglian Water's in-period ODI outperformance payment application.
Total			2.575	2.575		2.575	0	

⁶ PC level stands for Performance commitment level

⁷ The £2.575m figure is in 2012-13 prices, which was the base year for PR14, and net of tax. To calculate the impact on the price control for 2018-19 we update the figure by inflation and make an adjustment for tax.

A2 South West Water final determination

South West Water is requesting an adjustment to its 2018-19 water wholesale price control to reflect its past performance. Our final determination is set out in Table 7 and Table 8 below.

In relation to South West Water's **wholesale water** in-period ODIs the company has earned a net outperformance payment of £1.081m primarily because its leakage was 2 million litres per day lower than its performance commitment and it had resolved 95.5% of its operational customer contacts first time, which was higher than its commitment of 92%. South West Water estimates the ODI outperformance payment will increase its annual average household water bill by around £1.60 in 2018-19.

Table 7: Our final determination for South West Water's wholesale water in-period ODIs

In-period ODI	Performance relative to commitment	Ofwat final determination £ million (2012-13 prices net of tax)
W-A1: Compliance with water quality standard	Close to commitment	-
W-A2: Taste, smell and colour contacts	Close to commitment	-
W-B1: Water restrictions place on customers	Not applicable	-
W-B3: Leakage levels	Outperformed by 2 million litres per day	0.806
W-D1: Operational customer contacts resolved first time	Outperformed by 3.5 percentage points	0.151
W-E4: Pollution incidents (category 1 and 2)	At commitment	-
W-E5: Pollution incidents (category 3 and 4)	Underperformed by 7 incidents	-0.022
Net payment carried over from last year	-	0.146
Total (water)	-	+1.081

In relation to South West Water's **wholesale wastewater** in-period ODIs the company has incurred a net underperformance penalty of £3.168m this year primarily because it has four category 1 and 2 pollution incidents rather than its commitment of zero, and 252 category 3 and 4 pollution incidents rather than its commitment of 228 in 2016-17. The underperformance penalty also reflects wastewater penalties from 2015-16, which primarily related to category 1 and 2 pollution incidents. South West Water estimates the ODI underperformance payment will reduce its annual average household wastewater bill by around £5.00 in 2018-19.

Table 8: Our final determination for South West Water's wholesale wastewater in-period ODIs

In-period ODI	Performance relative to commitment	Ofwat final determination £ million (2012-13 prices net of tax)
S-B1: Operational customer contacts resolved first time	2 percentage points lower than commitment	-0.107
S-C1: Wastewater descriptive works permit compliance	Close to commitment	-
S-C4: Pollution incidents (category 1 and 2)	Four more incidents than commitment	-0.692
S-C5: Pollution incidents (category 3 and 4)	10.5 per cent more incidents than commitment	-0.427
Net payment carried over from last year	-	-1.942
Total (wastewater)	-	-3.168

The rest of this section describes how we arrived at these figures. Section A2.5 provides a more detailed breakdown of our calculations.

A2.1 South West Water's ODIs

South West Water has 42 performance commitments of which 25 have financial ODIs attached to them. There are 11 performance commitments with in-period ODIs for the 2015-20 period.

Table 9: Summary of South West Water’s financial ODIs

	Underperformance penalty only		Outperformance payment and underperformance penalty	
	In-period	End-of-period	In-period	End-of-period
Water	3	4	4 ⁸	2
Wastewater	3	3	1	4
Retail	-	-	-	1
Total	6	7	5	7

South West Water submitted a request before the 15 September 2017 deadline for us to determine the level of any change to its price controls due to its performance in connection with its in-period ODIs.

South West Water submitted as part of its application, completed versions of the ODI spreadsheet from the PR14 reconciliation rulebook and completed versions of the K factor model spreadsheet.

The application provided a breakdown of the ODI outperformance and underperformance payment claims, highlighting how the company had performed against its performance commitment levels for 2016-17 (these are included in Section A2.6).

The application included information on:

- the extent of outperformance and underperformance, and the associated payments and penalties;
- the impact on customers’ bills;
- customer engagement;
- data assurance; and
- the WaterShare Panel report.

The information contained in the application supplemented the performance and assurance documents published on the [South West Water website](#):

- Annual performance report for 2016-17 (July 2017);
- Assurance summary for 2016-17 (July 2017); and
- WaterShare Panel final report (August 2017).

⁸ The ODI for ‘water restrictions placed on customers’ allows for penalties to be paid annually. Rewards accumulate annually but are only paid at the end of the period if South West Water has not applied any water restriction measures during the course of the price control period (2015-2020).

South West Water did not consider there to be any ambiguity in the definitions of its in-period ODIs and there were no mitigating factors to be taken into consideration regarding its performance in 2016-17. The company had not refined any methodologies for the reporting of its performance commitments and had not identified any issues with the past reporting of its data.

South West Water's 2015-16 deferred in-period ODI underperformance penalty

In our [2016 final determination](#) of South West Water's in-period ODIs, we accepted South West Water's proposal not to apply the overall net underperformance penalty of £1.731 million (2012-13 prices, net of tax) in 2017-18. We stated that we would consider in 2017 whether we should make a determination, and when the underperformance penalty due for 2015-16 performance should be applied, taking into account all relevant circumstances at the time including whether South West Water improved its performance on Category 1 and 2 wastewater pollution incidents. We also stated that the underperformance penalty would be adjusted for inflation and interest if it was applied at the 2019 price review, or after 2017-18 but before the 2019 price review.

A2.2 Summary of South West Water's request for 2016-17

South West Water is seeking to reflect the in-period incentives from performance in 2015-16 (–£1.731m) and 2016-17 (–£0.292m) in customer bills in 2018-19, giving a total of –£2.023m for wholesale water and wholesale wastewater combined. As the company deferred the application of the 2015-16 related penalties for a year, South West Water has inflated these penalties by the company's weighted average cost of capital (3.70%) for one year, resulting in a net underperformance penalty of £2.087m to be applied to customer bills in 2018-19.

Separately, South West Water is returning £4 million to its customers through its WaterShare framework⁹ (resulting from other items including its outperformance on the cost of debt). After engagement with the WaterShare Panel and in light of the findings from its customer survey, South West Water has proposed to take the net penalty from 2015-16 and 2016-17 performance reducing customer bills by £2.087 million and defer the 'other items' element of the WaterShare scorecard (£4 million) to future years. The WaterShare Panel has accepted this recommendation.

⁹ South West Water's WaterShare framework involves the company publishing a scorecard on an annual basis that summarises its performance on the totex incentives, ODIs and other items such as debt outperformance and allows for the sharing of net benefits with customers in a timely manner.

We provide details of South West Water's in-period ODI outperformance payments and underperformance penalties for performance in 2016-17 in Section A2.6.

A2.3 Our assessment

Provision of information

South West Water completed the K factor models and the ODI spreadsheets correctly.

Ofwat cross-checking calculations

The company's calculations matched our internal calculations based on the information provided in the APR.

Assurance

South West Water was in the 'targeted' category under our [Company Monitoring Framework \(CMF\)](#) at the time it submitted its in-period ODI claim and remains so following [our 2017 CMF assessment](#) on 30 November 2017.

The CMF helps us to make sure that water companies provide high-quality assurance on their reporting to customers. It also challenges water companies to put processes in place so that the underlying data can be trusted. The CMF reminds companies that their behaviour in-period matters and that engagement and accountability is a continuous process, not simply during price reviews. Ultimate responsibility for assurance lies with a company's board. The company provided details of its overall assurance framework in its APR.

At PR14, South West Water proposed a WaterShare framework that would monitor its performance and provide transparency on sharing its performance with customers. This framework involves the company publishing a scorecard on an annual basis that summarises its performance and allows for the sharing of the scorecard of net benefits with customers in a timely manner. The company set up the WaterShare Panel to provide challenge and assurance that customers are legitimately and fairly sharing in company performance. The overall governance of this framework is set out in the [WaterShare Terms of Reference](#) on the company's website. The WaterShare approach was unique to South West Water and we have taken into account the framework in our assessment of South West Water's in-period ODIs.

South West Water provided us with the WaterShare Panel's final report which discussed details of the governance and assurance for ODIs. The WaterShare Panel has:

- reviewed the overall performance of the company using the 2016-17 scorecard;
- scrutinised 2016-17 ODI performance against the PR14 final determination;
- reviewed service performance against other companies' performance using the [Discover Water website](#);
- received feedback from the Environment Agency on the company's performance as assessed by the Environmental Performance Assessment;
- reviewed the ODI process and lessons learned from 2015-16 Ofwat in-period ODI determination process;
- discussed options and scrutinised company recommendation for the net gain sharing with customers; and
- reviewed the results of customer research to help inform the discussion on the appropriateness of the company's recommendation to pass back £2.1 million (i.e. the net underperformance penalty from 2015-16 and 2016-17 performance) to customers in 2018-19 with the remaining net gain carried forward to future years.

South West Water also submitted its technical auditors' assurance report, which provides details of the assurance process in relation to in-period ODIs for 2016-17. The company's technical auditor audited the input data to the ODI spreadsheets and K factor models which form part of the company's in-period ODI application. The scope of the audit was to confirm the source of the data and the correct transposition into the spreadsheets. The audit noted a misclassification of one of the performance commitments, which the company corrected.

Overall we found that the company has provided sufficient evidence that its external auditors have reviewed the company's procedures and processes in compiling the outcome data, and have challenged the company on its approach.

Bill impact

South West Water has explained to us that for 2018-19 its estimated change in its annual average wholesale water household bill will be an increase of £1.60, and for the annual average wholesale wastewater household bill will be a reduction of £5.00.

We also asked the company to provide the breakdown of impacts on the annual average household bill, including the impact of in-period ODIs and other factors influencing bills. The company responded that the impact of in-period ODIs on the

average household bill is a reduction of £3.43, whilst the impact of inflation has the opposite effect: increasing bills by £18.18. 'Other factors' contribute a £13.99 reduction in the average household bill (which includes the pre-adjustment K factor, the wholesale revenue forecasting incentive mechanism (WRFIM) adjustments and movements in the 2018-19 charge multipliers). Taking all these factors together the overall nominal impact on the annual average combined household bill for 2018-19 is an increase of £0.75 (or a 0.1% nominal increase).

Bill smoothing and customer engagement

The company's ODI submission proposed to apply the in-period incentives from performance in 2015-16 and 2016-17 to customer bills in 2018-19. South West Water is proposing to reduce customer bills by £2.1 million and defer the 'other items' element of the WaterShare scorecard (£4.0 million) to future years. South West Water proposed this approach to bill smoothing on the basis of customer research it commissioned to understand from customers how accrued performance payments should be returned to them.

Overall, South West Water found that household customers favour lower and/or smoother bills to reinvestment in services. These findings were shared and discussed with the WaterShare Panel who accepted South West Water's recommendation to reduce customer bills by £2.1 million in 2018-19 and defer the 'other items' element of the WaterShare scorecard (£4.0 million) to future years.

Our assessment is that it is appropriate for South West Water to apply a reduction of £2.1 million to customer bills in 2018-19. We have assessed this in the context of the company deferring the 'other items' element of the WaterShare scorecard (£4.0 million) to future years¹⁰. One of the main purposes of in-period ODIs is to sharpen the incentive of companies to improve their service performance by bringing the application of out- and under-performance payments closer in time to the performance that generated them. Thus, applying the net underperformance penalty in 2018-19 means that customers experience the reduction in bills more closely in time to the performance that generated them than if the underperformance penalty was further delayed.

In reaching this view we have taken account of:

- The net effect of South West Water's in-period ODIs on the average combined household bill is -£3.43, and the overall impact (including inflation

¹⁰ Although the 'other items' element of the WaterShare scorecard is purely a South West Water scheme South West Water's final determination company specific appendix refers to in-period ODIs operating in the context of its WaterShare framework.

and other factors) for 2018-19 is an increase of £0.75. This represents a small nominal increase of 0.1%.

- In South West Water's specific case the in-period ODIs need to be seen in the context of its WaterShare scheme, which allows for the sharing of the net benefits with customers from the company's performance.
- The company has undertaken appropriate and targeted customer research in order to inform its bill smoothing proposals.

Stakeholder engagement

South West Water outlined in its ODI submission that through its WaterShare Panel meetings, it will continue to engage with its stakeholders to outline how bills are impacted by incentive payments resulting from the in-period ODIs. The company also indicated that as part of its annual tariff and charges process, it intends to meet with CCWater separately to discuss the calculations for customers' bills.

We asked the company to provide a summary of the meeting with CCWater, in particular regarding the impact of its in-period ODI claim on customers. South West Water reported that CCWater was satisfied with the out and under-performance payments being applied and had no material concerns.

South West Water stated that since it is not anticipating above average increases on customer bills, the impact of in-period ODIs will be incorporated within its communications plan for annual tariff and charges process. The company noted that as part of the briefing on changes to customer bills, it engages with customers through a range of methods including customer bill wrappers, an annual customer newsletter 'WaterLevel', its websites and e-newsletters. In addition, the company stated that it will continue to promote affordability measures and target customers who are struggling to pay through its partnerships with debt agencies and social housing providers, as well as Watercare advisors reaching out to customers through job centres, community events and targeted door knocking activities.

Past and expected future performance

In its submission, South West Water provided information on its performance and expected future performance, supported by the information included in its [Annual Performance Report](#).

The company provided the following information.

Category 3 & 4 pollution incidents (water)

South West Water outlined that it had failed to achieve its performance commitment levels in 2015-16 and 2016-17, and is therefore liable for underperformance penalties in relation to its performance in both years. The company states that it has implemented a range of improvement initiatives across both its network and production operations, including in relation to raising awareness, repair crews and inspecting operational sites.

South West Water stated that it expects to meet its performance commitment in 2018-19.

Operational contacts resolved first time (wastewater)

South West Water reported that it failed to achieve its performance commitment levels in 2015-16 and 2016-17 and has incurred penalties in both years as a result. To improve performance in this area, the company has told us that it has introduced a Single Person Operating Model, which is a single wastewater team responsible for providing real time advice and support to customers to improve response times and resolution rates. South West Water expects this to increase its capacity to respond more quickly to wastewater events. As a result of the measures above, South West Water expects to achieve its performance commitment in 2018-19.

Category 1 and 2 pollution incidents (wastewater)

South West Water failed to achieve its performance commitment levels in 2015-16 and 2016-17, and is therefore liable for penalties in relation to its performance in both years. The company reported that it is taking a number of steps to ensure it improves, including an improved programme of sewer network checking and cleansing. South West Water states investments are being targeted to improve performance in this area and it expects to meet its performance commitment in 2018-19.

In our [2016 final determination](#) of South West Water's in-period ODIs, we stated that we would consider in 2017 whether South West Water improved its performance on category 1 and 2 wastewater pollution incidents when considering whether to apply its 2015-16 underperformance penalties in 2018-19. This issue did not arise as South West Water proactively applied to take its 2015-16 underperformance penalties in 2018-19. While we acknowledge that South West Water has improved its category 1 and 2 pollution incidents (wastewater) performance, we are disappointed the company has still failed to meet its performance commitment level and also that the company failed to meet its performance commitments for category 3 and 4 pollution incidents in 2016-17 (see below). We will continue to monitor

company performance in these areas closely and South West Water should deliver on its expectations of improvement in 2017-18.

Category 3 and 4 pollution incidents (wastewater)

South West Water met its performance commitment level in 2015-16, and as a result did not incur an underperformance penalty for performance in that year. However, the company's performance in 2016-17 failed to meet its performance commitment level, which has resulted in an underperformance penalty. The company is targeting investment to improve performance month-on-month, which it expects will significantly reduce the number of pollution incidents in the remainder of 2017-18. The company expects to outperform its performance commitment in 2018-19.

ODI definition (ambiguity)

South West Water reported that it did not consider there to be any ambiguity in the definitions of its in-period ODIs. The company also stated that it has not refined any methodologies for the reporting of its performance commitments and has not identified any issues with the past reporting of its data. We agree that the external assurance South West Water provided gave us confidence in the reporting of its data.

Mitigating factors

South West Water reported that it had not applied any mitigating factors to its reported performance. This is in line with our assessment of the company's in-period ODIs.

A2.4 Responses to the consultation on the draft determination

We consulted on our [draft determination of the in-period ODIs](#) between 31 October and 20 November 2017. We received two responses in relation to our draft determination for South West Water.

South West Water responded to say it agreed with our proposed draft determination.

CCWater commented that it expected the company to improve its performance on pollution incidents, given its poor performance and subsequent penalty. CCWater welcomed the work South West Water had done to reduce leakage beyond its

performance commitment level, as tackling leakage is a customer priority. CCWater supported South West Water's intention to smooth the bill profile for customers.

CCWater expected South West Water to be open and transparent in explaining the bill impacts of its in-period ODIs, and the reasons for its outperformance payment and underperformance penalties, including through its customer bill wrappers, its customer newsletter 'WaterLevel' and through its website and e-newsletters.

Taking into account the comments on the draft determination for South West Water we are making no changes for the final determination for South West Water.

A2.5 Our final determination

This section sets out our final determination for South West Water. This final determination includes the outperformance payments and underperformance penalties South West Water incurred based on performance in 2015-16 and 2016-17.

In relation to South West Water's **wholesale water** in-period ODIs the company has earned a net outperformance payment of £1.081m primarily because its leakage was 2 million litres per day lower than its performance commitment and it had resolved 95.5% of its operational customer contacts first time, which was higher than its commitment of 92%.

In relation to South West Water's **wholesale wastewater** in-period ODIs the company has incurred a net underperformance penalty of £3.168m this year primarily because it has four category 1 and 2 pollution incidents rather than its commitment of zero, and 252 category 3 and 4 pollution incidents rather than its commitment of 228 in 2016-17. The underperformance penalty also reflects wastewater penalties from last year, which primarily related to category 1 and 2 pollution incidents.

To put the amounts into context, Table 10 sets out the allowed revenue for South West Water's wholesale water and wastewater price controls for the 2015-2020 period. This was included in [South West Water's PR14 final determination company-specific appendix](#) (tables A2.10 and A3.10). Table 10 uses 2012-13 prices which is the basis of ODIs in PR14.

Table 10: South West Water's wholesale water and wastewater allowed revenue

Allowed revenue (PR14 FD, £m, 2012-13 prices)	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Wholesale water	188.2	185.8	182.6	181.5	181.6	919.8
Wholesaler wastewater	238.4	239.8	241.9	243.4	243.6	1,207.1

Note: totals may not add due to rounding

The following two tables set out our final determination of South West Water's in-period ODIs in 2016 and 2017 separately.

Table 11: Our final determination on in-period ODIs for 2017 – price control totals

Table 11 uses 2012-2013 prices, net of tax, which is the basis of ODIs in PR14.

£ million in 2012-13 prices (the base year for PR14), net of tax	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water	0.935	0.935	0
Wastewater	-1.226	-1.226	0
Total	-0.291	-0.291	0

Table 12: Our final determination on in-period ODIs for 2016 – price control totals

In our 2016 final determination of South West Water's in-period ODIs, we accepted South West Water's proposal not to apply the overall net underperformance penalty of £1.731 million (2012-13 prices, net of tax) in 2017-18. South West Water is now seeking to apply the in-period incentives from performance in 2015-16.

The first table uses 2012-13 prices, net of tax, which is the basis of ODIs in PR14. The second table is on the same basis and inflates the underperformance penalty based on performance in 2015-16 by South West Water's weighted average cost of capital (WACC) of 3.7% for one year.

£ million in 2012-13 prices (the base year for PR14), net of tax	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water	0.141	0.141	0
Wastewater	-1.873	-1.873	0
Total	-1.731	-1.731	0

£ million in 2012-13 prices (the base year for PR14), net of tax, with the application of WACC	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water	0.147	0.147	0
Wastewater	-1.942	-1.942	0
Total	-1.795	-1.795	0

Table 13: Our final determination for total in-period ODIs for 2016 and 2017– price control totals

The following tables sum the in-period ODIs for 2016 and 2017, which is the amount we are determining will be applied to South West Water’s price controls in 2018-19. The first table uses 2012-2013 prices, net of tax, which is the basis of ODIs in PR14. The second table uses 2018-19 prices gross of tax which is the basis for adjustments to the price controls in 2018-19.

£ million in 2012-13 prices (the base year for PR14), net of tax	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water	1.081	1.081	0
Wastewater	-3.168	-3.168	0
Total	-2.087	-2.087	0

£ million impact on the price control for 2018-19 (the figures in the table above updated by inflation and adjusted for tax)	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water	1.542	1.542	0
Wastewater	-4.518	-4.518	0
Total	-2.977	-2.977	0

Notes

- Totals may not add up because of rounding
- Marginal tax rate = 19%

We have used the K factor model to calculate the adjustment to South West Water’s wholesale water and wastewater price limits resulting from the application of its in-period ODIs. The K factor model (applying the methodology used for the PR14 final determination models) uses the formula $(1 + RPI) * (1 + K) / 100$. The revised K factors are set out in Table 14 below.

Table 14: Revised K factors for the charging year beginning 1 April 2018

Wholesale price control	Final determination price controls	Revised K
Water	-0.81%	-0.08%
Wastewater	0.41%	-1.19%

In Section A2.6 we set out our final determination of each of South West Water's in-period ODIs based on performance in the financial year 2016-17. Equivalent details for South West Water's performance in the financial year 2015-16 are set out in our [final determination](#) of South West Water's in-period ODIs in 2016.

A2.6 Final determination for South West Water's in-period ODIs for 2017

In-period ODI final determination: water

In-period ODI	2016-17 PC level ¹¹	2016-17 actual	Payment due £ million	Company claim ¹² £ million	Claim calculation	Ofwat final determination £ million	Comments
W-A1: Compliance with water quality standard <i>(Mean zonal compliance %)</i>	99.98	99.96	-	-	2016-17 PC level met = No 2016-17 penalty collar = 90.00% 2016-17 penalty deadband = 99.90% SWT's performance falls within the penalty deadband, therefore no penalty is due.	-	Actual performance is within the penalty deadband therefore no underperformance penalty is payable.
W-A2: Taste, smell and colour contacts <i>(Number of contacts per 1,000 population)</i>	3.9	2.7	-	-	2016-17 PC level met = Yes 2016-17 penalty collar = 8.0 2016-17 penalty deadband = 3.9 2016-17 payment deadband = 2.02 2016-17 payment cap = 1.5 This is within the deadband, therefore no reward or penalty is due.	-	Actual performance is within the outperformance payment deadband therefore no outperformance payment is due.
W-B1: Water restrictions placed on customers	0	0	-	0	2016-17 PC level met = Yes 2016-17 payment deadband = 0	-	This outperformance payment is only paid at the end of the price control

¹¹ PC level stands for performance commitment level

¹² The £ million figures are in 2012-13 prices, which was the base year for PR14, and net of tax. To calculate the impact on the price control for 2018-19 we uprate the figure by inflation and make an adjustment for tax.

Final determination of in-period ODIs for 2017

(Number of water restrictions)					<p>2016-17 payment cap = 0 Payment incentive rate = £1.624m</p> <p>This performance commitment measures the number of water restrictions in place on customers in a five-year period.</p> <p>Only the penalty is subject to the in-period mechanism. The outperformance payments are provisionally accrued yearly but are only applied after assessment of performance to 2018-19, based on expected delivery to 2019-20. If restrictions on use are imposed in a part of SWT's area in the five-year period no outperformance payment will be earned.</p>		period if no water restrictions are applied at any point during the price control period.
W-B3: Leakage levels (Megalitres a day, MI/d)	84	82	0.806	0.806	<p>2016-17 PC level met = Yes 2016-17 payment deadband = 84 2016-17 payment cap = 64 Payment incentive rate = £0.403m Outperformance payment: 84 (deadband) – 82 (performance) = 2 * 0.403 = £0.806m</p>	0.806	We propose to accept South West Water's net outperformance payment application and the company's outperformance payment calculation.
W-D1: Operational customer contacts resolved first time (% of customer contacts resolved first time)	92	95.5	0.151	0.151	<p>2016-17 PC level met = Yes 2016-17 payment deadband = 92 2016-17 payment cap = 100 Payment incentive rate = £0.043m Outperformance payment: 95.5 (performance) – 92 (deadband) = 3.5 * 0.043 = £0.1505m</p>	0.151	We propose to accept South West Water's net outperformance payment application and the company's outperformance payment calculation.

W-E4: Pollution incidents (Category 1 and 2) <i>(Number of pollution incidents, categories 1 and 2)</i>	0	0	-	-	2016-17 PC level met = Yes PC level has been met, therefore no penalty is due.		No underperformance penalty has been incurred.
W-E5: Pollution incidents (Category 3 and 4) <i>(Number of pollution incidents, categories 3 and 4)</i>	2	9	-0.022	-0.022	2016-17 PC level met = No 2016-17 penalty collar = 4 2016-17 penalty deadband = 2 Penalty rate = £0.011m Penalty: 4 (penalty collar) – 2 = 2 * 0.011 = £0.022m	-0.022	We propose to accept South West Water's net underperformance penalty application and the company's underperformance penalty application.
Total (water)			0.935	0.935		0.935	

In-period ODI final determination: wastewater

In-period ODI	2016-17 PC level ¹³	2016-17 actual	Payment due £ million	Company claim ¹⁴ £ million	Claim calculation	Ofwat final determination £ million	Comments
S-B1: Operational customer contacts resolved first time	92	89.9	-0.107	-0.107	2016-17 PC level met = No 2016-17 penalty collar = 75 2016-17 penalty deadband = 92 2016-17 payment deadband = 92	-0.107	We propose to accept South West Water's net underperformance penalty application and the company's

¹³ PC level stands for performance commitment level

¹⁴ The £ million figures are in 2012-13 prices, which was the base year for PR14, and net of tax. To calculate the impact on the price control for 2018-19 we update the figure by inflation and make an adjustment for tax.

Final determination of in-period ODIs for 2017

(% customer contacts resolved first time)					2016-17 payment cap = 100 Penalty rate = £0.051m Penalty: 92 (deadband) – 89.9 (underperformance) = $2.1 * 0.051 = £0.1071m$		underperformance penalty calculation.
S-C3: Wastewater descriptive works permit complaint (% wastewater descriptive works permit compliance)	100	99.4	-	-	2016-17 PC level met = No 2016-17 penalty collar = <95 2016-17 penalty deadband = 95 SWT's performance falls within the deadband, therefore no penalty is due.		South West Water's performance is within the penalty deadband therefore no underperformance penalty is payable.
S-C4: Pollution incidents (Category 1 and 2) (Number of pollution incidents, categories 1 and 2)	0	4	-0.692	-0.692	2016-17 PC level met = No 2016-17 penalty collar = 8 2016-17 penalty deadband = 2 Penalty rate = £0.346m Penalty: 4 (performance) – 2 (deadband) = $2 * 0.346 = £0.692m$	-0.692	We propose to accept South West Water's net underperformance penalty application and the company's underperformance penalty calculation.
S-C5: Pollution incidents (Category 3 and 4) (Number of pollution incidents, categories 3 and 4)	228	252	-0.427	-0.427	2016-17 PC level met = No 2016-17 penalty collar = 262 2016-17 penalty deadband = 228 Penalty rate 1 (262 to 248) = £0.0103m Penalty rate 2 (248 to 218) = £0.0193m Rate 2: $248 - 228 = 20 * 0.0193 = 0.386$	-0.427	We propose to accept South West Water's net underperformance penalty application and the company's underperformance penalty calculation.

Final determination of in-period ODIs for 2017

					Rate 1: $252 - 248 = 4 * 0.0103 = 0.0412$ Total penalty: $0.386 + 0.0412 = \text{£}0.4272\text{m}$		
Total (wastewater)			-1.226	-1.226		-1.226	

A3 Severn Trent Water final determination

Severn Trent Water is requesting an adjustment to its 2018-19 water wholesale price control to reflect its performance in 2016-17. Our final determination is set out in Table 15 and Table 16 below.

In relation to Severn Trent Water's **wholesale water** in-period ODIs the company has incurred a net underperformance penalty of £1.628m primarily because its drinking water complaints were 31.5% higher than its performance commitment and it achieved its target for speed of repairing leaks in 33% of cases rather than its commitment of 80%. The size of the penalty was offset in particular by Severn Trent Water achieving average supply interruptions to customers of 10 minutes, 2 minutes below its performance commitment to customers. Severn Trent Water estimates the ODI underperformance penalty will reduce its annual average household water bill by around £0.51 in 2018-19.

Table 15: Our final determination for Severn Trent Water's wholesale water in-period ODIs

In-period ODI	Performance relative to commitment	Ofwat final determination £ million (2012-13 prices, net of tax)
W-A1: Complaints about drinking water quality	31.5% more complaints than commitment	-2.395
W-A2: Compliance with drinking water quality standards	0.026 percentage points below commitment	-0.172
W-A4: Successful catchment management schemes	Not applicable	-
W-B2: Leakage	1.6% below commitment	- (See explanation below)
W-B3: Speed of response in repairing leaks	47 percentage points below commitment	-0.913
W-B4: Minutes customers go without supply each year	2 minutes lower than commitment	2.057

W-B7: Customers at risk of low pressure	25% lower than commitment	0.049
W-B8: Restrictions on water use	Not applicable	-
W-C1: Customers rating our services as good value for money	11 percentage points above commitment	0.125
W-E1: Carbon footprint	12% above commitment	-0.380
Total (water)	-	-1.628

In relation to Severn Trent Water's **wholesale wastewater** in-period ODIs the company has earned a net outperformance payment of £39.994m primarily because its number of external sewer flooding incidents was 23% lower than its commitment, its number of internal sewer flooding incidents was 9% lower than its commitment and its number of Category 3 and 4 pollution incidents was 25% lower than its commitment. Severn Trent Water estimates its ODI outperformance payment will increase its annual average household wastewater bill by around £12.85 in 2018-19. However, we propose to accept the company's proposals to defer £27m of its wastewater ODI payment, which reduces the impacts on the annual average household wastewater bill to £2.67.

Table 16: Our final determination for Severn Trent Water's wholesale wastewater in-period ODIs

In-period ODI	Performance relative to commitment	Ofwat final determination £ million (2012-13 prices, net of tax)
S-A1: Internal sewer flooding incidents	9% fewer incidents than commitment	3.546
S-A2: External sewer flooding incidents	23% fewer incidents than commitment	32.225
S-B1: Customers rating our services as good value for money	11 percentage points above commitment	0.125
S-C2: Category 3 pollution incidents	25% fewer incidents than commitment	3.935
S-D1: Carbon footprint	4% below commitment	0.163

Total (wastewater)	-	39.994
Total, with deferral of £27m (wastewater outperformance payment)	-	12.994

The rest of this section describes how we arrived at these figures. Section A3.6 provides a more detailed breakdown of our calculations.

A3.1 Severn Trent Water's ODIs

Severn Trent Water has 45 performance commitments of which 33 have financial ODIs attached to them. There are 15 performance commitments with in-period ODIs attached for the 2015-20 period.

Table 17: Summary of Severn Trent Water's financial ODIs

	Underperformance penalty only		Outperformance payment only		Underperformance penalty and outperformance payment	
	In-period	End-of-period	In-period	End-of-period	In-period	End-of-period
Water	1	8	-	-	9	2
Wastewater	-	2	-	1	5	4
Retail	-	-	-	-	-	1
Total	1	10	-	1	14	7

A3.2 Summary of Severn Trent Water's request for 2016-17

Severn Trent Water submitted its request before the 15 September 2017 deadline for us to determine the level of any change to its price controls due to its performance in connection with its in-period ODIs.

Severn Trent Water submitted as part of its application, completed versions of the ODI spreadsheet from the PR14 reconciliation rulebook and completed versions of the K factor model spreadsheet.

The application provided a breakdown of its ODI payment claims, explaining how the company had performed against its performance commitment levels for 2016-17 (these are included in Section A1.5)

The application included information on:

- the extent of outperformance and underperformance and the associated performance payments and penalties;
- the impact on customers' bills;
- customer engagement
- data assurance; and
- Water Forum engagement.

The information contained in the application supplemented the performance and assurance documents published on the [Severn Trent Water website](#):

- Annual Performance Report – 2016-17 (July 2017)
- Annual Performance Report – 2016-17: a summary for customers (July 2017)
- Assurance summary for 2016-17 (July 2017)
- Risk and compliance statement (July 2017)
- Minutes of meetings of the Water Forum (June 2017)

Severn Trent Water stated that, overall, operating conditions within the year were considered to be benign. They were not considered exceptional and were within the range of conditions expected when it designed its performance commitments and ODIs. Therefore, the company has not applied any adjustments to the calculated incentives based on external factors. The company did not identify any potential for ambiguity in measurement against its in-period ODIs.

Severn Trent Water is making adjustments to its overall ODI payment position due to restating performance for 2015-16 against three of its in-period ODIs:

- S-A1: Internal sewer flooding
- S-A2: External sewer flooding; and
- S-D1: Size of our carbon footprint.

Our assessment of the company's approach to restatement for these three in-period ODIs is included in Section A3.3 below.

Severn Trent Water applied for the full value of its ODI outperformance payments and underperformance penalties to be taken into account in this final determination, with the exception of leakage (W-B2). The reasons for this exception, and the impact of the company's restatement on the company's net ODI payment position, are explained below.

In Section A3.6 we set out Severn Trent Water's claim for each in-period ODI for 2016-17.

A3.3 Our assessment

Provision of information

Severn Trent Water correctly completed the K factor models and the ODI spreadsheets.

Ofwat cross-checking calculations

The company's calculations matched our internal calculations based on the information provided in the APR. However, as explained below, we consider that Severn Trent Water should apply its weighted average cost of capital (WACC) to adjustments to ODI payments as a result of restating performance in previous years.

Leakage ODI

Severn Trent Water has reported a reduction in leakage levels of 2 MI/day. This net reduction is comprised of a 6 MI/day reduction driven by data improvements, a 3 MI/day reduction due to methodological changes, and an increase in the level of unaccounted for water¹⁵ from the network of 7 MI/day.

The methodological changes reflect where new evidence has resulted in a change to the company's assumptions about how water is used. The data improvements reflect where the company now has more accurate data (for example, because new data loggers have been installed).

The definition of Severn Trent Water's leakage performance commitment in its PR14 company-specific appendix states: "If any methodology changes have a material impact on the calculation, outturn figures will be adjusted so that the incentive applies to the underlying change in leakage." Severn Trent Water does not consider the methodological changes are material. The company considers it is eligible for an outperformance payment of £0.861m. However, Severn Trent Water is not applying for the outperformance payment because the 2MI/day reduction in leakage is driven by minor methodological changes and data improvements.

We asked Severn Trent Water what its leakage performance would have been if it had used the same methodology and data quality as when the PR14 final determination was made. The company said that in this case its leakage would have been 442 MI/day. This is 3 MI/day above Severn Trent Water's performance commitment and would result in the company incurring an underperformance penalty of £0.369m. Severn Trent Water considered it was not appropriate for it to incur an

¹⁵ Unaccounted for water is either unmeasured consumption or leakage from the network.

underperformance penalty, as its PR14 final determination company-specific appendix means that it is eligible for an outperformance payment of £0.861m. The company also explained that when it considered whether an underperformance penalty was due as part of its assurance process its independent assurers did not consider that a penalty was appropriate.

We accept Severn Trent Water's proposal not to make any adjustment to its price control for leakage in 2017-18. However, this is in the context of a number of companies raising issues with the measurement of their leakage performance commitments with us recently. We would like to consider the issues raised with the sector as a whole early in 2018. Following engagement with the sector, we will consider Severn Trent Water's leakage performance as part of our in-period ODI determination for Severn Trent Water in 2018.

Restating performance against performance commitments

Earlier this year, Severn Trent Water made both us and its customer challenge group aware that it had identified some areas where it would need to restate its performance. Following this, as part of its 2016-17 annual performance reporting the company restated performance levels for the following performance commitments:

- S-A1: internal sewer flooding incidents
- S-A2: external sewer flooding incidents
- S-D1: carbon emissions (wastewater)

This affects the outperformance payment values that we included in our [final determination](#) of Severn Trent Water's in-period outcome delivery incentives for 2015-16. Our adjustments for the restated performance levels are set out below:

S-A1 and S-A2: Internal and external sewer flooding incidents

As part of Severn Trent Water's internal data checks and assurance (see Assurance section below), the company identified a risk related to jobs which had been cancelled on their recording systems for sewer flooding incidents. For 2016-17 reporting, the company reviewed all cancelled cases to understand if the cancellation was for valid reasons. The company also reviewed customer records for 2015-16. This review identified five internal sewer flooding incidents and 21 external sewer flooding incidents that were missed from the 2015-16 reported data.

Table 18: Internal sewer flooding incidents restatement to 2015-16 reported position

Internal sewer flooding	Reported	Restated position	Difference
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Committed performance level	1,014	1,014	0
Actual performance level	804	809	5

Table 19: External sewer flooding incidents restatement to 2015-16 reported position

External sewer flooding	Reported	Restated position	Difference
Committed performance level	7,639	7,639	0
Actual performance level	7,142	7,163	21

Severn Trent Water has updated its reported 2015-16 figures for internal and external sewer flooding incidents in this year's APR, and is applying for the following adjustments to its 2016-17 outperformance payments to account for these restatements:

- Internal sewer flooding – reduction of £0.214m
- External sewer flooding – reduction of £0.415m.

In our [Information Notice 17/05](#), we set out our policy for determining the application of in-period ODIs in 2017. We stated that in-period ODIs can be adjusted for inflation and tax. Where an in-period ODI is not being paid in the next charging year, the WACC, set out in companies' final determination at PR14, can also be added to the in-period ODI payment.

Severn Trent Water's restatement relates to its 2015-16 reported position, identified as a consequence of internal checks and assurance. We therefore consider it appropriate to apply the WACC (3.6%) in order to reflect the time that has elapsed between the overstated outperformance payment for 2015-16 being applied to customer bills and the reduction owed to customers to correct for this.

Table 20: Adjustments from restatements made to internal and external sewer flooding incidents

Performance commitment	Adjustment from restatement of 2015-16 position	Adjustment from restatement, applying WACC (3.6%)	Difference
Internal sewer flooding	£214,100	£221,808	£7,708
External sewer flooding	£415,000	£429,940	£14,940
Totals	£629,100	£651,748	£22,648

Consequently, it is our view that the following adjustments to Severn Trent Water's 2016-17 net outperformance payments are appropriate after taking into account applying the WACC to Severn Trent Water's restatements:

- Internal sewer flooding – reduction of £0.222m
- External sewer flooding – reduction of £0.430m.

Table 21: Net outperformance payments for internal and external sewer flooding incidents

Performance commitment	Net outperformance payment applied for by company	Our final determination
Internal sewer flooding	£3.554m	£3.546m
External sewer flooding	£32.240m	£32.225m

S-D1: Size of carbon footprint (wastewater)

During Severn Trent Water's assurance work this year (see Assurance section below), the company identified an error that it made in the Carbon Accounting Workbook, resulting in an overstatement of wastewater carbon emissions by approximately 12% in any given year. This would mean that the company's reported emissions are no longer calculated on a consistent basis with its PR14 performance commitments. To address this issue Severn Trent Water has implemented a shadow performance commitment for wastewater carbon emissions to ensure its performance commitment and reporting are on the same basis and reflect the commitment the company made to its customers at PR14, corrected for the systematic error. Severn Trent says it will calculate all future outperformance payments and underperformance penalties from this shadow commitment.

As set out in [Information Notice 16/07](#), our expectation is that where a company has brought to our attention an error in its outcomes, the company should formally apply to us to make a corrigendum (i.e. a correction) to its PR14 company-specific appendix. We are taking forward this corrigendum with Severn Trent Water.

Table 22: Restatements and shadow performance commitment for wastewater carbon emissions

Wastewater carbon emissions	2015-16	2016-17	2017-18	2018-19	2019-20
Final Determination (ktCO _{2e})	248	245	238	237	242

Shadow commitment (ktCO _{2e})	217	215	209	208	212
Performance reported in APR 2016	238	-	-	-	-
Restated outturn reported in APR 2017	204	207			

In addition, Severn Trent Water updated its reported 2015-16 figures for wastewater carbon emissions in this year's APR, and is applying for an additional outperformance payment of £43,890 for 2015-16 based on the restated outturn reported against the shadow performance commitment. When added to the outperformance payment of £117,040 in relation to its performance in 2016-17 this results in a total outperformance payment of £160,930 to be applied to customer bills in relation to wastewater carbon emissions.

Severn Trent Water's restatement relates to its 2015-16 reported position. We consider it appropriate to apply the WACC (3.6%) in order to reflect the time that has elapsed between the understated outperformance payment for 2015-16 being applied to customer bills and the payment owed to the company for outperformance. This is for consistency with how we treated the restatements that related to underperformance payments.

Table 23: Adjustments from restatements made to wastewater carbon emissions

Performance commitment	Adjustment from restatement of 2015-16 position	Adjustment from restatement, applying WACC (3.6%)	Difference
Wastewater carbon emissions	£43,890	£45,470	£1,580

Therefore, it is our view that the following adjustments to Severn Trent Water's 2016-17 outperformance payment (following our 2015-16 determination) are appropriate to account for the restatements made:

- an outperformance payment of £117,040 for 2016-17 based on the shadow performance commitment; and
- an outperformance payment of £45,470 for 2015-16 based on restated outturn reported against the shadow performance commitment.

This results in a total price control adjustment of £162,510 to be applied to customer bills in 2018-19 in relation to wastewater carbon emissions based on Severn Trent Water's performance in 2015-16 and 2016-17.

Assurance

Severn Trent Water was in the 'self-assurance' category under our [Company Monitoring Framework \(CMF\)](#) at the time it submitted its in-period ODI claim. Severn Trent Water moved down to the 'targeted' category when we published [our 2017 CMF assessment](#) on 30 November 2017.

The CMF helps us to make sure that water companies provide high-quality assurance on their reporting to customers. It also challenges water companies to put processes in place so that the underlying data can be trusted. The CMF reminds companies that their behaviour in-period matters and that engagement and accountability is a continuous process, not simply during price reviews. Ultimate responsibility for assurance lies with a company's board.

Within the in-period ODI application Severn Trent Water summarised the assurance it had undertaken and the outcome of the independent technical assurance on its performance commitments. This information supplemented the company's [Assurance summary for 2016-17](#) published in July 2017.

The assurance process used a staged approach which is completed before any internal sign-off of data by Severn Trent Water. Stage one focused on process and included both desktop reviews and face-to-face interviews. Stage two focused on the data produced and associated commentaries; engineering consultants carried out audits in person with the responsible data owners.

The external consultancy carried out stage one and stage two reviews for all 45 performance commitments at year-end, and on a risk-based approach at the half year (October 2016). As part of its year-end assurance, the consultants found no material weaknesses in the production of the data. However, external assurance and Severn Trent Water's own internal checks highlighted potential issues in reporting for the performance commitments relevant to this in-period determination. These potential issues are summarised below:

- **Size of carbon footprint**

The checks identified a data input had been omitted in error in the population of the carbon accounting workbook. This data was related to the proportion of methane produced through digestion that is subsequently captured. By omitting this data, the workbook assumed all methane produced escaped to the atmosphere, which was not the case.

Severn Trent Water reviewed its historical data and confirmed that this error was repeated across a number of years including 2011-2014, the years on which 2015-20 performance commitment levels were based. The impact was an overstatement of wastewater carbon emissions by approximately 12% in any given year.

This issue was corrected and the analysis for all years was presented to Severn Trent Water's independent technical assurer. The external assurers reviewed the approach taken and confirmed that there were no further material weaknesses in the approach.

- **Asset stewardship – number of internal and external sewer flooding incidents**

As part of the internal data checks and assurance, a risk was highlighted that incidents may not have been reported if jobs raised in Severn Trent Water's recording system were subsequently cancelled. The company informs us there are valid reasons to cancel jobs, such as duplicate jobs relating to a single incident or incidents confirmed as being in neighbouring companies' areas.

Severn Trent Water reviewed all cancelled cases relating to internal flooding and external curtilage flooding as well as a sample of blockage and non-curtilage contacts. The outcome of this was incorporated into 2016-17 reporting. Severn Trent Water also retrospectively reviewed the 2015-16 reported position and concluded that 5 internal incidents and 21 external incidents might have been missed from 2015-16 reported data.

For both performance commitments, the company has updated its reported figures in this year's APR and has applied commensurate adjustments to its total outperformance figures.

Accurate reporting of performance is important for trust and confidence. Company assurance processes are key to this and we want to incentivise high quality assurance. But we recognise that some information is, by its nature, uncertain and may need to be revised. Our CMF assessment looks at assurance in the round; if serious errors were in place and undetected then our CMF assessment would reflect this.

We also believe that a company should be proactive and show that it can be trusted to identify and deal with issues without intervention by us. We aim for a proportionate and risk-based approach; it is in customers' interests that the assurance process is proportionate to the risks around data.

Overall, we found that the company had explained the issues that it had found and how it had dealt with them. While the impact is visible to customers, we consider that the size and impact of the restatements were not significant enough to affect trust and confidence in the overall view of performance, nor individual commitments, or our previous view of company assurance. We would have serious concerns if we believed that the errors appeared systemic, but this does not appear to be the case.

Bill impact

Severn Trent Water has stated that the indicative bill impact from incorporating the full extent of payments from its ODIs is an increase of £12.61 to the average household combined water and wastewater bill. This is in addition to an expected indicative £12.49 increase due to RPI, and is only partially offset by an expected indicative decrease of £4.85 resulting from WRFIM. The impact on bills differs between water and wastewater services: the impact on the average wastewater bill is an increase of £12.85, while there is a reduction of £0.51 on the average water bill.

Severn Trent Water's analysis suggests that incorporating the full ODI outperformance payment for wastewater into the 2018-19 charges will increase the average household combined bill by more than 5% in nominal terms, and the unmeasured wastewater bill would increase by around 9%. This would impact at a time when customers are experiencing a number of pressures on their disposable incomes, primarily the rate of inflation being higher than the rate of increase in household incomes.

The company has proposed an approach to smoothing these bill impacts, which we discuss below.

Bill smoothing

The company's submission proposed to apply the full ODI underperformance penalty for water services on bills in 2018-19, but proposed measures to smooth bills over more than one year in relation to wastewater. Severn Trent Water proposed to defer £27m of the wastewater outperformance payment, which would reduce the ODI impact on wastewater bills to £2.67 (from £12.85) for 2018-19. Severn Trent Water stated that it would be important to review future charges annually in the round, including the impact of future performance, the effects of inflation and other drivers on customers' bills, to avoid bill volatility. Consequently, the company did not propose when the deferred outperformance payment for the wastewater control would be applied to customers' bills.

We asked the company whether it had considered any other options for deferring its wastewater outperformance payment; a rationale as to why the proposed approach was chosen over alternatives; and why this approach was in the interests of customers.

The company responded that it had considered three options for bill smoothing.

- **Option 1:** Apply the full wastewater outperformance payment to bills in 2018-19, without bill smoothing;
- **Option 2:** Defer £22.5m of the wastewater outperformance payment; and,
- **Option 3:** Defer £27m of the wastewater outperformance payment.

Table 24 below illustrates the nominal bill impact for 2018-19 in percentage terms relative to 2017-18 bills under each of the options considered.

Table 24: Scenarios considered by Severn Trent Water for bill smoothing

Average bills	Option 1 – without smoothing	Option 2 – defer £22.5m	Option 3 – defer £27m
Unmeasured			
Water	4.4%	3.9%	3.9%
Sewerage	9.5%	1.3%	0.7%
Combined	6.9%	2.6%	2.3%
Measured			
Water	4.7%	5.1%	5.1%
Sewerage	6.1%	4.6%	4.1%
Combined	5.4%	4.9%	4.6%
Average			
Water	4.4%	4.2%	4.2%
Sewerage	7.9%	2.3%	1.8%
Combined	6.1%	3.3%	3.0%

Severn Trent Water's decision to propose Option 3 was due to uncertainties relating to inflation, as its analysis suggested that some subgroups of customers were still at risk of breaching a 5% nominal bill increase if inflation continued to rise. The company felt that opting for Option 3 allowed for additional flexibility to manage increasing inflation within bills, while restricting the average bill impact to below 5%. The overall increase in the average bill due to ODIs under Option 3 would be around £2.16.

We also asked the company to provide its current expectation of when it expects to apply the deferred outperformance payment to its customer bills. The company

responded that it would consider including the deferred amount in bills in 2019-20. However, if it continues to outperform, and inflation continues to rise, then the company would have to consider deferring further outperformance payments next year as well. This would move the bill impacts into the next price control period.

Severn Trent Water has informed us that the Water Forum and CCWater are both supportive of its proposal to defer a proportion of its wastewater outperformance payment (more detail is provided in the following section). In addition Severn Trent Water emphasised that its approach is in line with feedback it received from customers during its PR14 customer engagement, in which customers said that bill stability is important and customers challenged the company to limit bill rises.

Based on the information Severn Trent Water provided us with, including the views of its Water Forum and CCWater, our assessment is that it is appropriate for Severn Trent Water to smooth the impact of its net outperformance payment for wastewater in-period ODIs, by deferring £27m. Applying the full wastewater outperformance payment would result in wastewater bills increasing by £12.61 on average due to ODI performance, on top of increases primarily due to inflation of £8.21. These aggregated impacts would amount to significant bill increases for customers. Applying a proportion of the payment in 2018-19 will reduce the impact on customers' bills next year and allow additional flexibility to manage increasing inflation. We expect Severn Trent Water to take appropriate account of bill smoothing when deciding next year when the deferred £27m should be applied.

Deferring £27m of the wastewater outperformance payment means applying an outperformance payment of £12.994m for wastewater services to bills in 2018-19. Combined with the £1.628m underperformance penalty for water services, this is a net outperformance payment of £11.366m in 2012-13 prices, net of tax.

We expect Severn Trent Water to continue to manage the impact on bills by taking a rounded, long-term view. We will consider next year whether the outperformance payment due for 2017-18 performance should be applied taking into account all relevant circumstances at that time. It will be for Severn Trent Water to apply this increase in charges in a manner which is consistent with our Charges Scheme Rules.

Customer and stakeholder engagement

Severn Trent Water reported that the Water Forum continues to monitor and challenge the company's current performance in a proportionate and targeted way. Severn Trent Water has engaged with the Water Forum on: the potential for bill smoothing and the deferral of ODI outperformance payments; its half-year results; its

full results, including the findings from the assurance programme; leakage and the data issues relating to sewer flooding and wastewater carbon emissions. Severn Trent Water provided us with the draft minutes of its most recent meeting with the Water Forum on 1 June 2017, during which the Water Forum challenged the company to reflect on its options for how much and when the company should take any ODI outperformance payments in 2018-19 and that it should consider the impact on bills for customers.

We asked the company to engage with the Water Forum and CCWater specifically on: the options for deferring the ODI outperformance payments it had modelled; when the impact on bills would be seen; and the implications of future expected ODI performance and inflation for bills.

Following our request, Severn Trent Water engaged with CCWater and informed us that the central chair for CCWater stated 'having looked at this closely over the last few weeks...I support Option 3 and commend the company for proposing to mitigate the short term impact on customer bills by phasing access to the rewards they have earned by spreading the bill impact over a number of financial years.'

Severn Trent Water stated that it has received challenges from the Water Forum over the previous 18 months, and in addition to the supportive comments expressed by its Water Forum Chair, they received no comments from members objecting to the proposed Option 3.

Disappointingly, Severn Trent Water has not undertaken any specific engagement with customers in relation to its proposal to defer part of the ODI outperformance payment.

In relation to its engagement with South Staffordshire Water, Severn Trent has kept South Staffordshire Water informed about the changes, its intention to smooth bills and the likely effect, so that South Staffordshire Water is prepared to engage with their shared customers as required.

Past and expected future performance

We checked whether the information provided on 2016-17 performance was in line with what we would expect from the company's past performance and whether future performance was expected to be materially different from the current year. In its APR for 2016-17, Severn Trent Water explained the reasons for any underperformance and outperformance.

Our assessment is that there are no examples of performance being due to exceptional factors or 'one-off' events, which might warrant further investigation or further consideration of different bill smoothing options.

ODI definition (ambiguity)

During the first year of the price control period, Severn Trent Water reviewed the definition of all 45 performance commitments to identify any areas of ambiguity. The company explained its findings and proposed interpretation in its APR for 2016. The company did not identify any further areas of ambiguity in any of its ODI definitions this year.

Mitigating factors

Severn Trent Water has reported performance for each ODI in accordance with the definitions in the PR14 final determination company-specific appendix. We agree that Severn Trent Water has applied no mitigation measures to its in-period ODIs.

A3.4 Responses to the consultation on the draft determination

We consulted on our [draft determination of the in-period ODIs](#) between 31 October and 20 November 2017. We received three responses in relation to our draft determination for Severn Trent Water.

Severn Trent Water responded to say it welcomed the publication of our draft determination, which aligned very closely with its application. Severn Trent Water did not request any changes to the draft determination.

Welsh Water commented that the draft determination could have been clearer that we are proposing to allow Severn Trent Water a wastewater ODI outperformance net payment of £39.994m, and to allow it to defer £27m into the future. The [draft determination](#) stated: (1) that Severn Trent Water's performance entitles it to £39.994m (2012-13 prices, net of tax) of net ODI outperformance payments; and (2) that Severn Trent Water can adjust its wastewater price control by £12.994m (2012-13 prices, net of tax) in 2018-19, thus allowing it to defer £27m of wastewater outperformance payments into the future (page 58).

CCWater commented that, while it supported the deferment of part of the outperformance payment, it wanted to know when the deferred amount would be applied to customers' bills. Our final determination relates to what adjustments there

will be to Severn Trent Water's price controls in 2018-19 for its ODIs. We are not determining when the £27m deferral will apply to customers' bills, as this is not allowed for in the company's licence. At future in-period ODI determinations we will take into account past performance, the case for applying the deferred outperformance payment, and bill smoothing, among other factors. Severn Trent Water has told us it will take into account other pressures on customers' bills in the future when proposing when to apply its deferred wastewater outperformance payments.

CCWater commented that Severn Trent had made a step change in many areas of performance which had led to the achievement of the sewer flooding outperformance payments, which reflects a customer priority identified at PR14. CCWater also commented that it expected Severn Trent Water to improve its performance on drinking water quality complaints.

CCWater asked what we will do if and when Severn Trent Water's wastewater outperformance payments reach the 2% aggregate return on regulated equity (RoRE) cap for ODIs. This is not an issue that arises in the in-period ODI determinations for 2016-17. We have set out our policy on the aggregate RoRE cap on ODIs in the [Final price control determination notice: policy chapter A2 – outcomes](#), pages 89-95.

CCWater stated that we and Severn Trent Water need to consider the application of ODI payments in the context of the proposed licence variation resulting from the acquisition of Dee Valley Water by Severn Trent Water. We are currently consulting on the [licence variations](#). The consultation document sets out the company's proposed approach to allocating ODI payments before and after the licence variation using approaches that vary depending on the particular ODI (see pages 16 to 20). We and Severn Trent Water will take into account the results of the consultation before finalising the approach to ODI payments following the licence variations.

CCWater asked us to consider the impact that Severn Trent Water's wastewater outperformance payments would have on the bills for customers in the South Staffordshire Water region. As explained above, Severn Trent Water has kept South Staffordshire Water informed about its ODI payments, its intention to smooth bills, and the likely effect on bills, so that South Staffordshire Water can engage with their shared customers as required.

CCWater commented that it expected Severn Trent Water to communicate effectively with its customers to explain what tangible services improvements its customers are receiving for the outperformance payments.

Taking into account the comments on the draft determination for Severn Trent Water, we are making no changes for the final determination for Severn Trent Water.

A3.5 Our final determination

This section sets out our final determination for Severn Trent Water.

In relation to Severn Trent Water's **wholesale water** in-period ODIs the company has incurred a net underperformance penalty of £1.628m primarily because its drinking water complaints were 31.5% higher than its performance commitment and it achieved its target for speed of repairing leaks in 33% of cases rather than its commitment of 80%. The size of the penalty was offset, in particular, by Severn Trent Water achieving average supply interruptions to customers of 10 minutes, two minutes below its performance commitment to customers.

In relation to Severn Trent Water's **wholesale wastewater** in-period ODIs the company has earned a net outperformance payment of £39.994m primarily because its number of external sewer flooding incidents was 23% lower than its commitment, its number of internal sewer flooding incidents was 9% lower than its commitment and its number of Category 3 pollution incidents was 25% lower than its commitment.

To put the amounts into context, Table 25 sets out the allowed revenue for Severn Trent's wholesale water and wastewater price controls for the 2015-2020 period. This was included in the company's [PR14 final determination company-specific appendix](#) (tables A2.10 and A3.9). The table uses 2012-13 prices, which was the base year for ODIs in PR14.

Table 25: Severn Trent Water's wholesale water and wastewater allowed revenue

Allowed revenue (PR14 FD, £m, 2012-13 prices)	2015-16	2016-17	2017-18	2018-19	2019-20	Total
Wholesale water	620.7	620.3	620.0	619.7	619.3	3,100.0
Wholesale wastewater	661.0	662.8	664.6	666.4	668.2	3,322.8

Note: totals may not add due to rounding

In Table 26 below we set out our final in-period ODI determination for Severn Trent Water.

Table 26: Our final determination on in-period ODIs for 2016-17 – price control totals

The first table uses 2012-13 prices, net of tax, which is the basis of ODIs in PR14.

The second table applies the £27m deferral of the wastewater outperformance payment, still in 2012-13 prices. The third table uses 2018-19 prices, gross of tax, which is the basis for adjustments to the price controls in 2018-19.

For wastewater we are determining both: (1) that Severn Trent Water is entitled to £39.994m (2012-13 prices, net of tax) of net ODI outperformance payments; and (2) Severn Trent Water can adjust its wastewater price control by a net £12.994m (2012-13 prices, net of tax) in 2018-19 and defer £27m to its wastewater price control in a future year.

£ million in 2012-13 prices (the base year for PR14), net of tax	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water	-1.628	-1.628	0
Wastewater	40.016	39.994	0.022
Total	38.388	38.366	0.022

£ million in 2012-13 prices (the base year for PR14), net of tax	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water	-1.628	-1.628	0
Wastewater	13.016	12.994	0.022
Total	11.388	11.366	0.022

£ million impact on the price control for 2018-19 (the figures in the table above uprated by inflation and adjusted for tax)	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water	-2.319	-2.319	0
Wastewater	18.542	18.511	0.032
Total	16.224	16.192	0.032

Notes

- Totals may not add up because of rounding
- Marginal tax rate = 19%

We have used the K factor models to calculate the adjustment to Severn Trent Water's wholesale price limits resulting from the application of in-period ODIs. The K factor model (applying the methodology used for the PR14 final determination

models) uses the formula $(1 + \text{RPI}) * (1 + \text{K}) / 100$. The revised K factors are set out in Table 27 below.

Table 27: Revised K factors for the charging year beginning 1 April 2018

Wholesale price control	Final determination price controls	Revised K
Water	-0.25%	-0.36%
Wastewater	0.08%	-1.13% ¹⁶

In Section A3.6 we set out our final determination of each of Severn Trent Water's in-period ODIs based on performance in the financial year 2016-17. Equivalent details for Severn Trent Water's performance in the financial year 2015-16 are set out in our [final determination](#) of Severn Trent Water's in-period ODIs in 2016.

¹⁶ Despite our proposal to apply WACC adjustments to Severn Trent Water's ODI payments, the value reached for K is the same under both the company's submission and our final determination.

A3.6 Final determination for Severn Trent Water's in-period ODIs for 2016-17

In-period ODI final determination: water

In-period ODI	2016-17 PC level ¹⁷	2016-17 actual	Payment due £ million	Company claim ¹⁸ £ million	Claim calculation	Ofwat final determination £ million	Comments
W-A1: Complaints about drinking water quality <i>(Number of water quality complaints)</i>	10,995	14,461	-2.395	-2.395	2016-17 PC level met = No 2016-17 penalty deadband = 11,800 Penalty rate = £0.0009m Penalty: 14,461 (performance) – 11,800 (deadband) = 2,661 * 0.0009 = £2.395m	-2.395	We propose to accept Severn Trent Water's net underperformance penalty application and the company's underperformance penalty calculation.
W-A2: Compliance with drinking water quality standards <i>(Mean zonal compliance %)</i>	99.97	99.944	-0.172	-0.172	2016-17 PC level met = No 2016-17 penalty collar = 99.91 2016-17 penalty deadband = 99.945 Penalty rate = £1.717m (£/0.01%) Underperformance penalty: 99.945 (deadband) – 99.944 (underperformance) = 0.001	-0.172	We propose to accept Severn Trent Water's net underperformance penalty application and the company's underperformance penalty calculation.

¹⁷ PC level stands for Performance Commitment level

¹⁸ The £ million figures are in 2012-13 prices, which was the base year for PR14, and net of tax. To calculate the impact on the price control for 2018-19 we uprate the figure by inflation and make an adjustment for tax.

					= 1.717 / 10 = £0.1717m		
W-A4: Successful catchment management schemes <i>(Number of catchment management schemes)</i>					The Severn Trent Water PR14 Final Determination company-specific appendix (pages 159-160) states that the outperformance or underperformance payment is to be applied after assessment of performance to 2018-19. However, payment may be made earlier if the total number of schemes shown to be successful is above the target at an earlier date. The target is 12 successful schemes by the end of the 2018-19 financial year (31 March 2019).	-	Our view is that no outperformance or underperformance payment is applicable for 2016-17.
W-B2: Leakage <i>(Megalitres per day MI/d)</i>	439	432	0.861	0	2016-17 PC level met = Yes Incentive payment rate = £0.123m Outperformance payment: 439 – 432 = 7 * 0.123 = £0.861m SVT is not applying to take the outperformance payment of £0.861m, as this was primarily driven by improvements in data quality.	-	We propose to accept Severn Trent Water's application. Based on the company's measured performance level the maximum outperformance payment due would be in £0.861m. However, it is not applying to take this outperformance payment, as the measured outperformance

Final determination of in-period ODIs for 2017

							was a consequence of improvements in data quality for leakage and methodological changes rather than actual reductions in leakage.
W-B3: Speed of response in repairing leaks (% visible leaks fixed within 24 hours)	80%	33%	-0.913	-0.913	2016-17 PC level met = No 2016-17 penalty deadband = 70% Penalty rate = £24,663 Underperformance penalty: 70 (deadband) – 33 (performance) = 37 * 24,663 = £0.913m	-0.913	We propose to accept Severn Trent Water's net underperformance penalty application and the company's underperformance penalty calculation.
W-B4: Minutes customers go without supply each year (Minutes)	12.2	10.13	2.057	2.057	2016-17 PC level met = Yes 2016-17 payment deadband = 12.0 Incentive payment rate = £1.1m Outperformance payment: 12 (deadband) – 10.13 (performance) = 1.87 * 1.1 = £2.057m	2.057	We propose to accept Severn Trent Water's net outperformance payment application and the company's outperformance payment calculation.
W-B7: Customers at risk of low pressure	250	187	0.050	0.050	2016-17 PC level met = Yes Incentive payment rate = £790 Outperformance payment: 250 – 187 = 63 * 790 = £0.049m	0.049	We propose to accept Severn Trent Water's net outperformance payment application and the company's

<i>(Number of customers at risk of low pressure)</i>							outperformance payment calculation.
W-B8: Restrictions on water use <i>(Number of water restrictions in the five-years 2015-2020)</i>			-	-	No outperformance payment or underperformance penalty is payable for 2015-16. The five-year underperformance penalty is to apply in full in the year after a water restriction is applied.	-	This outperformance payment is only paid at the end of the price control period if no water restrictions are applied at any point during the price control period.
W-C1: Customers rating our services as good value for money ¹⁹ <i>(% of customers rating services as good or very good value for money, as measured by quarterly Customer Satisfaction Survey)</i>	47	58	0.125	0.125	2016-17 PC level met = Yes 2016-17 payment deadband = 57% Payment incentive rate = £0.125m Outperformance payment: 58 (performance) – 57 (deadband) = 1 * 0.125 = £0.125m	0.125	We propose to accept Severn Trent Water's net outperformance payment application and the company's outperformance payment calculation.
W-E1: Carbon footprint	224	250	-0.380	-0.380	2016-17 PC level met = No 2016-17 penalty deadband = 224 Penalty rate = £14,630	-0.380	We propose to accept Severn Trent Water's net underperformance penalty

¹⁹ Rewards and penalties for the 'Customers rating our services as good value for money' performance commitment are divided equally between the water and wastewater price controls.

<i>(ktCO₂e: thousand tonnes of carbon dioxide equivalent)</i>					Penalty: 250 – 224 = 26 * £14,630 = £0.380m		application and the company's underperformance penalty calculation.
Total (water)			-0.767	-1.628		-1.628	

In-period ODI final determination: wastewater

In-period ODI	2016-17 target (PC level ²⁰)	2016-17 actual	Payment due £ million	Company claim ²¹ £ million	Claim calculation	Ofwat final determination £ million	Comments
S-A1: Internal sewer flooding incidents <i>(Number of internal sewer flooding incidents)</i>	989	901	3.768	3.554	2016-17 PC level met = Yes 2016-17 outperformance payment deadband = 989 Payment incentive rate = £42,820 Outperformance payment: 989 – 901 = 88 * 42,820 = £3.768m SVT is seeking to apply a reduction of £0.214m to its 2016-17 potential outperformance payment, to account for restatements to its 2015-16 reported number of internal sewer flooding incidents.	3.546	Our view is that Severn Trent should apply its WACC to the reduction amount relating to restatements to its 2015-16 reported number of internal sewer flooding incidents. This gives a net outperformance payment amount of £3.546m.

²⁰ PC level stands for performance commitment level

²¹ The £ million figures are in 2012-13 prices, which was the base year for PR14, and net of tax. To calculate the impact on the price control for 2018-19 we update the figure by inflation and make an adjustment for tax.

					<p>However, this reduction needs to be inflated by Severn Trent's weighted average cost of capital (3.6%) since this underperformance penalty relates to the previous charging year. Therefore, the reduction amount is equal to: $\text{£}0.214\text{m} * 1.036 = \text{£}0.221\text{m}$</p>		
<p>S-A2: External sewer flooding incidents <i>(Number of internal sewer flooding incidents)</i></p>	7,548	5,801	32.655	32.240	<p>2016-17 PC level met = Yes 2016-17 payment deadband = 7,452 Payment incentive rate = £19,779 Outperformance payment: 7,452 (deadband) – 5,801 = 1,651 * 19,779 = £32.655129m SVT is seeking to apply a reduction of £0.415 to its 2016-17 potential outperformance payment, to account for restatements to its 2015-16 reported number of external sewer flooding incidents. However, this reduction needs to be inflated by SVT's weighted average cost of capital (3.6%) since this underperformance</p>	32.225	<p>Our view is that Severn Trent should apply its WACC to the reduction amount relating to restatements to its 2015-16 reported number of external sewer flooding incidents. This gives a net outperformance payment amount of £32.225m.</p>

					penalty relates to the previous charging year. Therefore, the reduction amount is equal to: £415,359 * 1.036 = £430,312		
S-B1: Customers rating our services as good value for money ²² (% of customers rating Severn Trent Water's services as good or very good value for money, as measured by its quarterly Customer Satisfaction Survey)	47	58	0.125	0.125	2016-17 PC level met = Yes 2016-17 payment deadband = 57 Payment incentive rate = £0.125m Outperformance payment: 58 – 57 (deadband) = 1 * 0.125 = £0.125m	0.125	We propose to accept Severn Trent Water's net outperformance payment application and the company's outperformance payment calculation.

²² Rewards and penalties for the 'Customers rating our services as good value for money' performance commitment are divided equally between the water and wastewater price controls.

S-C2: Category 3 pollution incidents (Number of Category 3 pollution incidents)	402	301	3.935	3.935	2016-17 PC level met = Yes 2016-17 payment deadband = 374 Payment incentive rate = £53,900 Outperformance payment: 374 (deadband) – 301 = 73 * 53,900 = £3.9347	3.935	We propose to accept Severn Trent Water's net outperformance payment application and the company's outperformance payment calculation.
S-D1: Carbon footprint (ktCO ₂ e: thousand tonnes of carbon dioxide equivalent)	FD: 245 Shadow: 215	207	0.556	0.162	2016-17 PC level met = Yes Payment incentive rate = £14,630 2016-17 outperformance payment: 215 – 207 = 8 * 14,630 = £117,040. 2015-16 reward: 248 – 238 = 10 * 14,630 = £146,300 2015-16 outperformance payment based on the shadow commitment: 217 – 204 = 13 * 14,630 = £190,190 Difference in 2015-16 ODI: £190,190 – £146,300 = £43,890 However, this increase needs to be inflated by Severn Trent's weighted average cost of capital (3.6%) since this underperformance penalty relates to the previous charging year.	0.163	Our view is that Severn Trent should apply its WACC to the increased amount relating to restatements to its 2015/16 reported carbon emissions. This gives a net outperformance payment amount of £0.163m.

Final determination of in-period ODIs for 2017

					Therefore, the increase amount is equal to: $\text{£}43,890 * 1.036 = \text{£}45,470$ $\text{£}45,470 + \text{£}117,040 = \text{£}162,510$		
Total (wastewater)				40.016		39.994	

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