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Trust in water

Final determination of in-period ODIs for 2018

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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, Severn Trent Water Limited and Hafren Dyfrdwy Limited in respect of the 2019-20 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 are set out in full in this document.

Further to an application made by Severn Trent Water, this document also sets out our decision to amend that company's wastewater ODI cap, from 1st January 2019, subject to the company's agreement.

We introduced ODI caps for all companies for the 2015-20 period as a precaution to safeguard customers, because the caps place maximum limits on the cost of ODIs to them. In assessing Severn Trent's application we have considered if it is in customers' interests to adjust the cap.

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 where 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). Recent licence and boundary changes mean that four companies currently have in-period ODIs. These are Anglian Water and South West Water in respect of the whole of their areas, and Severn Trent Water and Hafren Dyfrdwy in respect of parts of their areas. We explain this further in Section 1 below.

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

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

This document is structured as follows:

- **Section 1** provides an overview of the final determinations for each company.
- **Section 2** provides an overview of the outcomes framework.
- **Section 3** sets out our approach to assessing companies' in-period ODI submissions for 2018.
- **Section 4** provides an overview of the responses to the consultation on the draft determinations.
- **Section 5** provides an overview and our final determination in relation to Severn Trent Water's application to amend its wastewater ODI cap.
- **Section 6** sets out next steps.
- **Appendix 1** sets out our final determination for Anglian Water.
- **Appendix 2** sets out our final determination for South West Water.
- **Appendix 3** sets out our final determination for Severn Trent Water.
- **Appendix 4** sets out our final determination for Hafren Dyfrdwy.

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1. Summary of final determinations

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

We also set out our final decision in relation to Severn Trent Water's application to amend its ODI wastewater cap.

Table 1 below summarises the changes we are determining for the four companies' price controls for 2019-20.

Table 1: Summary of final determinations

	Anglian	South West	Severn Trent	Hafren Dyfrdwy
Water	£4.635m	£0.514m	-£29.558m	-£0.172m
Wastewater	-	-£0.784m	£24.890m	£0.110m
Total	£4.635m	-£0.270m	-£4.668m	-£0.062m

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 £4.635 million (2012-13 prices, net of tax) to wholesale water bills in 2019-20 for one year only. Anglian Water estimates that its in-period ODI claim will result in an increase of £2.45 on the average annual household water bill in 2019-20.

Anglian Water's outperformance payment resulted from the company outperforming its leakage performance commitment in 2017-18. As a result, 9 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 1 November 2018. 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 £0.514 million (2012-13 prices, net of tax) to wholesale water bills in 2019-20 for one year only. South West Water estimates the ODI outperformance payment will increase its annual average household water bill by around £0.68 in 2019-20.

South West Water has earned this net outperformance payment of £0.514 million for its water in-period ODIs primarily because its leakage was 1 million litres per day lower than its performance commitment and it had resolved 96.1% of its operational customer contacts first time in 2017-18.

We are determining a decrease in South West Water's **wholesale wastewater price control**, applying an underperformance payment of £0.784 million (2012-13 prices, net of tax) to wholesale wastewater bills in 2019-20 for one year only. South West Water estimates the ODI underperformance payment will reduce its annual average household wastewater bill by around £1.13 in 2019-20.

South West Water has incurred this net underperformance payment of £0.784 million for its wastewater in-period ODIs primarily because it had three Category 1 and 2 pollution incidents rather than its commitment of zero in 2017-18, and 237 Category 3 and 4 pollution incidents rather than its commitment of 218 in 2017-18.

We are making no changes from our [draft determination](#) for South West Water that we published on 1 November 2018. 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 payment of £29.558 million (2012-13 prices, net of tax) to wholesale water bills in 2019-20 for one year only. Severn Trent Water estimates the ODI underperformance payment will reduce its annual average household water bill by around £3.75 (once other factors such as RPI and WRFIM¹ are applied) in 2019-20. This will not affect the bills of former Dee Valley Water customers that transferred to Severn Trent Water on 1 July 2018.

¹ Wholesale revenue forecasting incentive mechanism (WRFIM) provides financial incentives for companies to provide accurate forecasts, and ensures under- and over- recovery is reconciled.

The company has incurred this net underperformance payment of £29.558 million for its water in-period ODIs primarily because it underperformed its performance commitment on supply interruptions by 23.49 minutes. Other factors that had a significant contribution to its underperformance payment included underperformance in drinking water complaints and in leakage.

We are determining an increase in Severn Trent Water's **wholesale wastewater price control**, applying a net outperformance payment of £24.890 million (2012-13 prices, net of tax) to bills in 2019-20 and, as proposed by Severn Trent Water, deferring the remaining £62.925 million to future years. Severn Trent Water estimates that accepting the company's proposals to defer £62.925 million of its wastewater ODI payment will increase the annual average household wastewater bill by £7 (once other factors such as RPI and WRFIM are applied) in 2019-20.

The company has earned a total net outperformance payment of £87.815 million primarily because its number of external sewer flooding incidents was 49% lower than its commitment; its number of internal sewer flooding incidents was 31% lower than its commitment; and its number of category 3 pollution incidents was 13% lower than its commitment.

We are making no changes from our [draft determination](#) for Severn Trent Water that we published on 1 November 2018. We cover the consultation responses and how we have addressed them in Appendix 3.

Hafren Dyfrdwy

In June 2018 we made variations and modifications to the Conditions of Appointment (licences) of Severn Trent Water Ltd and Dee Valley Water Ltd. We also granted a new wastewater licence to Dee Valley Water. This allowed Dee Valley Water to become a water and wastewater services company based wholly in Wales and for Severn Trent Water to become a water and wastewater services company based wholly in England. The company based wholly in Wales is now called [Hafren Dyfrdwy](#).

As a result of the licence change, Severn Trent Water became the water supplier for the previous Dee Valley Water's water supply area in England in and around Chester. This includes 49,700 households and 4,000 business customers (including charities and public sector organisations).

For Hafren Dyfrdwy, the changes mean the company is able to provide water and wastewater services to the previous Severn Trent Water's water and wastewater supply areas in Wales in and around Powys and Monmouthshire.

These changes, which came into effect on 1 July 2018, have implications for the application of in-period ODIs. The adoption by Hafren Dyfrdwy of the Severn Trent Water ODIs that apply to customers in and around Powys and Monmouthshire requires us to determine the payment “in-period”. As a result, our final determination of in-period ODIs this year includes Hafren Dyfrdwy.

The ODI implications were explained in our:

- [Consultation under section 13 of the Water Industry Act 1991 on proposed modification of Severn Trent Water’s licence to include the Powys Site and proposed modification of Dee Valley Water’s licence to include the Chester site](#), published 23 March 2018; and
- [Variation of Severn Trent Water Limited’s appointment to include the Chester Site and variation of Dee Valley Water Limited’s appointment to include the Powys site](#) published 23 March 2018. In particular, see ‘Performance commitments and ODIs’ (pages 16-17), and ‘Proposal to allocate performance commitment levels and ODIs between the two companies’ in Appendix 3 (pages 40-44).

Appendix 4 contains the final determination for Hafren Dyfrdwy. Following our Variation of Severn Trent and Dee Valley’s licences (see above), this is based on a proportion of the outperformance and underperformance payments applicable due to Severn Trent’s performance in the period 2017-2018. The company’s ODIs are based on Severn Trent Water’s ODIs. The estimated allocation of Hafren Dyfrdwy’s outperformance payments and underperformance payments (1 April 2015 to 30 June 2018) were included in Tables 11 and 12 on pages 148 and 149 in our [Consultation under section 13 of the Water Industry Act 1991 on proposed modification of Severn Trent Water Limited’s \(Severn Trent Water\) licence to include the Powys Site and proposed modification of Dee Valley Water Limited’s \(Dee Valley Water\) licence to include the Chester site](#) (Ofwat, 23 March 2018). We have used these allocations in our final determinations to determine the in-period ODI values for Hafren Dyfrdwy.

We are determining a decrease in Hafren Dyfrdwy’s **wholesale water price control**, applying an underperformance payment of £0.172 million (2012-13 prices, net of tax) to wholesale water bills in 2019-20 for one year only. Hafren Dyfrdwy estimates the ODI underperformance payment will reduce its annual average household water bill by around £1.75 in 2019-20.

We are determining an increase in Hafren Dyfrdwy’s **wholesale wastewater price control**, applying a net outperformance payment of £0.110 million (2012-13 prices, net of tax) to bills in 2018-19 and deferring the remaining £0.278 million to future

years. Taking this deferral into account, Hafren Dyfrdwy estimates that the impact on the annual average household wastewater bill is an increase of £6.75 in 2019-20.

This final determination will result in the customers that were Severn Trent's customers in this period receiving similar bills to if they had remained as Severn Trent customers. It will not affect customers that have remained customers of the company that is now called Hafren Dyfrdwy.

We are making no changes from our [draft determination](#) for Hafren Dyfrdwy that we published on 1 November 2018. We cover the consultation responses and how we have addressed them in appendix 4.

Summary of our final decision for amending Severn Trent Water's wastewater ODI cap

Our final decision for amending Severn Trent Water's wastewater ODI cap seeks to retain the incentives for the company to improve its performance in the interests of customers. We are determining an increase in the cap from 2% to 2.6% of RoRE, while adjusting the service levels and incentive rates on three performance commitments from 1 January 2019 for the remainder of the current price review period. We set out further details of the ODI cap in Section 5.

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 giving money back to customers where 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 were set at PR14 that we will calculate at the 2019 price review (PR19) and implement from 2020 onwards affecting customer bills in the period 2020-2025 (we call these “end-of-period” ODIs). Recent licence and boundary changes mean that four companies currently have in-period ODIs. These are Anglian Water and South West Water in respect of the whole of their areas, and Severn Trent Water and Hafren Dyfrdwy in respect of parts of their areas.

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 ensure that payments related to current performance are usually paid for, or received by, current customers.

In-period ODIs can result in payments being made to or by companies. Payments are 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 as reported in 2017 can be made in 2018-19. Payments can take the form of:

- An underperformance payment paid by a company to customers for performance below the commitment it made to its customers; or

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.

- An outperformance payment received by a company to reflect stretching levels of performance provided to customers beyond the commitment it made to its customers.

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 are to be made to allowed revenues in the next charging year by changing a companies' 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 may 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 forward 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. As explained above, Hafren Dyfrdwy also has in-period ODIs for the final two years of this control period (2018-19 and 2019-20).

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 for the 2019 price review](#) we said that we expect companies to adopt in-period ODIs as a default for all their ODIs; companies need to justify why an in-period ODI is not appropriate if they are not proposing one; and companies need to explain the overall balance between in-period and end-of-period ODIs in their business plans.

At PR14 we included a cap on outperformance and underperformance payments as our approach to ODIs was new. The outperformance payment cap provides an important protection for customers, while the underperformance payment cap provides protection for companies. However, once the cap is reached it can prevent

any further benefits from the ODIs and may mean that companies incentives to deliver what matters to customers are reduced. We explicitly allowed for companies or their Customer Challenge Group (CCG) to apply to relax cap during the period if it was clear that doing so was in the interests of customers. We set out further details of the ODI cap in Section 5.

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 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.

As explained above, the adoption on 1 July 2018 by Hafren Dyfrdwy of the Severn Trent Water ODIs that apply to Powys customers requires us to determine the payment “in-period”, where applicable. As a result, our final determinations of in-period ODIs this year also includes Hafren Dyfrdwy.

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 18/17](#), on 16 August 2018. In particular, IN 18/17 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 set out that 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 CCG³.

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 four companies with in-period ODIs are available below:

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

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

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 representatives from the Consumer Council for Water, customer groups, environmental organisations and business organisations.

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

- information about what outperformance or underperformance payment the company considers is appropriate for each in-period ODI, its supporting evidence, and whether its request differs in any way from the 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 or underperformance payment 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 or underperformance payment 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;
 - any ambiguity in the definition of each in-period ODI, and how the company has interpreted them;
 - 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, [IN 18/17](#), 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 on the company-specific appendix, 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. The information was cross-checked against the assurance analysis that we had carried out on the company's APR.

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 payment or underperformance payment for a specific in-period ODI was material if it was greater than £1 million or if it constituted more than 25% of the total outperformance payments or underperformance payments being claimed.

4. Responses to the consultation on the in-period ODI draft determinations

We consulted on our [draft determination of the in-period ODIs](#) between 1 November and 21 November 2018. We received responses from Anglian Water, Hafren Dyfrdwy, Severn Trent Water, South West 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.

Severn Trent Water and Hafren Dyfrdwy expressed their support for the use of incentives and the framework we have developed to drive improved services for customers.

CCWater commented that customers generally do not support the use of ODIs as a method of driving companies' improvements in service, as they tend to see improving services as an integral part of companies' day to day activities and not something that requires additional reward. However, the ODI framework sharpens incentives on companies' management to deliver what matters to their customers. We address the issues of customer support for ODIs and ensuring performance commitments are stretching in our [PR19 final methodology statement](#).

CCWater emphasised that it is important that water companies are transparent about their ODIs and how these affect bills, and to explain clearly to customers what improvements they are getting in return for any outperformance payments companies are receiving. Customers will need to be reassured that any outperformance payments are justified and reflect their willingness to pay in order to retain their trust in companies. 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. Companies are required to explain their performance and related ODI payments each year in their annual performance reports (APRs).

CCWater also noted that customers consistently indicate that they prefer bills which change smoothly over time, and it recognises that a balance is required between linking incentives more closely in time to performance with maintaining a smoother profile of bill changes year on year. 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.

5. Severn Trent Water's application to amend its wastewater ODI cap

5.1 Background

At PR14 we included a cap on outperformance and underperformance payments. The effect of the cap is to limit the amount of out and underperformance payments during the 2015-20 period. The cap is designed to protect customers and companies against the risk that ODIs turn out to be materially different from expected when the price review was set, reflecting that the outcomes approach was new at PR14. We always recognised that the aggregate cap and collar would reduce companies' incentives to deliver for customers as they approach the cap. If incentives to deliver are reduced, this can prevent any further benefits such as improved service, from those ODIs.

In our 2014 final determination⁵, we said that an ODI cap could be amended under certain circumstances to ensure that it is not creating distortions which act against customers' interests. A company and/or CCG (or relevant customer body) can apply to us to amend an ODI cap in the event that it considers the arrangement is working against the long term interests of customers. We will consider the merits of amending caps on a case by case basis and expect to see convincing evidence over a period of several years for us to agree to alter these.

One example of the evidence that a company could provide was that it was delivering service genuinely beyond upper quartile performance. This is valuable in two important ways. First it demonstrates that the company is delivering stretching performance for its customers and the improved service benefits customers, such as fewer internal and external sewer flooding incidents. Second, since we propose to use upper quartile performance as a benchmark for setting performance levels across the industry, going beyond it increases the benchmark and acts to improve service for all customers across England and Wales.

Amending the cap to retain financial incentives is in customers' interests if the incentives are proportionate to the costs required to continue to deliver stretching performance and do not exceed the benefits.

Caps are applied to water and wastewater services separately. For each service the cap applies to the sum total of all ODI net outperformance payments in 2015-20. We separately apply the cap to the sum total of all ODI net underperformance payments

⁵ This is set out in our [Final price control determination notice: policy chapter A2 – outcomes](#), published in December 2014.

in 2015-20. Each cap is 2% of RoRE for the respective price control, which for Severn Trent's wastewater service is around £150 million.

Severn Trent Water's performance

Severn Trent Water has outperformed on all its in-period wastewater ODIs and expects that this will continue throughout the remainder of the 2015-20 period. In particular it has earned significant outperformance payments for reducing the incidence of external sewer flooding, which is sewer flooding that occurs on customer properties outside their homes. Such flooding incidents have significant adverse effects on consumers and the achievement by the company in reducing the frequency of such flooding is an important priority for customers.

Severn Trent Water's incentive rate is about £20,000 for each reduction in external sewer flooding incidents below its performance commitment. This is significantly higher than the outperformance incentive rates of other companies with a similar performance commitment. The company's underperformance payment rate is also set at about £20,000 (which is comparable to other water companies with 'underperformance payment only' ODIs) and applies if the company does not meet its performance commitment level.

Severn Trent Water has also performed well on other performance commitments relating to internal sewer flooding (flooding in the home) and pollution incidents for which it has received significant outperformance payments. It has performed less well against its water ODIs and is likely to be obliged to incur underperformance payments related to these ODIs.

The company's end-of-period ODIs set in PR14 are distinct from the in-period ODIs that are the subject of the final determination in this document, and will be assessed as part of PR19 and impact bills in the 2020 to 2025 period.

Severn Trent Water's application to amend the wastewater ODI cap

Severn Trent Water expected its performance in 2018-19 to lead to exceeding its wastewater ODI cap and applied to Ofwat to amend it in July 2018. In our [Draft determination of in-period ODIs for 2018](#), we set out Severn Trent Water's application, our assessment of the application, and our view on an appropriate amendment to Severn Trent Water's ODI cap.

5.2 Our draft determination

We proposed an increase in the wastewater ODI cap from 2% to 2.6% of RoRE which will increase the maximum outperformance payments from the current cap by about £45 million to approximately £200 million. This was consistent with our interpretation of the evidence of customers' willingness to pay and means that the benefits of further improvements in service by the company should at least match any related increase in customers' bills. It would also retain the incentives on all of the ODIs in the wastewater package for Severn Trent Water to deliver what customers care most about.

In addition to the amendment to the cap, we proposed to require:

- **Increased service level.** The internal and external sewer flooding and category 3 pollution incidents performance level targets for 2018-19 and 2019-20 being reset to the level achieved in 2017-18.
- **Reduced incentive rate for external sewer flooding.** The outperformance and underperformance incentive rate being reduced by 85% for external sewer flooding, to bring it broadly into line with those of other companies' outperformance incentive rates.
- **Shared best practice.** It is important that other companies are able to replicate the improvements which Severn Trent Water has made on external sewer flooding, so that the benefits of improved performance are realised by wider customers.

5.3 Responses to the consultation on Severn Trent Water's application to amend its wastewater ODI cap

We consulted on Severn Trent Water's application to amend its wastewater ODI cap in conjunction with our [draft determination of the in-period ODIs](#) between 1 November and 21 November 2018. We received three responses in relation to our proposed approach to amending Severn Trent Water's wastewater ODI cap.

Anglian Water

Anglian Water's view is that our proposed approach introduces uncertainty about the circumstances under which companies' regulatory settlements can be amended and the potential scale of those amendments. It stated its view that the changes proposed for Severn Trent Water's settlement go beyond the formal rules of the final determination. For the 2020-25 period, Anglian Water's view is that these should be

formally set out as part of the PR19 final determinations or captured in revisions to the formal rules of the final determination.

In response to the points raised by Anglian Water, first, we consider that our proposed approach to amending the cap does not introduce uncertainty, because we said at PR14 that the cap could be amended in-period at the affected company's (or its CCG's) request. Our procedure also means that any resulting amendment only happens with the agreement of the company, otherwise the cap remains unaltered. In relation to the scale of the amendments, we consider that there is an inherent interaction between the ODI cap, the performance targets and the incentive rates. Therefore, removing the cap without making other changes to performance levels or incentive rates would potentially give customers little benefit, whilst providing Severn Trent Water with significant financial returns. Likewise, the company's proposed options for lifting the cap would see the company's gains far outweigh the benefits to customers. Our decision to raise the cap along with a tightening of service levels means that Severn Trent Water would only be rewarded for continuing improvements in performance from 2017-18 service levels, that is current service levels.

CCWater

CCWater responded that it understands our proposal to raise the outperformance payment cap from 2% to 2.6% of RoRE in the specific circumstances of this determination, and when coupled with the other elements of the proposal, will allow Severn Trent Water to earn additional outperformance payments through improving service with a direct customer benefit.

CCWater noted that it was disappointed that the additional investment to support vulnerable customers proposed in Severn Trent Water's original application would be lost as a result of our draft determination. It has encouraged the company to consider if any additional investment is still possible under the terms of our proposal.

We would welcome any additional investment made by Severn Trent Water to support vulnerable customers.

Severn Trent Water

Severn Trent Water welcomed our conclusion that there is sufficient evidence to support its request to amend the wastewater ODI cap, to the long term benefit of customers. Whilst it is supportive of our proposed approach, the company identified two implementation issues:

1. adjusting targets for internal sewer flooding and pollution incidents is not warranted; and
2. targets and incentive rates on past performance should not be adjusted.

We address these two issues below.

Severn Trent Water also made a comment that a wider range of comparable information should be used (we compared Severn Trent Water's external sewer flooding incentive rate with the rates set for other companies at PR14). The company submits that we should use a greater range of comparable information, including proposed PR19 rates. In addition, it states that most companies used deadbands, caps and collars in ODIs at PR14 that reduce the range of performance that incentives apply to, and so affect the overall risk and reward package.

We do not consider that we should we use proposed PR19 incentive rates for comparison. We are still analysing what companies have proposed in their PR19 business plans and we do not have a final set of PR19 data on performance commitment levels and ODI incentive rates. Therefore, we do not propose to rely on this information in setting performance levels or incentives rate before the price review is complete.

We note the point Severn Trent Water raised around deadbands, caps, and collars, but it did not propose that we add deadbands, caps, and collars to any of its performance commitments. We consider that it can be against customer interests to reduce company incentives to deliver good performance on outcomes that matter to them, and the ODI cap is in place to safeguard customers by placing maximum limits on the cost of ODIs to them. Therefore we do not think that any changes in the form of introducing deadbands, cap or collar to the overall package are required.

Severn Trent Water stated that while it agrees with the overarching aim of increasing the cap to 2.6%, two amendments could create an even more robust long-term framework for both the sector and consumers:

- focus the PC-ODI changes to external sewer flooding; or
- make changes to the target and incentive rate on a forward-looking basis (as opposed to changes relating to past performance).

The two arguments Severn Trent Water provided to support its concern with the implementation issues are as follows:

- 1. Adjusting targets for internal sewer flooding and pollution incidents is not warranted**

Severn Trent stated that it understands the logic in changing targets and incentives for external sewer flooding where outperformance has been exceptional (around 73% of its outperformance payments). It does not consider this should apply to internal sewer flooding and pollution incidents where its outperformance is not necessarily greater than other companies.

It is clear that we need to adjust targets and incentives for external sewer flooding: Severn Trent Water's customers have incurred significant payments up to the cap set at PR14 and we have to assess whether the outperformance payment is commensurate to performance. It is also appropriate to make sure that any further outperformance payments result from additional benefits for customers on other measures. We accept that Severn Trent's outperformance for internal sewer flooding and pollution incidents is less than some other companies. However, no other company has reached the ODI cap for outperformance payments. To go beyond the protection of the ODI cap set at the 2014 price review we need to be confident that any further outperformance payment for any performance commitment is the result of performance that we now judge as stretching.

2. Targets and incentive rates on past performance should not be adjusted

Pollution incidents are measured on a calendar basis (ie 2018 is reported for 2018-19) and so less than a month will remain following the publication of this final determination. For other measures, that cover the 2018-19 financial year, around three months will remain. Severn Trent Water states it does not have time to make operational changes to respond to proposed tightening of service levels for 2018-19.

We accept that there is limited time for the company to make operational changes to respond the change in service levels that would be confirmed when the final decision is published. We therefore will amend the proposal we consulted on so that both the ability to earn further outperformance payments and the tightening of service standards is on a future basis only.

5.4 Our final decision for an amendment to Severn Trent Water's wastewater ODI cap

Our final decision is based on the general principle that the PR14 ODI cap would only be reopened in certain circumstances. In this case, we have gone through the process of reconsidering the cap level (as well as targets and incentive rates) because:

- this is part of a process that Severn Trent Water has chosen to initiate;

- Severn Trent Water does not have to agree to the change, in which case the cap remains; and
- there is an inherent interaction (as explained above) between the cap, the targets and the incentive rate, hence our proposal of a package of changes to support a change to the cap.

Our final decision is to adjust Severn Trent Water's wastewater ODI cap, performance commitments for three in-period ODI measures and incentive rate for external sewer flooding, effective from 1st January 2019. This is on the basis that:

- amending the cap is supported by customers and in the long-term interests of customers;
- our intention is to focus on incentivising future performance, so adjusting incentives for past behaviour would not be appropriate in this context;
- amending the change in service levels in relation to activities going forward is appropriate; and
- it is appropriate to revise the service levels for internal sewer flooding and pollution incidents, along with external sewer flooding.

We protect customers by applying these forward looking changes to incentivise future performance and service levels.

If Severn Trent agrees to accept these changes, it should confirm this to us in writing and publish its letter of acceptance on its website, before or on 31 December 2018. Should the company not accept these changes, then, as stated in the consultation, the existing cap will remain in place.

5.4.1 Wastewater ODI cap

Severn Trent Water's wastewater ODI cap from 1 April 2015 to 31 March 2020 is currently set at 2% RoRE. Subject to Severn Trent Water accepting it, our decision means that this cap will be increased from 2% to 2.6% of RoRE (which will increase the company's overall maximum outperformance payments for all its ODIs by about £45 million). However, Severn Trent Water will earn no outperformance payments for performance from the date that the company reached the current cap up to 1 January 2019, when the amendments made by our decision become effective. The effect of our amendments also means that for three ODIs (specifically, internal and external sewer flooding and category 3 pollution incidents), the company will not be entitled to receive outperformance payments for the period 1 January 2019 to 31 March 2020 unless it reaches revised targets for these ODIs. These revised targets

are set out below. It will also pay underperformance payments if its performance is below these revised targets.

5.4.2 Tightening service levels for three in-period ODIs

Our decision to raise the cap is supported by a tightening of service levels, meaning Severn Trent Water will only be rewarded for continuing improvements in performance from 2017-18 service levels. Therefore, we are making changes to three in-period ODI performance commitment levels. Subject to Severn Trent Water accepting this decision, our changes become effective on 1 January 2019.

For internal sewer flooding and external sewer flooding:

- the targets for the final quarter of the financial year 2018-19 (from 1 January to 31 March 2019) will be calculated pro-rata, based on 2017-18 outturn (ie 2017-18 outturn multiplied by 0.25); and
- the targets for 2019-20 will be based on 2017-18 outturn.

The performance commitment for category 3 pollution incidents is measured on a calendar year basis. The target for 2019-20 (calendar year 2019) is the 2017-18 outturn.

There was a change to Severn Trent's performance commitments in 2018-19 due to the change of area explained in earlier sections. For the three months between April and June 2018, Severn Trent should have met the PR14 performance commitment on a pro-rata basis as set out in appendix 3 of Severn Trent Water's appointment variation⁶. Severn Trent Water's appointment variation became effective from 1 July 2018, meaning the England only targets are applicable on a pro-rata basis for six months up to 31 December 2018.

From 1 January 2019 onwards, we have decided that the targets are based on 2017-18 performance. Due to the fact that 2017-18 actual reported performance is given for the company prior to its appointment variation, it is necessary to adjust the 2017-18 actual performance figures to reflect targets for England only. This is done in line with the proportions set out in appendix 3 of Severn Trent Water's appointment variation. The adjusted figure is then pro-rated for the period between 1 January and 31 March 2019, and applied for the full year from 1 April 2019.

⁶ As set out in Appendix 3 (pages 40-44) of the [Variation of Severn Trent Water Limited's appointment to include the Chester Site and variation of Dee Valley Water Limited's appointment to include the Powys site](#).

Table 2a sets out information on internal sewer flooding incidents, and table 2b sets out the targets for the different periods of 2018-19 and 2019-20.

Table 2a: Information on internal sewer flooding incidents service levels

	Targets	2015-16	2016-17	2017-18	2018-19	2019-20
A	PR14 final determination commitment level	1,014	989	960	927	892
B	Following Severn Trent Water appointment variation					885
C	Applying 2017-18 performance levels					662
D	Adjustment for appointment variation					657

Table 2b: Revised targets on internal sewer flooding incidents

Targets	1 Apr 2018 – 30 Jun 2018 (3 months)¹	1 Jul 2018 – 31 Dec 2018 (6 months)¹	1 Jan 2019 – 31 Mar 2019 (3 months)	2019-20 (1 year)
Targets on internal sewer flooding incidents	269	435 (653*2/3)	164 (D*0.25)	657 (D)

Note

¹ Part year targets set out in Appendix 3 (pages 40-44) of the variation document.

Table 3a sets out information on external sewer flooding incidents, and table 3b sets out the targets for the different periods of 2018-19 and 2019-20.

Table 3a: Information on external sewer flooding incidents service levels

	Targets	2015-16	2016-17	2017-18	2018-19	2019-20
A	PR14 final determination	7,639	7,548	7,447	7,336	7,220
B	Following Severn Trent Water appointment variation					7,161
C	Applying 2017-18 performance levels					3,763

D	Adjustment for appointment variation					3,732
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Table 3b: Revised targets on external sewer flooding incidents

Targets	1 Apr 2018 – 30 Jun 2018 (3 months)¹	1 Jul 2018 – 31 Dec 2018 (6 months)¹	1 Jan 2019 – 31 Mar 2019 (3 months)	2019-20 (1 year)
Targets on external sewer flooding incidents	1,981	3,541 (5,311*2/3)	933 (D*0.25)	3,732 (D)

Note

¹ Part year targets set out in Appendix 3 (pages 40-44) of the variation document.

Table 4 sets out information on pollution incidents and the target for 2019-20.

Table 3: Information on category 3 pollution incidents and revised target

	Targets	2015-16	2016-17	2017-18	2018-19	2019-20
A	PR14 final determination	429	402	374	374	374
B	Following Severn Trent Water appointment variation					364
C	Applying 2017-18 performance levels					327
D	Adjustment for appointment variation					318

5.4.3 Incentive rates for external sewer flooding

From 1st January 2019, the underperformance and outperformance incentive rates for external sewer flooding will be adjusted downwards by 85%. If performance levels are worse than the commitment set at PR14, the original PR14 final determination underperformance payment applies.

Table 4: Revised incentive rates for external sewer flooding

In-period ODI	Underperformance payment rate	Outperformance payment rate
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	(£m/number/year)	(£m/number/year)
Incentive rates set out in the PR14 final determination	0.019779	0.019779
Revised incentive rate effective from 1 January 2019	0.002967	0.002967

5.4.4 Reporting for 2018-19

In reporting 2018-19 performance in relation to the three performance commitments above, Severn Trent Water will need to clearly set out its performance levels and ODI payment calculation for the periods specified rather than the annual total. This is in order to take into account periodic changes to the targets, and the incentive rates in the case of external sewer flooding. Thus, we expect Severn Trent Water to set out to customers its performance and associated ODI payment for:

- 1 April 2018 – 30 June 2018 (3 months)
- 1 July 2018 – 31 December 2018 (6 months)
- 1 January 2019 – 31 March 2019 (3 months)

6. Next steps

It is each company's responsibility to set its charges taking into account our [Charges Scheme Rules](#), within the price controls that we have determined.

Company performance in 2018-19 will be taken account of at PR19, including the application of Severn Trent Water's wastewater ODI cap.

If Severn Trent agrees to accept the changes to its performance commitments set out in the above section, it should confirm this to us in writing and publish its letter of acceptance on its website by, or on, 31 December 2018. Should the company not accept these changes, then, as stated in the consultation, the existing cap will remain in place.

A1 Anglian Water final determination

Anglian Water is requesting an adjustment to its 2019-20 water wholesale price control to reflect its performance in 2017-18. Our final determination is set out in the table below.

Anglian Water earned a net outperformance payment of £4.635 million because it outperformed its performance commitment on leakage by 5%. As a result, 9 million fewer litres of water are leaking from the company's network every day.

Table 5: 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 9 megalitres / day	4.635

The rest of this section describes how we arrived at these figures. Section A1.6 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.

Table 6: Summary of Anglian Water's financial ODIs

	Underperformance payments only		Outperformance and underperformance payments	
	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 2017-18

Anglian Water submitted its application for an in-period ODI determination before the 15 September 2018 deadline.

The application explained how the company had outperformed its performance commitment level for leakage in 2017-18, and included an overview of the assurance that had been carried out on leakage performance 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 2017-18 at its meeting in May 2018.

The application provided details on the engagement the company 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 March and June 2018, as well as a meeting with the Consumer Council for Water (CCWater) to discuss customers' bills in September 2018. The CEF accepted Anglian Water's proposed adjustment without further challenge.

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 2017-18 annual performance report (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 2017-18 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 it responded well to the severe weather experienced in February and March 2018, and consequently 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 2017-18 is 9 MI/d below its performance commitment level. The company considers that the appropriate outperformance payment is £4.635 million in 2012-13 prices, net of tax.

A1.3 Our assessment

Provision of information

The K factor model and the ODI model spreadsheets were completed correctly by Anglian Water. The company provided sufficient information for us to assess its claim for an outperformance payment for leakage. However, Anglian Water had not entered forecast November RPI indices for 2019 and 2020, which resulted in a discrepancy on the outperformance payment figure when uplifted by inflation (discussed in Section A1.5).

Ofwat cross-checking calculations

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

Assurance

Anglian Water is currently in the 'targeted' category under our [Company Monitoring Framework \(CMF\)](#). 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 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 has in place for reporting leakage and the reliability of its year-end reported leakage figure;
- the second review examined the processes Anglian Water has in place for reporting leakage and whether they comply with reporting requirements in the context of PR14.

The external engineering consultants found no material issues, although they made some suggestions for long-term improvements to the data sources Anglian Water used to derive customer supply pipe leakage and training for meter readers to identify broken meters. Anglian Water's Board was content to approve the final reported leakage figure at its May 2018 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 2019-20 of around £2.45. This compares to an approximate total increase of £11.98 on the average annual customer bill due to changes in RPI, K and updated charge multipliers.

Anglian Water has taken into account our [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. The outperformance payment for leakage will not directly cause any customer group to experience an increase in bills of more than 5%.

Bill smoothing

Anglian Water submitted that it does not consider it appropriate to defer the outperformance payment for its leakage ODI, and the CEF and CCWater accepted the proposed bill changes without further challenge.

We agree with Anglian Water that it is not appropriate to smooth the impact of the £2.45 average annual household water bill increase. 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 £2.45 average bill impact would serve to increase future bill increases rather than smooth bills.

Customer and stakeholder engagement

Anglian Water communicated its leakage position in its 2017-18 as part of its annual performance report (APR). In its APR Anglian Water reported its leakage performance against its ODI in 2017-18, and stated that it was due an in-period outperformance payment of £4.635 million (before inflation and tax adjustments; £6.843 million after inflation and tax).

Anglian Water gave regular updates to the CEF on its performance, including leakage, in 2017-18. In the CEF meeting (March 2018), Anglian Water provided an estimate of its likely out-turn performance. In June 2018 Anglian Water confirmed its final performance on leakage for 2017-18, the associated outperformance payment, and an estimate of the impact on average bills. The CEF accepted Anglian Water's proposals without further challenge.

On 19 September Anglian Water discussed with CCWater its customer bills for 2019-20, 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.

Anglian Water provided us with information on its communication plan regarding its 2019-20 bills. Its approach to communicating bills will employ social media and proactive press releases, accompanied by infographics and other visual content to show how customer bill money is used to pay for investment in infrastructure and services (such as improvements to leakage).

Past and future expected performance

Anglian Water justified 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 2017-18 (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 definitions (ambiguity)

Anglian Water stated that it did not consider that 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.

Mitigating factors

The company did not apply any additional mitigation factors to the claim. Anglian Water identified severe weather experienced in February and March 2018; however it responded well to this weather and does not believe any mitigating factor is relevant to its in-period ODI claim. 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 1 November and 21 November 2018. We received two responses in relation to our draft determination for Anglian Water. CCWater responded that it welcomes Anglian Water's continuing efforts to reduce leakage, as customers identify this as a key priority. It noted that Anglian Water operates in a region which is both water-constrained and likely to experience significant population growth over the next 30 years. As such, CCWater considers that the company needs to manage its water balance carefully, and active leakage control is a key component of the company's water conservation strategy.

On bill volatility, CCWater commented that it agrees with our draft determination, and the view of Anglian Water's Customer Engagement Forum (CEF), that the additional £2.45 increase in water charges does not require smoothing given the total increase in bills. However, CCWater stated that it expects the company to be transparent in communicating with customers on the reasons for the outperformance payment and on the range of impacts this could have on customers, and in how they handle possible negative feedback they might receive.

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 5% in 2017-18. As a result, 9 million fewer litres of water are leaking from the company's network every day.

To put the amounts into context, Table 7 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](#) (table A2.10). The table below uses 2012-13 prices which is the basis of ODIs in PR14.

Table 7: 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 £ million for wholesale water. The first part of Table 8 uses 2012-13 prices, net of tax, which is the basis of ODIs in PR14. The second part of Table 8 uses 2019-20 prices gross of tax.

Table 8: Our final determination for in-period ODIs for 2018 – price control totals

Water	Company claim £ million	Ofwat final determination £ million	Difference £ million
£ million in 2012-13 prices (the base year for PR14), net of tax	4.635	4.635	0
£ million impact on the price control for 2019-20 (the figures in the table above uplifted by inflation and adjusted for tax)	6.617	6.843	0.226 (see note below)

Notes

- marginal tax rate = 19%

- we noted that in its K factor model, Anglian Water had not entered forecast November RPI indices for 2019 and 2020. For our final determination we have used November RPI indices of 285.2 for 2019 and 293.7 for 2020 to calculate the uplifted figure of £6.843 million (uplifted for inflation and a marginal tax rate of 19%). It is this calculation of the K model which is what led to the difference between Anglian Water's figure and our figure in Table 8.

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 revised K factor is set out in Table 9 below.

Table 9: Revised K factor for the charging year beginning 1 April 2019

Wholesale price control	Final determination of price controls ⁷	Revised K
Water	0.56%	1.16%

In Section A1.6 we set out our final determination on Anglian Water's in-period ODI based on performance in the financial year 2017-18. Equivalent details for Anglian Water's performance in the previous two financial years (2015-16 and 2016-17) are set out in:

- our [final determination](#) of Anglian Water's in-period ODIs in 2016, and
- section A.1 in our [final determination of in-period ODIs for 2017](#).

⁷ 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 2017-18

In-period ODI	2017-18 PC level ⁸	2017-18 actual	Payment due £ million	Company claim ⁹ £ million	Claim calculation	Ofwat FD £ million	Difference £ million	Comments
W-D4: Leakage (three-year average)	192 MI/d	183 MI/d	4.635	4.635	2017-18 PC level met = Yes 2017-18 outperformance payment cap = 182 Outperformance incentive rate = £0.515m (MI/d/year) Outperformance payment: $192 - 183 = 9 * £0.515m = £4.635m$	4.635	0	We are accepting Anglian Water's in-period ODI outperformance payment application and the company's calculation.
Total			4.635	4.635		4.635	0	

⁸ PC level stands for performance commitment level

⁹ The £4.635 million 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 uprate 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 2019-20 water wholesale price control to reflect its performance in 2017-18. Our final determination is set out in Table 10 and Table 11 below.

In relation to South West Water's wholesale water in-period ODIs the company has earned a net outperformance payment of £0.514 million primarily because its leakage was 1 million litres per day lower than its performance commitment and it had resolved 96.1% of its operational customer contacts first time, which was higher than its performance commitment level of 93% for 2017-18. South West Water estimates the ODI outperformance payment will increase its annual average household water bill by around £0.675 in 2019-20.

Table 10: 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	Underperformed by 0.02%	-
W-A2: Taste, smell and colour contacts	Outperformed by 1.4 contacts per 1,000 population	-
W-B1: Water restrictions placed on customers	Met performance commitment	-
W-B3: Leakage levels	Outperformed by 1 megalitre per day	0.403
W-D1: Operational customer contacts resolved first time	Outperformed by 3.1%	0.133
W-E4: Pollution incidents (category 1 and 2)	At commitment	-
W-E5: Pollution incidents (category 3 and 4)	Underperformed by 16 incidents	-0.022
Total (water)	-	0.514

In relation to South West Water's wholesale wastewater in-period ODIs the company has incurred a net underperformance payment of £0.784 million this year primarily because it had three Category 1 and 2 pollution incidents against its commitment of zero in 2017-18, and 237 Category 3 and 4 pollution incidents against its commitment of 218. South West Water estimates the ODI underperformance

payment will reduce its annual average household wastewater bill by around £1.125 in 2019-20.

Table 11: 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	1.5% lower than commitment	-0.071
S-C3: Wastewater descriptive works permit compliance	At commitment	-
S-C4: Pollution incidents (Category 1 and 2)	Underperformed by 3 incidents	-0.346
S-C5: Pollution incidents (Category 3 and 4)	Underperformed by 19 incidents	-0.367
Total (wastewater)	-	-0.784

The rest of this section describes how we arrived at these figures. Section A2.6 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 12: Summary of South West Water’s financial ODIs

	Underperformance payments only		Outperformance and underperformance payments	
	In-period	End-of-period	In-period	End-of-period
Water	3	4	4 ¹⁰	2
Wastewater	3	3	1	4
Retail	-	-	-	1
Total	6	7	5	7

¹⁰ The ODI for ‘water restrictions placed on customers’ allows for underperformance payments to be paid annually. Outperformance payments 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).

A2.2 Summary of South West Water's request for 2017-18

South West Water submitted its application for an in-period ODI determination before the 15 September 2018 deadline.

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 2017-18 (these are included in Section A2.6).

The application included information on:

- the extent of outperformance and underperformance on each in-period ODI and the associated payments;
- customer research;
- the impact on customers' bills; and
- the engagement plan with customers and stakeholders.

South West Water submitted a copy of the WaterShare Panel 2017/18 Year End Report (August 2018) alongside its application.

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

- 2018 Annual Performance Report & Regulatory Report (July 2018);
- 2018 Summary Performance Report (July 2018); and
- 2018 Summary Assurance Report (July 2018).

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 2017-18. 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 is seeking to reflect the in-period underperformance payment from performance in 2017-18 (–£0.270 million) in customer bills in 2019-20 for wholesale water and wholesale wastewater combined.

Separately, South West Water is returning £9.0 million to its customers through its WaterShare framework¹¹. 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 underperformance payment from its 2017-18 performance reducing customer bills by £0.270 million and defer the 'other items' element of the WaterShare scorecard (£9.0 million) to future years. The WaterShare Panel has accepted this recommendation.

We provide details of South West Water's in-period ODI outperformance and underperformance payments for performance in 2017-18 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 is currently in the 'targeted' category under our [Company Monitoring Framework \(CMF\)](#). 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

¹¹ 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.

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 2017-18 WaterShare scorecard;
- scrutinised 2017-18 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 the 2015-16 and 2016-17 Ofwat in-period licence 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 recommendation to pass back £0.3 million (i.e. the net underperformance payment from 2017-18 performance) to customers in 2019-20.

The WaterShare Panel carefully considered each option and given the results of the customer research undertaken, endorsed the company's recommendation.

South West Water also submitted its technical auditor's assurance report, which provides details of the assurance process in relation to in-period ODIs for 2017-18. 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.

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 not challenged the company on its approach.

Bill impact

South West Water has explained to us that for 2019-20 its estimated change in its annual average wholesale water household bill will be an increase of £0.675, and for the annual average wholesale wastewater household bill will be a reduction of £1.125. The overall average household bill impact will be a reduction of £0.450.

Bill smoothing and customer engagement

The company's ODI submission proposed to apply the in-period incentives from performance in 2017-18 to customer bills in 2019-20. South West Water is proposing to reduce customer bills by £0.270 million and defer the 'other items' element of the WaterShare scorecard (£9.0 million) to future years. This approach was shared and discussed with the WaterShare Panel who accepted South West Water's recommendation.

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 the majority of household customers favour lower and/or smoother bills to reinvestment in services. Although re-investment options were not considered because of the results of the customer research, the WaterShare panel highlighted that re-investment options should continue to be explored for future years. The panel recommended that South West Water's areas of underperformance should be addressed as business as usual if WaterShare money is not used.

Our assessment is that it is appropriate for South West Water to apply a reduction of £0.270 million to customer bills in 2019-20. We have assessed this in the context of the company deferring the 'other items' element of the WaterShare scorecard (£9.0 million) to future years¹². 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 payment in 2019-20 means that customers experience the reduction in bills more closely in time than if the underperformance payment was further delayed.

¹² 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 we have taken this into account in our assessment.

In reaching this view we have taken account of:

- The net effect of South West Water's in-period ODIs on the average household bill is a reduction of £0.450.
- 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 meets with CCWater separately to discuss the calculations for customers' bills.

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 news '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 its own 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 and 4 pollution incidents (water)

South West Water outlined that it had failed to achieve its performance commitment levels in 2017-18, and is therefore liable for an underperformance payments. The

company states that it has implemented a range of improvement initiatives across both its network and production operations, including:

- raising awareness of environmental pollution risks for all production and networks staff, including a joint workshop with the Environment Agency;
- on the production side reviewing pollution risk assessments at all sites and implementing new controls;
- modifying chemical storage systems to provide additional protections against overflows and spills, and improving sludge storage facilities;
- on the network side, repair crews routinely using settlement tanks and dechlorination equipment to minimise environmental damage from burst mains; and
- inspection and audit of operational sites to ensure environment risks arising from operations are documented and mitigated.

South West Water stated its strategy to improve reporting and mitigate water discharges impacting the environment is working and 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 2017-18 and has incurred an underperformance payment as a result. To improve performance in this area, the company has introduced a Single Person Operating Model and expects this to increase capacity to respond more quickly to wastewater events. In addition, the company created a specialist in house team who will concentrate on blockage cleaning and maintenance on its small diameter sewer network. This completed the establishment of a single wastewater team responsible for both the environment and customer, providing real time advice and support to customers which optimises response times and increases resolution.

As a result of the measures above, South West Water expects to achieve its performance commitment level in 2018-19.

Category 1 and 2 pollution incidents (wastewater)

South West Water failed to achieve its performance commitment levels in 2017-18, and is therefore liable for an underperformance payment in relation to its performance. The company reported that it is taking a number of steps to ensure it improves, including an improved programme of sewer network checking, surveys and cleansing. The company has also increased its customer awareness campaigns

(‘Love your Loo’ and ‘Think Sink!’), and introduced a dedicated pollution response team and a new system to improve data ‘visualisation’ in order to better prevent and manage incidents.

South West Water states investments are being targeted to improve performance in this area.

Category 3 and 4 pollution incidents (wastewater)

South West Water failed to meet its performance commitment level in 2017-18, which has resulted in an underperformance payment. The company is taking a number of steps to ensure it improves, as detailed for Category 1 and 2 pollution incidents in the section above.

South West Water states investments are being targeted to improve performance in this area.

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 their 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 1 November and 21 November 2018. We received two responses in relation to our draft determination for South West Water.

South West Water responded to say that agreed with our proposed treatment of the outperformance and underperformance payment. The company stated that our draft

determination is aligned to its proposed treatment that was researched with its customers and discussed with its independent WaterShare Panel.

CCWater expressed its disappointment that South West Water's continuing poor environmental performance has resulted in in-period ODI underperformance payments. It stated that it expects the company to do more to improve its environmental performance in future years.

CCWater stated that it supports the company's proposal to apply the in-period ODI incentives to bills in 2019-20, whereby the impact is a bill reduction of £0.45 to the average combined household bill. South West Water proposed to reduce customer bills by £0.270 million and defer the 'other items' element of the WaterShare scorecard (£9.0 million) to future years. CCWater agrees that there is no further requirement for bill smoothing.

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 payments South West Water incurred based on performance in 2017-18.

In relation to South West Water's wholesale water in-period ODIs the company has earned a net outperformance payment of £0.514 million primarily because its leakage was 1 million litres per day lower than its performance commitment and it had resolved 96.1% of its operational customer contacts first time, which was higher than its performance commitment level of 93% in 2017-18. South West Water estimates the ODI outperformance payment will increase its annual average household water bill by around £0.675 in 2019-20.

In relation to South West Water's wholesale wastewater in-period ODIs the company has incurred a net underperformance payment of £0.784 million this year primarily because it has three Category 1 and 2 pollution incidents against its commitment of zero in 2017-18, and 237 Category 3 and 4 pollution incidents against its commitment of 218. South West Water estimates the ODI underperformance payment will reduce its annual average household wastewater bill by around £1.125 in 2019-20.

To put the amounts into context, Table 13 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 the company's [PR14 final determination company-specific appendix](#) (tables A2.1 and A3.10). The table uses 2012-13 prices which is the basis of ODIs in PR14.

Table 13: 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

Table 14: Our final determination on in-period ODIs for 2017-18 – price control totals

The first part of Table 14 uses 2012-13 prices, net of tax, which is the basis of ODIs in PR14. The second part of Table 14 uses 2019-20 prices gross of tax.

	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water - £ million in 2012-13 prices (the base year for PR14), net of tax	0.514	0.514	0
Wastewater - £ million in 2012-13 prices (the base year for PR14), net of tax	-0.784	-0.784	0
Total	-0.270	-0.270	0
Water - £ million impact on the price control for 2019-20 (the figures in the table above uprated by inflation and adjusted for tax)	0.759	0.759	0
Wastewater - £ million impact on the price control for 2019-20 (the figures in the table above uprated by inflation and adjusted for tax)	-1.157	-1.157	0
Total	-0.398	-0.398	0

Notes

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

Table 15: Revised K factors for the charging year 1 April 2019

Wholesale price control	Final determination price controls	Revised K
Water	-0.15%	-0.53%
Wastewater	-0.11%	1.12%

The revised K factors for the charging year beginning 1 April 2019 include the in-period ODIs for 2017-18, and also the unwinding of the in-period ODIs for 2016-17.

In Section A2.6 we set out our final determination on each of South West Water's in-period ODIs based on performance in the financial year 2017-18. Equivalent details for South West Water's performance in the previous two financial years (2015-16 and 2016-17) are set out in:

- our [final determination](#) of South West Water's in-period ODIs in 2016, and
- section A.2 in our [final determination of in-period ODIs for 2017](#).

A2.6 Final determination for South West Water's in-period ODIs for 2017-18

In-period ODI final determination: water

In-period ODI	2017-18 PC level ¹³	2017-18 actual	Payment due £ million	Company claim ¹⁴ £ million	Claim calculation	Ofwat FD £ million	Comments
W-A1: Compliance with water quality standard <i>(Mean zonal compliance %)</i>	99.98	99.96	-	-	2017-18 PC level met = No 2017-18 underperformance payment deadband = 99.90% Performance falls within the underperformance payment deadband, therefore no underperformance payment is due.	-	Actual performance is within the underperformance payment deadband therefore no underperformance payment is payable.
W-A2: Taste, smell and colour contacts <i>(Number of contacts per 1,000 population)</i>	3.60	2.20	-	-	2017-18 PC level met = Yes 2017-18 outperformance payment deadband = 2.02 This is within the deadband, therefore no outperformance payment or underperformance payment 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	-	-	2017-18 PC level met = Yes 2017-18 payment deadband = 0 Outperformance payment incentive rate = £1.624m	-	This outperformance payment is only paid at the end of the price control period if no water restrictions are applied at any

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 2018

In-period ODI	2017-18 PC level ¹³	2017-18 actual	Payment due £ million	Company claim ¹⁴ £ million	Claim calculation	Ofwat FD £ million	Comments
(Number of water restrictions)					<p>This performance commitment measures the number of water restrictions in place on customers in a five-year period.</p> <p>Only the underperformance payment 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 South West Water's area in the five-year period no outperformance payment will be earned.</p>		point during the price control period.
W-B3: Leakage levels (Megalitres a day, Ml/d)	84	83	0.403	0.403	<p>2017-18 PC level met = Yes</p> <p>2017-18 payment deadband = 84</p> <p>2017-18 payment cap = 64</p> <p>Payment incentive rate = £0.403m</p> <p>Outperformance payment: 84 (deadband) – 83 (performance) = 1 * 0.403 = £0.403m</p>	0.403	We are accepting South West Water's net outperformance payment application and the company's outperformance payment calculation.
W-D1: Operational customer contacts resolved first time	93	96.1	0.133	0.133	<p>2017-18 PC level met = Yes</p> <p>2017-18 payment deadband = 93</p> <p>2017-18 payment cap = 100</p> <p>Payment incentive rate = £0.043m</p>	0.133	We are accepting South West Water's net outperformance payment application and the company's outperformance payment calculation.

Final determination of in-period ODIs for 2018

In-period ODI	2017-18 PC level ¹³	2017-18 actual	Payment due £ million	Company claim ¹⁴ £ million	Claim calculation	Ofwat FD £ million	Comments
<i>(% of customer contacts resolved first time)</i>					Outperformance payment: 96.1 (performance) – 93 (deadband) = 3.1 * 0.043 = £0.133m		
W-E4: Pollution incidents (Category 1 and 2) <i>(Number of pollution incidents, categories 1 and 2)</i>	0	0	-	-	2017-18 PC level met = Yes PC level has been met, therefore no underperformance payment is due.		No underperformance payment has been incurred.
W-E5: Pollution incidents (Category 3 and 4) <i>(Number of pollution incidents, categories 3 and 4)</i>	2	18	-0.022	-0.022	2017-18 PC level met = No 2017-18 underperformance payment deadband = 2 2017-18 underperformance payment collar = 4 Underperformance payment rate = £0.011m Underperformance payment: 4 (underperformance payment collar) – 2 (underperformance payment deadband) = 2 * 0.011 = £0.022m	-0.022	We are accepting South West Water's net underperformance payment application and the company's underperformance payment calculation.
Total (water)			0.514	0.514		0.514	

In-period ODI final determination: wastewater

In-period ODI	2017-18 PC level ¹⁵	2017-18 actual	Payment due £ million	Company claim ¹⁶ £ million	Claim calculation	Ofwat FD £ million	Comments
S-B1: Operational customer contacts resolved first time <i>(% customer contacts resolved first time)</i>	93	91.6	-0.071	-0.071	2017-18 PC level met = No 2017-18 underperformance payment deadband = 93 2017-18 underperformance payment collar = 75 Underperformance payment rate = £0.051m Underperformance payment: 93 (deadband) – 91.6 (underperformance) = 1.4 * 0.051 = £0.071m	-0.071	We are accepting South West Water's net underperformance payment application and the company's underperformance payment calculation.
S-C3: Wastewater descriptive works permit complaint <i>(% wastewater descriptive works permit compliance)</i>	100	100	-	-	2017-18 PC level met = Yes 2017-18 underperformance payment deadband = 95.0 South West Water met its performance commitment, therefore no payment is due.		South West Water met its performance commitment therefore no underperformance payment is payable.
S-C4: Pollution incidents (Category 1 and 2)	0	3	-0.346	-0.346	2017-18 PC level met = No 2017-18 underperformance payment deadband = 2	-0.346	We are accepting South West Water's net underperformance payment application and the

¹⁵ PC level stands for performance commitment level

¹⁶ 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 2018

(Number of pollution incidents, categories 1 and 2)					2017-18 underperformance payment collar = 8 Underperformance payment rate = £0.346m Underperformance payment: 3 (performance) – 2 (deadband) = 1 * 0.346 = £0.346m		company's underperformance payment calculation.
S-C5: Pollution incidents (Category 3 and 4) (Number of pollution incidents, categories 3 and 4)	218	237	-0.367	-0.367	2017-18 PC level met = No 2017-18 underperformance payment deadband = 218 2017-18 underperformance payment collar = 262 Underperformance payment rate 1 (262 – 248) = £0.0103m Underperformance payment rate 2 (248 – 218) = £0.0193m Underperformance payment rate 2 applies: Underperformance payment: 237 (performance) – 218 (deadband) = 19 * 0.0193 = £0.367m	-0.367	We are accepting South West Water's net underperformance payment application and the company's underperformance payment calculation.
Total (wastewater)			-0.784	-0.784		-0.784	

A3 Severn Trent Water final determination

Severn Trent Water is requesting an adjustment to its 2019-20 water wholesale price control to reflect its performance in 2017-18. Our final determination is set out in Table 17 and Table 18 below.

The estimated allocation of Severn Trent Water's outperformance payments and underperformance payments (1 April 2015 to 30 June 2018) were included in Tables 11 and 12 on pages 148 and 149 in our [Consultation under section 13 of the Water Industry Act 1991 on proposed modification of Severn Trent Water Limited's \(Severn Trent Water\) licence to include the Powys Site and proposed modification of Dee Valley Water Limited's \(Dee Valley Water\) licence to include the Chester site \(Ofwat, 23 March 2018\)](#).

Table 16: Allocation of Severn Trent Water wholesale water and wastewater performance payments 1 April 2015 to 30 June 2018 (%)

Price control	Severn Trent Water	Hafren Dyfrdwy
Wholesale water	99.42%	0.58%
Wholesale wastewater	99.56%	0.44%

We have used these allocations in our final determinations to determine the final in-period ODI values for Severn Trent Water.

In relation to Severn Trent Water's wholesale water in-period ODIs the company has incurred a net underperformance payment of £29.558 million primarily because it underperformed its performance commitment on supply interruptions. Other factors that had a significant contribution to its underperformance payment included higher drinking water complaints and underperformance in leakage. Severn Trent Water estimates the adjusted ODI underperformance payment will decrease its annual average household water bill by around £8 in 2019-20.¹⁷

¹⁷ The net decrease on average household water bills that the company has stated is based on their applied underperformance payments. Based on our proposal to exclude the adjustment for the freeze and thaw, we expect there will be a greater reduction on average household water bills than stated.

Table 17: 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: Number of complaints about drinking water quality	Underperformed by 2,695 contacts	-2.411
W-A2: Compliance with drinking water quality standards	0.04 percentage points below commitment	-
W-A4: Number of successful catchment management schemes	Not applicable	-
W-B2: Leakage levels	Underperformed by 9 megalitres per day	-1.712
W-B3: Speed of response in repairing leaks	Underperformed by 67 percentage points	-1.398
W-B4: Number of minutes customers go without supply each year	Underperformed by 23.49 minutes	-23.579
W-B7: Customers at risk of low pressure	46 customers lower than commitment	0.036
W-B8: Restrictions on water use	Not applicable	-
W-C1: Customers rating our services as good value for money	7 percentage points above commitment	-
W-E1: Size of our carbon footprint	Underperformed by 34 ktCO ₂ e	-0.494
Total (water)	-	-29.558

In relation to Severn Trent Water's wholesale wastewater in-period ODIs the company has earned a net outperformance payment of £87.815 million primarily because its number of external sewer flooding incidents was 49% lower than its commitment; its number of internal sewer flooding incidents was 31% lower than its commitment; and its number of Category 3 pollution incidents was 13% lower than its commitment. We are accepting the company's proposals to defer £62.925 million of its wastewater ODI payment, to mitigate the impact on the annual average household bill.

Table 18: 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	Outperformed by 298 incidents	12.704
S-A2: External sewer flooding incidents	Outperformed by 3,684 incidents	72.545
S-B1: Customers rating our services as good value for money	Outperformed by 6 percentage points	-
S-C2: Category 3 pollution incidents	Outperformed by 47 incidents	2.522
S-D1: Carbon footprint	Outperformed by 3 ktCO ₂ e	0.044
Total (wastewater)	-	87.815
Total, with deferral of £62.925m (wastewater outperformance payment)	-	24.890

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 19: Summary of Severn Trent Water's financial ODIs

	Underperformance payment only		Outperformance payment only		Under and out-performance payments	
	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 2017-18

Severn Trent Water submitted its application for an in-period ODI determination before the 15 September 2018 deadline.

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 2017-18 (these are included in Section A3.6).

The application included information on:

- the extent of outperformance and underperformance and the associated performance payments;
- 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 – 2017/18 (July 2018)
- Annual Performance Report – 2017/18: a summary for customers (July 2018)
- Assurance summary for 2017/18 (July 2018)
- Risk and compliance statement for 2017/18 (July 2018)

Severn Trent Water stated that operating conditions in the year were considered to be normal overall. In general, they were not considered exceptional and were within the range of conditions expected when it designed its performance commitments and ODIs. The company stated that the one exception to this was the impact of the 'Beast from the East' which it considered to be exceptional in terms of impact on performance, most notably supply interruptions.

The company made two adjustments to their mechanistic ODI calculations. The first to reflect that their position on calculating real leakage losses aligns with our approach detailed in the 2016-17 in-period ODI determination, and the second to take into account the capping of individual events for supply interruptions to reflect the impact of extreme weather.

- W-B2: Leakage
- W-B4: Minutes customers go without supply each year.

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

Severn Trent Water applied for the full value of its ODI out- and under- performance payments to be taken into account in this final determination, with the exception of the adjustments for leakage (W-B2) and supply interruptions (W-B4). The reasons for these exceptions, and the impact of the company's restatement on the company's net ODI payment position, are explained below.

The company did not identify any potential for ambiguity in measurement against its in-period ODIs.

In Section A3.6 we set out Severn Trent Water's claim for each in-period ODI for 2017-18.

A3.3 Our assessment

Provision of information

Severn Trent Water completed the K factor model correctly, and the ODI model spreadsheets in a manner that produced the correct outputs. We raised a query regarding several figures in the ODI model spreadsheets where we identified discrepancies with supporting documentation provided in the in-period ODI application. Severn Trent explained the reason for any discrepancies and acknowledged where they had made errors in completing the ODI model spreadsheets. These discrepancies did not have a material impact on the final calculation of the aggregate in-period ODIs.

Ofwat cross-checking calculations

With the exception of the discrepancies mentioned in the section above on provision of information, the company's calculations matched our internal calculations based on the information provided in the APR.

Leakage ODI

Severn Trent Water has reported an increase in leakage levels of 11 MI/day. This net increase is comprised of a 7 MI/day increase driven by data improvements, a 3

MI/day reduction due to methodological changes, and an increase in the level of unaccounted for water¹⁸ 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).

In our 2016-17 in-period ODI final determination we determined that Severn Trent should apply only changes in real losses, and not data improvements and methodology updates, to financial incentive calculations relating to leakage. In line with this position and subsequent industry workshops in 2018, Severn Trent has made an adjustment to the way it calculates its leakage ODI value for 2017-18 as well as adjusting previous ODI values claimed for 2015-16 and 2016-17 to reflect real losses only.

The company provided details of how it calculated the adjustments, which results in an additional underperformance payment of £0.611 million.

We accept Severn Trent Water's calculation of leakage performance using real losses only and the adjustment to previous years' ODI values. The adjustment has been included in the total underperformance payment for leakage as detailed in Section A3.6.

Supply interruptions ODI

Severn Trent experienced an exceptionally poor year in relation to supply interruptions during 2017-18, stating in its in-period ODI application that "the performance was attributable to a very small number of large scale events throughout the year and culminating in the 'Beast from the East' in March 2018".

The company cited what it describes as two events in particular that caused significant operating issues, namely one in Gloucestershire in December 2017 and the extreme cold weather and rapid thawing in March 2018.

These events contributed 17.06 minutes (5.73 minutes relating to the Gloucestershire incident and 11.33 minutes relating to the freeze and thaw) to the total annual supply interruptions performance of 34.29 minutes. The company considers that these impacts were exceptional and requested that adjustments be applied to their mechanistic in-period ODI calculation to reflect this.

¹⁸ Unaccounted for water is either unmeasured consumption or leakage from the network.

In our [PR14 final determination](#) for Severn Trent (pages 164 and 165), performance commitment W-B4 (number of minutes customers go without supply each year) states that “the impact of any individual incident will be limited to 5 minutes”. The company applied to exclude the impact of the Gloucestershire event and the “Beast from the East” to the extent that either exceeded 5 minutes.

We agree with the company’s view that the Gloucestershire event in Tewkesbury in December 2017 was an individual incident and accept the application to exclude the impact of the event to the extent that it exceeded 5 minutes (i.e. 0.73 minutes).

For the freeze and thaw we raised a query to the company to provide further explanation as why it considers this an individual incident. The query included a request for a more detailed breakdown of the data used to calculate the total minutes of 11.33 minutes split by geographical area (i.e. a group of contiguous customers) and period (number of days) within each geographical area.

Severn Trent responded that it considers the “Beast from the East” to be an individual incident as it has the same underlying cause and has widely been referred to as an incident (including in our publication [Out in the Cold](#)). However, in a [letter to Ofwat on 6 April 2018](#) Severn Trent Water referred interchangeably to both incident and multiple incidents in respect of what occurred in its area during the freeze and thaw.

The supply interruptions in March 2017 arose from supply failures of distinct assets at a number of different geographic locations and times across the company’s area. As such, these have the characteristics of separate incidents, albeit all related to the same meteorological conditions. Moreover, the commitment given at PR14 simply referred to incidents, without further qualification. It made no reference to a broader weather-related exclusion, nor defined circumstances in which meteorological conditions across a large region might constitute a single incident.

Therefore, we consider that the freeze and thaw resulted in multiple distinct incidents and we do not consider that the 5 minute individual incident cap should be applicable. This is consistent with a straightforward reading of the performance commitment Severn Trent Water made to its customers at PR14. We have therefore rejected Severn Trent’s application to apply the adjustment to exclude the impact of the freeze and thaw to the extent that combined incidents exceeded 5 minutes and have applied the full underperformance payment in our calculation. This results in a £6.963 million¹⁹ increase to the underperformance payment.

¹⁹ This is the total underperformance payment based on Severn Trent Water’s performance. As a result of the licence modifications (discussed in Section 1), the allocation of payments results in £6.923m being applied to Severn Trent Water and £0.040m being applied to Hafren Dyfrdwy.

Details of our calculations and final determination on this ODI are set out in Section A3.6.

Assurance

Severn Trent Water is currently a 'targeted' company under our [Company Monitoring Framework](#). 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 the company summarised the assurance it had undertaken and the outcome of the independent technical assurance on performance commitments. This information supplemented the company's [Assurance Summary 2018](#) published in July 2018.

In its in-period ODI application supporting documents, Severn Trent Water stated that the assurance process used a staged approach which is completed before any internal sign-off of data by the company. 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 stage. As part of its year-end assurance, the consultants found no material weaknesses in the production of the data and confirmed that the majority of reviewed teams have a good understanding of their processes for reporting performance.

In addition to the above, the company stated that their ODI model spreadsheets and K factor model underwent second line assurance to ensure that the correct outputs had been included.

In our assessment, we found several discrepancies between the information in the ODI model spreadsheets, the APR and supporting documents to the in-period ODI application. We asked the company to clarify several points and Severn Trent acknowledged where it had made errors in both their ODI model spreadsheets and supporting documentation. We also found discrepancies between the information about assurance in the supporting documents and the Assurance Summary 2018.

We accepted the company's overall response but note that we will be closely monitoring the quality of internal assurance of future in-period ODI submissions.

Impact of licence and boundary changes on customer bills

An important commitment following the boundary changes of Severn Trent Water and Hafren Dyfrdwy was the guarantee that the revision of operating areas would lead to at least the same level of service to customers and, as far as possible, no increase in customer bills due to regulatory incentives.

We asked the company to provide further information detailing how this has been considered. Severn Trent Water stated that the driver for in-period ODI allocation between the two companies is wholesale revenue. The rationale is that any wholesale revenue incentive results in an uplift or reduction in customer bills proportionate to their wholesale charge. Allocating in line with the wholesale revenue split thus means that customers are in the same position as if the border variation had not taken place.

In line with the split of wholesale water revenue, 99.42% of underperformance payments will be allocated to previous Severn Trent Water customers (the remainder applying to previous water Severn Trent Water customers in Wales transferred to Hafren Dyfrdwy), and the downward adjustment to charges will not apply to customers in the previous Dee Valley Water area.

Equivalently, Severn Trent Water customers will pay the additional charges related to 99.56% of the net outperformance payment due for wastewater (the remainder being payable by previous wastewater Severn Trent Water customers in Wales transferred to Hafren Dyfrdwy).

Bill impact

Severn Trent Water has stated that the indicative bill impact from incorporating the payments from its ODIs and other factors (RPI, Water Revenue Forecasting Mechanism (WRFIM), etc) for the average combined household bill is an increase of £3.25. However, the impact of bills differs between water and wastewater services.

The company estimates a net reduction on the average household water bill of £3.75 (once other factors are also applied), based on its proposed underperformance payment. Based on our exclusions of the adjustment for the freeze and thaw, we expect there will be a greater reduction on water bills than stated.

Severn Trent estimates that the impact on the average household wastewater bill is an increase of £7 (once other factors are also applied). The company has stated that incorporating the full ODI outperformance for wastewater into the 2019-20 charges would increase the average household combined bill by more than 8% and the unmeasured wastewater bill by around 14%. 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.

Thus, the company proposed an approach to smoothing these bill impacts, which we discuss below.

Bill smoothing

The company's submission proposed to apply the full in-period ODI underperformance payment for water services on bills in 2019-20 and suggested measures to smooth bills over more than one year in relation to wastewater. Severn Trent Water proposed to defer £62.925 million of the wastewater outperformance payment, which would reduce the ODI impact on wastewater bills for 2019-20. Severn Trent Water has incorporated the deferred ODI payments from 2017-18, along with those deferred from 2016-17, in its financial modelling forecasts for the PR19 business plan submission. To help reduce bill volatility the company has smoothed the impact of these deferrals across AMP7.

We asked Severn Trent whether it had considered any other options for deferring its wastewater outperformance payment. The company responded that its customer research indicates that customers are concerned if there is a sharp increase in their overall bill, but do not focus on to the composition of the charge. It therefore looked at the level of the wastewater ODI which could be taken in 2019-20 without causing undue incidence effects and presenting as smooth a bill profile as possible.

Severn Trent also commented that if there had been no offsetting adjustments on the water service, it would have considered deferring more of the wastewater outperformance payments to future periods. This approach is similar to the company's approach early in the AMP, where it took more outperformance payments in-period when the RPI was low, allowing it to keep the resulting bill increases within reasonable bounds.

Table 20 below illustrates the nominal bill impact for 2019-20 in percentage terms relative to 2018-19 bills under each of the options considered.

Table 20: Scenarios considered by Severn Trent Water for bill smoothing

Average bills	Option 1 – without smoothing	Option 2 – with smoothing
Unmeasured		
Water	197.6	198.0
Wastewater	212.6	188.8
Combined	410.2	386.4
Measured		
Water	163.2	163.2
Wastewater	173.7	158.4
Combined	337.0	321.6
Average		
Water	181.2	181.2
Wastewater	195.2	175.2
Combined	376.4	356.3

Severn Trent Water discussed its proposal to defer an element of outperformance on wastewater with its Water Forum and CCWater as part of discussions on PR19. We asked the company to provide more information on the Water Forum and CCWater's specific views on the bill impacts of this year's in-period ODIs. In response, Severn Trent Water stated that the Water Forum and CCWater have endorsed its recommendations on this year's in-period ODIs and are supportive of its overall approach, which looks to manage incidence effects by taking more ODIs when bill increases can be kept low.

Based on the information Severn Trent Water provided us with, including the views of its Water Forum and CCWater, we consider it is appropriate for Severn Trent Water to smooth the impact of its net outperformance payment for wastewater in-period ODIs, by deferring £62.925 million. Applying a proportion of the payment in 2019-20 will reduce the impact on customers' bills next year.

Deferring £62.925 million of the wastewater outperformance payment means applying an outperformance payment of £24.890 million for wastewater services to bills in 2019-20. Combined with the £29.558 million underperformance payment for water services, this is a net underperformance payment of £4.668 million in 2012-13 prices net of tax.

Customer and stakeholder engagement

Severn Trent Water reported that the Water Forum continues to monitor and challenge the company's current performance. Severn Trent Water provided updates

to the Water Forum at the full and half financial year, the Severn Trent Water Audit Committee Chair provided an annual update on its view of Severn Trent Water's assurance activities, and Severn Trent Water's regulators (DWI, the Environment Agency and Natural England) and CCWater were invited to give the forum their views throughout the year. In line with this approach, Severn Trent Water has engaged with the Water Forum on: the proposed deferral and impact on customer bills in 2019/20, expected outturn performance in terms of future years through the developing performance commitment suite for PR19, actual performance ahead of full year results announcement in May 2018, and performance ahead of the publication of the Annual Performance Report 2018.

Severn Trent Water has several elements in its approach to customer engagement, including research undertaken to inform business plan proposals in 2014 and the PR19 plan, publication of its customer-focused Annual Performance Report 2018, and communication during the main billing period.

We asked the company to provide further information in relation to engagement directly with customers on bill impacts for this year's ODIs, including the proposal to defer part of the outperformance payment.

Following our request, Severn Trent Water responded that, for 2019-20 charges specifically, it had undertaken new research to gauge customer views on the level of change that would cause concern. This utilised two channels: a survey using its online portal "Tapchat" and focus groups for more in-depth discussions.

Since Tapchat is directed at customers and this year's ODIs will increase wastewater charges, Severn Trent Water ensured that some of its focus groups included wastewater-only customers (i.e. South Staff Water). The research indicated that household customers might become concerned by changes of around £2 per month or £20-£25 per year. At this point customers would expect some further explanation as to the reason for the changes.

This research has informed Severn Trent Water's handling strategies for bill increases this year. Severn Trent Water is conscious that the effects of unsmoothed bills will fall more heavily on Severn Trent's wastewater only customers, principally those served by South Staffs Water. Severn Trent Water has kept South Staffs Water informed about the proposed 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.

Once Severn Trent Water completes its charges scheme process, and understands whether any customer groups may experience effects greater than 5% of their bill,

Severn Trent Water will review what specific communications may be required for those impacted.

Past and expected future performance

We checked whether the information provided on 2017-18 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 Annual Performance Report 2017-18, Severn Trent Water explained the reasons for any underperformance and outperformance.

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

ODI definition (ambiguity)

During the first year of the AMP 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 the Annual Performance Report 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. It has not applied any mitigating factors to its performance.

The one exception was with regard to the impact of the exceptional weather on its supply interruptions ODI. The company however did not apply an overall exceptional weather adjustment but rather requested to exclude the impact of the two above mentioned incidents to the extent that the incident exceeded 5 minutes during 2017-18. The details of this request and our assessment are discussed above.

We agree that Severn Trent Water has applied no other 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 1 November and 21 November 2018. We received two responses in relation to our draft determination for Severn Trent Water.

Severn Trent Water responded to say that it welcomes our proposed decision to: increase the wholesale wastewater price control to apply a net outperformance payment of £24.890 million to bills in 2019-20; and defer wastewater ODIs of £62.925 million to future years in order to mitigate the impact on bills.

In relation to supply interruptions, the company stated that as part of its ODI submission it noted that a small number of events triggered the 5 minute cap. In the draft determination, we did not consider that the 5 minute individual incident cap should be applicable, and rejected the company's application to apply the adjustment to exclude the impact of the freeze and thaw to the extent that combined incidents exceeded 5 minutes. Severn Trent Water recognised that its performance for customers should have been better during freeze-thaw, and agree that it is appropriate to reduce bills in recognition of the importance of service levels.

However, the company stated that the amount of the extra bill reduction that should be applied is different to what we proposed, because there was one incident during freeze-thaw which exceeded the 5 minutes cap, which slightly reduces the amount by £0.418 million to £6.545 million (for Severn Trent Water and Hafren Dyfrdwy combined).

We issued a query to Severn Trent Water in relation to the distinct incident which exceeded the 5 minute cap, requesting further information on the location, duration of incident, number of properties affected, and the company's response. Severn Trent Water responded that it had identified Breamfield (a series of 11 rural distribution service reservoirs that are all fed from the Breamfield reservoir), had exceeded the five minute cap in its own right. As such, it stated that strictly the underperformance payment should be capped and an adjustment of £0.418m applied to the mechanistic ODI underperformance payment calculation.

However, the company stated that in light of our comments on the freeze/thaw, its own performance, the materiality of the adjustment, it considered that it would be clearer and more transparent for its customers and stakeholders if the ODI underperformance payment is based on the full mechanistic underperformance payment. The company has therefore confirmed subsequently to its consultation

response that it is no longer seeking an adjustment to the supply interruptions underperformance payment for 2017-18.

CCWater noted that our decision to allow Severn Trent Water to defer £62.925 million of its total accrued outperformance payment to mitigate the impact on the average household bill is a further deferral of in-period ODI outperformance payments, following those made in previous years, and that the total amount now deferred is substantial. CCWater said that it expects the company to mitigate the impact of this deferral on future bills, and to be open and transparent in communicating this to customers. CCWater also responded that while Severn Trent Water has earned significant outperformance payments for its wastewater performance: it is disappointed to see underperformance in many of its water service commitments and the negative impact on customers these represent.

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 payment of £29.558 million (2012-13 prices, net of tax) to wholesale water bills in 2019-20 for one year only. The company has incurred this net underperformance payment primarily because it underperformed its performance commitment on supply interruptions by 23.49 minutes. Other factors that had a significant contribution to its underperformance payment included higher drinking water complaints and leakage, and underperformance in leakage. Severn Trent Water estimates the ODI underperformance payment will reduce its annual average household water bill by around £3.75 (once other factors such as RPI and WRFIM are applied) in 2019-20.

In relation to Severn Trent Water's wholesale wastewater in-period ODIs the company has earned a net outperformance payment of £87.815 million primarily because its number of external sewer flooding incidents was 49% lower than its commitment; its number of internal sewer flooding incidents was 31% lower than its commitment; and its number of Category 3 pollution incidents was 13% lower than its commitment. We are determining an increase in Severn Trent Water's wholesale wastewater price control, applying a net outperformance payment of £24.890 million (2012-13 prices, net of tax) to bills in 2019-20 and deferring the remaining £62.925 million to future years. Severn Trent Water estimates that accepting the company's proposals to defer £62.925 million of its wastewater ODI payment will increase the annual average household wastewater bill by £7 (once other factors such as RPI and WRFIM are applied) in 2019-20.

To put the amounts into context, Table 21 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 21: 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

As detailed in the [Consultation under section 13 of the Water Industry Act 1991 on proposed modification of Severn Trent Water's licence to include the Powys Site and proposed modification of Dee Valley Water's licence to include the Chester site](#), we made the following revenue adjustments to the PR14 price control to the charging year starting on 1 April 2018.

Table 22: Severn Trent Water's adjusted wholesale water and wastewater allowed revenue for 2018-19

Allowed revenue (Charging Year starting on 1 April 2018, £ million)	2018-19
Wholesale water	695.8
Wholesale wastewater	741.6

In Table 23 below we set out our provisional conclusions on the overall in-period ODI determination for Severn Trent Water in £ million for water and wastewater.

The first part of the table uses 2012-13 prices, net of tax, which is the basis of ODIs in PR14 and then applies the £62.925 million deferral of the wastewater outperformance payment to the 2012-2013 prices. The second part of the table uses 2019-20 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 £87.815 million (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 £24.890 million (2012-13 prices, net of tax) in 2018-19 and defer £62.925 million to its wastewater price control in a future year.

Table 23: Our final determination on in-period ODIs for 2018 – price control totals

	Company claim £ million	Ofwat final determination £ million	Difference £ million
Water - £ million in 2012-13 prices (the base year for PR14), net of tax	-22.635	-29.558	-6.923
Wastewater - £ million in 2012-13 prices (the base year for PR14), net of tax	87.815	87.815	0
Total	65.180	58.257	-6.923
Total with the deferral of £62.925m of the wastewater outperformance	2.255	-4.668	-6.923
Water - £ million impact on the price control for 2019-20 (the figures in the table above uprated by inflation and adjusted for tax)	-33.396	-43.610	-10.214
Wastewater - £ million impact on the price control for 2019-20 (the figures in the table above uprated by inflation and adjusted for tax)	36.723	36.723	0
Total	3.327	-6.887	-10.214

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 revised K numbers are set out in Table 24 below.

Table 24: Revised K factors for the charging year beginning 1 April 2019

Wholesale price control	Final determination price controls	Revised K
Water	-0.05%	-5.58%
Wastewater	-0.03%	2.13%

The revised K factors for the charging year beginning 1 April 2019 include the in-period ODIs for 2017-18, and also the unwinding of the in-period ODIs for 2016-17.

In Section A3.6 we set out our final determination on each of Severn Trent Water's in-period ODIs based on performance in the financial year 2017-18. Equivalent details for Severn Trent Water's performance in the two previous financial years (2015-16 and 2016-17) are set out in:

- our final determination of [Severn Trent Water's in-period ODIs in 2016](#).
- section A.3 in our [final determination of in-period ODIs for 2017](#).

A3.6 Final determination for Severn Trent Water's in-period ODIs for 2017-18

In-period ODI final determination: water

In-period ODI	2017-18 PC level ²⁰	2017-18 actual	Payment due £ million	Company claim ²¹ £ million	Claim calculation	Ofwat FD £ million	Comments
W-A1: Complaints about drinking water quality <i>(Number of water quality complaints)</i>	9,992	12,687	-2.411	-2.411	2017-18 PC level met = No 2017-18 underperformance payment deadband = 9,992 Underperformance payment rate = £0.0009m Underperformance payment: 12,687 (performance) – 9,992 (deadband) = 2,695 * 0.0009 = 2.426 * 99.42% = £2.411m	-2.411	We are accepting Severn Trent Water's net underperformance payment application and the company's underperformance payment calculation.
W-A2: Compliance with drinking water quality standards <i>(Mean zonal compliance %)</i>	100.000	99.960	-	-	2017-18 PC level met = No 2017-18 underperformance payment deadband = 99.950 2017-18 underperformance payment collar = 99.910 This is within the deadband, therefore no outperformance payment or underperformance payment is due.	-	Severn Trent's actual performance is within the underperformance payment deadband therefore no underperformance payment is payable.

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.

Final determination of in-period ODIs for 2018

In-period ODI	2017-18 PC level ²⁰	2017-18 actual	Payment due £ million	Company claim ²¹ £ million	Claim calculation	Ofwat FD £ million	Comments
W-A4: Successful catchment management schemes (Number of catchment management schemes)	-	-	-	-	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).	-	No outperformance or underperformance payment is applicable for 2017-18.
W-B2: Leakage (Megalitres per day MI/d)	434	443	-1.101	-1.712	2017-18 PC level met = No 2017-18 underperformance payment deadband: 434 Underperformance payment rate = £0.123m Mechanistic underperformance payment: 443 (performance) – 434 (deadband) = 9 * 0.123 = £1.107m * 99.42% = £1.101m Underperformance payment adjustment to reflect changes in real losses only: £0.615 * 99.42% = £0.611m	-1.712	We are accepting Severn Trent Water's calculation of its underperformance payment and the adjustment to reflect changes in real losses only for previous years.

Final determination of in-period ODIs for 2018

In-period ODI	2017-18 PC level ²⁰	2017-18 actual	Payment due £ million	Company claim ²¹ £ million	Claim calculation	Ofwat FD £ million	Comments
					Total underperformance payment: £1.101 + £0.611m = £1.712m		
W-B3: Speed of response in repairing leaks (% visible leaks fixed within 24 hours)	90%	23%	-1.398	-1.398	2017-18 PC level met = No 2017-18 underperformance payment deadband = 80% Underperformance payment rate = 0.024663 Underperformance payment: 80 (deadband) – 23 (performance) = 57 * 0.024663 = 1.406 * 99.42% = £1.398	-1.398	We are accepting Severn Trent Water's net underperformance payment application and the company's underperformance payment calculation.
W-B4: Minutes customers go without supply each year (Minutes)	10.80	34.29	-24.377	-16.656	2017-18 PC level met = No 2017-18 underperformance payment deadband = 12.0 Underperformance payment rate = 1.1 Underperformance payment: 34.29 (performance) – 12.0 (deadband) = 22.29 * 1.1 = 24.519 * 99.42% = £24.377m Severn Trent has requested to exclude the impact of two supply interruption incidents to the extent that the incidents exceeded 5 minutes. Gloucestershire adjustment: 5.73 (performance) – 5 (underperformance payment collar) = 0.73 * 1.1 = 0.803 * 99.42% = £0.798m	-23.579	We are accepting Severn Trent Water's adjustment for the Gloucestershire event and rejecting the adjustment for the freeze and thaw. The reasoning behind our decision is provided in Section A3.3. The applicable underperformance payment is calculated as: £24.377m - £0.798m = £23.579m

Final determination of in-period ODIs for 2018

In-period ODI	2017-18 PC level ²⁰	2017-18 actual	Payment due £ million	Company claim ²¹ £ million	Claim calculation	Ofwat FD £ million	Comments
					Freeze and thaw adjustment: 11.33 (performance) – 5 (underperformance payment collar) = 6.33 * 1.1 = 6.963 * 99.42% = £6.923m Total adjustment: £0.798m + £6.923m = £7.721m Adjusted underperformance payment: £24.377 - £7.721m = £16.656m		
W-B7: Customers at risk of low pressure <i>(Number of customers at risk of low pressure)</i>	250	204	0.036	0.036	2017-18 PC level met = Yes 2017-18 outperformance payment deadband = 250 Incentive payment rate = 0.000790 Outperformance payment: 250 (deadband) – 204 (performance) = 46 * 0.000790 = 0.036 * 99.42% = £0.036m	0.036	We are accepting Severn Trent Water's net outperformance payment application and the company's outperformance payment calculation.
W-B8: Restrictions on water use <i>(Number of water restrictions in the five-years 2015-2020)</i>	0	0	-	-	No outperformance payment or underperformance payment is payable for 2017-18. The five-year underperformance payment 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	52	59	-	-	2017-18 PC level met = Yes 2017-18 payment deadband = 62 Payment incentive rate = £0.125m	-	We accept that Severn Trent's actual performance is within the outperformance payment

Final determination of in-period ODIs for 2018

In-period ODI	2017-18 PC level ²⁰	2017-18 actual	Payment due £ million	Company claim ²¹ £ million	Claim calculation	Ofwat FD £ million	Comments
as good value for money ²² <i>(% of customers rating services as good or very good value for money, as measured by quarterly Customer Satisfaction Survey)</i>					Performance is within the deadband, therefore no outperformance payment or underperformance payment is due.		deadband therefore no incentive is payable.
W-E1: Carbon footprint <i>(ktCO₂e: thousand tonnes of carbon dioxide equivalent)</i>	222	256	-0.494	-0.494	2017-18 PC level met = No 2017-18 underperformance payment deadband = 222 Underperformance payment rate = 0.014630 Underperformance payment: 256 (performance) – 222 (deadband) = 34 * 0.014630 = 0.497 * 99.42% = -0.494	-0.494	We are accepting Severn Trent Water's net underperformance payment application and the company's underperformance payment calculation.
Total (water)			-29.745	-22.635		-29.558	

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

In-period ODI final determination: wastewater

In-period ODI	2017-18 target (PC level ²³)	2017-18 actual	Payment due £ million	Company claim ²⁴ £ million	Claim calculation	Ofwat FD £ million	Comments
S-A1: Internal sewer flooding incidents <i>(Number of internal sewer flooding incidents)</i>	960	662	12.704	12.704	2017-18 PC level met = Yes 2017-18 outperformance payment deadband = 960 Payment incentive rate = 0.042820 Outperformance payment: 960 (deadband) – 662 (performance) = 298 * 0.042820 = 12.760 * 99.56% = £12.704m	12.704	We are accepting Severn Trent Water's net outperformance payment application and the company's outperformance payment calculation.
S-A2: External sewer flooding incidents <i>(Number of external sewer flooding incidents)</i>	7,447	3,763	72.545	72.546	2017-18 PC level met = Yes 2017-18 outperformance payment deadband = 7,447 Payment incentive rate = 0.019779 Outperformance payment: 7,447 (deadband) – 3,763 = 3,684 * 0.019779 = £72.866 * 99.56% = £72.545m (difference of 0.001 due to rounding)	72.545	We are accepting Severn Trent Water's net outperformance payment application and the company's outperformance payment calculation.

²³ PC level stands for performance commitment level

²⁴ 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 2018

In-period ODI	2017-18 target (PC level ²³)	2017-18 actual	Payment due £ million	Company claim ²⁴ £ million	Claim calculation	Ofwat FD £ million	Comments
S-B1: Customers rating our services as good value for money ²⁵ <i>(% of customers rating Severn Trent Water's services as good or very good value for money, as measured by its quarterly Customer Satisfaction Survey)</i>	52	58	-	-	2017-18 PC level met = Yes 2017-18 outperformance payment deadband = 62 Payment incentive rate = £0.125m Performance is within the deadband, therefore no outperformance payment or underperformance payment is due.	-	We accept that Severn Trent's actual performance is within the outperformance payment deadband therefore no outperformance payment is payable.
S-C2: Category 3 pollution incidents <i>(Number of Category 3 pollution incidents)</i>	374	327	2.522	2.522	2017-18 PC level met = Yes 2017-18 outperformance payment deadband = 374 Payment incentive rate = 0.0539 Outperformance payment: 374 (deadband) – 327 = 47 * 0.0539 = 2.533 * 99.56% = £2.522m	2.522	We are accepting Severn Trent Water's net outperformance payment application and the company's outperformance payment calculation.
S-D1: Carbon footprint	FD: 238	206	0.044	0.044	2017-18 PC level met = Yes	0.044	We are accepting Severn Trent Water's net outperformance payment

²⁵ Outperformance payments and underperformance payments for the 'Customers rating our services as good value for money' performance commitment are divided equally between the water and wastewater price controls.

Final determination of in-period ODIs for 2018

In-period ODI	2017-18 target (PC level ²³)	2017-18 actual	Payment due £ million	Company claim ²⁴ £ million	Claim calculation	Ofwat FD £ million	Comments
<i>(ktCO₂e: thousand tonnes of carbon dioxide equivalent)</i>	Shadow 209				2017-18 outperformance payment deadband = 209 Payment incentive rate = 0.014630 2017-18 outperformance payment based on shadow commitment: 209 (deadband) – 206 (performance) = 3 * 0.014630 = 0.044 * 99.56% = £0.044m		application and the company's outperformance payment calculation.
Total (wastewater)			87.815	87.815		87.815	

A4 Hafren Dyfrdwy final determination

Hafren Dyfrdwy is requesting an adjustment to its 2019-20 water wholesale price control so that customers' bills that were served by Severn Trent during 2017-18 will reflect the impact of Severn Trent's performance in this year. Our final determination is set out below.

The estimated allocation of Hafren Dyfrdwy's outperformance payments and underperformance payments (1 April 2015 to 30 June 2018) were included in Tables 11 and 12 on pages 148 and 149 in our [Consultation under section 13 of the Water Industry Act 1991 on proposed modification of Severn Trent Water Limited's \(Severn Trent Water\) licence to include the Powys Site and proposed modification of Dee Valley Water Limited's \(Dee Valley Water\) licence to include the Chester site \(Ofwat, 23 March 2018\)](#). In summary, for ODIs paid in revenue these are:

Table 25: Allocation of Severn Trent Water wholesale water and wastewater performance payments 1 April 2015 to 30 June 2018 (%)

Price control	Severn Trent Water	Hafren Dyfrdwy
Wholesale water	99.42%	0.58%
Wholesale wastewater	99.56%	0.44%

We have used these allocations in our final determinations to determine the final in-period ODI values for Hafren Dyfrdwy.

Table 26: Summary of 2019-20 in-period ODI allocations

Price control	Severn Trent Water (pre 1 July 2018)	Hafren Dyfrdwy (ODI allocation)	Hafren Dyfrdwy (post 1 July 2018)
Wholesale water	-£29.731m	0.58%	-£0.172m
Wholesale wastewater (pre deferral)	£88.203m	0.44%	£0.388m

A4.1 Summary of Hafren Dyfrdwy's request for 2017-18

Hafren Dyfrdwy submitted its request before the 15 September 2018 deadline for us to determine the level of any change to its price controls due to Severn Trent's performance in 2017-18 that is relevant to the customers that were served by Severn

Trent during this year, but following the changes in company areas are now served by Hafren Dyfrdwy.

Hafren Dyfrdwy 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 included information on:

- 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 Hafren Dyfrdwy [website](#):

- Annual Performance Report – 2017/18 (July 2018)
- Annual Performance Report – 2017/18: a summary for customers (July 2018)
- Assurance summary for 2017/18 (July 2018)
- Risk and compliance statement for 2017/18 (July 2018)

A4.2 Our assessment

Provision of information

Hafren Dyfrdwy completed the K factor model correctly, and the ODI model spreadsheets in a manner that produced the correct outputs. We raised a query regarding several figures in the ODI model spreadsheets where we identified discrepancies with supporting documentation provided in the in-period ODI application. Hafren Dyfrdwy explained the reason for any discrepancies and acknowledged where it had made errors in completing the ODI model spreadsheets. These discrepancies did not have a material impact on the final calculation of the aggregate in-period ODIs.

Ofwat cross-checking calculations

With the exception of the above mentioned discrepancies, the company's calculations matched our internal calculations.

Details of our calculations and final determination on this ODI are set out in Section A3.6.

Assurance

Hafren Dyfrdwy is currently a 'prescribed' company under our [Company Monitoring Framework](#). 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 the company summarised the assurance it had undertaken and the outcome of the independent technical assurance on performance commitments. This information supplemented the company's [Assurance Summary 2018](#) published in July 2018.

In its in-period ODI application supporting documents, Hafren Dyfrdwy stated that the assurance process used a staged approach which is completed before any internal sign-off of data by the company. 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 stage. As part of its year-end assurance, the consultants found no material weaknesses in the production of the data and confirmed that the majority of reviewed teams have a good understanding of their processes for reporting performance.

In addition to the above, the company stated that their ODI model spreadsheets and K factor model underwent second line assurance to ensure that the correct outputs had been included.

In our assessment, we found several discrepancies between the information in the ODI model spreadsheets and supporting documents to the in-period ODI application. However, we note that these are Severn Trent Water's information related to its performance, not necessarily Hafren Dyfrdwy's. We asked the company to clarify several points and Hafren Dyfrdwy acknowledged where there were errors in both their ODI model spreadsheets and supporting documentation. We also found

discrepancies between the information about assurance in the supporting documents and the Assurance Summary 2018.

We accepted the company's overall response.

Impact of licence and boundary changes on customer bills

An important commitment following the boundary changes of Severn Trent Water and Hafren Dyfrdwy was the guarantee that the revision of operating areas would lead to at least the same level of service to customers and, as far as possible, no increase in customer bills due to regulatory incentives.

We asked the company to provide further information detailing how this has been considered. Hafren Dyfrdwy stated that the driver for in-period ODI allocation between the two companies is wholesale revenue. The rationale is that any wholesale revenue incentive results in an uplift or reduction in customer bills proportionate to their wholesale charge. Allocating in line with the wholesale revenue split thus means that customers are in the same position as if the border variation had not taken place.

In line with the split of wholesale water revenue, 0.58% of underperformance payments will be allocated to Hafren Dyfrdwy, the benefit of which will be applied to the former Severn Trent Water customers in Wales.

Equivalently, previous Seven Trent Water wastewater customers in Wales who were transferred to Hafren Dyfrdwy will pay the additional charges related to 0.44% of the net outperformance payment on wastewater service which will be allocated to Hafren Dyfrdwy.

Bill impact

This final determination will result in the customers that were Severn Trent's customers in this period receiving similar bills to if they had remained as Severn Trent customers.

The impact of ODIs will be applied to former Severn Trent customers and not to former Dee Valley customers. This reduces the benefit of considering the impact on average bills which will not be reflective of either group of customers. Average bills are complicated further because Hafren Dyfrdwy has more water customers overall than wastewater customers, but similar numbers of former Severn Trent customers receive each service. A change in wholesale water will have a smaller impact on the average bill than a corresponding change in wholesale wastewater revenue, even though the impact on water and wastewater bills for the former Severn Trent

customers will be similar. The following information on average bills should be understood in this context.

Hafren Dyfrdwy has stated that the indicative bill impact from incorporating the payments from its ODIs alone is an increase of around £5.00 to the average household combined water and wastewater bill. For a combined customer, this is in addition to the £6.50 increase from other factors such as RPI and WRFIM. However, the impact on bills differs between water and wastewater services.

The company estimated a reduction in the average household water bill of £1.75 due to ODIs alone, based on the proposed underperformance payments. Based on our decision to exclude the adjustment for the freeze and thaw, we expect there will be a greater reduction on water bills than stated. The company estimates an increase of around £6.75 to the average household wastewater bill due to ODIs alone, based on the proposed deferral of part of the wastewater performance.

The table below illustrates the indicative bill impacts for Hafren Dyfrdwy customers. The company agreed that it would not apply any in-period ODI changes to Wrexham bills and therefore the impacts apply to Powys only.

Table 27: Indicative impacts to average household bills due to in-period ODIs

Average bill	Hafren Dyfrdwy	Powys alone	Wrexham alone
Water	-£1.75	-£7.25	£0
Wastewater	+£6.75	+£6.75	£0
Combined	+£5.00	-£0.50	£0

The company has stated that incorporating the full ODI outperformance payment for wastewater into the 2019-20 charges 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 proposed an approach to smoothing these bill impacts, which we discuss below.

Bill smoothing

The company's submission proposed to apply the full in-period ODI underperformance payment for water services on bills in 2019-20, but suggested measures to smooth bills over more than one year in relation to wastewater. Hafren Dyfrdwy proposed to defer £0.278 million of the wastewater outperformance

payment, which would result in an ODI impact on wastewater bills of £6.75 (due to ODIs alone) for 2019-20. Hafren Dyfrdwy has incorporated the deferred ODI payments from 2017-18, along with those deferred from 2016-17, in its financial modelling forecasts for the PR19 business plan submission.

We asked Hafren Dyfrdwy whether it had considered any other options for deferring its wastewater outperformance payment. The company responded that it recognised Hafren Dyfrdwy (and Severn Trent Water) could have chosen to increase bills in 2019-20 by taking more of the ODI payments. However it would have come at the expense of more bill volatility, and it therefore chose to defer a portion of ODIs.

Hafren Dyfrdwy's stated that its proposal to manage incidence effects (ie defer a portion of the wastewater outperformance payment to AMP7) was part of the bill modelling undertaken at the time of the boundary changes; as a response to CCWater's representations on the boundary changes, the company gave a commitment to offset these effects by lowering the PAYG rate for waste. The company states that CCWater supports this commitment.

Based on the information Hafren Dyfrdwy provided us with, including the views of its Water Forum and CCWater, our assessment is that it is appropriate for Hafren Dyfrdwy to smooth the impact of its net outperformance payment for wastewater in-period ODIs, by deferring £0.278 million. Applying a proportion of the payment in 2019-20 will reduce the impact on customers' bills next year.

Customer and stakeholder engagement

Hafren Dyfrdwy reported that in its engagement with us and CCWater before the boundary change, it explained that it would allocate outperformance and underperformance payments earned before the variation to ensure that customer charges picked up the same level of charge as they would have done if the boundary changes had not taken place. In response to CCWater's concerns about bill impacts, the company gave commitment that the previous Dee Valley Water customers would not bear the cost of Severn Trent Water in-period ODIs earned prior to the border variation.

We asked the company to provide further information in relation to engagement directly with customers on bill impacts for this year's ODIs, including the proposal to defer part of the outperformance payment.

Following our request Hafren Dyfrdwy responded that, for 2019-20 charges specifically, it had undertaken new research to gauge customer views on the level of change that would cause concern. The company's research indicated that household

customers might become concerned by changes of around £2 per month or £20-£25 per year. At this point customers would expect some further explanation as to the reason for the changes.

This research has informed Hafren Dyfrdwy's handling strategies for bill increases this year. The company also recognises stakeholder concerns about whether any customer groups may experience effects greater than 5% of their bill; it therefore looked at the level of the wastewater ODI which it could take in 2019-20 without causing undue incidence effects and presenting as smooth a bill profile as possible.

Hafren Dyfrdwy stated that in considering these issues, it was also careful of the impact on its wastewater-only customers, who would not see the offsetting underperformance payment on the water service (primarily customers who take water from Dŵr Cymru). It stated that given Hafren Dyfrdwy wastewater bills are very low and Dŵr Cymru average bills are higher than either Hafren Dyfrdwy or legacy companies, wastewater should typically represent significantly less than half of a combined bill for these customers. The company said that although it does not know what Dŵr Cymru bills will be next year, if they rise in line with inflation, it could be reasonably confident that this group of customers would not experience unreasonable incidence effects.

Further, Hafren Dyfrdwy shared draft bill effects with CCWater Wales on its indicative wholesale charges, and are met to discuss these in November. The company's analysis of 2019-20 bill changes was that:

- average household bills would rise by less than the rate of inflation;
- average wastewater bills would rise by less than 5%;
- typical unmetered water bills in Wrexham will rise by less than 5% and metered bills fall even though the ODI underperformance payments will not be applied to them;
- while typical measured sewerage bills are likely to increase by more than 5%, combined bills for typical customers in Powys (both measured and unmeasured) will not.

Hafren Dyfrdwy also commented that the profile of the ODIs needs the same profile as for Severn Trent Water for the remainder of the AMP. If the profile was different, customers would not be in the same position as in the counterfactual and the company would not be meeting its boundary changes commitments. For example, if it deferred a greater share of the outperformance payments into AMP7 the percentage of ODIs allocated to Hafren Dyfrdwy year by year would differ and it would be difficult to demonstrate that the approach was fair to both sets of customers.

A4.3 Responses to the consultation on the draft determination

We consulted on our draft determination of the in-period ODIs between 1 November and 21 November 2018. We received two responses in relation to our draft determination for Hafren Dyfrdwy.

Hafren Dyfrdwy responded that it notes the adjustment charges for 2019-20 are based on the performance of Severn Trent Water in 2017-18, and a proportion of any under or over performance is attributed to the company in line with the revenue apportionment of the NAV determination. The company welcomed our proposed decision to: increase its wholesale wastewater price control to apply a net outperformance payment of £0.388 million to bills in 2019-20; defer wastewater outperformance payments of £0.278 million to future years, helping to mitigate the impact on bills.

In relation to supply interruptions (as noted in the responses for Severn Trent), the company stated that as part of its ODI submission it noted that a small number of events triggered the 5 minute cap. In the draft determination, we did not consider that the 5 minute individual incident cap should be applicable, and rejected the company's application to apply the adjustment to exclude the impact of the freeze and thaw to the extent that combined incidents exceeded 5 minutes. The company recognised that its performance for customers should have been better during freeze-thaw, and agree that it is appropriate to reduce bills in recognition of the importance of service levels.

However, the company stated that the amount of the extra bill reduction that should be applied is different to what we proposed, because there was one incident during freeze-thaw which exceeded the 5 minutes cap, which slightly reduces the amount by £0.418 million to £6.545 million, with a proportion equal to 0.58% allocated to Hafren Dyfrdwy.

As discussed in Section A3.4, Severn Trent Water has withdrawn its proposed amendment to our draft determination and is no longer seeking an adjustment to the supply interruptions underperformance payment for 2017-18. Hafren Dyfrdwy subsequently also agreed that it was not seeking an adjustment to the proposed underperformance payment for 2018-19.

CCWater responded that it would like reassurance that customers on the Wales/England border who receive a wastewater service only from Severn Trent would not carry more of the bill impact as a result of the outperformance payments received by the company as a result of their 2017-18 ODI performance.

CCWater commented that it would also like to understand how the deferral of outperformance payments might affect Hafren Dyfrdwy wastewater customers in the future and what steps Severn Trent/Hafren Dyfrdwy management is taking to mitigate any impacts on those customers in the future.

We expect Severn Trent and Hafren Dyfrdwy to clearly explain to customers and stakeholders the reasons for movements in bills in 2019-20 and how they are delivering on their guarantee that the revision of operating areas would lead to at least the same level of service to customers and, as far as possible, no increase in customer bills due to regulatory incentives.

The deferral of outperformance payments will be considered through the 2019 price review and we welcome comments on the draft determinations we will make in 2019 on this issue.

A4.4 Our final determination

This section sets out our final determination for Hafren Dyfrdwy.

The reasons for the underperformance payments and over performance payments that are based on Severn Trent Water's performance are set out in Appendix 3. This final determination will result in the customers that were Severn Trent's customers in this period receiving similar bills to if they had remained as Severn Trent customers. It will not affect customers that have remained customers of the company that is now called Hafren Dyfrdwy.

The estimated allocation of Hafren Dyfrdwy's outperformance payments and underperformance payments (1 April 2015 to 30 June 2018) were included in Tables 11 and 12 on pages 148 and 149 in our [Consultation under section 13 of the Water Industry Act 1991 on proposed modification of Severn Trent Water Limited's \(Severn Trent Water\) licence to include the Powys Site and proposed modification of Dee Valley Water Limited's \(Dee Valley Water\) licence to include the Chester site \(Ofwat, 23 March 2018\)](#). In summary, for ODIs paid in revenue these are:

Table 28: Allocation of Severn Trent Water wholesale water and wastewater performance payments 1 April 2015 to 30 June 2018 (%)

Price control	Severn Trent Water	Hafren Dyfrdwy
Wholesale water	99.42%	0.58%
Wholesale wastewater	99.56%	0.44%

We have used these allocations in our final determinations to determine the final in-period ODI values for Hafren Dyfrdwy.

Table 29: Summary of 2019-20 in-period ODI allocations

Price control	Severn Trent Water	Hafren Dyfrdwy	Hafren Dyfrdwy
Wholesale water	-£29.558m	0.58%	-£0.172m
Wholesale wastewater	£87.815m	0.44%	£0.388m

In relation to Hafren Dyfrdwy's wholesale water in-period ODIs the company has incurred a net underperformance payment of £0.172 million. Hafren Dyfrdwy estimates that the adjusted ODI underperformance payment will decrease its annual average household water bill by around £1.75 (due to ODIs) in 2019-20.

In relation to Hafren Dyfrdwy's wholesale wastewater in-period ODIs the company has incurred a net outperformance payment of £0.388 million. We are accepting the company's proposals to defer £0.278 million of its wastewater ODI payment, increasing the annual average household wastewater bill by £6.75 (due to ODIs alone).

To put the amounts into context, as detailed in the [Consultation under section 13 of the Water Industry Act 1991 on proposed modification of Severn Trent Water's licence to include the Powys Site and proposed modification of Dee Valley Water's licence to include the Chester site](#), the starting point for the calculation of change in revenue allowed to Hafren Dyfrdwy in the Charging Year starting on 1 April 2018 is provided in Table 30.

Table 30: Hafren Dyfrdwy's wholesale water and wastewater allowed revenue for 2018-19

Allowed revenue (PR14 FD, £m, 2012-13 prices)	2018-19
Wholesale water	19.3
Wholesale wastewater	2.5

In Table 31 below we set out our provisional conclusions on the overall in-period ODI determination for Hafren Dyfrdwy in £ million for water and wastewater.

The first row uses 2012-2013 prices, net of tax, which is the basis of ODIs in PR14, and then applies the £0.278 million deferral of the wastewater outperformance

payment to the 2012-2013 prices. The second part of the 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 Hafren Dyfrdwy is entitled to £0.388m (2012-13 prices, net of tax) of net ODI outperformance payments; and (2) Hafren Dyfrdwy can adjust its wastewater price control by a net £0.110 million (2012-13 prices, net of tax) in 2019-20 and defer £0.278 million to its wastewater price control in a future year.

Table 31: Our final determination on in-period ODIs for 2018 – 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 - £ million in 2012-13 prices (the base year for PR14), net of tax	-0.132	-0.172	-0.040
Wastewater - £ million in 2012-13 prices (the base year for PR14), net of tax	0.388	0.388	0
Total	0.256	0.216	-0.040
Total with the deferral of £0.278m of the wastewater outperformance	-0.022	-0.062	-0.040
Water - £ million impact on the price control for 2019-20 (the figures in the table above uprated by inflation and adjusted for tax)	-0.195	-0.254	-0.059
Wastewater - £ million impact on the price control for 2019-20 (the figures in the table above uprated by inflation and adjusted for tax)	0.162	0.162	0
Total	-0.033	-0.092	-0.059

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 Hafren Dyfrdwy's wholesale price limits resulting from the application of in-period ODIs. The revised K numbers are set out in Table 32 below.

Table 32: Revised K factors for the charging year beginning 1 April 2019

Final determination of in-period ODIs for 2018

Wholesale price control	Final determination price controls	Revised K
Water	-6.45%	-7.61%
Wastewater	33.44%	35.27%